

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of:

**Determination of Rates and Terms for
Preexisting Subscription Services and
Satellite Digital Audio Radio Services**

**Docket No. 2011-1
CRB PSS/Satellite II**

**PROPOSED FINDINGS OF FACT
OF SOUNDEXCHANGE, INC.**

PUBLIC VERSION

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I. INTRODUCTION AND SUMMARY OF KEY PROPOSED FINDINGS

1. The evidentiary record in this proceeding makes one thing perfectly clear: Sirius XM Radio Inc. (“Sirius XM”) is by all financial metrics a fundamentally different company that it was when it last was before this Court. In fact, five years ago, Sirius and XM were still two separate companies, fiercely competing against one another for both content and subscribers. The two companies had combined adjusted EBITDA of *negative* \$565 million, SX Trial Ex. 016 at SXM_CRB_DIR_00021681 (p. 15), and free cash flow of *negative* \$505 million. In light of those numbers, this Court was unwilling to set a rate at the upper boundary of the zone of reasonableness that could delay the attainment of positive EBITDA and free cash flow. *Id.* at SXM_CRB_DIR_00021682 (p. 16).

2. Today, Sirius and XM are a single merged entity and the nation’s sole subscription satellite radio service. Its subscriber numbers have grown by 34% over the two companies’ combined subscribership in 2007. In terms of subscriber count, Sirius XM is now the size of Comcast, and is bigger than Direct TV, Dish Network, Time Warner Cable, and Cablevision. Lys WRT at SX Ex. 211-RP, p. 11, SX Trial Ex. 240. The company’s 2011 EBITDA was *positive* \$731 million, and it is projected to be *positive* \$900 million by the end of this year. SX Trial Ex. 016 at SXM_CRB_DIR_00021681 (p. 15). Likewise Sirius XM’s free cash flow was \$416 million, and is projected to be \$700 million for 2012. *Id.* at SXM_CRB_DIR_00021682 (p. 16). And both Sirius XM management, as well as independent Wall Street analysts, confidently project that those positive numbers will only grow.

3. It is no wonder then that Mel Karmzin, Sirius XM’s CEO, recently stated that “we’re a very profitable, successful company. If we want a performer, we can afford to pay more than anybody else can because we’re making more.” Lys WRT at 31 & SX Ex. 238-RP, SX Trial

Ex. 240. It is beyond doubt that, Sirius XM can and should be paying today's market rates for their most important and valuable content – the music – and that the time for the still-struggling recorded music industry to be subsidizing Sirius XM's unprecedented prosperity is long past.

4. As for the Pre-existing Subscription Services ("PSS"), it has been 15 years since the PSS rates were litigated. During that time, other potential competitors have come and gone, and webcasters, many of whom also could compete in the same market, have proliferated. Nevertheless, the industry has stagnated and continues to be dominated by Music Choice, which pays an outdated and deeply subsidized royalty. The evidence shows that Music Choice in turn gives its service away at deeply discounted rates to its largest customers, who also partly own Music Choice. These non-arms-length transactions only distort the market at the expense of the record companies and recording artists who create the music that fuels Music Choice's business model. With willing competitors who are willing to pay more, there is no reason grounded in law or economics that would justify continuing the subsidy that Music Choice already has been permitted to enjoy for far too long.

THE SDARS CASE

The SoundExchange Benchmarks and Economic Analysis

5. In the last SDARS proceeding, the proceeding known as *SDARS I*, this Court found that "the interactive subscription market is a benchmark with characteristics reasonably comparable to the non-interactive SDARS." *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services ("SDARS I")*, Final Rule and Order, 73 Fed. Reg. 4080, 4093 (Jan. 24, 2008). The Court thus based the SDARS rates for the current rate term on the adjusted interactive subscription music streaming services benchmark proffered by SoundExchange's expert economist, Dr. Janusz Ordovery.

6. In this proceeding, Dr. Ordover again has presented the Court with a benchmarking analysis based on market place agreements for interactive subscription streaming services. Consistent with this Court's precedent, these agreements exhibit all the hallmarks of an appropriate benchmark. They were negotiated in a competitive market that is free of regulation and unaffected by the influence of any statutory license or rate. Ordover WRT at 14-15, SX Trial Ex. 74. No party was required to buy or sell, and no party had recourse to a regulatory process if mutually acceptable rates could not be negotiated. Moreover, the interactive subscription market is one with many participants, thus allowing Dr. Ordover to examine and synthesize many agreements among many willing buyers and willing sellers. 6/14/12 Tr. 2257:5-11 (Ordover).

7. Using these agreements, Dr. Ordover employed two different benchmarking techniques in order to arrive at a high and low end of a range of reasonable market-based rates. Ultimately, these two complimentary approaches yielded a range of reasonable rates for Sirius XM's SDARS service of between 22% and 32.5% of Sirius XM's total SDARS revenue.

8. Dr. Ordover's first, and preferred, approach was to calculate the percentage of total revenues represented by royalty payments made by interactive services to the record companies, and then to apply that percentage of revenue to the price of a music-only satellite service in order to determine the corresponding percentage of revenue for the Sirius XM service. Ordover WDT at 18-25, SX Trial Ex. 74.

9. The interactive streaming service's gross revenues (which are a product of retail price and the number of subscribers) reflect the aggregate value that consumers place on the various attributes and functionalities provided by the service. And, because the retail price "reflects all of the advantages and disadvantages of Sirius XM's service vis-à-vis interactive

services,” Dr. Ordovery’s analysis properly took into account the effect of interactivity, or the lack thereof, as well as all other relevant differences – positive or negative – between interactive services and Sirius XM that effect the value of such services to the consumer. 6/14/12 Tr. 2391:18-2392:7 (Ordovery).

10. Using the actual royalty payments made by the interactive services to the record companies, Dr. Ordovery showed that the annual payments were very consistently clustered in a range of 60%-65%. The following table shows the consistency of his findings:

**Royalty Payments by Interactive Subscription Services
(as a percentage of gross revenues)**

Label	Service	2H2010	2011	Total
EMI	Napster Streaming + Mobile	████	████	████
	Rhapsody Limited Portable + Portable	████	████	████
	Zune Portable	████	████	████
	MOG	████	████	████
	Spotify Premium + Mobile		████	████
	Slacker Premium Service		████	████
	Rdio Portable	████	████	████
Sony	Napster Streaming + Mobile	████	████	████
	Rhapsody Limited Portable + Portable	████	████	████
	Zune Portable	████	████	████
	MOG	████	████	████
UMG	Rdio Portable	████	████	████
	Napster Streaming + Mobile	████	████	████
	Rhapsody Limited Portable + Portable	████	████	████
	Zune Portable	████	████	████
	MOG		████	████
WMG	Spotify Portable		████	████
	Rdio Portable		████	████
	Napster Streaming + Mobile	████	████	████
	Rhapsody Portable	████	████	████
	Zune Portable	████	████	████
	MOG	████	████	████
	Slacker Premium Service		████	████
	Rdio Portable	████	████	████

11. From there, Dr. Ordoover adjusted the rate down to reflect the fact that, unlike the benchmark services, Sirius XM's service contains both music and non-music programming. Sirius XM's own evidence demonstrated that satellite radio subscribers value the music far more than they do the non-music programming.

12. For example, one Sirius XM study found that [REDACTED]
[REDACTED]
[REDACTED]. Simonson WRT at Ex. 201-RR, SX Trial Ex. 65.
Another found that [REDACTED]
[REDACTED]. Simonson WRT at Ex. 203-RR, p. 00042993, SX Trial Ex. 65.
Still another found that [REDACTED], and that
[REDACTED]
[REDACTED]. Simonson
WRT at Ex. 203-RR, p. SXM_CRB_DIR_00042968, SX Trial Ex. 65.

13. Dr. Ordoover conservatively concluded that music thus accounts for 50% of the value of Sirius XM's the SDARS service. And Sirius XM's experts agreed. This yielded an upper boundary of the range of reasonable rates of between 30% and 32.5%.

14. To calculate the lower boundary of the range of reasonable rates, Dr. Ordoover performed a different, though complimentary, analysis on the same benchmark services, consistent with the specific methodology this Court has used and endorsed in the past. Ordoover WDT at 33-34, SX Trial Ex. 74.

15. To do this, Dr. Ordoover calculated an average monthly per-subscriber royalty across an array of interactive services of \$5.95. Ordoover WDT at 28-29, SX Trial Ex. 74. He then calculated a separate interactivity adjustment as the ratio of the average retail price of the

non-interactive services to that of the interactive services. This yielded an interactivity adjustment of .4865. Ordoover WDT at 34, SX Trial Ex. 74. Applying the interactivity adjustment to the average monthly per-subscriber royalty for the interactive services produced a monthly rate of \$2.89 per subscriber. In turn, dividing the derived per-subscriber rate of \$2.89 for the all-music subscription services by the retail price of Sirius XM's basic package of both music and non-music content, yields a percentage rate of 22.32% of Sirius XM's total subscription revenues. Ordoover WDT at 34, SX Trial Ex. 74.

The Sirius XM Benchmarks

The Direct Licenses

16. The centerpiece of Sirius XM's direct case in this proceeding is a series of direct licenses, at 5%-7% of revenue, that were manufactured specifically for the purpose of creating a benchmark in this case. In reality, those direct licenses reveal absolutely nothing about the value of music – on Sirius XM or otherwise – for a number of reasons.

17. *First*, the record is filled with evidence of Sirius XM and its agent, Music Royalty, Inc. ("MRI") admitting that the Sirius XM's motivation for entering into the direct licenses was merely to create a benchmark that they could put before this Court. Indeed, the first direct licenses were executed only several months before the direct cases were due in this proceeding. A contemporaneous email from MRI to a potential licensee reads, "I wanted to let you know that SXM will be filing its direct case for the trial by next Tuesday the 29th. A huge motivation for SXM on this deal is closing it if at all possible in advance of the filing of the case." SX Trial Ex. 24, at SXM_CRB_DIR_00007863. Sirius XM's CFO, Mr. David Frear, admitted on the witness stand, with an odd degree of apparent pride, that "we're out there working hard to establish a good benchmark here." 8/13/12 Tr. 3203:4-5 (Frear). Mr. Gertz,

President of MRI similarly admitted as much on direct questioning from Judge Wisniewski.

6/7/12 Tr. 932:1-18 (Gertz).

18. *Second*, although Sirius XM's own economic expert admitted that a good benchmark must be representative of the relevant market, the direct licenses represent an absurdly tiny fraction of the overall recorded music industry and even of what is played on Sirius XM. None of the major record labels signed a direct license. Rather, only [REDACTED] independent labels have signed a deal – compared to the 20,100 rights owners to which SoundExchange distributes statutory royalties.

19. Although Judge Roberts twice requested at trial that Sirius XM provide the Court with an analysis of the number of direct licensees that appear in Sirius XM's top 20 or 25 labels played, they simply could not do so. Although MRI did submit an analysis, it was a disaster. When SoundExchange pointed out that as much as half of the recordings that MRI categorized as directly licensed were not, in fact directly licensed at all, Sirius XM was forced to withdraw the testimony – it was so bad they could not even correct it before trial – claiming that it was simply “too complicated.” That was not the only example of MRI's incompetence. In his written testimony, Mr. Gertz identified two direct licensed labels that he proudly touted as being “regularly featured” on the Sirius XM service. Gertz WDT at 12-13, SXM Dir. Trial Ex. 14. According to MRI's royalty statements, however, no royalties whatsoever were paid to either label in the entire fourth quarter of 2011. SX Trial Ex. 321. Either MRI has no idea what is being played on Sirius XM, or Sirius XM is unlawfully failing to pay those labels and artists the royalties they deserve.

20. The best evidence in the record is a report prepared by MRI in 2010. That analysis shows that over half of Sirius XM's [REDACTED] directly licensed labels had a market share of

0% of all Sirius XM plays for the preceding year, SX Trial Ex. 301 at 54-58. All [REDACTED] labels combined accounted for only 2%. SX Trial Ex. 301 at 54-58 (listing estimated market share of directly licensed labels); SX Trial Ex. 21 at 2-3 (explaining market share analysis methodology); SX Trial Ex. 20 (market share analysis).

21. Even that data – the best currently in the record – is not reliable. According to an email from Mr. Gertz of MRI to Cynthia Greer, Associate General Counsel at Sirius XM, the analysis was able to identify only 71.12% of the total plays on Sirius XM’s SDARS service due in part to “bad or missing” data received from Sirius XM. SX Trial Ex. 21 at 2-3. Worse still, MRI elected not to pursue a comprehensive clean-up effort because, in the words of Mr. Gertz, a “current effort at data clean-up for reporting purposes would only benefit SoundExchange.” SX Trial Ex. 21 at 3.

22. *Third*, the direct licenses cannot serve as benchmarks for setting the statutory rate because they contain different terms, and Dr. Noll has offered no adjustments to their rates. Here, Sirius XM claims that the direct licenses are for the identical service covered by the statutory license: an apples-to-apples comparison. In practice, however, MRI’s pitch was the exact opposite. Its representatives were actively pitching the direct license to independent labels by highlighting the differences between the direct licenses and the statutory license and insisting that “[REDACTED] [REDACTED].” Eisenberg WRT at SX Ex. 313-RR, SX Trial Ex. 245.

23. These differences are: (i) whereas under the statutory license, 50% of the royalty is paid to the label and 50% directly to the artists, under the direct license, 100% is paid to the label, yielding a significantly higher effective rate for the label; (ii) under the direct license, non-union labels are entitled to retain the non-featured artists’ share of the royalties, further

increasing the label's effective rate; (iii) the direct licenses offered cash-strapped independent labels accelerated royalty payments and even cash advances of up to [REDACTED]; (iv) the direct licenses promised a closer and more tailored relationship with Sirius XM programmers; and (v) under the direct licenses, Sirius XM agreed to pay the relevant administrative fees that otherwise would be borne by the labels under the statutory license.

24. The major record labels and the vast majority of independent labels recognized the direct licenses as a bad deal. That is why over 90% of the labels to which it was offered turned it down. Because of these apples-to-oranges differences, however, a small number of small independent labels were willing to take a direct license with Sirius XM. For them, even at a headline rate of 5%-7%, these additional features could translate to an effective rate well above the prevailing statutory rate or, at a minimum, would provide increased cash flow and other incentives that would make the deal sufficiently attractive. Indeed, Dr. Noll admitted that, under the direct licenses, the effective rate for some labels could be as much as double the same labels' effective rate under the statutory license.

25. As such, the direct licenses tell the Court nothing about the value of the underlying music or of the performance rights at issue. Rather, they show, at most, the value of the *differences*, between the statutory license and the direct licenses. A simple example makes the point. With a statutory rate of 7.5%, some number of small labels would be willing to take a lower headline rate of 5%-7% in exchange for what they see as unique benefits not available under the statutory license. At the same time, if the statutory rate were 15%, the same number of small labels should be just as willing to take the same direct license in exchange for a lower headline rate of 10%-14%. What this shows is that Sirius XM was simply arbitraging off the existing statutory rate and obtaining a slightly lower rate (regardless of what the statutory rate

was or is) by offering a suite of unique apples-to-oranges perks that are not available under the statutory license. The direct licenses thus demonstrate what those unique apple-to-oranges features were worth to the labels that took the deal. They shed no light whatsoever on the value of the underlying music or on the rate that would prevail in a free market where a statutory rate for a compulsory license was not already in effect.

Dr. Noll's Webcasting Benchmarks

26. As a purported “check on the reasonableness of the direct licenses,” Dr. Noll performs a deeply flawed benchmarking analysis derived from agreements negotiated with Last.fm.

27. Dr. Noll readily agrees that a good benchmark analysis must examine a sufficient number of agreements that are representative of the relevant market being studied. 6/5/12 Tr. 271:2-5 (Noll); *see also* 6/5/12 Tr. 257:20-22 (Noll) (agreeing that the representativeness of the sample “is a valid issue to examine.”). Yet, while Dr. Ordover examined 24 licenses with 7 leading interactive streaming services – all paying very consistent percentage of revenue royalty rates, Dr. Noll analyzed the agreements of only a single webcaster, Last.fm, in a market in which he concedes that the amounts paid by the services as a percentage of revenue vary dramatically and are “all over the map.” 8/15/12 Tr. 3562:4-3563:1 (Noll). In fact, Dr. Noll did not even investigate whether the rates he calculated for Last.fm were in any way representative of non-interactive music services generally. 8/14/12 Tr. 3401:7-21 (Ordover).

28. Likewise, Dr. Noll admits that rates obtained in a regulated market make for poor benchmarks. 6/6/12 Tr. 388:1-3 (Noll). Yet, Dr. Noll did not look at the Last.fm service to see if it qualifies as a statutory service. 8/15/12 Tr. 3513:20-3514:22 (Noll), and he apparently failed to consider the fact that the Last.fm agreements with two of the record companies have expired,

and Last.fm now pays those record companies (via SoundExchange) at the statutory rate.

8/14/12 Tr. 3308:8-20, 3317:10-16 (Ordoover).

29. The Last.fm agreements (the two that have not fully expired) are also woefully out of date. They were negotiated in 2007, and unrebutted evidence in the record makes it clear that record companies would not enter into the same deal today. Harrison WRT at 3, PSS Trial Ex. 32. In fact, rebuttal testimony revealed that UMG and Last.fm are currently in the process of re-negotiating the old 2007 license. In those negotiations, [REDACTED]

[REDACTED]. 8/21/12 Tr. 4386:11-16 (Harrison).

30. Most importantly, and as Mr. Harrison testified, the remaining Last.fm deal with Universal Music Group (“UMG”) was negotiated as part of a larger settlement of litigation and contained requirements for Last.fm to pay UMG \$2.5 million in recoupable advances. [REDACTED]

[REDACTED] 8/21/12 Tr. 4400:9-17 (Harrison). As Mr. Harrison explained, until the agreement expired by its initial terms in April 2009, [REDACTED]

[REDACTED] 8/21/12 Tr. 4397:3-4 (Harrison). As a result, [REDACTED]

[REDACTED]. 8/21/12

Tr. 4401:6-12 (Harrison). Dr. Noll’s use of the Last.fm agreements to derive a proposed rate is misplaced and bears no economic relationship to any prevailing rates in today’s marketplace.

The Section 801(b) Factors

31. With respect to the four policy considerations under 17 U.S.C. § 801(b)(1), this Court has explained that “the issue at hand is whether these policy objectives weigh in favor of divergence from the results indicated by the benchmark marketplace evidence.” *SDARS I*, 73 Fed. Reg. at 4094; *see also Mechanical and Digital Phonorecord Delivery Rate Determination Proceeding (“Mechanicals II”)*, 74 Fed. Reg. 4510, 4523 (Jan. 26, 2009). Based on any reading of the evidence in this case, the answer to that question is a resounding, “No.”

32. Other than outdated designated testimony from prior proceedings, Sirius XM’s evidence regarding these policy consideration focused almost exclusively on the fourth consideration: minimizing disruption to the industries involved. Under that factor a royalty rate would be disruptive “if it directly produces an adverse impact that is substantial, immediate and irreversible.” *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, 73 Fed. Reg. 4080, 4097 (Jan. 24, 2008). There is no evidence whatsoever in the record that the benchmark-based rates proposed by SoundExchange would have any adverse impact on Sirius XM, let alone one that is substantial, immediate and irreversible.

33. During the last five years of the current rate period, the country has endured the worst economy that it has seen in over half a century. And through that time, Sirius XM has been, and still is, paying statutory rates that are almost ten times the 0.88% percent rate that it claimed, in 2006, was the most it possibly could pay. Throughout time, however, Sirius XM has experienced nothing but unprecedented growth and overwhelming financial success. And according to their own predictions and those of Wall Street analysts, that trend is certain to continue.

34. During this past rate period, Sirius XM will have increased subscribership by 34% with a net addition of 6.2 million subscribers. Sirius XM's subscriber count now outpaces DirecTV, Dish Network, Time Warner Cable, Charter, and Cablevision, and Sirius XM is roughly equivalent in subscribers with Comcast. Lys WRT at SX Ex. 211-RP, p. 11, SX Trial Ex. 240. And they are not finished growing.

35. Despite Sirius XM's professed fears of having to face competition in the future from Internet radio in the car, independent analysts and Sirius XM's own management believe that Sirius XM is poised for further significant growth over the coming years. Lys WDT at 8, 10-11, SX Trial Ex. 80 (quoting Mel Karmazin from November 2011: "we believe we have many, many years of subscriber growth ahead of us"). Specifically, Sirius XM's own internal projections show that Sirius XM believes it will have between [REDACTED] million and [REDACTED] million subscribers by 2016. SX Trial Ex. 9 at 39 (2011 Long Range Scenario).

36. Not surprisingly, with such significant subscriber growth, Sirius XM's revenues have likewise grown. In 2007, Sirius and XM had combined revenue of \$2.1 billion. SX Trial Ex. 016 at SXM_CRB_DIR_00021680 (p. 14). Now, at the end of 2012, Sirius XM's revenue will have risen 62% to \$3.4 billion. SX Trial Ex. 217 at 7. Likewise, in 2007, Sirius and XM had combined adjusted EBITDA of *negative* \$565 million. SX Trial Ex. 216 at 15. Now, at the end of 2012, Sirius XM's adjusted EBITDA will have risen dramatically to approximately *positive* \$900 million, an increase of nearly \$1.6 billion. SX Trial Ex. 217 at 7.

37. Sirius XM's free cash flow tells the same story, rising from *negative* \$505 million in 2007 to approximately *positive* \$700 million in 2012, an increase of \$1.2 billion. SX Trial Ex. 216 at 16; SX Trial Ex. 217 at 7; *see also* Lys WDT at 18-21, SX Trial Ex. 80.

38. It thus is no wonder Sirius XM CEO Mel Karmazin recently proclaimed that “[a]t the end of this year, we’ll have between a \$1.2 billion and \$1.5 billion of cash on our balance sheet. I don’t know what to do with it other than to use it as you’re characterizing.” Lys WRT at 47 & SX Ex. 222-RP, SX Trial Ex. 240.

39. Mr. Karmazin is not alone in his bullish outlook. More recently, Morgan Stanley issued an analysis of Sirius XM’s financial forecast under two scenarios – one in which the rate set in this proceeding ends at 13% and one in which it ends at 20%. Under those scenarios, Morgan Stanley projects that Sirius XM will earn \$7.69 billion in EBITDA profits under the base scenario (ending at 13%), and \$6.74 billion in EBITDA profits under the bear scenario (rates ending at 20%). SXM Reb. Trial Ex. 12 at 9. A summary of Morgan Stanley’s projections is in the table below (SXM Reb. Trial Ex. 12 at 9):

EBITDA (\$ thousands)	2013	2014	2015	2016	2017	Total
Base Case (9%-13%)	\$1,123.2	\$1,401.5	\$1,549.0	\$1,724.3	\$1,889.5	\$7.69 billion
Bear Case (12%-20%)	\$1,038.9	\$1,273.3	\$1,368.3	\$1,483.1	\$1,578.2	\$6.74 billion

40. Under any measure, earning *\$6.74 billion in profits* cannot constitute “disruption.”

THE PSS CASE

The SoundExchange Benchmark

41. The PSS statutory license covers non-interactive audio streaming services provided over cable or satellite systems. Ford WDT at 12, SX Trial Ex. 79. For this market, Dr. George Ford adopted a benchmarking approach “to evaluating the reasonableness of the rate” proposed by SoundExchange.” 6/18/12 Tr. 2808:20-22 (Ford). Dr. Ford concluded that the

marketplace agreements that he reviewed in four distinct digital markets could be used together “in order to establish a zone of reasonableness for revenue-based royalty fees.” Ford WDT at 13, SX Trial Ex. 79. Based on these marketplace contracts, Dr. Ford determined that the range of percentage-of-revenue royalty rates for these agreements fell within a range of 45% to 70%, with one observed rate at 43%. Ford WDT at 15-16, SX Trial Ex. 79. SoundExchange’s proposed final year rate of 45% is almost exactly the lower bound of the range of rates observed by Dr. Ford and accordingly can “be presumed to be a reasonable proxy for a market outcome.” Ford WDT at 16, SX Trial Ex. 79.

42. Dr. Ford explained that the agreements he relied on are “representative of the meat of the industry, and there could be outliers.” 6/18/12 Tr. 2887:3-5 (Ford). During discovery, SoundExchange produced well over 2,000 digital music licensing agreements. 6/6/2012 Tr. 329:1-3 (Noll). Out of these more than 2,000 agreements, Music Choice was able to identify a total of only 26 agreements containing percentage-of-revenue royalty rates purportedly below the 43% rate in Dr. Ford’s zone of reasonableness. In other words, even under Music Choice’s own (often misguided) interpretation of the contracts, only about 1% of agreements had percentage-of-revenue royalty rates below Dr. Ford’s lower bound, providing substantial evidence that Dr. Ford’s range of rates was in fact “representative of the meat of the industry.” SoundExchange presented its evidence supporting it

The Music Choice Benchmark

43. For its part, Music Choice rather bull-headedly relies primarily on the familiar musical works benchmark. That benchmark was relied on by the Librarian 15 years ago in the *PSS I* decision only and expressly because the Librarian had found that, in 1998, there were no

other benchmarks to look to. Indeed, the Librarian also noted that the parties hadn't even fully developed their analysis of the musical works benchmark. 67 Fed. Reg. at 45247.

44. Since then the musical works benchmark has been rejected every time it has been offered to assist the Court in setting digital performance rights. The CARP rejected in *Webcaster I*, and this Court twice rejected it in *Webcaster II* and *SDARS I*. Music Choice has not given any articulable reason why the long-discredited musical works benchmark should be applied now in this proceeding.

II. BACKGROUND

A. The Parties

1. SoundExchange

45. SoundExchange is a § 501(c)(6) nonprofit performance rights organization established to ensure prompt, fair and efficient collection and distribution of royalties payable to performers and sound recording copyright owners for the use of sound recordings over satellite radio, the Internet, wireless networks, and cable and satellite television networks via digital audio transmissions. Bender WDT at 2, SX Trial Ex. 75. SoundExchange's core mission is to collect and distribute statutory royalties as efficiently and accurately as possible. Bender WDT at 7, SX Trial Ex. 75.

46. In the previous SDARS proceeding, Docket No. 2006-1 CRB DSTRA, the Judges designated SoundExchange to "serve as the Collective for the 2007-2012 license period" for the collection and distribution of royalties paid by the SDARS under the Section 112 and 114 licenses. 73 Federal Register 4080, 4099 (Jan. 24, 2008). SoundExchange is also the Collective for the collection and distribution of PSS royalties for the time period 2008-2012. *See* 37 C.F.R. § 382.3(a). In addition, the Judges have designated SoundExchange as the Collective for

webcasting royalties under the Section 112 and 114 licenses for the 2011-2015 license period.

Bender WDT at 3, SX Trial Ex. 75.

47. SoundExchange is governed by an 18-member Board of Directors that is made up of equal numbers of artist representatives and sound recording copyright owner representatives. Copyright owners are represented by board members associated with the major record companies (four), independent record companies (two), the Recording Industry Association of America (two), and the American Association of Independent Music (one). Artists are represented by one representative each from the American Federation of Musicians (“AFM”) and the American Federation of Television and Radio Artists (“AFTRA”). There are also seven at-large artist seats, which are currently held by artists’ lawyers and managers, as well as a recording artist. Bender WDT at 2-3, SX Trial Ex. 75.

48. SoundExchange refers to those record labels and artists who have specifically authorized it to collect royalties on their behalf as “members.” As of November 2011, it had approximately 12,700 rights owner members (including both record labels and artists who own the copyrights in their own recordings) and 30,250 artist members. SoundExchange also pays statutory royalties to non-members – copyright owners and artists alike – as if they were also members. In total, as of November 2011, it maintained accounts for more than 20,100 rights owners and more than 45,000 artists, including members and non-members. Bender WDT at 4, SX Trial Ex. 75. In each of its quarterly distributions, SoundExchange sends checks to approximately 18,000 – 20,000 royalty recipients. 6/15/12 Tr. 2466:10-12 (Bender).

49. According to Daniel Glass of Glassnote Records, “In the past, it was difficult to collect for streaming/radio on the Internet. Now record companies, especially independents,

have SoundExchange doing that for us.” Blatter WDT at SXM Dir. Ex. 46, p.1, SXM Dir. Trial Ex. 15.

50. SoundExchange has collected and distributed hundreds of millions of dollars in royalties paid by the SDARS and PSS for their performances of sound recordings under the statutory licenses. For its SDARS service, Sirius XM paid [REDACTED] in royalties to SoundExchange in 2009; [REDACTED] in 2010; and [REDACTED] for the first nine months of 2011. The PSS pay royalties that are a small fraction of the SDARS royalties. Bender WDT at 4, SX Trial Ex. 75.

51. SoundExchange distributes hundreds of millions of dollars annually to copyright owners and performers. In 2008, SoundExchange distributed about \$100 million in royalty payments; in 2009, it distributed about \$155 million; and in 2010 it distributed about \$250 million. SXM Dir. Trial Exs. 46, 50, 52.

52. Even as the amount of royalties collected and distributed continue to grow, SoundExchange’s operations remain extremely efficient. In 2010, its administrative rate was 6.7%. By comparison, similar collection organizations have administrative rates that are more than twice as high. Bender WDT at 4, SX Trial Ex. 75.

53. By statute, statutory royalties collected by SoundExchange are divided according to a formula that gives 50% of the royalties to copyright owners, 45% to featured artists, 2½% to an escrow account for distribution to non-featured musicians, and 2½% to an escrow account for distribution to non-featured vocalists. 17 U.S.C. § 114(g).

2. Sirius XM

54. Sirius XM is the result of a July 2008 merger between Sirius Satellite Radio Inc. (“Sirius Radio”) and XM Satellite Radio Holdings Inc. Sirius Radio was originally incorporated

in 1990 as Satellite CD Radio, Inc. XM Satellite Radio Inc. ("XM Radio") was incorporated in 1992, and XM Satellite Radio Holdings was created as a holding company for XM Radio in 1997. XM Radio launched its broadcasting service on November 12, 2001, and Sirius Radio launched its broadcasting service in February 2002. Lys WDT at 4, SX Trial Ex. 80.

55. In February 2007, Sirius Radio and XM Satellite Radio Holdings agreed to a merger of equals. The merger was completed on July 29, 2008. Lys WDT at 4, SX Trial Ex. 80. The merger has enabled Sirius XM to cut costs and achieve efficiencies. Lys WDT at 16-17, SX Trial Ex. 80. According to Sirius XM's CFO David Frear, the merger resulted in more than \$600 million in annual operating cost savings. 6/7/12 Tr. 642:16-17 (Frear).

56. Sirius XM is now "the world's largest radio broadcaster," SX Trial EX. 217 at 20, larger even than Clear Channel, the prior dominant company, SX Trial Ex. 229 at 23, 26. It has over 22 million subscribers, and its subscriber count now outpaces DirecTV, Dish Network, Time Warner Cable, Charter, and Cablevision, and is roughly equivalent with Comcast. SX Trial Ex. 229 at 11. Sirius XM's subscriber base is growing rapidly, faster than at any time since the merger of Sirius and XM. Lys WRT at 30-31, SX Trial Ex. 240; SX Trial Ex. 217 at 7.

57. Sirius XM broadcasts satellite radio on a subscription fee basis primarily to automobile-based radio receivers. Sirius XM has agreements with all of the major car companies, and Sirius XM satellite radios are available as a factory or dealer-installed option in substantially all vehicle makes sold in the United States. Lys WDT at 5, SX Trial Ex. 80.

58. Sirius XM offers over one hundred and forty channels of satellite radio, including seventy-one channels of commercial-free music. Blatter WDT at 2-3, SXM Dir. Trial Ex. 15; Lys WDT at 5, SX Trial Ex. 80.

59. Sirius XM offers different packages of channels that range in price from \$6.99 to \$19.99 per month. Sirius XM has recently been able to raise its subscription prices substantially. In September 2011, Sirius XM announced that it was increasing the price of its standard package from \$12.95 to \$14.49 per month beginning in January 2012. Lys WDT at 15, SX Trial Ex. 80.

60. In addition, in July 2009, Sirius XM introduced its so-called “U.S. Music Royalty Fee” to pass on to consumers Sirius XM’s increased royalty costs. The U.S. Music Royalty Fee was initially \$1.98 per month for basic subscriptions (increasing the total price from \$12.95 to \$14.93 per month). In December 2010, Sirius XM reduced the U.S. Music Royalty Fee that it charges subscribers from \$1.98 to \$1.40 per month on the base \$12.95 subscription. Lys WDT at 15, SX Trial Ex. 80.

61. In the words of Sirius XM’s CEO Mel Karmazin, Sirius XM is “a very profitable, successful company.” Lys WRT at 31 & SX Ex. 238-RP, SX Trial Ex. 240. In its 2010 filings with the Securities and Exchange Commission (SEC), Sirius XM reported total revenue of approximately \$2.8 billion. Lys WDT at 8, SX Trial Ex. 80. Sirius XM’s revenue is not only growing, its growth is accelerating. 8/13/12 Tr. 3179:7-10 (Frear). Sirius XM is expected to have revenue of \$3.4 billion at the end of 2012. SX Trial Ex. 217 at 7.

62. Sirius XM’s financial performance has improved dramatically over the last several years and continues to flourish. For example, in 2007, Sirius and XM had combined adjusted EBITDA of *negative* \$565 million. SX Trial Ex. 016 at SXM_CRB_DIR_00021681 (p. 15). Now, at the end of 2012, Sirius XM’s adjusted EBITDA has risen dramatically to approximately *positive* \$900 million, an increase of nearly \$1.6 billion. SX Trial Ex. 217 at 7. Similarly, free cash flow has risen from *negative* \$505 million in 2007 to approximately *positive* \$700 million in 2012, an increase of \$1.2 billion. SX Trial Ex. 016 at

SXM_CRB_DIR_00021682 (p. 16); SX Trial Ex. 217 at 7; *see also* Lys WDT at 18-21, SX Trial Ex. 80.

63. From 2010 to 2011, Sirius XM's net income grew by 892%; its free cash flow grew by 98% and its adjusted EBITDA grew by 17%. Lys WRT at 30, SX Trial Ex. 240. Sirius XM's financial performance is discussed in greater detail in Section VIII.C.1 below.

3. Music Choice

64. Music Choice is a residential music service that is delivered to customers by cable operators as part of a larger cable subscription package. Del Beccaro WDT at 3, PSS Trial Ex. 1. Music Choice includes 46 channels of genre-based, noninteractive audio programming—the channels that make use of the statutory PSS license at issue in this proceeding—as well as an on-demand music video service and an interactive music video channel called SWRV. Del Beccaro WDT at 3, 12, PSS Trial Ex. 1; 6/11/2012 Tr. 1518:14-1519:2 (Del Beccaro). Music Choice plans to expand the number of noninteractive channels to 300 during the first quarter of 2013. Del Beccaro WDT at 23, PSS Trial Ex. 1. Except for a handful of cable operators who offer Music Choice as a standalone tier, Music Choice is generally offered to cable subscribers as part of a packaged bundle of channels. Ford WDT at 12-13, SX Trial Ex. 79. Music Choice's channels are currently available in 52 million cable homes, and there are approximately 40 million cable customers using the service each month. 6/11/12 Tr. 1462:8-11 (Del Beccaro). According to Music Choice's calculations, Music Choice accounts for approximately 55% of the market share for cable and satellite audio channels. 8/16/2012 Tr. 3878:10-14 (Del Beccaro).

65. Besides Music Choice, Muzak is also classified by statute as a PSS provider. Del Beccaro WDT at 44, PSS Trial Ex. 1; 6/11/2012 Tr. 1469:21-14701:3 (Del Beccaro). Music Choice also competes directly in the residential cable and satellite audio market with Sirius XM,

DMX (SonicTap), and Stingray Digital (Galaxie Music Services), as well as with so-called “over-the-top” providers such as Pandora and iHeartRadio, which are available in the home through Internet-connected televisions, cable boxes, and other devices. Del Beccaro WDT at 12, PSS Trial Ex. 1. Music Choice is the only one of these competitors to offer video channels and services. 8/16/2012 Tr. 3889:8-3890:10 (Del Beccaro). More often, these services, including Music Choice, Muzak, DMX, and Sirius XM, offer commercial or business establishment services. 8/16/2012 Tr. 3889: 8-13 (Del Beccaro) (“DMX [is] . . . really a commercial business player”); 6/11/2012 Tr. 1469:21-1470:6 (Del Beccaro) (Muzak has “not been active in trying to sell their service to residences. They program their services towards businesses.”); Frear WDT at 25, SXM Dir. Trial Ex. 12 (stating that Sirius XM operates a business establishment service).

66. Music Choice first launched to the public in 1991. Del Beccaro WDT at 5, PSS Trial Ex. 1. Music Choice’s partnership includes three large cable operators, Comcast Corporation, Cox Communications, Inc., and Time Warner Cable, Inc.. Del Beccaro WDT at 2, PSS Trial Ex. 1. While Music Choice initially stated that its partners included two record companies, Mr. Del Beccaro clarified that in fact no record companies are partners and no record companies sit on Music Choice’s board. 6/14/12 Tr. 2209:14-2210:11 (Del Beccaro). According to its audited financial statement, Music Choice had revenues of \$[REDACTED] million and \$[REDACTED] million in 2010 and 2011, respectively. SX Trial Ex. 233 at PSS_366020. Likewise, Music Choice’s audited financial statement reports net income of \$[REDACTED] million in 2010 and \$[REDACTED] million in 2011. SX Trial Ex. 233 at PSS_366020. Music Choice made distributions to its partners of \$[REDACTED] million in 2011 and \$[REDACTED] million in 2012. SX Trial Ex. 233 at PSS_366022, PSS_366038.

B. History of Prior Proceedings

1. The 2003 Settlement

67. On March 19, 2003, SoundExchange, XM, and Sirius entered into a private, confidential, non-precedential settlement setting rates and terms for the SDARS services under the § 112 and § 114 statutory licenses for the period through December 31, 2006. *Notification of Settlement and Motion to Suspend CARP Proceeding and Notice and Recordkeeping Rulemaking Applicable to Preexisting SDARS*, Docket No. 2001-1 CARP DSTRA2 & Docket No. RM 2002-1 (filed jointly on Mar. 19, 2003). The Copyright Office accepted the settlement and suspended the CARP proceeding on March 21, 2003. *Order*, Docket No. 2001-1 CARP DSTRA2 (Mar. 21, 2003).

68. The parties agreed that the 2003 settlement would “be non-precedential, and shall not be admissible as evidence or otherwise taken into account in any administrative, judicial, or other government proceeding.” *Notification of Settlement and Motion to Suspend CARP Proceeding and Notice and Recordkeeping Rulemaking Applicable to Preexisting SDARS* at 3-4, Docket No. 2001-1 CARP DSTRA2 & Docket No. RM 2002-1 (filed jointly on Mar. 19, 2003)

2. The SDARS I Decision

69. In 2006, the CRJs initiated a proceeding to determine the SDARS rates and terms for the period 2008 through 2012. *See Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services (“SDARS I”)*, Final Rule and Order, 73 Fed. Reg. 4080, 4093 (Jan. 24, 2008). At that time, Sirius and XM had not yet merged, and both of them participated in that proceeding, as did SoundExchange.

70. In *SDARS I*, SoundExchange’s expert witness Dr. Ordovery offered a benchmark based on the interactive subscription market. This Court found that “the interactive subscription

market is a benchmark with characteristics reasonably comparable to the non-interactive SDARS, particularly after Dr. Ordovery's reasonable adjustment for the difference in interactivity." 73 Fed. Reg. at 4093. This Court "equate[d]" Dr. Ordovery's benchmark of \$1.40 per subscriber per month "to be the equivalent of 13% stated as a percentage of revenue." 73 Fed. Reg. at 4093.

71. In the Court's view, "the 13% rate identified hereinabove marks the upper boundary of a zone of reasonableness for potential marketplace benchmarks." 73 Fed. Reg. at 4094. The Court found that the potential marketplace benchmarks could not "be less than or equal to the SDARS' musical works rates (*i.e.*, 2.35% of gross revenues)" and that "a rate close to the upper boundary is more strongly supported than one close to the lower boundary." 73 Fed. Reg. at 4094.

72. The Court then measured the marketplace benchmark rates "against the statutory objectives to reach [the Court's] decision." 73 Fed. Reg. at 4084. The Court explained that "the issue at hand is whether these policy objectives weigh in favor of divergence from the results indicated by the benchmark marketplace evidence." 73 Fed. Reg. at 4094. Thus, the Court considered "the other evidence in the record offered with respect to the four policy considerations" to determine if the result of the benchmark analysis "requires any adjustment." 73 Fed. Reg. at 4094.

73. The Court then found that the first three 801(b) policy objectives did not require an adjustment of the benchmark rates. 73 Fed. Reg. at 4094-4096.

74. With respect to the fourth policy objective, the Court concluded that a rate "can be disruptive . . . if it directly produces an adverse impact that is substantial, immediate and irreversible in the short-run because there is insufficient time for either the SDARS or the

copyright owners to adequately adapt to the changed circumstances produced by the rate change, as a consequence, such adverse impacts threaten the viability of the music delivery service currently offered to consumers under this license.” 73 Fed. Reg. at 4097. The Court also noted that experts on both sides “agree that a royalty rate that would cause the SDARS to cease operating or dramatically change the nature of its product would clearly be disruptive.” 73 Fed. Reg. at 4097.

75. The Court found that there were “two circumstances faced by the SDARS” that merited a rate lower than the upper boundary of 13%. First, the Court found that “an immediate increase” to 13% would be disruptive because “the SDARS have not yet attained a sufficient subscriber base nor generated sufficient revenues to reach consistent Earnings Before Interest, Taxes, Depreciation and Amortization (“EBITDA”) profitability or positive free cash flow.” 73 Fed. Reg. at 4097. Second, the Court concluded that “any undue constraint on the SDARS’ ability to successfully undertake satellite investments planned for the license period” would be disruptive. 73 Fed. Reg. at 4097.

76. Based on these considerations, the Court set royalty rates of 6% in 2008; 6.5% in 2009; 7% in 2010; 7.5% in 2011; and 8% in 2012. 73 Fed. Reg. at 4098.

77. With respect to the Section 112 rates and minimum fees, the Court accepted SoundExchange’s proposal to include the Section 112 license within the rates set for the Section 114 license, but declined to ascribe any particular percentage of the Section 114 royalty to the Section 112 license. 73 Fed. Reg. at 4098.

78. With respect to terms, the Court explained that it adopts “royalty payment and distribution terms that are practical and efficient,” that “we seek to maintain consistency across the licenses set forth in Sections 112 and 114,” because “[c]onsistency promotes efficiency

thereby reducing the overall costs associated with the administration of the licenses.” 73 Fed. Reg. at 4098-99 (internal quotation omitted). The Court noted that if a party seeks a variance from terms that are otherwise consistent across licenses, the burden is upon that party to show the “need for and the benefits of variance.” 73 Fed. Reg. at 4099. The Court then generally adopted terms that were more consistent with the terms that had previously been set for webcasting services. 73 Fed. Reg. at 4099-4101.

79. Finally, the Court designated SoundExchange as the sole Collective for the collection and distribution of royalties. 73 Fed. Reg. at 4099.

3. Prior PSS Decisions

80. Although this Court has not previously determined a rate for the PSS, the predecessor Copyright Arbitration Royalty Panel (“CARP”) made one such determination in 1997. *See Determination of Reasonable Rates and Terms for the Digital Performance of Sound Recordings (Final Rule and Order)*, 63 Fed. Reg. 25394, 25396 (May 8, 1998). In a one-page explanation of its decision, the CARP summarily concluded that all the 801(b) factors favored the PSS and set the rate for the PSS at 5%. *See SDARS I*, 73 Fed. Reg. at 4083. The Librarian of Congress then rejected much of the CARP’s analysis, noted that there was insufficient evidence in the record to compare the relative value of musical works and sound recordings in the marketplace, and adjusted the rate upward to 6.5%. *Determination of Reasonable Rates and Terms for the Digital Performance of Sound Recordings (Final Rule and Order)*, 63 Fed. Reg. at 25394-25410. On appeal, the D.C. Circuit deferred to the Librarian and did not disturb the 6.5% rate. *Recording Industry Ass’n of America, Inc. v. Librarian of Congress*, 176 F.3d 528, 535 (D.C. Cir. 1999). Since 2002, Music Choice has been paying royalties under the terms of two settlements with SoundExchange; the current rate is 7.5%.

C. History of This Proceeding

1. The Direct Cases

81. On November 29, 2011, the following parties filed written direct statements in this proceeding: SoundExchange, Sirius XM and Music Choice.

82. Direct testimony was taken from June 5, 2012 through June 18, 2012.

a. SoundExchange Witnesses

83. During the direct phase of the proceeding, SoundExchange presented written and oral testimony from the following 8 witnesses:

84. Jonathan Bender is the Chief Operating Officer of SoundExchange, which collects and distributes royalty payments to performers and sound recording copyright owners. Mr. Bender oversees the collection and distribution of the royalty payments for the performance of sound recordings on webcast, cable, and satellite services. He supervises the receipt of the payments, the determination of the amounts owed to the copyright owners and performers, and the distribution of these royalties. Mr. Bender also oversees SoundExchange's license compliance activities and manages the budget. Bender WDT at 1-2, SX Trial Ex. 75. Mr. Bender testified before the Court during the direct phase of the trial on Friday, June 15, 2012, Vol. 9 ("6/15/12 Tr. (Bender)").

85. Dr. Janusz Ordover is a Professor of Economics and former Director of the Masters in Economics Program at New York University, where he has taught since 1973. Dr. Ordover specializes in industrial organization economics, particularly in antitrust and regulatory economics. He has served as an advisor on antitrust to many organizations, and has provided economic testimony in policy hearings at the Federal Trade Commission and the United States Senate. Dr. Ordover also served as Deputy Assistant Attorney General for Economics at the

Antitrust Division for the United States Department of Justice. He has consulted and testified on a wide range of antitrust and regulatory matters, including matters dealing with the distribution and pricing of content. Throughout his academic career, one focus of Dr. Ordovery's research has been the incentives for the creation and dissemination of intellectual property. Ordovery WDT at 1-2, SX Trial Ex. 74. Dr. Ordovery testified before the Court during the direct phase of the trial on Thursday, June 14, 2012, Vol. 8 ("6/14/12 Tr. (Ordovery)") and on Friday June 15, 2012, Vol. 9 ("6/15/12 Tr. (Ordovery)"). The Court accepted Dr. Ordovery as an expert in industrial organization economics, competition policy, regulatory economics, and the pricing of intellectual property. 6/14/12 Tr. 2250:22-2251:6 (Ordovery).

86. Charles Ciongoli is Executive Vice President and Chief Financial Officer for Universal Music Group North America ("UMG"), and in that position, he is ultimately responsible for all of the financial activities of the company. Prior to holding his current position, Mr. Ciongoli was the Senior Vice President of Finance for UMG, and before that, he was the Vice President of Finance for MCA Records and also served as Vice President and Group Controller for both MCA Records and MCA Music Publishing. Ciongoli WDT at 1, SX Trial Ex. 67. Mr. Ciongoli testified before the Court during the direct phase of the trial on Wednesday, June 13, 2012, Vol. 7 ("6/13/12 Tr. (Ciongoli)") and Thursday, June 14, 2012, Vol. 8 ("6/14/2012 Tr. (Ciongoli)").

87. Stephen Bryan is Executive Vice President of Digital Strategy and Business Development, Recorded Music at Warner Music Group (WMG), and in that role, he is directly responsible for creating and implementing WMG's digital strategy as well as negotiating key deals. When he first started at WMG, Mr. Bryan was Manager for Strategic Planning and Business Development, and in that capacity he worked to identify new business initiatives and

strategic alliances for WMG. Bryan WDT at 1, SX Trial Ex. 66. Mr. Bryan testified before the Court during the direct phase of the trial on Wednesday, June 13, 2012, Vol. 7 (“6/13/2012 Tr. (Bryan)”).

88. Darius Van Arman is the founder of the independent record label Jagjaguwar, which is home to such recording artists as Bon Iver (who most recently debuted at number two on the Billboard charts with their most recent album) and Dinosaur Jr. (an iconic underground band that is still making critically acclaimed albums well into their third decade of existence). He is also the co-owner of the three independent record labels Dead Oceans, Jagjaguwar and Secretly Canadian, of the music distribution company SC Distribution and of the artist management company Fort William Artist Management. He has worked in the music industry since 1995, solely in the independent music sector, and was recently appointed to the Presidential Advisory Committee for A2IM, the preeminent trade organization serving the independent music community in the United States. Van Arman WDT at 1, SX Trial Ex. 77. Mr. Van Arman testified before the Court during the direct phase of the trial on Friday, June 15, 2012, Vol. 9 (“6/15/12 Tr. (Van Arman)”).

89. Dr. George Ford is the President of Applied Economic Studies, a private consulting firm specializing in economic and econometric analysis, located in Birmingham, Alabama, the Chief Economist of the Phoenix Center for Advanced Legal & Economic Policy Studies, a Washington, D.C.-based 501(c)(3) research organization that specializes in the legal and economic analysis of public policy issues involving the communications and technology industries, and an Adjunct Professor at Samford University, a private university located in Birmingham, Alabama, where he teaches economics in the graduate program of the business school. Ford WDT at 1-2, SX Trial Ex. 79. Dr. Ford testified before the Court during the direct

phase of the trial on Monday, June 18, 2012, Vol. 10 (“6/18/12 Tr. (Ford)”). The Court accepted Dr. Ford as an expert in industrial economics. 6/18/12 Tr. at 2805:20-2806:2 (Ford).

90. Dr. Thomas Lys is the Eric L. Kohler Chair in Accounting and Professor of Accounting and Information Management at the Kellogg School of Management, Northwestern University. He previously held academic positions at the Graduate School of Business at the University of Chicago and the Graduate School of Business at Stanford University. His research investigates the economic consequences of alternate financial reporting standards and financial decisions, such as changes in capital structure, changes in the money supply, corporate disclosures, valuation, risk arbitrage, labor participation in corporate decisions, auditor liability, and financial analysts' earnings forecasts. His most recent work integrates the rational models of decision-making in economics, accounting and finance with the descriptive models of behavioral decision theory to predict the actions of various financial decision-makers. Lys WDT at 1-2, SX Trial Ex. 80. Dr. Lys was unable to appear in person to testify orally at the direct case hearing (though he did appear and testify orally at the rebuttal case hearing). His written direct testimony was admitted into evidence.

91. J. Gregory Sidak is the chairman of Criterion Economics, L.L.C. in Washington, D.C. and the Ronald Coase Professor of Law and Economics at Tilburg University in The Netherlands. He is also a founding co-editor of the *Journal of Competition Law & Economics*, published quarterly by the Oxford University Press. Sidak WDT at 4-8, SX Trial Ex. 78. Professor Sidak testified before the Court during the direct phase of the trial on Monday, June 18, 2012, Vol. 10 (“6/18/12 Tr. (Sidak)”). The Court accepted Professor Sidak as an expert in the economics of competition in rate setting. 6/18/12 Tr. at 2730:19-2731:4 (Sidak).

b. Witnesses for the Services' Direct Cases

i. Sirius XM

92. During the direct phase of the trial, Sirius XM. submitted written and oral testimony from the following 9 witnesses:

93. Mel Karmazin. Direct Testimony of Mel Karmazin, June 11, 2012, Vol. 5 ("6/11/12 Tr. (Karmazin)").

94. Steven Blatter. Direct Testimony of Steven Blatter, June 8, 2012, Vol. 4 ("6/8/12 Tr. (Blatter)").

95. David Frear. Direct Testimony of David Frear, June 7, 2012, Vol. 3 ("6/7/12 Tr. (Frear)").

96. James Meyer. Direct Testimony of James Meyer, June 6, 2012, Vol. 2 ("6/6/12 Tr. (Meyer)").

97. David Stowell. Direct Testimony of David Stowell, June 8, 2012, Vol. 4 ("6/8/12 Tr. (Stowell)").

98. Dr. Roger Noll. Direct Testimony of Roger Noll, June 5, 2012, Vol. 1 ("6/5/12 Tr. (Noll)") and Testimony of Roger Noll, June 6, 2012, Vol. 2 ("6/6/12 Tr. (Noll)").

99. John Hauser. Direct Testimony of John Hauser, June 12, 2012, Vol. 6 ("6/12/12 Tr. (Hauser)").

100. Ronald Gertz. Direct Testimony of Ronald Gertz, June 7, 2012, Vol. 3 ("6/7/12 Tr. (Gertz)").

101. William Rosenblatt. Direct Testimony of William Rosenblatt, June 8, 2012, Vol. 4 ("6/8/12 Tr. (Rosenblatt)").

ii. Music Choice

102. During the direct phase of the trial, Music Choice submitted written and oral testimony from the following three witnesses:

103. David Del Beccaro. Direct Testimony of David Del Beccaro, June 11, 2012, Vol. 5 (“6/11/12 Tr. (Del Beccaro)”).

104. Damon Williams. Direct Testimony of Damon Williams, June 12, 2012, Vol. 6 (“6/12/12 Tr. (Williams)”).

105. Dr. Gregory Crawford. Direct Testimony of Gregory Crawford, June 12, 2012, Vol. 6 (“6/12/12 Tr. (Crawford)”) and Direct Testimony of Gregory Crawford, June 13, 2012, Vol. 6 (“6/13/12 Tr. (Crawford)”).

2. The Rebuttal Cases

106. On July 2, 2012, the participants filed their written rebuttal cases. Witness testimony in the rebuttal phase began on Monday, August 13, 2012 and concluded on Thursday, August 23, 2012. There were eight days of rebuttal witness testimony.

a. SoundExchange Rebuttal Witnesses

107. SoundExchange filed written rebuttal testimony from nine witnesses, four of whom had also testified during the direct phase of these proceedings: Dr. Ordoover testified before the Court in the rebuttal phase of the case on Monday, August 13, 2012, Vol. 11 (“8/13/12 Tr. (Ordoover)”) and on Tuesday, August 14, 2012, Vol. 12 (“8/14/12 Tr. (Ordoover)”); Mr. Bender testified before the Court during the rebuttal phase of the case on Thursday, August 16, 2012, Vol. 14 (“8/16/12 Tr. (Bender)”); Dr. Ford testified before the Court during the rebuttal phase of the case on Monday, August 20, 2012, Vol. 15 (“8/20/12 Tr. (Ford)”) and on Tuesday, August 21, 2012, Vol. 16 (“8/21/12 Tr. (Ford)”); and Dr. Lys testified before the Court during

the rebuttal phase of the case on Monday, August 20, 2012, Vol. 15 (“8/20/12 Tr. (Lys)”). As noted above, he had submitted written direct testimony that was admitted into evidence, but had not testified in person in the direct case hearing.

108. SoundExchange also presented the rebuttal testimony of the following five witnesses who did not testify during the direct phase of the proceeding:

109. Mark Eisenberg is cofounder and Chief Operating Officer of LatticeWorks Media, a digital media holding company which develops, incubates, and operates collaborative properties designed for social media access and distribution. Eisenberg WRT at 1, SX Trial Ex. 245. In addition, Mr. Eisenberg provides independent consulting services to a variety of media, entertainment, and technology companies. Eisenberg WRT at 1, SX Trial Ex. 245. Mr. Eisenberg is an attorney admitted to practice law in the state of New York. Eisenberg WRT at 1, SX Trial Ex. 245. Prior to founding LatticeWorks, Mr. Eisenberg worked for 16 years for Sony Music Entertainment. Eisenberg WRT at 1, SX Trial Ex. 245. At Sony, Mr. Eisenberg negotiated artist agreements, 8/22/2012 Tr. 4556:12-4557:10 (Eisenberg), and focused on digital initiatives, first as Vice President, New Technology & Business Development, and most recently, Executive Vice President and Head of Business & Legal Affairs, Global Digital Business Group. Eisenberg WRT at 2, SX Trial Ex. 245. In the latter position, Mr. Eisenberg was the lead deal maker in negotiations for the use of Sony’s master recordings with digital music services. Eisenberg WRT at 2, SX Trial Ex. 245. Mr. Eisenberg testified before the Court during the rebuttal phase of the trial on Wednesday, August 22, 2012, Vol. 17 (“8/22/12 Tr. (Eisenberg)”). At trial, Mr. Eisenberg was qualified as an expert in the licensing relationships, business and legal, between digital services and record labels and the licensing relationships, business and

legal, between artists and labels with respect to royalty agreements. 8/22/2012 Tr. 4585:22-4586:7 (Eisenberg).

110. Aaron Harrison is Vice President, Business & Legal Affairs, Global Digital Business for UMG Recordings, Inc. (“UMG”), a position he has held since 2008. Along with other members of the Business & Legal Affairs team for Global Digital Business, he negotiates deals with various digital music services that use UMG’s repertoire of sound recordings, including download and ringtone stores, subscription and locker services, and interactive streaming services. He was previously Senior Director, Business & Legal Affairs, eLabs, for UMG, and began his employment with UMG in 2005 as Director, Business & Legal Affairs, eLabs. Harrison WRT at 1, PSS Trial Ex. 32. Mr. Harrison testified before the Court during the rebuttal phase of the trial on Tuesday, August 21, 2012, Vol. 16 (“8/21/12 Tr. (Harrison)”).

111. Michael Powers is the President of Yellow Dog Records, a boutique record label that features artists who emphasize innovative approaches to authentic American musical roots traditions — Blues, Jazz, Soul, and Americana styles. Powers WRT at 1, SX Trial Ex. 243. Mr. Powers testified before the Court during the rebuttal phase of the trial on Monday, August 20, 2012, Vol. 15 (“8/20/12 Tr. (Powers)”).

112. Dr. Itamar Simonson is the Sebastian S. Kresge Professor of Marketing at the Graduate School of Business, Stanford University. His field of expertise includes consumer behavior, marketing management, survey methods, and human judgment and decision making. Most of his research has focused on buyers' purchasing behavior as well as the effect on buying decisions of product/service characteristics (such as brand name, price, and features), the competitive context, and marketing activities (such as promotions and advertising). Simonson WRT at 1, SX Trial Ex. 65. Mr. Simonson testified before the Court during the rebuttal phase of

the trial on Tuesday, August 21, 2012, Vol. 16 (“8/21/12 Tr. (Simonson)”). The Court accepted Dr. Simonson as an expert in consumer decision-making and survey methodology. 8/21/12 Tr. at 4483:16-22 (Simonson).

b. Witnesses for the Services’ Rebuttal Cases

i. Sirius XM

113. David Frear. Rebuttal Testimony of David Frear, August 13, 2012, Vol. 11 (“8/13/12 Tr. (Frear)”).

114. Dr. Roger Noll. Rebuttal Testimony of Roger Noll, August 14, 2012, Vol. 12 (“8/14/12 Tr. (Noll)”) and Rebuttal Testimony of Roger Noll, August 15, 2012, Vol. 13 (“8/15/12 Tr. (Noll)”).

115. David Stowell. Rebuttal Testimony of David Stowell, August 15, 2012, Vol. 13 (“8/15/12 Tr. (Stowell)”).

116. Ronald Gertz. Rebuttal Testimony of Ronald Gertz, August 15, 2012, Vol. 13 (“8/15/12 Tr. (Gertz)”).

117. Dr. Michael Salinger. Rebuttal Testimony of Michael Salinger, August 16, 2012, Vol. 14 (“8/16/12 Tr. (Salinger)”).

ii. Music Choice

118. David Del Beccaro. Rebuttal Testimony of David Del Beccaro, August 16, 2012, Vol. 14 (“8/16/12 Tr. (Del Beccaro)”).

119. Dr. Gregory Crawford. Rebuttal Testimony of Gregory Crawford, August 23, 2012, Vol. 18 (“8/23/12 Tr. (Crawford)”).

D. Stipulation Concerning Ephemerals for SDARS and PSS

120. On May 25, 2012, the three parties to this proceeding submitted a joint proposal for a single bundled rate with a percentage attributable to the Section 112 license and a

percentage attributable to the Section 114 license. *See Stipulation of SoundExchange, Inc., Sirius XM Radio Inc. and Music Choice Regarding the Royalty and Minimum Fee Payable for the Making of Ephemeral Recordings* (May 25, 2012).

121. The stipulation proposes that royalty payments should be allocated between the Section 112 license and the Section 114 license by substantially the following regulatory language:

“The royalty payable under 17 U.S.C. 112(e) for the making of phonorecords used by the Licensee solely to facilitate transmissions for which it pays royalties as and when provided in this subpart shall be included within, and constitute 5% of, the total royalties payable under 17 U.S.C. 112(e) and 114.”

122. With respect to the SDARS minimum fee, stipulation proposes that it should be governed by substantially the following regulatory language:

“Each Licensee making Ephemeral Recordings pursuant to 17 U.S.C. 112(e) shall make an advance payment of \$100,000 per year, payable no later than January 20th of each year. The annual advance payment shall be nonrefundable, but the Ephemeral Recordings royalties due and payable for a given year or any month therein under [cross reference to bundled royalty rate and ephemerals allocation] shall be recoupable against the annual advance payment for such year; Provided, however, that any unused annual advance payment for a given year shall not carry over into a subsequent year.”

123. With respect to the PSS minimum fee, the stipulation proposes that it should be governed by substantially the following regulatory language:

“Each Licensee making digital performances of sound recordings pursuant to 17 U.S.C. 114 and Ephemeral Recordings pursuant to 17 U.S.C. 112(e) shall make an advance

payment of \$100,000 per year, payable no later than January 20th of each year. The annual advance payment shall be nonrefundable, but the royalties due and payable for a given year or any month therein under [cross reference to bundled royalty rate] shall be recoupable against the annual advance payment for such year; Provided, however, that any unused annual advance payment for a given year shall not carry over into a subsequent year.”

III. RATE PROPOSALS FOR SDARS

A. SoundExchange’s Rate Proposal for SDARS

124. SoundExchange’s rate proposal for Sirius XM’s SDARS service is set forth in the *Second Revised Proposed Rates and Terms of SoundExchange, Inc.* (“SX Revised Rate Proposal”). For all licensed transmissions and related ephemeral recordings by an SDARS, SoundExchange requests royalty rates that are a percentage of “Gross Revenues” as set forth below:

<u>Year</u>	<u>Percentage</u>
2013	12%
2014	14%
2015	16%
2016	18%
2017	20%

B. Sirius XM’s Rate Proposal for SDARS

125. Sirius XM’s proposed SDARS rate is set forth in the *Introductory Memorandum to the Written Direct Statement of Sirius XM Radio Inc.* Sirius XM has proposed a rate in the range of 5-7% of Sirius XM’s monthly gross revenues.

IV. RATE STRUCTURE FOR SDARS

126. In addition to identification of comparable benchmark services, determination of reasonable benchmark royalty rates requires the selection of an appropriate rate structure, *i.e.*, the

particular mechanism with which licensing fees are calculated. Historically, the Court has exhibited a preference for a per-performance (*i.e.*, per-listen/per-song transmitted) mechanism, reasoning that intensity of usage most directly reflects the value of the licensed sound recording rights to the licensee (the service). Implementation of a per-performance metric for satellite radio service is not feasible, for the simple reason that satellite radio transmission is one-way. That is, there is no listener data transmitted back to the satellite that would permit Sirius XM to collect the data required to administer the payment of royalties based on a per-performance metric. Ordover WDT at 15, SX Trial Ex. 74.

127. Given that a usage-based metric cannot be readily calculated, the remaining potentially viable options are percentage-of-revenue and per-subscriber mechanisms. Neither metric represents a perfect proxy for usage, although Dr. Ordover views a percentage of revenue mechanism as preferable because revenues, as a function of price, are related to usage insofar as subscribers' willingness to pay for a service is influenced by the subscriber's planned intensity of usage. Ordover WDT at 15-16, SX Trial Ex. 74. Thus, as between a per-subscriber rate and a percentage of revenue rate, it is Dr. Ordover's opinion that the percentage of revenue rate is preferable because it "gives us the best picture of the desirability of the service measured both by its price and by its attractiveness as measured by the number of subscribers." 6/14/12 Tr. 2262:5-2263:15 (Ordover). While it is true that a percentage of revenue metric requires one to estimate the portion of the total value of the Sirius XM service that ought to be attributed to music, a per-subscriber metric would require the same determination. Ordover WDT at 15-16, SX Trial Ex. 74.

128. As a general proposition, a percentage-of-revenue metric has two critical components – the percentage rate and the revenue base against which that rate is applied to

determine licensing fees. Importantly, these two components should be assessed jointly. In particular, because Dr. Ordovery's derivation of a percentage rate takes account of the fact that only a portion of Sirius XM's total subscription revenues is attributable to music content, that rate should be applied to the company's total subscription revenues. Ordovery WDT at 23 n. 26, SX Trial Ex. 74.

V. SOUNDEXCHANGE'S SDARS RATE PROPOSAL IS REASONABLE IN LIGHT OF THE ECONOMIC EVIDENCE

A. Background on Marketplace Agreements

129. Both Dr. Ordovery and Dr. Noll utilize agreements between record companies and certain types of digital music distribution services in their economic analysis in this case. Accordingly, we provide below an overview of the digital music distribution market and the common features of agreements between the services and the record companies.

130. According to Stephen Bryan, WMG "almost always requires digital distribution services to pay the greatest of: [REDACTED]
[REDACTED]
[REDACTED]]. Bryan WDT at 5, SX Trial Ex. 66. This structure "ensures that no matter what the business model of the licensee WMG is fairly compensated for the fact that we and our recording artists are providing the entire foundation for the service . . . [and] ensures that if the service is tremendously successful and has significant revenues driven by the availability of WMG content, WMG shares in that success." Bryan WDT at 5, SX Trial Ex. 66. Specifically, the per-user fee establishes a minimum value for WMG content within a given service; while the revenue share prong allows WMG to share in the upside when a service is particularly successful. 6/13/2012 Tr. 1971:13-1972:7 (Bryan).

131. In its marketplace agreements with digital music services, WMG negotiates an array of additional provisions that are of significant value to the company. Bryan WDT at 5, SX Trial Ex. 66. WMG generally receives non-refundable advances that serve as minimum revenue guarantees. Bryan WDT at 5-6, SX. Trial Ex. 66. WMG requires digital music services to meet rigorous security requirements, specifies the audio quality of streams offered by the service, and limits the types of devices on which music can be streamed or downloaded. Bryan WDT at 6, SX Trial Ex. 66. WMG also negotiates extensive reporting requirements and audit rights that “allow[] WMG broad oversight over the commercial distribution of its copyrighted works.” Bryan WDT at 6, SX Trial Ex. 66. WMG secures holdback rights that can be exercised pursuant to artists contracts or in order to create exclusive deals for certain content. Bryan WDT at 6, SX Trial Ex. 66. WMG negotiates terms of short duration (typically one year) in light of the still-evolving digital music market. Bryan WDT at 6, SX Trial Ex. 66; 6/13/2012 Tr. 1975:1-4 (Bryan).

1. Subscription On-Demand Streaming Agreements

132. Stephen Bryan testified that subscription interactive (or “on-demand”) streaming services represent “the most mature and developed freely-negotiated digital distribution channel that does not involve the purchase of permanent copies of music.” Bryan WDT at 7, SX Trial Ex. 66. Mr. Bryan explained that his judgment that these digital distribution channels are more mature than others is based on the almost ten years that on-demand services have been available, the existence of at least a half-dozen companies that are currently licensed for such services, and the fact that the retail price and business models for these services are well established. 6/13/2012 Tr. 1976:9-1977:8 (Bryan). These services offer the ability to stream exactly the song the subscriber wishes to hear (hence “on demand”), though on-demand subscribers often spend a

substantial amount of their time accessing the “lean-back” radio-like functionality available on on-demand services (though typically associated with webcasting services). Bryan WDT at 8, SX Trial Ex. 66; Bryan WDT at 10, SX Trial Ex. 66. (When on-demand subscriptions incorporate “lean-back” radio-like functionality, the licensing fees for the radio component are not separately negotiated. Bryan WDT at 10, SX Trial Ex. 66.)

133. In addition to accessing streams online, subscribers to on-demand services may also conditionally download tracks to their PC and to at least one mobile device (depending on the subscription type). Bryan WDT at 8, SX Trial Ex. 66. The conditional downloads remain accessible on the subscriber’s hard drive or portable device for as long as the subscriber maintains his or her paid subscription. Bryan WDT at 8, SX Trial Ex. 66.

134. On-demand services such as those offered by Rhapsody and Microsoft are priced at \$9.99 for portable subscriptions and \$4.99 for non-portable subscriptions. Bryan WDT at 8, SX Trial Ex. 66. Recently a new subscriber acquisition model, dubbed “freemium,” has emerged; services that offer this three-tiered service (a limited free on-demand tier that aggressively seeks to convert users to the more attractive paid tiers, a non-portable tier at \$5, and a portable tier at \$10) include Spotify, MOG, and Rdio. Bryan WDT at 8-9, SX Trial Ex. 66.

135. Stephen Bryan testified that despite the drop in retail price for on-demand streaming services, [REDACTED]
[REDACTED]. For example, in WMG’s agreement with MOG, WMG is paid the greatest of [REDACTED]; 2) [REDACTED]
[REDACTED]; and [REDACTED]. Bryan WDT at 9, SX Trial Ex. 66.

2. Digital Downloads and “Cloud” Locker Services

136. According to Stephen Bryan, the single largest contributor to WMG’s revenues is the sale of permanent downloads through Apple’s iTunes Store. Bryan WDT at 11, SX Trial Ex. 66. Currently, WMG is paid approximately [REDACTED] per downloaded track, or [REDACTED] of the retail price. Bryan WDT at 11, SX Trial Ex. 66. However, WMG maintains the discretion to increase those rates or [REDACTED] [REDACTED].

137. Stephen Bryan testified that a number of permanent download retailers have recently launched “cloud” locker services, which allow users to store purchased music on remote servers (as opposed to their local hard drives). Bryan WDT at 12, SX Trial Ex. 66. In WMG’s agreement with Apple for its cloud service, WMG is paid the greater of [REDACTED] [REDACTED] [REDACTED] and [REDACTED]. Bryan WDT at 12, SX Trial Ex. 66.

3. Ringtones and Ringbacks

138. Stephen Bryan testified that WMG continues to license its sound recordings for use in mobile personalization products such as ringtones (digital versions of sound recordings that serve as the ringer on a user’s cell phone) and ringback tones (streams of sound recordings that users can select to play for a caller instead of the customary ring). Bryan WDT at 12, SX Trial Ex. 66. License fees for ringtones are generally the greater of [REDACTED] [REDACTED]. Bryan WDT at 12, SX Trial Ex. 66. Ringtones sold by Apple are subject to the greater of [REDACTED]. Bryan WDT at 12, SX Trial Ex. 66. Ringback tones often retail for \$2 per ringback tone, plus a monthly service fee of \$1-\$2. Bryan WDT at 12, SX

Trial Ex. 66. WMG generally receives the greater of [REDACTED]
[REDACTED]]. Bryan WDT at 13, SX Trial Ex. 66.

4. Video Streaming

139. According to Stephen Bryan, the overwhelming majority of video streaming is done by users on an on-demand basis. Bryan WDT at 13, SX Trial Ex. 66. WMG's agreement with YouTube requires royalty payments of between [REDACTED]
[REDACTED]
[REDACTED]]. Bryan WDT at 13, SX Trial Ex. 66.

5. Customized Radio

140. Stephen Bryan testified that in negotiations for direct licenses for customized non-interactive radio service, such as Slacker or Last.fm, in contrast to on-demand services, "we're not really negotiating from scratch. We're negotiating from a starting point that is the SoundExchange rate." 6/13/2012 Tr. 1979:11-13 (Bryan). The direct agreements that WMG has entered into with customized radio services often include "modest incremental functionality that's not part of the program complement." 6/13/2012 Tr. 1979:4-5 (Bryan). The dynamic that results is that "the service can always decide and in the negotiation always say that if we can't reach a rate that we're comfortable with, we can modify our service and take a license through SoundExchange." 6/13/2012 Tr. 1979:6-9.

B. Interactive Music Streaming Services Provide an Appropriate Benchmark to Establish Sound Recording Royalty Rates for Satellite Radio

141. The core economic principles underlying SoundExchange's economic analysis in this matter, as presented by Dr. Ordoover, is that the section 801(b)(1) statutory criteria are most consistent with the development of a royalty rate that approximates the terms that would be reached by the parties in an unfettered marketplace setting, *i.e.*, one free of the applicable

compulsory licensing regime. Such a rate would reflect the value of sound recordings to Sirius XM subscribers, given the pricing and availability of other channels of distribution through which consumers are able to listen to music. It is reasonable to expect that a material portion of that value would flow to sound recording copyright holders inasmuch as music represents a critical element of satellite radio that attracts subscribers to the service. Ordover WDT at 3, SX Trial Ex. 74.

142. Dr. Ordover approached the task of recommending a royalty rate in this case by first assessing which non-statutory channels of music distribution reasonably can serve as benchmarks for the rates agreed to between buyers and sellers in the absence of a regulatory backstop. Dr. Ordover concluded that interactive subscription services represent the most suitable benchmark for purposes of estimating a rate schedule that should apply to Sirius XM's licensing of digital sound recording performance rights. Ordover WDT at 4, SX Trial Ex. 74.

143. Dr. Ordover adopted a benchmarking approach as his method for recommending music royalty rates in this case because "[it] has a very nice property, and that is that it actually starts with real life rates. I don't have to construct rates out of nowhere or on some basis. I can actually work with actual rates." 6/14/12 Tr. 2254:18-2256:3 (Ordover). The compelling benefit of a benchmark approach is that it is based on actual market outcomes that reflect the very same factors deemed relevant by the first three statutory criteria. Ordover WDT at 14-15, SX Trial Ex. 74.

144. Using interactive subscription services as the benchmark marketplace, Dr. Ordover undertook several approaches to calculate appropriate rates for Sirius XM. The rates yielded by these approaches range from 22.32% to 32.5% of Sirius XM's gross subscription revenues. Ordover WDT at 4, SX Trial Ex. 74.

1. The CRJs' Prior Reliance on the Interactive Services Benchmark in SDARS I

145. In *SDARS I*, this Court found that “the interactive subscription market is a benchmark with characteristics reasonably comparable to the non-interactive SDARS, particularly after Dr. Ordover’s reasonable adjustment for the difference in interactivity. Both markets have similar sellers and a similar set of rights to be licensed. While the buyers may be different entities, there is no persuasive evidence that the buyers in the target market have less relative market power than the buyers in the benchmark market. Both markets are input markets and demand for these inputs is driven by or derived from the ultimate consumer markets in which these inputs are put to use.” *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services (“SDARS I”)*, Final Rule and Order, 73 Fed. Reg. 4080, 4093 (Jan. 24, 2008).

2. Dr. Ordover’s Rationale for an Interactive Music Service Benchmark

146. Dr. Ordover’s first criteria in selecting a benchmark was to find rates that were “maximally free of regulatory intervention,” and were negotiated between willing buyers and willing sellers in a market that was effected to the least extent possible by regulation. 6/14/12 Tr. 2256:18-2257:4 (Ordover). “[I]t is important not to rely, as a benchmark, if one can avoid it, on rates that have been negotiated with the backstop of the regulatory intervention. 6/14/12 Tr. 2359:11-2359:18 (Ordover). In Dr. Ordover’s opinion, rates arising from voluntary transactions in a competitive marketplace free of regulatory overhang best advance the statutory policy objectives and promote the economic welfare of consumers, record companies, and distributors of music content. Ordover WDT at 14-15, SX Trial Ex. 74.

147. Second, Dr. Ordover wanted to select as a benchmark services for which he could find enough information based on multiple buyer/seller interactions. “In other words, it is not a

good idea to start from a rate where there is only one buyer/seller interaction. There's just one beta [sic] point. What you can learn from one data point. Very little. Probably nothing."

6/14/12 Tr. 2257:5-11 (Ordover).

148. Dr. Ordover's third criteria for a suitable benchmark is that the benchmark market transactions should not be distorted by the exercise of undue market power on either the buyers' side or the sellers' side. 6/14/12 Tr. 2257:12-20 (Ordover).

149. Last, Dr. Ordover sought to use as a benchmark agreements with services that are similar to the service for which he is trying to construct a royalty rate. 6/14/12 Tr. 2257:21-2258:2 (Ordover).

150. Measured against these criteria, Dr. Ordover believed that interactive music streaming services "stack[ed] up pretty well." Dr. Ordover had access to multiple agreements negotiated between a number of different music services and each of the four major record companies. The rates in those agreements were voluntarily negotiated, because no party was required by regulation to buy or to sell, no party had to accept the rates being offered by the other, and no party had recourse to a regulatory process in the event that negotiations failed. 6/14/12 Tr. 2258:7-2259:15 (Ordover).

151. Moreover, although there are some differences between interactive streaming services and satellite radio (besides interactivity or the lack thereof, for example, "there are some differences between the satellite signal into your motor vehicle versus the streaming service delivered by an interactive channel") the services are similar in important respects. 6/14/12 Tr. 2259:20-2261:3 (Ordover). On the seller side, both interactive subscription services and satellite radio require access to the same sound recording rights controlled by the same copyright holders. On the buyer side, sound recording rights are an essential input for Sirius XM, just as they are for

interactive streaming services, which means that for both Sirius XM and interactive music services, the demand for sound recording rights is derived from downstream consumer demand for the services. In both downstream markets, music content is distributed through a digital channel and is offered at monthly subscription prices that afford subscribers unlimited usage. In addition, both services provide subscribers with the ability to listen to music while “on the go” at least to some degree: satellite radio primarily delivers music content to consumers while traveling in their vehicles, and mobile interactive subscription services provide subscribers with the ability to listen to music on mobile devices such as laptops, iPhones, and iPads.¹

3. Calculation of the Upper Bound of Rates Using the Interactive Music Service Benchmark

152. Dr. Ordoover’s first, and preferred, approach to analyzing the interactive music services benchmark was to calculate the percentage of total revenues represented by royalty payments made by interactive services to the record companies, and then apply that percentage of revenue to the amount that he calculated as the retail price of a music-only satellite service in order to determine the corresponding percentage of revenue for the Sirius XM service. *See generally* Ordoover WDT at 18-25, SX Trial Ex. 74.

153. In Dr. Ordoover’s opinion, the value to consumers of the attributes and functionalities of a service is reflected in retail prices paid by consumers and the overall attractiveness of the service as measured by the number of subscribers. Thus, the service’s gross revenues (which are a product of price and quantity) reflect the value consumers in the aggregate place on the various attributes and functionalities provided by the service. For example, if

¹ Interactive subscription services also make “non-portable” services available to consumers by allowing streaming only through a personal computer. These services command lower retail prices and were not included in Dr. Ordoover’s analysis. Ordoover WDT at 18-19, SX Trial Ex. 74.

consumers in the aggregate reduce their valuation of the functionalities offered by one service relative to another service, one would expect the price of the now less desirable service to fall, all else remaining the same. Stated another way, for consumers who are just indifferent between subscribing to one service versus another, the relevant prices fully capture the influence of all the relevant factors on the valuation of the two services. By using percentage-of-revenue rates, the need to adjust benchmark rates to account for differences in characteristics between the benchmark service and satellite radio is avoided; the retail prices reflect such differences, as perceived by consumers, which in turn means that royalty payments based on a percentage of revenues also will reflect such differences. Ordover WDT at 27, SX Trial Ex. 74.

154. Dr. Ordover confirmed this theoretical proposition by examining the licensing agreements negotiated across a variety of digital music distribution services. The results of that examination appear at Table Two of Dr. Ordover's written direct testimony (which is reproduced later in these Proposed Findings). This table shows the general clustering of, and consistently high, percentage-of-revenue rates for access to digital sound recording rights across different distribution channels. Ordover WDT at 16, 26, SX Trial Ex. 74.

155. Consequently, in this analysis, Dr. Ordover did not specifically adjust for the absence of interactivity in the Sirius XM service. As noted above, the retail price paid by consumers for a service reflects the value of the service and all of its attributes. Thus, if consumers value interactivity, that value will be reflected in a higher retail price paid by consumers for an interactive service. A given percentage of royalty rate applied to a non-interactive service with a given consumer retail price will result in a lower per-unit royalty for the record companies compared to the same percentage of revenue royalty rate applied to an interactive service with a higher consumer retail price. Thus, the increased value associated with

interactivity will result in a higher dollar-value royalty even though the same percentage of revenue is applied to interactive and non-interactive services. “So, the more valuable the service, the higher the per-unit payment is going to be made to the labels”, even though same percentage of revenue is applied. 6/14/12 Tr. 2280:4-2282:11 (Ordoover).

156. In short, in his primary benchmarking analysis Dr. Ordoover took account of interactivity because its value is reflected in the retail prices paid by consumers. 6/14/12 Tr. 2380:1-2381:2 (Ordoover). And, because the retail price “reflects all of the advantages and disadvantages of SiriusXM’s service vis-à-vis interactive services,” Dr. Ordoover’s calculations take into account not only the effect of interactivity or the lack thereof, but also any other relevant differences – positive or negative – between interactive services and Sirius XM that effect the value of such services to the consumer. 6/14/12 Tr. 2391:18-2392:7 (Ordoover).

157. The agreements and corresponding royalty payments used by Dr. Ordoover for his analysis are those between interactive streaming music services and the four major record companies. 6/14/12 Tr. 2309:13-17 (Ordoover). Dr. Ordoover and his staff analyzed data on licensing fees paid by these interactive subscription services to each of the four major record companies. Ordoover WDT at 19, SX Trial Ex. 74.

158. Dr. Ordoover believes that these agreements are representative of the market as a whole because the major record companies represent approximately 70 percent of the market for recorded music. In addition, the major record companies distribute sound recordings produced by many independent labels, and the rates negotiated by the major record companies apply to the distributed independent labels as well. 6/14/12 Tr. 2311:18-2312:6, 2312:21-2314:15 (Ordoover).

159. Dr. Ordoover started his analysis with data from July 2010. He chose this date because the digital music distribution marketplace is highly dynamic, and he believed that data

used to develop estimates of reasonable rates should be relatively current and thus reflective of extant marketplace conditions. Ordover WDT at 20 n. 18, SX Trial Ex. 74.

160. The agreements between interactive music services and the major record labels reviewed by Dr. Ordover and his staff were structured so that the royalty payment would be calculated as the greatest of three metrics: an amount per play; an amount per subscriber; and a percentage of the service's revenue. 6/14/12 Tr. 2261:7-2262:4 (Ordover). The royalty calculations for each label are done on a pro-rata basis according to the proportion of total songs played accounted for by each record company's sound recordings catalog, *e.g.*, if a label accounts for 20% of the music distributed on a service, the label's licensing fees would be computed using 20% of the service's revenues. Licensing fees ultimately owed by the service are equal to the largest fee amount calculated as among the operative metrics. Ordover WDT at 19, SX Trial Ex. 74.

161. To calculate the effective percentage of revenue paid by each interactive music streaming service to the record labels, Dr. Ordover took the amount of each services' gross revenues divided by the amount it paid in royalties to the record companies. 6/14/12 Tr. 2274:10-16 (Ordover). In other words, Dr. Ordover relied on the actual payments made by the interactive services to calculate the effective percentage of revenue, rather than the percentage of revenue rates specified in the agreements.² 6/14/12 Tr. 2321:14-2322:2, 2324:16-2325:6 (Ordover). When Dr. Ordover calculated actual licensing fees paid as a percentage of revenue, he used gross revenues – that is, revenues without any deductions or carve-outs. Ordover WDT at 19, SX Trial Ex. 74.

² In some cases, the per-play rates or per-subscriber rates might yield a higher payment than the percentage of revenue rate stated in the contract. In such cases, the music service pays the higher rate, and Dr. Ordover converted that payment into an effective percentage of revenue.

162. In Table One of his written direct testimony, reproduced below, Dr. Ordoover reported results for licensing fees paid to each of the four major record labels by a number of interactive subscription services, including well-established services like Microsoft Zune, Napster, and Rhapsody, and newer market entrants like Rdio and MOG. The annual payments as a percentage of gross revenues generally range from 50% to 70%, and tend to cluster in a narrower range of 60% to 65%. 6/14/12 Tr. 2275:4-12 (Ordoover), Ordoover WDT at 19-21, SX Trial Ex. 74.

**Ordover Table One: Royalty Payments by Interactive Subscription Services
(as a percentage of gross revenues)
(RESTRICTED)**

Label	Service	2H2010	2011	Total
EMI	Napster Streaming + Mobile	████	████	████
	Rhapsody Limited Portable + Portable	████	████	████
	Zune Portable	████	████	████
	MOG	████	████	████
	Spotify Premium + Mobile		████	████
	Slacker Premium Service		████	████
	Rdio Portable	████	████	████
Sony	Napster Streaming + Mobile	████	████	████
	Rhapsody Limited Portable + Portable	████	████	████
	Zune Portable	████	████	████
	MOG	████	████	████
	Rdio Portable	████	████	████
UMG	Napster Streaming + Mobile	████	████	████
	Rhapsody Limited Portable + Portable	████	████	████
	Zune Portable	████	████	████
	MOG		████	████
	Spotify Portable		████	████
	Rdio Portable		████	████
WMG	Napster Streaming + Mobile	████	████	████
	Rhapsody Portable	████	████	████
	Zune Portable	████	████	████
	MOG	████	████	████
	Slacker Premium Service		████	████
	Rdio Portable	████	████	████

Source: Royalty payment data from EMI, Sony, Universal, and Warner.
Note: All reported percentages are based on gross subscription revenues.

163. It was necessary for Dr. Ordovery to adjust the benchmark rates to account for the fact that the Sirius XM service, unlike interactive subscription services, transmits both music and non-music content, and only a portion of Sirius XM's total subscription revenues can be attributed to the sound recordings. Once this adjustment is made, observed payments to the record labels by interactive subscription services, as percentages of the services' total gross revenues, yield "percentage of revenue rates" for Sirius XM between 30% and 32.5% for the 2013-2017 period. Ordovery WDT at 17, SX Trial Ex. 74.

164. Estimation of the portion of total satellite radio service value reasonably attributable to music is greatly aided by the fact that Sirius XM offers service packages that essentially consist of non-music content (Sirius News, Sports & Talk and XM News, Sports & Talk) and service packages consisting mostly of music programming (Sirius Mostly Music and XM Mostly Music). Each of the Mostly Music packages provides access to a channel line-up heavily weighted towards music programming: approximately 80% of the channels are music channels. Ordovery WDT at 21-22, SX Trial Ex. 74.

165. The non-music and mostly-music packages are offered at identical prices – \$9.99 per-month. The fact that the same price is charged for both types of service packages suggests that the marginal subscriber(s) to each of these packages values music and non-music content, respectively, at roughly equivalent levels.³ This finding has important implications for the

³ For purposes of estimating the portion to the total value of satellite radio attributable to music content, it is most appropriate to focus on the marginal consumer, *i.e.*, the consumer for whom the value of music is just equal to the price of the service. Infra-marginal subscribers value music more highly than marginal subscribers, of course. Hence the average valuation of music by all the subscribers to the mostly-music service is higher (and can be substantially higher) than the marginal valuation. Furthermore, if one reasonably assumes a uniform distribution of tastes across consumers, for both music and non-music content, the identical prices of Sirius XM's non-music and mostly music packages suggest that consumers, on average, value music and non-music content equivalently. That is, the average valuation of

various “blended” packages (*i.e.*, packages whose channel line-ups prominently feature both music and non-music content) to which all but a small fraction of Sirius XM’s customers subscribe. In particular, for packages that combine a substantial amount of both music and non-music content, it is reasonable to estimate that the music content, for the average marginal subscriber, accounts for one-half of the service’s total value. Ordover WDT at 22-23, SX Trial Ex. 74.

166. Dr. Salinger does not have any basis to disagree with Dr. Ordover’s conclusion that music represents 50 percent of the content value of the Sirius XM service. 8/16/12 Tr. at 3842:5-14 (Salinger).

167. Although Dr. Ordover found that music represents 50 percent of the value of the content on Sirius XM, Dr. Noll used the slightly higher figure of 55 percent for the value of sound recordings, because he included comedy and Dr. Ordover did not. 6/5/12 Tr. 234:7-16 (Noll).

168. In fact, the evidence shows that Dr. Ordover’s assumption that music is 50 percent of the value of the content is quite conservative. As explained in the testimony of Dr. Simonson, internal Sirius XM surveys leave little doubt that, for most Sirius XM subscribers, music is the most important attribute of satellite radio. Simonson WRT at 8-9, SX Trial Ex. 65. Dr. Simonson testified that Sirius XM has conducted many consumer studies to learn about its subscribers and what they consider most important. These studies show that music is the most important content for most Sirius XM subscribers and the main driver of their decision to

music among consumers who value non-music at \$X/month is the same as the valuation of non-music among consumers who value music at \$X/month. Ordover WDT at 22 n. 24, SX Trial Ex. 74.

subscribe to and retain the Sirius XM service, significantly more important than non-music programming (e.g., news, sports, entertainment). Simonson WRT at 8-9, SX Trial Ex. 65.

169. The following are some illustrative findings taken from various Sirius XM consumer/subscriber studies (*see* Simonson WRT at 9-10, SX Trial Ex. 65):⁴

- a) Music channels are the most popular among Sirius subscribers: One Sirius XM study (Simonson WRT at Ex. 201-RR, SX Trial Ex. 65) found that [REDACTED]
[REDACTED]
[REDACTED].
- b) Almost all Sirius XM subscribers listen to music (Simonson WRT at Ex. 202-RR, p. 00021780, SX Trial Ex. 65): [REDACTED]
[REDACTED]
[REDACTED]. Another study (Simonson WRT at Ex. 203-RR, p. 00042993, SX Trial Ex. 65) found that [REDACTED]
[REDACTED].
- c) Sirius XM subscribers listen to music more than any other type of programming. For example, the Sirius XM study discussed above (Simonson WRT at Ex. 203-RR, p. 00042993, SX Trial Ex. 65) found that [REDACTED]
[REDACTED]
[REDACTED].

⁴ Dr. Simonson was given access to all of Sirius XM's internal surveys produced in this case. 8/21/12 Tr. 4488:10-15 (Simonson). Dr. Simonson testified that the surveys he identified in the report were just illustrative of the same conclusions that would be reached in the entire universe of Sirius XM surveys: "I reviewed all of the studies that I received and there was no point in attaching all of them to my report, but I think that the conclusions that you reach from wider assortments of studies are quite similar." 8/21/12 Tr. 4513:17-21 (Simonson).

- d) In another study completed for Sirius XM, [REDACTED]
[REDACTED] (Simonson WRT at Ex. 204-RR, p. 00042877, SX Trial Ex. 65); among those respondents who consider subscribing to Sirius XM (referred to as “considerers”), [REDACTED], which shows the importance of music for attracting new subscribers.
- e) Furthermore, a Sirius XM study (Simonson WRT at Ex. 203-RR, p. 00042968, SX Trial Ex. 65) concerning user motivation found that [REDACTED]
[REDACTED]. More specifically, the study found [REDACTED]
[REDACTED]
[REDACTED] (see also Simonson WRT at Ex. 203-RR, p. 0043020-22, SX Trial Ex. 65). For example, the study found that music was a significant driver of continuing subscriptions for [REDACTED]
[REDACTED]
[REDACTED].⁵ See also Simonson WRT at Ex. 203-RR, p. 00042977, SX Trial Ex. 65 (concluding that “[REDACTED]”).

⁵ As Dr. Simonson testified, Sirius XM’s internal studies show that music is [REDACTED] than exclusive non-music content. Simonson WRT at 10 n.13, SX Trial Ex. 65. For example, one Sirius XM survey found that [REDACTED]
[REDACTED]. Simonson WRT at Ex. 205-RR, pp. 00045737-38, SX Trial Ex. 65. In fact, much of Sirius XM’s exclusive content only attracts a limited audience. For example, after the merger, Sirius XM attempted to attract a broader audience to Howard Stern with a large “Turn on Stern” marketing campaign aimed at legacy XM subscribers (who previously could not listen to Howard Stern on legacy Sirius). But Sirius XM found that [REDACTED]
[REDACTED]. Simonson WRT at 10 n.13, SX Trial Ex. 65.

170. In short, the evidence overwhelmingly demonstrates that Dr. Ordovery's assumption that music is 50% of the value of the content on Sirius XM is entirely reliable and if anything significantly conservative.

171. Based on the determination that music represents approximately half of the content value of satellite radio, Dr. Ordovery calculated that the per-subscriber royalty payment for satellite radio would be \$3.88 to \$4.21 (*i.e.*, the then-retail price of the Select service package of \$12.95 * 50 percent * 60 or 65 percent). Dividing those figures by the \$12.95 retail price yields a percentage of revenue rate of 30 percent to 32.5 percent. Ordovery WDT at 23, SX Trial Ex. 74. In other words, Dr. Ordovery used \$12.95 as the subscription fee, and then multiplied that by 50 percent to obtain the music portion of the subscription price of \$6.475. He then multiplied the music-only satellite radio service subscription price by 60 percent to 65 percent (the effective percentage of revenue royalty derived from the interactive services market) to obtain the music royalty of \$3.88 to \$4.21. Finally, he and divided those numbers back into the subscription price to convert it back to a percentage. *See* 8/16/12 Tr. at 3794:13-3795:9 (Salinger).

172. Dr. Ordovery did not consider it necessary to adjust the rates calculated based on the interactive music services benchmark interactive to account for the cost of Sirius XM's investment in its network platform. As a matter of economic theory, Dr. Ordovery believes that if two music deliver services offer music in different ways, and consumers will pay "X" for one service and "X plus delta" for the second service, the extra amount ("delta") that consumers are willing to pay for the second service will be split in some fashion between the service and the music providers. That is because "one party needs the other one to create the benefit. Given that recognition, it is most likely that they will come to some terms that sort of recognize the joint value creation leading, therefore, to some kind of allocation of the deltas between the two sides."

6/14/12 Tr. 2270:7-2271:15 (Ordoover). Thus, a percentage of revenue rate applied to the total revenues of the service allows each party to capture “the joint benefit from what it is that Sirius XM does and what it is that – that the record companies do” and there is no need to further adjust. 6/14/12 Tr. 2392:8-19 (Ordoover).

4. Dr. Ordoover’s Calculation of the Lower Bound of Rates Using the Interactive Music Service Benchmark

173. In order to generate a lower bound for the range of royalty rates that he proposes, Dr. Ordoover calculated the royalty rates for satellite radio by adjusting the percentage of royalty rates paid by the interactive streaming music services specifically in order to account for the absence of interactivity in the satellite radio service. 6/14/12 Tr. 2282:12-16 (Ordoover). In other words, Dr. Ordoover’s lower bound was calculated under the assumption that interactivity is the only material difference between interactive subscription services and satellite radio. Ordoover WDT at 34, SX Trial Ex. 74.

174. A reasonable estimate of the incremental value of interactivity can be obtained by comparing the average monthly price of non-interactive subscription services with the average monthly price for interactive subscription services. Retail prices effectively capture the marketplace value marginal consumers place on the collection of characteristics and functions that define any given service, and ratios of retail prices therefore can serve as a useful estimate of the difference in value between the features and capabilities of one service versus another to marginal consumers. Ordoover WDT at 27-28, SX Trial Ex. 74.

175. In order to derive the value of interactivity alone, therefore, Dr. Ordoover compared the retail prices for interactive music streaming services with the retail prices for non-

interactive streaming music services.⁶ Because both types of services are Internet music streaming services and the only significant difference is interactivity, the comparison of retail prices captures the value of interactivity to consumers. 6/14/12 Tr. 2284:9-21, 2409:15-20 (Ordoover); Ordoover WDT at 33, SX Trial Ex. 74.

176. The ratio of these two prices provides the adjustment factor to apply to the actual monthly per-subscriber rate for interactive subscription services in order to estimate an equivalent rate for satellite radio. In other words, under the assumption that interactivity is the only material difference between interactive subscription services and satellite radio, the actual monthly licensing fees per-subscriber paid by interactive subscription services is adjusted by the ratio of the retail prices for interactive and non-interactive streaming services to derive an equivalent monthly per-subscriber rate for Sirius XM. Ordoover WDT at 34, SX Trial Ex. 74.

177. Dr. Ordoover regards this calculation as a lower bound for his proposed rates because it assumes that interactivity, or the absence thereof, is the only distinguishing factor between interactive streaming services and Sirius XM. As Dr. Ordoover notes, there are differences between the services with respect to the availability of transmissions (*e.g.*, Sirius XM's satellite coverage offers availability almost anywhere in the United States, while mobile streaming services require access to a high-speed wireless network). Ordoover WDT at 30, SX Trial Ex. 74. Thus, to the extent that Sirius XM has characteristics valued by consumers that are not available with Internet music streaming services, such as easily availability in the dashboard of the car, this calculation does not account for that additional value. 6/14/12 Tr. 2283:8-2284:8, 2382:12-2883:2 (Ordoover).

⁶ The video service agreements used by Dr. Ordoover to determine an interactivity adjustment in SDARS I no longer exist. 6/15/12 Tr. 2455:18-2456:4 (Ordoover).

178. In particular, there is a substantially greater difference between the retail prices for interactive and non-interactive Internet streaming services than there is between the retail prices for interactive streaming services and satellite radio, even if one reduces the satellite radio retail price by 50 percent to account for the presence of non-music content. This fact suggests that there are other differences besides interactivity between non-interactive services and satellite radio that influence their relative values to consumers. In other words, accounting only for interactivity leads to a downward adjustment of benchmark rates that quite likely overstates the extent to which the average marginal consumer values interactive subscription services more highly relative to a hypothetical music-only satellite radio offering. Ordover WDT at 33, SX Trial Ex. 74.

179. Interactive music streaming services are uniformly offered to consumers at a retail price of \$9.99 per month. In Table Four of his Written Direct testimony (reproduced below), Dr. Ordover listed the interactive music streaming services and their retail prices. Ordover WDT at 31-32, SX Trial Ex. 74.

Ordover Table Four: Monthly Prices for Interactive Subscription Services

Service	Monthly Retail Price
Mog Primo	\$9.99
Rdio Unlimited	\$9.99
Rhapsody Premiere	\$9.99
Slacker Premium Radio	\$9.99
Spotify Premium	\$9.99

Source: Service websites

180. Dr. Ordover and his staff researched the websites of non-interactive subscription music streaming services to determine the retail prices of those services. 6/14/12 Tr. 2285:11-2286:10 (Ordover). The table is reproduced from Dr. Ordover's written direct testimony and presents a summary of monthly retail prices for non-interactive subscription services. Ordover WDT at 33, SX Trial Ex. 74.

Ordover Table Five: Monthly Prices for Non-Interactive Subscription Services

Service	Monthly Retail Price
Pandora One	\$3.00
Last.fm	\$3.00
Live365 VIP Annual/6-month/3-month	\$5.95/\$6.95/\$7.95
Musicover Premium Annual/3-month	\$4.00/\$5.00
Sky.fm Premium 2-year/Annual/Monthly	\$3.71/\$4.08/\$4.99

Source: Service websites

181. A simple average of the reported monthly prices is \$4.86. Ordover WDT at 33, SX Trial Ex. 74. Dr. Ordover used a simple average rather than a weighted average because he did not have reliable data on the usage for each of the various non-interactive music streaming services. 6/14/12 Tr. 2293:15-2294:16 (Ordover).

182. Many non-interactive music streaming services are ad-supported services that do not charge a monthly subscription fee to consumers. Dr. Ordover did not include ad-supported services in his analysis because he did not have the data to convert advertising revenue into a per-consumer amount. 6/14/12 Tr. 2287:16-2288:3 (Ordover). Responding to questions from Judge Roberts, Dr. Ordover also noted that the objective of this exercise was to obtain a reasonable estimate of the incremental value consumers assign to interactivity. The most straightforward and defensible way to derive such an estimate is to identify two services available to consumers in the marketplace that are as close to each other as possible in pertinent characteristics other than the presence or absence of interactivity. In Dr. Ordover's view, a comparison of the retail prices of subscription interactive services and subscription (paid) non-interactive services satisfy this objective – the services differ only with respect to interactivity. To introduce ad-supported non-interactive streaming services would needlessly confound the exercise. This is so because interactivity would cease to be the only difference between the two services – the presence or absence of commercials would also need to be accounted for. In other

words, the exercise would no longer effectively isolate the incremental value of interactivity, which again is the ultimate objective. Ordover WRT at 33, SX Trial Ex. 218.

183. Moreover, as Dr. Ordover pointed out, the largest non-interactive streaming service – Pandora – publicly reports that it pays approximately 50 percent of its revenues in royalties to the record companies, and he therefore believed that the inclusion of advertising supported non-interactive music services would not alter his conclusions. 6/14/12 Tr. 2290:19-2291:17 (Ordover).

184. The ratio of the retail price of the interactive music services to the simple average retail price of the non-interactive music services is .4865 (\$4.86/\$9.99). Dr. Ordover used that ratio to adjust the average per-subscriber royalty paid by interactive services in order to calculate an equivalent payment for satellite radio. 6/14/12 Tr. 2294:17-2295:11 (Ordover); Ordover WDT at 34, SX Trial Ex. 74.

185. The actual per-subscriber royalty paid by a number of interactive subscription services, *i.e.*, the actual monthly licensing fees paid divided by the monthly subscriber counts, were presented in the Table Three of Dr. Ordover's written direct testimony, which is reproduced below. The unweighted average monthly per-subscriber royalty is \$5.95. Ordover WDT at 28-29, SX Trial Ex. 74. The figure of \$5.95 was calculated by Dr. Ordover using the same data he used to calculate the effective percentage of revenue paid by interactive music services – that is, the total payments made by such services and the number of subscribers reported by those services. 6/14/12 Tr. 2296:7-15 (Ordover).

**Ordover Table Three: Actual Royalty Payments Per-Subscriber
(RESTRICTED)**

Label	Service	2H2010	2011	Total
EMI	Napster Streaming + Mobile	■	■	■
	Rhapsody Limited Portable	■	■	■

	Spotify Premium + Mobile			
	MOG			
	Slacker Premium Service			
	Rdio Portable			
Sony	Napster Streaming + Mobile			
	Rhapsody Limited Portable			
	MOG			
	Rdio Portable			
UMG	Napster Streaming + Mobile			
	Rhapsody Limited Portable			
	MOG			
	Spotify Portable			
	Rdio Portable			
WMG	Napster Streaming + Mobile			
	MOG			
	Slacker Premium Service			
	Rdio Portable			

Source: Royalty payment data from EMI, Sony, Universal, and Warner.

186. Dr. Ordoover applied the interactivity adjustment of .4865 to the average per-subscriber royalty payment made by interactive music services (\$5.95) and calculated an equivalent royalty payment for satellite radio of \$2.89. 6/14/12 Tr. 2295:3-2296:6 (Ordoover); Ordover WDT at 34, SX Trial Ex. 74. The final step was to convert the monthly \$2.89 per-subscriber rate into a percentage-of-revenue rate. This is accomplished by dividing \$2.89 by the \$12.95 monthly charge paid by subscribers to Sirius XM's Select packages, which results in a percentage-of-revenue rate of 22.32%. Ordover WDT at 34, SX Trial Ex. 74; 6/14/12 Tr. 2295:20-2296:6 (Ordoover).

187. Because all of the data for these calculations come from music-only streaming services, there was no need to make an adjustment for the non-music content offered by Sirius XM. 6/14/12 Tr. 2296:16-2298:6 (Ordoover). That is because the numerator reflects a music-only service while the denominator reflects the retail price for a service that combines music and non-music content; the resulting rate appropriately is applied against Sirius XM's total subscription revenues, and the application of the rate does not require any further adjustment to

Sirius XM's subscription revenues to account for the estimated portion reasonably attributable to the distribution of non-music content. Ordover WDT at 32-33, SX Trial Ex. 74. Dr. Noll agrees. 8/15/12 Tr. 3547:2-3548:1 (Noll).

188. Similarly, because all of the data for these calculations come from Internet-based music streaming services, the question raised by Dr. Noll of whether adjustments must be made to account for the value of the Sirius XM delivery platform do not apply to this calculation. While Dr. Ordover and Dr. Noll disagree about whether such an adjustment is necessary under any circumstances, they concur that the proposed adjustment is unnecessary with respect to this calculation. As Dr. Noll testified in the rebuttal phase of the trial that the foregoing approach to adjusting the interactive music service benchmark takes into account the value of the Sirius XM platform and, in Dr. Noll's opinion, no platform adjustment need be made under this approach. 8/14/12 Tr. 3477:8-15 (Noll).

189. Dr. Salinger likewise agrees that Dr. Ordover's lower-bound calculation of the rate derived from the interactive service benchmark tacitly takes into account any differences in delivery costs between satellite radio and Internet services. Salinger WRT at 12, SXM Reb. Trial Ex. 9.

190. Dr. Noll faulted these calculations on various grounds, two of which will be addressed immediately below and the balance of which will be addressed in Section V.C.

191. First, Dr. Noll opined that Dr. Ordover should have used a weighted average retail price for non-interactive services (which he calculated to be \$3.15) rather than the simple average of the retail prices used by Dr. Ordover, which resulted in a figure of \$4.86. Noll WRT at 24-26, SXM Reb. Trial Ex. 6. Dr. Noll's \$3.15 weighted average retail price is dominated by the \$3 per month figure he uses as the price of a Pandora subscription, although Dr. Noll agrees

that individuals who pay for Pandora on a month-by-month basis rather than buying a yearly subscription pay \$3.99 per month. He did not attempt to adjust his weighted average subscription webcaster price to account for the higher price of a Pandora month-by-month subscription. 8/15/12 Tr. 3552:12-3553:5 (Noll).

192. Second, Dr. Noll opined that it would make more sense to use Sirius XM's Average Revenue Per User (ARPU) rather than the retail price for Sirius XM's basic subscription package. "The correct starting point for the first procedure is the average revenue per user (ARPU), not the sticker price." Noll WRT at 5, 18-19 SXM Reb. Trial Ex. 6. He suggests that "I doubt Dr. Ordoover disagrees that ARPU, not sticker price, is the correct basis for calculating royalties." Noll WRT at 20 n.5, SXM Reb. Trial Ex. 6. In the first quarter of 2011, ARPU was \$11.22, and in the first quarter of 2012 it was \$11.49. Noll WRT at 41-42, SXM Reb. Trial Ex. 6.

193. Adopting these changes suggested by Dr. Noll would result in a royalty rate for Sirius XM of 16.2 percent ($\$3.15/\$9.99 * \$5.95/\11.49), if one did not adjust Dr. Noll's weighted average retail price upward to account for his failure to consider the month-to-month retail price of Pandora.

a. Corroborating Evidence from Other Digital Music Services

194. Dr. Ordoover tested whether the rates obtained through his investigation of rates for interactive subscription services reflect more generally the rates voluntarily negotiated between record companies and service providers across a variety of modes of digital distribution for music content. He and his staff examined numerous licensing agreements between the record companies and services, and found that the percentage of revenue rates stipulated in these

licensing agreements cluster in a range that corroborates the reasonableness of the benchmark rates derived from interactive subscription services. Ordover WDT at 17, SX Trial Ex. 74.

195. The table reproduced below from Dr. Ordover's written direct testimony presents the percentage of revenue rates found in the licensing agreements between the major record companies and digital music distributors. The figures in the table reflect rates that currently govern record companies' compensation under a sampling of recent agreements. Ordover WDT at 25-26, SX Trial Ex. 74. The table reports the actual percentage of revenue rates stated in the agreements between the music services and the record companies, rather than the effective percentage of revenue rates calculated from payment data.⁷ 6/14/12 Tr. 2418:9-18 (Ordover).

Ordover Table Two: Contractual Percentage-of-Revenue Rates

Product	% of Gross Revenue Rate
Permanent Audio Download	70%
Cellular (Ringtone/Ringback)	43% - 50%
Interactive Subscription (Non-Portable)	50% - 60%

Source: Licensing agreements between four major record companies and service providers. The specific agreements summarized in the table are set forth in Appendix 2.

196. Although not included in Dr. Ordover's report, testimony at trial revealed that the largest of the non-interactive music streaming services, Pandora, pays approximately 50 percent of its revenues in royalties to the record labels. 6/14/12 Tr. 2364:8-14 (Ordover).

197. As the table illustrates, across services built around the digital distribution of sound recordings to consumers, copyright holders consistently earn a substantial percentage of distributors' gross revenues. These high percentages reflect the fact that access to music content represents the core and indispensable element of these services. Ordover WDT at 26, SX Trial Ex. 74.

⁷ These figures therefore may understate the actual effective percentage of revenue paid by the service if the per-play or per-subscriber rate yielded a higher payment than the percentage of revenue rate stated in the agreement.

198. The consistency of rates found in the contract data is not surprising. The average daily consumption of music by consumers necessarily is limited, which means that increased listenership in one channel of music distribution diverts some of the time spent listening to music through other channels. Thus, insofar as digital music distribution channels are substitutes, a reasonable expectation is that sound recording copyright holders would seek to garner roughly comparable percentages of the value of music content to consumers (as reflected in the prices, and thus the revenues, of the various services). While the quantum of value differs across services, such differences reflect the mode of distribution and other pertinent attributes, and are captured in retail prices. The observed consistency of percentage-of-revenue rates across distribution channels is consistent with this view. Ordover WDT at 26, SX Trial Ex. 74.

C. Sirius XM's Criticisms of the Interactive Services Benchmark and its Proposed Non-Interactive Services Benchmark are Unsupported

1. Dr. Noll's Preference for Non-Interactive Webcasting as a Benchmark

199. Dr. Ordover and Dr. Noll both look to digital music markets as a source of benchmark rates. But while Dr. Ordover begins his analysis with 24 agreements between the four major record companies and seven interactive music services, Ordover WDT at 20-21, SX Trial Ex. 74, Dr. Noll's analysis centers on four agreements between one non-interactive music streaming service – Last.fm – and the major record companies. Noll WDT at 76, SXM Trial Ex.

1. Two of those agreements have expired and are no longer in effect. Ordover WRT at 25, SX Trial Ex. 218. Dr. Noll regards his non-interactive music service benchmark as corroborative of his direct license benchmark. Noll WDT at 55, SXM Trial Ex. 1.

200. Dr. Noll chose non-interactive services as his benchmark because it is closer to the satellite radio service in terms of interactivity; therefore he believes that less adjustment is necessary. 8/14/12 Tr. 3452:12-18 (Noll). Recognizing that the Court did not use non-

interactive music services as its benchmark in the *SDARS I* proceeding, Dr. Noll opines that the difference now is that there currently exist market-determined webcasting rates: “But the advantage of the current proceeding over the last proceeding is that we now have some evidence about market determined non-interactive rates so we don’t have to bother with the [interactivity] adjustment.” 8/14/12 Tr. 3453:8-3454:5 (Noll).

201. Dr. Noll is incorrect with respect to the later point. Contracts similar to the Last.fm agreement existed at the time of the *SDARS I* trial, but the Court found them unpersuasive. In the *SDARS I* proceeding, a “custom radio” agreement between Sony BMG and Yahoo! was introduced into evidence and offered as corroboration of the satellite services’ principal benchmark. The Court declined to give any weight to that agreement on the grounds that the rate terms “were not shown to be representative of this category’s agreements” and “suffer the same flawed ‘functionality’ adjustment as Dr. Woodbury’s PSS-derived rate.” *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services (“SDARS I”)*, Final Rule and Order, 73 Fed. Reg. 4080, 4090 (Jan. 24, 2008).

202. Quite apart from Dr. Noll’s misstatement of the history of attempts to use non-interactive or custom radio agreements in these proceedings, the Last.fm agreements utilized by Dr. Noll do not represent a sound benchmark for purposes of determining a rate schedule for Sirius XM in this proceeding. Ordover WRT at 22, SX Trial Ex. 218. First, these agreements do not represent unfettered competitive marketplace agreements. Rather, the rates in the agreements are strongly affected by, and indeed expressly based on, regulated rates. Ordover WRT at 23. SX Trial Ex. 218. Second, Dr. Noll’s use of only four agreements (two of which have expired) with a single service is a sample size so small as to cast strong doubt on its utility, and that issues

is compounded when Dr. Noll attempts to account for the per-play mechanism in the Last.fm agreements by using a single month of usage data from a single service. Third, Dr. Noll makes no effort to demonstrate that the Last.fm agreements are representative of webcasting rates generally, and the evidence establishes that neither the Last.fm agreements nor the Last.fm service itself is fairly representative. Finally, Dr. Noll effectively assumes that a non-interactive music streaming service has the same value to consumers as a satellite radio music service, contrary to the marketplace evidence. Ordoover WRT at 3, SX Trial Ex. 218.

2. Webcasting Rates are an Inappropriate Benchmark Because They Are Regulated Rates

203. Dr. Noll agrees that in regulatory rate-setting proceedings, before this Court and elsewhere, the standard practice is to find actual market transactions as the place to begin the rate-setting process. As he put it, “in a world in which there are market rates to use, then obviously it makes sense to have that as a starting point.” 8/15/12 Tr. 3509:14-3510:6, 3512:16-3513:2 (Noll). In particular, Dr. Noll states that he would not regard the webcasting royalty rates set by this Court in *Webcasting III* as a valid benchmark in this case: “[T]hey wouldn’t be regarded as a valid benchmark for these rates here because they were determined by a regulatory process.” 6/6/12 Tr. 386:11-19 (Noll). Dr. Noll explained: “But – but the regulated rate is not a market-determined rate, so using it as a market-determined benchmark would be inappropriate.”⁸ 6/6/12 Tr. 388:1-3 (Noll).

⁸ Dr. Noll further concedes the inappropriateness of regulated rates when he states that the most appropriate benchmarks are “the rates in *negotiated direct license* agreements between the record distribution companies and non-interactive subscription mobile Internet music services that have the least amount of user control of content.” Noll WRT at 3, SXM Reb. Trial Ex. 6 (emphasis added).

204. Dr. Ordovery likewise opines that regulated rates may be used as benchmarks only in circumstances not present here. Ordovery WRT at 23, SX Trial Ex. 218.

205. Dr. Noll did not directly use the statutory rates established by this Court in *Webcasting III*. Rather, he used agreements negotiated by Last.fm. But his use of the Last.fm agreements very much suffers from the same problem. The observed rates, even if negotiated between a music service and four record labels rather than set by this Court, are influenced by the parties' expectations regarding rates that would be set through the regulatory process. Ordovery WRT at 23, SX Trial Ex. 218.

206. Dr. Noll's use of the Last.fm agreement, despite his concession that regulated rates make inappropriate benchmarks, is particularly puzzling because he agrees that in a market where there exists a statutory rate, that rate essentially controls what parties are going to agree to for a service that meets the statutory criteria. 8/15/12 Tr. 3513:3-8 (Noll). Dr. Noll did not look at the Last.fm service to see if it qualifies as a statutory service, but he assumes that it functions today as a statutory service. 8/15/12 Tr. 3513:20-3514:22 (Noll). In fact, the Last.fm agreements with two of the record companies that by Dr. Noll relied on have now expired, and Last.fm now pays those record companies (via SoundExchange) at the statutory rate. 8/14/12 Tr. 3308:8-20, 3317:10-16 (Ordovery).

207. Because the Last.fm service offered functionality that was at least arguably consistent with the functionality that qualifies for the statutory license, *see* Harrison WRT at 3, PSS Trial Ex. 32, the agreements with Last.fm were negotiated with the understanding that if negotiations broke down, the services could revert to statutory rates. 8/14/12 Tr. 3306:4-13 (Ordovery). It follows, as Dr. Ordovery testified, that the rates expressed in the Last.fm agreement

would be very heavily influenced by the statutory webcasting rates. Ordoover WRT at 23, SX Trial Ex. 218.

208. Indeed, the link between the Last.fm agreements and the statutory process is so close that two of the agreements feature per-play rates that are directed tied to the statutory rate. 8/14/12 Tr. 3306:4-13 (Ordoover). *See also* Noll WDT at 78-79, SXM Dir. Trial Ex. 1 (noting that some of the per-play rates in the Last.fm agreements are expressed as a stated amount or percentage over the existing statutory rate).

209. That there is a direct relationship between the Last.fm rates and the statutory rates is not simply a theory posited by the economists – it is the reality experienced by the business people who negotiate custom radio agreements.

210. As explained by Mr. Harrison of UMG, the precise boundary between interactive services that must enter into direct licenses and noninteractive services that can take advantage of the statutory license remains a hotly contested issue in discussions over custom radio offerings such as Last.fm's. The question was particularly unsettled during the period when the Last.fm agreement was being negotiated. At that time, certain copyright holders were engaged in litigation over a custom radio service called LAUNCHcast. In May of 2007, a jury found that the service was not "interactive" within the meaning of 17 U.S.C. § 114(j)(7); the Second Circuit affirmed this finding more than a year later in *Arista Records, et al. v. Launch Media, Inc.*, 578 F.3d 148 (2d Cir. 2009). In such an uncertain atmosphere (when copyright holders appeared to be losing the fight to require direct deals), the pull that the statutory rates invariably exert on "noninteractive" deals was magnified. Harrison WRT at 3, PSS Trial Ex. 32.

211. In negotiations with services such as Last.fm, therefore, the existence of the statutory license deprives the record companies of the "holdout power" they would have in an

unregulated market. In the absence of an agreement, the music service will simply make some relatively minor changes to its service and pay the statutory rates. 8/21/12 4388:7-4389:5 (Harrison).

212. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Harrison WRT at 4, PSS Trial Ex. 32.

213. A similar dynamic plays out in negotiations with most all U.S.-based, “noninteractive” or semi-interactive services. Generally, a service asserts that it is not interested in a direct deal because it can always opt for the statutory license. Harrison WRT at 5, PSS Trial Ex. 32. Even if a service is interested in a direct license for additional functionality that may go beyond the statutory license, the service argues that if the record company insists on a rate that the services deems too high, it will simply scale back its functionality and provide the statutory service at the statutory rate. If a direct deal is ultimately struck, its terms are inevitably tied to the statutory rate, whether explicitly or implicitly. 8/21/12 Tr. 4388:7-4391:17 (Harrison).

214. Given Dr. Noll’s statement that it would be inappropriate to use a regulated rate rather than a market rate as a benchmark, his decision to use negotiated agreements so closely tied to the regulated rate is puzzling. Ordoover WRT at 23, SX Trial Ex. 218. The fact is that the Last.fm agreements are so directly tied to the statutory rates that they effectively were determined by the regulatory process and are not suitable as benchmarks.

3. Even if Webcasting Rates Provided a Suitable Benchmark, Dr. Noll Has Not Persuasively Established That the Last.fm Rates on Which He Relies Are Representative of Webcasting Generally

a. Dr. Noll's Analysis Is Based on a Very Small and Unreliable Sample of Contracts and Usage Data

215. Dr. Noll used rates he obtained from agreements negotiated by Last.fm as his “check on the reasonableness of the direct licenses.” Noll WDT at 76, SXM Dir. Ex. 1. In so doing, Dr. Noll relies on an exceedingly small sample size of rates. The sample consists of four contracts negotiated by a single non-interactive service (Last.fm).

216. Further diminishing the sample size, two of the four agreements have expired and thus, by definition, do not provide evidence of the rates that even Last.fm could currently negotiate with these labels. Ordover WRT at 25, SX Trial Ex. 218. 8/14/12 Tr. 3308:8-20, 3317:10-16 (Ordover).

217. Dr. Noll acknowledges that his benchmark rate drawn from the Last.fm agreements is based on very limited data: “So there is unfortunately we don’t have very many such services because most of the non-interactive services offer the statutory rate, so that’s all we have.” 8/14/12 Tr. 3476:9-12 (Noll).

218. As Dr. Ordover testified, the smaller the sample, the more difficult it becomes to draw a reliable inference for the whole population. Dr. Ordover characterizes Dr. Noll’s reliance on such a small sample as totally inconsistent with sound economics and statistics. Ordover WRT at 25, SX Trial Ex. 218.

219. Dr. Noll’s reliance on the Last.fm agreements is problematic for the additional reason that it carries with it the need to account for the per-play component of the mechanism used to determine Last.fm’s royalty payments. As Dr. Noll testified, Last.fm’s royalty payments are calculated as the greater of the amounts yielded from application of three separate metrics –

percentage of revenues, per-subscriber, and per-play. Consequently, in order to determine the effective rate paid by Last.fm, Dr. Noll needed to account for intensity of usage in order to know whether the contractual per-play rates, or the contractual percentage of revenue rate, would yield the higher royalty under the “greater-of” formula. Noll WDT at 76-79, SXM Dir. Ex. 1; Ordoover WRT at 27, SX Trial Ex. 218.

220. Dr. Noll acknowledged that he had limited data on the number of plays per subscriber per month, and the data that he did have showed large variations in the number of plays per month that seemed “implausible.” Noll WDT at 77, SXM Dir. Ex. 1. Dr. Noll could not explain the differences in the usage rates, but nevertheless selected one month’s worth of data for Slacker and one record company as his basis to estimate Last.fm’s royalty payments under application of the per-play rates found in the Last.fm agreements. Noll WDT at 77, SXM Dir. Ex. 1; Ordoover WRT at 27, SX Trial Ex. 218.

221. Dr. Noll rejected usage estimates calculated by Dr. Pelcovits in the *Web III* proceedings that were considerably higher than Dr. Noll’s estimates. Noll WDT at 76-77, SXM Dir. Ex. 1. Had he used the Pelcovits usage estimates, the effective royalty rate for the Sony and UMG agreements would have been much higher than the rate Dr. Noll used for his analysis. Noll WDT at 78-79, SXM Dir. Ex. 1. And this is so even though Dr. Noll mistakenly calculated the per-play rates under those agreements using 2008 statutory rates.⁹ Had he used the correct

⁹ [REDACTED]

2011 per-pay rates for UMG, for example, the effective percentage of revenue paid by Last.fm, would have been 40 percent,¹⁰ and that number would increase as the statutory rates increase after 2011.

222. Dr. Noll's calculations are based on usage data that he admits is both limited and displays variations that "are a cause of concern", Noll WDT at 77, SXM Dir. Ex. 1, which further exacerbates the initial problem of using four contracts from a single service to derive the appropriate rate for Sirius XM. Ordoover WRT at 27, SX Trial Ex. 218. The data sample used to calculate the royalty rate for non-interactive webcasters is simply too small and too unreliable – both respect to the contract rates and the usage data – to provide a reliable basis for rate-setting in this proceeding.

b. SoundExchange's Evidence Establishes that the Last.fm Agreements Are Outdated and Idiosyncratic

223. For a host of reasons, the Last.fm agreements are unusual, do not reflect the market value of music, and should not be used as benchmarks – certainly not the way Dr. Noll has proposed using them – to set the rates in this proceeding.

224. Mr. Harrison testified extensively about the Last.fm agreement with UMG. UMG is one of only two major record companies that are still operating under the terms of any agreement with Last.fm. As he explained, although most digital licenses are negotiated for only one or two year terms, the current Last.fm-UMG agreement, on which Dr. Noll relies, was negotiated in 2007, expired in 2009, and was extended through April 2010. Although the companies are still operating under it while currently out-of-contract, "its terms are long outdated." Harrison WRT at 2-3, PSS Trial Ex. 32.

[REDACTED].
Harrison WRT at 4 n.1, PSS Trial Ex. 32.

¹⁰[REDACTED].

225. UMG certainly would not sign an agreement with the same terms today. Harrison WRT at 3, PSS Trial Ex. 32. In fact, rebuttal testimony revealed that UMG and Last.fm are currently in the process of re-negotiating the old 2007 license. In those negotiations, [REDACTED]
[REDACTED]
[REDACTED]. 8/21/12 Tr. 4386:11-16 (Harrison).

226. Even without reference to the new higher rates to which Last.fm has agreed going forward, it is clear for a number of reasons that Dr. Noll's reliance on the Last.fm agreements is misplaced.

227. First, [REDACTED]
[REDACTED]
[REDACTED] Harrison WRT at 3-4, PSS Trial Ex. 32; 8/21/12 Tr. 4394:2-4396:5 (Harrison).

228. More importantly, the Last.fm agreement [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]. Noll WDT at Appendix H, p.51, SXM Dir. Trial Ex. 1; 8/21/12 Tr. 4396:10-12 (Harrison). [REDACTED]
[REDACTED]. Noll WDT at Appendix H, p.51, SXM Dir. Trial Ex. 1; *see also* 8/21/12 Tr. 4396:15-22, 4400:9-17 (Harrison).

229. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Harrison WRT at 4, PSS Trial

Ex. 32.

230. Second, and more significantly, [REDACTED]

[REDACTED]

[REDACTED] 8/21/12 Tr. 4400:9-17 (Harrison). As Mr. Harrison explained, until the agreement expired by its initial terms in April 2009, [REDACTED]

[REDACTED]

[REDACTED] 8/21/12 Tr. 4397:3-4 (Harrison). As a result, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 8/21/12 Tr.

4401:6-12 (Harrison).

231. Dr. Noll does not take account of any of these circumstances relating to the Last.fm/UMG agreement, and his analysis bears no relation to the facts of what Last.fm was actually paying to UMG. And more generally, the UMG example points up the danger of relying agreements with only one music streaming service, particularly when two of those agreements have expired.

- c. **Dr. Noll Offers No Evidence to Establish That the Last.fm Rates are Representative, and Other Services Such as Pandora Pay Substantially Higher Percentage of Revenue Royalties**

232. Dr. Noll uses agreements with one non-interactive webcaster, Last.fm, as his proxy for the effective percentage of revenue paid by all non-interactive webcasters. Yet Dr. Noll agrees that the amounts paid by non-interactive services as a percentage of revenue varies dramatically and is “all over the map.” 8/15/12 Tr. 3562:4-3563:1 (Noll). And as Dr. Ordoover points out, Dr. Noll did not investigate whether the rates he calculated for Last.fm were in any way representative of non-interactive music services in general. 8/14/12 Tr. 3401:7-21 (Ordoover).

233. Dr. Noll states that he used Last.fm as a benchmark because in his view it was one of the closest substitutes for Sirius XM. He stated that Pandora is another close substitute, and describes it as “by far the most important Internet music site” which accounts for “about 60 percent of all Internet music delivery.” 6/5/12 Tr. 286:21-288:7 (Noll). But Dr. Noll states he was not allowed to use Pandora as a benchmark because its rates are non-precedential. He implies that absent the statutory bar against using Pandora rates, it would have corroborated his benchmark analysis. (“I mean, I identified other close substitutes, like Pandora, as another one, but I can’t use that rate because it’s a WSA rate. Q: So to be clear, barring – barring technical bars, for example, parties saying no party shall use this, it’s conceivable you would have had multiple additional corroborating benchmarks in your view? A: Oh yes. There were other things that, in principle, you could use, but they’re not – they’re not fair game because they don’t have precedential value.”) 6/5/12 Tr. 285:12-286:1 (Noll).

234. In fact, the Last.fm agreements are not representative of the royalty rates for non-interactive webcasting generally, and Pandora example would not have corroborated his analysis at all. Ordoover WRT at 25-26, SX Trial Ex. 218.

235. First, Pandora pays a much higher effective percentage of revenue than that calculated by Dr. Noll for Last.fm. Dr. Noll claims that Last.fm pays an effective percentage of revenue of between 25 percent and 27.5 percent.¹¹ Noll WDT at 79, SXM Dir. Trial Ex. 1. Yet public reports regarding Pandora's financials indicate that sound recording performance royalties paid by Pandora equaled approximately 50% of its 2011 revenues. SX Trial Ex. 222 at SX02 00161512 (Pandora 10K, stating, "For our fiscal year ended January 31, 2012 we incurred SoundExchange related content acquisition costs representing 49.7% of our total revenue for that period."). For example, Dr. Noll cited Pandora's SEC Form 10Q for the quarter ended July 31, 2011 in his written testimony. See Noll WDT at 66 n. 64, SXM Dir. Trial Ex. 1. The Form 10Q cited by Dr. Noll states at page 37: "For our fiscal year ended January 31, 2011 we incurred SoundExchange content related acquisition costs representing 45% of our total revenue for that period." Ordover WRT at 26 n. 44, SX Trial Ex. 218. At trial, Dr. Noll acknowledged that Pandora overall pays approximately 50 percent of its revenues for sound recording rights. 8/15/12 Tr. 3563:2-6 (Noll).

236. Second, as we discussed previously, to determine the effective percentage of revenue paid by Last.fm, Dr. Noll needed to determine the average usage for that service in order

¹¹ One notable feature about the "marketplace" agreements with Last.fm upon which Dr. Noll relies is that all of the agreements grant Last.fm the rights necessary to operate its service using all of the authorized sound recordings of the labels. In other words, the royalty rate that is set forth in those agreements is applied to all of Last.fm's revenue as defined in the agreement and all of the performances of a given label's recordings are taken into account in determining compensation to the label, with no distinction based on when a sound recording was made. Dr. Noll does not adjust his SDARS royalty derived from the Last.fm agreements to account for the lack of federal copyright protection for sound recordings fixed prior to 1972 (so-called "pre-72 recordings"). Nor did Dr. Ordover make an adjustment in his recommended rate derived from the interactive services. If one were to assume that Last.fm and the interactive services are not required to pay any royalties on the pre-72 recordings they use (a question on which I express no opinion), the payments they make for their use of other sound recordings would have to be viewed as correspondingly higher.

to assess the impact of the contractual per-play rates in the effective percentage of revenue payment. Dr. Noll used the Slacker data in order to calculate usage on Last.fm. Noll WDT at 77, SXM Dir. Ex. 1; Ordover WRT at 27, SX Trial Ex. 218. In fact, the Slacker data does not represent the only source of information which could be used to estimate intensity of usage among subscribers to non-interactive or custom radio streaming services. Pandora data was available to Dr. Noll and he used that data for a different purpose in his written rebuttal testimony. See Noll WRT at Table 1, SXM Reb. Trial Ex. 6.

237. According to fiscal year 2012 (Feb 2011 – Jan 2012) data reported by Pandora to SoundExchange, Pandora subscribers (*i.e.*, the paying audience) listened to [REDACTED] plays (performances). While Pandora does not report subscriber counts for its paid service, an estimate can be generated by dividing the service's reported subscription revenues by the annual retail price of \$36. For fiscal year 2012, Pandora reported subscription revenues of \$34,383,000, SX Trial Ex. 222 at SX0200161532, which when divided by \$36 yields a subscriber count estimate of 955,083, and a corresponding monthly per-subscriber performance figure of [REDACTED] – *i.e.*, [REDACTED] Ordover WRT at 27-28, SX Trial Ex. 218.

238. This figure dwarfs substantially the [REDACTED] monthly plays per-subscriber estimated by Dr. Noll from Slacker's royalty payment data, which he uses to estimate percentage of revenue royalty rates of between 25% and 27.5% that are then adjusted to determine a rate purportedly applicable to Sirius XM. Not surprisingly, if Dr. Noll had used the monthly per-subscriber performances figure of [REDACTED] estimated for Pandora, his results would have been markedly different. Using the Pandora usage figures, Dr. Ordover calculated that the effective percentage of revenue paid by Last.fm using the per-play rates specified in the Last.fm contracts

would have been [REDACTED] percent for UMG, [REDACTED] percent for Sony, and [REDACTED] percent for EMI and Warner. Ordoover WRT at 28, SX Trial Ex. 218

239. Based on Dr. Ordoover's estimate that music content accounts for one-half of Sirius XM's overall value to subscribers, the effective percentage of revenue rates calculated in the foregoing paragraph imply a percentage-of-revenue rate for Sirius XM of between [REDACTED], *i.e.*, 50% of the estimated Last.fm effective rate. Ordoover WRT at 28-29, SX Trial Ex. 218.

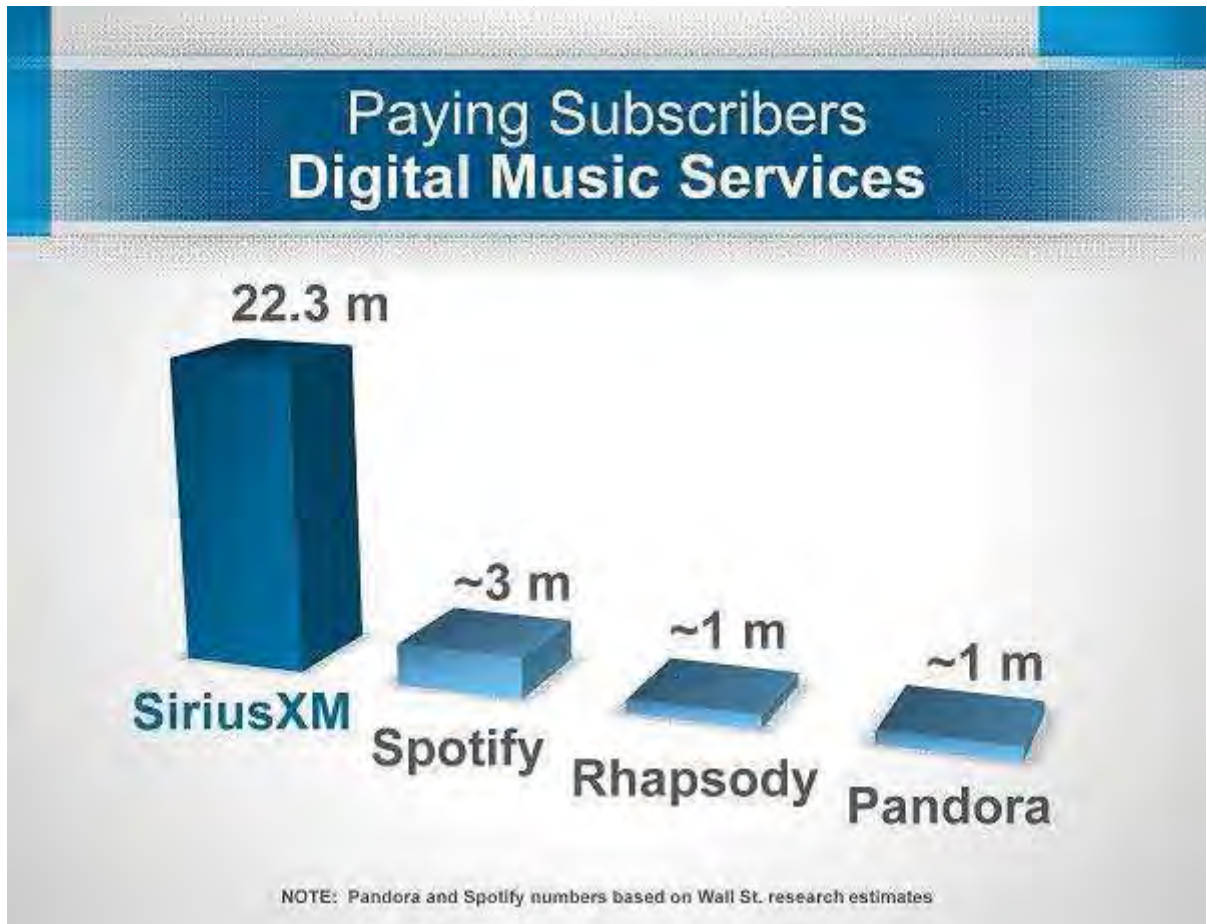
240. Using Dr. Ordoover's number of plays per subscriber for Pandora's subscription service, Dr. Noll calculated that Pandora would be paying 50 percent of its revenues as the effective royalty for the sound recording rights on the subscription portion of Pandora's service. 8/15/12 Tr. 3563:2-12 (Noll). Thus, even if one assumes that the correct comparison is between Sirius XM and Pandora's subscription service, rather than Sirius XM and Pandora's service as a whole (including both the subscription and free-to-the-consumer ad supported services), it remains the case that the effective percentage of revenue paid by Sirius XM's largest and most direct competitor (according to Dr. Noll) pays 50 percent of its revenue to SoundExchange.

241. Dr. Noll claims that Dr. Ordoover over-estimated the average number of plays per subscriber on Sirius XM for two reasons. First, he states that if in the middle of the year a new Pandora subscriber pays \$36 up-front for a year-long subscription, Pandora amortizes that amount on a straight-line basis and will not attribute a full year's worth of revenue to that subscriber. Thus, he claims, the average amount paid per subscriber is \$25 per year instead of \$36 per year, and the resulting calculation is that Pandora has 1.4 million subscribers instead of 900,000. 8/15/12 Tr. 3574:18-3575:15 (Noll).

242. In addition, Dr. Noll claims that until the beginning of October 2011, Pandora converted users of its free service into paid subscribers (at a subscription fee of \$1 per month) if those users exceeded 40 hours of usage (or approximately 600 plays) per month. Thus, he argues, assuming that 2 percent of the users of the free service actually were treated as paid subscribers, the number of subscribers per year increases from 1.4 million subscribers to approximately 2 million. 8/15/12 Tr. 3575:16-3576:20 (Noll).

243. Dr. Noll's claim that Pandora's plays per subscriber is less than 500 is based on a multitude of errors that led him erroneously to believe that Pandora has more than two million subscribers. *See* 8/15/12 Tr. 3576:16-17 (Noll). The facts overwhelmingly demonstrate that Dr. Noll is wrong and that Pandora, in fact, had roughly one million paid subscribers who on average listen to [REDACTED] plays per month.

244. To begin with, it is notable that Sirius XM has repeatedly told shareholders and investors, based on a various Wall Street analyst reports, that Pandora has about one million paid subscribers. For example, in Sirius XM's last shareholder presentation in May 2012, Sirius XM compared its subscribers to the roughly one million Pandora subscribers:



SX Trial Ex. 229 at 29. Sirius XM made a similar presentation in 2011 shareholder presentation, only then it said Pandora had roughly a half million subscribers. SX Trial Ex. 16 at SXM_CRB_DIR_00021691. Indeed, Mel Karmazin testified on this point in this very proceeding. 6/11/12 Tr. 1334:14-17 (Karmazin) (“So today Pandora has about 2 percent of their subscribers -- they have less than a million people who are paying for their service.”). But according to Dr. Noll, everyone else (Dr. Ordovery, Sirius XM, and the Wall Street analysts following Pandora) all are wrong that Pandora had about a million subscribers because his review of Pandora’s financial statements shows that they had more than two million subscribers. See 8/15/12 Tr. 3576:16-17 (Noll). Unsurprisingly, it is Dr. Noll who is wrong.

245. First, Dr. Noll's analysis is hampered by a basic mathematical and accounting error. Dr. Ordoover estimated the number of Pandora subscribers by dividing the reported subscriber revenue by the \$36 paid for an annual subscription, which roughly gives the average number of subscribers over the course of the year.¹² Ordoover WRT at 27, SX Trial Ex. 218. Dr. Noll rightly testified that the \$36 annual fee is amortized over the course of the year, 8/15/12 Tr. at 3575:1-3 (Noll) – *i.e.*, that Pandora only recognizes \$3 of subscriber revenue each month with the remainder recognized as deferred revenue – but he then commits a basic mathematical error when he suggests that the way to find the average number of subscribers over the course of the year is to “divide [revenue] by the average amount paid per subscriber.” 8/15/12 Tr. at 3575:8-15 (Noll).

246. A simple example demonstrates Dr. Noll's error. Assume that Pandora has 5 subscribers at the beginning of October, adds 5 new subscribers in November, and then adds 5 more subscribers in December. Further assume that each of these subscribers listens to 10 songs per month while members of the service. The table below summarizes the total revenue recognized (*i.e.*, excluding the deferred revenue) and the total number of songs played each month:

¹² In fact, this has the potential to overestimate subscribers because some paid subscribers pay \$3.99 on a monthly basis rather than \$3 per month for the annual subscription. 8/15/12 Tr. 3552:12-3553:5 (Noll).

	October	November	December	Total
Total Subscribers	5	10	15	
Subscription Revenue (\$3 per subscriber recognized each month)	\$15	\$30	\$45	\$90
Total Plays (10 songs per subscriber)	50	100	150	300

In this hypothetical, even though each of these subscribers paid \$36 for the annual subscription, only \$3 is recognized as revenue for each month that the subscriber was a member of the service (*i.e.*, over the course of this period, Pandora would recognize \$9 of revenue for subscribers who started in October, \$6 of revenue for the subscribers who started in November, and \$3 of revenue for the subscribers who started in December). These add up to \$90 of total recognized subscription revenue. If you divide \$90 by \$9 (*i.e.*, the price of a subscription for the whole period), you get 10, which is the actual average number of subscribers.¹³ Under Dr. Noll's method, however, you would divide \$90 by \$6 (because Pandora only recognized on average \$6 for each subscriber), and you would get 15 subscribers, which is not the average number of subscriber during the period. We know that the actual average number of plays per subscriber each month was defined in this hypothetical to be 10. And in fact that is shown mathematically:

$$300 \text{ Total Plays} / 10 \text{ avg. subscribers} / 3 \text{ months} = 10$$

But under Dr. Noll's method, the average plays per subscriber each month is 6.7:

$$300 \text{ Total Plays} / 15 \text{ avg. subscribers} / 3 \text{ months} = 6.7$$

The reason that Dr. Noll's methodology errs is that he effectively averages in zero plays for each subscriber in months where the subscriber was *not* a member of the service. Just like Sirius XM's average revenue per user (ARPU) calculation is based on *average* subscribers during the time period, Lys WRT at SX Ex. 231-RP, p. 37, SX Trial Ex. 240, so too should a calculation of

¹³ 5 Oct. subscribers + 10 Nov. subscribers + 15 Dec. subscribers = 30 / 3 months = 10.

average plays per subscriber be based on *average* subscribers over the time period. Therefore Dr. Noll has erroneously inflated the number of Pandora subscribers from “9 hundred some thousand to 1.4 million.” 8/15/12 Tr. at 3575:8-15 (Noll).

247. Second, Dr. Noll correctly points out that until September 2011, some number of individuals paid \$0.99 to continue accessing Pandora’s free service after 40 hours of usage. As Pandora explained: “Until September 2011, for listeners who are not subscribers, we limited usage of our advertising-supported service on desktop and laptop computers to 40 hours per month. Listeners who reached this limit could continue to use this service by paying \$0.99 for the remainder of the month.” SX Trial Ex. 222 at SX 02 00161537 (p. 46 of 111). Dr. Noll readily admitted that he did not know how many people paid the \$0.99 for continued listening, but he nonetheless went ahead and assumed that it was at least 600,000 each month. 8/15/12 Tr. at 3575:8-3576:20 (Noll) (“over two million subscribers” after taking into account the \$0.99 subscribers less than “1.4 million” from his earlier analysis equals at least 600,000). But that clearly is not accurate. In fact, if Dr. Noll had looked back at his Table 1, he would have seen that between August and September 2011 (the month that the new policy took effect), subscription plays dropped by a mere []% from [] to [] before going back up again in October and November 2011. Noll WRT at Table 1, SXM Reb. Trial Ex. 6. In other words, the \$0.99 subscribers accounted for a tiny fraction of the plays, contrary to Dr. Noll’s assumptions.¹⁴

248. Most importantly, Dr. Noll could have simply looked at Pandora’s fourth quarter revenue and plays (covering November 2011 through January 2012) to examine whether there

¹⁴ If there were really 600,000 of the “most intensive users” included within the average, 8/15/12 Tr. 3576:7-8 (Noll), then that should have accounted for hundreds of millions of plays. Indeed, even if these supposed 600,000 individuals only listened to 600 plays per month, that would be 360 million plays. In short, this is clearly a gross overestimate by Dr. Noll.

was a material difference once the policy regarding intensive free users was removed. In fact, such an analysis shows that Dr. Noll is simply wrong. Pandora recognized \$9.273 billion in subscription revenue in the fourth quarter, which implies that Pandora averaged roughly 1.03 million subscribers over the time period:¹⁵

$$\text{Average subscribers} = \$9.273 \text{ billion} / \$9 \text{ subscription over time period} = 1,030,333$$

During that time period (November 2011 through January 2012), there were a total of [REDACTED] subscription plays,¹⁶ which means the average plays per subscriber each month during the fourth quarter was [REDACTED].

¹⁵ This is calculated by subtracting Pandora's total subscription revenue for the year (\$34.383 million), SX Trial Ex. 222 at SX 02 00161553 (p. 62 of 111), minus its subscription revenue through the first nine months (\$25.110 million). The subscription revenue for the first nine months is found on page 4 of Pandora's third quarter 10-Q (covering August 2011 through October 2011), which is available publicly from the SEC at <http://www.sec.gov/Archives/edgar/data/1230276/000119312511323367/d244588d10q.htm>. Courts routinely take judicial notice of SEC filings that are required by law to be filed with the SEC and were actually filed with the SEC. See, e.g., *Cortec Indus., Inc. v. Sum Holding, L.P.*, 949 F.2d 42, 47 (2d Cir. 1991). Courts have repeatedly held that such filings may be taken judicial notice of as they "can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned," Fed. R. Evid. 201(b)(2). This is especially so here where the parties have both relied on Pandora's other filings with the SEC.

Even if this Court were to decide not to take judicial notice of Pandora's third quarter 10-Q, a similar calculation regarding the number of subscribers can be done for Pandora's first quarter 10-Q (covering the period of February 2012 through April 2012), which is in the record. See Stowell WRT at SXM Reb. Ex. 43, p. 29, SXM Reb. Trial Ex. 7. In the first quarter, Pandora average roughly 1.13 million subscribers:

$$\text{Average subscribers} = \$10.187 \text{ billion} / \$9 \text{ subscription over time period} = 1,131,889$$

If one uses the higher first quarter average subscriber figures with the fourth quarter plays, that still conservatively yields an average of [REDACTED] plays per subscriber. Either way, it is clear that Dr. Noll's attempt to inflate Pandora's subscribers to over 2 million is grossly off.

¹⁶ The total number of subscription plays for November 2011 plays was [REDACTED]. See Noll WRT at Table 1, SXM Reb. Trial Ex. 6. The total number of subscription plays for December 2011 and January 2012 ([REDACTED]) can be calculated by subtracting the total number of plays for the year ([REDACTED]), Ordoover WRT at 27, SX Trial Ex. 218,

Average plays = [REDACTED] plays / 1,030,333 avg. subscribers / 3 months = [REDACTED]

This provides compelling evidence that Dr. Ordovery's analysis was right and that Dr. Noll's analysis was grossly inaccurate. If anything, this shows that the \$0.99 subscribers were lowering the average, not increasing it as Dr. Noll suggests.

249. The bottom line is that Dr. Noll holds out Last.fm as representative of non-interactive webcasting generally, both in terms of its rates and in terms of its intensity of usage. It is neither.

d. Dr. Noll Fails to Account for the Differences Between Non-Interactive Webcasting and Satellite Radio

250. Dr. Noll's analysis of digital agreements, and the Last.fm agreement in particular, depends on the premise that non-interactive streaming services are highly comparable to the music content distributed by Sirius XM, and therefore can be used as a benchmark without the need for any adjustments.

251. Fundamentally, it is Dr. Noll's view that non-interactive Internet radio is an excellent substitute for and entirely comparable to satellite radio in the consumers' eyes, simply because they are both non-interactive. Ordovery WRT at 24-25, SX Trial Ex. 218. Dr. Noll is commendably candid on this point. It is his position that this Court should treat Sirius XM as though it were an internet webcaster – the same royalty rate applied to the same rate base. 8/15/12 Tr. 3551:6-11 (Noll). *See also* 8/15/12 Tr. 3554:3-12 (Noll) (it is central to Dr. Noll's opinion that Pandora is a close substitute for Sirius XM); 8/15/12 Tr. 3549:5-3550:12 (Noll) (testifying that, for the purposes of constructing a percentage of revenue rate, the Court should

less the numbers of plays in the fiscal year through November 2011, which is available from Dr. Noll's Table 1 ([REDACTED])). Overall, the total number of plays for the period is [REDACTED].

assume that the music content on Sirius XM would be priced to subscribers at the same retail price as a webcasting service).

252. Consequently, even if Dr. Noll had correctly determined the effective average percentage of revenue rate paid by webcasters (he hasn't) and even if it were appropriate to use webcasting as a benchmark given the impact of regulated rates on the webcasting market (it's not), Dr. Noll's analysis would fail because he made no attempt whatsoever to adjust for any functional differences between Internet webcasting and satellite radio. Ordover WRT at 24, SX Trial Ex. 218 ("Clearly, the Sirius XM service offers features and attributes that lead consumers to value it at substantially greater levels vis-à-vis non-interactive services.").

253. Dr. Noll understands that "[b]ecause satellite radio is primarily in the dashboard, you want these other services that can be made available in the dashboard." 6/5/12 Tr. 280:3-7 (Noll). And he seems to think that using non-interactive Internet services as a benchmark is appropriate because he considers them to have "availability on the dashboard through downloads over the Internet." 6/5/12 Tr. 228:13-289:6 (Noll). Dr. Noll is incorrect.

254. In fact, at the present time there is little in-dash availability for Internet radio services. Sidak WDT at 32-33, SX Trial Ex. 78. Sirius XM witnesses have agreed that Internet radio services like Pandora are "not available in an easy-to-use way in the car yet." 6/6/12 Tr. 555:20-22 (Meyer).

255. Moreover, to the extent that consumers may endeavor to use their smartphones without in-dash capabilities, those efforts face significant limitations. Sidak WDT at 32, SX Trial Ex. 78. In a car not designed to be smartphone-compatible, streaming audio content through a car stereo requires multiple steps, and most methods require purchasing additional equipment. Sidak WDT at 34, SX Trial Ex. 78; *see also* Meyer WDT at 12, SXM Dir. Trial Ex.

5. Even cars that are smartphone-compatible may accommodate only particular makes or models of smartphones. Sidak WDT at 34-35, SX Trial Ex. 78. And attempting to manipulate a smartphone while driving poses safety risks. Sidak WDT at 32, 35, SX Trial Ex. 78. Finally, current 3G network technology was not designed for audio streaming in periods of high demand, SX Trial Ex. 7 at 6, and is not available in sparsely populated areas. Sidak WDT at 32-33, SX Trial Ex. 78. Overall, Mr. Karmazin sums it as follows: “So I definitely think our network is a huge advantage to us over, you know, the other networks.” 6/11/12 Tr. 1436:6-7 (Karmazin).

256. This functional difference between satellite radio and Internet radio when it comes to the automobile is reflected in the substantial difference in price between Sirius XM’s service and non-interactive services like Pandora and Last.fm. Ordoover WRT at 3, SX Trial Ex. 218.

257. Dr. Salinger acknowledges that Sirius XM is a differentiated product with no perfect substitute, 8/16/12 Tr. at 3819:9-18 (Salinger), and because it is a differentiated product, Sirius XM gets to select a price that is different from the price of other products. 8/16/12 Tr. at 3834:7-20 (Salinger). The price that Sirius XM has selected demonstrates just how differentiated it is. Dr. Noll’s contentions do not square with Sirius XM’s actual pricing, as a straightforward comparison of retail prices demonstrates.

258. Non-interactive subscription services like Last.fm and Pandora are priced at three dollars per-month. By comparison, using Sirius XM’s current retail prices, a reasonable price estimate for a hypothetical music-only Sirius XM service is \$8.66. With music content estimated to represent one-half of the total value of Sirius XM service, the price of a hypothetical music-only service is one-half the current monthly price of Select packages (\$14.49) plus the music royalty fee (\$1.42). Clearly, the Sirius XM service offers features and attributes that lead

consumers to value it at substantially greater levels *vis-à-vis* non-interactive subscription services. Ordover WRT at 24, SX Trial Ex. 218.

259. Of note, Sirius XM currently offers a plan that does not include any music channels. This “non-music” plan, known as Sirius/XM News, Talk, & Sports, is priced at \$9.99 per-month. Sirius/XM Select is the company’s lowest-priced plan that combines music and non-music content. That plan retails for \$15.91 per-month (\$14.49 base price plus \$1.42 music royalty fee), or nearly six dollars more than the non-music plan. Even if one were to use Sirius XM’s old price of \$12.95 per-month, the implied incremental price for music would still exceed \$3.00 (the retail price of Pandora or Last.fm) by a substantial margin. If Dr. Noll were correct that Sirius XM and his benchmark webcasting service were comparable and direct competitive substitutes, one would expect a substantial volume of consumers to forego subscriptions to Sirius/XM Select in favor of subscriptions to the company’s non-music plan and a second subscription to a benchmark webcasting service, such as Pandora One. In fact, the company’s non-music plan accounts for a minuscule fraction of total subscribers. Ordover WRT at 34, SX Trial Ex. 218. Thus, according to Dr. Ordover, the “\$3 that Professor Noll advances as the value of music [on Sirius XM] I think makes no economic sense. It’s inconsistent with revealed behavior of consumers and with empirical evidence.” 8/14/12 Tr. 3326:16-3329:19 (Ordover).

260. Similarly, if Sirius XM and webcasting services were direct substitutes, it would seem unlikely that Sirius XM could raise the price of its basic subscription without losing subscribers to Internet webcasting services, which have not raised their basic subscription prices.

Yet Sirius XM has done just that, and according to Mr. Karmazin, the company has perceived no adverse impact on its subscriber growth.¹⁷ Ordover WRT at 34, SX Trial Ex. 218

261. These facts demonstrate that Dr. Noll erred when, in order to calculate a percentage of revenue rate for Sirius XM, he assumed that the value of a music-only satellite service would equal the \$3 retail price of Pandora or Last.fm. *See* Noll WDT at 83, SXM Dir. Trial Ex. 1. Leaving aside the fact that Dr. Noll ignores, without good reason, non-interactive webcasting services such as Live365 that charge significantly more than \$3 per month for a subscription,¹⁸ Dr. Noll is simply wrong in concluding that Sirius XM would be able to charge its monthly subscription price, less three dollars, for a service without music content but otherwise identical to its current offering. Ordover WRT at 33-34, SX Trial Ex. 218.

262. Indeed, Dr. Noll agrees that Sirius XM could not survive long if it offered its non-music content, and the satellite radio platform, for \$11 per month (*i.e.*, the current \$14.49 subscription price per month, less the \$3.00 that Dr. Noll says is the implied price of the music content on Sirius XM). 8/15/12 Tr. 3554:13-3556:5 (Noll).

263. Regardless, given the concession by Sirius XM witnesses that Internet radio is not yet widely available in a car in the same easy-to-use way that Sirius XM offers, Dr. Noll erred in focusing solely on the presence or absence of interactivity to the exclusion of other factors that currently would seem to increase the value to consumers of the Sirius XM service. Ordover WRT at 24-25, SX Trial Ex. 218. His non-interactive services benchmark fails, among other

¹⁷ Dr. Ordover quotes Karmazin's statement, in the first earnings call after Sirius XM implemented an increase to its subscription price, to the effect that "Given the approximately 12% base package price increase we implemented in January, this positive churn result and no dip in conversion certainly exceeded our expectations and is an excellent demonstration of the value consumers place on our service.").

¹⁸ These services and their subscription prices are listed in Dr. Ordover's written testimony. *See* Ordover WDT at 34, SX Trial Ex. 74.

reasons, because he assumes that the value to consumers of a satellite music service is precisely the same as the value of a non-interactive Internet music service.

4. Dr. Noll's Alternative Methods To Establish the Retail Price of a Music-Only Satellite Service Are Similarly Flawed

264. As noted previously, in order to calculate a percentage of revenue rate for Sirius XM based on his non-interactive services benchmark, Dr. Noll applied the effective percentage of revenue rate that he calculated based on the Last.fm agreements (27.5%) to the implied retail price of a music-only satellite service. He then divided the number that he derived from that calculation into the Sirius XM ARPU to calculate a percentage of revenue rate for Sirius XM. *See* Noll WDT at 80-90, SXM Dir. Trial Ex. 1.

265. In addition to his assumption that the retail price of a music-only satellite service would match the retail price of Last.fm or Pandora (discussed above in Section V.C.3.d), Dr. Noll offers two alternative methodologies to calculate the retail price of a music-only satellite service, both of which are based on the view that consumers' willingness to pay for Sirius XM is a function of the separate value of each product in the Sirius XM bundle, namely access to music content, access to non-music content, and the Sirius XM transmission network. *Ordo*ver WRT at 30, SX Trial Ex. 218. Each of these approaches is flawed for the reasons described below.

a. Dr. Noll's Reliance on the Hauser Survey

266. One of Dr. Noll's approaches to determine the retail value of a music-only satellite service relies on the results of a survey designed by Professor Hauser. Based on the survey, Professor Hauser concludes that music content accounts for 25.7% of satellite radio's overall value. Professor Hauser's survey suffers from a faulty design that has the inexorable downward effect on the estimated value of music content. *Ordo*ver WRT at 34-35, SX Trial Ex.

218. According to Dr. Ordovery, the reliability of Professor Hauser's survey is undermined by the following serious flaws.

267. Professor Hauser's results are inconsistent with marketplace realities. His estimated value of music content – \$3.24 – is well below the value of music to marginal subscribers (\$5.92) that is implied by the difference between the price of Sirius XM's non-music content package and Sirius XM's basic subscription package that combines music and non-music content. The value of music on average across current subscribers would be even higher. Ordovery WRT at 34-35, SX Trial Ex. 218.

268. Professor Hauser determines his estimated value for music content without considering the separate music royalty fee that Sirius XM charges subscribers whose service plan includes more than incidental amounts of music. Ordovery WRT at 35, SX Trial Ex. 218.

269. It is hard to imagine that consumers would pay any positive price for a satellite radio service without content, and yet Professor Hauser's survey finds otherwise. Hauser WDT at Appendix G, SXM Dir. Trial Ex. 24. Taken at face value, his survey suggests that subscribers will pay \$1.97 for ubiquitous station availability, plus \$1.20 for premium sound quality, as well as \$2.46 for the absence of commercials, all without any actual content (*i.e.*, if all they could hear on the radio were white noise). Ordovery WRT at 35, SX Trial Ex. 218.

270. In a survey design of the type employed by Professor Hauser – where respondents are asked to value individual attributes with reference to a fixed price for the offering overall – the higher the number of features or attributes are included, the lower will be the estimated value of any given attribute. Thus, by including several attributes in addition to music and non-music content, Professor Hauser's survey necessarily pushes downward the estimated value of music (and non-music). Moreover, by carving up non-music content into several separate categories,

Professor Hauser further depresses the estimated value of music content.¹⁹ Ordover WRT at 35, SX Trial Ex. 218.

271. Professor Hauser contends that his survey included the appropriate set of attributes, based on the fact that the sum of average willingness to pay across all attributes (\$12.47) is reasonably close to the actual monthly subscription price (\$12.95 at the time of the survey). However, given that respondents were provided information on plan pricing and were asked questions with reference to those prices, it is not surprising that their responses would be affected by those prices. Moreover, it is important to recognize that by posing questions with reference to retail prices, Professor Hauser's survey does not address willingness to pay. Assuming a downward sloping demand curve, the retail price reflects willingness to pay only for the marginal subscriber(s). Average willingness to pay across all subscribers (respondents) must exceed retail price. Ordover WRT at 35-36, SX Trial Ex. 218.

272. Dr. Hauser did not ask Sirius XM users who were not paying for the service how much they would value music. But in applying Dr. Hauser's results, Dr. Noll in effect applied those results to all users whether they are paying or not. 6/6/12 Tr. 424:2-12 (Noll).

273. Hauser's survey should be given no weight. But if it received any weight at all, one would have to find the value of music higher than the \$3.24 figure that appears in Dr. Hauser's Appendix G. Dr. Simonson testified that the results of Dr. Hauser's survey greatly understate the value of music to the Sirius XM service. Simonson WRT at 10-11, SX Trial Ex. 65. When Dr. Simonson corrected for errors by Dr. Hauser, he concluded that the value of music to Sirius XM's subscribers (using the Hauser Survey data) was between \$10.37 and \$5.75

¹⁹ See Simonson WRT at 18, SX Trial Ex. 65.

(before adjusting upward for the Music Royalty Fee and the recent price increase). Simonson WRT at 4, 14, 21, SX Trial Ex. 65. In no event is the value of music reliably calculated at \$3.24.

b. Dr. Noll's Calculation of Platform Costs

274. Dr. Noll's final approach is based on the notion that the value of Sirius XM's network and delivery system can be estimated using the company's underlying costs. Dr. Noll purports to determine the costs of the Sirius XM satellite platform, deducts those costs from Sirius XM's ARPU, and then subtracts the value of non-music content to arrive at the imputed value of a music-only satellite service. Noll WDT at 85, SXM Dir. Trial Ex. 1.

275. Dr. Noll characterizes this approach as an implementation of the third statutory factor, but in reality Dr. Noll is advocating a rate determination framework that allows Sirius XM to recover its costs. Ordover WRT at 36, SX Trial Ex. 218. As should be apparent, this approach would yield higher or lower rates depending on changes in Sirius XM's costs, or which costs are deducted from the revenues for purposes of calculating rates. In effect, sound recording copyright-holders are asked to shoulder – if necessary – the burden of increases in Sirius XM's costs, or in the extreme to receive no compensation whatsoever if those costs exceed the company's revenues. This makes no sense as a matter of economics, unless Sirius XM is a public utility operating under rate regulation, which it is not. Ordover WRT at 37, SX Trial Ex. 218. Dr. Noll effectively makes the copyright owners the "last claimant" or the "residual claimant" on Sirius XM's revenues, and had such a bargain actually been struck, one would expect the copyright owners to receive "a much bigger share of the upside." 8/14/12 Tr. 3320:12-3321:13 (Ordover).

276. Dr. Lys agreed that there is no basis for giving Sirius XM's delivery costs complete precedence over other costs, such as those associated with creating content. Lys WRT

at 55, SX Trial Ex. 240. For example, if the costs of the satellite delivery system were equal to 100 percent of the price subscribers paid, it would make no sense to assume that all of the value from the service was derived from delivery system and none of the value from the content. Lys WRT at 55-56, SX Trial Ex. 240.

277. What equally makes no sense, as a matter of economics, is that Dr. Noll's specific calculation of the value of music is highly dependent on timing and number of subscribers. Lys WRT at 57, SX Trial Ex. 240. As Dr. Lys explained, because most of the costs that Dr. Noll has allocated are relatively fixed, the per subscriber amounts vary inversely with the number of subscribers. Lys WRT at 57, SX Trial Ex. 240. If he had performed this analysis several years ago, when Sirius and XM had far fewer subscribers, then Dr. Noll's analysis would have found that the costs of the delivery system (as he improperly defines those costs) were nearly equal to revenues, *i.e.*, provided nearly all of the value, in Dr. Noll's view. Lys WRT at 57, SX Trial Ex. 240. Similarly, if Dr. Noll completed his analysis for years during the coming rate term, rather than as of 2010, the analysis would show lower unique costs per subscriber and a higher value of music. Lys WRT at 57, SX Trial Ex. 240. This is because, as Dr. Lys testified, most of the satellite delivery costs are fixed while the number of subscribers is expected to grow. Lys WRT at 57, SX Trial Ex. 240. To demonstrate this point, Dr. Lys replicated Dr. Noll's analysis for 2016 using Sirius XM's latest projections.²⁰

²⁰ Because the cost projections do not totally line up with Dr. Noll's allocations (in part because he has allocated only portions of certain cost categories), Dr. Lys examined the projected increase or decrease in the overall cost categories and assumed that the cost portions that Dr. Noll allocated would rise or fall at roughly the same percentage as the overall category. Lys WRT at 57 n.258, SX Trial Ex. 240. As Dr. Lys explained, while these estimates are rough, they do not affect the overall point that subscribers are expected to increase substantially while total costs are mostly flat or falling (with the noted exception of OEM Revenue Share, which rises with increased revenue). *Id.*

Figure 11
Dr. Noll's Value of Music Analysis
Sensitivity Calculating Percent Change Using Historical and Projected Costs
(in \$ Thousands)

	2010	Percent Change	2016
Satellite and Transmission	\$ 80,947		
Engineering Design and Development	\$ 45,390		
Marketing and Sales			
Subscriber Acquisition Cost	\$ 413,041		
Depreciation and Amortization			
OEM Revenue Share			
Total			
Subscribers (Millions)	19.385		
Per Subscriber Per Month	\$ 4.39		\$ 3.25
With Noll Return on Investment (16.7%)	\$ 5.12		\$ 3.80
ARPU (According to Dr. Noll)	\$ 11.38		\$ 11.38
Revenue - Cost	\$ 6.26		\$ 7.58
Music Value (55.1%)	\$ 3.45		\$ 4.18
Music Value With 2016 Projected ARPU			\$ 5.18

Lys WRT at 58 fig.11, SX Trial Ex. 240.

278. Dr. Lys found that based on these projections, and assuming average revenue per user remained constant, the value for music in 2016 (as defined by Dr. Noll) would rise from \$3.45 to \$4.18. Lys WRT at 58 & fig.11, SX Trial Ex. 240. Dr. Lys further found that if he used Sirius XM's projected average revenue per user (excluding advertising revenue) for 2016, the value of music (as defined by Dr. Noll) rises even further to \$5.18. Lys WRT at 58 & fig.11, SX Trial Ex. 240. This analysis demonstrates that the value of the delivery system and the value for music under Dr. Noll's methodology are highly dependent on timing and the number of subscribers. Dr. Lys thus concluded that Dr. Noll's analysis of these costs for 2010 is not a reliable indicator of what these costs are likely to be during the coming rate term. Lys WRT at 58, SX Trial Ex. 240. Dr. Lys testified that his calculations demonstrate a fundamental flaw in Dr. Noll's analysis because there is no reason to believe the values of the satellite delivery

system and the content should rise or fall based on the number of subscribers, but that is exactly what Dr. Noll's methodology assumes. Lys WRT at 58, SX Trial Ex. 240.

279. Beyond its conceptual shortcomings, Dr. Noll's proposal to carve out Sirius XM's transmission and delivery costs is further undermined by his rather expansive definition of "delivery costs." Included in Dr. Noll's tally of costs are expenditures for marketing and sales, subscriber acquisition, and revenue sharing with OEMs.²¹ These costs have nothing to do with the satellite network. Instead, these generally relate to Sirius XM's efforts to acquire customers. Ordoover WRT at 37-38, SX Trial Ex. 218.

280. Dr. Lys concluded that Dr. Noll improperly classified costs that have nothing to do with the satellite delivery system to inflate the supposed unique costs to transmit and deliver satellite radio services to vehicles. Lys WRT at 56, SX Trial Ex. 240. In particular, Dr. Lys testified that Dr. Noll included various marketing costs and incentive payments to automakers that are meant to help attract new subscribers, not to transmit and deliver satellite radio service.²² Lys WRT at 56, SX Trial Ex. 240. The rationale for these classifications is supposedly confirmed by Mr. Frear, Noll WDT at 85, SXM Dir Trial Ex. 1, but Mr. Frear's testimony only confirms the inappropriateness of these cost classifications, Frear WDT at 9-12, SXM Dir Trial Ex. 12. As Dr. Lys explained, it may well be that "attracting and retaining subscribers is among the Company's largest and most important costs," but that is true with every subscription-based company, including Internet music providers. Lys WRT at 56, SX Trial Ex. 240. For example,

²¹ Noll WDT at Table 3, SXM Trial Ex. 1.

²² Dr. Lys also testified that Dr. Noll improperly included all costs from certain broad categories, for example assuming that all engineering costs are related to the satellite delivery system. Lys WRT at 56 n. 253, SX Trial Ex. 240. That is clearly not accurate. Indeed, Mr. Karmazin testified that Sirius XM spent millions of dollars in recent years developing Sirius XM 2.0, which is primarily an internet-based delivery system. Karmazin WDT at 4, SXM Dir. Trial Ex. 19.

between 2009 and 2011, Pandora spent between 24 percent and 32 percent of its total revenues on sales and marketing alone. Lys WRT at 56 n. 256, SX Trial Ex. 240. As Dr. Lys concluded, these types of costs of attracting subscribers are simply not unique to satellite radio. *Id.*

281. Dr. Noll appears to agree that these costs are not unique to satellite radio, but he seems to think that the Sirius XM costs are different simply because they are larger. “Q: Okay. And we can agree, can’t we, that webcasters probably also spend money to acquire subscribers? A: Not like this. Q: But they do spend money? A: Well, yes, but its nothing like this. I mean, there’s – there’s no counterpart like this.” 6/6/12 Tr. 438:4-11 (Noll). The idea that a category of costs must be taken into account for one service rather than another, simply because the costs are greater for the first service, has no sound economic basis. As Dr. Lys testified, that Sirius XM chooses to share a portion of its revenue with automakers and to give them incentive payments to install satellite radios in cars may well be a good use of its marketing resources, but these payments cannot reasonably be viewed as part of the satellite delivery system. Lys WRT at 56, SX Trial Ex. 240.

282. Ultimately, as Dr. Lys explained, if these costs are properly thought of as uniquely part of the delivery system, then virtually all of Sirius XM’s costs including, for example, customer care, could be so classified as well. Lys WRT at 56, SX Trial Ex. 240. In fact, as Dr. Lys testified, Dr. Noll’s analysis is highly dependent on his improper inclusion of these marketing and subscriber acquisition costs. Lys WRT at 56, SX Trial Ex. 240. If one removes these improper inclusions but otherwise applies the same analysis, the value of music becomes \$5.37, not \$3.45 as Dr. Noll estimates. Lys WRT at 56-57 & fig. 10, SX Trial Ex. 240.

Figure 10
Dr. Noll's Value of Music Analysis
Excluding Marketing and Sales and Subscriber Acquisition Cost
(in \$ Thousands)

Satellite and Transmission	\$	80,974
Engineering Design and Development	\$	45,390
Depreciation and Amortization		
Total		
Subscribers (Millions)		19.385
Per Subscriber Per Month		
With Noll Return on Investment (16.7%)		
ARPU (According to Dr. Noll)	\$	11.38
Revenue - Cost	\$	9.74
Music Value (55.1%)	\$	5.37

283. Moreover, if one properly focuses only on these actual delivery system costs, *i.e.*, the costs related to the satellites rather than marketing and subscriber acquisition and retention costs, it turns out Sirius XM's costs as a percentage of revenue are actually in line with Internet radio companies like Pandora. As shown in Dr. Lys's Figure 10 above, Sirius XM's satellite system costs of \$[REDACTED] million amounts to roughly [REDACTED]% of Sirius XM's 2010 revenue of \$2.8 billion. Lys WRT at 57 fig. 10, SX Trial Ex. 240. In comparison, Pandora's costs related to its delivery system, which are included in its product development and cost of revenue (covering hosting and streaming costs and related functions) line items, amounted to between 13% and 25% of Pandora's total revenue for fiscal years 2010, 2011, and 2012. *See* SX Trial Ex. 222 at SX02 00161539 (p. 48 of 111). In other words, while Sirius XM's satellite delivery costs may be higher in absolute dollars, the delivery costs are actually not very different in relative terms as to what Internet radio companies must pay for their delivery systems

284. Finally, the record demonstrates that Sirius XM may substantially lower its subscriber acquisition costs during the coming the rate term by [REDACTED].

[REDACTED]. Subscriber acquisition costs make up a substantial portion of Dr. Noll's calculations.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. Sirius XM's internal projections show that it expects the [REDACTED]

[REDACTED]

[REDACTED]. SX Trial Ex. 9 at 12. Sirius XM has further completed a detailed analysis examining [REDACTED]

[REDACTED]

[REDACTED]. 8/13/12 Tr. at 3116:11-21, 3117:18-3118:5 (Frear); SX Trial Ex. 209. In fact, Sirius XM estimated that between 2013 and 2016, it could [REDACTED]

[REDACTED]. SX Trial Ex. 209 at

SXM_CRB_REB_0019717-18. Given that Sirius XM will [REDACTED]

[REDACTED]

[REDACTED], the Court should not rely on Dr. Noll's use of Sirius XM's 2010 subscriber acquisition costs.

5. Dr. Noll's Adjustments to the Interactive Music Services Benchmark Are Flawed

a. Dr. Noll's Adjustments to the Interactive Music Services Benchmark Simply Restate His Non-Interactive Webcasting Benchmark

285. Dr. Noll claims that three adjustments are necessary if an interactive services benchmark is to be employed. The first adjustment must account for non-music content. The second adjustment must account for interactivity. And the third adjustment must account for the value of the satellite delivery platform. Noll WRT at 10 (SXM Reb. Trial Ex. 6). Dr. Noll summed up these adjustments as follows: "If you want to start with interactive, you cut it in half because you are going to something that is noninteractive; you cut it in half again because half of the content is not music; and then you cut it in half again because the distribution system accounts for half of the costs." 6/5/12 Tr. 294:10-16 (Noll).

286. Dr. Noll's first adjustment is not something the parties contest. Dr. Ordoover ascribed 50 percent of the value of content on Sirius XM to music, while Dr. Noll ascribed 55 percent of the content value to music. 6/5/12 Tr. 234:7-16 (Noll). Moreover, both agree that this adjustment is irrelevant to Dr. Ordoover's lower bound calculation of the royalty derived from an interactive services benchmark. 8/14/12 Tr. 3477:8-15 (Noll).

287. We will address the second and third proposed adjustments in Sections V.C.5.b and c below. By way of overview, however, Dr. Noll's second and third adjustments to Dr. Ordoover's interactivity benchmark represent nothing more than a rehash of Dr. Noll's non-interactive service benchmark. Dr. Noll opines that "this . . . is really simple. It involves what's the right retail price for, the right estimate for the retail price of the music component of Sirius XM and what is the right percentage royalty rate if you believe Janusz, you get 22.4. If you believe me you get 6.34." 8/14/12 Tr. 3477:2-7 (Noll). Dr. Noll adjusts Dr. Ordoover's

interactive music service by using the weighted average price of a non-interactive subscription streaming service (which is his way of arriving at the “right estimate for the retail price of the music component of Sirius XM”), multiplying that price by the percentage of revenue royalty that Dr. Noll calculates for non-interactive webcasters (which is his estimate of “the right percentage royalty rate”), and then dividing that number into the Sirius XM revenue per subscriber in order to calculate a percentage of revenue rate for Sirius XM. 8/15/12 Tr. 3548:13-3549:4 (Noll).

288. As is readily apparent, Dr. Noll’s second and third adjustments simply restate his non-interactive music services benchmark, with all of the flaws discussed above in Section V.C.1-3.

b. Dr. Noll’s Interactivity Adjustment is Flawed

289. Dr. Noll’s second proposed adjustment to the interactive services benchmark is to substitute the 26.1 percent average percentage of revenue royalty that he calculates from the four agreements between Last.fm and the major record companies for the 60 percent average royalty that Dr. Ordoover calculated for interactive services. 8/14/12 Tr. 3476:3-12 (Noll). Making Dr. Noll’s adjustment for interactivity (rather than Dr. Ordoover’s) but rejecting Dr. Noll’s proposed platform adjustment yields a rate of 13.1 percent of revenue. 8/15/12 Tr. 3584:21-3585:6 (Noll).

290. Dr. Noll opines that, as a matter of theory, one would predict that the range of royalty rates paid by music services would differ depending on the nature of the use of the sound recordings. 8/14/12 Tr. 3456:18-3458:3 (Noll). Dr. Noll assails Dr. Ordoover for assuming that “royalty rates that emerge from competitive markets are the same for all services,” when in fact, according to Dr. Noll, “[s]ervices that offer less user control of content pay lower royalty rates.” Noll WRT at 4, SXM Reb. Trial Ex. 6.

291. Dr. Noll appears not to understand what Dr. Ordover did. Dr. Ordover does not claim that the royalty rates are the same on a per unit basis no matter what the functionality of the services. Instead, as Dr. Ordover testified, the retail price paid by consumers for a service reflects the value of the service and all of its attributes. Thus, if consumers value interactivity or any other service attribute, that value will be reflected in a higher retail price paid by consumers for the service. A given percentage of royalty rate applied to a service with a higher retail price will result in a higher per-unit royalty compared to the same percentage of revenue royalty rate applied to a service with less desirable functionality and therefore a lower retail price. “So, the more valuable the service, the higher the per-unit payment is going to be made to the labels,” even though same percentage of revenue is applied. 6/14/12 Tr. 2280:4-2282:11 (Ordover).

292. Dr. Noll acknowledges that if two different music services charge different retail prices to their subscribers, the same percentage of revenue royalty applied to both will produce a different royalty for the music input on a per-unit basis. 8/15/12 Tr. 3523:11-16 (Noll). Likewise, Dr. Salinger agrees that a music service that offers a higher quality service to consumers will charge a higher retail price, and the more the music service can charge its subscribers, the higher the music royalty it will pay on a per-unit basis. But, as Dr. Salinger concedes, the observation that the owners of music rights will charge a premium for the use of sound recordings by a more highly-valued service does not say anything about whether the music rights owners will receive the same or different percentage of revenue fee from the higher value service. This is so because, simply as a matter of math, the same percentage of revenue applied

to the higher retail subscription price of a more highly valued service yields a higher music royalty on a per-unit basis.²³ 8/16/12 Tr. at 3830:3-3832:4 (Salinger).

293. Nevertheless, Dr. Noll effectively contends that the royalty for a non-interactive service must be reduced twice – once because non-interactive services command lower retail prices, and a second time because he believes that non-interactive services are paid a lower percentage of revenue of the lower revenue. Dr. Noll asserts that the empirical evidence is consistent with his theory, 8/14/12 Tr. 3458:3-5 (Noll), and that an examination of the contracts shows that percentage of royalty rates differ as user control of content increases. Noll WRT at 17, SXM Reb. Trial Ex. 6.

294. In fact, the empirical evidence refutes Dr. Noll's theory.

295. Dr. Noll reviewed during the trial SoundExchange Trial Exhibit 220, which is a Universal Music agreement with an on-demand subscription service. 8/15/12 Tr. 3534:3-3535:3 (Noll). The agreement identified three tiers of service: an on-demand non-portable service; an on-demand service that could be used on three non-portable devices and one permitted portable device; and an on-demand service that could be used on three non-portable devices and three permitted portable devices. The agreement contained a "greater-of" payment formula for all three variants of the service, and the per-subscriber amount was different in each case but the percentage of revenue fee for each of the three services was the same at [REDACTED] of revenue. 8/15/12 Tr. 3535:4-3537:12 (Noll). The per-subscriber fee for the least portable service is the UMG proportional share of [REDACTED], but no less than [REDACTED]; the per-subscriber fee for the intermediate portable service is the UMG proportionate share of [REDACTED], but not less than

²³ Although Dr. Salinger believes that a higher-valued music service will pay a higher percentage of revenue royalty compared to a lower-valued service, he has not read the digital music agreements involved in this case, and he has no empirical evidence to support his theory beyond what he read in Dr. Noll's report. 8/16/12 Tr. at 3832:5-22 (Salinger).

[REDACTED]; and the per-subscriber fee for the most portable version of the service is the UMG proportionate share of [REDACTED] but not less than [REDACTED]. 8/15/12 Tr. 3538:13-3539:18 (Noll).

296. As this agreement demonstrates, consumers do in fact value user control, and will pay more for a greater degree of user control (in this case, portability rather than interactivity). But while the per-play and per-subscriber rates differ, the percentage of revenue rates for services with different degrees of consumer control are the same, contrary to Dr. Noll's theory.

297. Video streaming agreements provide yet another example. Dr. Noll claims that Dr. Ordoover in effect admitted that his interactivity adjustment in *SDARS I* based on interactive and non-interactive video streaming royalty rates was a mistake. Purporting to speak for Dr. Ordoover, Dr. Noll stated: "that basically is testimony that says I did it wrong the first time. Shouldn't have formed the ratio of non-interactive to interactive music services for videos. That was a mistake because there must be something wrong with the market because those should have had the same royalties." 8/14/12 Tr. 3461:16-3462:4 (Noll). But after being shown Dr. Ordoover's written testimony from *SDARS I*, Dr. Noll agreed that the video streaming services used by Dr. Ordoover in that case paid different per play royalties for interactive streaming and non-interactive streaming, but were subject to precisely the same percentage of royalty rates. 8/15/12 Tr. 3544:5-17, 3545:22-3546:9 (Noll). Under Dr. Noll's theory, of course, the percentage of revenue rates for the interactive service should have been higher than the percentage of revenue rates for the non-interactive service, yet they were exactly the same.²⁴

²⁴ On re-direct, Dr. Noll attempted to explain away this inconvenient fact by stating that the video streaming agreements are no longer in effect. 8/15/12 Tr. 3573:22-3574:3 (Noll). That is true. But his theory is not time-specific; Dr. Noll does not suggest that his theory has only recently become valid. And if his theory was valid, it should have resulted in different percentage of revenue rates to interactive and non-interactive video streaming services.

298. Finally, the poster-child for Dr. Noll's argument are the Last.fm and Slacker agreements for non-interactive services, which have stated percentage of revenue rates of 30 percent or below. Noll WRT at 16-17, SXM Reb. Trial Ex. 6. Leaving aside the fact that these rates are strongly influenced by regulated rates (*see* Section V.C.2) and reflect the unusual circumstances of the individual negotiations (*see* Section V.C.3.b), Dr. Noll ignores Pandora. Pandora, according to Dr. Noll, is "by far the most important Internet music site" and accounts for "about 60 percent of all Internet music delivery." 6/5/12 Tr. 286:21-288:7 (Noll). It is, in his view, a close substitute for the Sirius XM service. 6/5/12 Tr. 285:12-286:1 (Noll). Pandora pays at least 50 percent of its revenues for sound recording rights, whether for its service as a whole, or for the subscription portion of its service. *See* Section V.C.3.c.

299. In short, the empirical evidence is consistent that percentages of revenue cluster at 50 percent or above regardless of the level of consumer control, just as Dr. Ordovery opines, and Dr. Noll's adjustment to apply a lower percentage of revenue rate due to the absence of interactivity is incorrect.

c. Dr. Noll's "Platform" Adjustment is Improper

300. Dr. Noll asserts that the Sirius XM service should be viewed as a bundle of three inputs – music content; non-music content; and the satellite platform for delivering the content. Noll WDT at 80, SXM Dir. Trial Ex. 1. When he adjusts Dr. Ordovery's upper bound interactive music services benchmark, he attempts to separate each part of the bundle into a separately-valued component, and he then applies what he views to be the appropriate percentage of revenue royalty against the music-only portion of the bundle.²⁵ To obtain the value of the

²⁵ Dr. Noll's proposed platform adjustment is not relevant to Dr. Ordovery's lower-bound analysis of the interactive music services benchmark, as both Dr. Noll and Dr. Salinger agree. 8/14/12 Tr. 3477:8-15 (Noll). Salinger WRT at 12, SXM Reb. Trial Ex. 9.

satellite platform part of the bundle, he purportedly uses the forward-looking average costs of the platform, and nets those costs out of the average revenue per user for the Sirius XM service.

Noll WRT at 18-19, SXM Reb. Trial Ex. 6.

301. Dr. Noll's theory has already been carefully considered and squarely rejected by this Court. The same theory was advanced by Dr. Woodbury on behalf of Sirius and XM in *SDARS I*. Here is what the Court had to say:

Dr. Woodbury's "functionality adjustment" merely lists key characteristics of the music made available to SDARS consumers (e.g. mobility, quality of reception, broader playlists than typically available on terrestrial radio, etc.) for which consumers are willing to pay enhanced revenues and then attributes all of the revenue associated with these characteristics to other inputs such as satellite technology under the unsubstantiated theory that such other inputs could produce the same level of revenue absent any music to broadcast. Therefore, the Woodbury "functionality" adjustment is seriously flawed and makes little contribution to resolving the lack of comparability between the Music Choice cable TV music programming proposed benchmark market and the SDARS target market.

We conclude from the record before us that there is no basis to support the notion that music inputs in both these markets are equally productive in generating revenues for the users.

Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services ("SDARS I"), Final Rule and Order, 73 Fed. Reg. 4080, 4089 (Jan. 24, 2008).

302. In this case, just as in *SDARS I*, Sirius XM attempts to isolate the "key characteristics of the music made available to SDARS consumers" and effectively "assumes that all of the revenue associated with these characteristics" is attributable to the satellite platform. 73 Fed. Reg. at 4089. Indeed, Dr. Noll undertakes this analysis in precisely the same way that Dr. Woodbury did in *SDARS I* – he uses the costs of the platform as his proxy for revenues derived from the platform. Compare Noll WRT at 18-19, SXM Reb. Trial Ex. 6 ("My

comparable method for estimating the retail price of music content on satellite radio service multiplies the fraction of content that is accounted for by sound recordings (I used 55 percent) by the difference between the price of the bundled service and the forward-looking average cost of the platform”) *with SDARS I*, 73 Fed. Reg. 4080, 4089 n. 25 (“Dr. Woodbury uses the ‘costs’ associated with these other inputs in his adjustment, [and] he makes clear that those costs merely serve as a proxy for revenues attributable to the use of inputs.”).

303. Dr. Noll’s theory that, as this Court put it in *SDARS I*, the satellite network input “could produce the same level of revenue absent any music to broadcast”, 73 Fed. Reg. at 4089, is just as wrong here as it was in *SDARS I*.

304. Dr. Noll’s attempt to unbundle the value of the network from the value of the music flies in the face of reality, as everyone in this case – including Dr. Noll – acknowledges. Consumers do not value the satellite network independent of the content it transmits, and the satellite platform could not produce any revenue, much less the level of revenue that Dr. Noll calculates, without music to broadcast. On this there is no dispute.

305. As stated by Sirius XM’s CFO, David Frear: “I don’t believe that our customers really care whether they’re getting the signal across a satellite or a terrestrial repeater or an Internet connection. What they have come to us for is SiriusXM-branded programming for a specific price. And its 140 channels of music, talk, news and sports. So they just want to listen to that.” 6/7/12 Tr. 666:5-11 (Frear).

306. Dr. Noll put it more bluntly : “If there were not program content on Sirius XM, its value would be zero.” 6/6/12 Tr. 430:9-18 (Noll). *See also* 6/5/12 Tr. 234:21-235:15 (Noll).

307. Given that the bundle of inputs cannot be unbundled and sold separately (or, at least, the satellite platform cannot be sold without the content input), Dr. Ordoover explained why

the Court was correct in *SDARS I* and Dr. Noll is wrong. If two music delivery services offer music in different ways, and consumers will pay “X” for one service and “X plus delta” for the second service, the extra amount (“delta”) that consumers are willing to pay for the second service will be split in some fashion between the service and the music providers. That is because “each party needs the other one to create the benefit. Given that recognition, it is most likely that they will come to some terms that sort of recognize the joint value creation leading, therefore, to some kind of allocation of the deltas between the two sides.” 6/14/12 Tr. 2270:7-2271:15 (Ordoover).

308. Dr. Ordoover’s analysis is entirely consistent with the Court’s conclusions in *SDARS I*. There the Court cautioned:

That is not to say that the music input that is sold to consumers as “mobile music” is *wholly* responsible for the consumer revenues generated by the product over and above the revenues that are generated by an otherwise identical but “nonmobile music product,” any more than the technical distribution vehicle is *wholly* responsible for those added revenues.

SDARS I, 73 Fed. Reg. at 4089 n. 26 (emphasis in original). Like the Court, Dr. Ordoover does not contend that the music input receives all the incremental value produced by Sirius XM’s investment in its satellite platform, but rather that the parties share in the total value produced by the bundle. 6/14/12 Tr. 2270:7-2271:15 (Ordoover). Thus, Dr. Ordoover applies his percentage of revenue royalty to the bundle of value created jointly by the music content and the satellite platform, while Dr. Noll attempts to separately value inputs that he concedes have, in reality, no separate value. 6/5/12 Tr. 235:6-15 (Noll) (stating that all of the inputs are essential and “you pull the plug on any one of them, and the whole thing collapses.”)

309. In short, because the Sirius XM network is “either completely worthless or worth almost nothing without music,” it is the joint product that generates the consumer’s willingness

to pay and therefore music and Sirius XM share the benefit. 8/14/12 Tr. 3319:9-20 (Ordoover); Ordoover WRT at 30, SX Trial Ex. 218.

310. That a carve-out of the satellite platform costs is inappropriate is confirmed by Sirius XM's current and anticipated future pricing of its service. Sirius XM charges the same \$14.49 per-month price for its Sirius Select and Sirius XM Internet Radio packages, which are substantially similar offerings in terms of content and differ most materially in that one is delivered via its satellite network and the other is delivered over the Internet. Such pricing would seem irrational if the company believed that transmission over its satellite network added additional value to its service over and above the content itself. Indeed, Sirius XM's CFO, Mr. David Frear, testified in his deposition, according to Dr. Ordoover, that the company's offerings are priced identically because the company's business is selling content and it does not believe that consumers care about the specific platform over which the content is distributed. Ordoover WRT at 31, SX Trial Ex. 218.

311. Moreover, Mr. Frear testified that Sirius XM is rolling out a new generation radio that will work with both the Internet and the satellite system. 8/13/12 Tr. at 3155:22-3156:9 (Frear). Mr. Frear agreed that he expects that Sirius XM will price its content the same regardless of delivery mechanism, *i.e.*, whether the content is received over the Internet or the satellite system. 8/13/12 Tr. at 3157:1-15 (Frear); *see also* Ordoover WRT at 31, SX Trial Ex. 218.

312. Given that Sirius XM currently prices its content distributed over the satellite network (which it created) at the same price as it distributes its content over the Internet (which it did not create) , and that Sirius XM will continue such pricing in the future when it offers its new generation receivers that work with both platforms, Dr. Noll's theory that the cost of satellite

platform must be separated out from the value of the bundled service as a whole (and the music royalty reduced accordingly) is insupportable. Ordoover WRT at 31, SX Trial Ex. 218.

313. There are a variety of other conceptual flaws in Dr. Noll's theory, which we have already discussed at length in Section V.C.3 above, and will only summarize here:

- Dr. Noll is effectively advocating a rate determination framework that guarantees that Sirius XM will recover its costs, much as it would if it were a public utility, since Dr. Noll in effect "pays" all the network costs before he determines how much is left over to split with the owners of sound recording rights. Ordoover WRT at 36, SX Trial Ex. 218. In effect, under his theory, the owners of sound recording rights would receive no compensation whatsoever if those costs exceed the company's revenues. 8/14/12 Tr. 3320:12-3321:13 (Ordoover); Lys WRT at 55-56, SX Trial Ex. 240.
- Dr. Noll's specific calculation of the value of music is highly dependent on timing and number of subscribers, because most of the costs that Dr. Noll has allocated are relatively fixed, and as a result the per subscriber amounts vary inversely with the number of subscribers over time. Lys WRT at 57, SX Trial Ex. 240.
- Dr. Noll's calculations of the "unique costs" of Sirius XM's satellite delivery system are completely unreliable, because he has wrongly classified as platform costs things that have nothing to do with the satellite delivery system, such as subscriber acquisition and marketing costs. Lys WRT at 56, SX Trial Ex. 240.

314. To buttress his assertion that marketplace royalty rates for sound recording performance rights reflect the value of the service provider's delivery system, Dr. Noll points to

the fact that the wireless carrier Cricket has agreements for its interactive music service with all the four major labels that includes [REDACTED]. Dr. Noll's use of Cricket as an analogy for Sirius XM misses the mark. He claims that Cricket's [REDACTED] rate reflects adjustments "to take into account other components of the bundle, including transmission service." Noll WDT at 81, SXM Dir. Trial Ex. 1. In fact, Cricket bundles music with a variety of other services unrelated to the delivery of content, including the services common to wireless telephone plans such as voice calling, text messaging and data usage, all of which have independent value for consumers. Because various elements of the bundle of services are priced out in the marketplace, the total value of the bundled service can, in principle, be apportioned among the components of the bundle. Ordoover WRT at 32-33, SX Trial Ex. 218. Stated differently, the percentage of revenue in the Cricket agreements reflects the fact that the delivery system *delivers* services that also have an independent value to consumers, and that can be (and are) sold without the music input. Ordoover WRT at 33, SX Trial Ex. 218.

VI. THE DIRECT LICENSES BETWEEN SIRIUS XM AND SMALL INDEPENDENT RECORD LABELS DO NOT OFFER A RELIABLE BENCHMARK

A. The Direct Licenses Were Negotiated by Sirius XM in an Effort to Create a Benchmark for This Proceeding

315. Dr. Noll's primary benchmark analysis in this case rests on a modest number of direct licenses between Sirius XM and small independent labels. Dr. Noll's benchmark agreements, however, did not come into existence through normal market processes. Instead, they were negotiated by Sirius XM for the purpose of creating a benchmark for this case.

316. Although Sirius XM and its agents offered a number of business reasons for the direct license initiative, Gertz WDT at 6, SXM Dir. Trial Ex. 14, the timing of the benchmark initiative is telling. The first direct licenses signed between Sirius XM and independent record

labels were received by Sirius XM in late September 2011, *see* SX Trial Ex. 301 at 54-55 (MRI status reporting listing date “signed licenses” had been sent to Sirius XM), more than four-and-a-half years into the current rate term and approximately two months before the filing of direct written testimony in this case.

317. Indeed, litigation deadlines drove some of Sirius XM’s negotiations. During discussions with one independent label, for example, Les Watkins of MRI told the label, “I wanted to let you know that SXM will be filing its direct case for the trial by next Tuesday the 29th. A huge motivation for SXM on this deal is closing it if at all possible in advance of the filing of the case.” SX Trial Ex. 24, p. 3.

318. Mr. Frear admitted that one of the reasons that Sirius XM initiated the direct license initiative was to establish a benchmark for the rates in the SDARS proceeding. 6/7/2012 Tr. 704:1-5 (Frear). *See also* 8/13/12 Tr. 3203:4-5 (Frear) (“You know, we’re out there working hard to establish a good benchmark here”).

319. Similarly, Mr. Gertz acknowledged, in response to a question from Judge Wisniewski, that one of the reasons that Sirius XM was trying to sign direct licenses was to use them as a benchmark in this case. 6/7/2012 Tr. 932:1-18 (Gertz). Not surprisingly, at the direct phase of the trial, Mr. Gertz was not sure whether MRI would be retained to administer or solicit direct licenses beyond 2012. 6/7/2012 Tr. 952:5-9 (Gertz).

B. The Direct-Licensed Labels are a Small and Decidedly Unrepresentative Sample of the Copyright Owners That are Subject to the Statutory License

1. Market Share of the Direct Licensors

320. At the heart of Sirius XM’s direct license benchmark is the argument that the direct license agreements are representative of the rates that the rest of the copyright owners would agree to in an unregulated competitive market. As Dr. Noll concedes, however, the more

limited the number of direct licensors, “the more of an issue there is about their representativeness.” 6/5/12 Tr. 271:2-5 (Noll); *see also* 6/5/12 Tr. 257:20-22 (Noll) (agreeing that the representativeness of the record labels that signed direct licenses “is a valid issue to examine.”).

321. By any measure, the number of direct licensees is limited indeed. As of the submission date of Dr. Noll’s initial direct written testimony, Sirius XM had negotiated licenses with 62 independent labels. Ordover WRT at 4-5, SX Trial Ex. 218. There were 85 direct licenses at the time of the rebuttal filings, Noll WRT at 32, SXM Reb. Trial Ex. 6, and approximately 95 direct licenses by the time of the rebuttal trial. 8/13/2012 Tr. 3015:16-20.²⁶

322. The number of independent labels that signed direct licenses represents a tiny fraction of the more than 20,100 rights owners to which SoundExchange distributes payments. *See* Bender WDT at 4, SX Trial Ex. 75. Moreover, the labels with which Sirius XM reached agreement are a relatively small sub-set of the [REDACTED] independent labels that Sirius XM approached in the first instance. Ordover WRT at 4 note 8, and 6, SX Trial Ex. 218; SX Trial Ex. 301 at 53. A substantial majority of the independent labels that were offered a direct license by Sirius XM turned it down. In fact, five or six times as many independent labels declined as signed. 6/6/12 Tr. 309:17-310:9 (Noll).

323. Taken together, the independent labels that signed direct licenses represent an insignificant segment of the market, and this is true no matter how the market is defined.

²⁶ No other information relating to those ten additional licensors is in evidence.

324. In other contexts, (for example, addressing the assertion that Sirius XM has market power), Dr. Noll stated Sirius XM is “one of many competitors in the market for the rights.” 6/5/12 Tr. 275:17-276:3 (Noll); 8/14/12 Tr. 3482:7-16 (Noll). Dr. Salinger agrees that “the market is broader than satellite radio.” 8/16/12 Tr. at 3822:15-3823:1 (Salinger). And in the broader market for music rights, according to Dr. Noll, “SiriusXM is a tiny fraction of all the music use in the U.S.” 8/14/12 Tr. 3480:9-10 (Noll); *see also* 6/5/12 Tr. 247:14-248:9 (Noll) (asserting that the direct license transactions took place in a competitive market because the market includes everyone who buys sound recordings in the form of CDs, digital downloads, or digital streaming, and in this market “SiriusXM is a tiny fraction of the demand side.”). If that is so, however, the share of that broader market that is represented by the sound recordings made available under the direct licenses is literally incalculably small. No party to this case has even attempted to measure it.

325. What the parties have attempted to do is measure the share of total plays on Sirius XM represented by catalogues of the direct-licensed independent labels. At most, the direct-licensed content represents just slightly over two percent of the plays on Sirius XM.²⁷

326. The catalogs of the 62 labels that had signed direct licenses at the time direct testimony was filed, taken together, historically accounted for a *de minimis* portion of total airplay across Sirius XM’s music channels – roughly between one and two percent. Ordoover WRT at 4-5, SX Trial Ex. 218. *See also* 6/5/12 Tr. 261:10-12 (Noll).

327. During the direct-phase trial, Sirius XM witnesses claimed the current market share of the direct licensors (including any new licensees since the time direct written testimony was filed) was either four or six percent. 6/6/2012 Tr. 308:3-5 (Noll); 6/7/2012 Tr. 937:13-17

²⁷ In this context, a single transmission of a sound recording over the Sirius XM satellite network, regardless of how many people listen to it, is a “play.”

(Gertz); 6/7/2012 Tr. 687:4-10 (Frear). None of the witnesses offered support for these assertions, but it appears that their figures may have been drawn from a “Play Share Analysis” that Sirius XM was forced to withdraw from its witnesses’ testimony during the rebuttal phase. The 4% figure cited by Dr. Noll is close to the 3.9% of plays the that Play Share Analysis purported to associate with direct licensed independent labels when pre-’72 material was excluded, and the 6% figure favored by Mr. Gertz is similar to the 5.8% of plays the Play Share Analysis reported for all recordings including pre-’72.

328. The “Play Share Analysis” was prepared by MRI using data from April 2012. SoundExchange raised questions about the Analysis in communications with Sirius XM’s counsel, in discovery motions, and subsequently in a motion to exclude the Analysis on the grounds that it was riddled with errors. As SoundExchange explained in its motion, far from simply muddying the data, the attribution errors in the Play Share Analysis systematically inflated the play share of direct licensors and deflated the play share of labels that had not entered into a direct license. In instances where a directly licensed label had released an album containing a recording of a song (regardless of whether that label owned the master to that recording), MRI credited that label with ownership of every other recording of that song by the same artist, even where it was plainly evident that the label had no rights in the other recordings. These errors had particularly noticeable impact where the directly licensed label specialized in re-records or live versions of tracks originally released by other labels or where the directly licensed label had released compilation albums. Many of the directly licensed labels fit these profiles. *See SoundExchange’s Motion to Strike the Play Share Analysis from the Rebuttal Testimony of Ronald H. Gertz, David Frear, and Roger Noll* (filed August 9, 2012).

329. After SoundExchange raised concerns about the reliability of the Play Share Analysis, Sirius XM agreed to withdraw the Play Share Analysis and every reference to it from the testimony of its witnesses. While Sirius XM did not agree with all of SoundExchange's arguments, it did agree that "the rather complex, computerized process of attempting to match large, sometimes imprecise datasets to develop the requested information resulted in some miscategorizations and, hence, to some errors in the data presented in the various rebuttal testimony." As a consequence, no reliance can be placed on either number offered in the testimony of Dr. Noll or Mr. Gertz. *See Sirius XM's Response Mooting SoundExchange's Motion to Strike the Play Share Analysis from the Rebuttal Testimony of Ronald H. Gertz, David Frear and Roger Noll*, at 1 (filed August 9, 2012).

330. Even without the Play Share Analysis, however, there is some indication of the market share of the direct licensed labels. Under the market share analysis that MRI conducted before the direct case testimony was filed, based on Sirius XM's playlist data for June 2009 through May 2010, the total market share represented by the 85 licenses signed at the time of the submission of the written rebuttal testimony in this case was [REDACTED]. SX Trial Ex. 301 at 54-58 (listing estimated market share of directly licensed labels); SX Trial Ex. 21 at 2-3 (explaining market share analysis methodology); SX Trial Ex. 20 (market share analysis). Individually, none of the labels accounts for more than [REDACTED] of plays on the service. SX Trial Ex. 301 at 54-58. Indeed, [REDACTED] of the 85 direct license labels had a reported market share of 0%, even when MRI calculated market share to 5 decimal points. SX Trial Ex. 301 at 54-58.

331. This is not to say that this earlier attempt at a market share analysis by MRI was necessarily significantly more reliable than the discredited Play Share Analysis. For example, the earlier market share analysis showed that "roughly 35-45% of plays on Sirius XM represent

tracks released by independent labels.” Gertz WDT at 7, SXM Dir. Trial Ex. 14. However, according to an email from Mr. Gertz to Cynthia Greer, associate general counsel at Sirius XM, the analysis was only able to identify 71.12% of plays on Sirius XM’s SDARS service due in part to “bad or missing” data received from Sirius XM. SX Trial Ex. 21 at 2-3. MRI elected not to pursue a comprehensive clean-up effort because, in the words of Mr. Gertz, a “current effort at data clean-up for reporting purposes would only benefit SoundExchange.” SX Trial Ex. 21 at 3.

332. Alternatively, market share can be estimated for a majority of the directly licensed labels using Sirius XM’s actual royalty payment data. According to Mr. Gertz, recent royalty payment data is a better source of information than the 2010 market share analysis. 6/7/12 Tr. 906:3-20 (Gertz). Sirius XM refused to provide the most recent royalty payment data in discovery, but payment data for 54 of the directly licensed labels during the Fourth Quarter of 2011 is in evidence. SX Trial Ex. 321. In accordance with the formula set out in the sample direct license appended to Mr. Frear’s written direct testimony, royalty payments are calculated by dividing the total number of “Transmissions” on the SDARS service by the number of Transmissions of the directly licensed label’s content and multiplying that figure by gross revenues. Frear WDT at SXM Dir. Ex. 7, SXM Dir. Trial Ex. 12. The statements sent to direct licensors show this calculation, and so the total play share of directly licensed content can be calculated by adding all the numerators (reflecting each label’s content) and dividing by the denominator, or [REDACTED] total transmissions on the SDARS service during the Fourth Quarter of 2011. SX Trial Ex. 321. Despite several apparent attribution errors in these actual royalty payments (including payments to the directly licensed label [REDACTED] for sound recordings composed by [REDACTED]), compare SX Trial Ex. 321 at SXM_CRB_DIR_00088799-04

[REDACTED]

[REDACTED]
[REDACTED] with Gertz WDT at SXM Dir. Ex. 14, SXM Dir Trial Ex.

14 [REDACTED]

[REDACTED]”), the aggregate market share for these 54 labels is still remarkably small.

According to the royalty statements, only [REDACTED] of plays during the Fourth Quarter of 2011 were directly licensed. SX Trial Ex. 321. The median number of transmissions was [REDACTED], which means that SoundExchange’s witness Michael Powers of Yellow Dog Records, who had [REDACTED] Transmissions during the Fourth Quarter of 2011, [REDACTED] [REDACTED] of the direct licensors who received statements. SX Trial Ex. 321.

333. Mr. Eisenberg testified about one final way to arrive at a rough estimate of the market share of the direct licensors. Eisenberg WRT at 10, SX Trial Ex. 245. Mr. Eisenberg examined 2011 terrestrial airplay data synthesized by a non-testifying consultant, Massarsky Consulting Inc., which it compiled from source data gathered by Mediabase, one of the two primary industry services that monitor terrestrial airplay in the United States. Eisenberg WRT at 10, SX Trial Ex. 245; 6/8/2012 Tr. 993:21-994:2 (Blatter). In 2011, of the top 1000 artists in various radio formats, the artists specifically identified with the first 78 labels which entered into direct licenses with Sirius XM accounted for just 0.203% of the total terrestrial radio market share. Eisenberg WRT at 10, SX Trial Ex. 245. In the most generous analysis considered by Mr. Eisenberg, all plays from a direct-licensed-label-affiliated artist were attributed to the direct-licensed label notwithstanding the fact that the same artist had recorded for labels other than direct licensors. Eisenberg WRT at 10, SX Trial Ex. 245. Under these relaxed requirements, the

estimated market share remained exceedingly small: 0.299%. Eisenberg WRT at 10, SX Trial Ex. 245.

334. As Dr. Ordovery points out, the direct license agreements comprise a decidedly unreliable sample on which to predict likely marketplace outcomes more generally, because the number of labels that entered into direct licenses with Sirius XM is dwarfed by the number of labels that declined to grant a license to Sirius XM at the rates offered by Sirius XM. Ordovery WRT at 4 note 8, and 6, SX Trial Ex. 218. Licensing rates rejected by the overwhelming majority of record labels with whom Sirius XM negotiated and accepted by only a relatively small number of very small labels represent a poor benchmark for the recording industry at-large. Ordovery WRT at 2, SX Trial Ex. 218.

2. Individually, the Direct-Licensed Labels Range from Very Small to “Very, Very Tiny”

335. Not only do the labels that signed direct licenses represent an extremely small portion of the market viewed as a group, but each individually is very small compared to the major record labels and large independents. Quite apart from the fact that the representativeness of the direct licensors is called into substantial question by their collective small share of the market, their individual size renders them especially unrepresentative.

336. As Dr. Ordovery testified, a benchmark based on small record labels is highly problematic. Ordovery WRT at 10, SX Trial Ex. 218. A larger label with a broad catalog of popular recordings across a number of genres likely will negotiate a higher rate than a small label could negotiate. The bigger the label and the larger its catalog of popular recordings, the more important it is for Sirius XM to avoid operating at a competitive disadvantage due to the absence of that entire catalog. Ordovery WRT at 11, SX Trial Ex. 218.

337. The small size of the direct-licensed labels is not in dispute. Prior to the direct licensing initiative, no single one of the 62 labels that signed a direct deal represented more than [REDACTED] of song plays on Sirius XM. Ordoover WRT at 10, SX Trial Ex. 218. Dr. Noll agrees that many of the direct licensors are, in his words, “very, very tiny.” 6/6/12 Tr. 355:5-9 (Noll). In terms of total sales and popularity, some of the independent labels that signed direct licenses represent one one-hundredth of a percent of the market. 6/6/12 Tr. 356:3-9 (Noll).

338. Using the MRI market share analysis to rank record labels’ market share, none of the top 25 labels had been signed at the time the written direct testimony was submitted, and only two top 25 labels were signed in the period through the rebuttal trial. SX Trial Ex. 20.

339. The record in this case is replete with evidence that small indies cannot, on their own, negotiate the same level of rates that the majors can negotiate. Sirius XM recognized this fact in its negotiations by offering higher rates to labels with a larger share of plays on Sirius XM. As explained by Ronald Gertz, candidate labels were assigned to one of three royalty rate buckets - 5%, 6%, or 7% - as a function of their share of plays. 6/7/12 Tr. 842:15-19 (Gertz). In determining what rate to offer a given record label, MRI and Sirius XM chose to [REDACTED]
[REDACTED]
[REDACTED] 6/7/12 Tr. 842:7-19 (Gertz).

340. Sirius XM’s CFO, Mr. Frear, confirmed at trial that Sirius XM generally was willing to offer higher rates for bigger and more popular catalogs. 6/7/12 Tr. 711:12-712:18 (Frear).²⁸ The nature of Sirius XM’s tiered royalty structure is consistent with the presence of a

²⁸ “Q: And is it fair to say that the label with the bigger catalog of hit recordings in a popular genre would have been offered a higher rate than a label with a smaller catalog of less popular recordings? A: It—so if all of those things lined up that way, that might be a logical outcome. We’d have to go back and look at what the negotiations actually produced, but in terms of talking about what we might be prepared to do in the course of negotiations, that a

positive relationship between a label's importance (as measured by share of plays) and the label's negotiating position *vis-à-vis* Sirius XM.

341. Similarly, Mr. Gertz testified that "on the publishing side, it's very common for the major publishers to receive a higher royalty than—than smaller publishers that have a smaller catalog." 6/7/2012 Tr. 949:20-950:1 (Gertz).

342. Dr. Noll takes a contrary view. According to Dr. Noll, the direct licenses with tiny independent labels are representative of the rates that would be negotiated by major labels because "[t]here isn't a relationship between the royalty rate on average in licenses and the size of the label." 8/14/12 Tr. 3449:1-21 (Noll).

343. Dr. Noll's opinion that independent labels do not receive systematically lower rates than major labels is based on his observation that in other digital and physical product markets, indies can receive the same royalty rates as a major by choosing to be distributed by a major. 8/15/12 Tr. 3497:15-3498:2 (Noll). But that observation does not help Dr. Noll.

344. When a major label negotiates a rate, it negotiates that rate on behalf of itself and the labels it distributes.²⁹ In addition to the major labels, there are aggregators that distribute on behalf of independent labels. Those aggregators are able to negotiate royalties rates close to those obtained by the majors, because if the aggregators are not offered such rates, the

big catalog in a popular genre, that—with a quality catalog that we play a lot of, that would—on balance in the negotiations, we might be willing to go from 5 percent to 6 percent to 7 percent; whereas somebody with a really big catalog—for instance, the deposition refers to bluegrass. No offense to bluegrass, wonderful genre. We have a lot of subscribers who love bluegrass, but fewer people overall in the population listen to it. So even though it might be a really high-quality catalog, lot of plays, that maybe it's not worth us paying quite as much for that one. Q: So you were willing to go higher for a bigger and more popular catalog as opposed to a bigger, but less popular catalog? A: I would say that it's a directional influence on the negotiations, but not an absolute." 6/7/2012 Tr. 711:12-712:18 (Frear).

²⁹ About 90 percent of music distribution is handled by the four major record companies, with Universal representing about 30 percent. 6/5/12 Tr. 247:7-9 (Noll).

independent labels they serve will simply sign up to be distributed by a major and will thus obtain the higher rate. As a result of this market dynamic, Dr. Noll agrees that the testimony suggests that the rates the indies obtain can rise to the level that the major record labels have negotiated for themselves. 8/15/12 Tr. 3498:3-3499:10 (Noll). But that fact hardly proves the converse. If the majors are willing to give their distributed indie labels the benefit of the rates that the majors can negotiate, and that market dynamic effectively raises the rate levels for indies, it does not follow the large labels will be dragged down to the rates that small indies would negotiate if the small indies acted on their own. To the contrary, Dr. Noll's evidence demonstrates that it is the big labels that set the market rate, not the small ones.

345. Perhaps recognizing the difficulty of arguing that tiny record labels can negotiate the same rates that the majors negotiate, Dr. Noll attempts to defend the relevance of his benchmark by claiming that their repertoires, when viewed as a single collection, closely mimic the scope of song catalogs offered by the major record labels. 6/5/12 Tr. 261:15-262:14 (Noll); 6/6/12 Tr. 350:9-351:22 (Noll).

346. Dr. Noll's argument simply ignores reality. Ordoover WRT at 11, SX Trial Ex. 218. Even if one accepts his assertion that the collective song catalogs of the relevant independent labels resemble substantially the catalog of a major label in terms of breadth across genres and popularity (a claim we address in Section VI.B.3 below), the fact remains that Sirius XM did not negotiate the sound recording performance rights for all of these catalogs with one label in a single transaction. Rather, it negotiated with each small label independently. Ordoover WRT at 11, SX Trial Ex. 218.

347. As such, it strains credulity to suggest that a small label with a tiny market share can be considered representative of a much larger label by the simple trick of pretending that it is

part of a collective. Ordoover WRT at 11-12, SX Trial Ex. 218. Pretending that the independent labels that agreed to direct licenses acted as a collective, when in fact they did not, does not transform the rates they negotiated into rates that are representative of those that would be negotiated by the rest of the recording industry. Ordoover WRT at 11-12, SX Trial Ex. 218.

3. No Empirical Evidence Supports the Proposition That the Direct-Licensed Independent Labels Own Sound Recordings Equal in Quality and Popularity to those Owned by the Major Record Companies and Large Independents

348. Dr. Noll recognized that the less representative the direct licensors are of the larger universe of record labels, the less useful the direct licenses are as a benchmark. 6/6/12 Tr. 352:3-8, 354:13-18 (Noll). One of the ways Dr. Noll assessed representativeness was with respect to the “quality” of sound recordings, which Dr. Noll equates with the popularity of those recordings. 6/6/12 Tr. 354:19-22 (Noll). The relevance of sound recording popularity is obvious: As observed by MRI representative Ron Gertz, “SiriusXM is very hits driven, and they want to have the most successful service they can, so they’re going to use what’s popular.” 6/7/12 Tr. 836:17-22 (Gertz).

349. Even if one were to accept Dr. Noll’s invitation to think of the labels that signed direct licenses as a collective and ignore the reality that they are not, Dr. Noll fails to demonstrate that the benchmark independent labels represent current artists with mainstream consumer appeal.

350. Dr. Noll’s assessment of the quality of the sound recordings owned by the indies that signed direct licenses appears at pages 42 through 45 of his revised written direct testimony. 6/6/12 Tr. 368:10-369:2 (Noll). Dr. Noll does not offer in that testimony any quantitative analysis, 6/6/12 Tr. 371:1-12 (Noll), and although he looked at the Billboard charts, he did not attempt to go through the sound recordings owned by labels that signed direct licenses to

determine whether their sound recordings appeared on the Billboard charts. 6/6/12 Tr. 374:9-14 (Noll). As of the time he prepared his revised written direct testimony, none of the albums on the Billboard Top 200 for 2010 had been produced or distributed by any of the labels that signed direct licenses. 6/6/12 Tr. 381:17-382:18 (Noll).

351. In lieu of a disciplined quantitative analysis to support his conclusion that the catalogues of the direct-licensed labels match in the aggregate the popularity of a major label's catalogue, Dr. Noll offers a small handful of specific examples of indie-owned recordings that he deems popular. Included are: (1) a label specializing in Broadway recordings; (2) three "former hit singles"; and (3) comedian George Carlin. Ordoover WRT at 12, SX Trial Ex. 218.

352. The sound recordings of "former hit singles" that Dr. Noll cites are actually re-recordings of the original hit versions of the songs, and are not the original recordings. Ordoover WRT at 12, SX Trial Ex. 218. At trial, Dr. Noll agreed that this was so. 6/6/12 Tr. 374:15-375:16 (Noll). Nor are the specific sound recordings cited in his testimony the only instance of this: K-tel Records is another example of a direct licensor that offer re-records rather than original sound recordings. 6/6/12 Tr. 374:15-375:16 (Noll).³⁰

³⁰ Several independent labels that signed direct licenses specialize in re-records. Eisenberg WRT at 33, SX Trial Ex. 245. Generally speaking, even where an original artist re-records his or her works, the original version remains the preferred version in the marketplace. Eisenberg WRT at 33, SX Trial Ex. 245; *see* SX Ex. 343-RP (explaining in an All Music Guide review of Chubby Checker's Greatest Hits album, released on K-Tel and featuring re-records of his hit songs, that "you're wasting your time and money by picking this set. What you need are the original versions"); *see also* SX Ex. 344-RP (noting in another review that "[t]here's something kind of counterfeit about Chubby Checker's K-Tel catalog" and that "this guy's discography is like a hall full of mirrors"). The same holds true for the L.A. Guns re-records. *See* SX Ex. 345-RP (stating in a review that "some of the re-recordings find vocalist Phil Lewis straining to hit higher notes, sometimes even altering the melodies to compensate for his diminished vocal range" and concluding that consumers should "avoid this one"). For this reason, record labels that offer re-records might be willing to agree to a lower royalty rate, because their sound

353. Another example of popular recordings owned by direct licensors, according to Dr. Noll's written testimony, are comedy albums featuring George Carlin. Although one of the most popular comedians of all time, however, he can hardly be considered representative of the popular music that has broad appeal among Sirius XM's subscriber base. Ordoover WRT at 12, SX Trial Ex. 218. Moreover, while Dr. Noll claims that Carlin's albums account for four of the top 25 comedy albums of all time according to Amazon.com, in fact the ranking relied on by Dr. Noll was created in January of 2002 by an individual named J. Cristal, from Teaneck, N.J. The list does not reflect sales on Amazon. 6/6/12 Tr. 376:14-381:5 (Noll).

354. Outside of his written testimony, when Dr. Noll has provided examples of artists and labels that support his reliance on the direct licenses, he has chosen artists that appear to have nothing to do with direct licenses. For example, during his oral testimony, he referred to Lady Antebellum, again as an example of an artist that owns its own label. 6/5/12 Tr. 343:12-17 (Noll). That band, however, appears to be signed to EMI. Ordoover WRT at 13, SX Trial Ex. 218.

355. Other witnesses testifying on behalf of Sirius XM have tried to bolster the importance of the catalogues obtained via the direct licenses, with little success. Mr. Blatter, for example, testified that the music of L.A. Guns "is now directly licensed via our agreement with Cleopatra Records" and attested that this music "is a mainstay of our Hair Nation (hard rock) channel—we feature thirteen tracks by the band in rotation." Blatter WDT at 6, SXM Dir. Trial Ex. 15. [REDACTED]

[REDACTED] SX Trial Ex. 321 at SXM_CRB_DIR_00088768. Assuming

recordings will rarely be purchased unless they are cheaper than the original versions of the same works.

that Mr. Blatter is correct that thirteen tracks by the L.A. Guns are in rotation on Sirius XM, [REDACTED]

356. Similarly, Mr. Blatter testified that Cleopatra had directly licensed “Turn Up the Radio,” by the band Autograph,” and “Seventeen,” by the band Winger, and that those tracks were “regularly played on Hair Nation.” Blatter WDT at 6, SXM Dir. Trial Ex. 15. But [REDACTED]

[REDACTED] SX
Trial Ex. 321 at SXM_CRB_DIR_00088768.³¹

357. Mr. Gertz also weighed in on this topic, listing in his written direct testimony examples of purportedly directly licensed works by artists and labels that are “regularly featured on the Sirius XM service.” Gertz WDT at 12-13, SXM Dir. Trial Ex. 14. However, according to the Fourth Quarter 2011 royalty statements, [REDACTED]

[REDACTED]. For example, Mr. Gertz listed “I’m Gonna Be (500 Miles),” a work by the Proclaimers that Mr. Gertz indicated was owned by the soundtrack specialist Milan Records, as a song that “is featured on Sirius XM’s ‘90s On 9’ channel.” Gertz WDT at 13, SXM Dir. Trial Ex. 14. According to the royalty statements, however, [REDACTED]
[REDACTED]. SX Trial Ex.

³¹ At trial Mr. Blatter acknowledged that he based his testimony about directly licensed songs from “data that was provided to me by the firm that we’re working with to determine what songs are directly licensed.” 6/8/2012 Tr. 10009:11-14 (Blatter). Regarding Cleopatra Records, Mr. Blatter stated that “we were informed by our agent that those songs were directly licensed through Cleopatra,” and that his team at Sirius XM had relied on MRI’s information produce the airplay data in his testimony. 6/8/2012 Tr. 1011:1-10 (Blatter). Mr. Blatter’s team did not independently research which label owned the recordings. 6/8/2012 Tr. 1011:6-8 (Blatter).

321 at SXM_CRB_DIR_00088750. Similarly, Mr. Gertz stated indicated that “over ten” LA Guns tracks owned by Cleopatra Records were featured on Sirius XM’s “Hair Nation” channel. Gertz WDT at 13, SXM Dir. Trial Ex. 14. According to the royalty statements, however, [REDACTED] [REDACTED]. SX Trial Ex. 321 at SXM_CRB_DIR_00088768.

358. Finally, Mr. Frear chimed in, but his only basis for stating that the sound recordings that Sirius XM has licensed are of good quality was that Sirius XM chooses to play those sound recordings. 8/13/2012 Tr. 3065:19-3066:9 (Frear).

359. That so many sound recordings touted by Sirius XM apparently are re-records or are owned by labels other than those that signed direct licenses is not surprising. Eisenberg WRT at 11, SX Trial Ex. 245. As Mr. Eisenberg testified, the mere appearance of an artist on an independent label’s list of artists does not necessarily mean that the artist’s entire catalog resides with the independent label. Eisenberg WRT at 11, SX Trial Ex. 245. There are many cases in which an artist begins his or her career on an independent label before switching to a major label. Eisenberg WRT at 11, SX Trial Ex. 245. As Mr. Gertz acknowledged, “Artists can—throughout their career can be on multiple labels.” 6/7/2012 Tr. 917:18-19 (Gertz). Additionally, there are cases in which an artist signed to a major label contributes a single recording to a project released by an independent label. Eisenberg WRT at 11, SX Trial Ex. 245. Examples of artists identified by MRI (and apparently considered by Dr. Noll) as “key artists” whose catalogs are not entirely controlled by direct licensors include Spyro Gyra, Animal Collective, and the composer Stephen Sondheim. Eisenberg WRT at 11, SX Trial Ex. 245.

360. When Dr. Ordoover reviewed the Billboard 100 charts, he determined that the independent labels that signed direct licenses do not represent mainstream, popular sound

recordings to any great extent. 8/14/12 Tr. 3345:1-3346:8 (Ordovery). The collection of 62 direct licenses that underlies Dr. Noll's preferred benchmark involves record labels that are uniformly small and, for the most part, feature artists with no more than a niche or fringe following. Ordovery WRT at 10, SX Trial Ex. 218.

361. By no stretch of the imagination can the catalogues of the direct-licensed labels be compared to that of a major label such as UMG. The UMG catalog includes many of the industry's most prominent artists across today's most popular genres: Lady Gaga, Kanye West, Justin Bieber, Rihanna, Eminem, Maroon 5, Nicki Minaj, the Black Eyed Peas, Scott McCreery, Drake, Sugarland, and Martina McBride. These are the bands whose fans are fueling today's music industry. UMG's catalog also extends to some of the key artists of the last few decades, including U2, Lyle Lovett, and Guns n' Roses, and without them, many of Sirius XM's most popular channels would not exist. Given the importance of its sound recordings, UMG would not have been interested in accepting a direct license at a royalty rate lower than the statutory license. Harrison WRT at 9, PSS Trial Ex 32.

362. Whether viewed as a collectivity or as individual companies, the indies that signed direct licenses do not own sound recordings that match the popularity of the sound recordings distributed by larger labels, and the direct licenses simply are not representative of the larger sound recording industry.

C. The Licenses Were Negotiated Under the Shadow of Regulation

363. The direct licenses used by Dr. Noll to construct his benchmark were negotiated in the shadow of regulation, which lessens their utility as reasonable marketplace benchmarks. Rates negotiated in the shadow of regulation present a problem when one attempts to use them as a benchmark to derive a market rate, because in the regulated market the seller is compelled to

sell. Unlike an unregulated market, where the seller may simply decline to enter into a transaction if the price offered is deemed by the seller to be insufficient, in the regulated market the seller must sell either at a price agreed to through negotiation, or at the price set by regulation.³² Ordoover WRT at 13-14, SX Trial Ex. 218.

364. Dr. Noll acknowledged that the negotiation of direct licenses between Sirius XM and the independent labels was very directly impacted by the regulatory process. The labels had no right to simply refuse to license their content to Sirius XM; their only choice was to enter into a direct license or have the rate set through the regulatory process. 6/6/12 Tr. 334:5-20 (Noll).

365. To the extent that the direct licenses set rates for the parties to those licenses during the final year of the current rate term, the frame of reference for evaluating the royalty rate was, of course, the existing statutory rate. There was no true market negotiation – rather, the negotiating documents reflect efforts by MRI to persuade labels to accept the proposed rates

³² That is not to say that rates negotiated against a regulatory backdrop can never offer probative corroboration of benchmark rates based on unfettered marketplace outcomes. In the *Webcasting III* proceeding, Dr. Ordoover concluded that rates negotiated between SoundExchange and the National Association of Broadcasters (NAB) provided useful corroboration of benchmark rates derived from observed outcomes in digital music channels not subject to regulatory oversight, in particular interactive streaming services. The circumstances present there, however, are not present here. Ordoover WRT at 14, SX Trial Ex. 218. First, central to Dr. Ordoover's conclusion in *Webcasting III* was the fact that both SoundExchange and the NAB had substantial familiarity with the regulatory process. The NAB had participated directly and extensively in the *Webcasting II* proceedings, and therefore could reasonably predict the rates the Court would set if called upon to do so. Ordoover WRT at 14, SX Trial Ex. 218. Second, the NAB is an organization that represents major broadcasting companies, and presumably had the resources to investigate any changes in the market that might have affected the rates set by the Court in *Webcasting III*. Ordoover WRT at 14-15, SX Trial Ex. 218. Third, the NAB member companies were not required to buy sound recordings at a price negotiated with SoundExchange. That is, unlike the sellers in this market, the buyers were *not* compelled by statute to buy, and as large companies whose revenues were derived primarily from over-the-air broadcasting rather than webcasting, they had the option to simply exit the market if the rates offered by SoundExchange (or set by the Court) exceeded reasonable market rates. Under those circumstances, the rates voluntarily negotiated by the NAB companies would not likely exceed marketplace rates. Ordoover WRT at 15, SX Trial Ex. 218.

because any difference between those rates and the statutory rate was offset by other purported benefits. *See* 6/7/12 Tr. 841:18-842:6 (Gertz) (“[W]e were looking at existing statutory rates and tried to come up with a range of rates that the market would accept.”); Gertz WDT at 9, SXM Dir. Trial Ex. 14 (“We chose the top rate of 7% in part by reference to the current statutory rate (7.5% for 2011).”)

366. Dr. Ordoover and Dr. Noll are in agreement that, to the extent that the direct license terms extend into the next rate period, the independent labels that negotiated those licenses had to form some expectation of what rates this Court is going to determine in this proceeding. 8/14/12 Tr. 3277:15-3278:11 (Ordoover); 6/6/12 Tr. 335:16-21; 336:21-337:6 (Noll). “You are trying to make a prediction” about the range of rates that will result from the regulatory process. 6/6/12 Tr. 336:21-337:6 (Noll).

367. Dr. Ordoover observed that none of the independent labels with direct licenses participated in the first SDARS proceeding. Similarly, Dr. Noll acknowledged that the direct license indie labels likely had no experience with the proceedings before this Court: “the chances that any of [the direct license indie labels] have been a witness here is zero.” 6/6/12 Tr. 337:14-338:8 (Noll).³³

368. There is no evidence that the small independent labels had any solid grasp of the applicable regulatory framework. Certainly there is no evidence in the record that the independent labels with direct deals understood the methodological steps employed by the Judges in the first SDARS proceeding, in particular that the rate schedule set by the Judges incorporated a material downward adjustment – *via* application of the fourth statutory factor – to

³³ Sirius XM and its executives, in contrast, were very much a part of past proceedings in this Court. 6/6/12 Tr. 338:3-8 (Noll).)

account for the Court's view that satellite radio's forward looking viability otherwise would be threatened by a higher rate.³⁴ Ordoover WRT at 15-16, SX Trial Ex. 218.

369. It is particularly unlikely that the labels that signed direct deals would have understood the regulatory process sufficiently to have any real prospect of predicting its outcome, because generally they are quite small and presumably sufficiently resource-constrained to preclude any in-depth examination or analysis of the facts and circumstances that might lead the Court to increase the statutory rate. Moreover, their incentives to investigate thoroughly the Court's analytical history are muted by the modest dollar amount of royalties at stake for any one of them. Ordoover WRT at 16, SX Trial Ex. 218. Indeed, many of the independent labels that executed direct licenses had not previously registered with SoundExchange and had not previously received royalties for the use of their sound recordings by Sirius XM, which suggests that many of the labels that signed direct licenses had very little if any knowledge of the regulatory environment and little incentive to learn about it. Eisenberg WRT at 35, SX Trial Ex. 245.

370. The independent labels that signed direct deals, lacking an understanding of the key role the fourth factor played in the last proceeding, reasonably might have viewed the current statutory rate as a highly reliable predictor of the rates the Court will set in this proceeding, and therefore would have been willing to accept rates at roughly equivalent levels when offered directly by Sirius XM. Ordoover WRT at 15-16, SX Trial Ex. 218.

³⁴ *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, Final Rule and Order, 73 Fed. Reg. 4080, 4097-98 (Jan. 24, 2008) (concluding that "there are two circumstances faced by the SDARS that merit the adoption of a rate below the upper boundary of the zone of reasonable market rates we have identified hereinbefore" (*i.e.*, 13%).

371. In these circumstances, according to Dr. Ordovery, the fact that the direct licenses between independent labels and Sirius XM were negotiated in the shadow of regulation renders these agreements unsuitable as probative evidence of rates that would obtain in an unfettered marketplace setting. Ordovery WRT at 16, SX Trial Ex. 218.

372. Dr. Noll defends against the assertion that the independent labels that signed direct licenses were operating in an information vacuum and did not know the regulatory process by claiming that “they were getting information from their trade associations” and from SoundExchange. 6/5/12 Tr. 267:5-267:16 (Noll). But there is no evidence that the independent labels that signed direct licenses actually saw the recording industry press releases. Ordovery WRT at 16 n. 30, SX Trial Ex. 218. What is known is that representatives for Sirius XM communicated to at least some of the record labels that the statutory rate would [REDACTED] [REDACTED]. See, e.g., SX Trial Ex. 320 at SXM_CRB_DIR_00055365 (email from MRI to label representatives explaining that [REDACTED] [REDACTED] [REDACTED]).

373. Mr. Gertz attempted to talk up the ability of the independent labels to understand and predict the potential outcomes of the regulatory process by claiming that, “From the negotiations, it is clear that these independent labels are run by experienced professionals who skillfully protect the financial and reputational interests of the artists they represent.” Gertz WRT at 2, SXM Reb. Trial Ex. 8. Mr. Gertz conceded, however, that he not personally negotiate any of the direct licenses. 8/15/2012 Tr. 3752:2-6 (Gertz).

374. To support this contention, Mr. Gertz testified, “Well, people in the independent label business who own these copyrights or administer these copyrights are effectively in the licensing business, so they deal with licenses all the time. That’s how they make money. They enter into and negotiate licenses.” 8/15/2012 Tr. 3684:11-16 (Gertz). Similarly, in his written testimony Mr. Gertz testified, “The executives of [small] labels (often the founders of the label, or veterans of major labels) routinely consider license requests from all types of users (and uses)”³⁵ Gertz WDT at 14, SXM Dir. Trial Ex. 14. Mr. Gertz is simply wrong. Dr. Noll recognized that it is probably the case that small indies do not usually negotiate digital licenses, and usually distribute through an aggregator or a major label instead. 8/15/12 Tr. 3503:18-3506:7 (Noll). As a practical matter, small indies do not negotiate licenses with interactive services, for example, because of the costs of distribution. While there may be exceptions, as a general practice, it makes sense for a small independent label to let someone else handle distribution for them if they wish to be widely distributed. 8/15/12 Tr. 3504:3505:6 (Noll).

375. Yellow Dog Records provides a example: Mr. Powers testified that his label’s direct license with Sirius XM was the only time he had ever negotiated a deal with a digital music service where revenue was involved. 8/20/2012 Tr. 4140:2-5 (Powers); SX Trial Ex. 321.

³⁵ Unsurprisingly, when counsel for Sirius XM asked Mr. Gertz during his direct examination whether he would consider certain direct licensors to be “[REDACTED],” the question was confined to a handful of direct licensors, all of which negotiated the top royalty rate and three of which received substantial advances: [REDACTED]. 8/15/2012 Tr. 3691 Tr. 2-6 (Gertz); Gertz WRT at SXM Reb. Ex. 18, p.2, SXM Reb. Trial Ex. 8 ([REDACTED]); Gertz WRT at SXM Reb. Ex. 25, p.2, SXM Reb. Trial Ex. 8 ([REDACTED]); Gertz WRT at SXM Reb. Ex. 10, p.2, SXM Reb. Trial Ex. 8 ([REDACTED]). Mr. Gertz’s answer added one more label, [REDACTED], which also received the top royalty rate and a substantial advance. 8/15/2012 Tr. 3693:2-47 (Gertz); Gertz WRT at SXM Reb. Ex. 8, p.2-3, SXM Reb. Trial Ex. 8. But the fact that Mr. Gertz considers four direct-licensed labels to be “[REDACTED]” negotiators, 8/15/2012 Tr. 3691:6 (Gertz), says nothing about the remaining 91 direct licensors.

376. Mr. Gertz's second illustration of sophisticated negotiation – labels that refused to sign Exhibit A (granting rights to various additional functionalities critical to the Sirius 2.0 offering, including the valuable but uncompensated right to record tracks) – was confined to the same exclusive group of licensors who received advances. *See* Gertz WRT at 2, SXM Reb. Trial Ex. 8; Gertz WDT at SXM Dir. Ex. 7, p.8, SXM Trial Ex. 14. In contrast, Michael Powers of Yellow Dog Records testified that he understood the license pitch to mean that Sirius XM might finally be pursuing a concept he had once discussed with a Sirius XM programmer:

“implement[ing] an in-receiver ‘purchase this song’ feature” that would steer additional revenue to the rights owner. Powers WRT at 3, SX Trial Ex. 243. An examination of the sample direct license shows, however, that the recording and caching “rules” in Exhibit A do not trigger additional compensation to the rights owner. Gertz WDT at SXM Dir. Ex. 7, p.8, SXM Trial Ex. 14.

377. As Mr. Gertz himself acknowledged, “A lot of labels simply aren’t into the detail of the statutory license. And they may know that—that there’s a statutory license, but they didn’t know that—or weren’t completely familiar with the fact that certain activities aren’t covered under the statutory license, and they need to be approached directly, nor did many of them know that they had the ability to do a voluntary license around the statutory license and what their obligations were, then, back to the artist.” 6/7/12 Tr. 850:3-12 (Gertz). In response to these information gaps, MRI initiated a “dialogue on educating the labels about what their rights were.” 6/7/12 Tr. 850:13-15 (Gertz). This need for an educational campaign by MRI confirms that at least some independent labels had little knowledge about the regulatory process.

378. Mr. Frear also vouched for the sophistication of the independent labels that signed direct licenses: “I have personally interacted with the senior executives of a number of these

licensors, and can attest to the fact that they are highly-sophisticated and highly-professional business people who fully understood their options.” Frear WRT at 2-3, SXM Reb. Trial Ex. 1. But this testimony is more than mildly ironic. Mr. Frear met with [REDACTED] labels. [REDACTED]
[REDACTED]. 8/13/2012 Tr. 3074:5-8 (Frear).
Mr. Frear [REDACTED]
[REDACTED]. 8/13/2012 Tr. 3073:14-
3074:17 (Frear). Moreover, [REDACTED]
[REDACTED]
[REDACTED]. SXM Reb. Ex. 23 at 3; SX Trial Ex. 308.

379. Mr. Frear's reference to meetings with "senior executives" is telling, and suggests he met only with the larger indies. Had he met with all of the independent labels that signed direct licenses, he might have known that such direct licensors do not necessarily employ "senior executives." For example, Yellow Dog Records, which was [REDACTED], has only one full-time employee. 8/20/2012 Tr. 4135:5-14 (Powers); SX Trial Ex. 321.

380. There is evidence that other direct licensors were less than fully informed about the statutory license when they received Sirius XM's offer. After engaging in negotiations with Eardrum Records, the holding company for George Carlin's comedy recordings, for example, Andrew Moss of Sirius XM wrote to Les Watkins of MRI, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

SX Trial Ex. 302; 8/15/2012 Tr. 3717:7-14 (Gertz).

381. 101 Records provides another example. 101 Records is based outside of the United States, 8/15/2012 Tr. 3721:6-10 (Gertz), and it seemed unfamiliar with both Sirius XM and the statutory process. In an email, Mike Johnson of 101 Records wrote to MRI, asking [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] SX Trial Ex. 303 at SXM_CRB_DIR_00050632-SXM_CRB_DIR_00050634. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]. SX Trial Ex. 303 at SXM_CRB_DIR_00050626-SXM_CRB_DIR_50628. [REDACTED]
[REDACTED]
[REDACTED] SX Trial Ex. 303 at SXM_CRB_DIR_00050627. [REDACTED]
[REDACTED] SX Trial Ex. 303 at SXM_CRB_DIR_00050626.

382. Given their lack of experience with the regulatory process and inability to predict what rates might be set by this Court, a number of labels asked for most-favored-nations clauses. At trial, Mr. Gertz initially claimed he was not aware of any labels that asked for MFNs, 6/7/12 Tr. 949:10-12 (Gertz), [REDACTED].
8/15/2012 Tr. 3745:14 (Gertz). In fact, MRI received many requests for MFNs, either in reference to other labels, the statutory rate, or both. *See, e.g.*, Gertz WRT, SXM Reb. Ex. 34 ([REDACTED])

[REDACTED]
[REDACTED]); SX Trial Ex. 312 at SXM_CRB_DIR_00017249 ([REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]); SX Trial Ex. 313 at
SXM_CRB_DIR_00008441 ([REDACTED]
[REDACTED]
[REDACTED]). At trial Mr. Gertz agreed that [REDACTED]
[REDACTED]. 8/15/2012 Tr. 3747:10-3749:2 (Gertz); *see* SX Trial Ex. 315 at
SXM_CRB_DIR_00029154 ([REDACTED]
[REDACTED]). In effect, the response of MRI and Sirius XM to a request for an MFN was “no.” Gertz
WDT at 10-11, SXM Dir Trial Ex. 14.

383. Some labels that asked for MFNs eventually took direct licenses. One label gave
MRI two options: a shorter term length or a rate tied to the statutory rate. *See* SX Trial Ex. 304
at 1 ([REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]). Sirius XM and MRI preferred [REDACTED]
[REDACTED]
[REDACTED]. *See* Gertz WRT, SXM Reb. Ex. 6 at p.1, 4, SXM Reb. Trial Ex. 8; 8/15/2012 Tr.
3733:11-13 (Gertz).

384. For certain other independent labels, Sirius XM agreed to very short license terms. While most of the direct licenses are for three years, with one of those years overlapping with the current rate term, 6/7/2012 Tr. 948:1-5 (Gertz), some are for terms shorter than three years. See SX Trial Ex. 305 at 1, 4 ([REDACTED]); SX Trial Ex. 307 at 1, 4 ([REDACTED]); Gertz WRT at SXM Reb. Ex. 9, pp. 1, 4, SXM Reb. Trial Ex. 8 ([REDACTED]); Gertz WRT at SXM Reb. Ex. 8, pp. 1, 4, SXM Reb. Trial Ex. 8 ([REDACTED]). Two direct licenses do not overlap with the upcoming rate term at all. SX Trial Ex. 306 at 1, 4 ([REDACTED]); Gertz WRT at SXM Reb. Ex. 6, pp. 1, 4, SXM Reb. Trial Ex. 8 ([REDACTED]). Direct licenses that do not overlap with the upcoming rate term, or overlap by a short time, simply do not provide useful information about what the rate should be for the next five years.

385. In an email to [REDACTED], Trent Smith of MRI encouraged [REDACTED] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] Eisenberg WRT at SX Ex. 329-RR, p. SXM_CRB_DIR_00042287, SX Trial Ex. 245. Michael Powers of Yellow Dog Records likewise viewed that direct license as experimental, and signed it with a “try it and see” attitude. Powers WRT at 3, SX Trial Ex. 243. And the example of Mr. Powers sheds significant light on the direct licenses. Mr. Powers had never before negotiated a digital license. 8/20/12 Tr.

4139:3-7, 4140:2-5 (Powers). He believed that the direct license offered potential benefits, including receipt of 100 percent of the royalties versus 50 percent under the statutory license, that raised the value of the direct license above the statutory rate. Powers WRT at 3, 5-6, SX Trial Ex. 243. Unsure of whether those potential benefits would be realized, he viewed the license as an experiment with only a small downside because his total revenues from SoundExchange have averaged less than [REDACTED], and because he could revert to the statutory scheme two years into the new rate term. Powers WRT at 3, SX Trial Ex. 243. He does not believe that his reasons for signing the direct license would be shared by a major label, and he does not believe that the rate that Yellow Dog Records agreed to is an appropriate basis for setting statutory rates for the vast majority of record labels that have not signed direct licenses. Powers WRT at 2, 5, SX Trial Ex. 243.

D. The Independent Labels that Accepted A Direct License Were Offered Incentives Unrelated to the Royalty Rate

386. Although the great majority of labels that were approached with the offer of a direct license decided to decline the offer, *see* SX Trial Ex. 301, a minority accepted. The fact that some independent labels accepted the Sirius XM direct license offer is not surprising, however, because the offer included certain benefits not available through the statutory license. 8/14/12 Tr. 3267:11-3268:7 (Ordover).

387. To the extent that independent record labels accepted a royalty rate modestly lower than the current statutory rate in order to obtain other benefits that were not available through the statutory process and that more than offset the rate reduction, the direct licenses do not provide any useful evidence that the current rates are too high. Dr. Salinger, for example, conceded that if the effective rate in the direct licenses were higher than the statutory rate due to the value of other benefits conveyed by the direct license, “then I would grant you that you don’t

have – that you – that in those instances, you’re not seeing undercutting to get more plays.” 8/16/12 Tr. at 3815:5-3817:1 (Salinger).³⁶ In the same vein, Mr. Eisenberg testified that “it is my opinion that the operational and business challenges facing independent labels, taken together with the favorable royalty accounting provisions in the underlying label-artist contractual relationship, created unique incentives for various independent labels to enter into direct licenses with Sirius XM that have little or nothing to do with the headline rate that was offered in those deals.” Eisenberg WRT at 3, SX Trial Ex. 245.

388. Sirius XM’s explicit direct license strategy was to offer a rate that was very close to the statutory rate and then persuade independent labels that the additional value they received from non-statutory benefits equaled or exceeded the difference. The starting royalty rate that MRI and Sirius XM offered independent labels was either 5%, 6%, or 7%. Gertz WDT at 10, SXM Trial Ex. 14. That range was developed with explicit reference to the then-current statutory rate. *See* 6/7/12 Tr. 841:18-842:6 (Gertz) (“[W]e were looking at existing statutory rates and tried to come up with a range of rates that the market would accept.”); Gertz WDT at 9, SXM Dir. Trial Ex. 14 (“We chose the top rate of 7% in part by reference to the current statutory rate (7.5% for 2011).” Mr. Gertz worked with Les Watkins, MRI’s Senior Vice President, Business Affairs & Business Development, and “business and legal people at Sirius XM” to develop the direct license form designed to be something that the labels “would be likely to accept.” 6/7/12 Tr. 839:3-7, 838:17-840:2 (Gertz).

389. The offer that was emailed to labels in the first instance compared the offer rate to the statutory rate then in effect. *See, e.g.*, SX Trial Ex. 313 ([REDACTED])

³⁶ Dr. Salinger does not know what those benefits are, however, because Dr. Salinger has not read any of the direct licenses negotiated between Sirius XM and the independent labels, and has not reviewed any of the emails or other communications with the independent labels about those licenses. 8/16/12 Tr. at 3833:1-16 (Salinger).

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]l).

390. MRI then pointed out that Sirius XM would absorb the costs of administering the license, thereby avoiding the deduction for the royalties represented by the SoundExchange administrative fee.³⁷ In an email to [REDACTED], Jake Terrell of MRI [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] Eisenberg WRT at SX Ex.

313-RR, SX Trial Ex. 245. Similarly, Jake Terrell wrote to Mr. Edelman of Sharp Nine Records that [REDACTED]

³⁷ SoundExchange's administrative fee covers the internal costs of collections and distributions. Eisenberg WRT at 20, SX Trial Ex. 245. In 2011, SoundExchange's administrative fee was 5.3%. Eisenberg WRT at 20, SX Trial Ex. 245.

[REDACTED]
[REDACTED] SX Trial Ex. 18.

391. The cost of administering the license does not disappear in a direct licensing regime. *See* 6/7/2012 Tr. 690:12-20 (Frear) (stating that Sirius XM was paying MRI \$30,000 per month to “process and negotiate” the direct licenses and that Sirius XM had budgeted \$360,000, \$450,000, or \$500,000 or “a number in that range” for the direct licensing initiative). Frear WRT at 4, SXM Reb. Trial Ex. 1 (“Sirius XM anticipates that it will incur approximately [REDACTED] of expenses for calendar year 2012 to pursue its direct licensing program, and we plan to budget approximately [REDACTED] of expenses for calendar year 2013.”). Rather, Sirius XM takes the cost of administering the direct license on as a cost after paying out royalties. Eisenberg WRT at 21, SX Trial Ex. 245.

392. As a result, in the first round of direct licenses signed in 2011, once the SoundExchange administrative costs are netted out, the statutory rate and the direct license rate of 7 percent were “basically the same,” according to Dr. Noll. 6/6/12 Tr. 311:4-12 (Noll). For 2012, the statutory rate effectively was one-half a percent higher than the direct license rate of 7 percent. 6/6/12 Tr. 312:20-313:10 (Noll); 6/5/12 Tr. 264:11-18 (Noll).

393. Having reduced the net difference between the statutory rate and the 7 percent direct license rate to zero (for 2011) or .5 percent (for 2012), MRI negotiators then touted a number “selling points” to persuade labels to enter into a direct license, none of which related to the headline royalty rates. SX Trial Ex. 17 at SXM_CRB_DIR_00055280 (email from Trent Smith of MRI to Mr. Gertz and others, listing the “main selling points we’ve been using with labels for Sirius XM”). Instead, MRI focused its pitch on aspects of the direct license that made its effective rate comparable or superior to the statutory rate then in effect (*e.g.*, “Since Sirius

XM is obtaining label metadata from the direct licensors we expect to do a better job of matching label plays meaning fewer ‘black box’ plays (at least with respect to direct licensors’ content) than SoundExchange has,” SX Trial Ex. 17 at SXM_CRB_DIR_00055281) or aspects of the license that would be valuable to labels with contractual royalty provisions that do not precisely mirror the split mandated in the statutory license (*e.g.*, “SoundExchange pays artist shares directly to artists and withholds 5% of royalties for union fund; under direct license 100% of royalty is paid to labels,” SX Trial Ex. 17 at SXM_CRB_DIR_00055281).

394. The result of these non-statutory incentives, which we discuss in more detail below, was that Jake Terrell of MRI got it right: “[REDACTED]” Eisenberg WRT at SX Ex. 313-RR, SX Trial Ex. 245. *See also* Powers WRT at 5, SX Trial Ex. 243 (testifying that the direct license royalty rate is not an apples-to-apples comparison with the statutory rate).

1. The Direct License Results in an Significantly Higher Effective Rate Due to Retention of the Featured Artist’s Share

395. Labels receiving royalties from SoundExchange pursuant to the statutory license do not receive the entire royalty rate as set forth by the CRB. Eisenberg WRT at 14, SX Trial Ex. 245. Pursuant to 17 U.S.C. § 114 (g)(2), statutory license receipts from the SDARS service are instead apportioned as follows:

- 50% to labels
- 45% to featured performers
- 2.5% to non-featured vocalists; and
- 2.5% to non-featured musicians.

396. Given that the labels receive only 50 percent of the statutory royalty, under the statutory license the net rate paid to the label under the 7.5 percent statutory rate in 2011 was

approximately 3.75%. Deduction of the label's share of SoundExchange's administrative fee reduced that amount to an effective rate of 3.55%. Eisenberg WRT at 14, 20, SX Trial Ex. 245.

397. In contrast to the statutory license, under the terms of the direct licenses Sirius XM pays 100 percent of the royalties to the record labels. 6/6/12 Tr. 341:10-342:3 (Noll).

398. Under a direct license, the division of royalties is governed by privately negotiated contracts. 17 U.S.C. § 114(g)(1). Because of this, the effect of paying 100 percent of the royalty to the record labels under the direct license is to substantially increase – and perhaps even double – the effective royalty retained by the label. Eisenberg WRT at 14, SX Trial Ex. 245.

399. Mr. Eisenberg testified that artists' contracts with record labels generally take the form of one of three paradigms: a "royalty rate" deal, a "net receipts" deal, or a "profit-split" deal. Eisenberg WRT at 15, SX Trial Ex. 245. In a royalty rate deal, an artist is paid a specified percentage of royalties for all forms of digital distribution—typically between 12 percent to 25 percent (and predominantly 14-18 percent) of gross revenues. Eisenberg WRT at 15, SX Trial Ex. 245. If a label with a royalty rate arrangement entered into a 7 percent direct license with Sirius XM, the label would effectively receive 5.25 percent to 6.16 percent of revenues, as opposed to 3.75 percent under the statutory license in 2011. Eisenberg WRT at 15, SX Trial Ex. 245. In a net receipts deal, meanwhile, certain costs are offset against the label's gross receipts prior to the application of the "top-line" rate (generally similar to rates under the royalty rate deal). Eisenberg WRT at 15, SX Trial Ex. 245. In such a case, the label effective rate would be even higher than under the royalty rate deal described above. Eisenberg WRT at 15, SX Trial Ex. 245. Finally, in a profit-split deal, labels can deduct the costs that are deducted under a net receipts deal plus many additional categories of expenditures incurred during the course of the

artist's recording and touring activities, including independent radio promotion, independent publicity, independent marketing, advertising, tour support, website costs, creative services, general accounting and collection, attorney's fees, and fees and royalties paid to third parties (producers, mixers, music publishers and unions). Eisenberg WRT at 16, SX Trial Ex. 245.

Under profit-split arrangements, the label typically would keep 100 percent of the proceeds from a Sirius XM license until the artist's account is in a profitable position, if ever. Eisenberg WRT at 16, SX Trial Ex. 245. Only at that point would the label begin to share profits, either according to a 50-50 split or an even smaller share for the artist. Eisenberg WRT at 16, SX Trial Ex. 245.

400. Mr. Eisenberg testified that it is a well-established custom and practice in artist recording agreements under any of the above contractual arrangements for artists to stand behind multiple categories of costs, including cash advances to the artist, living expenses, production and marketing costs, and promotion expenditures. Eisenberg WRT at 17, SX Trial Ex. 245. A label may then recoup these outstanding costs against incoming royalties attributable to the artist. Eisenberg WRT at 17, SX Trial Ex. 245. *See also* Gertz WDT at 17, SXM Trial Ex. 14 (referring to "the longstanding practice reflected in the recording agreements [artists] signed with their labels, which provide for royalty advances with the understanding that those advances will be recouped from all royalty sources."). The vast majority of active recording artists on a given label are unrecouped, given the significant up-front costs entailed in fostering artist development and providing advances. Eisenberg WRT at 17, SX Trial Ex. 245. Under the statutory license, the satellite radio royalties would be paid directly to the artist even if they are not yet recouped, but under a direct license, the label could retain those royalties and recoup them against expenses. Eisenberg WRT at 17, SX Trial Ex. 245.

401. Michael Powers, President of Yellow Dog Records (which signed a direct license) provided a detailed example of how the payment structure of the direct license benefited the labels. Mr. Powers testified that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. Powers WRT at 4-5, SX Trial Ex. 243. In the Yellow Dog agreements with artists, [REDACTED]

[REDACTED]. 8/20/2012 Tr. 4181:9-19 (Powers). In Mr. Powers' agreements, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. Powers WRT at 5, SX Trial Ex. 243. Mr. Powers testified that [REDACTED]

[REDACTED].³⁸ Powers WRT at 4,

[illegible]

SX Trial Ex. 243. Consequently, Mr. Powers was attracted to the direct license payment structure because [REDACTED]

[REDACTED]. Powers WRT at 5, SX Trial Ex. 243.

402. Dr. Noll agrees that record labels frequently pay advances to their artists, and that it is common in the industry that the artist's share of any royalties that are paid to the label may be credited first against the advance in order to allow the label to recoup its advance. 6/6/12 Tr. 342:4-344:2 (Noll). As a result, where the label receives 100 percent of the royalties, it may be able to recoup its advances faster than it can under the statutory license, where it receives only 50 percent of the royalties. 6/6/12 Tr. 344:11-20 (Noll). It often happens that record labels are unable to fully recoup their advances, and the fact that a label receives 100 percent of the royalties under the direct license rather than 50 percent under the statutory license improves its chances of fully recouping its advances. 6/6/12 Tr. 344:21-345:10 (Noll) ("Q. So in a situation where the record company is getting 100 percent of the royalties, as opposed to 50 percent under the statutory scheme, its chances of fully recouping its advances are improved, right? A. That's exactly right."). *See also* 8/14/12 Tr. 3276:14-3277:9 (Ordoover) (testifying that the fact that the label received 100 percent of the royalties under the direct license, compared to 50 percent under the statutory license, speeds up the process of recouping the record label's advance).

403. Theoretically, perhaps, record labels could claw back from their artists the royalties paid by SoundExchange in order to recoup label advances or other expenses. In practice, however, Mr. Eisenberg has never seen an instance in which a label required an unrecouped artist to pay back royalties it had received directly from SoundExchange in connection with a statutory license. 8/22/2012 Tr. 4606:2-19 (Eisenberg).

[REDACTED] 8/20/2012 4184:9-14 (Powers).

404. MRI was not shy about pointing out to independent labels the advantages of receiving 100 percent of the satellite radio royalty. *See* Eisenberg WRT at SX Ex. 329-RR, p.

SXM_CRB_DIR_00042287, SX Trial Ex. 245 (email from Trent Smith of MRI to A [REDACTED]
[REDACTED], emphasizing the possibility that [REDACTED]

[REDACTED]). MRI repeatedly stressed this point to labels, as in the following email from Jake Terrell to [REDACTED]

[REDACTED] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] Eisenberg WRT at SX Ex. 313-RR, p. 1, SX Trial Ex. 245. And the labels got the message. As one label put it in an email to MRI, [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] SX Trial Ex. 317 at SXM_CRB_DIR_00079565.

405. While the effective rate to the label under the direct license is higher than the maximum 50 percent rate the label receives under the statutory license for most contractual agreements with artists, the direct license yields even more favorable rates to niche labels which obtain rights from performers on a “buyout” basis. Eisenberg WRT at 18, SX Trial Ex. 245. For example, some sound recordings are made by studio musicians being paid on a work-for-hire basis. In that situation, the artist is paid a flat fee and the record label is entitled to retain all

royalties paid to it without sharing such royalties with the artists.³⁹ 6/6/12 Tr. 345:11-346:12 (Noll).

406. One example of such a label is direct licensor ([REDACTED]) likely consists of almost entirely works made for hire. Eisenberg WRT at 19, SX Trial Ex. 245. See Eisenberg WRT at SX Ex. 317-RR, p. 2, SX Trial Ex. 245 ([REDACTED]
[REDACTED]
[REDACTED]); Eisenberg WRT at SX Ex. 318-RR, pp. 8-9, SX Trial Ex. 245 ([REDACTED]
[REDACTED]). As Dr. Ordovery testified, having paid its artists, this label is entitled to collect all of the royalties from the sale of the sound recording. 8/14/12 Tr. 3275:5-3276:13 (Ordovery). See 8/15/2012 Tr. 3729:19-3730:12 (Gertz) ([REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]).

407. The [REDACTED] franchise offers another example. *See also* Eisenberg WRT at SX Ex. 316-RR, SX Trial Ex. 245 ([REDACTED]).

³⁹ Where a label's contracts provide that its releases are works made for hire, statutory royalties that are set aside as part of the featured artist's share are either claimed by the performers or treated as unclaimed royalties. Eisenberg WRT at 18-19, SX Trial Ex. 245.

[REDACTED]). The performers on those tracks were most likely not involved in an ongoing contractual relationship with the label. Eisenberg WRT at 18, SX Trial Ex. 245.

408. In effect, the benefit of the royalty payment under the direct license for such labels is double what the same royalty rate would generate for the record label under the statutory license. Ordoover WRT at 19-21, SX Trial Ex. 218. Again, Dr. Noll agrees. “Q: But for a record company that doesn’t owe a royalty to its artists because its got – its doing works for hire, for example, a 7 percent rate from Sirius XM is really equivalent to a 14 percent statutory rate for that – for that label, right? A: That would be the case, that’s right. That’s an incentive for them to sign this, exactly.” 6/6/12 Tr. 347:7-14 (Noll).

409. Mr. Powers, the President of Yellow Dog Records (which signed a direct license) did the same math and came to the same conclusion. Comparing the statutory rate and the direct license rate, he said “[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED].”

8/20/2012 Tr. 4156:5-4157:3 (Powers).

410. That the ability to receive and retain 100 percent of the royalty and effectively double the royalty rate motivated some of the independent labels to sign direct licenses cannot be doubted. In addition to Yellow Dog Records, Marc Edelman of Sharp Nine Records, a jazz label that signed a direct license, made his views clear in an email to MRI: “Not to belabor the point, but why would SoundExchange unilaterally give half my royalties away without it knowing how my contracts read? Where would they get that idea? Is there anything in any statutes concerning this? Because, in fact, I pay my artists a flat fee and, lacking any statutory language to the contrary, they would not be entitle[d] to any of these monies. Obviously, if I can keep 100% of my royalties I would like to.” SX Trial Ex. 18 at SXM_CRB_DIR_00081231.

2. The Direct License Permits Non-Union Signatories to Retain the Non-Featured Artists’ Share, Further Increasing the Effective Rate

411. Five percent of the statutory royalty is distributed to non-featured artists: 2.5 percent to a fund administered by the musicians’ union, AFM, and 2.5 percent to the vocalists’ union, SAG/AFTRA. Eisenberg WRT at 19-20, SX Trial Ex. 245; Hair WDT at 4-5, SX Trial Ex. 73. With respect to non-statutory royalties, the unions have executed agreements with record labels to ensure that non-featured musicians and vocalists receive some royalties from the distribution of sound recordings. Eisenberg WRT at 20, SX Trial Ex. 245. But many independent labels are not signatories to the union agreements, so they do not make union payments when they receive royalties through direct licenses. Eisenberg WRT at 20, SX Trial Ex. 245. MRI used the fact that union payments were not mandated under the direct license as a “SELLING POINT.” SX Trial Ex. 17. Mr. Gertz agreed that the fact that the direct license does not make deductions for union payments was touted as a benefit for the labels. 6/7/2012 Tr. 883:17-884:19.

3. The Direct License Offered Advances and Accelerated Royalty Payments

412. Sirius XM enticed some independent labels – and in particular, the bigger ones – with significant cash advances. *See* Gertz WRT at SXM Reb. Ex. 23, pp. 3-4, SXM Reb. Trial Ex. 8 ([REDACTED]); Gertz WRT at SXM Reb. Ex. 8, pp. 3-4, SXM Reb. Trial Ex. 8 ([REDACTED]); Gertz WRT at SXM Reb. Ex. 9, pp. 3-4, SXM Reb. Trial Ex. 8 ([REDACTED]); Gertz WRT at SXM Reb. Ex. 18, p. 4, SXM Reb. Trial Ex. 8 ([REDACTED]); Gertz WRT at SXM Reb. Ex. 25, pp. 3-4, SXM Reb. Trial Ex. 8 ([REDACTED]).

413. Paying advances likely exerted a downward influence on the rates the participating labels were willing to accept, according to Dr. Ordovery. Ordovery WRT at 20-21, SX Trial Ex. 218). The payment of advances has the effect of providing an immediate flow of revenues to the label. While Dr. Ordovery has not studied the finances of the companies that received advances, the opportunity to obtain immediately the full payment of a revenue stream that might otherwise trickle in over several years could very likely be highly attractive to many record labels. Ordovery WRT at 20-21, SX Trial Ex. 218. At trial Mr. Gertz acknowledged that independent labels are often small business who can have cash flow problems, though he denied that this was the reason they would want an advance. 6/7/2012 Tr. 868:6-9 (Gertz). He did agree, however, [REDACTED] 8/15/2012 Tr. 3749:6-8 (Gertz).

414. [REDACTED] 6/7/2012 Tr. 875:12-17 (Gertz).

According to Dr. Noll, although advances provide a benefit because of the time value of money, in his view the greater motivation was that advances gave Sirius XM an incentive to play the licensor's sound recordings: "that is a mechanism for creating an incentive on the part of Sirius and XM to come through with the promise about plays." 6/6/12 Tr. 348:12-349:6 (Noll). Dr. Noll is wrong on the later point, however, because Sirius XM was careful to calculate the advance in a way that created no incentive whatsoever to increase plays above historical levels.

[REDACTED]
[REDACTED]
[REDACTED]. 8/13/2012 Tr. 3093:13-18, 3094:11-16
(Frear).

415. In the direct licenses, Sirius XM also covenants to provide accelerated distributions directly to the labels within 45 days. *See* Gertz WDT at SXM Dir. Ex. 7, p. 3, SXM Trial Ex. 14. MRI touted accelerated distributions as a "SELLING POINT." SX Trial Ex. 17 ("Royalties under direct deal are reported 45 days after the close of each quarter (SoundExchange reporting schedule is more like 100 days)"). Like the advances, accelerated distributions aid the cash flow of the direct license labels.

4. The Direct License Offered Closer Relationships with Programmers and Contractual Privity with Sirius XM

416. At trial, Mr. Gertz testified that an important benefit of the direct license was greater exposure to Sirius XM programmers and the opportunity for small independent labels to bring their sound recordings to the attention of those programmers. 8/15/2012 Tr. 3749:9-15 (Gertz) ("[REDACTED]
[REDACTED]
[REDACTED]"). *See also* 6/7/2012 Tr. 836:1-6

(Gertz) (stating that the “most important[]” benefit of the direct license was that it offered “a direct relationship with Sirius XM” that could lead to higher revenues).

417. In negotiations with independents, MRI emphasized the fact that the direct license could open up new lines of communication with programmers. *See* Eisenberg WRT at SX Ex. 329-RR, p. SXM_CRB_DIR_00042287, SX Trial Ex. 245 ([REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]).

418. This opportunity to leverage a direct licensing negotiation is illustrated by the

[REDACTED]

[REDACTED]

[REDACTED]. SX Trial Ex. 308.

419. Mr. Powers of Yellow Dog Records perceived the direct license as a way to obtain more exposure for his sound recordings through a relationship with Sirius XM programmers. Although Yellow Dog has an excellent relationship with Sirius XM’s Bluesville channel, there are several other channels where Mr. Powers believed music on the Yellow Dog Records label could be a fit but is not receiving airplay. Powers WRT at 4-5, SX Trial Ex. 243. Mr. Powers felt that a direct license status could give Yellow Dog Records some initial visibility to programmers of additional channels and allow them to develop a reputation based on the merits of the music. Powers WRT at 4, SX Trial Ex. 243.

420. As Mr. Powers explained, in this area Yellow Dog Records’ circumstances may differ from those of larger record labels. Powers WRT at 4, SX Trial Ex. 243. Yellow Dog

Records often chooses to work with emerging artists who have artistic merit but are not known by programmers. Powers WRT at 4, SX Trial Ex. 243. Yellow Dog Records' promotional budget is small in comparison to major labels and it does not have the option to create familiarity by "brute force." Powers WRT at 4, SX Trial Ex. 243. The direct license offered a business relationship, unrelated to the royalty rate, that appeared to have value to Mr. Powers.

421. The direct license also permitted licensors to audit Sirius XM directly—*i.e.*, to examine the books at records of the broadcaster to ensure the accuracy of accountings first-hand—rather than relying on the findings of an industry-wide audit conducted by SoundExchange. Gertz WDT at SXM Dir. Ex. 7, p. 4, SX Trial Ex. 14; 37 C.F.R. § 382.15. MRI touted audit rights as a "SELLING POINT." SX Trial Ex. 17 ("Direct license includes direct audit rights for labels").

5. The Independent Labels that Signed Direct Licenses Likely Were Misled About the Value of Royalties From Other Sirius XM Platforms

422. MRI made misleading statements about the direct license offer which may well have influenced independent labels to accept a lower royalty rate for the satellite radio service.

423. In the standardized initial email, [REDACTED], 8/15/2012 Tr. 3698:5-15 (Gertz), MRI accurately stated that the direct license would grant Sirius XM the rights to use licensed sound recordings on additional "platforms." "[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]" SX Trial Ex. 313 at SXM_CRB_DIR_00008443; *see also* Gertz WRT at SXM Reb. Ex. 29, p. SXM_CRB_DIR_00053557, SXM Reb. Trial Ex. 8; Gertz WRT at SXM Reb. Ex. 31, SXM Reb. Trial Ex. 8; Gertz WRT at SXM Reb. Ex. 33, p.

SXM_CRB_DIR_00051426, SXM Reb. Trial Ex. 8. But then in a paragraph of the same email, summarizing the pitch, MRI wrote, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] and on to explain, [REDACTED]

[REDACTED] SX Trial Ex. 313 at

SXM_CRB_DIR_00008443; *see also* Gertz WRT at SXM Reb. Ex. 29, p.

SXM_CRB_DIR_00053557, SXM Reb. Trial Ex. 8; Gertz WRT at SXM Reb. Ex. 31, SXM Reb. Trial Ex. 8; Gertz WRT at SXM Reb. Ex. 33, p. SXM_CRB_DIR_00051426, SXM Reb. Trial Ex. 8.

424. The emails described above appear designed to suggest that direct licenses would see an increase in the royalties they earned from business establishment services, private residence services via cable and satellite television systems, and Internet services. However, the 7 percent gross revenues offer is in fact significantly below the statutory rate for two of the three platforms “[REDACTED]”: the statutory rate is 10% for business establishment services and 15% for cable satellite. 37 C.F.R. § 384.3(a); 37 C.F.R. § 383.3(a); *see also* Harrison WRT at 11, PSS Trial Ex. 32. Far from [REDACTED]
[REDACTED], the fact that BES and CABSAT rights were rolled in to the 7 percent blanket rate was certain to lower to a label’s royalties for those platforms. Meanwhile, the effect of a rolled-in 7 percent rate on webcasting would require a great deal more information before MRI could make any statement about [REDACTED], since the statutory license for webcasting is based on a per-play metric.

425. MRI made further misleading statements in follow-up emails. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] In reality, Sirius XM is not paying its direct licensors on a “[REDACTED]” revenue base; it is simply applying a new, across-the-board rate to the several revenue bases that had formerly come under multiple statutory licenses. At trial, Mr. Gertz claimed [REDACTED]

[REDACTED]
[REDACTED] 8/15/2012 Tr. 3736:18-3740:3740:8 (Gertz). But there is no evidence that Mr. Watkins took steps to clarify his misleading statement.

426. These were not isolated incidents. In an email to [REDACTED], Mr. Watkins wrote that “[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]” SX Trial Ex. 311 at SXM_CRB_DIR_00054871. At trial, Mr.

Gertz tried to defend Mr. Watkins: “[REDACTED]

[REDACTED]
[REDACTED]”

8/15/2012 Tr. 3742:1-8 (Gertz). But by giving labels only partial information about the statutory licenses, Mr. Watkins was making it more difficult for labels to estimate the difference between the offer rate and the statutory royalties they would otherwise receive, and likely led some of

them to erroneously conclude that they were better off with a marginally lower rate for satellite radio because the difference would be more than offset by additional royalties from other platforms.

E. Sirius XM's Theory That the Direct License Rates are Explained By Demand Diversion is Unsupported by the Facts and Inapplicable to Most of the Recording Industry

427. Dr. Noll contends that the reason certain independent labels signed direct licenses at a rate lower than the current statutory rate (at least for 2012) was to obtain an increase in the number of plays on Sirius XM at the expense of record labels that charge the higher statutory rate. This so-called "demand diversion" effect is central to Dr. Noll's benchmark analysis. In a competitive market and absent regulation, according to Dr. Noll, the record labels would engage in price competition aimed at increasing each label's market share, and the product of that competition would be a decrease in royalty rates to the level represented by the direct licenses. *See* Noll WDT at 36-38, SXM Dir. Trial Ex. 1 This competition, according to Dr. Noll, explains the lower royalty rates in the direct licenses and represents what would happen in the market as a whole in the absence of a statutory rate.

428. Dr. Noll's theory about the motives of the licensors is just that – a theory. He has never spoken with any of the executives of the independent labels that signed direct licenses. 8/15/12 Tr. 3563:13-3563:20 (Noll). Dr. Noll did not participate in the negotiations with any of the independent labels that were offered direct licenses. 6/6/12 Tr. 338:16-339:2 (Noll) ("what I have seen about the negotiations, of course, is secondhand.") He has no direct knowledge of the negotiations, other than what he has read in the discovery documents. Dr. Noll concedes that he "can't speak to the motive of all of the people who actually engaged in negotiations but never reached an agreement." 6/6/12 Tr. 314:2-19 (Noll).

429. Quite apart from the absence of direct evidentiary support, Dr. Noll's demand diversion theory suffers from multiple flaws. First, if the potential for demand diversion would result in market rates lower than the current statutory rate, Dr. Noll must explain why so few record labels agreed to the lower-than-statutory rates requested by Sirius XM. As we discuss in Section VI.F below, Dr. Noll's explanation that the recording industry engaged in massive collusion because the record companies prefer a regulated rate is insupportable. Second, as we explain in Section VI.D, the indies that signed direct licenses were offered a number of valuable non-statutory benefits that explain, better than Dr. Noll's demand diversion theory, their motive to sign the direct license. Third, as we will show in the balance of this section, even if the labels that signed direct licenses did so in order to increase the number of plays and market share, their incentives in that regard are very different than the incentives of the major record labels and bigger independents. Their decisions to sign direct licenses, therefore, do not make them representative of the rest of the recording industry, and the rates to which they agreed are not the rates that would be accepted by the rest of the recording industry.

430. Dr. Ordoover testified that a record label's willingness to trade off a reduction in rate for an increase in plays depends on its starting volume of plays. 8/14/12 Tr. 3280:3-3281:3 (Ordoover). Dr. Noll agrees that for an indie that is not getting played much now, the royalty rate is the least part of its incentive in the negotiation, and getting played more is the greatest part: "no matter what the royalty rate is, it doesn't matter to you if you're not getting played." 6/6/12 Tr. 360:9-16 (Noll). As Dr. Noll put it, "If you're not getting paid very much, it doesn't matter what the rate is, that's right." 6/6/12 Tr. 364:7-12 (Noll).

431. Conversely, according to Dr. Noll, it is the larger independent record companies and the majors that care about the rate: "The people that really care about the rate are the ones

who are played a lot, and that's mainly the majors. They're the ones who care most about the rate." 6/6/12 Tr. 364:7-12 (Noll).

432. The reason that small record companies care more about increasing the number of plays and big record companies care more about the rate was explained by Dr. Ordovery. A small indie whose sound recordings are rarely played might reasonably think that it could double, triple or quadruple its plays on Sirius XM, given that even this magnitude of increased plays would require only a minor change in Sirius XM's overall playlists. Such an increase in plays might warrant accepting a lower rate, given a reasonable expectation that total royalty revenue will increase. But a major label such as UMG reasonably would not expect significant increase in plays, as it would require Sirius XM programmers to deviate substantially from existing playlists that presumably were configured so as to maximize the appeal of the Sirius XM service. Without the possibility of sufficiently large increases in plays, the major label will be disinclined to offer a reduction in the royalty rate that might be profitable to a miniscule label. Ordovery WRT at 18-19, SX Trial Ex. 218.

433. Here again, Dr. Noll agrees. He testified that for an indie that currently has a very low number of plays on Sirius XM, one of the incentives operating on it is that it has a more realistic prospect of doubling, tripling, quadrupling, or increasing by ten-fold the number of plays. 6/6/12 Tr. 362:22-363:7 (Noll).

434. The testimony of industry witnesses is consistent with the opinions of the experts. Mr. Harrison of UMG testified that if a label is being paid little prior to signing a direct license, and a slight change in emphasis by programmers at Sirius XM could double or even triple the label's plays, it might be worth it to enter into a direct license at a lower rate because the aggregate payments to the label would be higher. In contrast, there is almost no way that Sirius

XM could double—and certainly no way it could triple—its use of UMG content. Harrison WRT at 9-10, PSS Trial Ex 32.

435. During his testimony during the rebuttal trial, Dr. Ordoover offered an example that illustrated the magnitude of the difference between small indies and majors. Dr. Ordoover calculated that if Sony Music were to accept a rate reduction from 8 percent of revenue to 7 percent of revenue, it would need to increase the number of plays on Sirius XM by 14.3 percent in order to offset the rate reduction. For Sony, given its existing level of plays on Sirius XM, that would require an additional [REDACTED] plays per year. For Yellow Dog Records, in contrast, the same rate reduction from 8 percent to 7 percent could be offset by an increase of only [REDACTED] plays per year. 8/14/12 Tr. 3287:3-3289:11 (Ordoover).

436. Dr. Ordoover believes that Sirius XM's programmers have already created the playlists they believe will maximize profits for Sirius XM. If playing substantially more Sony sound recordings would increase their profits, they would have already done so.⁴⁰ 8/14/12 Tr. 3355:7-3356:17, 3289:16-3291:7 (Ordoover). And biasing Sirius XM's playlist in a way not considered optimal by Sirius XM programmers risks losing some number of subscribers. Because Sirius XM makes a very substantial profit on its marginal subscribers, Dr. Ordoover believes it very unlikely that Sirius XM would make a change in its playlists of the magnitude necessary to render profitable even a small rate reduction by a major record company. 8/14/12 Tr. 3291:8-3292:21 (Ordoover).

⁴⁰ Indeed, while cross-examining Darius Van Arman, counsel for Sirius XM challenged Mr. Van Arman about his concern that programming choices would be based on price rather than quality: "Are you aware that your concern in this regard is directly contrary to sworn testimony in this case, that Sirius XM will continue to select music based upon what it views as the best quality music channels and what it believes its subscribers wants [sic] to hear?" 6/15/12 Tr. 2567:1-10 (Van Arman).

437. The testimony of Sirius XM witnesses supports Dr. Ordovery's opinion. Sirius XM witness Steven Blatter testified that when Sirius XM creates its playlists, the "merits of the artist and song" trump price. 6/8/12 Tr. 981:14-982:12 (Blatter). Similarly, Mr. Frear testified, "We have programmers, as I testified, that go through a really large available title library to put music on the channels. They put music on the channels they think the subscribers are going to enjoy." 8/13/2012 Tr. 3065:13-16 (Frear). As a result, there is no reason for major record companies to believe that a rate reduction would result in the kind of significant shift in Sirius XM's playlist necessary to make such a reduction profitable.

438. While Dr. Noll concedes that small independent record labels have different incentives and places less weight on the royalty rate compared to large independents and the majors, he makes no attempt whatsoever to address this issue in his analysis. Plainly, however, his reliance on direct licenses with small independent labels is substantially undermined by his own admission that small record companies that heretofore have not been played much do not care about the rate, while the larger record companies "really care about the rate." 6/6/12 Tr. 364:9-11 (Noll). Given those concessions, it makes little sense to use the rate negotiated by a very small indie as the benchmark for much larger record companies. Ordovery WRT at 20, SX Trial Ex. 218.

F. Sirius XM's Attempts to Explain Why the Great Majority of Record Labels Rejected the Direct License Do Not Withstand Scrutiny

1. Dr. Noll's Theory That the Record Companies Prefer a Regulated Rate Because the Regulatory Process is Biased in their Favor is Wrong

439. As already noted, the number of labels that signed a direct license with Sirius XM is dwarfed by the number that MRI approached – [REDACTED] independent labels – in connection with the direct licensing initiative. SX Trial Ex. 301 at 53. As a result, in Dr. Ordovery's view, the

direct licenses represent a highly unrepresentative sample and provide a poor benchmark.

Ordoover WRT at 22, SX Trial Ex. 218.

440. Recognizing the problem, Dr. Noll attempts to explain why the direct license rates should apply to all record labels, including hundreds that specifically rejected these very same rates. Dr. Noll opines that most or all of the record labels would have agreed to the direct license rates, but competition for market share among the labels was thwarted because SoundExchange allegedly served as a vehicle through which record labels collusively agreed to refrain from signing direct licenses with Sirius XM and instead pursue the determination of a rate through this Court. 6/6/12 Tr. 314:20-315:6 (Noll) (“I believe that there were a lot of labels that believe they’d be better off acting collectively and, in particular, certainly the majors believed that.”); *see also* 6/6/12 Tr. 317:21-318:4. That uniform rate, according to Dr. Noll, is preferred by record labels, for two reasons. First, a uniform rate supposedly eliminates competition among record labels for greater airplay, *i.e.*, demand diversion, that otherwise would occur and thereby drive down licensing rates for sound recording performance rights. Noll WDT at 41-42, SXM Dir. Trial Ex. 1. And second, the record companies prefer a regulated rate because the process by which the CRB determines a rate is purportedly stacked in favor of SoundExchange, for reasons principally concerning the timing of production that creates information asymmetries that favor SoundExchange in the rate-setting process. 6/6/12 Tr. 320:16-322:7 (Noll); Ordoover WRT at 6-7, SX Trial Ex. 218. In short, Dr. Noll believes that many of the record companies thought they could get a better rate from this Court than they could be negotiating with Sirius XM. 6/6/12 Tr. 317:21-318:4 (Noll).

441. There are at least four reasons why Dr. Noll is wrong.

442. First, as Dr. Ordoover points out, Dr. Noll's effort to blame the regulatory process and recording industry collusion for the unenthusiastic response to the direct license initiative ignores the "simplest explanation" and the "obvious answer" for why only a small fraction of independent labels accepted the direct license offer – the "deal was not a good deal." 8/14/12 Tr. 3295:7-14 (Ordoover). In fact, the negotiating documents confirm that many labels rejected the direct license because of the low royalty rates that Sirius XM was offering. See, e.g., SX Trial Ex. 202 at 2 ([REDACTED]); SX Trial Ex. 201 at [REDACTED]; SX Trial Ex. 201 at [REDACTED]; SX Trial Ex. 201 at [REDACTED]; SX Trial Ex. 201 at [REDACTED].

443. *Second*, to the extent the Court sets the statutory rate using as its benchmark the rates from a workably competitive and unregulated market, the benchmark market rates should reflect any effects of demand diversion in the services operating in that market, and therefore the statutory rate derived from that benchmark market likewise should capture the effects of demand diversion. In other words, a statutory rate that is set based on an appropriate benchmark, properly adjusted to account for any relevant differences between the benchmark and target markets, will reflect all market influences including demand diversion. Previously, the Court has used the market for subscription interactive music streaming services as its benchmark. Although interactive services allow consumers to request particular sound recordings on demand, so that the royalty rate being charged by the record label will not influence the listening choice of

the consumer, it is also true that such services often recommend music to their subscribers and “push” a playlist when the subscriber is not actively selecting the music to be streamed.

Consequently, it is reasonable to expect that the royalty rates negotiated by record labels with subscription interactive services take into account demand diversion effects, and if that is so there is no reason why the recording industry would refuse direct licenses and favor regulation. Ordover WRT at 7, SX Trial Ex. 218.

444. *Third*, if it were the case that the statutory rate set by this Court did not reflect the effects of demand diversion, one might expect a substantial number of record labels to undersell the statutory rate in an effort to gain a greater proportion of airplay on Sirius XM. The mere existence of a uniform statutory rate does not prevent price competition among record labels if the statutory rate is set at an above-market price. Ordover WRT at 7, SX Trial Ex. 218. Thus, if the statutory rate had been set too high to begin with, as Dr. Noll seems to contend, the demand diversion effect – if it really existed – should have resulted in wide-spread undercutting of the statutory rate throughout the rate term. That did not happen. 8/14/12 Tr. 3303:6-3304:5 (Ordover).

445. *Fourth* and finally, Dr. Noll’s key assertion – that record companies prefer the regulatory process to a competitive market because the regulatory process is biased in their favor – is entirely unfounded. Ordover WRT at 22, SX Trial Ex. 218.

446. The only action the record labels can take, acting through SoundExchange, is to come to this Court and ask it to set a rate. 6/6/12 Tr. 315:8-11 (Noll). According to Dr. Noll, that regulatory processes “bias the outcome of the process in favor of SoundExchange” and there is a “deck stacking feature here”, with the result that the process “lacks a certain legitimacy.” 6/6/12 Tr. 319:21-320:1, 321:11-21, 323:8-15, 324:17-20 (Noll).

447. Dr. Noll asserts that the deck is stacked against Sirius XM because the copyright owners have an informational advantage. 6/6/12 Tr. 325:4-7 (Noll). Part of that advantage, according to Dr. Noll, stems from the fact that “the labels and SoundExchange have more information about what’s going on in the digital delivery marketplace.” 6/6/12 Tr. 319:15-20 (Noll). Because written direct testimony is submitted prior to the production of documents and other relevant information via discovery, according to Dr. Noll, the procedures favor the party with greater pre-discovery information. Ordover WRT at 8, SX Trial Ex. 218.

448. Dr. Ordover points out, however, that while SoundExchange may know more about the record label business than does Sirius XM, on the other hand, Sirius XM’s business and competitive environment are very relevant to this case, and on those issues Sirius XM has the informational advantage. 8/14/12 Tr. 3301:5-3302:9 (Ordover); Ordover WRT at 8, SX Trial Ex. 218. As a case in point, when Dr. Ordover prepared his written direct testimony, he did not have access to any information pertaining to the centerpiece of Dr. Noll’s analysis – Sirius XM’s direct licenses with independent record labels. Ordover WRT at 8-9, SX Trial Ex. 218.

449. In any event, even if some informational advantage existed, that advantage would be remedied through the discovery process in these proceedings. 8/14/12 Tr. 3302:10-14 (Ordover). Dr. Noll concedes, as he must, that both sides are entitled to take discovery, 6/6/12 Tr. 327:5-9 (Noll), that he asked Sirius XM’s counsel to request in discovery the digital agreements entered into by the major record labels, 6/6/12 Tr. 327:15-22, 328:9-13 (Noll), and that he received over 2,000 such agreements through the discovery process. 6/6/12 Tr. 329:1-7, 330:9-11 (Noll). Dr. Noll filed amended written testimony after he obtained that discovery, and “most of the discussion in my testimony about deals is based on discovery.” 6/6/12 Tr. 330:12-18 (Noll).

450. In addition to the ability of witnesses to use discovery for the purpose of preparing amended written direct testimony, information obtained through the discovery process may be incorporated in rebuttal reports and brought to the attention of the Judges in that fashion. Consequently, if there is any information imbalance (a fact SoundExchange certainly does not concede), it is quite temporary and certainly should not interfere with the ability of the Judges to set appropriate rates based on the application of the statutory standard. Ordover WRT at 8-9, SX Trial Ex. 218.

451. Dr. Noll also claims that SoundExchange has an informational advantage in these proceedings because it is able to designate certain digital agreements as non-precedential under the Webcaster Settlement Act. Dr. Noll maintains that the procedures in this court “load[] the deck in favor of SoundExchange” because it can decide that certain agreements are non-precedential. 6/5/12 Tr. 286:2-16, 6/6/12 Tr. 331:10-332:5 (Noll).

452. There is a certain irony to that argument, because when Sirius XM entered into an agreement with SoundExchange to establish the rates for the Sirius XM webcasting service, Sirius XM requested and received SoundExchange’s agreement that those webcasting rates could not be used as precedent in this proceeding (although they could be used as precedent in the webcasting proceeding). Ordover WRT at 9 n.16, SX Trial Ex. 218. Moreover, the only non-precedential deal of any real relevance is that which set the rates for Pandora and certain other webcasting services. Public sources reveal that Pandora pays approximately 50% of its revenues in sound recording royalties, however, and this non-precedential agreement would not have supported Dr. Noll’s benchmark analysis. Ordover WRT at 9 n.16, SX Trial Ex. 218.

453. Quite apart from the procedures that govern rate-setting, Dr. Noll asserts that the copyright owners also have a “political” advantage in this Court. 6/6/12 Tr. 325:4-7 (Noll).

454. It is simply not correct, however, that as a general principle regulated entities benefit from an inherent bias in their favor. Railroads, for example, were heavily regulated until a series of legislative enactments largely deregulated the industry in the late 1970s and early 1980s. Railroads have experienced far greater economic success in the deregulated market economy than they did under the prior regulatory scheme. Ordoover WRT at 9-10, SX Trial Ex. 218.

455. Indeed, when Dr. Noll alluded to these “political” concerns in his trial testimony during the rebuttal phase, his explanation for why regulation generally favors the regulated entities simply does not fit the facts of this matter. According to Dr. Noll, “all that I have known from 40 plus years of doing research is that regulation on average sets prices above the competitive level for reasons having to do with administrative law, you’re not allowed to put people out of business” 8/14/12 Tr. 3460:14-3461:4 (Noll). In this case, however, it is Sirius XM that asserts that the proposed rates jeopardize its business. And as Dr. Ordoover points out, it is Sirius XM that benefits from the fourth factor, which addresses whether the rate might materially disrupt the ongoing viability of Sirius XM’s business operations. Should the Court determine that application of this factor is warranted, it cannot elevate the statutory rate to above-competitive levels but rather can only lower it. Ordoover WRT at 8, SX Trial Ex. 218. Both Dr. Noll’s theory of regulatory capture and the statutory factors that govern this case, therefore, are more likely to favor Sirius XM than the record companies, and the supposed “political” nature of the regulatory process provides no reason why the record companies would prefer regulation.

456. As Dr. Ordoover puts it, there is no evidence that this Court “is in any way captured by any one of the interests so there is nothing other than pure economic theory which is in some part slightly dubious.” 8/14/12 Tr. 3296:17-3297:13 (Ordoover). Dr. Noll’s attempt to

demonstrate that the vast majority of record companies rejected the direct license rates because of a preference for regulated rates finds no support in logic, this Court's regulations, or the record.

2. Sirius XM Offers No Persuasive Evidence of Interference in the Licensing Process by SoundExchange or Industry Organizations

457. Sirius XM attempts to bolster its claim that the recording industry preferred a regulated rate by portraying the major record labels, SoundExchange, and other industry organizations as conspirators who collectively browbeat the indie label community into refusing the direct license offers. Nothing could be farther from the truth.

458. To begin, Sirius XM's attempt to portray the major record labels as unabashedly hostile to the direct license initiative is simply wrong. Although Mr. Frear contends that the major record companies refused to engage in negotiations, Frear WDT at 24, SXM Dir. Trial Ex. 12, the reality is that Sirius XM never really tried to initiate negotiations. For example, Sirius XM never offered a direct license to UMG with any specificity. Rather, there was a single conversation between David Frear and UMG's General Counsel in which Mr. Frear broached the general topic of the possibility of a direct license. UMG responded that it was open to hearing about it, but Sirius XM never got back to UMG with any specific proposal. 8/21/12 Tr. 4376:12-4377:1 (Harrison).

459. The same was true for the other major record companies. Unlike the way it dealt with independent labels, Sirius XM approached each of the four major labels about direct licensing without offering any particular royalty rate. 6/7/2012 Tr. 714:5-10 (Frear). Both EMI and [REDACTED] engaged in negotiations with Sirius XM over a direct license and Sirius XM even provided them with draft licenses, but those draft licenses did not contain proposed rates. 6/7/2012 Tr. 715:6-716:17; 8/13/2012 Tr. 3075:16-3077:22 (Frear).

460. Presumably, Sirius XM made no real effort to negotiate with the major record companies because it knew that it had structured the direct licenses in a way that made no sense for large record companies. Mr. Gertz testified that the direct licenses were intended to cover the rights for all of Sirius XM's platforms—satellite, Internet webcasting, BES, and residential (television) music services. Gertz WDT at 6, SXM Dir. Trial Ex. 14. Moreover, “[a]lthough the royalty pool is calculated at 5-7% of *all* Sirius XM revenue from all covered services (satellite, Internet, BES, residential television music channels), the label's share of that pool is calculated on its share of Sirius XM satellite radio transmissions. In other words, the satellite radio performances serve as a proxy for distributing royalties associated with all Sirius XM services.” Gertz WDT at 11, SXM Dir. Trial Ex. 14.

461. Such a license is was unacceptable to large record companies, even without knowing what rate Sirius XM wanted to propose. The method of compensation in the direct license would mean that, among other changes, performances on Sirius XM's Internet channels would be irrelevant to the royalty calculation. Under the direct licenses, Internet channels would be paid not on the number of webcasting “performances” (*i.e.*, the number of broadcasts of a sound recording times the number of individuals who listened to each broadcast) as the statutory webcasting license requires, but on a form of proxy compensation based on the ratio of the label's content to all content programmed across the entire satellite service (including niche programs with low listenership). Given the popularity of the music owned by the major labels, a major label would only be willing to enter into an agreement in which the basis of payment bears a stronger relationship to the relative popularity of channels. Harrison WRT at 10, PSS Trial Ex 32. In addition, if a label's track were played on an Internet-only channel, that performance would receive no compensation whatsoever. Sirius XM has 31 online-only music channels, and

it is likely that those channels feature major label content. Harrison WRT at 10, PSS Trial Ex 32.

462. Finally, the direct licenses would pay for business establishment services (BES) and cable satellite services (CABSAT) on the same 7% revenue rate that is applied to the SDARS service. The statutory rate is 10% of gross revenues for BES, 37 C.F.R. § 384.3(a), and 15% of gross revenues for CABSAT. 37 C.F.R. § 383.3(a). Accepting a lower rate for those services would make no sense for the majors and other larger labels. Harrison WRT at 11, PSS Trial Ex 32. In fact, it would not make sense for smaller labels either. It is likely that most small independent labels that took the direct license were not aware of the current statutory rates for the BES and CABSAT services. Harrison WRT at 11, PSS Trial Ex 32.

463. The major record companies, therefore, had good reason not to beat down Sirius XM's door in pursuit of a direct license. Sirius XM never even offered a rate, and the terms that it suggested were not attractive to the major record companies. The lack of direct license negotiations with the majors is not evidence of major label collusion in pursuit of an above-market regulated rate; it is evidence that Sirius XM made an unattractive offer and knew better than to think serious negotiations would ensue.

464. As to documentary or testimonial evidence showing the claimed obstructionism of the major labels and industry organizations, there is precious little. In his direct testimony, for example, Mr. Gertz claimed that "evidence from the 'front line' suggests that the interference from SoundExchange is, unfortunately, working: my staff has heard over and over again from the labels we have approached on Sirius XM's behalf that labels interested in doing the deal were under tremendous pressure from the industry groups not to sign. . . ." Gertz WDT at 14-15, SXM Dir. Trial Ex. 14. But the evidence Mr. Gertz offered to support this claim was simply an

email from a label stating, “After reading about the positions of AAIM and NARAS on this issue, we’ve decided to stay with Sound Exchange for now. Feel free to send along new information as it becomes available.” Gertz WDT at 15, SXM Dir. Trial Ex. 14. Mr. Gertz appears to equate the mere fact that trade associations issued public statements with the exertion of “tremendous pressure.”

465. Many of the emails Mr. Gertz collected simply do not support his assertion that industry groups were pressuring labels. For example, Mr. Gertz cites an email in which a label states that it “will look at the license, but will also confer with A2IM and other indies.” Gertz WRT at SXM Reb. Ex. 34, SXM Trial Ex. 14. This communication addresses only actions that the label planned to take, not actions taken by A2IM. Moreover, the label went on to write, “Regardless, I would need to add an aggressive MFN and language that contemplates any Statutory changes during the term. This may defeat XM’s intent. What kind of leeway is XM willing to give?” Gertz WRT at SXM Reb. Ex. 34, p. SXM_CRB_DIR_00066195, SXM Trial Ex. 14. MRI’s status report indicates that [REDACTED]

[REDACTED]

See SX Trial Ex. 301 at 17 [REDACTED].

466. In another email Mr. Getz offered as evidence of interference, a label responded to MRI’s offer by stating, “[REDACTED].” Gertz WRT at SXM Reb. Ex. 29, p. 5, SXM Reb. Trial Ex. 8. But as Mr. Gertz had noted in prior communications with the associate general counsel for Sirius XM, [REDACTED]

[REDACTED] SX Trial Ex. 21 at 3. The fact that an indie is

distributed by UMG does not mean it was pressured, but rather means that it does not control the relevant rights.

467. Mr. Gertz offered only one piece of evidence in which a SoundExchange board member or employee purportedly put pressure on a label not to sign the direct license offer. Mr. Gertz's evidence consisted of an email in which [REDACTED]

[REDACTED]. 8/15/2012 Tr. 3753:17-3754:3 (Gertz). As Judge Roberts observed, "[REDACTED] 8/15/2012 Tr. 3753:21-22 (Gertz).

468. Mr. Gertz testified that [REDACTED] 8/15/2012 Tr. 3756 Tr. 12-18 (Gertz) ("[REDACTED] [REDACTED]"). [REDACTED] 8/15/2012 Tr. 3752:7-10 (Gertz). Mr. Gertz also testified that [REDACTED] 8/15/2012 Tr. 3703:16-18 (Gertz).

469. Mr. Frear's testimony was similarly unpersuasive. Mr. Frear stated that "Many independent labels were effectively foreclosed as direct-license candidates given either their distribution ties to the majors, or their close association to SoundExchange, including Concord Music Group (the former employer of Jonathan Bender, SoundExchange's COO) and Beggars Group (home of Simon Wheeler, who testified on behalf of SoundExchange in Webcasting II)." Frear WRT at 3-4, SXM Reb. Trial Ex. 1. Yet, as Mr. Frear acknowledged on cross-examination, Sirius XM has in fact engaged in extensive negotiations with [REDACTED]

[REDACTED]. 8/13/2012 Tr.
3078:12-15 (Frear).

470. Mr. Frear alleged that Welk Music Group told him that it could not direct license because of its distribution agreement with a major label. 8/13/2012 Tr. 3021:22-3022:17 (Frear).

But in an email from Les Watkins to [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] SX Trial Ex.
201 at SXM_CRB_REB_00019620-SXM_CRB_REB_00019621. [REDACTED]
[REDACTED]

471. Dr. Noll, for his part, asserts that public statements by SoundExchange, A2IM and several other industry organizations attempted to stifle the direct license initiative through “the persistent reference to the fact that solidarity, coordination, not undermining the position of SoundExchange in this proceeding, don’t do this because it will be used against us, that is beyond the kind of information that would tell them what’s going on in this proceeding or what the factual underpinning of the proceeding is.”⁴¹ 8/14/12 Tr. 3448:9-16 (Noll).

⁴¹ In his rebuttal testimony, Dr. Noll also discusses certain SoundExchange emails discussing the public statements. Noll WRT at 29-32, SXM Reb. Trial Ex. 6. But what those emails show is that SoundExchange was careful to communicate with indie labels only through the public statements and did not initiate any private communications to influence indie label decisions. *See, e.g.*, SXM Reb. Ex. 041 (email responding to inquiries from Relapse Records by directing them to the SoundExchange and A2IM public statements).

472. Dr. Noll admits that if a trade association publicly stated that it thought the outcome of this proceeding would be a rate considerably higher than the existing statutory rate, Dr. Noll would not have a problem with the fact that the association made such a statement. 6/6/12 Tr. 340:17-341:2 (Noll). For its part, MRI assured indies (when the question arose) that royalty rates would increase modestly if at all in the upcoming rate period. Ordover WRT at 16 n. 30, SX Trial Ex. 218; SX Trial Ex. 320 at SXM_CRB_DIR_00055365 (an MRI email to label representatives explaining that [REDACTED] [REDACTED] [REDACTED]).⁴² And SoundExchange, in its first public statement, explained the existing rate structure and advised that SoundExchange “is planning to seek a substantial increase in the statutory rate. In other words, we plan to seek rates well in excess of the 2012 rate of 8%.” In its second public statement, SoundExchange stated that it “believes the current rates for satellite radio are below-market” and that SoundExchange “will seek a substantial increase.” Noll WDT at 50-51, SXM Dir. Trial Ex. 1. Both sides, therefore, offered their views on the rates for the upcoming rate period, and Dr. Noll apparently does not find this objectionable.

⁴² See also SX Trial Ex. 311 (T

473. What Dr. Noll appears to object to is any suggestion in the industry public statements that there is a link between the direct licenses and the rate-setting proceeding in this Court. *See* Noll WDT at 50, SXM Dir. Trial Ex. 1. Certainly, Sirius XM (acting through MRI) was far from forthcoming with the indies about its intent to use the direct licenses as a benchmark in these proceedings. Mike Powers, President of Yellow Dog Records (which signed a direct license), testified that he was very surprised to learn that Sirius XM considered its direct licenses with independent labels as indicative of the rate that should be the basis of a statutory royalty rate for other content owners. Powers WRT at 2, SX Trial Ex. 243. During the course of negotiations with Sirius XM's representative MRI, and at the time he signed the direct license, Mr. Powers was unaware that Sirius XM intended to use the direct license agreement as evidence in this rate-setting proceeding. Mr. Powers was surprised to learn that Sirius XM had submitted his direct license's royalty rate without his knowledge. Powers WRT at 2, SX Trial Ex. 243.

474. The fact that Sirius XM intended to use the direct licenses as a benchmark, and intended to argue that all record companies should pay the direct license rate, was surely a critical fact that the indies would have wanted to know if increased plays was their motive to sign. As Mr. Gertz acknowledged, if 100 percent of the owners of sound recordings accepted the direct licenses, MRI could not offer to play all their recordings more. 6/7/2012 Tr. 865:18-22 (Gertz). By the same token, if all record companies paid the same rate because the statutory rate was lowered to the level of the direct license rate, the promised economic incentive to increase the plays of the direct-licensed labels would have disappeared. In short, Sirius XM was telling independent labels that it had an economic incentive to play their sound recordings more because the indies were agreeing to accept a rate lower than the statutory rate, but it was not telling them that it intended to eliminate that incentive by using the direct licenses as a benchmark. It is

understandable that Sirius XM and MRI did not want the independent labels to know that the direct licenses would be used in this case as a benchmark to set the rates for everyone, but why this information must be concealed from them is something Dr. Noll does not explain.

475. Dr. Ordoover reviewed the evidence of supposed industry coordination cited by Dr. Noll. He found that “none of [it] to me, as an economist who spends a lot of time thinking about collusion and such, is indicative of industry coordination.” 8/14/12 Tr. 3304:6-14 (Ordoover). Dr. Ordoover’s conclusion is correct, and Sirius XM’s effort to explain away the fact that most record labels rejected its proposed royalty rate fails.

VII. SIRIUS XM’S SERVICE IS SUBSTITUTIONAL AND ITS ONLY EVIDENCE OF PROMOTION IS MERELY ANECDOTAL

476. As in the *SDARS I* decision, the evidence presented in this proceeding is insufficient to suggest a net substitution/promotion effect for either the Sirius XM service or the interactive services benchmark. *See SDARS I*, 73 Fed. Reg. at 4094.

477. Dr. Noll has not conducted any research of his own into the question of whether Sirius XM promotes the sales of sound recordings or substitutes for such sales, and instead has relied on the testimony of others. 6/5/12 Tr. 226:19-227:6 (Noll). However, Dr. Noll concludes that “[t]here is no reliable economics research in published journals on this issue.” 6/5/12 Tr. 227:7-8 (Noll). And, in any event, it is not possible to quantify any effect because of the absence of any research. 6/5/12 Tr. 230:17-231:8 (Noll).

478. Contrary to Dr. Noll’s conclusion, however, the publications in the record suggest that satellite radio is not, on balance, promotional. A 2004 historical analysis in the *Review of Economic Research on Copyright Issues* indicated that “contrary to common beliefs, radio broadcast does not enhance the market for sound recordings.” Ford WRT at SX Ex. 352-RP, p. 118, SX Trial Ex. 244. A 2007 study found statistical evidence that radio play has a negative

relation to record sales and that the size of the impact is large. Ford WRT at SX Ex. 353-RP, p. 32, SX Trial Ex. 244. A separate 2007 study found that satellite radio in particular substitutes for CD sales and downloads. Ford WRT at SX Ex. 354, p. 9, SX Trial Ex. 244.

479. A study completed for Sirius XM found that people who would consider subscribing to XM or Sirius were [REDACTED] [REDACTED] compared to current subscribers. The study's authors concluded that the reason individuals who are considering subscribing to Sirius XM [REDACTED] [REDACTED] than people who already subscribe "[REDACTED] [REDACTED]." Simonson WRT at 10 n.12, SX Trial Ex. 65, *citing* Simonson WRT at SX Ex. 204-RR, p.SXM_CRB_DIR_00042861, p. 00042874.

480. An April 2011 internal survey by Sirius XM showed that [REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

SX Trial Ex. 8 at 23. The study concluded, [REDACTED]
[REDACTED] SX Trial Ex. 8 at 20.

481. Mr. Blatter claims that “the simple and universally recognized fact is that airplay on radio has continually proven to be the biggest driver of record sales.” Blatter WDT at 18-19, SXM Dir. Trial Ex. 15. But his support for this proposition comes from two dated and potentially biased studies about terrestrial radio. *See* Blatter WDT at SXM Dir. Ex. 37, p.1, 4-6, SXM Trial Ex. 15 (study about terrestrial radio during the period 2004 to 2006, commissioned by the National Association of Broadcasters and evaluating, in part, a proposed performance fee for terrestrial radio); 6/8/2012 Tr. 1019:21-22 (Blatter) (Mr. Blatter stating that “The study [in SXM Dir. Ex. 37] was commissioned by the NAB”); Blatter WDT at SXM Dir. Ex. 38, p.1, 7, SXM Trial Ex. 15 (survey research from 2001 by Edison Research, a firm that “works with many of the largest Radio Ownership Groups” and “conducts research for successful radio stations in South America, Canada, and Europe”). The later-dated study acknowledges that “there has been precious little scholarly research on [the topic of the promotional impact of terrestrial radio airplay], and the two most recent contributions to the literature have contrasting conclusions.” Blatter WDT at SXM Dir. Ex. 37, p.12, SXM Dir. Trial Ex. 15.

482. Business executives with the major record labels do not consider Sirius XM to be promotional on a net basis. Dr. Ordovery spoke with executives from the four major record companies, and was informed that in their view the promotion and substitution effects for satellite radio did not differ in any meaningful way from interactive streaming music services. 6/14/12 Tr. 2340:8-2341:1 (Ordovery). The record label executives expressed substantially uniform opinions that the balance of substitution and promotional effects as between satellite radio and interactive subscription services is not materially different. Both types of service divert some consumer demand away from other channels, and similarly both types of service

expose some users to new music, and hence potentially stimulate demand in other channels.

Ordoover WDT at 9 n. 8, SX Trial Ex. 74.

483. The thinking of the record companies has evolved, and CDs are no longer the focus of the promotion/substitution analysis for them. As Stephen Bryan testified, “Whereas in the past WMG was primarily concerned about the sales of physical products, such as CDs, we now view each potential distribution model in terms of its impact on all other distribution channels. . . .” Bryan WDT at 3, SX Trial Ex. 66. There are a wide range of digital services that appeal to different consumers, but all have the potential to substitute for each other and WMG is vigilant in negotiating agreements in the marketplace that prevent damaging potentially more lucrative distribution channels. Bryan WDT at 3, SX Trial Ex. 66. Mr. Ciongoli expressed the same view, noting that many consumers simply choose to access music through the various services rather than purchasing any music at all. Ciongoli WDT at 4-6, SX Trial Ex. 67. As a result, record company executives such as Mr. Ciongoli think about promotion versus substitution not simply in terms of impact on the sale of physical products or permanent downloads, but in terms of the complex interaction of multiple revenue streams, including sales, royalty payments from “access services,” and statutory royalties.

484. Given the multiple digital distribution services available, the record company executives view each service as potentially a substitute for others. Mr. Ciongoli testified that consumers only have a finite amount of time to consume music in a day. Sirius XM competes with other listening formats, including CDs, iPods (or other similar devices), webcasting, and interactive services. When subscribers listen to Sirius XM, they are doing so at the expense of one of these other formats. Ciongoli WDT at 6, SX Trial Ex. 67.

485. Similarly, Mr. Harrison testified that people have a limited number of hours in a day, and they generally use only one music delivery platform at a time. If someone has access to hundreds of carefully tailored satellite radio channels in her car, for example, she probably is not also carting along a large selection of CDs for the car's CD player. Similarly, if someone is tuned into Music Choice in the living room, he is probably not simultaneously calling up tracks on a MOG subscription. The more hours users dedicate to Sirius XM or Music Choice, the fewer hours they will have for other services, and the less likely they are to pay for separate music subscriptions. Harrison WRT at 12, PSS Trial Ex 32. Lawrence Kenswil, formerly President of Universal Music Group's eLabs, submitted testimony in 2006 that concurs. Mr. Kenswil testified that whereas in the past UMG focused almost exclusively on selling CDs and other physical product, the future for UMG is about receiving a fair return from multiple revenue streams. Kenswil DWDT at 2, SX Trial Ex. 412. Digital revenue streams such as satellite radio can provide additional compensation for UMG, but they can also substitute for sales of other UMG products because there is only so much time in the day for people to spend listening to music. Kenswil DWDT at 3, SX Trial Ex. 412. *See also* Eisenberg DWDT at 8, SX Trial Ex. 403 (testifying that virtually all digital services are substitutional to some extent).

486. Evidence supporting these views comes from Sirius XM's own files: According to a survey by Sirius XM [REDACTED]

[REDACTED]

[REDACTED] Simonson WRT at SX Ex. 203-RR, p. 7, SX Trial Ex. 65.

487. According to Mr. Harrison, the substitution problem may be particularly acute for Sirius XM subscribers, since the Sirius XM subscription is so expensive compared to other

digital music subscription services. It stands to reason that even if a \$9.99 Spotify on-demand subscriber could be persuaded to pay an extra \$3.00 per month for Pandora's offering, a Sirius XM subscriber who is already paying \$14.49 per month might think twice about paying for an additional subscription, whether it costs \$3.00 or \$9.99. For this reason alone, Mr. Harrison is skeptical of Sirius XM's claim that its service promotes record sales rather than inhibiting music spending. In fact, since the launch of satellite radio, record sales have fallen almost every year, while the number of satellite radio subscribers has grown. Harrison WRT at 12-13, PSS Trial Ex 32. *See also* Eisenberg DWDT at 12, SX Trial Ex. 403 (when customers have decided to spend a significant amount of money to receive their music in a particular digital format, they will have less money in their entertainment budgets to spend on CDs, digital downloads, or the many paid subscription services from which record companies earn respectable royalties); 6/13/2012 Tr. at 2096:5-11 (Ciongoli) (stating that he has "seen trend analysis from time to time that consumers may or may not choose other services because they already paid for a satellite service."); 6/13/2012 Tr. at 2095:16-20 (Ciongoli) (testifying that satellite radio substitutes for physical sales of music recordings).

488. Moreover, with 70 or more music channels offering niche programming, satellite radio is "narrowcasting," not broadcasting. Kenswil DWDT at 3, SX Trial Ex. 412. Because of the number of channels and its enormous variety, satellite radio can provide consumers with exactly the mood or genre of music they want at a particular time, reducing the need of consumers to purchase CDs, downloads, or subscription services. Kenswil DWDT at 3, SX Trial Ex. 412. With such tremendous breadth and high digital audio quality, satellite radio substitutes for other ways that people experience music—not only for CDs, but also for other digital services from which UMG derives important and substantial revenue. Kenswil DWDT at

3-4, SX Trial Ex. 412. Mr. Eisenberg agreed that unlike terrestrial radio, satellite radio offers scores of channels in narrowly tailored genres that meet the tastes of virtually anyone who enjoys music. Eisenberg DWDT at 12, SX Trial Ex. 403. Millions of listeners simply want to have a variety of music playing in the car, for example, or in the office or during dinner.

Eisenberg DWDT at 12, SX Trial Ex. 403. Or they have a range of tastes and might prefer one genre such as country, but at times, might also be in the mood for classical, jazz, blues, or light rock and roll—things that are not always easy to find on terrestrial radio in a given location.

Eisenberg DWDT at 12, SX Trial Ex. 403. For these people (who are already spending significant sums of money to receive satellite radio in the car, in their homes, or with them wherever they go) satellite radio is the perfect substitute for many of the CDs they otherwise might buy. Eisenberg DWDT at 12-13, SX Trial Ex. 403.

489. The move to digital distribution has also eroded the value of traditional radio promotion. Now, when consumers purchase music, they more frequently buy a la carte songs rather than albums. Previously, some had argued that radio and television were promotional of recorded music in that they could lead some listeners to purchase albums containing multiple songs and costing \$10 or more because one song on the album was played on the airwaves and became a hit. To whatever extent radio and television previously may have been promotional, the digital revolution has severely muted that promotional aspect. Ciongoli WDT at 4-6, SX Trial Ex. 67.

490. Nor is satellite radio the equivalent of terrestrial radio with respect to promotion. Mr. Eisenberg explained that certain characteristics of satellite radio broadcasting diverge from terrestrial radio broadcasting and suggest that to the extent that terrestrial radio's particular practices have a promotional effect, satellite radio is unlikely to have the same impact. *See*

Eisenberg DWDT at 10-13, SX Trial Ex. 403. The music industry has learned from decades of experience that the playing of a sound recording on terrestrial radio (known as a “spin”) does not by itself have promotional value. Eisenberg DWDT at 10, SX Trial Ex. 403. Rather, the value of radio promotion for a particular recording is achieved when the spins in conjunction with other marketing efforts amount to a “call to action” or, in marketing terms, have an “impact” on the target demographic. Eisenberg DWDT at 10-11, SX Trial Ex. 403. To make an impact on a the market, the spins must be part of what is called a “power rotation”—that is, the release being promoted must be played over and over again at peak listening hours. Eisenberg DWDT at 11, SX Trial Ex. 403. These power spins must be coordinated with a local marketing campaign, including disc jockey (“DJ”) chatter where a local DJ, who has a relationship with the audience, talks up the new release as something that listeners will like. Eisenberg DWDT at 11, SX Trial Ex. 403. Typically these marketing campaigns relate to local appearances by the artist, and are accompanied by radio advertisements for the concerts and ticket and merchandise give-aways. Eisenberg DWDT at 11, SX Trial Ex. 403. Only in this way does terrestrial radio help create the necessary frenzy among the target audience to “break” a new release and turn it into a hit record. Eisenberg DWDT at 11, SX Trial Ex. 403. Moreover, a record company can only “promote” a small subset of its catalog at any one time. Eisenberg DWDT at 11, SX Trial Ex. 403. The idea that any distribution channel—terrestrial radio, satellite radio, or any other—can simultaneously promote sales of every artist and album at the same time is ludicrous. Eisenberg DWDT at 11, SX Trial Ex. 403.

491. According to Mr. Eisenberg, satellite radio shares none of the characteristics common to successful promotional efforts on terrestrial radio. Eisenberg DWDT at 11, SX Trial Ex. 403. Except for the dedicated “top hits” channel (which largely plays the songs that are at

the top of the hit list and contribute little to getting them there in the first place) Sirius XM prides itself on having long playlists, *i.e.*, not playing the same song multiple times within a day.

Eisenberg DWDT at 11-12, SX Trial Ex. 403. *See* Blatter WDT at 20, SXM Dir. Trial Ex. 15 (noting that Sirius XM channels dig deeper into an artist's catalog than terrestrial radio does).

Mr. Eisenberg testified that satellite radio's infrequent spins—far from the proven “power rotation” model—provide little or no promotional value to record companies. Eisenberg DWDT at 12, SX Trial Ex. 403. Satellite radio has far less DJ chatter touting new releases than does traditional terrestrial radio. Eisenberg DWDT at 12, SX Trial Ex. 403. And, though Sirius XM may feature a particular artist in any number of ways, it rarely if ever, given its diffuse national audience, takes part in any localized campaigns that are coordinated with local concert appearances or other promotional activities. Eisenberg DWDT at 12, SX Trial Ex. 403.

492. Sirius XM's evidence of promotion is purely anecdotal. *See* Blatter WDT at 18-30, SXM Dir. Trial Ex. 15. Mr. Blatter acknowledged that his evidence of promotion comprised discrete “examples” showing only a “correlation” between airplay and record sales, but he stated that he considered that evidence “empirical.” 6/8/2012 Tr. 1032:20-1033:7 (Blatter). Mr. Blatter did not examine the impact of Sirius XM airplay on revenue streams other than record sales. *See* Blatter WDT at 18-30, SXM Dir. Trial Ex. 15. Mr. Blatter did not examine the impact of other types of services on record sales. 6/8/2012 Tr. 1030:2-17 (Blatter).

493. As of the direct phase trial, Mr. Blatter stated that with respect to the record labels that he claimed had acknowledged the promotional value of Sirius XM airplay, “it[] wouldn't be all that surprising if these—if these examples cited here were not directly licensed at that time.” 6/8/2012 Tr. 1017:1-9 (Blatter). By way of explanation, Mr. Blatter stated, “When my testimony was done, we had just started the direct licensing process.” 6/8/2012 Tr. 1017:2-3 (Blatter). But

as of the rebuttal trial, it remained the case that none of the labels that had purportedly acknowledged the promotional value of Sirius XM airplay had signed direct licenses. Blatter WDT at 24-25, SXM Dir. Trial Ex. 15 (listing [REDACTED] and Glassnote Records); SX Trial Ex. 301 at 43 ([REDACTED]); 8/13/2012 Tr. 3077:18-22 (Frear) ([REDACTED]); Bryan WDT at 1, SX Trial Ex. 66 ([REDACTED]); SX Trial Ex. 301 at 15 ([REDACTED]), SX Trial Ex. 301 at 54-58 ([REDACTED]).

494. In rebuttal, Mr. Harrison explained how Mr. Blatter's reliance on emails sent by promotions representatives was misplaced. A major record label, as Mr. Harrison explained, is a large company, and the attorneys who negotiate deals with interactive music services have very little contact with individuals employed in the promotions department. While it is important for negotiators to consider the relative substitutional characteristics of various music services, the people who work in the promotions department take this issue much less seriously, if they consider it at all. Harrison WRT at 11, PSS Trial Ex 32. Their function is to promote records, and in carrying out their duties, they are agnostic about the platform on which the records are gaining attention or spins. *Id.*

495. Mr. Blatter also cited waivers of the performance complement of the Digital Millennium Music Act as evidence that record labels consider Sirius XM to be promotional, but as he told Judge Wiesnewski, these waivers do not waive the payment of royalties for any additional plays that are allowed thereby. 6/8/2012 Tr. 986:20-987:5 (Blatter). Mr. Blatter

acknowledged, as well, that when record labels agree to allow Sirius XM to play more of their songs, they receive more royalties. 6/8/2012 Tr. 1018:19-1019:1 (Blatter).

496. In the *SDARS I* proceeding, Mr. Eisenberg testified that when it suits their immediate business interests, satellite radio companies claim that their services drive consumers to purchase particular sound recordings or CDs. Eisenberg DWDT at 10, SX Trial Ex. 403. But in other contexts, satellite radio companies actually tout their substitutional effects: In one testimonial that XM featured on its own website, a customer described his satellite radio subscription as follows: “No more need to ever buy another CD.” Eisenberg DWDT at 10, SX Trial Ex. 403. The experience of record company executives, as well as Sirius XM’s own internal surveys discussed above, suggest that satellite radio subscribers who see no more need to ever buy another CD (or other form of paid music consumption) predominate over those who might increase their music purchases on other channels.

VIII. ANALYSIS AND APPLICATION OF THE § 801(B) FACTORS TO SIRIUS XM

497. According to this Court’s decision in *SDARS I*, the next step after assessment of marketplace benchmarks is to determine “whether [the 801(b)] policy objectives weigh in favor of divergence from the results indicated by the benchmark marketplace evidence.” *SDARS I*, 73 Fed. Reg. at 4094. The evidence submitted in this proceeding indicates that no adjustment to the *SDARS* rate is necessary as a result of the 801(b) factors.

A. This Court’s Precedent and Economic Theory Indicate that the First Three § 801(b) Factors Are Satisfied by a Market Rate

498. The following four policy objectives govern rate-setting for the blanket license at issue in this proceeding:

- a) To maximize the availability of creative works to the public;
- b) To afford the copyright owner a fair return for his creative work and the copyright user a fair income under existing economic conditions;

- c) To reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication; and
- d) To minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices.

Ordoover WDT at 5, SX Trial Ex. 74.

499. In *SDARS I*, the Copyright Royalty Judges determined that no deviation from the marketplace benchmarks was necessitated by any of the first three § 801(b) factors. *SDARS I*, 73 Fed. Reg. at 4094-97.

500. Dr. Ordoover believes that the rate a willing buyer would pay a willing seller in a competitive market need not be adjusted to comply with the first three of the statutory factors. 6/14/12 Tr. 2304:16-2305:2 (Ordoover). Dr. Salinger agreed with Dr. Ordoover that the first three statutory factors would be satisfied by a rate that a market might produce in the long run. 8/16/12 Tr. at 3836:12-22 (Salinger).

501. As Dr. Salinger interprets the statutory factors, the Court need not set a rate that guarantees or necessarily allows a return on Sirius XM's costs. 8/16/12 Tr. at 3837:1-6 (Salinger). Thus, with respect to the first three statutory factors, Dr. Salinger agreed that the Court needs simply needs to determine an appropriate marketplace rate: "Q. And so, basically, the best we can do at this point is to conduct a benchmarking analysis to figure out what the appropriate marketplace rate is? A. Correct. Which requires having the – an appropriate benchmark and an appropriate methodology for going from the benchmark to the market." 8/16/12 Tr. at 3839:15-20 (Salinger). Similarly, in Dr. Ordoover's opinion, the necessary first step is to identify comparable benchmark rates, and then to determine whether these rates require modification in light of application of the governing policy objectives. Dr. Ordoover concludes

that rates negotiated outside the shadow of regulation should satisfy the first three policy objectives. Ordoover WDT at 5, SX Trial Ex. 74.

502. The first statutory factor concerns maximizing the availability of creative works to the public. Stated differently, the first policy objective directs that licensing rates should be high enough to foster the creation of new content, but not so high as to jeopardize the forward-looking viability of a service that has gained acceptance among consumers in the marketplace. There are no sound economic reasons to adjust market-based rates because of this statutory objective. As Dr. Ordoover stated, a market-based rate fosters this objective because it provides copyright holders with incentives to create content, as reflected in the services' (and, hence, consumers') willingness and ability to pay for creative works; and it also gives service providers sufficient incentives to distribute content to the listening audience. Rates determined through voluntary negotiations in a competitive marketplace can be expected to meet these requirements because they will not be so low as to suppress the creative endeavors of copyright holders, nor will they be so high as to materially weaken the incentives of service providers to expand output and improve the quality of their services, to the ultimate detriment of consumers. Ordoover WDT at 6-7, SX Trial Ex. 74.

503. The second statutory factor counsels the Court to consider whether the rate set will afford the copyright owner a fair return for his creative work and the copyright user a fair income under existing economic conditions. As Dr. Ordoover testified, the notion of "fairness" in the abstract is not an objective that economic policy seeks to promote, if only because "fairness" is not a concept based in fundamental principles of economics. Of course, given an externally provided notion of "fairness," economic analysis can offer guidance on how that goal can be achieved at the lowest resource cost to society. Setting this issue aside, one way to characterize a

“fair” outcome from an economic perspective is to associate it with an outcome that results from the voluntary interactions of participants in effectively competitive markets, *i.e.*, markets not distorted by undue exercise of monopoly power on the part of sellers or monopsony power on the part of buyers. From such a vantage point, a “fair” outcome would entail rates that are consistent with rates paid by services in other distribution channels that arise through market-based interactions. Ordoover WDT at 9-10, SX Trial Ex. 74.

504. Importantly, providing a copyright user with a “fair income” should not be interpreted as setting a guaranteed minimum rate of return for the copyright user. Given that the benchmark rates are established through voluntary transactions, and that the benchmark services are at this time active in the marketplace while paying those rates, there is no compelling economic reason to question the utility of those rates in the instant proceeding, unless there is a clear showing that the benchmark rates were elevated by the exercise of monopoly power. Dr. Ordoover states that there is no evidence to suggest that this is the case with respect to interactive subscription services, which he puts forth as the appropriate benchmark, or with respect to other non-statutory distribution channels. Consequently, it is his view that observed rates paid to the record labels by interactive subscription services require no adjustment pursuant to the second policy objective. In fact, any downward adjustment would amount to a “subsidy” for Sirius XM, which would provide the company with an unwarranted competitive advantage relative to rival distributors of music content, and also dilute the incentives for the creation of new works and for the efficient transmission of music through new and emerging channels. Ordoover WDT at 10, SX Trial Ex. 74.

505. The third statutory factor addresses the relative roles of the copyright owners and the copyright user with respect to their relative creative and technological contributions, cost,

risk, and contribution to the opening of new markets for creative expression. Dr. Ordover testified that the achievement of the policy goals set out in the third objective are best accomplished with licensing rates consistent with those negotiated voluntarily in market-based settings. Effectively competitive markets do not ensure that participating firms are invariably able to earn normal rates of returns on their investments. This is especially true of investments that are sunk in the sense that they would not be recovered if the firm were to exit the business. At the same time, effectively competitive markets reward firms that have undertaken investments and other expenditures on products and services that consumers find attractive, given the availability of other options. Generally, firms will continue investing if the expected rate of return on these investments is higher than the firm's cost of capital, taking into account the risks associated with the project. This is true for a firm like Sirius XM, which has made substantial investments in its distribution infrastructure; firms like the record companies, which invest in their A&R (*i.e.*, artists and repertoire), marketing and distribution chain; and recording artists, who invest their time and other resources to produce the content that is disseminated through various channels. Ordover WDT at 10-11, SX Trial Ex. 74.

506. From this perspective, the relevant costs and risks translate into prices that the seller charges for its product or service. In a competitive market, no seller is assured that it will earn the risk-corrected, expected cost of capital. A service like Sirius XM may not be able to recover the costs of its satellite footprint (if its service does not attract enough demand); the record company may not recover the costs it expended on the artist and the recording (and it rarely does); and the recording artist may never recover the opportunity cost of time devoted to producing a song (and many do not). None of this means that rates should be set in such a manner as to ensure a risk-adjusted return on investment. If a market participant sinks resources

into the provision of a product or service, no matter how “large” these might be, the marketplace will only reward those investments if the ultimate consumers find these products or services sufficiently attractive relative to the alternatives. No participant in the market should be required to ensure the success of any other participant, be it a nationwide satellite radio service or a fledgling recording artist producing songs in a basement. In fact, basic economics teaches that investments that are not generating enough in revenues should be “marked to market” and valued at their true economic value and not at their initial value. Ordoover WDT at 11-12, SX Trial Ex. 74.

507. There are several relevant considerations to address with respect to the third policy objective as it pertains to the fact that Sirius XM has substantial fixed (and possibly sunk) costs (such as those associated with the costs of satellites in particular) and was the first satellite radio service. Ordoover WDT at 12-13, SX Trial Ex. 74.

- a) First, while Sirius XM’s contributions (technological and to opening new markets for creative expression) and its costs are significant, it is important to recognize the contributions and costs of the record labels as no less significant, including the contributions and opportunity costs of performers who split statutory license fees with record companies. In particular, it would be wrong as a matter of sound economics and competition policy to assess the contributions and costs of the record labels solely on an incremental basis, *i.e.*, to limit the analysis to the incremental contributions and costs associated with the distribution of music *via* Sirius XM. Indeed, the record companies undertake substantial and irreversible investments in development and promotion of artists that are designed to provide artists with strong incentives to create new sound recordings. Consideration of

the third objective should not underestimate the massive and quite risky investments record labels make to identify new talent and to encourage the continuing productivity of existing artists.

- b) Second, the sizable capital invested by Sirius XM to deploy new satellites and to maintain its network may suggest that the balancing of factors spelled out in the third objective should shift rates in favor of Sirius XM, *i.e.*, in favor of a downward adjustment to rates obtained from market-based benchmarks. This would be wrong, however. First, consideration, if any, of a possible downward adjustment should account for the fact that the five-year time horizon over which licensing rates in this matter will be determined is substantially shorter than the useful physical life of Sirius XM's investments in its satellite network. Second, what is relevant for rates is the economic life and the rate at which the investment would depreciate in the competitive market. If the economic life is affected by competition from other services, there is no reason why rates should be set to assure a level of profitability that a competitive market would make unattainable. Third, Sirius XM has no plans to launch additional satellites in the coming rate term. To the extent the Court finds the investment in satellites relevant, the issue appropriately is addressed under the rubric of the fourth policy objective.
- c) Finally, Sirius XM is a distributor of music and non-music content. Moreover, while Sirius XM creates some original programming that it provides alongside the music (the so-called "wrapper"), it is beyond dispute that the music itself, and not the programming, represents the content that is absolutely essential for the service to be attractive to a sufficient number of consumers to make it even potentially

economically viable. This is not to say that the programming expertise of Sirius XM is without value – it surely does have value, especially for the “lean-back” listeners. But it is also the case that the programming inputs paired with the music content would have no value if delivered in isolation, *i.e.*, not accompanied by sound recordings. The inverse, however, does not hold: separate and apart from its transmission *via* satellite radio, music content has an established value in the marketplace in a variety of distribution channels.

508. As Dr. Salinger explained with respect to the third policy objective: “I’m saying give music its full total contribution and leave – meaning the competitive price of music for that kind of right, the non-interactive right, and leave the rest for Sirius XM. Now, Sirius XM might say that they’re not getting their relative contribution that way, but they made the investment and that was their risk.” 8/16/12 Tr. at 3841:19-3842:4 (Salinger).

509. In sum, the determination of licensing rates in this proceeding should begin with the identification of rates voluntarily negotiated between copyright holders (individual record companies) and service providers in unfettered market settings, *i.e.*, in settings free of the compulsory licensing regime underlying the instant proceeding. In Dr. Ordovery’s view, such rates satisfy the first three of the operative statutory objectives insofar as those objectives advocate consideration of factors that shape negotiations undertaken, and rates agreed to, in the absence of potential regulatory intervention. Ordovery WDT at 14, SX Trial Ex. 74.

B. Examination of Each of the First Three § 801(b) Factors Confirms that They Are Satisfied by a Market Rate

510. Even if the Copyright Royalty Judges do not agree with Dr. Ordovery that the first three § 801(b) factors necessarily support a market rate, each factor weighs in favor of artists and copyright owners, and will not support a downward deviation from the market rate.

1. A Market Rate Maximizes the Availability of Creative Works to the Public

511. Section 801(b)(1)(A) seeks to “maximize the availability of creative works to the public.” The first factor goes to the very purpose of the Copyright Clause of the U.S. Constitution, U.S. Const. Art. I, § 8, – to stimulate the creation and dissemination of creative works to the benefit of the public. “The economic philosophy behind the [Copyright Clause] is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors.” *Mazer v. Stein*, 347 U.S. 201, 219 (1954). “Accordingly, ‘copyright law *celebrates* the profit motive, recognizing that the incentive to profit from exploitation will redound to the public benefit by resulting in the proliferation of knowledge The profit motive is the engine that ensures the progress of science.’” *Eldred v. Ashcroft*, 537 U.S. 186, 212 n. 18 (2003) (quoting *American Geophysical Union v. Texaco, Inc.*, 802 F. Supp. 1, 27 (S.D.N.Y. 1992), *aff’d* 60 F. 3d 913 (2d Cir. 1994)). Compensating copyright owners and performers stimulates both the creation of copyrighted works *and* their dissemination. *Eldred v. Ashcroft*, 537 U.S. 186, 205-06 (2003).

512. As this Court has recognized, both economic theory and the long history of investment by record companies support the claim that revenues from dissemination of sound recordings are essential for funding the creation and dissemination of sound recordings in the future. In rejecting arguments from copyright users in *Webcasting II*, the Court noted that:

As a matter of theory, Dr. Jaffe’s proposed benchmark analysis ignores the long-established pattern of investment in the recording industry. Thus, not only are there some initial sunk investments, but there is a requirement of repeated substantial outlays years after year or, in other words, the repeated “sinking” of funds. If sellers are faced with the prospect of not recovering such sunk costs, then the incentive to produce such sound recordings is diminished.

Webcasting II, 72 Fed. Reg. at 24094.

513. The record in this case supports the same conclusion. Record companies bear the burden of the investments needed to identify and develop talent, make copyrighted sound recordings, and promote and distribute those creative works. They pay for all of the talent acquisition costs, the production costs (including studio time, equipment use, engineers, back-up musicians), the artwork, the marketing expenses (including promotion, advertising, touring, and music videos) and the distribution expenses, all before earning any revenue from the recordings. Without the substantial investment and creative efforts of record companies, it would not be possible to introduce to the marketplace new recordings and new artists. Ciongoli WDT at 8, SX Trial Ex. 67. Moreover, the costs of creating sound recordings must be recovered across all revenue streams – not just one. Bryan WDT at 3, SX Trial Ex. 66; Ciongoli WDT at 3-4, SX Trial Ex. 67.

514. With respect to the first Section 801(b)(1) factor, Dr. Noll believes that this factor favors Sirius XM because by his estimate approximately 2 percent of the population in the U.S. does not have wireless Internet service and therefore cannot receive Internet radio services in the automobile; and some portion of that 2 percent of the population may not be served by terrestrial radio. 6/5/12 Tr. 222:12-224:14 (Noll). Dr. Noll does not estimate the proportion of that group that actually subscribes to Sirius or XM. *See* Noll WDT at 18-20, SXM Dir. Trial Ex. 1. Aside from the tiny sliver of the population at issue in Dr. Noll's analysis, there is no evidence that this group depends on Sirius XM in order to access music. Indeed, according to Sirius XM's own internal survey, [REDACTED]

[REDACTED] SX Trial Ex. 8 at 23. The study concluded, [REDACTED]

[REDACTED] SX Trial Ex. 8 at 20.

515. Further with respect to the first Section 801(b)(1) factor, Dr. Noll asserts that royalties from Sirius XM constitute only 2 to 3 percent of total record industry revenue, and the absence or reduction of that revenue would have little impact on the incentives to create new music. 6/5/12 Tr. 224:15-225:5 (Noll). But according to Mr. Ciongoli, statutory royalties are critical to record labels, and [REDACTED]

[REDACTED] 6/13/2012 Tr. 2141:7-10 (Ciongoli). And as this Court recognized in *SDARS I*, “recording companies will necessarily make future investment decisions based on their best estimate of the revenue sources available to them in the future from all sources including revenue streams derived from the SDARS’ use of sound recordings.” *SDARS I*, 73 Fed. Reg. at 4090.

516. Finally, Dr. Noll argues (in the context of direct licensing) that lower royalty rates would give Sirius XM an incentive to play more music, such as by creating more music channels or adding more music to channels that have a mix of music and nonmusic content. Noll WDT at 41, SXM Dir. Trial Ex. 1. But as Mr. Karmazin admitted, the amount of music Sirius XM plays will not be influenced by the royalty rate that is set in this proceeding. 6/11/2012 Tr. 1442:1-6 (Karmazin) (Judge Wisniewski: “If the royalty rate for sound recordings were cut in half, how many more recordings would you play on Sirius XM?” A: “I don’t think that the answer for us is based on the royalty in any area as to how many recordings we are going to play.”). If the royalty were cut in half, Sirius XM would not play any additional music. 6/11/2012 Tr. 1443:10-12 (Judge Wisniewski: “So if the rate were cut in half, you wouldn’t play any more music?” A: “No.”).

2. A Market Rate Affords a Fair Return to the Copyright Owner and a Fair Income to the Copyright User

517. The second statutory objective seeks “to afford the copyright owner a fair return for his creative work and the copyright user a fair income under existing economic conditions.” 17 U.S.C. § 801(b)(1)(B).

a. Fair Return to the Copyright Owner

518. Mr. Ciongoli testified that the recorded music business has changed dramatically over the past decade and that UMG has adapted its business with a focus on digital exploitation, which the marketplace and consumers demand. Ciongoli WDT at 3, SX Trial Ex. 67. Mr. Ciongoli stated that digital revenue is now a primary source of revenue for UMG and is necessary for UMG to continue investing in new sound recordings and new artists. Moreover, he stated that “over the course of this rate term, I can safely say that our dependence on digital revenues and performance royalties will likely increase further.” Ciongoli WDT at 6, SX Trial Ex. 67.

519. According to Mr. Ciongoli, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 6/13/2012 Tr. 2141:7-10

(Ciongoli).

520. Mr. Ciongoli identified three factors that have led to the recorded music business’ new reliance on digital revenues. *First*, he noted that as the industry migrates from physical to digital exploitation, consumers are purchasing fewer and fewer physical products and are instead opting for an array of digital audio formats to consume sound recordings, including online music stores such as iTunes, streaming over the Internet, and satellite radio through Sirius XM, to name

a few. As a result of this substitution of digital for physical, revenues from digital exploitation of UMG's recorded works — including those attributable to statutory and other forms of licensing activities — are now viewed as a primary source of revenues that must be maximized in order for the recorded music business to survive. Consequently, UMG has invested heavily in the personnel and infrastructure necessary to operate a digital exploitation business. Ciongoli WDT at 3-4, SX Trial Ex. 67.

521. *Second*, Mr. Ciongoli explained that digital exploitation has altered the model for how the public consumes music. The marketplace is slowly migrating from a model based on “ownership” of music to a model based on “access” to music. Each year, UMG sees more and more of its revenue coming from services that do not “sell” music to consumers, but rather provide “access” for consumers to a wide range of music. These services include not only interactive streaming services, such as Rhapsody, Spotify, and Napster, but also non-interactive streaming services such as Pandora and satellite radio through Sirius XM. Whereas consumers previously were limited to listening to music that either (a) they owned or (b) was currently playing on the limited number of radio or music television channels they received, consumers now have the ability to “access” the music they want to hear directly through one of these services without having to purchase permanent copies of the music. As a result of this changing model, statutory and direct licenses are becoming an increasingly important part of UMG's revenues and are essential to its financial performance. While revenues from these services once accounted for only a tiny fraction of UMG's annual revenues, they now comprise a major source of revenue. In 2010, for example, UMG and its featured and non-featured artists received approximately [REDACTED] from SoundExchange in statutory license royalties. UMG received another [REDACTED] in direct license royalties from other audio subscription and streaming

services. UMG's combined statutory and direct license royalties increased [REDACTED] between 2006 and 2010.

522. Moreover, even when consumers do purchase music under the "ownership" model, they more frequently buy a la carte songs rather than albums. In 2010, for example, UMG sold [REDACTED] a la carte songs (including CD singles) and [REDACTED] albums. In contrast, in 2000, prior to the digital distribution revolution, UMG sold [REDACTED] a la carte songs (including CD singles) and [REDACTED] albums. Previously, some had argued that radio and television were promotional of recorded music in that they could lead some listeners to purchase albums that cost \$10 or more based on the popularity of "hit" songs played on the airwaves. To whatever extent radio and television may have been previously promotional, the digital revolution has severely muted that promotional aspect. Moreover, as noted above, many consumers simply choose to "access" music through the various services described above rather than purchasing any music at all. As a result, companies like UMG cannot rely solely on the sale of physical products or permanent downloads – they must obtain substantial royalty revenues from "access" services in order to survive. Ciongoli WDT at 4-6, SX Trial Ex. 67.

523. *Third*, Ciongoli testified that consumers only have a finite amount of time to consume music in a day. Sirius XM competes head-to-head with other listening formats, including CDs, iPods (or other similar devices), webcasting, and interactive services. When subscribers listen to Sirius XM, they are doing so at the expense of one of these other formats. As a result, record companies need to obtain revenues from Sirius XM through SoundExchange that are equivalent to the revenues that they would have received through one of these other formats. The statutory license for Sirius XM should not be set lower than the license rates record

companies regularly receive in the open market through direct licensing deals (recognizing, of course, that not all Sirius XM content is music). Ciongoli WDT at 6, SX Trial Ex. 67.

524. Mr. Ciongoli testified that UMG's digital revenues fall far short of the revenues it lost from physical sales over the past decade. 6/13/12 Tr. at 2085:8-10 (Ciongoli).

Consequently, it has not been easy for UMG to recoup its substantial investments in the creation, marketing, and distribution of recorded music. Ciongoli WDT at 6, SX Trial Ex. 67.

525. According to figures from the RIAA, in 2000, the total retail value of music sold in the United States was \$14.3 billion. In comparison, by 2010, the total retail value of music sold (including all digital revenues) was \$6.85 billion, less than half of what it was a decade earlier. Indeed, from 2009 to 2010 alone, there was a decline of nearly 11% in the value of music sold. Ciongoli WDT at 7, SX Trial Ex. 67.

526. Digital revenues have failed to close the gap following the loss of traditional physical product sales over the past decade. According to the RIAA, in 2010 the total retail value of digital sales and licenses (including statutory and direct license revenues) was \$3.2 billion. This was up narrowly from \$3.1 billion in 2009. During that same time period, the total retail value of physical sales declined by \$921 million. Moreover, it is obvious that the growth in digital sales and licenses from essentially zero in 2000 to \$3.2 billion in 2010 comes nowhere near the \$10.7 billion decline in physical sales over the same time period (\$14.3 billion (2000 physical retail value) – \$3.6 billion (2010 physical retail value)). Ciongoli WDT at 7, SX Trial Ex. 67.

527. Mr. Ciongoli testified that at UMG specifically, domestic revenue from physical product has fallen from [REDACTED] in 2000 to [REDACTED] in 2010. Over the same period, digital revenues have risen from virtually nothing in 2000 to [REDACTED] in 2010 (inclusive of

royalties received through SoundExchange). As these number show, while UMG's digital revenues are growing, revenues from physical sales continue to decline at a faster rate. Ciongoli WDT at 7-8, SX Trial Ex. 67.

528. Stephen Bryan testified, "[s]ales of CDs and other physical media have continued to decline in recent years, but revenues for digital distribution—from sales of digital downloads and albums, sales of other digital products (such as ringtones), and subscription streaming services—have increased significantly. In fact, in the second quarter of 2011, WMG reported that our digital revenue had grown to nearly 40% of our worldwide Recorded Music business, and in 2008, Atlantic Records was recognized as the first major label to achieve digital revenue in excess of 50% of its U.S. physical and digital sales revenue." Bryan WDT at 3, SX Trial Ex. 66. Mr. Bryan explained that the migration of consumers from physical products such as CDs to digital platforms has changed the way WMG understands its business: "As consumers have migrated to digital platforms and technologies, those platforms and technologies enable a much wider variety of experiences around music. So what we're seeing is the emergence of different types of consumers that want to engage in music in a much wider variety of ways than what was possible in the physical world and our consumer research indicates that there are consumers that are looking for very different types of experiences around music. Because of that, it becomes really important that we focus on trying to maximize the revenue from each of those types of consumers, from each of those types of digital services that have emerged over the last ten years." 6/13/2012 Tr. 1969:21-1970:12 (Bryan).

529. Digital revenues, including statutory revenues, are particularly important to labels like Mr. Van Arman's that concentrate on younger, less established artists. Van Arman WDT at 4, SX Trial Ex. 77. While older recording artists tend to release records that achieve a higher

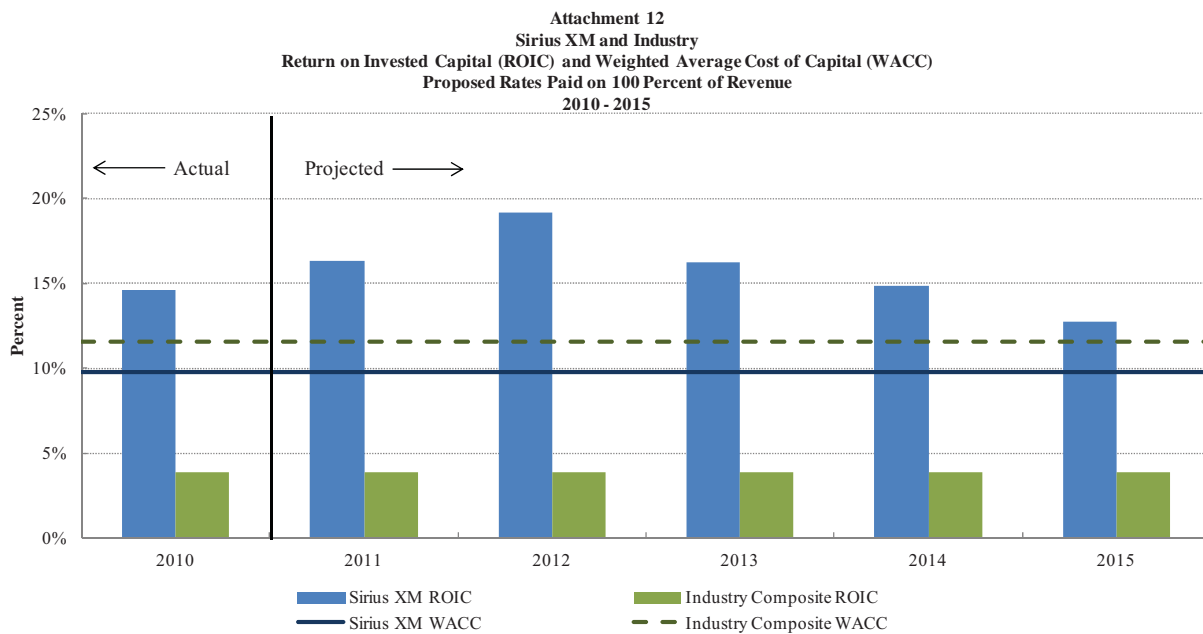
proportion of physical revenues (presumably because their fans are more accustomed to traditional modes of purchasing music), younger artists earn more through digital revenues. Van Arman WDT at 4, SX Trial Ex. 77. Over the past four years, Mr. Van Arman's company's digital revenues have grown approximately 300%, and now account for roughly 50% of their total revenues. Van Arman WDT at 4, SX Trial Ex. 77. No single digital revenue stream can sustain Mr. Van Arman's business, but digital revenue streams in the aggregate are significant, and every digital stream counts. Van Arman WDT at 4, SX Trial Ex. 77. The SoundExchange royalties that one of Mr. Van Arman's labels, Jagjaguwar, has received from Sirius XM's satellite radio service have increased from \$932.92 in 2007 to \$25,058.96 in 2009 and \$20,237.17 in 2010, and based on the first nine months of 2011, that year's receipts for Sirius XM's satellite radio service will likely exceed those for 2010. Van Arman WDT at 4-5, SX Trial Ex. 77. In total, Jagjaguwar has received over \$95,000 from SoundExchange (for all the services licensed through SoundExchange) since 2007. Van Arman WDT at 5, SX Trial Ex. 77.

530. Because the very identity of Mr. Van Arman's independent record company is deeply rooted in a commitment to artist development, his labels face a particular challenge in a market where music sales are declining due to fewer sales of traditional CDs and the large number of consumers that opt to illegally download music, but there is no corresponding reduction in the amount of work labels like Mr. Van Arman's need to do for artists. Van Arman WDT at 3, SX Trial Ex. 77. Mr. Van Arman testified that it is important for them to do all they can to ensure a fair return on their energies, both for the long term and so that they can continue to work at a very high level for their artists. Van Arman WDT at 3, SX Trial Ex. 77.

b. Fair Income to the Copyright User

531. In *SDARS I*, the Copyright Royalty Judges found that “[a]ffording copyright users a fair income is not the same thing as guaranteeing them a profit in excess of the fair expectations of a highly leveraged enterprise. Nor is a fair income one which allows the SDARS to utilize its other resources inefficiently. In both these senses, a fair income is more consistent with reasonable market outcomes.” *SDARS I*, 73 Fed. Reg. at 4095.

532. As discussed in greater depth in Section VIII.C.1.g., below, Dr. Lys found that, applying SoundExchange’s proposed royalty rates, the projected return on (total) invested capital (ROIC) for Sirius XM would exceed the current weighted average cost of capital (WACC), indicating Sirius XM’s ability to outperform the returns commensurate with its risk levels even under SoundExchange’s proposed rates. Lys WDT at 34, SX Trial Ex. 80.



Lys WDT at Attachment 12, SX Trial Ex. 80. The figure above also shows that Sirius XM outperforms the average ROIC of the radio and television broadcasting industry. Lys WDT at 34-35, SX Trial Ex. 80. The figure above was based on an assumption that Sirius XM would pay royalties on 100% of revenue. *Id.* The ROIC results are even stronger if the royalty rate

schedule is applied to [REDACTED] percent of Sirius XM's total revenues. *See* Lys WDT at Attachment 13, SX Trial Ex. 80. An above-average return on invested capital is certainly a fair income to the copyright user.

533. Moreover, Morgan Stanley projections demonstrate that, whether royalty rates are set beginning at 9% in 2013 and rising 1% per year to end at 13% (Morgan Stanley's "base case" scenario) or beginning at 12% in 2013 and rising 2% per year to end at 20% (Morgan Stanley's "bear case" scenario), Sirius XM will earn billions of dollars in profits during the coming rate term. SXM Reb. Trial Ex. 12 at 9; *see also* Section VIII.C.1.b. In total, Morgan Stanley projects that Sirius XM will earn \$7.69 billion in EBITDA profits in the base scenario (rates ending at 13%) and \$6.74 billion in EBITDA profits in the bear scenario (rates ending at 20%). SXM Reb. Trial Ex. 12 at 9. Clearly, either of these scenarios would produce a fair income for Sirius XM.

3. A Market Rate Reflects the Relative Roles of the Copyright Owner and the Copyright User in the Product Made Available to the Public

534. The third statutory objective seeks to "reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication." 17 § 801(b)(1)(C). Consideration of the relative contributions of the record companies and the SDARS reveals that it is the record companies – not the SDARS – that have taken far more risks, invested far more capital, and spent far more money than the SDARS "in the product made available to the public." § 801(b)(1)(C).

535. According to Mr. Ciongoli, UMG, like other record companies, makes a substantial investment in and contribution to the creation, marketing, and distribution of sound recordings each year. UMG spent a total of approximately [REDACTED] in 2010 in order to

create, market, and distribute recorded music (including compensation to composers). That substantial investment is vital to the functioning of the music industry. UMG is often involved in every step of the development and distribution of recorded music, from finding and developing musical talent, to selecting and funding a creative team (including a studio, producer, and engineer) that enables the musical talent to create recorded music, to marketing and distributing that music to the public. Without the substantial investment and creative efforts of UMG and other record companies, it would not be possible to bring to the marketplace all of the new recordings and new artists that the public expects. Ciongoli WDT at 8, SX Trial Ex. 67.

536. UMG has also invested heavily in the personnel and infrastructure necessary to operate a digital exploitation business. In 2010, digital revenues (inclusive of royalties received through SoundExchange) for UMG were [REDACTED] — about [REDACTED] percent of total physical and digital revenues. That is up from [REDACTED] (roughly [REDACTED] percent of total physical and digital revenues) in 2009 and [REDACTED] (roughly [REDACTED] percent of total physical and digital revenues) in 2008. Across the industry, the RIAA reports that in 2010 the total retail value from physical and digital exploitation were split almost evenly, at 53% physical to 47% digital exploitation. Only five years ago (in 2006), according to the RIAA, the split was 84% physical to 16% digital across the industry. Ciongoli WDT at 4, SX Trial Ex. 67.

537. Mr. Ciongoli explained that a large portion of UMG's investment is spent on finding musical talent and creating recorded works. For example, in 2010, UMG spent [REDACTED] [REDACTED] to employ the Artists & Repertoire ("A&R") Department staff who find and work with the artists. Musical talent is discovered through various means, but UMG primarily relies on members of its A&R Department who go to clubs and concerts, review thousands of demonstration recordings, scan the Internet, attend festivals, and perform market research.

While the A&R Department scouts thousands of artists each year, UMG ends up signing only a small number of new artists each year. Needless to say, finding musical talent is a laborious process, requiring uniquely skilled professionals who are able to sift through thousands of talented musicians to find the few who have true superstar potential and will be commercially viable. Ciongoli WDT at 9-10, SX Trial Ex. 67.

538. Mr. Ciongoli testified that UMG incurs even more significant costs in order to create recorded works. In 2010, UMG spent approximately [REDACTED] on recording costs, including costs paid to studios, producers, sound engineers, backup musicians, and others involved in the recording process, and advances to artists. The recording process can include assisting the artist in selecting and developing material to be recorded, which can be a lengthy process and often involves working with the artist to develop a brand or image that will be used by the artist throughout his or her career. The A&R Department also may work with the artist to select a creative team, including a producer, engineer, and studio who can best help the artist reach their creative potential. In many cases, UMG's staff is involved throughout the recording process, managing it from start to finish in a sort of executive producer role. Indeed, even after the basic recording process is complete, UMG's A&R team often remains integrally involved in completing the finished product, overseeing the mixing and mastering of recordings as well as any re-mixing or editing of the recordings that may be required for certain markets or uses. Ciongoli WDT at 9-10, SX Trial Ex. 67.

539. UMG also invests heavily in marketing recorded music. Mr. Ciongoli testified that in 2010, UMG spent [REDACTED] on marketing activities. The investment in marketing includes the cost of making music videos, consumer advertisements, Internet marketing and website development, publicity and promotional tours, promotional merchandise, designing

attractive “packaging” for the recordings, and a host of other expenses. Most of these marketing costs are incurred up front, before the record company is able to generate any revenue from the music that is being marketed. UMG invests extraordinary amounts of time and money into its marketing activities. Without these investments, few, if any, recordings would become the commercial successes necessary to sustain the music industry. Indeed, even with all of its marketing efforts, the vast majority of UMG’s recordings are not commercially successful. Ciongoli WDT at 10-11, SX Trial Ex. 67.

540. Mr. Ciongoli testified that these substantial investments yield dividends to many other industries that are dependent on the recorded music and brands that are developed and financed through our investment. These industries include radio, webcasting, and other digital services, live performance and touring, branded or sponsored merchandising, film and TV, and music publishing, to name a few. Each of these industries creates jobs and revenue for numerous parties, including the artists themselves. UMG’s initial financing and creative efforts to record, market, and promote the recorded works provides substantial value to each of these industries. Ciongoli WDT at 8-9, SX Trial Ex. 67.

541. Mr. Ciongoli also explained that even as physical sales decline, the costs associated with UMG’s distribution operations remain significant. In 2010, UMG recognized [REDACTED] in manufacturing and related expenses, and [REDACTED] in distribution and selling costs. These costs comprise the departments responsible for retail interaction, customer service, credit and collection, and supply chain fulfillment with both physical and digital retailers, as well as the departments responsible for the production of our inventories and various logistical operations necessary for the business. Mr. Ciongoli WDT at 11, SX Trial Ex. 67.

542. Mr. Ciongoli testified that UMG also faces various other costs which are not directly related to the creation, marketing, and distribution of sound recordings but are critical to the functioning of the company, including the costs associated with our executive, legal, finance, copyright and royalties, information technology, human resources, corporate development, and administrative departments. These costs amounted to [REDACTED] for fiscal year 2010. Ciongoli WDT at 11, SX Trial Ex. 67.

543. According to Mr. Ciongoli, UMG spent a total of [REDACTED] in 2010 related to its recording and distribution business. When asked, Mr. Ciongoli confirmed that this figure is a reasonable measure of UMG's typical annual costs related to its recording and distribution business. 6/13/12 Tr. at 2092:14-2093:8 (Ciongoli). Mr. Ciongoli explained that the recording business involves enormous upfront expenses as described earlier through various recording, marketing, and distribution costs as well as artist advances, almost all of which must be spent before the company receives a single penny in revenue from the recording. In light of the challenges presented by the transforming music industry, it has been tougher and tougher for UMG to recoup these investments and to earn an appropriate return on its invested capital. Ciongoli WDT at 12, SX Trial Ex. 67.

544. The approach of Mr. Van Arman's independent labels to creating sound recordings differs slightly from that of major labels, and the scale of their operations tends to be smaller, but there also significant similarities. Van Arman WDT at 2, SX Trial Ex. 77. Much like the major labels, Mr. Van Arman's labels spend a great deal of time seeking out recording artists to sign—listening to demos, attending shows and music festivals, reading the music press, and taking referrals from other bands, labels, managers, and booking agents. Van Arman WDT

at 2, SX Trial Ex. 77. They also devote significant resources to promoting the music and touring of artists they have signed. Van Arman WDT at 2, SX Trial Ex. 77.

545. And the contribution of the record industry and artists is not merely economic in character. According to Raymond Hair, AFM musicians “make the finest music in the world. We make the music that people want to hear around the world.” 6/14/2012 Tr. 2222:13-18 (Hair). Mr. Hair further explained, “[Artists are] the ones who make the music. We’re the ones that—that go into that studio, sit down, sit there and create. And, you know, I mean, we’re the ones that make the chill bumps come up on your skin. We’re the ones that make you cry. We’re the ones that make you sad. We’re the ones that make you remember all the things that sometimes you don’t want to remember.” 6/14/2012 Tr. 2224:20-2225:5 (Hair). Mr. Van Arman testified, “Our business is in the world of arts, and we feel the product we release and the artists we support all make a very important cultural contribution.” Van Arman WDT at 1-2, SX Trial Ex. 77.

C. SoundExchange’s Rate Proposal Satisfies the Fourth Factor (§ 801(b)(1)(D)) – “Minimize Any Disruptive Impact on the Structure of the Industries Involved and on Generally Prevailing Industry Practices.”

546. The fourth statutory objective seeks to “minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices.” 17 U.S.C. § 801(b)(1)(D).

1. The Evidence Overwhelmingly Supports the Conclusion that the Rate Proposed by SoundExchange Will Not Have a Disruptive Impact on the SDARS.

547. Under this Court’s interpretation of disruption, there can be no serious dispute that Sirius XM will not likely be disrupted by adopting SoundExchange’s proposed rate.

548. During the last proceeding, the Court explained that a royalty rate would be disruptive “if it directly produces an adverse impact that is substantial, immediate and irreversible.” *SDARS I*, 73 Fed. Reg. at 4097. The Court found in particular that “an immediate increase to the upper boundary of the zone of reasonableness (*i.e.*, 13%) would be disruptive inasmuch as the SDARS have not yet attained a sufficient subscriber base nor generated sufficient revenues to reach consistent Earnings Before Interest, Taxes, Depreciation and Amortization (“EBITDA”) profitability or positive free cash flow. . . . In order not to significantly delay the attainment and amounts of EBITDA profitability and positive free cash flow, some rate within the zone of reasonableness that is less than 13% is warranted.” *Id.* The Court also found that a rate “lower than the upper boundary most strongly indicated by marketplace data” was warranted to avoid “any undue constraint on the SDARS’ ability to successfully undertake satellite investments planned for the license period.” *Id.*

549. This Court, however, recognized that causing higher costs or lower profits is not sufficient to qualify as disruptive. *Id.*; *see also* Lys WDT at 21, SX Trial Ex. 80 (“As a matter of economics, ‘disruptive’ does not mean that a firm or an industry could not exhibit *any* decline in financial performance.”).

550. Dr. Ordover believes that from the standpoint of economically sound competition policy, and not as a matter of legal interpretation of the statutory language, the fourth policy objective should be limited to a temporary facilitation of the ability of nascent and emerging services to gain consumer acceptance and potentially achieve an efficient scale of operation. Sound competition policy would not regard the fourth objective as advocating protection to an established service from the rigors of competition, either from existing services or from future entrants. Ordover WDT at 5-6, SX Trial Ex. 74. As Dr. Ordover points out, a market economy

disrupts businesses all the time: “That’s what a market economy is all about.” 6/14/12 Tr. 2304:9-15 (Ordoover).

551. Thus, once a company achieves a material presence in the marketplace, as Sirius XM indubitably has, use of the fourth policy factor to reduce market-based rates should be considered only with extreme caution, and should never be used to shield the service at issue from the full rigors of vigorous marketplace competition. Doing so is likely to harm consumers and also impede (or deter) entry and expansion of rival services. Ordoover WDT at 5-6, SX Trial Ex. 74.

552. Based on these considerations, it is clear that in this proceeding there is no need to depart from market rates based on the disruption factor.

a. Sirius XM Is in a Strong Financial Position and Able to Pay Market Rates for Sound Recording Royalties

553. Sirius XM has claimed in this proceeding that its robust financial position is tenuous and that during the coming rate period it faces economic uncertainty. Sirius XM’s financial performance over the current rate term and its short-term financial forecasts show nothing less than a remarkable financial turnaround when compared to the information presented to this Court in the prior proceeding. This turnaround, during one of the worst economic periods in American history, was made possible because Sirius XM was able to amass the subscriber base necessary to support long-term sustained EBITDA profitability and free cash flow. Attaining that subscriber base is key to Sirius XM’s business because as Dr. Noll explained, “[o]nce you put up a satellite and you’re broadcasting content down from it, the marginal cost of an additional user plugging into that broadcast is zero” 8/14/12 Tr. 3486:8-13 (Noll). This is in stark contrast to the last proceeding where this Court found a potential disruptive impact

because “the SDARS have not yet attained a sufficient subscriber base.” *SDARS I*, 73 Fed. Reg. at 4097.

554. At the end of 2007 (the start of this rate period), Sirius and XM had 17.3 million subscribers. SX Trial Ex. 016 at SXM_CRB_DIR_00021684 (p. 18).⁴³ By the end of this year, Sirius XM has announced that, with a net increase of 1.6 million subscribers in 2012, it will attain 23.5 million subscribers. SX Trial Ex. 217 at 7. Thus, during this past rate period, Sirius XM will have increased subscribers by 34% with a net addition of 6.2 million subscribers. In fact, Sirius XM’s subscriber count now outpaces DirecTV, Dish Network, Time Warner Cable, Charter, and Cablevision, and Sirius XM is roughly equivalent in subscribers with Comcast. Lys WRT at SX Ex. 211-RP, p. 11, SX Trial Ex. 240. Sirius XM was able to achieve this enormous growth notwithstanding the fact that auto sales during the period were at their lowest level since the early 1980’s. Meyer WDT at 16, SXM Dir. Trial Ex. 5. To put things in perspective, between 2005 and 2007, auto sales ranged from 16.1 to 16.9 million cars and light vehicles sold in the United States each year. SX Trial Ex. 16 at SXM_CRB_DIR_00021673. In contrast, for 2008 to 2011, auto sales never topped 13.2 million and were as low as 10.4 million in 2009. *Id.*

555. Even with these horrible economic conditions, Sirius XM thrived and built a subscriber base to achieve consistent positive adjusted EBITDA and free cash flow. It is not surprising then, that as auto sales slowly return to pre-recession levels, Lys WRT at SX Ex. 211-RP, p. 45, SX Trial Ex. 240 (projecting auto sales to reach 16.6 million by 2016), analysts and Sirius XM’s management believe that it is poised for further significant growth over the coming years. Lys WDT at 8, 10-11, SX Trial Ex. 80 (quoting Mel Karmazin from November 2011:

⁴³ If one counts 2007 as the beginning of the current rate period, then Sirius and XM started with only 13.7 million subscribers and will have attained a 72% increase in subscribership during the period. SX Trial Ex. 016 at SXM_CRB_DIR_00021684 (p. 18).

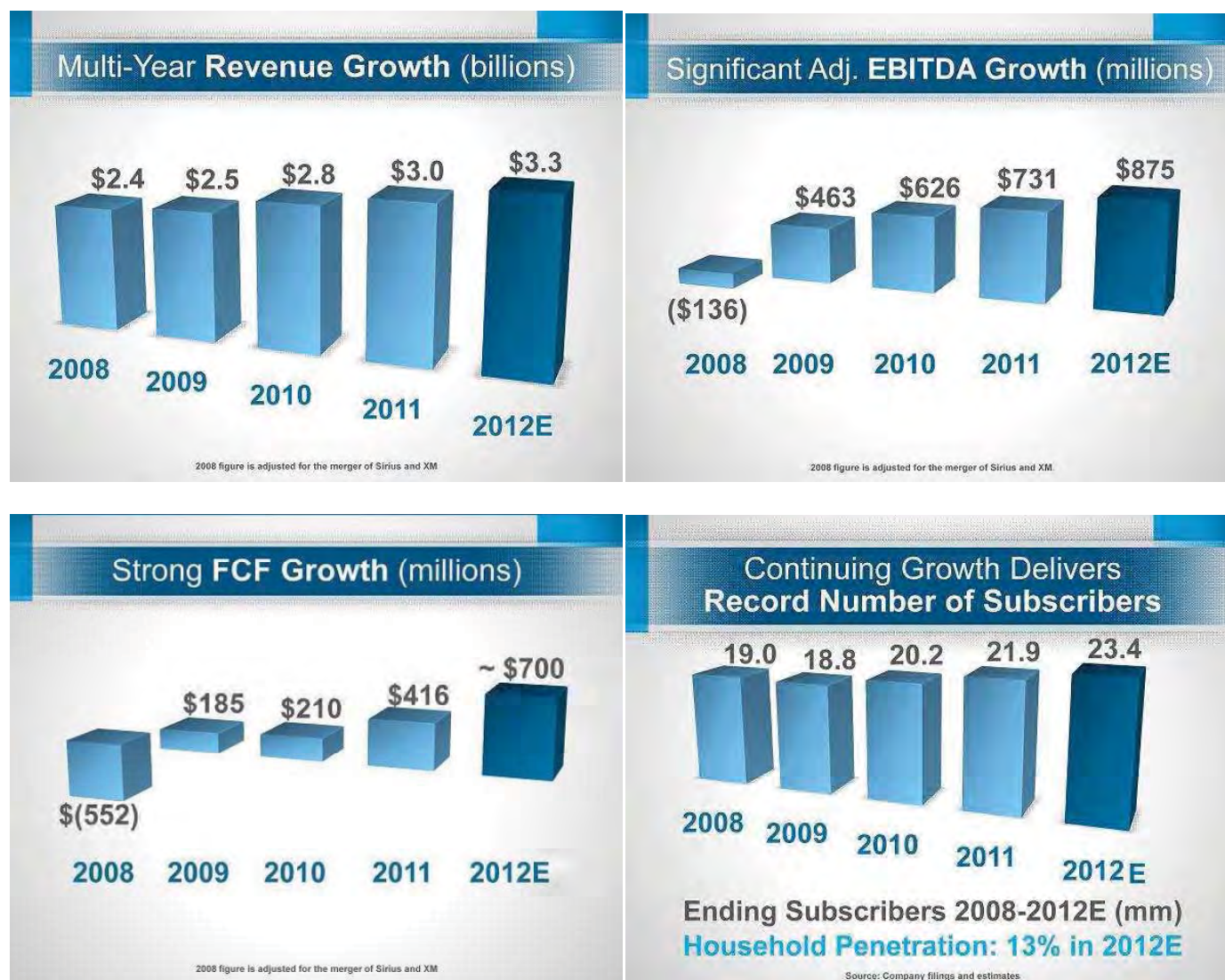
“we believe we have many, many years of subscriber growth ahead of us”). Indeed, as Dr. Lys testified, Wall Street analysts uniformly believe that Sirius XM’s subscriber base will continue to grow in the coming years notwithstanding any increased competition from Internet. *Id.* at 11-12 & fig. 2; *see also, e.g.*, Ordoover WDT at 6 n. 2, SX Trial Ex. 74 (citing a Morgan Stanley report indicating that Sirius XM “can sustain subscriber momentum”). Likewise, Sirius XM’s own internal projections show that Sirius XM believes it will have between [REDACTED] million and [REDACTED] million subscribers by 2016. SX Trial Ex. 9 at 39 (2011 Long Range Scenario).

556. The significantly expanded subscriber base has paid off, providing Sirius XM with a consistent stream of revenue and profits. In 2007, Sirius and XM had combined revenue of only \$2.1 billion. SX Trial Ex. 016 at SXM_CRB_DIR_00021680. Now, at the end of 2012, Sirius XM’s revenue will have risen 62% to \$3.4 billion. SX Trial Ex. 217 at 7. Likewise, in 2007, Sirius and XM had combined adjusted EBITDA of *negative* \$565 million.⁴⁴ SX Trial Ex. 016 at SXM_CRB_DIR_00021681 (p. 15). Now, at the end of 2012, Sirius XM’s adjusted EBITDA will have risen dramatically to approximately *positive* \$900 million, an increase of nearly \$1.6 billion. SX Trial Ex. 217 at 7. Free cash flow tells the same story, rising from *negative* \$505 million in 2007 to approximately *positive* \$700 million in 2012, an increase of \$1.2 billion.⁴⁵ SX Trial Ex. 016 at SXM_CRB_DIR_00021682 (p. 16); SX Trial Ex. 217 at 7;

⁴⁴ EBITDA (earnings before interest, taxes, depreciation, and amortization) roughly measures the cash profitability of a company’s sales from an operating perspective. Lys WDT at 19, SX Trial Ex. 80. In deciding royalty rates for 2007 through 2012, the Copyright Royalty Board considered both EBITDA and free cash flow in assessing whether the proposed rates would be disruptive. *Id.* Sirius XM’s management has likewise emphasized EBITDA and free cash flow as “primary driver of Sirius XM’s value.” *Id.*

⁴⁵ Free cash flow is the measure of cash generated by a company that is not needed to fund the period’s operations or to reinvest in the firm’s future operations. Lys WDT at 18-19, SX Trial Ex. 80. In other words, the computation of free cash flow explicitly excludes the cash required to fund capital investments (e.g., facilities, satellites) that a company like Sirius XM must undertake to support its ongoing and expanded operations. *Id.* at 19. Free cash flow is

see also Lys WDT at 18-21, SX Trial Ex. 80. Sirius XM regularly touts this dramatic growth to shareholders, including in the slides below from its May 2012 shareholder presentation.



Lys WRT at SX Ex. 211-RP, pp. 10, 36-38, SX Trial Ex. 240. In fact, since this shareholder presentation, Sirius XM has raised its guidance for subscribers (a second time) to 23.5 million,

thus a measure of cash available to the company to deploy as it sees fit, including as payments to shareholders in the form of a dividend or stock repurchase, or to repay debt, without reducing investments in the business. *Id.* As Sirius XM explains, free cash flow is a useful metric “to determine cash available for future subscriber acquisition and capital expenditures, to repurchase or retire debt, to acquire other companies and to evaluate our ability to return capital to stockholders.” *Id.* Free cash flow is the primary measure used in (equity) valuation. *Id.*

revenue to approaching \$3.4 billion, and adjusted EBITA to approximately \$900 million. SX Trial Ex. 217 at 7. As Mel Karmazin recently explained to investors, Sirius XM's revenue is not just growing, it is accelerating. 8/13/12 Tr. 3179:7-10 (Frear). And it is not just revenue that is growing at a rapid a rapid pace. As Dr. Lys testified (Lys WRT at 30, SX Trial Ex. 240):

- **Net income** grew by 892 percent from 2010 to 2011,
- **Free cash flow** grew by 98 percent from 2010 to 2011,
- **Adjusted EBITDA** grew by 17 percent from 2010 to 2011.

As Sirius XM boasts, it is "the world's largest pure-play audio entertainment company," and "one of the few large media companies currently growing revenue and EBITDA." Ordoover WDT at 6 n. 2, SX Trial Ex. 74. Indeed, Sirius XM's annual revenue is now hundreds of millions of dollars greater than Clear Channel's annual revenue. Lys WRT at SX Ex. 211-RP, p. 26, SX Trial Ex. 240.

557. Moreover, Sirius XM's subscriber base is continuing to grow rapidly, faster than at any time since the merger of Sirius and XM. Lys WRT at 30-31, SX Trial Ex. 240; SX Trial Ex. 217 at 7. Sirius XM announced that 2011 was the "best year of subscriber growth since the merger of Sirius and XM." Lys WRT at 30, SX Trial Ex. 240. But the first and second quarters of 2012 have set even higher post-merger records, even in the face a 12 percent base subscription price increase that Sirius XM implemented in January 2012. Lys WRT at 31, SX Trial Ex. 240; SX Trial Ex. 217 at 7.

558. As these current financials demonstrate, Sirius XM could already pay SoundExchange's proposed royalty rates and maintain positive adjusted EBITDA and free cash flow, even if it did not pass a single penny of those royalty costs on to subscriber. Moreover, as discussed below, forecasts from Sirius XM and analysts demonstrate that Sirius XM will be able

to pay SoundExchange's royalty rate without any significant risk of disruption to Sirius XM's business. As Mel Karmazin candidly admitted in an April 2012 interview with Forbes: "we're a very profitable, successful company. If we want a performer, we can afford to pay more than anybody else can because we're making more."⁴⁶ Lys WRT at 31 & SX Ex. 238-RP, SX Trial Ex. 240. Dr. Lys agrees that Sirius XM's current operating performance demonstrates the company's capacity to pay performing artists and record companies market rates for music. Lys WRT at 31, SX Trial Ex. 240

b. Sirius XM's Internal Forecasting and Analysts' Projections Demonstrate that SoundExchange's Rate Proposal Will Not Likely Disrupt Sirius XM's Business

559. As Dr. Lys testified, disruption analysis is necessarily forward-looking as to the impact on Sirius XM's business during the coming rate term from 2013 to 2017. Lys WDT at 21, SX Trial Ex. 80. Such an analysis must project the *future* financial performance of Sirius XM because the likelihood of disruption depends not on how well Sirius XM did in the past, but how it will likely perform in the future. *Id.* at 21. Therefore, in order to assess the likelihood that SoundExchange's rate proposal would disrupt Sirius XM's business, Dr. Lys analyzed a range of forecasts from analysts and Sirius XM, including reasonably likely downside forecasts. *See* Lys WDT at 21-30, SX Trial Ex. 80; Lys WRT at 3-5, 11-14, 21-22, Appendix A, SX Trial Ex. 240. This is exactly the kind of analysis that Professor Stowell suggested should be done, but failed to undertake. *See* Stowell WRT at 6, SXM Reb. Trial Ex. 7 (suggesting that a "sophisticated investor" would examine "reasonably likely downside scenarios"). In particular, Dr. Lys examined the effect that the proposed rates would have on Sirius XM's projected

⁴⁶ Bercovici, Jeff, "Karmazin: Rush Limbaugh Should Want to Work for Sirius XM," Forbes, April 6, 2012, available at <http://www.forbes.com/sites/jeffbercovici/2012/04/06/karmazin-rush-limbaugh-should-want-to-work-for-sirius-xm/>, accessed on June 27, 2012 (SX Ex. 238-RP).

EBITDA and free cash flow, two financial measures that this Court previously focused on during the first SDARS proceeding. *See* Lys WDT at 21, SX Trial Ex. 80. Based on these analyses, Dr. Lys concluded that SoundExchange's rate proposal will not likely disrupt Sirius XM's business.

560. Dr. Lys first applied SoundExchange's rate proposal to forecasts from Morgan Stanley. *See* Lys WDT at 21-30, SX Trial Ex. 80. Dr. Lys selected Morgan Stanley for this analysis because Morgan Stanley's forecasts were at or below the median forecast of other analysts and because Morgan Stanley's forecasts went out a full five years, farther than some analysts. 8/20/12 Tr. 4018:3-13 (Lys); 8/20/12 Tr. 4130:5-4131:8 (Lys); Lys WDT at 22-23, SX Trial Ex. 80; Lys WRT at 12-13 & fig. 4, SX Trial Ex. 240. As Dr. Lys testified, academic research shows that the median analyst forecast is the optimal forecast to use because it is unbiased, *i.e.*, on average not likely to be too high or too low, while the academic literature shows the mean analyst forecast is slightly positively biased, though on a very small magnitude. 8/20/12 Tr. 4016:11-4017:16 (Lys); Lys WRT at 12, SX Trial Ex. 240. In other words, the literature shows that "the median forecast is actually the best forecast" to use and "the mean is not as good a forecast." 8/20/12 Tr. 4130:17-21 (Lys). The Morgan forecasts are at (or below) the median of the analysts' projections, implying that the Morgan Stanley forecasts are, if anything, conservative. Lys WRT at 12-13 & fig. 4, SX Trial Ex. 240

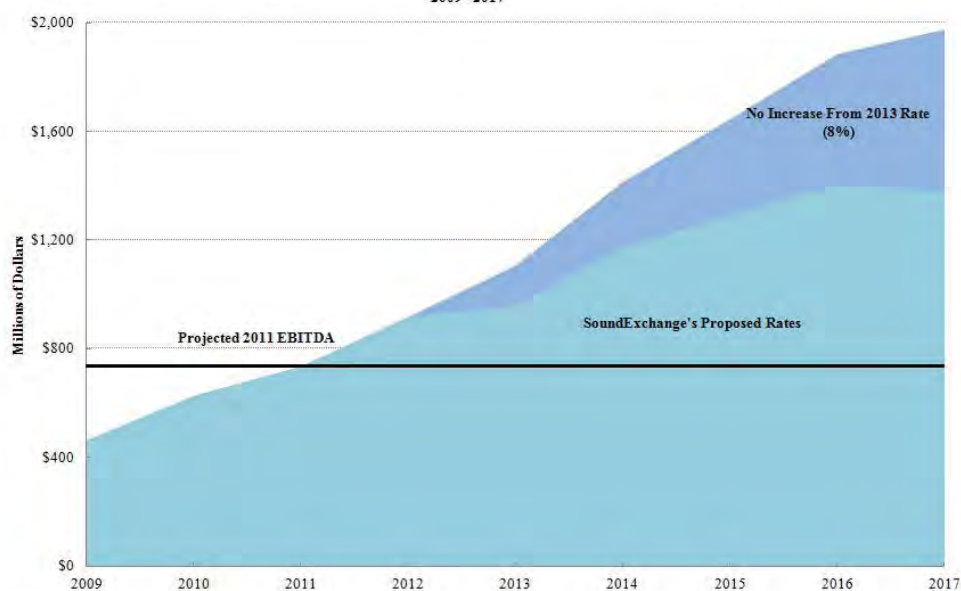
561. Dr. Lys's analysis of Morgan Stanley's forecasts shows that Sirius XM could easily pay SoundExchange's proposed rates without disrupting Sirius XM's business. Dr. Lys found that Sirius XM's projected EBITDA and free cash flow would actually continue to grow well above 2011 and 2012 levels notwithstanding higher royalty rates. Lys WDT at 24-30, Attachments 9-10, SX Trial Ex. 80. Indeed, Dr. Lys found this to be true even when he conservatively assumed that Sirius XM would pay royalties on 100% of gross revenue, which

has not historically been the case, and that Sirius XM would not “pass on” any of the additional royalty amounts through an increase in the U.S. Music Royalty Fee (or other new increase in subscriber prices), which is again contrary to past behavior. *See Id.* at 24-25. Notwithstanding those conservative assumptions, Dr. Lys concluded that:

- Sirius XM’s projected EBITDA would be \$917.4 million in 2012, \$958.9 million in 2013 (the first year of the new royalty) and \$1,377.2 million in 2017 (the fifth year of the new royalty rate), all substantially higher than Sirius XM’s 2011 EBITDA of \$731 million. *Id.* at 24.
- Sirius XM’s free cash flow would increase to \$741.6 million in 2012, \$725.0 million in 2013 and to over \$900 million in 2015 and 2016, all substantially higher than Sirius XM’s 2011 free cash flow of \$416 million. *Id.* at 26.

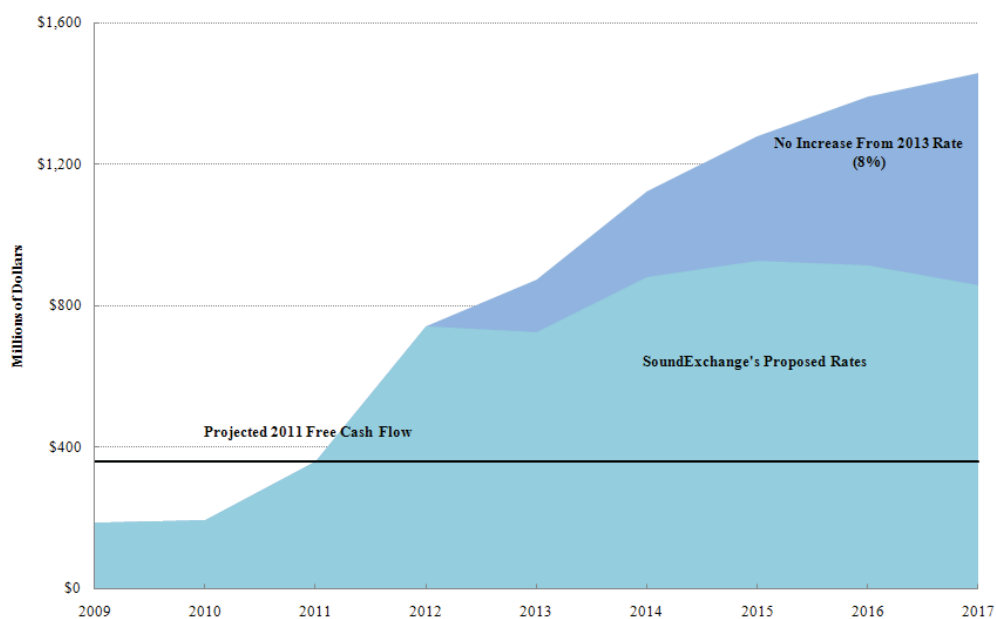
The figures below depict the significant projected EBITDA and free cash flow growth that Sirius XM will still attain under SoundExchange rate proposal (Lys WDT at 25 fig. 3, 27 fig. 5, SX Trial Ex. 80):

Figure 3
Sirius XM
Historical and Projected EBITDA Assuming Sirius XM Pays Royalties on 100% of Total Revenue
2009 - 2017



Note: See Attachment 9 Notes.

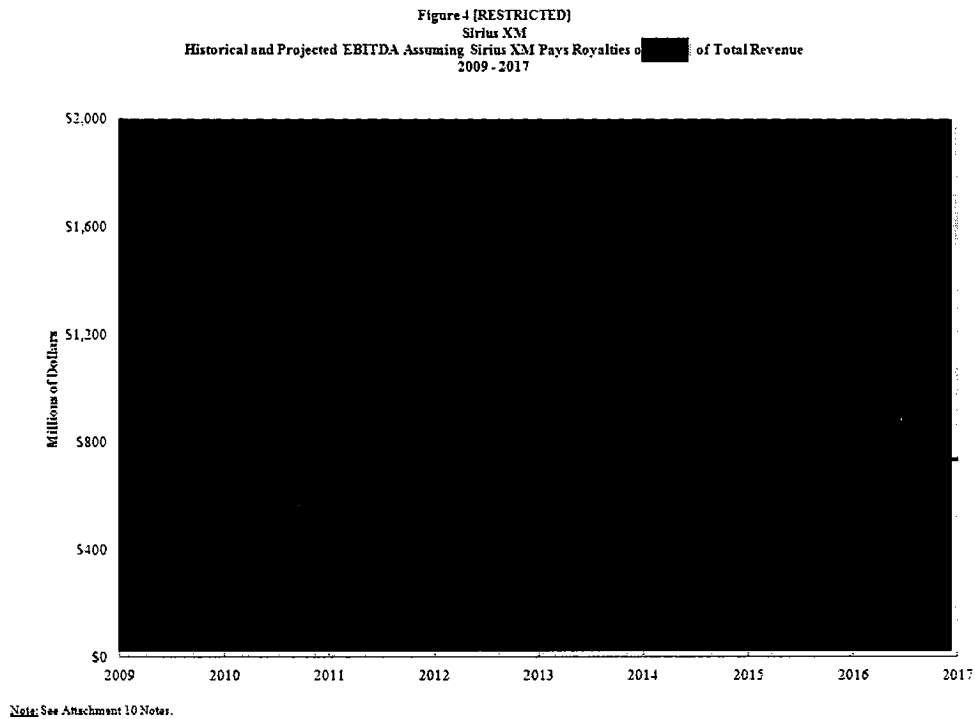
Figure 5
Sirius XM
Historical and Projected Free Cash Flow Assuming Sirius XM Pays Royalties on 100% of Total Revenue
2009 - 2017

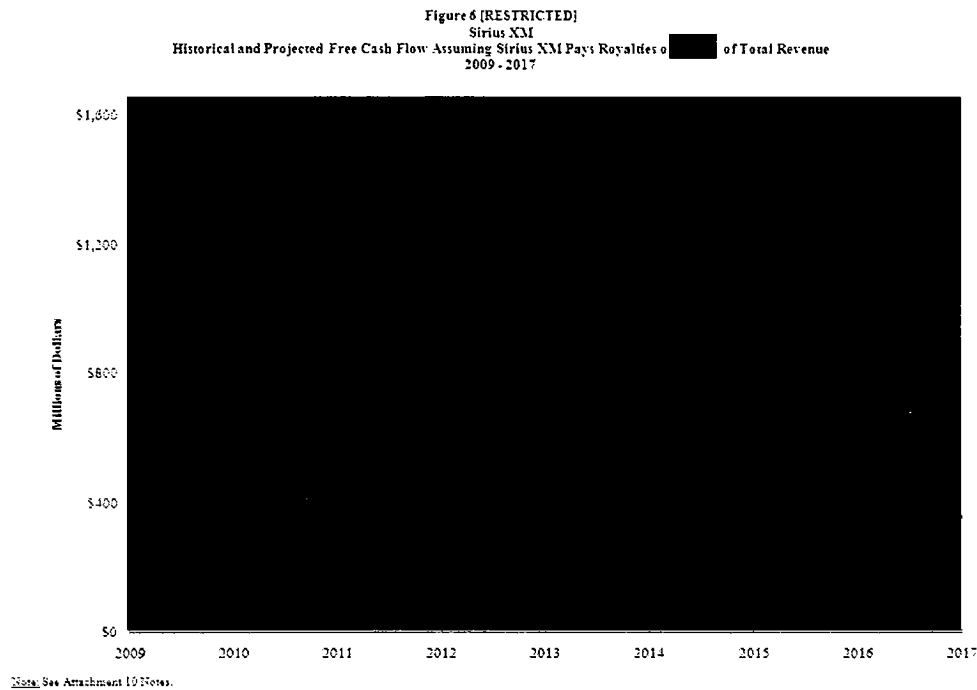


Note: See Attachment 9 Notes.

562. Moreover, Dr. Lys completed the same analysis assuming that Sirius XM would only make royalty payments on approximately [REDACTED] percent of its total revenue, as has it has

historically. The results are even stronger: Sirius XM's EBITDA projections would rise to [REDACTED] million in 2013 (the first year of the new royalty) and [REDACTED] million in 2017 (the fifth year of the new royalty rate) while Sirius XM's free cash flow would increase from [REDACTED] million in 2012 to [REDACTED] million in 2013 and to [REDACTED] million in 2017. *Id.* at 25, 27, Attachment 10. The figures below depict Sirius XM's projected EBITDA and free cash flow growth under those assumptions (Lys WDT at 26 fig. 4, 28 fig. 6, SX Trial Ex. 80):





Notably, again, all of these analyses were done assuming that Sirius XM would not pass on a single penny of costs to subscribers, which is contrary to Sirius XM's past practice. *See id.* at 29-30; *see also* Section VIII.C.1.c (discussing that Sirius XM will likely pass on some or all of the costs to subscribers). In fact, Dr. Lys concluded, based on Morgan Stanley's projections and these conservative assumptions (paying on 100% of revenue and no pass-through to subscribers), that the proposed royalty rate would have to be substantially greater (more than 31 percent starting in 2013 and more than 37 percent starting by 2017) before Sirius XM would experience negative EBITDA or negative free cash flows in any single year. Lys WDT at 3, 28, SX Trial Ex. 80; 8/20/12 Tr. 4035:18-4036:20 (Lys).

563. Dr. Lys next analyzed Sirius XM's own internal forecasts XM for its performance through 2016, including both a "baseline" (or "conservative") scenario and a "downside"

scenario.⁴⁷ Lys WRT at 3-5, SX Trial Ex. 240. As Dr. Lys testified: “[A]n excellent way to test the disruption claims put forward by Sirius XM is to use Sirius XM’s own internal analyses as to its likely performance during the upcoming rate term. This is especially true where Sirius XM has provided multiple performance scenarios, including both a ‘baseline’ scenario and ‘downside’ scenario, which Sirius XM describes as ‘[REDACTED]’

[REDACTED]

[REDACTED].” *Id.* at 3-4; *see also* SX Trial Ex. 9 at 37.⁴⁸

564. Dr. Lys found that Sirius XM's internal projections are generally [REDACTED] with the Morgan Stanley projections that he used in his written direct testimony. Lys WRT at 11, SX Trial Ex. 240. Sirius XM's 2011 "baseline" adjusted EBITDA projection for 2012 through 2016 is [REDACTED] than Morgan Stanley's adjusted EBITDA forecast, but its "downside" projection is [REDACTED] Morgan Stanley's adjusted EBITDA forecast in four of the five years. *Id.* With respect to free cash flow, both Sirius XM's "baseline" and "downside" scenarios are [REDACTED] than Morgan Stanley's projection. *Id.* As Dr. Lys explained, this provides additional evidence that the Morgan Stanley projections are [REDACTED], and further supports that Sirius XM's claims of disruption in this proceeding are exaggerated. *Id.*

⁴⁷ As Dr. Lys testified, he originally did this work as part of his amended direct testimony, but due to his illness and the parties agreement was not able to put this into evidence until his rebuttal testimony. 8/20/2012 Tr. 4020:6-10 (Lys).

⁴⁸ As this document explains: [REDACTED]

[REDACTED]

[REDACTED] SX Trial Ex. 9 at 6, 37.

565. Dr. Lys again analyzed the effect of SoundExchange's proposed royalty rates on projected adjusted EBITDA and free cash flow using Sirius XM's internal forecasts. His analysis again assumed that (a) Sirius XM will pay royalties on 100 percent of total revenue, which as noted earlier is not historically accurate, and (b) that Sirius XM will not pass any of the increased royalty expenses on to subscribers in the form of the U.S. Music Royalty Fee, which as described in Section VIII.C.1.c is contrary to Sirius XM's past practice and [REDACTED]. *Id.* at 4. Nevertheless, even with these highly conservative assumptions, Sirius XM's business would not be disrupted; to the contrary, Sirius XM would continue its rapid growth:

2011 "Baseline" Scenario

- Adjusted EBITDA would grow to \$[REDACTED] million in 2012, \$[REDACTED] million in 2013 (the first year of the new royalty rate) and \$[REDACTED] million in 2016 (the fourth year of the proposed new royalty rate).
- Free cash flow would grow to \$[REDACTED] million in 2012, \$[REDACTED] million in 2013 (the first year of the new royalty rate) and \$[REDACTED] million in 2016 (the fourth year of the new royalty rate).

2011 "Downside" Scenario

- Adjusted EBITDA would grow to \$[REDACTED] million in 2012, \$[REDACTED] million in 2013 (the first year of the new royalty rate) and \$[REDACTED] million in 2016 (the fourth year of the new royalty rate).
- Free cash flow would grow to \$[REDACTED] million in 2012, \$[REDACTED] million in 2013 (the first year of the new royalty rate) and \$[REDACTED] million in 2016 (the fourth year of the new royalty rate).

Id. at 4-5, Appendix A.1 & A.2. As with the Morgan Stanley estimates, all of these figures under both the baseline and downside scenarios are [REDACTED] than Sirius XM's actual adjusted EBITDA for 2011 of \$731 million and actual free cash flow for 2011 of \$416 million.

Id.

566. Dr. Lys completed identical analyses using Sirius XM's 2010 internal forecasts, which Sirius XM shared with the credit ratings agencies in October 2010. Lys WRT at 5, Appendix A.3 & A.4, SX Trial Ex. 240. His conclusions remained the same: SoundExchange's proposed rates will not have a disruptive impact on Sirius XM. *Id.* at 5. In fact, Dr. Lys found that this holds true even using Sirius XM's 2010 "downside" scenario, which assumes among other things, that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. *Id.* On top of that, Dr. Lys again added the

conservative assumptions that Sirius XM would pay royalties on 100 percent of total revenue and that it will not pass any additional royalty expenses on to subscribers (via the U.S. Music Royalty Fee or otherwise). *Id.* Even with all of these conservative assumptions, under Sirius XM's "downside" projections, it will [REDACTED]

during the upcoming rate term with the royalty rate increases that SoundExchange proposes. *Id.*

567. To further test the robustness of his results, Dr. Lys performed a variety of additional sensitivity analyses based on other downside scenarios. Lys WRT at 22, Appendix A,

SX Trial Ex. 240. Again for each of these scenarios, Dr. Lys assumed, contrary to the evidence, that Sirius XM would pay on 100 percent of total revenue and that it will not pass any additional royalty expenses on to subscribers (via the U.S. Music Royalty Fee or otherwise). *Id.* at Appendix A. Nevertheless, each of the scenarios showed that Sirius XM would still earn positive EBITDA and free cash flow during the coming rate term under SoundExchange's proposed rates. *Id.* For example, under Morgan Stanley's "Bear Case" downside scenario, Sirius XM would still earn roughly \$3.2 billion in cumulative adjusted EBITDA and roughly \$3.3 billion in cumulative free cash flow over the upcoming rate term. *Id.* at Appendix A.8. Even under much harsher projections, such as assuming that Sirius XM's revenue would go back to 2011 levels ("constant revenue") but that Sirius XM's could not otherwise adjust costs (including additional synergies that are already known will go in effect), Sirius XM would still earn over \$2.4 billion in cumulative adjusted EBITDA and roughly \$900 million in cumulative free cash flow over the rate term.⁴⁹ *Id.* at Appendix A.5. As Dr. Lys concluded, these sensitivity analyses illustrate, contrary to the claims of Sirius XM's witnesses, that the proposed rates would unlikely disrupt the company, even if (a) auto sales are lower than currently

⁴⁹ Effectively, this last analysis shows that had Sirius XM been required to pay SoundExchange's proposed royalty rates last year (in 2011), it still would have earned significant positive adjusted EBITDA and free cash flow. Given that in the history of Sirius XM (and its predecessors) it has earned higher revenue in each year it offered service to the public, including during the depths of the recession, this scenario is highly unlikely. *See, e.g.,* SX Trial Ex. 016 at SXM_CRB_DIR_00021680. Indeed, Sirius XM has already guided investors that 2013 will be an even better year for the company than 2012. Lys WRT at 41, SX Trial Ex. 240. And Sirius XM has already told investors that it expects 2012 revenues to be over 10% higher than 2011 revenues, that 2012 adjusted EBITDA will be roughly 23% higher than in 2011, and that 2012 free cash flow will be roughly 68% higher than in 2011. *Compare* SX Trial Ex. 217 at 7 (2012 guidance) *with* Lys WRT at SX Ex. 211-RP, pp. 10, 36-38, SX Trial Ex. 240. This last analysis assumes that all of these gains will be lost and that the better 2013 never materializes.

expected, (b) competition erodes Sirius XM's subscriber base, or (c) the actual revenue, EBITDA, and free cash flow growth rates fall to zero. *Id.* at 22.

568. Finally, after Dr. Lys's written testimony was submitted, Morgan Stanley issued a new report offering detailed financial projection for two royalty rate scenarios, which Sirius XM entered into evidence. SXM Reb. Trial Ex. 12 at 9. In its baseline scenario, Morgan Stanley now assumes that the royalty rates will begin at 9% in 2013 and rise 1% per year to end at 13%. SXM Reb. Trial Ex. 12 at 9. In its bear case scenario, Morgan Stanley assumes that the royalty rates will follow SoundExchange's rate proposal and begin at 12% in 2013 and rise 2% per year to end at 20%. SXM Reb. Trial Ex. 12 at 9. In both scenarios, Morgan Stanley projections show that Sirius XM will earn billions of dollars in profits during the coming rate term. SXM Reb. Trial Ex. 12 at 9. In fact, Morgan Stanley projects that in each year, under either scenario, Sirius XM's EBITDA will be over \$1 billion, far higher than Sirius XM has ever achieved in the history of its company. SXM Reb. Trial Ex. 12 at 9. Moreover, Morgan Stanley projects that in spite of the rate increases, Sirius XM's EBITDA will increase each year under either scenario. SXM Reb. Trial Ex. 12 at 9. In total, Morgan Stanley projects that Sirius XM will earn \$7.69 billion in EBITDA profits in the base scenario (rates ending at 13%) and \$6.74 billion in EBITDA profits in the bear scenario (rates ending at 20%). SXM Reb. Trial Ex. 12 at 9.

569. Simply stated, earning \$6.74 billion in profits is not disruption and the fact that Sirius XM's profits will likely be fractionally lower based on higher royalty rates is not evidence of disruption. Morgan Stanley's analysis demonstrates just how conservative Professor Lys's projections were. A summary of Morgan Stanley's projections is in the table below (SXM Reb. Trial Ex. 12 at 9):

EBITDA (\$ thousands)	2013	2014	2015	2016	2017	Total
Base Case (9%-13%)	\$1,123.2	\$1,401.5	\$1,549.0	\$1,724.3	\$1,889.5	\$7.69 billion
Bear Case (12%-20%)	\$1,038.9	\$1,273.3	\$1,368.3	\$1,483.1	\$1,578.2	\$6.74 billion

i. Sirius XM's Public Filing With the SEC Demonstrates Management's Views That It Will Likely Earn Billions of Dollars in Profits During the Coming Rate Term

570. In the second quarter of 2012, Sirius XM recognized \$3.0 billion onto its balance sheet related to management's expectation that Sirius XM would more likely than not be able to use substantially all of its prior net operating losses "NOLs" as a tax benefit in the future. *See* SX Trial Ex. 217 at 7; 8/20/12 Tr. 4058-4061 (Lys). Under United States tax law, companies carry forward prior losses (NOLs) to future periods, effectively allowing them to shelter future income from taxes. 8/20/12 Tr. 4058:10-16 (Lys). Because companies can use NOLs from earlier time periods to reduce their tax obligations in subsequent periods, NOL carryforwards are recognized as deferred tax assets on the balance sheet under U.S. GAAP. Lys WRT at 6, SX Trial Ex. 240. However, U.S. GAAP allows companies to only book deferred tax assets to the extent that it is "more likely than not" to be able to take advantage of those tax benefits before NOL carryforwards expire. *Id.*; 8/20/12 Tr. 4059:1-14 (Lys). Deferred tax assets in excess of the realizable benefit must be written off and cannot be carried on the balance sheet. Lys WRT at 6, SX Trial Ex. 240. In previous years, Sirius XM's financial statements recognized a \$3.3 billion writedown, or "valuation allowance," for its NOLs, *i.e.*, the NOLs still existed, but, at the time, Sirius XM's management then did not believe that the company would generate enough income before the NOLs' expiration to take full advantage of them to reduce future taxes. *Id.*

Consistent with Sirius XM's impressive turnaround, Sirius XM's management has changed its

assessment and now believes that the company will be “[REDACTED]
[REDACTED].” *Id.*; SX Trial Ex. 15 at 38 (2012 Sirius XM Budget).⁵⁰

571. As Dr. Lys testified, in order to rebook the NOLs on Sirius XM’s balance sheet, Sirius XM had to prove to its auditors that Sirius XM is doing so well that in the long run (*i.e.*, not the next couple of years, but 4, 5, 6 years down the road), it will more likely than not earn sufficient income to utilize the NOL carryforwards. 8/20/12 Tr. 4059:1-4060:19 (Lys). That is because U.S. GAAP is “very conservative,” so auditors are generally averse to revaluing assets unless there is credible evidence. *Id.* As Sirius XM disclosed in public filings, two of the four main criteria used to evaluate the NOL carryforward are (1) Sirius XM’s ability in the future “to utilize net operating losses within the carryforward period” and (2) Sirius XM’s “expectation of future earnings.” Lys WRT at SX Ex. 231-RP, p. 34, SX Trial Ex. 240 (Sirius XM 2011 10-K). To evaluate these criteria, Sirius XM engaged PricewaterhouseCoopers LLP (“PwC”) to project its future earning and expected utilization of net operating losses prior to their expiration. Lys WRT at 6 n.18, SX Trial Ex. 240. As part of that engagement, Sirius XM and PwC projected that Sirius XM would [REDACTED]
[REDACTED]. *Id.*

572. Sirius XM’s position that it will be sufficiently profitable to rebook the NOLs confirms several points. First, given that NOL analysis depended on long-term forecasts, Sirius XM’s statements in this Court that they do not rely on such forecasts “cannot be true.” 8/20/12

⁵⁰ Sirius XM’s criterion for reversing the write-down is consistent with the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Section 740: *Income Taxes*. Lys WRT at 6 n.18, SX Trial Ex. 240. As explained in ASC Section 740-10-30-5, deferred tax assets such as net operating losses carried forward must be “more likely than not to be realized.” *Id.*

Tr. 4059:1-4060:19 (Lys). Second, and more fundamentally, Sirius XM's recognition of the NOL tax benefit demonstrates that Sirius XM's management believes, contrary to the testimony of these same individuals submitted to this Court, that it will likely earn billions of dollars in profits during the coming rate term, despite their claims of disruption to this Court.

ii. Analyst and Internal Sirius XM Forecasts Are Some of the Best Tools to Analyze any Potential Disruption

573. As Dr. Lys testified, the peer-reviewed empirical literature shows that “analyst forecasts are one of the most reliable sources of future performances.” 8/20/12 Tr. at 4015:18-4016:10 (Lys). Dr. Lys, of course, recognized that projections are subject to some forecasting error (either positive or negative), and the confidence interval widens as forecasts go further into the future. *Id.* at 4018:14-4019:3 (Lys). Forecasts are after all attempts to predict the future, which nobody can predict with absolute certainty. But as Dr. Lys testified, analyst forecasts, including longer range forecasts, are reliable and are shown in the published, peer-reviewed literature to be the “best thing you can do” for analyzing future performance. *Id.* at 4019:15-21 (Lys); *see also id.* at 4016:3-6 (Lys) (testifying that the significant empirical, peer-reviewed literature shows that “if you want to know what a company does in the next three, four years, you would be a fool not to rely on analysts”). Moreover, the literature demonstrates that the median analyst forecast is the best forecast to use, which is why Dr. Lys focused on the Morgan Stanley forecasts because they are almost always the median. *Id.* at 4016:11-4018:13 (Lys). Dr. Lys further testified that internal company forecasts also contain important information about future performance, noting that “the internal forecasts have access to information that the external forecasts, the analyst forecasts do not have.” *Id.* at 4020:9-16 (Lys); Lys WRT at 3-4, SX Trial Ex. 240.

574. Tellingly, despite Professor Stowell's attempt to cast doubt on the reliability of equity analyst forecasts, in his testimony, Professor Stowell relied on various analyst forecasts, including those of Morgan Stanley and Lazard, to inform his opinion on Sirius XM's future sources of revenue, subscribers, and growth. Stowell WDT at 8-9, SXM Dir Trial Ex. 18. Indeed, Professor Stowell relied on the very same Morgan Stanley report that Dr. Lys relied upon. *Id.* Moreover, Professor Stowell also cited Goldman Sachs and Stifel Nicolaus to describe the then-expected merger synergies, cash flow, and margins. *Id.* at 15. Mr. Frear and Mr. Meyer also relied on analyst projections in their testimony. *See* Lys WRT at 21, SX Trial Ex. 240; *see also e.g.*, Frear WDT at 18, SXM Dir Trial Ex. 12; Meyer WDT at 19, SXM Dir Trial Ex. 5. Likewise, the company regularly discusses analyst forecasts for auto sales with investors. *See, e.g.*, Lys WRT at SX Ex. 211-RP, pp. 26, 34, 45, SX Trial Ex. 240.

iii. Sirius XM's Claim About the Inaccuracy and Bias of Forecasts Is Substantially Overstated

575. In attempt to undermine the use of forecasts, Mr. Stowell argues that equity analysts' projections are biased and often "unduly optimistic," stating that "history has shown that many equity analysts are biased and often forecast unrealistically favorable financial results for the companies that they cover." Stowell WDT at 17, SXM Dir Trial Ex. 18. However, as Dr. Lys testified, the reasons he cites for this historical phenomenon from the 1980's and early 1990's have been addressed and largely eliminated through regulations, including (a) the SEC's adoption in 2000 of Regulation FD, which requires companies to simultaneously disclose to the public any material nonpublic information that it shares with stock analysts or security market professionals, and (b) additional provisions adopted by the SEC in 2003, *i.e.*, in the wake of the WorldCom and Enron scandals, in order to remove or mitigate analyst conflicts of interest. Lys WRT at 11, SX Trial Ex. 240.

576. These arguments should come as no surprise to Professor Stowell. In his own textbook Professor Stowell acknowledges and describes the effects of Regulation FD, stating that “it levels the playing field, enabling all investors to receive the same information at the same time.” Lys WRT at 12, SX Trial Ex. 240 (quoting David Stowell, *An Introduction to Investment Banks, Hedge Funds, and Private Equity: The New Paradigm*, 2010, p. 123). Similarly, his textbook lists a number of the SEC’s 2003 reforms and states that “[b]y insulating research analysts from Investment Banking Division pressure, [the reforms were] designed to ensure that stock recommendations are not tainted by efforts to obtain investment banking fees.” *Id.*

577. Likewise, Mr. Stowell’s description of academic research about analyst forecast accuracy is incomplete and misleading. As Dr. Lys pointed out, Professor Stowell’s argument was based solely on two unpublished papers, which have not gone through the rigorous peer review process, and which Professor Stowell discusses out of context. 8/20/12 Tr. 4015:6-17 (Lys). Professor Stowell ignored substantial, published peer-reviewed empirical research demonstrating that, while analyst forecasts were consistently optimistic in the early 1980’s, the forecasts had become unbiased or slightly pessimistic in the late 1990’s and early 2000’s. Lys WRT at 12, SX Trial Ex. 240. The movement away from optimistic analyst forecasts is consistent with the substantial regulatory changes implemented by the SEC, along with the increased attention paid to analyst forecasts, increased competition among forecasters, and more cautious guidance from certain managers who want their companies to “beat” analysts’ forecasts. *Id.*

578. Furthermore, contrary to the impression Professor Stowell seeks to create, equity analysts like debt analysts *do* account for downside risk in their models. Lys WRT at 20, SX Trial Ex. 240; *see also* Stowell WDT at 11 (suggesting the reason to rely on debt analysts is

because “they typically consider ‘downside’ risk”). In fact, Professor Lys pointed out that Morgan Stanley’s projections explicitly discuss and take into account various downside risks, including heightened competition and sensitivity to auto sales. Lys WRT at 20, SX Trial Ex. 240; SX Trial Ex. 223 at 2. Likewise, Sirius XM’s internal forecasts discuss and account for the [REDACTED] [REDACTED] as well as [REDACTED] [REDACTED]. SX Trial Ex. 9 at 2-4, 37 (2011 Sirius XM Baseline and Downside Long Range Scenario). These are the very downside risk factors Professor Stowell identifies for Sirius XM. Stowell WDT at 7-11, SXM Dir Trial Ex. 18. In other words, both Sirius XM and analysts following Sirius XM are well aware of the risks that Sirius XM faces, and these forecasts are a “best guess” to quantify how those risks will affect the business, including quantifying downside scenarios where the risks have a greater effect on the company’s financial performance.

579. Not satisfied with tarring all equity analysts as “unduly optimistic,” Stowell WDT at 17, SXM Dir Trial Ex. 18, Professor Stowell then engaged in a misleading and erroneous analysis of the particular equity analysts who follow Sirius XM, *id.* at 18-20. Professor Stowell argues that equity analysts covering Sirius XM are particularly bad at forecasting the company’s future financial performance. Stowell WDT at 18-20 & Exs. 7-9, SXM Dir Trial Ex. 18. But as Dr. Lys testified, Professor Stowell analyzed only forecasts prior to the 2008 recession and establishes, at most, that those analysts were unable to predict the severe economic downturn resulting from the 2008 financial crisis. Lys WRT at 13-14, SX Trial Ex. 240; 8/20/12 Tr. 4028:11-4029:6 (Lys). While Professor Stowell attributes the forecasting errors to excessive optimism, Dr. Lys testified that the actual reason was that analysts (like the rest of us) simply did

not foresee the financial crisis.⁵¹ Lys WRT at 14, SX Trial Ex. 240; 8/20/12 Tr. 4028:11-4029:6 (Lys).

580. Moreover, as Dr. Lys pointed out and Professor Stowell conceded, notwithstanding the financial crisis, the analysts were actually quite accurate in predicting Sirius XM's adjusted EBITDA and free cash flow even in the longer term. 8/20/12 Tr. 4029:1-6 (Lys); 8/15/12 Tr. 3631:20-3632:12 (Stowell) (conceding that Mr. Butson's forecasts based on Wall Street consensus estimates were "reasonably accurate" with respect to EBITDA and free cash flow); 8/15/12 Tr. 3633:8-20 (Stowell) (conceding that Mr. Butson's forecasts from 2007 were "relatively accurate on the bottom line with respect to 2011"). But because these EBITDA and free cash flow forecasts did not fit within Professor Stowell's story that equity analysts are not to be trusted, he misleadingly omitted these forecasts from his testimony. Stowell WDT at 18-20 & Exs. 7-8, SXM Dir Trial Ex. 18; Stowell WRT at 4-5 & figs. 1a-1b, SXM Reb. Trial Ex. 7; 8/15/12 Tr. 3631:12-19 (Stowell) (conceding that he did not compare EBITDA or free cash flow forecasts); *see* Lys WRT at 16, SX Trial Ex. 240 (testifying that Professor Stowell displays only subscription and revenue data to support his claim that exhibit "a significant overestimation of the financial future of Sirius XM," but provides no rationale why he opts not to show the forecasting success of the more-important EBITDA and free cash flow measures). As Dr. Lys testified, Professor Stowell's analysis is simply "cherry picked only to look [at] pre-recession [forecasts] and only revenue and subscribers." 8/20/12 Tr. 4033:1-2 (Lys). But as Dr. Lys found, the analyst forecasts made after the crisis (and post-merger) projections do not resemble

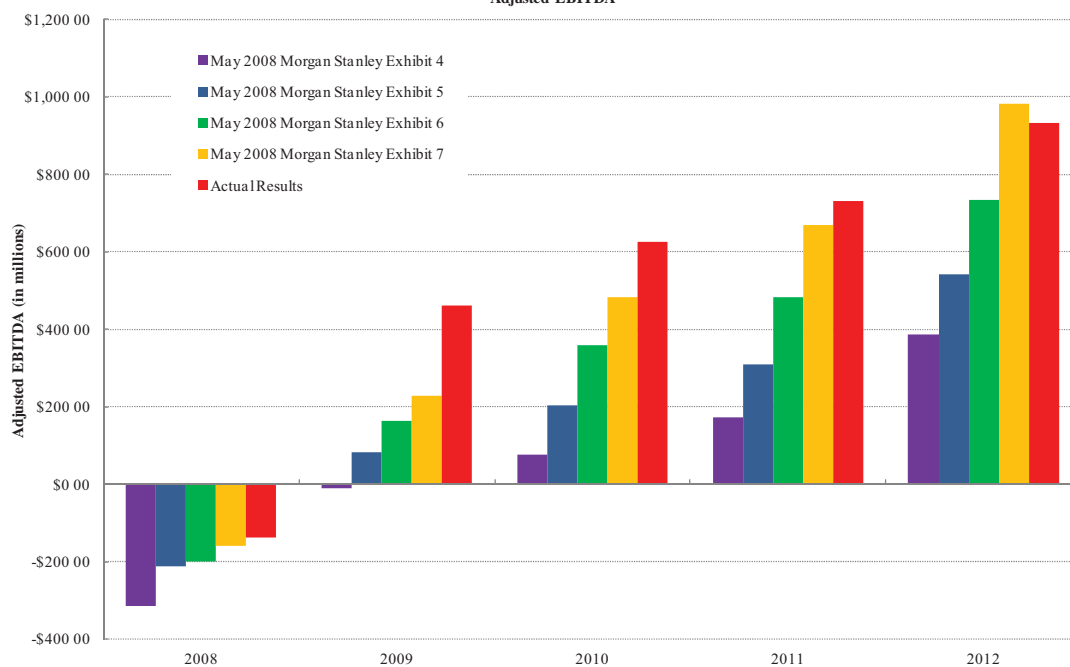
⁵¹ As Professor Lys testified, credit analysts similarly misgauged the financial health of companies in the financial crisis. Lys WRT at 20, SX Trial Ex. 240. Companies with investment-grade ratings, even with Aa3 ratings, defaulted in 2008 and 2009. *Id.* In essence, the financial crisis was unanticipated and extremely severe – hardly a period to test the overall reliability of either equity or credit analysts. *Id.*

the results shown in Mr. Stowell's exhibits – even for the measures (revenue and subscribers) he chose for his particular analysis. Lys WRT at 14-15 & figs. 5-6, SX Trial Ex. 240.

581. Professor Stowell's analysis also does not include a single forecast from *after* the Sirius and XM merger. Lys WRT at 14, SX Trial Ex. 240. Instead, Professor Stowell's analysis simply adds entirely separate analysts forecasts for Sirius and XM as separate entities and assumes they are one company. *See* Stowell WDT at 19 & Exs. 7-8, SXM Dir Trial Ex. 18 (see note 2 to exhibits 7 and 8 which state “[f]orecasts for Sirius Satellite Radio and XM Satellite Holdings are combined”). To test Professor Stowell's analysis, Dr. Lys examined Morgan Stanley's forecasted EBITDA and free cash flow measures from a May 2008 research report published nearest to the date of the Sirius and XM merger, which projects the combined performance of the merged Sirius XM entity. *Id.* at 16-17 & Exs. 7-8. Dr. Lys compared the projections to Sirius XM's actual financial performance and concluded Morgan Stanley's long-run EBITDA and free cash flow forecasts in this study were actually quite accurate, providing compelling evidence that Morgan Stanley's forecasts are reliable.⁵² 8/20/12 Tr. 4028:13-4032:13 (Lys). Indeed, he found that if anything the forecasts of EBITDA and free cash flow were “overly pessimistic, not optimistic” and testified that “these people [at Morgan Stanley] are really good” because they were able to make these relatively accurate long-run forecasts in spite of “a company whose long-term history got destroyed” and “the largest recession and if not the largest, the second largest recession in U.S. history.” *Id.* at 4030:22-4032:13. The results of Dr. Lys's comparisons are displayed in the figures below. Lys WRT at 18-20 figs. 7-8, SX Trial Ex. 240.

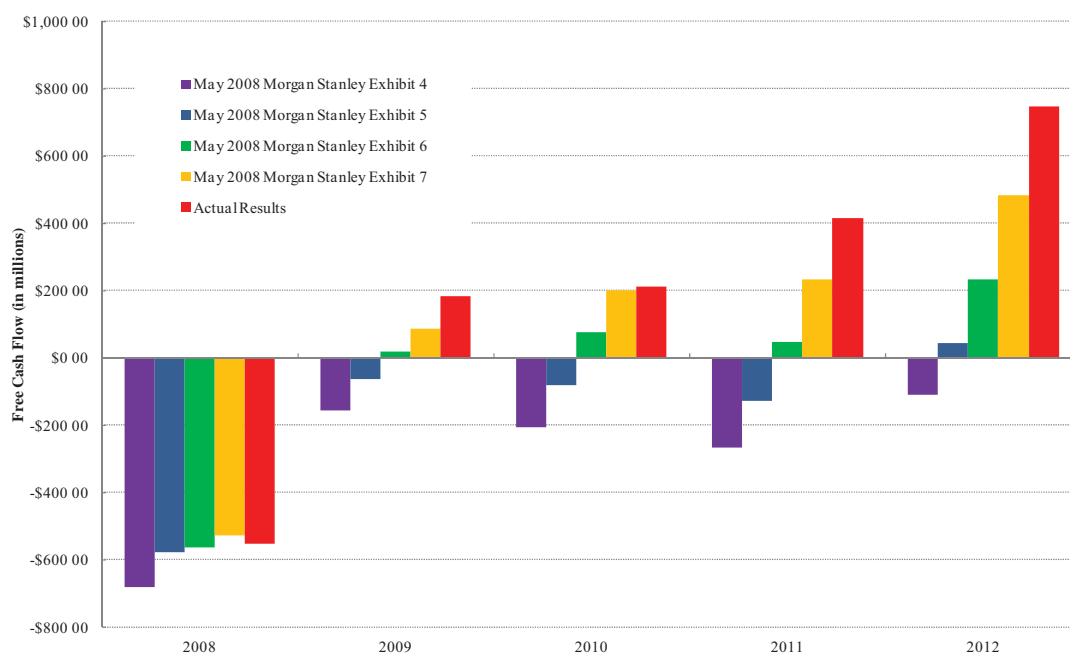
⁵² This report contained four scenarios, each of which projected Sirius XM's financial performance while realizing varying levels of merger synergy. These different projections are labeled by their exhibit name within the Morgan Stanley report. Lys WRT at 16 n.51, SX Trial Ex. 240.

Figure 7
Sirius XM
2008 Morgan Stanley Projections vs. Actuals
Adjusted EBITDA



Notes: See Attachment 8 Notes

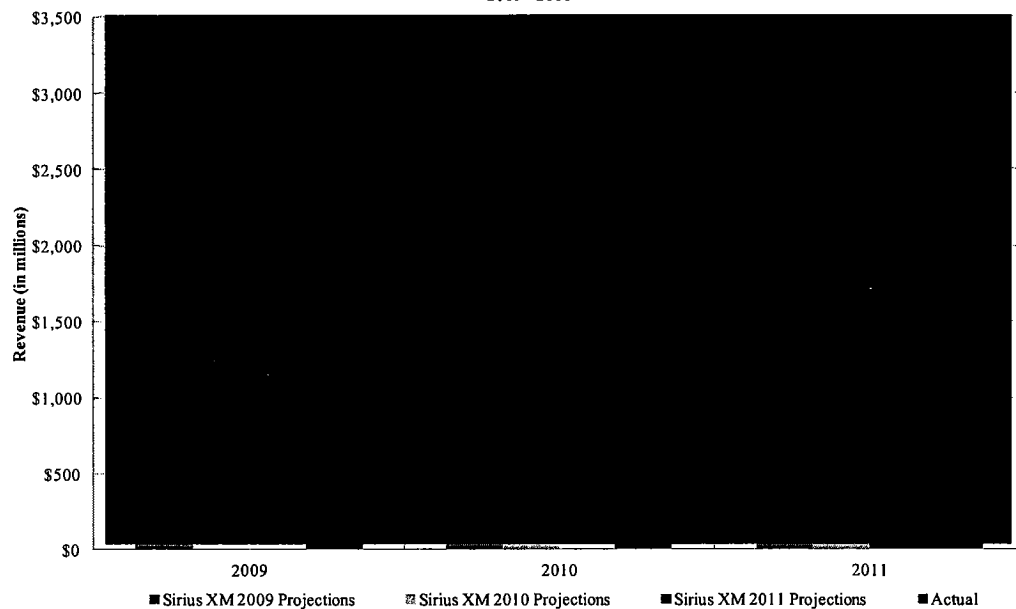
Figure 8
Sirius XM
2008 Morgan Stanley Projections vs. Actuals
Free Cash Flow



Notes: See Attachment 9 Notes

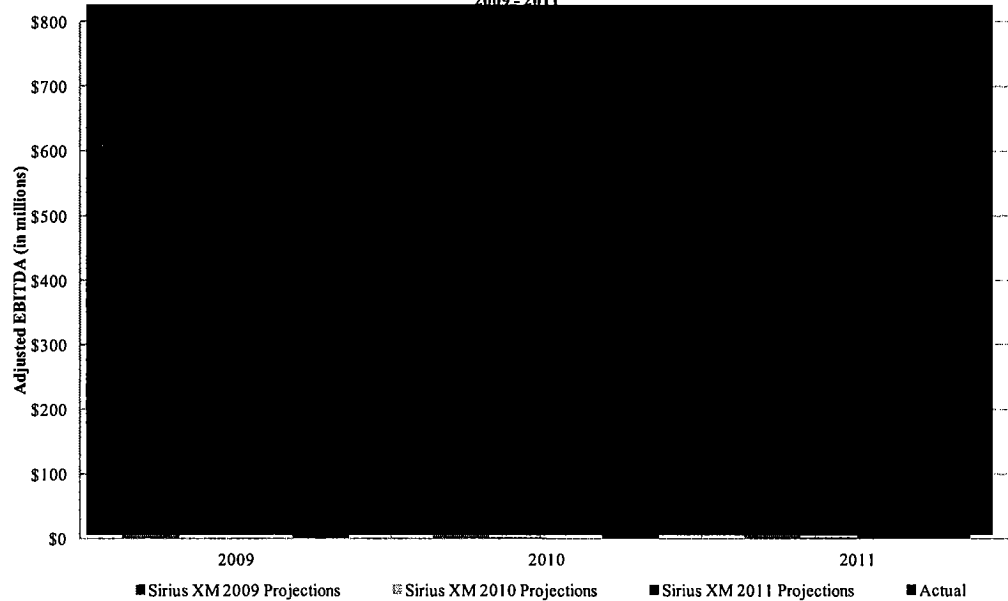
582. In a similar vein, Professor Stowell and Mr. Frear attempted to downplay Sirius XM's forecasting ability by comparing the company's pre-merger and pre-crisis forecasts to actual results. Frear WDT at 14-15, SXM Dir Trial Ex. 12; Stowell WDT 21, SXM Dir Trial Ex. 18. But as Dr. Lys demonstrated (as show in Figures 1-3 below), Sirius XM's post-crisis and post-merger forecasting errors do not resemble those of the older forecasts (as displayed in Mr. Frear's charts). Lys WRT at 6-8 & figs. 1-3, SX Trial Ex. 240. Dr. Lys testified that just as the case of equity analysts, the forecasting errors of Sirius XM's internal post-crisis forecasts are smaller, and the projections more often predicted a more *pessimistic* outcome than was actually realized. *Id.* at 7. This provides further compelling evidence that Sirius XM's projections are reliable and some of the best tools available to analyze disruption.

Figure 1 [RESTRICTED]
Sirius XM
Post-Crisis Sirius XM Projections & Actual Performance
Revenue
2009 - 2011



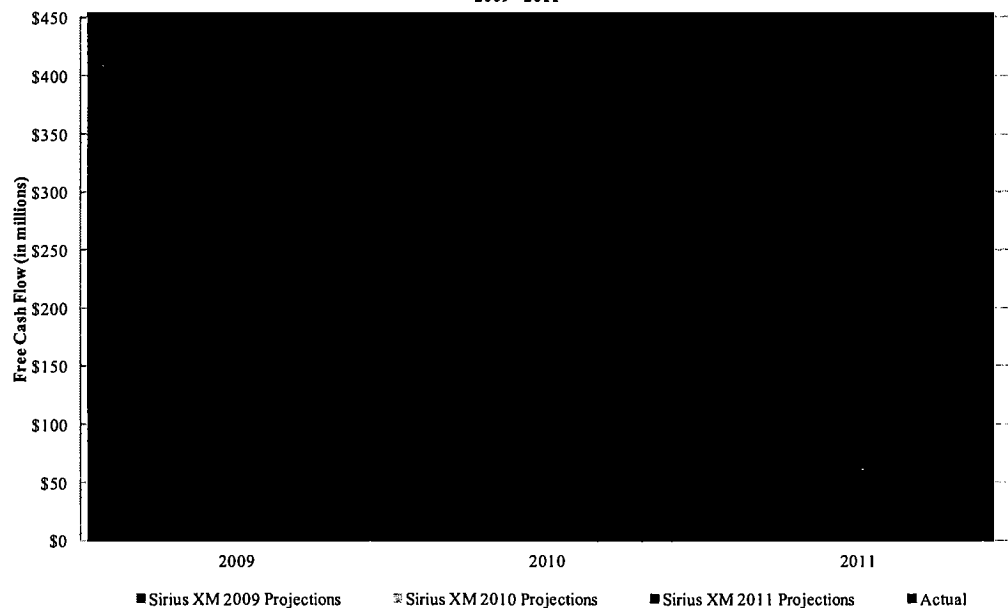
Note: See Attachment 1 notes.

Figure 2 [RESTRICTED]
Sirius XM
Post-Crisis Sirius XM Projections & Actual Performance
Adjusted EBITDA
2009 - 2011



Note: See Attachment 2 notes.

Figure 3 [RESTRICTED]
Sirius XM
Post-Crisis Sirius XM Projections & Actual Performance
Free Cash Flow
2009 - 2011



Note: See Attachment 3 notes.

583. Finally, Sirius XM's claims that its business is simply too unpredictable for forecasting are directly contradicted by Sirius XM's management statements to investors. For example, Mel Karmazin discussed with investors the implications from "the fact that our business appears to be very predictable." Lys WRT at SX Ex. 230-RP, SX Trial Ex. 240 (2011.11.17 Mel Karmazin presents at the Liberty Media Corporation 2011 Investor Meeting). He repeated that assessment on various other occasions: "Given the predictable nature of our business, we would prefer to take advantage of a prudent level of leverage, which should mean higher returns to our equity holders over time." Lys WRT at SX Ex. 226-RP, p. 4, SX Trial Ex. 240.

iv. Sirius XM's Self-Serving Claim That It Does Not Rely on Its Internal Forecasts Is Belied by the Evidence

584. Sirius XM's self-serving statements that its own internal forecasts are not to be believed cannot be reconciled with the record. Lys WRT at 9-10, SX Trial Ex. 240. Contrary to Mr. Frear's and Professor Stowell's testimony, the evidence suggests that Sirius XM does, in fact, rely on its long-term projections. As Dr. Lys testified, for "a company like SiriusXM with 15-year average asset life, it's inconceivable" that Sirius XM would not rely on long-term projections. 8/20/12 Tr. 4025:14-17 (Lys). And, in fact, Dr. Lys testified that he reviewed various documents confirming his suspicions that this could not be true. *Id.*

585. For example, Sirius XM has shared its internal long-range projections with credit ratings agencies during three presentations with those agencies in August 2009, January 2010, and October 2010. Lys WRT at 9, SX Trial Ex. 240; SX Trial Ex. 14 (October 2010 Presentation); Lys WRT at SX Ex. 233-RR, SX Trial Ex. 240 (January 2010 Presentation). Mr. Frear's testimony that Sirius XM shared its long-range projections with ratings agencies in only "one meeting" is false. 6/7/12 Tr. 772:9-12 (Frear). In fact, in all three ratings agency

presentations that Sirius XM produced and Dr. Lys reviewed, Sirius XM provided internal five-year company forecasts that were labeled as “Sirius XM Projections,” “Financial Projections,” or “Company Projections.” Lys WRT at 9, SX Trial Ex. 240; SX Trial Ex. 14; Lys WRT at SX Ex. 233-RR, SX Trial Ex. 240. While Mr. Frear attempted to distinguish these projections as “sensitivity analyses,” 6/7/12 Tr. 772:13-20 (Frear), the forecasts come directly from, and are exactly identical to, Sirius XM’s long-range scenarios, the very company projections that Sirius XM claims are not to be relied upon. Lys WRT at 10 n.26; 6/7/12 Tr. 777:12-778:4 (Frear) (conceding that various projections, including subscribers and free cash flow, were exactly identical between the long-range scenarios and the credit ratings presentations). Moreover, in two of the three ratings agencies presentations, Sirius XM did not even provide a range of scenarios; it just provided a single baseline scenario showing, for example, Sirius XM’s long-term projections for subscribers, ARPU, revenue, adjusted EBITDA, and free cash flow. *See, e.g.*, Lys WRT at SX Ex. 233-RR, pp. 33-35 (SXM_CRB_DIR_00021108-10), SX Trial Ex. 240. To suggest that these single-scenario projections are “sensitivity analyses” and that Sirius XM was not providing company projections is not remotely plausible.

586. As Dr. Lys testified, each of these meetings with ratings agencies where Sirius XM shared its internal long-range scenarios occurred shortly before Sirius XM issued hundreds of millions of dollars in debt, and each presentation occurred in proximity to a credit upgrade by Moody’s or S&P. Lys WRT at 9, SX Trial Ex. 240. In fact, in all three rating upgrade announcements that Moody’s published in regard to Sirius XM’s debt issuances, Moody’s noted that one of the factors considered in assigning the upgrade was “projected performance over the near to intermediate term.” *Id.* Importantly, Sirius XM could not have shared these five-year projections in connection with a debt offering without violating the securities laws, if it believed

the projections to be unreliable. *Id.* at 10; 8/20/12 Tr. 4022:9-4023:8 (Lys) (testifying that disclosing the projections on three occasions “alone says that [Sirius XM] must have believed that this is reasonable or they really violated the securities acts if they disclosed it”).

587. Dr. Lys found that Mr. Frear has also repeatedly shared the company’s long-term projections with the Board of Directors, including in connection with the company’s capital structure planning. Lys WRT at 10, SX Trial Ex. 240; *see, e.g.*, Lys WRT at SX Ex. 234-RR, pp. SXM_CRB_DIR_00015583-85, SX Trial Ex. 240 (January 2011 Board Presentation); Lys WRT at SX Ex. 235-RR, pp. SXM_CRB_DIR_00015685-86, SX Trial Ex. 240 (Q4 2010 board presentation on capital structure); Lys WRT at SX Ex. 236-RR, p. SXM_CRB_DIR_00015916-18 (February 2010 Board Presentation); Lys WRT at SX Ex. 237-RR, pp. SXM_CRB_DIR_00016115-25 (2009 Q3 Finance Board Presentation). For example, based on these long-range plan projections, Mr. Frear prepared a presentation for the Board of Directors concerning Sirius XM’s capital structure and its substantial debt maturities. Lys WRT at SX Ex. 235-RR, pp. SXM_CRB_DIR_00015686, SX Trial Ex. 240 (Q4 2010 board presentation on capital structure). In the presentation, he told the Board of Directors that “[REDACTED] [REDACTED].” *Id.* Mr. Frear and Mr. Karmazin repeated this assessment to investors shortly thereafter in Sirius XM’s fourth quarter 2010 earnings call where Mr. Frear explained: “I just want to reemphasize the point that Mel [Karmazin] made in there that we believe that we will very comfortably cover our 2013 to ‘15 [debt] maturities out of the cash flow of the business.” Lys WRT at 10 & SX Ex. 228-RP, pp. SXM_CRB_DIR_00020695, SX Trial Ex. 240.⁵³ Notably, these are the exact same debt

⁵³ Mr. Karmazin made the same point: “So in taking a look at what our longer-term debt profile is, you really do need to factor in what we will be going into those years with in cash on those balance sheets. And I believe that where we are today, certainly, we don’t see any

maturities that Mr. Frear has told the Court pose “significant risks to the Company” for the upcoming rate term. Frear WDT at 12, SXM Dir Trial Ex. 12. Again, given the SEC’s disclosure requirements, Mr. Frear could not have made this statement – that the company’s future cash flow will easily cover its debt maturities three to five years later – if he believed the company’s long-term projections to be unreliable. Lys WRT at 10, SX Trial Ex. 240. In short, the evidence demonstrates that the company has repeatedly relied on its long-term projections, especially where doing so benefits the company.

588. Dr. Lys further testified that Sirius XM’s claim that it only uses internal forecasts for “budgeting” and on the cost side is not believable and is full of “incredible contradiction.” 8/20/12 at 4025:18-4026:14 (Lys). As Dr. Lys explained:

A budget is the plan over the future. So you start with a budget and you say, okay, if we are going to have this many subscribers, how many people do we need in the telephone room and how many satellites do we need and does it make sense to build repeaters, so budgets are literally the marching order over the next five years. So to say that we are only using them for budgeting, what are the budgets for? The budget is the blueprint of what we are going to do.

And on top of that, very often in my experience, compensation is based on reality versus budget, so you told us this is the path you're going to take, this is the path you actually took Mr. Karmazin, you did better than budgeting or you did worse than budgets. This is how CEOs are hired and fired. These are marching orders.

The problem comes from the fact that the board needs to have a tool to understand what the manager is going to do. And that's the budget. This is the blueprint. So if the forecasts go into the budget, they go into the day-to-day operations. Now, because a lot of these forecasts are long range, they naturally are updated as more evidence becomes available, so you know, for example, many companies have rolling budgets. We have experience from one year. You update now everything plus budget another year.

So this -- I mean, to take these statements at their word can't possibly be true. I mean, if that were true, this is the luckiest company on Earth because they are just plain blind and happened to hit it. Now, I don't believe in luck. At least not in the longer run.

8/20/12 Tr. 4026:5-4027:16 (Lys).

impediment to the debt maturities not being able to easily being handled by our cash that we would have on hand.” Lys WRT at SX Ex. 228-RP, pp. SXM_CRB_DIR_00020695, SX Trial Ex. 240.

589. Tellingly, roughly the first ten pages of Sirius XM's long range scenarios include

[REDACTED]

[REDACTED]

[REDACTED] See, e.g., SX Trial Ex. 9 at 2-10. When Mr. Frear shows these long range projections to the Board of Directors on a regular basis, he does not show them in-depth cost analyses, he shows them projections of subscribers, revenue, ARPU, free cash flow, net income, EBITDA, etc.⁵⁴ See, e.g., Lys WRT at SX Ex. 234-RR, SX Ex. 236-RR, SX Ex. 237-RR, SX Trial Ex. 240. These are exactly the marching orders that Dr. Lys described. And when Sirius XM is deciding whether it needs to borrow more money to pay for future debt maturities or whether it will have sufficient funds on hand, Mr. Frear and the Board of Directors must rely on projections of cash balances, which depend on the profitability and cash flow of the firm (*i.e.*, both the revenue and the expenses). See Lys WRT at SX Ex. 235-RR, p. SXM_CRB_DIR_00015686, SX Trial Ex. 240. At bottom, Sirius XM's assertion that it does not use long-term forecasts while running a capital intensive business with assets that depreciate on average over 15 years is refuted both by the record and by common sense.

v. Even Assuming a Level of Optimism in the Analyst Reports, Disruption of Sirius XM's Business Due to a Rate Increase Remains Highly Unlikely

590. Even assuming a level of optimism in analyst forecasts, Dr. Lys testified that the proposed rates are still not likely to disrupt Sirius XM for several reasons. Lys WRT at 21-22,

⁵⁴ Professor Stowell's testimony that "[t]he board of directors never used it," referring to Sirius XM's internal projections, is plainly belied by the evidence. 8/15/12 Tr. at 3637:3 (Stowell). These long-range projections appear in board presentation after board presentation, and none of those presentations contain detailed cost projections. 8/15/12 Tr. at 3637:3-9 (Stowell) (claiming that these documents are just used for "budget purposes"); 8/15/12 Tr. at 3606:5-6 (Stowell) (claiming erroneously the long range scenarios are focused only on "a whole range of expense-related items")

SX Trial Ex. 240. First, because the rates are tied to revenue, negative shocks to the company's business (and specifically revenue) would decrease the royalty payments to SoundExchange. *Id.* at 21. Second, Dr. Lys testified that even if actual revenues (and therefore, royalty payments) were realized as projected but EBITDA and free cash flow were negatively shocked (an unlikely outcome given the company's 70% contribution margin and stable fixed costs), the company would still be unlikely to be disrupted. *Id.* That is because the forecasting errors would have to be substantially larger than typical forecasting errors for Sirius XM to experience EBITDA or free cash flow of zero in any of the years under SoundExchange's rate proposal. *Id.* at 12-13, 21. Third, Dr. Lys performed numerous sensitivity analyses to further test potential shocks to Sirius XM's business, and there was no disruption to Sirius XM's business. *Id.* at Appendix A. Fourth, as Dr. Lys explained, the past history pre-merger and pre-financial crisis forecasts showed that Morgan Stanley's projections were either accurate or pessimistic in its EBITDA and free cash flow forecasts while overestimating revenue. *Id.* at 16-17, 21 & figs. 7-8. Accordingly, in the event history repeats and Morgan Stanley's current projections "overshoot" revenues and "undershoot" EBITDA and free cash flow in the upcoming period, then Dr. Lys's analysis *overstates* the impact of the rates. *Id.* at 21-22.

591. As Dr. Lys explained, even in the improbable hypothetical outcome that EBITDA or free cash flow *are* negative in a certain year, Sirius XM would not likely sustain an "adverse impact that is substantial, immediate and irreversible in the short-run," because of the roughly \$1.5 billion in cash and cash equivalents that Sirius XM expects to possess at the time the new rates are enacted. Lys WRT at 22, SX Trial Ex. 240. In fact, Dr. Lys testified that the \$1.5 billion in cash would be enough to pay the increased royalties proposed by SoundExchange (*i.e.*, in excess of the current eight percent rate) through the beginning of 2017, even assuming that it

paid royalties on 100% of total revenue. Lys WRT at 22 & Appendix A.10, SX Trial Ex. 240. If Morgan Stanley's revenue estimates prove to be optimistic, then Sirius XM's 2012 cash balance could pay the proposed royalties for an even *longer* time period, because the proposed rates are defined as a percentage of revenue. *Id.*

592. Finally, Sirius XM's substantial 70% contribution margin (*i.e.*, on average for each additional dollar of revenue, variable costs take only 30%) provides it with substantial breathing space to turn a profit. 8/20/12 Tr. 4038:12-4039:7 (Lys). In Dr. Lys's words, once the companies is scaled up, it is a "printing machine." *Id.* at 4039:6-7 (Lys). That is why Dr. Lys testified that "[i]t's very difficult to come up with a bearish outcome on this company." *Id.* at 4038:17-18 (Lys). "[T]he contribution margin is so huge, [raising royalties] just doesn't dent it enough such that [royalties] would come to an area where [Sirius XM] can't cover fixed costs. And that's why all of my simulations actually show that you can dent that forecast quite a bit and still not come near to the point where EBITDA or free cash flows are somewhat binding." *Id.* at 4050:6-13 (Lys).

c. The U.S. Music Royalty Fee Further Limits Any Possibility of Disruption

593. The possibility that SoundExchange's rate proposal would disrupt Sirius XM's business is further diminished because Sirius XM will in all likelihood pass on most, if not all, of any increased royalty costs to consumers. *See* Lys WRT at 31-35, SX Trial Ex. 240. As David Frear testified, Sirius XM is now passing through approximately 100% of the self-pay royalties to consumers, not just the increase in royalties above the earlier 2% royalty rate. *See, e.g.*, 8/13/2012 Tr. 3057:20-3058:21 (Frear). If Sirius XM passes through any increased royalty costs, as it did for the last rate increase, there will be little to no impact on Sirius XM's future free cash flow or adjusted EBITDA. Lys WRT at 32, SX Trial Ex. 240.

594. As part of the merger between Sirius and XM, Sirius XM agreed with the FCC not to raise its basic subscription prices for three years following the merger. SXM Dir. Trial Ex. 66 at ¶ 107 (FCC Order). The FCC, however, allowed Sirius XM to pass through to consumers any increase in royalty costs after the filing of the merger application with the FCC. *Id.* Shortly after the FCC Order permitted it to do so, Sirius XM instituted in July 2009 a U.S. Music Royalty Fee of \$1.98 per month to pass through increased royalty costs. Lys WRT at 32-33, SX Trial Ex. 240. In December 2010, Sirius XM had to lower the Music Royalty Fee for basic subscribers to \$1.40 so as to avoid over-collecting fees, which would have violated the FCC order. *Id.* at 33; *see also* Lys WRT at SX Ex. 240-RR, SX Trial Ex. 240. In January 2012, Sirius XM slightly increased the Music Royalty Fee to \$1.42, which was intended to fully pass through all of the self-pay SDARS royalties to subscribers. Lys WRT at 33, SX Trial Ex. 240; 8/13/12 Tr. 3047:6-7 (Frear). While Sirius XM was under the FCC restrictions through July 2011, Professor Lys estimates that it was able to recover [REDACTED]% of the increased royalties owed to SoundExchange and roughly [REDACTED] of the total SDARS royalties paid to SoundExchange.⁵⁵ Lys WRT at 33 & Attachment 13, SX Trial Ex. 240; *see also* Lys WRT at SX Ex. 239-RR, SX Trial Ex. 240 (describing in detail how the Music Royalty Fee was implanted). Once the FCC restrictions ended, Sirius XM began passing through approximately 100% of the self-pay SDARS royalties to subscribers. Lys WRT at 33 & SX Ex. 240-RR, SX Trial Ex. 240.

⁵⁵ As Dr. Lys's analysis shows, Mr. Frear's testimony that Sirius XM was only able to recover 53% of SoundExchange royalty costs, 6/7/2012 Tr. 733:9-18 (Frear), is not accurate. *See* Lys WRT at 33 & n.142, SX Trial Ex. 240. Based on the FCC restrictions, Sirius XM instituted the Music Royalty Fee primarily to recover the increased SoundExchange royalty costs. *See id.*; *see also* Lys WRT at SX Ex. 241-RR, pp. SXM_CRB_DIR_00017731-32, SX Trial Ex. 240 (letter to FCC). In fact, Sirius XM originally considering calling the fee the "Copyright Royalty Board Fee" rather than the Music Royalty Fee. *Id.*

595. Sirius XM's internal planning documents repeatedly indicate that Sirius XM intends [REDACTED]
[REDACTED]
[REDACTED]. Lys WRT at 32, SX Trial Ex. 240; *see also* SX Trial Ex. 9 at 6; Lys WRT at SX Ex. 239-RR, p. SXM_CRB_DIR00057929, SX Trial Ex. 240; Lys WRT at SX Ex. 240-RR, SX Trial Ex. 240 ("[REDACTED]
[REDACTED]
[REDACTED]"). Indeed, Sirius XM's long range planning documents specifically state that "[REDACTED]
[REDACTED]". SX Trial Ex. 9 at 6. While Sirius XM may not have made a final decision as to the specific Music Royalty Fee it will set based on a new royalty rate, the voluminous documents produced by Sirius XM show its expectation that it could pass through any cost increases to subscribers.

596. Not only does Sirius XM display an intent to recoup any increase in royalties, it has the ability to pass through cost increases without risk of losing substantial numbers of subscribers. As Dr. Lys testified in detail, since 2009 Sirius XM has instituted significant price increases raising the effective price from \$12.95 to \$15.91, a total increase of 23%, without any discernable impact on Sirius XM's churn rate. Lys WRT at 33, SX Trial Ex. 240. For example, after Sirius XM added the \$1.98 Music Royalty Fee in 2009 (a 15% price increase), Mel Karmazin told investors that there was no "discernable impact on churn." *Id.* at 33-34; *see also* Lys WDT at 14-15, SX Trial Ex. 80 (concluding that Sirius XM's imposition of the U.S. Music Royalty Fee appears to have had no effect on subscriber growth rates). In fact, Sirius XM actually [REDACTED]

[REDACTED]. Lys WRT at 34 n.149, SX Trial Ex. 240 (quoting internal Sirius XM email correspondence). Internal Sirius XM correspondence further revealed Sirius XM's belief that the Music Royalty Fee may have a [REDACTED]

[REDACTED]. *Id.* Tellingly, the number of Sirius XM subscribers has grown in every single quarter since the Music Royalty Fee was instituted. *Id.* at 34; *see also* Lys WDT at 29-30, SX Trial Ex. 80.

597. Likewise, on January 1, 2012, the day that Sirius XM's rate cap expired from the FCC merger and a later six-month extension as a settlement of litigation, Sirius XM raised base subscription prices by 12% from \$12.95 to \$14.49. Ordoover WDT at 7 n. 6, SX Trial Ex. 74. Sirius XM's subscriber base did not decline as a result. Rather it posted two record-breaking quarters of subscriber growth, totaling over one million net additional subscribers in the first half of 2012 alone. Lys WRT at 31, SX Trial Ex. 240; SX Trial Ex. 217 at 6. Indeed, rather than the churn rate increasing as had been expected, Sirius XM's churn rate actually declined from 2.0 percent in the first quarter of 2011 to 1.9 percent in the first quarter of 2012. Lys WRT at 30-31, SX Trial Ex. 240. Overall, the first and second quarters of 2012 represented the strongest subscriber growth since the merger of Sirius and XM. *See id.* (quoting Mel Karmazin); SX Trial Ex. 217 at 6 (Sirius XM added in the second quarter "over 600,000 subscribers, which represents a post-merger record, despite the mixed macroeconomic trends").

598. As Dr. Lys testified, Sirius XM faces inelastic demand from its subscriber base. 8/20/2012 Tr. 4057:2-4058:3 (Lys). Sirius XM recognizes as much, which is why Mel Karmazin told investors regarding the recent price increase: "we modeled the revenue benefit and [average

revenue per user] benefit of the price increase even with higher churn and you can't really model high enough churn to make it not worth doing. I mean, so, it clearly is the right thing to do."

Lys WRT at 35, SX Trial Ex. 240. Indeed, Sirius XM's internal projections showed that the price increase would lead to roughly \$[REDACTED] million in increased revenue in 2012 alone even assuming an increase to [REDACTED]% churn. SX Trial Ex. 15 at 25. Given that churn did not increase, the revenue benefit from the price increase is even higher. Moreover, this figure does not even encompass the full revenue benefit from the price increase because, as Sirius XM's witnesses testified, "it takes about 18 months for any price change to work its way fully through the customer base." 8/13/2012 Tr. 3056:20-22 (Frear).

599. In sum, as Dr. Lys testified, the evidence strongly suggests that Sirius XM has the ability and the intention to pass through some or all of any potential increase in royalties. Lys WRT at 35, SX Trial Ex. 240. Indeed, Sirius XM's own long-term planning document currently provides for [REDACTED], demonstrating Sirius XM's belief that its ability to raise prices is not so constrained by the realities of the marketplace. *Id.* Finally, it is notable that SoundExchange's rate proposal will not require Sirius XM to drastically increase the Music Royalty Fee to recover some or all of the increased royalties. For example, if the Court were to increase the royalty rate to 12% in 2013, as SoundExchange proposes, Sirius XM could recoup the entire rate increase by raising the Music Royalty Fee to roughly \$2.13, only slightly above its original level of \$1.98.⁵⁶ That is likely why Morgan Stanley believes that Sirius XM "can offset most of the higher [royalty] rate through increases in music royalty fees (MRFs) charged to customers." SXM Reb. Trial Ex. 12 at 7. In fact, Morgan Stanley assumes that Sirius XM will pass through 70-80% of any royalty increases in the form of the Music

⁵⁶ \$2.13 = (12% / 8%) x \$1.42.

Royalty Fee. SXM Reb. Trial Ex. 12 at 1. Morgan Stanley also believes that during the coming rate term Sirius XM will increase base subscription price by \$1.82. *Id.* at 7. In short, there is strong reason to believe that Sirius XM has the ability to raise prices to recoup some or all of any rate increase, further lowering any possibility of disruption during the coming rate term.

600. Sirius XM offered no actual evidence to support its inability to recover royalty increases during the coming rate term. Instead, Mr. Frear offered only an irrelevant reference to the 2011 price increase at Netflix as support for Sirius XM's alleged inability to raise prices. Frear WDT at 21, SXM Dir Trial Ex. 12. However, both Mr. Frear and Mr. Karmazin publicly stated that the Netflix price increase is not comparable to Sirius XM's situation. Lys WRT at 35 & n.158, SX Trial Ex. 240. In actuality, Mr. Frear is just repeating a version of his testimony from the last proceeding where he also told this Court that Sirius had no intention of raising prices because he did not believe the market would bear any price increase. 8/13/2012 Tr. 3163:18-3164:11. Yet, in spite of that testimony and the worst economic conditions since the Great Depression, Sirius XM managed to implement two substantial price increases during the rate period without any increase in churn. Mr. Karmazin likewise admitted that he testified in the last proceeding that a material increase in the royalty rates would be very problematic for Sirius, but that in fact Sirius XM was able to pass that rate increase onto subscribers without any increase in overall churn. 6/11/12 Tr. 1406:16-1407:18 (Karmazin). In short, Sirius XM's testimony on this issue is just not credible.

d. Sirius XM Can Easily Cover Its Debt Through Cash Flow From the Business

601. Sirius XM's claims about the serious threat of disruption posed by its debt load is greatly exaggerated and directly contrary to the company's public statements to investors. *See* Frear WDT at 12-13, SXM Dir Trial Ex. 12. Mr. Frear, without caveats, expressed to investors

that Sirius XM “will very comfortably cover our 2013 to ‘15 [debt] maturities out of the cash flow of the business.”⁵⁷ Lys WRT at 47 & SX Ex. 228-RP, p. SXM_CRB_DIR_00020695, SX Trial Ex. 240. Mr. Frear reaffirmed this statement in this proceeding based on his current expectations. 6/7/12 Tr. 752:10-13 (Frear). Mr. Frear likewise told his Board of Directors that “[REDACTED]”, covering all maturities during the upcoming rate term. Lys WRT at 10 & SX Ex. 235-RR, p. SXM_CRB_DIR_00015686, SX Trial Ex. 240. These are the very same debt maturities that Mr. Frear testified in his written testimony pose a serious risk of disruption to the business.

602. Sirius XM’s remaining debt maturities for this rate term pose little risk to the company. As Dr. Lys testified, Sirius XM has been calling its previous debt (*i.e.*, redeeming the debt early) and buying back debt that it cannot call. 8/20/12 Tr. 4044:16-4045:3 (Lys); 8/13/12 Tr. 3150:9-3151:12 (Frear). This includes calling all of the remaining debt due on September 1, 2015, SX Trial Ex. 217 at 7; 8/13/12 Tr. 3148:12-17 (Frear), and buying back early all of the remaining debt due on August 1, 2013. Of the four maturities coming due during the coming rate term (totaling \$2.4 billion) that Mr. Frear listed in his original testimony, *see* Frear WDT at 12, SXM Dir Trial Ex. 12, only two of those maturities (totaling \$1.35 billion) remain outstanding. The others have been paid off early. In fact, of the two outstanding, the \$550 million maturity on December 1, 2014 listed by Mr. Frear, *see* Frear WDT at 12, SXM Dir. Trial Ex. 12, is convertible debt, meaning that holders of that debt may opt to convert the debt into shares of Sirius XM’s common stock rather than obtaining repayment of the debt from Sirius

⁵⁷ Mr. Karmazin made the same point to investors: “So in taking a look at what our longer-term debt profile is, you really do need to factor in what we will be going into those years with in cash on those balance sheets. And I believe that where we are today, certainly, we don’t see any impediment to the debt maturities not being able to easily being handled by our cash that we would have on hand.” Lys WRT at SX Ex. 228-RP, p. SXM_CRB_DIR_00020695, SX Trial Ex. 240.

XM. Lys WRT at SX Ex. 231-RP, p. F-28, SX Trial Ex. 240 (2011 10-K). The debt is convertible at an approximate exchange price of \$1.875, far lower than the price at which Sirius XM's stock price currently trades. *Id.* This means that in all likelihood the holders of the convertible debt will opt to exchange their bonds for Sirius XM stock instead of cash, and Sirius XM's sole maturity during the coming rate term will be \$800 million due on April 1, 2015. Either way, neither of these two maturities pose a serious risk when one takes into account that Sirius XM will have between \$1.2 and \$1.5 billion of cash on hand by the end of this year. 8/20/12 Tr. 4044:4-6 (Lys); 6/7/12 Tr. 750:13-751:3 (Frear).

603. That is why Sirius XM management announced in a public filing with the SEC that the company has "sufficient cash, cash equivalents and marketable securities to cover [its] estimated funding needs (...) [and that] it will be able to generate sufficient revenues to meet [its] cash requirements" Lys WRT at 47 & SX Ex. 231-RP, p. 42, SX Trial Ex. 240. Sirius XM likewise told credit ratings agencies, in connection with a debt offering, that by 2014 its net debt – the total debt on balance sheet minus cash on hand, 6/7/12 Tr. 751:6-8 (Frear) – will be [REDACTED], even under its downside scenario.⁵⁸ SX Trial Ex. 14 at 33. In other words, Sirius XM expects to have [REDACTED]. Obviously, in such a scenario, the debt poses little risk because the company can just [REDACTED]. Indeed, Sirius XM's most recently-formed internal projections show that management

⁵⁸ In this presentation to credit ratings agencies, the net debt was presented in a ratio comparing net debt to EBITDA. SX Trial Ex. 14 at 33; *see also* 6/7/12 Tr. at 751:6-10 (Frear). When net debt was expected to become less than [REDACTED], Sirius XM expressed the ratio as [REDACTED] to the credit ratings agencies. SX Trial Ex. 14 at 33. As Dr. Lys testified, Sirius XM could not have made this presentation to the credit ratings agencies if it did not believe these figures to be accurate and reliable without seriously violating securities laws. Lys WRT at 10, SX Trial Ex. 240. Mr. Frear has made similar presentations to Sirius XM's board of directors where he expresses just how [REDACTED] the company expects the ratio to become. *See, e.g.*, Lys WRT at SX Ex. 235-RR, p. SXM CRB DIR 00015685, SX Trial Ex. 240 (showing Net Debt/EBITDA of [REDACTED]).

intends to [REDACTED] Lys WRT at 49, SX Trial Ex. 240. In particular, Sirius XM's balance sheet projection includes debt falling [REDACTED]. Lys WRT at 49, SX Trial Ex. 240; SX Trial Ex. 9 at 29.

604. Moreover, Sirius XM has the ability to tap the debt markets at very low rates should it choose to refinance debt rather than pay down its debt. This is demonstrated by the fact that Sirius XM was able to issue \$400 million of debt at 5.25% in August 2012. 8/13/12 Tr. 3150:9-20 (Frear). Professor Lys pointed out in his written direct testimony that Sirius XM's prior debt was trading at a yield of around 5.57%, within half a percent of Moody's Baa-rated Corporate Bonds index, evidencing that Sirius XM had the ability to issue new debt at low rates. Lys WDT at 31, Attachment 11, SX Trial Ex. 80. As Professor Lys explained, this indicates that investors in Sirius XM's debt require compensation that is roughly equivalent to, or less than, the compensation required from the investment-grade companies that constitute the Baa index (*i.e.*, the lowest rated investment grade companies). Sirius XM sought to exclude this testimony as unreliable, a motion that this Court correctly denied. Professor Stowell nevertheless insisted during the first trial that Dr. Lys was wrong and that Sirius XM's debt was trading at yields of 6.25 percent. 6/8/12 Tr. 1282:15-18 (Stowell). Of course, the actual bond issuance by Sirius XM at 5.25% demonstrates that Dr. Lys was right.

605. Indeed, Sirius XM has repeatedly touted to investors that it is easily able to refinance debt at significantly lower borrowing costs. For example, in a May 2012 shareholder meeting, Sirius XM touted its "significantly improved borrowing costs":

Investment Thesis: Significantly Improved Borrowing Costs	
February 2009	15% secured (REPAID)
June 2009	11.25% secured (REPAID)
August 2009	9.75% secured
March 2010	8.75% <u>unsecured</u>
October 2010	7.625% <u>unsecured</u>
Trading @ 5.69% Yield	
<small>Note: Secured transactions in June and August 2009 also included OID. February 2009 transaction also included fees and equity issuance.</small>	

Lys WRT at SX Ex. 211-RP, p. 42, SX Trial Ex. 240. David Frear has proclaimed to investors: “The debt market has also recognized our rapidly improving prospects. Sirius XM’s benchmark unsecured debt is trading below 6%, a dramatic improvement from the cost of 15% secured debt with equity, we incurred just three years ago.” Lys WRT at Ex. 224-RP at 6, SX Trial Ex. 240. Mel Karmazin agreed: “Already, our debt trades at levels that imply a far lower borrowing cost for future issuance than what we are currently paying.” Lys WRT at Ex. 224-RP at 4, SX Trial Ex. 240.

606. Finally, it is noteworthy that Sirius XM is already at its long-standing target leverage ratio of 3.0x gross debt to adjusted EBITDA. SX Trial Ex. 217 at 7 (statement from David Frear that as of September 1, 2012, Sirius XM’s leverage “will be at our 3.0x target”); *see also* 6/11/12 Tr. 1408:7-12 (Karmazin) (affirming long-standing target of debt around three times EBITDA). This is a dramatic improvement from the last proceeding. Whereas in 2009 Sirius XM had a leverage ratio of around 6.7x, it has cut that ratio in more than half to its target

of 3.0x. SX Trial Ex. 229 at 46. As Mel Karmazin explained to investors in November 2011: “We’ve said publicly that the leverage that we’re comfortable with is somewhere around three times total debt to EBITDA. And that’s an area that we will very clearly accomplish in 2012. Again, we believe that taking –having a certain amount of debt is a great advantage to our shareholders.” Lys WRT at SX Ex. 230-RP, SX Trial Ex. 240 (2011.11.17 Mel Karmazin presents at the Liberty Media Corporation 2011 Investor Meeting). Mr. Karmazin and others at Sirius XM have expressed similar sentiments repeatedly to investors. For example, Mr. Karmazin stated on an investor call in late 2011: “Since early 2009, our credit-ratings have been upgraded six notches by S&P. We are extremely pleased with the market’s view of our credit quality and access to credit, so we don’t believe we need to attain an investment grade rating. Given the predictable nature of our business, we would prefer to take advantage of a prudent level of leverage, which should mean higher returns to our equity holders over time.” Lys WRT at SX Ex. 226-RP at 4, SX Trial Ex. 240. That Sirius XM chooses to finance its business through significant debt in order to yield higher returns to shareholders is a perfectly fine business decision, but it cannot then serve as a basis for lowering Sirius XM’s royalty rate because it has chosen to take on that risk.

i. Professor Stowell’s Analysis of Sirius XM’s Credit Rating Is Misguided

607. Professor Stowell’s analysis of Sirius XM’s credit rating is misguided. Professor Stowell reviewed Sirius XM’s credit ratings and concluded that the ratings “suggest that there is a realistic possibility that Sirius XM will default on its outstanding debt.” Stowell WDT at 12, SXM Dir Trial Ex. 18. But as Dr. Lys pointed out, this conclusion is irrelevant to an assessment of the proposed royalty rates because there is a realistic possibility that virtually any company will default on its outstanding debt. Lys WRT at 23, SX Trial Ex. 240.

608. Professor Stowell failed to provide any reliable analysis demonstrating that Sirius XM's credit rating would decline as a result of increased royalties, and the evidence is that the ratings would not be affected.⁵⁹ As Dr. Lys testified, the ratings agencies do not discuss the royalties paid to SoundExchange as a primary risk of Sirius XM in assessing its credit quality and likelihood of default.⁶⁰ Lys WRT at 23, SX Trial Ex. 240; 8/20/12 Tr. 4049:2-4050:13 (Lys). The credit agencies note various risks, but royalties are not one of them. 8/20/12 Tr. 4049:2-4049:13 (Lys). Moreover, there is no evidence of any correlation between Sirius XM's royalty rate and its credit ratings. If, as Professor Stowell suggests, royalties were driving Sirius XM into distress, one would expect its credit ratings to decrease as the royalty rates increase. Lys WRT at 24, SX Trial Ex. 240; Tr. 8/20/12 at 4049:2-4049:13 (Lys). But when Dr. Lys compared Sirius XM's credit ratings with increases in royalty rates, he found no evidence that increased royalties correlated with lower credit ratings; in fact, the evidence showed the opposite – a concurrent improvement in Sirius XM's credit ratings as royalty rates increased. Lys WRT at 24 & Attachments 10-11, SX Trial Ex. 240. Dr. Lys concluded that the reason why SoundExchange royalties are not viewed as a big deal by credit ratings agencies is because royalties are performance dependent. 8/20/12 Tr. 4050:1-13 (Lys). That is, if Sirius XM does not perform as well as expected, then it also pay less royalties, lowering the impact from

⁵⁹ In fact, Professor Stowell's analysis on this point is simply "to the extent that cash is being claimed by SoundExchange in the form of higher royalty payment, that means there's less cash left over to pay principal and interest for the bondholders." 6/8/12 Tr. at 1228:12-16 (Stowell). This is not a serious risk analysis.

⁶⁰ On cross examination of Dr. Lys, Sirius XM's counsel raised a report from Morgan Stanley as evidence that one analyst views the royalty rate as a risk to Sirius XM. 8/20/12 Tr. at 4104:1-9 (Lys). As Dr. Lys testified, this report shows only that Morgan Stanley believes a rate increase would lead to additional costs for Sirius XM, not that Sirius XM's business will be disrupted. 8/20/12 Tr. at 4104:1-9 (Lys). Earning only \$6.7 billion in profits over the rate term instead of \$7.7 billion is not evidence of disruption. *See* SXM Reb. Trial Ex. 12 at 9.

royalties on profitability. 8/20/12 Tr. 4050:1-13 (Lys). In short, the evidence from credit ratings rebuts the contention that increased royalty rates are likely to disrupt Sirius XM's business.

609. Professor Stowell and other Sirius XM witnesses spent substantial time emphasizing that Sirius XM's debt rating is "junk," apparently hoping to make it sound like credit ratings agencies think Sirius XM is about to go under. As Dr. Lys testified, credit ratings agencies have repeatedly raised Sirius XM's credit rating over the last few years and believe that Sirius XM has strong liquidity and ability to finance its debt. *See* Lys WDT at 31-32, SX Trial Ex. 80; Lys WRT at 47-48, SX Trial Ex. 240. Moreover, the truth of the matter is that there is nothing extraordinary about Sirius XM's credit rating being non-investment grade or "junk" – "[t]he bonds of 95 percent of U.S. companies with revenues over \$35 million – and of all companies below that amount – are rated noninvestment grade or junk."⁶¹ Lys WRT at 25 n.99, SX Trial Ex. 240.

610. Furthermore, even if lower royalty rates were to boost Sirius XM's credit score (and Sirius XM's witnesses provide no evidence that it would do so), such an outcome would only subsidize the company's risk appetite. Lys WRT at 24, SX Trial Ex. 240. Sirius XM's management has indicated its comfort with and conscious decision to remain speculative grade:

We can grow our business in many, many ways, but we don't see any real advantage of us being an investment-grade company. I mean, we know we can easily – if you run the numbers, you could see how we could be debt free; in fact that was our interest. I don't see any reason for this company to be an investment grade company. I don't know what the advantages are for us.

⁶¹ Professor Stowell candidly admitted that while he knows "quite a few things about certain areas of investment banking," this was an area where he "ha[d] no clue." 6/8/12 Tr. at 1273:16-21 (Stowell).

Lys WRT at 24 & SX. Ex. 227-RP, p. 7, SX Trial Ex. 240; *see also* 6/11/12 Tr. 1419:13-18

(Karmazin). Mr. Karmazin reiterated this position in November 2011 during Sirius XM's earnings call:

Standard & Poor's upgraded our corporate credit rating to BB from BB-, which puts us just 2 notches away from investment-grade status. Since early 2009, our credit ratings have been upgraded 6 notches by S&P. We are extremely pleased with the market view of our credit quality and access to credit, so we don't believe we need to attain an investment-grade rating. Given the predictable nature of our business, we would prefer to take advantage of a prudent level of leverage, which should mean higher returns for our equity holders over time.

Lys WRT at 24 & SX. Ex. 226-RP, p. 4, SX Trial Ex. 240. Mr. Karmazin again made similar comments later in the fall of 2011:

We have gotten six rating agency upgrades from S&P since the time we merged the company and we got this financing. We are two notches below investment grade. We have no desire as a company to run the company to be an investment-grade company. We may get there, just naturally, because of the amount of cash we're generating. But the fact is that our business is really looking good, and our balance sheet is another thing that's going to come into play and be an advantage to us.

Lys WRT at 230-RP, SX Trial Ex. 240 (2011.11.17 Mel Karmazin presents at the Liberty Media Corporation 2011 Investor Meeting). Mr. Karmazin reiterated in this proceeding that he has no intention of running Sirius XM as an investment grade company, 6/11/12 1410:8-11 (Karmazin), and that he believes a certain amount of debt is to the advantage of shareholders, 6/11/12 Tr. 1408:15-20 (Karmazin). Again, it is a perfectly fine business decision if Sirius XM does not want to be an investment grade company because it believes that will lead to better returns for shareholders, but it is totally disingenuous to then tell this Court the fact that the company is not investment grade is a reason not to raise royalty rates. Indeed, as Dr. Lys testified, lowering the royalty rate because of Sirius XM's credit rating "would only subsidize the company's risk appetite" and incentivize Sirius XM to take on more debt to obtain lower royalty rates. Lys

WRT at 24, SX Trial Ex. 240. In fact, Mr. Karmazin candidly admitted that based on Sirius XM's stated intentions, "the rating agencies, you know, probably won't give us an investment grade rating because they would assume that we are not running the company for that purpose and, therefore, we might go backwards. And they don't like to upgrade you and then downgrade you." 6/11/12 Tr. 1412:18-1413:1 (Karmazin).

611. Sirius XM is not unique in its preference to remain speculative grade; as Dr. Lys explained, such a decision certainly has its benefits (and most rated companies remain speculative grade). Lys WRT at 25, SX Trial Ex. 240. In fact, Dr. Lys testified that basic finance theory shows that decreasing a company's risk benefits creditors at the expense of shareholders. Lys WRT at 25, SX Trial Ex. 240. As Standard & Poor's explains, managing the business "for a very high rating can sometimes be inconsistent with the company's ultimate best interests, if it means being overly conservative and forgoing opportunities." Lys WRT at 25, SX Trial Ex. 240. Standard & Poor's also states that "the more appropriate approach [rather than managing the business to obtain a specific rating] is to operate for the good of the business as management sees it and to let the rating follow." Lys WRT at 25, SX Trial Ex. 240.

612. Finally, even though Sirius XM has no desire to be an investment grade company, Dr. Lys testified that evidence from the debt market reveals that Sirius XM's debt yield trades near the yields of the lowest-rated investment grade companies, signaling that investors assign the company a low risk. Lys WRT at 49, SX Trial Ex. 240. In particular, Dr. Lys compared the weighted-average yield of Sirius XM's debt to indices of various credit rating levels (with S&P's BBB corresponding to Moody's Baa rating, the lowest investment-grade rating). Lys WRT at 49, Attachments 16, 17, SX Trial Ex. 240. Dr. Lys found that Sirius XM's bond yields currently correspond most closely with the BBB index when excluding the convertible bond, and are

below the BBB index when including the convertible bond. Lys WRT at 49, Attachments 16, 17, SX Trial Ex. 240. As Dr. Lys explained, this demonstrates that investors perceive the company's risk to resemble that of the lowest investment-grade companies. Lys WRT at 49, SX Trial Ex. 240; 8/20/12 Tr. 4048:7-11 (Lys).

ii. Professor Stowell's Reliance on Sirius XM's Altman Z-Score is Misleading

613. Professor Stowell's reliance on an Altman Z-Score analysis is misplaced and misleading. As Professor Stowell conceded, the Altman Z-Score was developed based only on manufacturing data, and researchers have since developed newer and better models for nonmanufacturing firms. 6/8/12 Tr. 1292:22-1293:18 (Stowell). The only reason that Professor Stowell did not use these newer models that actually apply to nonmanufacturing firms is because they are "only available per subscription currently, I'm told." 6/8/12 Tr. 1293:10-18 (Stowell). That Professor Stowell did not want to pay for access is not a basis for this Court to rely on a model that is outdated and irrelevant to Sirius XM.⁶²

614. As Dr. Lys testified in detail, while Professor Altman's 1968 paper (which Professor Stowell relied upon) made an important contribution to the default-forecasting literature, the Z-Score equation is now dated. Lys WRT at 26, SX Trial Ex. 240. Professor Altman's model was based on the study of 66 manufacturing corporations (33 of which went bankrupt), and data from 1946 through 1966. Lys WRT at 26, SX Trial Ex. 240. Researchers have since updated the model with more recent data and beyond the limited scope of manufacturing firms. Lys WRT at 26, SX Trial Ex. 240.

⁶² Tellingly, Professor Stowell's analysis is also sloppy. His graph depicting the Altman Z-Score safe zone is not even accurately plotted. Lys WRT at 25 n.103, SX Trial Ex. 240; *see also* Stowell WDT at 12, SXM Dir Trial Ex. 18.

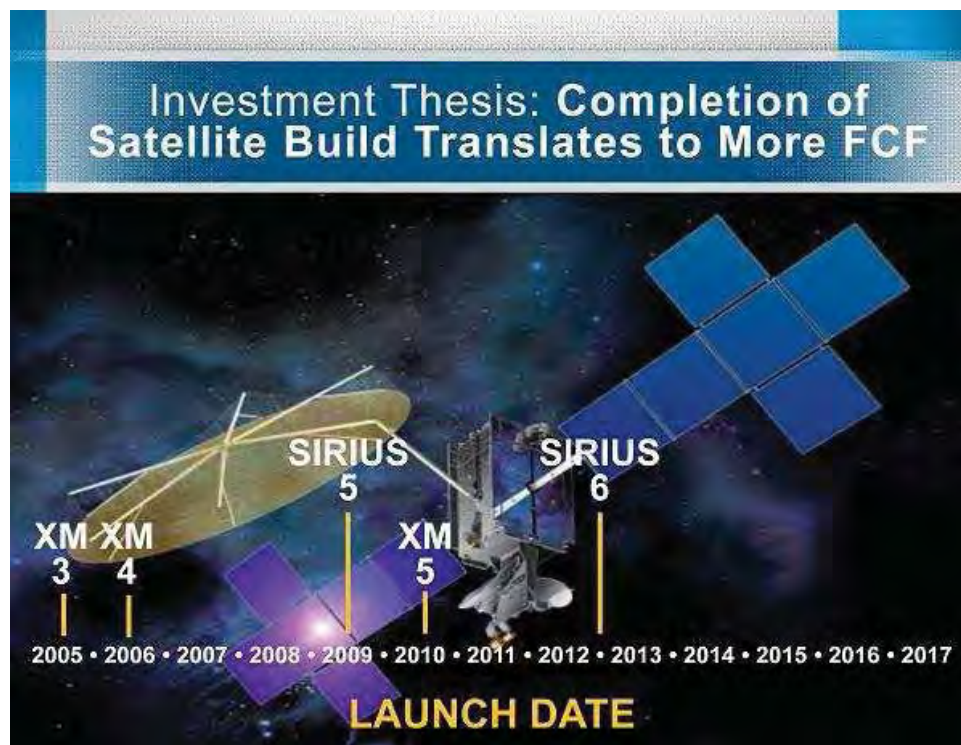
615. In particular, Dr. Lys testified that the primary reason why Sirius XM has a low Altman Z-Score based on the original model is because of its negative retained earnings from past losses when Sirius and XM were starting up. Lys WRT at 26, SX Trial Ex. 240. As Dr. Lys explained, the more recent empirical research shows that this retained earnings component of the original Z-Score calculation is not a statistically significant predictor of bankruptcy (in fact, one study found the relationship to be slightly positive, indicating that firms with *lower* retained earnings are *less* likely to enter bankruptcy). Lys WRT at 26, SX Trial Ex. 240. Based on the updated model, Sirius XM's revised Z-Score implies that the probability that Sirius XM will default within four to sixteen months is slightly less than one percent.⁶³ Lys WRT at 27, SX Trial Ex. 240. If you extrapolate that to five years, the likelihood of default is 5.5 to 6%. 8/20/12 Tr. 4048:2-6 (Lys). In short, when Dr. Lys applied the updated model that is actually relevant to nonmanufacturing firms, the model shows that Sirius XM's risk of bankruptcy is tiny.

616. Finally, Professor Stowell's discussion of the Altman Z-Score does not even address the relationship between the royalty rates and Sirius XM's Z-Score. Lys WRT at 25, SX Trial Ex. 240. As Dr. Lys explained, if royalties were driving Sirius XM into distress, one would expect a relation between higher royalties and higher distress. Lys WRT at 25, SX Trial Ex. 240. However, as Dr. Lys demonstrated, the opposite effect is observed: Sirius XM's Z-Score increased even as the royalty rates paid to SoundExchange also increased. Lys WRT at 26 & Attachment 12, SX Trial Ex. 240.

e. Sirius XM Has No Plans to Launch or Invest in New Satellites During the Coming Rate Term

⁶³ As Dr. Lys explained, Professor Altman's study explicitly stated that it was only "an accurate forecaster of failure up to two years prior to bankruptcy and that the accuracy diminishes substantially as the lead time increases." Lys WRT at 27, SX Trial Ex. 240.

617. In the *SDARS I* decision, this Court found that a rate “lower than the upper boundary most strongly indicated by marketplace data” was warranted in part to prevent “any undue constraint on the SDARS’ ability to successfully undertake satellite investments planned for the license period.” *SDARS I*, 73 Fed. Reg. at 4097. That consideration does not apply to the coming rate term where Sirius XM has no intention of launching any new satellites until 2018. 6/6/12 Tr. 607:9-11 (Meyer) (“[O]ur plan today is that we would begin replacing again in the '18 time frame”). In fact, Sirius XM specifically touts to its investors that the lack of any need to invest in satellites during the coming rate term will translate into more free cash flow, including in its most recent shareholder meeting:



Lys WRT at SX Ex. 211-RP, p. 44, SX Trial Ex. 240. While there is always a risk that a satellite might not survive its whole expected life span, Mr. Meyer conceded that he did not believe it was a material risk that Sirius XM would have significant expenditures to build new satellites. 6/6/12 Tr. 607:18-22 (Meyer). Sirius XM has stated that it has multiple in-orbit spares for both

the Sirius and XM satellites in the event of satellite failure. Sidak WDT at 36, SX Trial Ex. 78. Moreover, Sirius XM maintains in-orbit insurance for some of its satellites, which would help ameliorate the expenditures necessary to replace them in the event of a satellite failure. *Id.*; *see also* Lys WRT at SX Ex. 231-RP, p. 13, SX Trial Ex. 240. Sirius XM's internal projections show a total expected satellite investment of \$[REDACTED] million between 2013 and 2016. SX Trial Ex. 9 at 20. Mel Karmazin reiterated this point to investors in February 2012: "[C]apital expenditures will fall significantly as we finish the deployment of our second generation of satellites in the first half of this year. We don't expect to start spending significantly on new satellites for another five years." *See* Lys WRT at Ex. 224-RP, p. 4, SX Trial Ex. 240 (Sirius XM Q4 2011 Earnings Call Transcript). In short, there is no evidence to support lowering Sirius XM's royalty rate based on Sirius XM's need to undertake satellite investments.

f. Sirius XM's Operating Expenses Will Likely Continue to Decline as a Percentage of Revenue

618. A secondary reason for Sirius XM's recent turnaround is that it has been able to significantly cut operating expenses as a percentage of revenue with the merger of Sirius and XM. Lys WDT at 16-17, SX Trial Ex. 80. In fact, Mr. Frear testified that as a result of the merger, Sirius XM has achieved operating cost savings in excess of \$600 million per year. 6/7/12 Tr. 642:16-17 (Frear). Moreover, as Dr. Lys testified, Sirius XM's total operating expenses have remained relatively constant from 2009 through 2011 despite the increase in revenues for the same time period. Lys WDT at 16 & Attachment 6, SX Trial Ex. 80. For example, Sirius XM has reduced fixed expenses by 31 percent since the merger while revenue has increased precipitously during the same time period. Lys WDT at 16, SX Trial Ex. 80; *see also* Lys WRT at SX Ex. 226-RP, p. 5, SX Trial Ex. 240 (Sirius XM 3Q 2011 Earnings Call). Likewise, Sirius XM has been able to maintain its variable costs, *i.e.*, the costs that are expected

to increase more or less proportionately with increases in revenues at around a 70% contribution margin over the last few years. Lys WDT at 16-17, SX Trial Ex. 80. Sirius XM's internal projections show that they believe the contribution margin will remain in the range of [REDACTED]% during the next five years. SX Trial Ex. 9 at 13.

619. Sirius XM's management expects Sirius XM's operating expenses will continue to decrease as a percentage of revenue over the coming years. Lys WDT at 17-18, SX Trial Ex. 80. There are a variety of contributing factors to this. For example, Mr. Frear said at an investor conference in March 2011 that he expected the underlying cost of the radio module to decrease over the next seven to eight years. *Id.* Mr. Frear has also said that he expects fixed costs to remain stable in absolute terms from here on. *Id.* at 18. Sirius XM projects that fixed costs will decline as a percentage of revenue from roughly [REDACTED]% in 2011 to roughly [REDACTED]% in 2016. SX Trial Ex. 9 at 14. Unsurprisingly, Sirius XM also projects that its total operating expenses will also decline as a percentage of revenue. *Id.* at 19, 26. As Mel Karmazin explained to investors in August 2011: "We anticipate our revenue growth will accelerate. Our revenue will grow faster than our expenses, so there will be further margin expansion." Lys WDT at 18, SX Trial Ex. 80.

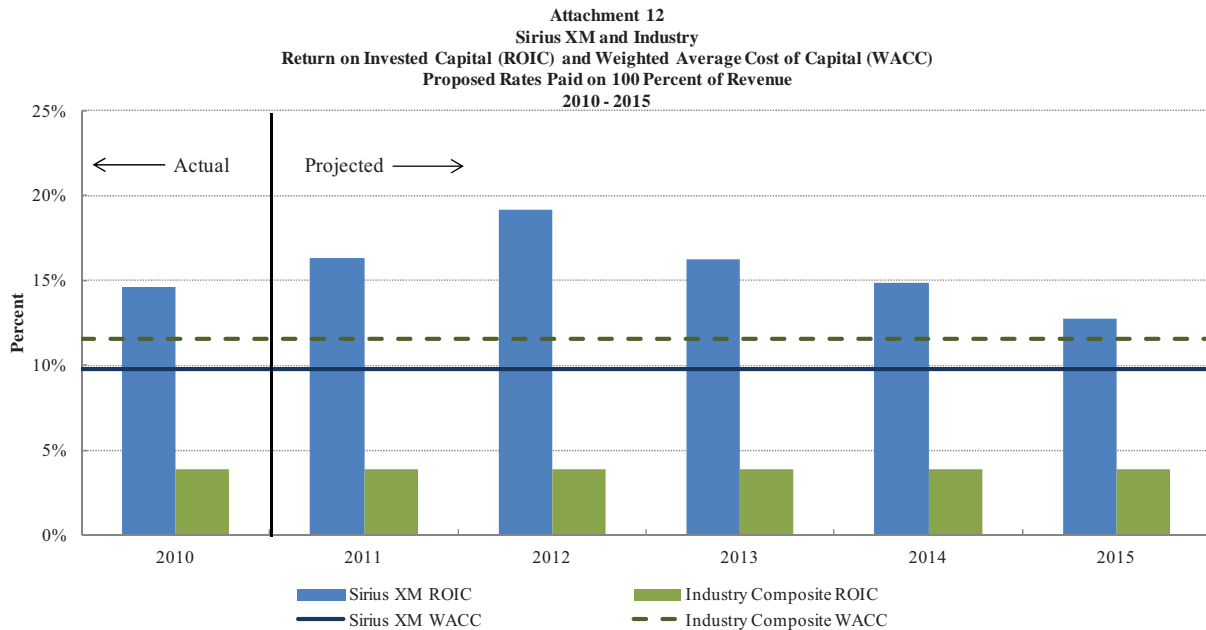
620. Analysts agree with management's assessment that operating expenses will continue to decline as a percentage of revenue in the coming years. Lys WDT at 18 & Attachment 7, SX Trial Ex. 80. Analysts at Morgan Stanley expect Sirius XM will continue to attain additional synergies from the merger that are still materializing. *Id.* For example, as Dr. Lys testified, Morgan Stanley "expect[s] over \$100M in annual cost savings to be realized as a large OEM revenue share deal is renegotiated at the end of 2013." *Id.* As was discussed in Mr. Frear's oral testimony, that OEM deal is with [REDACTED], and part of that savings is due to the fact

that [REDACTED]
[REDACTED]. 8/13/12
Tr. 3111-3116 (Frear); *see also* SX Trial Ex. 209 at 4. [REDACTED]
[REDACTED]. 8/13/12 Tr. 3115:1-3 (Frear).

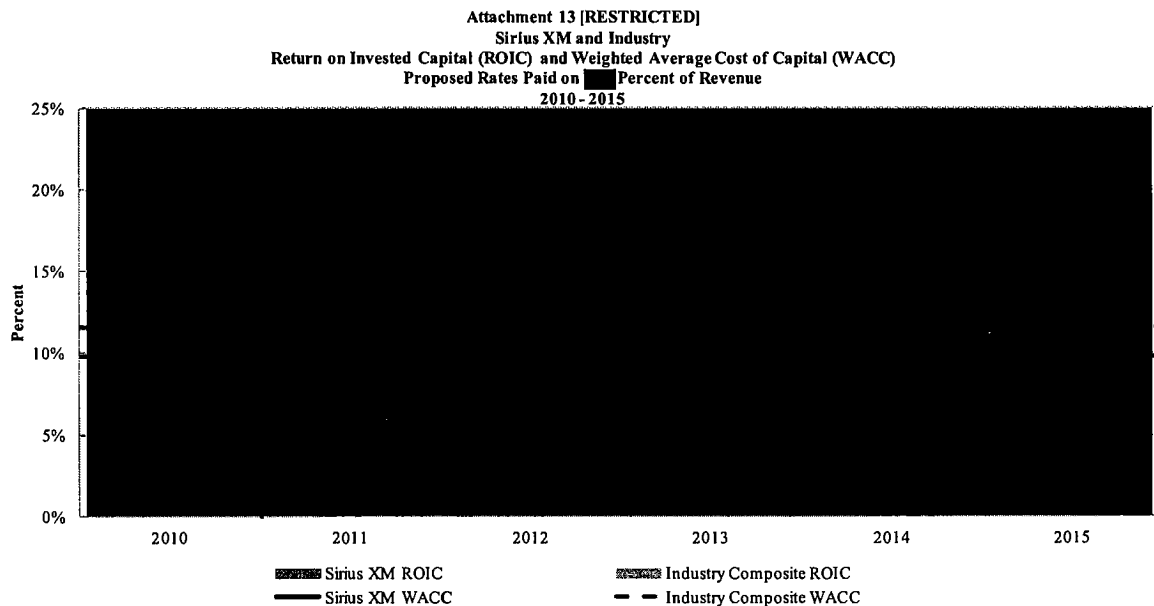
g. SoundExchange's Proposed Rates Would Still Permit Sirius XM To Obtain Significant Return on Invested Capital

621. Dr. Lys completed one final assessment of Sirius XM's financial performance concerning its return on (total) invested capital ("ROIC"). Lys WDT at 33-35, SX Trial Ex. 80. ROIC measures the aggregate return available to a firm's debt and equity investors. *Id.* at 34. The ROIC measure shows that Sirius XM is currently generating returns beyond those required by stock and bond holders, controlling for the company's risk level. *Id.* These returns also far exceed those generated by other firms in the radio and television broadcasting industry. *Id.* Dr. Lys further found that these returns are projected to continue in the coming years. *Id.*

622. Sirius XM's weighted-average cost of capital ("WACC") measures the returns required by the firm's investors in aggregate. *Id.* WACC is calculated by separately measuring the returns required by lenders and by equity investors, and then weighting those returns by the proportion of debt and equity in a firm's capital structure. *Id.* As the figure below shows, in 2011, Sirius XM generated a return on its invested capital of 16.35 percent, well in excess of the 9.79 percent WACC, indicating that Sirius XM's activities have enhanced investors' wealth. *Id.* at 34 & Attachment 12. The figure also shows that the projected ROIC values for Sirius XM (incorporating the effect of the proposed royalty rate schedule) exceed the current WACC, indicating Sirius XM's ability to outperform the returns commensurate with its risk levels in coming years. *Id.*



623. The figure above also shows that Sirius XM outperforms the average ROIC of the radio and television broadcasting industry. *Id.* The latest ROIC of radio and television broadcasting industry composite was 3.90 percent, far below Sirius XM's ROIC of 16.35 percent and also below the industry composite WACC of 11.54 percent. *Id.* The figure above was based on an assumption that Sirius XM would pay royalties on 100% of revenue. *Id.* As shown in the figure below, the ROIC results are even stronger if the royalty rate schedule is applied to [REDACTED] percent of Sirius XM's total revenues (*id.* at Attachment 13).



h. SoundExchange's Proposed Rate Is Roughly Forty to Fifty Percentage Points Below a Rate that Would Cause Sirius XM to Cease Operating

624. In the *SDARS I* decision, this Court stated that “a royalty rate that would cause the SDARS to cease operating or dramatically change the nature of its product would clearly be disruptive.” *SDARS I*, 73 Fed. Reg. at 4097. The evidence overwhelmingly shows that the rate proposed by SoundExchange does not even remotely threaten Sirius XM’s operations. As Professor Sidak testified, it is a basic principle of economics that Sirius XM would not cease operations unless its average subscription price fell below its average variable cost. Sidak WDT at 36-37, SX Trial Ex. 78. Professor Sidak then calculated that for the third quarter of 2011, the last quarter for which he had data, the royalty rate would have to increase to 57.8% before Sirius XM’s average variable costs would exceed its average subscription price, and that assumed 100% of gross revenues would be reported to SoundExchange. *Id.* at 37-41 & tbl. 3. If only [REDACTED] of gross revenue were reported to SoundExchange, as has historically occurred, *see* Lys WDT at 22, SX Trial Ex. 80, then the royalty rate would have to increase to between 70.4% and

79.3% before Sirius XM would cease operating. Sidak WDT at 40 fig. 3, SX Trial Ex. 78. In other words, even at the end of SoundExchange's rate proposal, the proposed rates are roughly forty to fifty percentage points below the economic shutdown rate. That is not to say that shutdown is the only form of disruption, but the evidence overwhelmingly shows there is virtually no risk of shutdown during the coming term based on SoundExchange's rate proposal.

625. Professor Stowell criticized Professor Sidak's analysis for only covering one quarter. Stowell WRT at 14, SXM Reb. Trial Ex. 7. But Professor Stowell did not bother to examine whether Professor Sidak's analysis would change for other periods. In fact, the record demonstrates that Sirius XM's variable costs have remained relatively constant as a percentage of total revenue, between [■] and [■]% of total revenue, even as the royalty rate paid to SoundExchange has increased.⁶⁴ SX Trial Ex. 15 at 26. Indeed, Sirius XM has told investors that it has consistently maintained a contribution margin (*i.e.*, the percentage of revenue left after variable costs) of roughly 70%. Lys WDT at 17, SX Trial Ex. 80. As a result, the evidence suggests that Professor Sidak's analysis would not differ significantly for different time periods.

i. SoundExchange's Phased In Rate Proposal

626. To further ensure that its rate proposal will not disrupt Sirius XM's business, SoundExchange has proposed rates that increase over the rate period. SX Revised Rate Proposal at 2. This proposal is consistent with this Court's prior precedent phasing in royalty rate increases. *SDARS I*, 73 Fed. Reg. at 4097-98. The record overwhelmingly demonstrates, however, that Sirius XM can afford to pay a 12% rate in 2013, the first year of the rate period, without the slightest risk of disruption. Sirius XM has already guided investors that its financial

⁶⁴ Sirius XM labels fewer costs as variable costs than Professor Sidak did for his analysis. If Professor Sidak applied Sirius XM's definition of variable costs, his analysis would show that royalty rate could go even higher before Sirius XM would cease operating.

performance in 2013 will be even better than in 2012. Lys WRT at 41, SX Trial Ex. 240; Lys WRT at SX Ex. 221-RP, p. 5, SX Trial Ex. 240; *see also* 6/11/12 Tr. 1425:9-12 (Karmazin) (agreeing that he still believes “2013 will be better than 2012”). But as Dr. Lys has demonstrated, based on Sirius XM’s own projections that it shared with credit ratings agencies, even if Sirius XM’s revenue in 2013 somehow dropped to \$[REDACTED] billion in 2012 from [REDACTED] billion in 2013, Sirius XM would still earn approximately \$[REDACTED] million in adjusted EBITDA and approximately \$[REDACTED] million in free cash flow, again assuming contrary to past history that Sirius XM pays on 100% of revenue and that it does not pass on any royalty increase on to subscribers. Lys WRT at Appendix A.4, SX Trial Ex. 240. In other words, even if Sirius XM is dead wrong that 2013 will be better than 2012 (and in fact 2013 is a total disaster), Sirius XM will still be making hundreds of millions of dollars in profits and free cash flow under a 12% rate. Moreover, the evidence demonstrates that if Sirius XM decided to recoup from subscribers *all* of the self-pay royalties at a 12% rate, Sirius XM would only need to raise the Music Royalty Fee to roughly \$2.13, only 15 cents more than the Fee was previously set at.⁶⁵ *See* 8/13/12 Tr. 3045:10-12 (Judge Roberts: “We know that [subscribers] were apparently comfortable paying \$1.98, and now they’re paying less at \$1.40”). Morgan Stanley likewise is already assuming in its base case that the royalty rate will rise to 13% with Sirius XM passing on the vast majority of costs to subscribers, with virtually no impact at all on Sirius XM’s business or subscriber growth. *See* SXM Reb. Trial Ex. 12 at 9. In short, should the Court determine that the market rates are at 12% or higher, the evidence in the record overwhelmingly supports that the royalty rate

2. Sirius XM’s Disruption Arguments Lack Merit

⁶⁵ $\$2.13 = (12\%/8\%) \times \1.42 current rate.

627. Sirius XM's claims of disruption are blatantly overstated. Its witnesses offer little actual analysis, instead arguing essentially that any dollar paid in royalties is a dollar less in Sirius XM's profits, and therefore disruption. For example, notwithstanding that Sirius XM will earn nearly \$1 billion in EBITDA profitability this year alone, Mel Karmazin stated that "[t]o increase the [royalty] rate by any measure could have a disruptive effect on Sirius XM's business." Karmazin WDT at 19, SXM Dir. Trial Ex. 19. David Stowell and David Frear both made similarly exaggerated statements. Stowell WDT at 4, SXM Dir. Trial Ex. 18 ("I have concluded that any increase to the royalty rate would substantially increase the likelihood of disruption."); Frear WDT at 23, SXM Dir. Trial Ex. 12 ("An increase in the royalty rate . . . significantly increases the likelihood of Sirius XM, once again, facing a potential disruption of its business."). Faced with compelling evidence about the rosy financial performance and outlook for the company, Sirius XM has presented this Court with flimsy arguments in support of its claim that any increase in the royalty rate will be disruptive.

a. Sirius XM's Concerns about Potential Disruption from Internet Radio are Unfounded

628. Sirius XM's claim that it faces a competitive threat from Internet radio in the car that is likely to have a disruptive effect over the coming rate term is not supported by the record evidence.

629. Most obviously, Sirius XM's claims of a disruptive effect are belied by the fact that outside of this proceeding, Sirius XM has stated both internally and to its shareholders that it expects increased subscribership, revenues, and profitability over the rate term. *See* Section VIII.C.1.b.i. Literally, at the same time Sirius XM is asking this Court to reduce the rates it pays because of the supposed competitive threat from Internet radio, it is predicting not just growth, but *record* growth, in spite of Internet radio. Mr. Karmazin put it well in a conference call with

investors earlier this year: “Increased competition is certainly out there especially in the Internet universe. But today, we can’t identify the effect of new competition on our business. SIRIUS XM has more paying subs today than ever before in our history and we are going to keep growing this year to end at another record level. We are focused on accelerating our revenue and adjusted-EBITDA growth and we will obtain new record levels in both of these measures. And our cash flow is now growing this year into a substantial asset for investors with tremendous potential for long-term growth.” Lys WRT at SX. Ex 221-RP, p.4, SX Trial Ex. 240. And Sirius XM has said the same thing again and again outside the confines of this proceeding.

- “As we’ve said many times, business models matter. We not only have a lot of users but we have a fantastic model for monetizing this usage through subscription services. Our business model is superior to that of terrestrial radio and the Internet radio companies we compete with. The subscription business is a great one. SIRIUS XM has more paying subscribers than all the other companies in the world combined. Also, at a time when more and more content is available, and consumers continue to be time-constrained, as there are still only 24 hours in a day, we believe curated content, SIRIUS XM aggregated curated audio content is more important than ever, and will be even more important in the future as even more content becomes available, especially on the Internet.” Lys WRT at SX. Ex. 221-RP, p. 4, SX Trial Ex. 240.
- “In 2011, SiriusXM was factory-installed in about two-thirds of all cars sold in America, while AM and FM radio was ubiquitous. Today, we are not seeing IP as a game changer. IP easy-to-use connectivity in cars is still very modest, but will become more common place over the coming years. Terrestrial radio is still our biggest competitor by far, and we know very well how to compete with it.” Lys WRT at SX. Ex. 224-RP, p. 3, SX Trial Ex. 240.
- “The IP connected mobile world no doubt has numerous strong competitors, but as I just outlined for us, it has also created huge new opportunities for us to connect with our subscribers. We are unique in that our subscribers have demonstrated a willingness to pay for our service at a price point that no other audio entertainment company in the world can match. This allows us to create and deliver premium content to them across all platforms in a way, we believe is truly unbeatable.” Lys WRT at SX. Ex. 230-RP, SX Trial Ex. 240 (2011.5.3 Sirius XM Radio First Quarter 2011 Financial and Operating Results Conference Call).

630. Rhetoric aside, Sirius XM has been unwilling to actually say in this proceeding that it expects substantial disruption from Internet radio over the rate period. Sirius XM's primary expert on this issue, Mr. Rosenblatt, called Internet radio "life-threatening" in his written testimony. Rosenblatt WDT at 4, SXM Dir. Trial Ex. 17. But when he was asked by the Court whether Internet radio was going to make satellite radio obsolete, Mr. Rosenblatt conceded that Sirius XM is not the "block ice" industry destined for obsolescence, but rather is like the cable industry—a service that has continued to prosper even as it has faced competition from other video entertainment services, like FIOS. 6/8/12 Tr. 1094:18-1096:7 (Rosenblatt). Mr. Rosenblatt added that ultimately "the SiriusXM audience is comfortable with what they get. It's a wide variety at a price point that makes sense for the package that you get." 6/8/12 Tr. 1096:1-7 (Rosenblatt). Moreover, Mr. Rosenblatt conceded that he believes that satellite radio subscribership will continue to grow during the coming rate term; it is just that Internet radio will grow faster. 6/8/12 Tr. 1154:4-8 (Rosenblatt) ("What I am suggesting is simply the growth rate of Internet services is higher than the growth rate of satellite radio subscribership. And I'm suggesting that it will likely continue that way during the next five years.")

631. As we explain, there are two basic reasons that Sirius XM is correct to predict substantial growth in the face of Internet radio. First, much of Sirius XM's growth has come during the ascendancy of Internet radio. And second, Sirius XM enjoys competitive advantages versus Internet radio going forward.

i. Sirius XM Has prospered Even As Internet Radio Has Grown.

632. One obvious indication that Internet radio does not present a disruptive threat to satellite radio is that according Sirius XM, Internet radio has *already* reached a critical mass and yet Sirius XM has flourished during that time. Mr. Rosenblatt testified that there was a

“technology transition” that began “in 2007-2008 and ended by 2010” in which Internet radio became more prominent, smartphones became more capable, and cars provided more Internet radio integration, such that there was a “critical mass” for Internet radio by 2010. Rosenblatt WDT at 6-8, 37-39, SXM Trial Ex. 17.

633. If Internet radio were disruptive to Sirius XM, one would expect to have seen reductions in Sirius XM’s growth during that time. But Sirius XM’s own figures show the opposite. Satellite radio has become substantially more, not less, popular and profitable during Mr. Rosenblatt’s “technology transition” and has continued that trend in the years since Internet radio reached its “critical mass” as shown in the charts below.



SX Trial Ex. 229 at 10, 36-38. Indeed, Mr. Frear has made this very point to investors: “if there is going to be a disruptive technology impact to our business, I think we would have seen it already.” Lys WRT at 38 & SX Ex. 223-RP, p. 11, SX Trial Ex. 240.

634. Not only has Sirius XM enjoyed record growth during the supposed ascendancy of Internet radio, but it actually *increased* its rates during that time with the expectation that it would result in a positive impact on revenue. 6/6/12 Tr. 600:8-16, 601:3-11 (Meyer). And despite increasing the rates it charges subscribers, the Sirius XM’s churn rate (*i.e.*, the monthly percentage of self-pay subscribers who deactivate) *decreased* during the first quarter of 2012. 6/6/12 Tr. 601:20-602:11 (Meyer).

635. In short, the record uniformly shows that Sirius XM has prospered as Internet radio has grown.

ii. Sirius XM Enjoys Significant Competitive Advantages over Internet Radio Going Forward

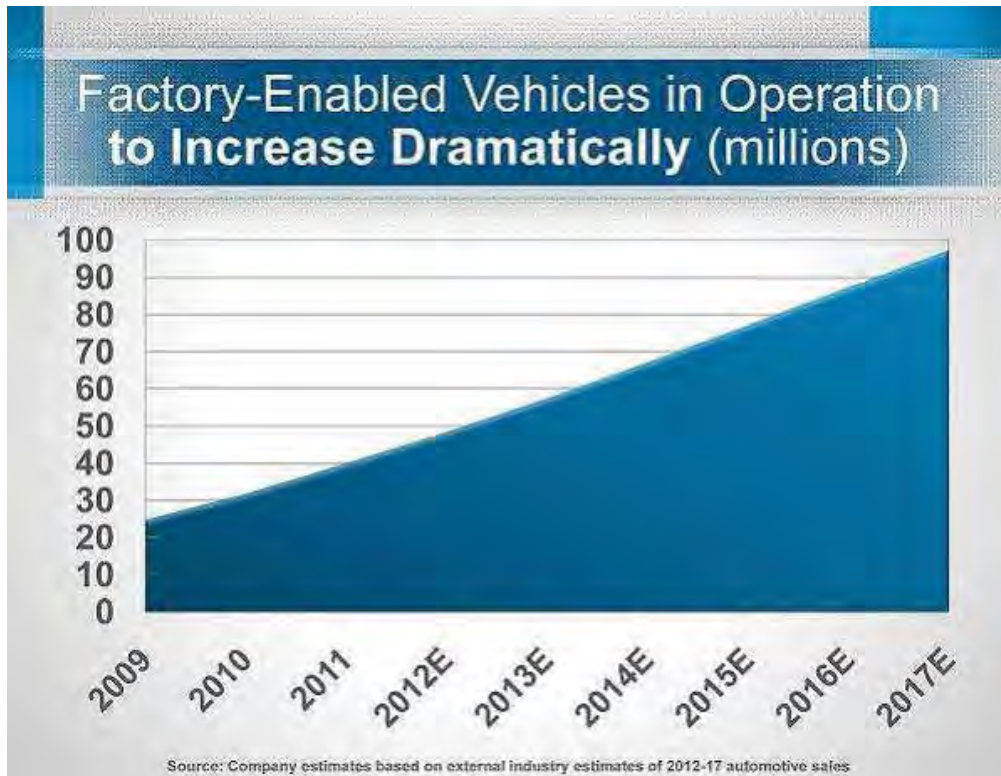
636. The record is equally clear in showing that Sirius XM has competitive advantages that will prevent Internet radio from being a disruptive threat going forward. These include the fact that Sirius XM has substantial advantages in distributing its radios in cars, that Sirius XM is better integrated and more usable in cars, and that Sirius XM does not suffer from a price disadvantage relative to Internet radio.

a) Sirius XM enjoys an overwhelming advantage in distributing its radios in cars

637. A primary reason that Internet radio will not pose a competitive threat going forward is that Sirius XM has had and will continue to have a formidable distribution advantage with automobile manufacturers. Potential substitutes for Sirius XM, including in-car Internet radio, pose little threat of significant competition until they can catch up with that distribution

advantage. Sidak WDT at 30, SX Trial Ex. 78. As Sirius XM executive Meyer testified, radio consumers “don’t just jump overnight to anything new”, 6/6/12 Tr. 542:14-17 (Meyer), and Sirius XM has 22.3 million subscribers while even the most prominent Internet radio service, Pandora, has only 1 million subscribers. 6/6/12 Tr. 575:16-576: (Meyer). An April 2011 presentation to Sirius XM’s Board of Directors [REDACTED]” Sidak WDT at 35 n. 108a, SX Trial Ex. 78. As Mel Karmazin told investors late last year: “Before any of these [internet radio] companies get to where they have any meaningful penetration, you know, in the cars, it's going to be many years from now.” 6/11/12 Tr. 1383:15-18 (Karmazin). Karmazin explained that “[i]t takes a long time to get into all of these vehicles.” 6/11/12 Tr. 1383:6-7 (Karmazin). Indeed, Karmazin admitted that it took Sirius XM nine years to get its penetration rate up to 65 percent. 6/11/12 Tr. 1384:16-22 (Karmazin).

638. Sirius XM’s own figures tell the tale. Sirius XM has told its shareholders that it expects to have nearly 100 million factory-enabled vehicles on the road by 2017.



SX Trial Ex. 229 at 34. And this figure does not even include the millions of cars that have satellite radios from the aftermarket (*i.e.*, not factory enabled). In contrast, even David Stowell, the only witness in this proceeding who expects Sirius XM to lose subscribers during the coming rate term, thinks that there will only be in the range of 25 million connected cars on the road by the end of the rate period. 8/15/12 Tr. 3620:18-3621:3 (Stowell).

639. The reason for this gap is that Sirius XM enjoys a huge head start in terms of integration into the automobile dashboard over Internet radio, 6/8/12 Tr. 1170:13-16 (Rosenblatt), that have made it “firmly entrenched in the automobile.” 6/6/12 Tr. 536:6-9 (Meyer). Sirius XM has agreements with every major automaker to offer satellite radios as factory- or dealer-installed equipment in new vehicles, and satellite radio is already built into 65 percent of new cars. Meyer WDT at 18, SXM Trial Ex. 5; Sidak WDT at 30, SX Trial Ex. 78. And because satellite radios have been built into new cars since at least 2003, satellite radios are

also present in a large volume of used cars. Numerous automobile manufacturers offer free introductory Sirius XM subscriptions with used cars that include a satellite radio. Sidak WDT at 31, SX Trial Ex. 78.

640. Internet radio lags far behind Sirius XM in establishing relationships with carmakers. Pandora, for example, did not have agreements with automobile manufacturers to provide in-dash options until 2009. Sidak WDT at 31-2, SX Trial Ex. 78. As Sidak testified, “[t]he mobile internet radio service suppliers are not as far along, in terms of contracting with all the auto manufacturers. In addition, once those contracts for the mobile Internet radio companies are entered into, they only apply to new cars. There’s a large fleet of used cars that contain satellite radio receivers in the dash, and so that’s a huge installed base that gives Sirius XM a first mover advantage over a new technology.” 6/18/12 Tr. 2746:19-2747:14 (Sidak). In fact, Sirius XM recognizes its relationships with automakers as [REDACTED]. Sidak WDT at 30 n.84a, SX Trial Ex. 78. All told, CFO David Frear predicts approximately 30 million cars on the road with Internet radio connectivity by 2018, and predicts 100 million cars with satellite radio by that time.

- b) Sirius XM’s satellite radios are far better integrated into cars than Internet radio listening options

641. Internet radio also will not pose a competitive threat to Sirius XM because it is not as well-integrated into automobiles and is constrained by certain technological limitations.

642. First, consumers currently face significant technological limitations to listening to Internet radio services in cars without an in-dash listening feature. Sidak WDT at 32, SX Trial Ex. 78. In a car not designed to be smartphone-compatible, streaming audio content through a car stereo requires multiple steps, and most methods require purchasing additional equipment.

Sidak WDT at 34, SX Trial Ex. 78. Thus, in-car Internet radio options that rely on connectivity to a smartphone rather than an in-dash connection are more difficult for drivers to use. Meyer WDT at 12, SXM Trial Ex. 5.

643. Even cars that are smartphone-compatible may accommodate only particular makes or models of smartphones. Sidak WDT at 34-35, SX Trial Ex. 78.

644. Indeed, non-smartphone-compatible cars pose serious safety risks to users attempting to listen to Internet radio in the car. Direct operation of a smartphone while in an automobile has been recognized as a distraction and a hazard to drivers. Sidak WDT at 32, 35, SX Trial Ex. 78.

645. The fact that the majority of cars on the road do not have seamless, in-dash access to smartphone applications and will not in the foreseeable future limits mobile Internet radio from substituting for Sirius XM as an in-vehicle listening option. Sidak WDT at 34, SX Trial Ex. 78. Sirius XM's established integration into the car dashboard, just like terrestrial radio's integration into the dashboard, will allow it to continue growing notwithstanding the growth of Internet radio over the coming rate term. Sidak WDT at 32, SX Trial Ex. 78. Even the CEO of Pandora, a leading Internet radio provider, expects that only "there will be a gradual migration in the car" to Internet radio services and that they "will not become a mainstream service until all new cars feature systems that can tap into apps." Sidak WDT at 35, SX Trial Ex. 78.

c) Network limitations on Internet radio

646. Current 3G network technology is insufficient for widespread, high-quality audio streaming. A Sirius XM document from 2010 acknowledges that [REDACTED]
[REDACTED] and that ["[REDACTED]
[REDACTED] SX Trial Ex. 7 at 6. This

presentation went on to hypothesize that [REDACTED]

[REDACTED]. SX Trial Ex. 7 at 7.

647. An increase in 4G network coverage will not be sufficient to allow mobile

Internet radio to substitute for satellite radio in cars. Sirius XM recognizes that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Sidak WDT at 32 n.95a, SX Trial Ex. 78.

648. In addition, audio streaming through a smartphone is simply not possible in sparsely populated areas that remain without 3G wireless service, and many densely populated areas also experience limitations on Internet connectivity that impede delivery of mobile Internet radio in cars. Sidak WDT at 33-34, SX Trial Ex. 78.

649. Conversely, Sirius XM's satellite delivery service offers its subscribers a more consistent signal delivery to their cars. As CEO Mel Karmazin points out, "we are an advantage to doing it on IP because you are going to often have buffering and you're going to have clutter. They tell me that, as time goes on, 4G is going to improve it, and buildouts. So I definitely think our network is a huge advantage to us over, you know, other networks." 6/11/12 Tr. 1436:2-7 (Karmazin).

iii. Sirius XM and Internet Radio Will Both Grow in the Upcoming Rate Term

650. The bottom line is that both Sirius XM and Internet radio will continue to grow over the coming rate term. When asked directly, Rosenblatt agreed that over the next five years

both satellite and Internet radio will continue to grow while terrestrial radio will continue to diminish. 6/8/12 Tr. 1153:18-1154:8 (Rosenblatt). Mr. Karmazin has made the same point to investors in late 2011: “That 15% [marketshare of satellite radio] is going to be growing in the years ahead. That 5% [marketshare of internet radio] is going to be growing in the years ahead. And the 80% [marketshare of terrestrial radio] is going to drop.” Lys WRT at SX Ex. 230-RP, SX Trial Ex. 240 (2011.11.17 Mel Karmazin presents at the Liberty Media Corporation 2011 Investor Meeting). That is why Mel Karmazin has told shareholders that: “we believe we have many, many years of subscriber growth ahead of us.” Lys WDT at 8, SX Trial Ex. 80. Likewise, Mr. Meyer testified that he does not believe the subscriber base unlikely to contract during the coming rate term. 6/6/12 Tr. 604:18-605:3 (Meyer); *see also* Lys WRT at 42, SX Trial Ex. 240 (noting that Mr. Meyer likewise testified in his deposition that Sirius XM’s subscriber base is unlikely to contract).

651. In fact, the only witness in this proceeding who believes that a decline in subscribers is likely is Professor Stowell. Stowell WDT at 11, SXM Dir. Trial Ex. 18. Professor Stowell’s expertise is in capital raising and investment banking; he has no expertise concerning audio entertainment in the car. 8/15/12 Tr. 3657:11-21 (Stowell) (explaining that his only expertise arises from his “general responsibility for all industries in the context of my role at JP Morgan in Chicago as it relates to the middle part of the United States”). Professor Stowell offers no explanation and empirical analysis as to how he comes to the conclusion that Sirius XM is likely to experience a decline subscriber base. Professor Stowell notes reviewing many analyst reports to understand the threat of Internet radio (and other alternative technologies), Stowell WDT at 11, SXM Reb. Trial Ex. 7, but fails to mention that all of the analysts covering Sirius XM expect the company to grow significantly (not decline) during the coming rate term in

spite of the increased competition. *See, e.g.*, Lys WDT at Attachment 2, Attachment 8, SX Trial Ex. 80. Indeed, Professor Stowell himself believes his own prediction of lost subscribers should not be relied upon or viewed as a “forecast with any certainty.” 8/15/12 Tr. 3663:16-3664:18 (Stowell).

b. Sirius XM’s 2009 Near-Bankruptcy is Irrelevant to the Disruption Analysis

652. The testimonies of Mr. Stowell, Mr. Karmazin, and Mr. Frear each describe Sirius XM’s struggle to refinance in early 2009 (the company ultimately gained access to capital in February 2009). Stowell WDT at 2, 5-7, SXM Dir. Trial Ex. 18; Frear WDT at 3-7, SXM Dir. Trial Ex. 12; Frear WDT at 3-7, SXM Dir. Trial Ex. 19. However, as Dr. Lys testified, their descriptions of the company’s near-bankruptcy are irrelevant to a current analysis of the likelihood that the royalty rates proposed by SoundExchange would disrupt Sirius XM’s business. Lys WDT at 46, SX Trial Ex. 240.

653. The near bankruptcy experience was caused by bad timing and the urgent need to refinance debt and had nothing to do with the royalty rate. 8/20/12 Tr. 4040:14-4042:7 (Lys). As Dr. Lys explained, that Sirius XM needed to refinance a debt issue “at the height of the worst liquidity crisis we have ever experienced is really bad luck.” 8/20/12 Tr. 4040:14-4041:3 (Lys). In addition, Sirius XM was simultaneously a victim of a power play to take over the company, with certain people buying up Sirius XM debt in an attempt to force a takeover of the company. 8/20/12 Tr. 4041:5-15 (Lys). In fact, Mr. Frear conceded that the company would have been able to refinance on more favorable terms if the merger of Sirius and XM had closed on the expected FCC merger schedule. 6/7/12 Tr. 742:3-22 (Frear). But in between the time when the merger was expected to close and when the FCC finally approved the merger, the credit market became seriously distressed after the collapse of Lehman Brothers; so distressed that in fact

Sirius XM was the only company of its credit rating to successfully finance debt in the marketplace during that time period. 6/7/12 Tr. 742:3-22 (Frear). Mel Karmazin has likewise discussed this issue with investors, telling them that the “government really screwed us by having the merger take 17 months to complete” and “because of the fact that it took so long , we wound up having to deal with Lehman; had to deal with financing.” Lys WRT at SX 230-RP (2011.11.17 Mel Karmazin presents at the Liberty Media Corporation 2011 Investor Meeting). Tellingly, once that short period of severe financial distress subsided, Sirius XM has successfully raised over \$2 billion in new debt without any difficulty, even as royalty rates have increased since 2009. 8/20/12 Tr. 4044:14-15, 4046:4-5 (Lys). Indeed, Sirius XM was able to raise \$780 million of debt only a few months after its “near-bankruptcy experience” in June and August of 2009 at lower interest rates. 6/7/12 Tr. 745:17-747:11 (Frear). This \$780 million refinancing was far more than the \$172 million it needed to raise in February 2009, 8/20/12 Tr. 4045:9-12 (Lys), which plainly demonstrates that the near bankruptcy was caused by bad timing and bad luck, not the royalty rate.

654. Moreover, Dr. Lys testified that the near-bankruptcy experience is further irrelevant because the two conditions that gave rise to Sirius XM’s near bankruptcy (a severe credit crisis and imminent need to obtain capital) are no longer present. Lys WDT at 46, SX Trial Ex. 240. First, as Dr. Lys pointed out, the odds of such a crisis happening again in the near future is very low since that type of crisis has happened only twice in the past 80 years. 8/20/12 Tr. 4046:5-9 (Lys). Second, Sirius XM’s financial position is very different now than it was then. As Dr. Lys testified, back then Sirius XM had a market cap of \$500 million; now it is \$16 billion. 8/20/12 Tr. 4044:1-2 (Lys). Back then, Sirius XM had less than \$200 million of cash on hand; now it has \$868 million and has announced that it will have between \$1.2 and \$1.5 billion

in cash on hand by the end of the year, depending on how much debt it buys back. 8/20/12 Tr. 4044:4-6 (Lys); 6/7/12 Tr. 750:13-751:3 (Frear). Sirius XM's debt strategy is also very different then and now; then it was Sirius XM's strategy was just to finance debt even at very high rates, but now Sirius XM is calling its previous debt and buying back debt that it cannot call, and replacing the older debt with cheaper debt. 8/20/12 Tr. 4044:16-4045:3 (Lys).

In short, Sirius XM does not anticipate an imminent need to obtain capital in the near future, nor is it likely that Sirius XM will have difficulties raising capital, should additional capital be needed; in fact, the opposite is true. Lys WDT at 46, SX Trial Ex. 240. As Mr. Karmazin explained:

[Sirius XM management is] extremely pleased with the market view of [Sirius XM's] credit quality and access to credit (...)

[Sirius XM] will have nearly \$1.5 billion of liquidity at [its] disposal by the end of 2012. [The company] will have the flexibility to use this liquidity to grow [the] business, ensure a low cost of debt, make acquisitions and return capital to shareholders.

Lys WDT at 46 & SX Ex. 226-RP, p. 4, SX Trial Ex. 240.

655. In fact, the big debate within Sirius XM is "what to do with the cash." 8/20/12 Tr. 4045:13-4046:3 (Lys). As Dr. Lys testified, Sirius XM's management's often repeated interest in returning capital to shareholders is probably the clearest indication that Sirius XM's financial performance is not only solid but also expected by management to remain solid in the future. Lys WRT at 46, SX Trial Ex. 270. For example, when asked about returning capital in an interview, Mr. Karmazin answered:

You could return the capital to shareholders. At the end of this year, at the end of this year, we'll have between a \$1.2 billion and \$1.5 billion of cash on our balance sheet. I don't know what to do with it other than to use it as you're characterizing.

Lys WRT at 47 & SX Ex. 222-RP & SX Ex. 230-RP, SX Trial Ex. 240 (emphasis added). As

Dr. Lys explained, returning capital to shareholders is a discretionary cash outflow from the

business – and an indication that management has excess cash on hand, something that is nearly impossible for a cash-starved business that is seeking additional capital in order to stay afloat.

Lys WRT at 47, SX Trial Ex. 270. Indeed, Dr. Lys testified that academic research shows that management initiation of dividends is a strong signal of positive and sustainable performance.

Id.

656. Further, even if Sirius XM had filed for bankruptcy in 2009, its service would not have been disrupted. As Mr. Frear candidly conceded, Sirius XM would have simply reorganized; it would not have liquidated through bankruptcy. 6/7/12 Tr. 748:4-10 (Frear). Sirius XM would have continued to operate its satellite radio service during the bankruptcy. 6/7/12 Tr. 748:11-14 (Frear). Likewise, Sirius XM did not stop transmitting at any time any satellite radio channels in connection with the near bankruptcy. 6/7/12 Tr. 748:15-18 (Frear). As Dr. Lys testified, a Sirius XM bankruptcy would have been a change of control event, not a liquidation event that would have destroyed the company. 8/20/12 Tr. 4042:8-4043:1 (Lys). Bankruptcy here would have been a reorganization; it just would have affected who controls the company. *Id.* Indeed, as Professor Sidak demonstrated, basic economic principles show that Sirius XM is nowhere near a shutdown point. Sidak WDT at 36-37, SX Trial Ex. 78. With a contribution margin of 70% (*i.e.*, on average for each additional dollar of revenue, variable costs are only 30%), 8/20/12 Tr. 4039:2-6 (Lys), basic principles of economics teach us that the company will not liquidate.

657. Finally, Mr. Frear's assertion that "the utter failure of anyone to predict... that Sirius XM would find itself on the precipice of bankruptcy within 12 months of the close of the proceeding" is "good evidence" of the "difficulty in forecasting the future of the Company," Frear WDT at 14-15, SXM Dir Trial Ex. 12, is plainly misleading. The bankruptcy had nothing

to do with a failure to forecast the company's financial performance. Lys WRT at 9, SX Trial Ex. 240. Indeed, in 2009, the year of the near-bankruptcy, Sirius XM [REDACTED]. *Id.* Sirius XM simply needed to refinance during a severe credit crisis. *Id.*

c. Sirius XM's Concerns about Potential Economic Downturns Are Overstated

658. Sirius XM argues that royalty rates cannot go up by any measure because a potential economic downturn may lead Sirius XM into "financial distress." *See, e.g.,* Stowell WDT at 16-17, SXM Dir. Trial Ex. 18. To begin with, Sirius XM's witnesses exaggerate the likelihood of another severe recession happening soon. Sirius XM's witnesses emphasize, for example, a temporary downward revision in analyst forecasts for auto sales, Frear WDT at 18, SXM Dir. Trial Ex. 12, which were later reversed, *see* Lys WRT at SX Ex. 221-RP, p. 3, SX Trial Ex. 240 (informing investors that forecasts of car sales had increased by 600,000).⁶⁶ In fact, auto sales are expected to climb significantly to 14.3 million in 2012, which the company told investors provides "nice momentum for [Sirius XM's] growth." Lys WRT at 38 & SX Ex. 221-RP, p. 3, SX Trial Ex. 240. Mr. Karmazin further told investors that "most forecasters believe auto sales will continue to grow for several years as Americans begin to more quickly replace the country's aging fleet of vehicles." Lys WRT at 38 & SX Ex. 226-RP, p. 4, SX Trial Ex. 240.

659. Professor Stowell likewise claimed that there is likelihood of disruption because of "historically high volatility and 'fear indices' that are close to the levels that prevailed during the 2007-2009 economic crisis." Stowell WDT at 16-17, SXM Dir Trial Ex. 18. But as Dr. Lys

⁶⁶ Mr. Frear likewise testifies about the current "tightened credit market," Frear WDT at 18, SXM Dir. Trial Ex. 12, notwithstanding the fact that Sirius XM was just able to issue \$400 million of debt at 5.25%, far lower than it has before, *see* 8/13/12 Tr. 3150:9-20 (Frear).

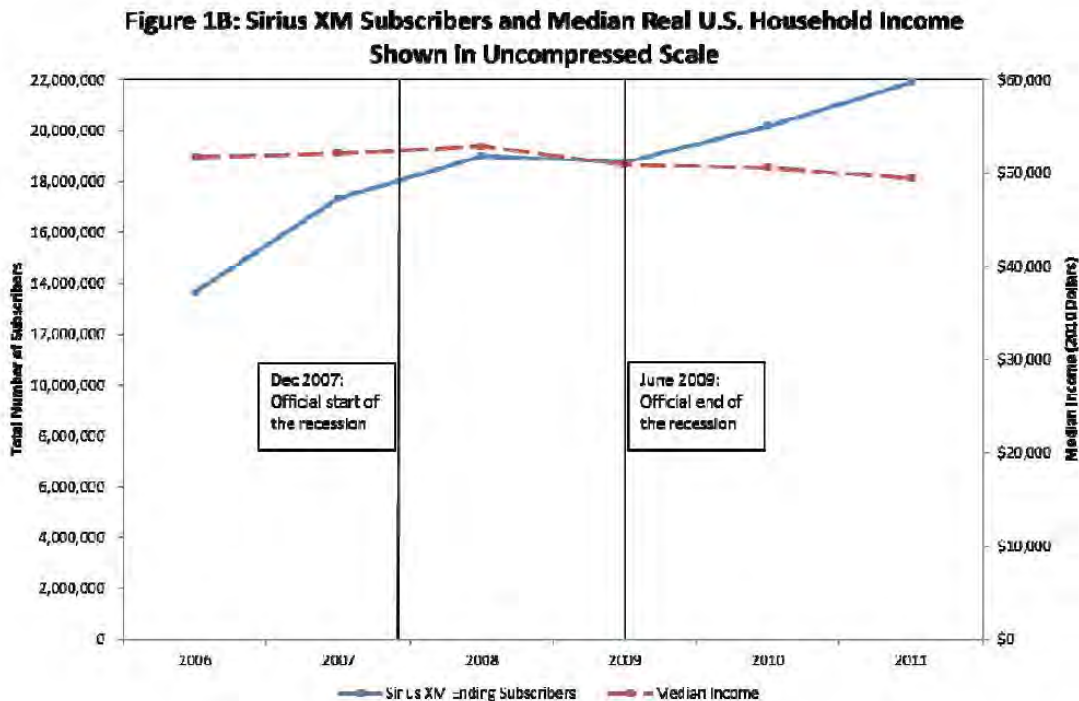
explained, these are measures of stock price volatility, not disruption. Lys WRT at 39, SX Trial Ex. 240. Moreover, Professor Stowell's analysis was just plainly inaccurate and misleading – the volatility of Sirius XM's stock price is at all time lows and the "fear indices" are far lower now than during the financial crisis. Lys WRT at 39-40, fig.9, Attachment 15, SX Trial Ex. 240. In short, it is pure speculation that the country will soon enter into another economic downturn like the 2008-2009 crisis.

660. But even in the event of another economic downturn, the evidence shows that while Sirius XM's business may experience a temporary slowdown in growth, it will be unlikely to experience substantial declines in revenue or subscribers. Sirius XM has attempted to caricature Professor Sidak's testimony as claiming its business is "recession-proof," Frear WRT at 19, SXM Reb. Trial Ex. 7, but the reality is that both sides agree on this issue that Sirius XM "did very well in the last recession."⁶⁷ *See, e.g.*, 8/13/12 Tr. 3146:15-16 (Frear); *see also* 8/13/12 Tr. 3147:1-4 (Frear) (Mr. Frear agreeing that he tells investors that "Sirius XM did very well through the last recession"). Professor Sidak's point was not that the recession had no effect on Sirius XM, but that it had substantially less impact on Sirius XM as compared to many other businesses.⁶⁸ *See, e.g.*, 6/18/12 Tr. 2795:12-19 (Sidak) ("I think many businesses would have envied such a situation because many businesses had enormous drop-offs in their sales during that period."). For example, while the auto industry saw its sales drop from over 16 million cars per year down to roughly 10 million cars per year, a decline of over 35%, SX Trial

⁶⁷ In fact, though Mr. Frear could not recall his specific statement, Mr. Frear did not doubt that he told investors that Sirius XM grows regardless of environment and that it grew through the last recession. 8/13/12 Tr. 3145:13-3147:4 (Frear).

⁶⁸ Sirius XM has repeatedly tried to mischaracterize Professor Sidak's testimony on this point. *See, e.g.*, 6/18/12 Tr. 2792:20-2793:2 (Sidak) ("Q: And, yet, you conclude that the macroeconomic conditions have no effect on this company? A: No. That's not a correct characterization of my testimony.").

Ex. 16 at SXM_CRB_DIR_00021673 (p. 7), Sirius XM experienced only a temporary slowdown in its growth, not a substantial loss of subscribers or revenue. Indeed, Dr. Salinger's graph demonstrates this point quite well – showing that Sirius XM's growth was temporarily slowed during the recession, but picked back up immediately after, even as household income continued to decline well after the recession ended (Salinger WRT at 21, SXM Reb. Trial Ex. 9).⁶⁹



661. In fact, the evidence shows that even in 2009 when Sirius XM lost subscribers overall (by 200,000), Sirius XM's self-pay subscriber base actually increased for the year by 154,000. *See* Lys WRT at SX 231-RP, p. 35, SX Trial Ex. 240. Self-pay subscribers are those who actually pay for the service to Sirius XM, as opposed to trial subscribers who get a free trial

⁶⁹ Sirius XM is a luxury product, *i.e.*, a discretionary purchase, not a necessity. Sidak WDT at 19, SX Trial Ex. 78. Professor Sidak demonstrated that even as household income continued to decline after the recession officially ended, Sirius XM was able to grow in spite of less disposable income for such discretionary purchases. *Id.* While Sirius XM's counsel tried to downplay the significance of a 7% decline in household income, "a seven percent decline in median household income is enormous" because the decline cuts hugely into the disposable income of households available for luxury products. 6/18/12 Tr. 2795:7-8 (Sidak).

subscription when they purchase a car. 6/7/12 728:21-729:10 (Frear). That is why Sirius XM's revenue increased in 2009 by roughly \$100 million from \$2.4 billion in 2008 to \$2.5 billion in 2009, SX Trial Ex. 229 at 34, even though Sirius XM's overall subscribership declined slightly. Likewise, 2009 was the first year that Sirius XM attained positive EBITDA (\$463 million) and positive free cash flow (\$185 million) in spite of the recession. SX Trial Ex. 229 at 37-38.

662. Fundamentally, it is Sirius XM's trial subscriptions that are most affected by macroeconomic factors because they are tied directly to automobile sales, since car purchasers are given free trial subscription by automakers. *See* Lys WRT at SX 231-RP, p. 35, SX Trial Ex. 240 (showing trial subscriptions dropped by over 10% in 2009, while self-pay subscribers actually increased). But the main takeaway, as Dr. Lys explained, is that Sirius XM's existing self-pay subscriber base is the key to its success, 8/20/12 Tr. 4054:7-8 (Lys), and that large self-pay subscriber base stayed intact throughout the recession. As Dr. Lys demonstrated, Sirius XM can more than afford to have a year or more of zero growth in overall subscribership without any significant risk of disruption to the business. *See, e.g.*, 8/20/12 Tr. 4020:17-4021:10 (Lys). This is especially so now that Sirius XM self-pay subscriber substantially larger than where it was during the recession. *See* Lys WRT at SX 231-RP, p. 35, SX Trial Ex. 240. In short, Sirius XM certainly performs better when macroeconomic conditions are better, but the evidence demonstrates, as Sirius XM tells its investors, that another economic downturn would not be disastrous for the company. Moreover, unlike the last recession, Sirius XM has a significant amount of cash on hand, which will grow to between \$1.2 and \$1.5 billion by the end of this year, to help weather any storm. Lys WRT at 47, SX Trial Ex. 240.

d. Sirius XM's Dependence on New Car Sales is Overstated

663. Sirius XM's dependence on new car sales to maintain profitability is overstated. For example, Professor Stowell testified that Sirius XM is "increasingly dependent on the highly volatile and cyclical U.S. auto industry... [and that its exposure to the auto industry] gives rise to a risk that cannot be hedged." Stowell WDT at 8, SXM Dir Trial Ex. 18. But as Dr. Lys explains, while new car sales are undoubtedly important to growing Sirius XM's business, the real "800-pound gorilla in the Sirius model is the existing customers and maintaining them." 8/20/12 Tr. at 4054:7-8 (Lys). As Dr. Lys explained, even if new car sales drop by a million in a year, the effect is roughly that Sirius XM's net subscriber additions will drop by 270,000 or so.⁷⁰ 8/20/12 Tr. at 4054:1-4055:4 (Lys). Dr. Lys testified that given Sirius XM has a large subscriber base, whether Sirius XM adds that additional 270,000 (or 300,000) subscribers really does not make a substantial difference in the short and intermediate run. 8/20/12 Tr. at 4054:19-4055:4 (Lys). In other words, new car sales affect Sirius XM's rate of growth, but it does not greatly affect Sirius XM's bottom line in the short and intermediate term.

664. Moreover, as Dr. Lys testified, a key driver of Sirius XM's future growth is the used car market. 8/20/12 Tr. at 4054:12-16 (Lys) ("The other 800-pound gorilla they haven't calculated but everybody is talking about is the roughly 30 to 40 million cars that have receivers but are not connected. Mostly used cars."). As Mr. Karmazin explained to investors:

I can't underestimate the importance that the used cars and second owner and third owner are going to represent for us. So, as we have begun to get to the point where customers have gotten satellite radio in their vehicles and now they are selling those vehicles and hopefully

⁷⁰ Morgan Stanley came to similar conclusions, finding that a loss of one million in new car sales results in a little over 325,000 fewer net additions (including paid trials), and a loss of two million in new car sales results in a little over 650,000 fewer net addition (including paid trials). SXM Reb. Trial Ex. 12 at 5. In either case, Morgan Stanley still predicts substantial subscriber growth, albeit at a slower pace than if car sales continue to increase. *Id.*

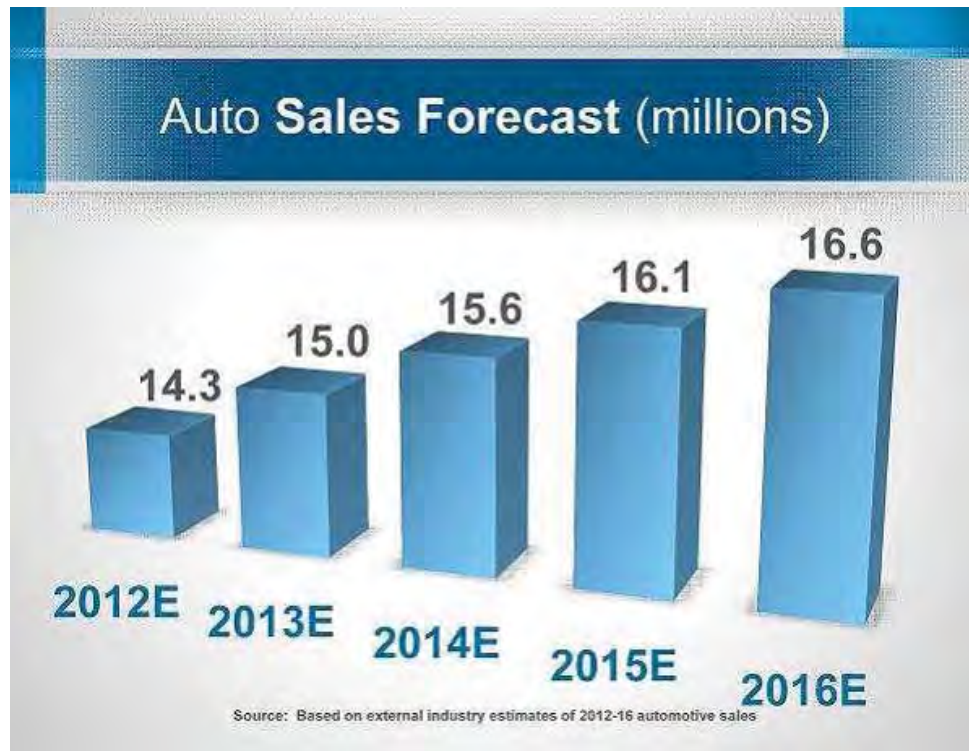
they are going to continue to be a subscriber when they buy a new one. Now the key for us is to get those vehicles that are now on the used car lots to get those people who are buying that vehicle to subscribe.

Lys WRT at 45 & SX Ex. 227-RP, p. 4, SX Trial Ex. 240.

665. Professor Stowell, however, overstates Sirius XM's dependence on new car sales because he erroneously diminishes the importance of used car sales. Professor Stowell claims that "[l]ess than 1% of Sirius XM's subscribers are projected to be attributable to used car sales by the end of 2012" and that over the coming years "nearly all new subscribers are projected to be attributable to new car sales." Stowell WDT at 8-9, SXM Dir. Trial Ex. 18. Both of these assertions are demonstrably false. In fact, Sirius XM expects to add approximately one million self-pay subscribers through used car sales in 2012 alone. 6/7/12 Tr. 790:2-5 (Frear). Sirius XM's internal documents show that used car sales accounted for []% and []% of new self-pay subscribers in 2010 and 2011, with the percentage expected to grow to []% in 2012. SX Trial Ex. 15 at SXM_CRB_DIR_00089936. Mr. Frear testified that he is hopeful that this number will continue to grow in the future, 6/7/12 Tr. 791:2-4 (Frear), which should further alleviate Sirius XM's dependence on new car sales for growth.

666. Furthermore, the fact that Sirius XM's business is tied to some degree with automobile sales is actually cause for optimism about Sirius XM's future and ability to grow. As Mr. Frear stated in Sirius XM's fourth-quarter 2011 earnings call: "Sirius XM has shown a consistent ability to deliver solid operating performance under less than ideal conditions. The last three years has been tough on consumers and the worst stretch for the auto industry since 1981 to 1983. Despite that, we have significantly grown subscribers, revenue, EBITDA, and free cash flow, and significantly reduced our leverage." Lys WRT at 44 & SX Ex. 224-RP, p. 6, SX Trial Ex. 240. Indeed, Mr. Frear testified that auto sales in 2011 were still only at the level of the 1992 recession. Frear WDT at 18, SXM Dir Trial Ex. 12. In other words, Sirius XM has

thrived in spite of the worst car sales in thirty years. Once new car sales return to their historical averages (around 16-17 million) over the next few years, as automobile analysts expect, Sirius XM's financial performance will be even better. Sirius XM made this very argument to its shareholders in May 2012 at its annual meeting.



SX Trial Ex. 229 at 45. Tellingly, while Professor Stowell cites credit analysts to describe a dependency of Sirius XM on auto sales, Stowell WDT at 11, SXM Dir Trial Ex. 18, he conveniently fails to mention that credit analysts' optimism surrounding the automobile industry is one of the *causes* of the favorable outlook for Sirius XM, as Standard & Poor's clearly states in a document relied upon by Professor Stowell: "We are revising our outlook on the company to positive from stable. This reflects our view that a continued recovery in auto sales will enable Sirius XM to maintain subscriber growth and strengthen credit measures over the intermediate term. Lys WRT at 45, SX Trial Ex. 240.

667. Finally, Professor Stowell's analysis comparing Sirius XM's stock price and automobile sales (SAAR) is fundamentally flawed and should be disregarded in its entirety. Stowell WDT at 8-11, SXM Dir Trial Ex. 18. To begin with, as Dr. Lys described in detail in his Appendix B, Professor Stowell's regression analysis (in his Exhibit 1) is utterly flawed from an econometrics perspective, complete with numerous important errors, some of which "virtually every textbook on econometric methodology contains explicit warnings against." Lys WRT at 45-46, Appendix B, SX Trial Ex. 240. It is clear that this type of analysis is well beyond Professor Stowell's expertise in investment banking and capital raising. 6/8/12 Tr. 1202:2-4 (Stowell). For example, once Dr. Lys held constant for changes in the stock market, which Professor Stowell failed to do, changes in SAAR were shown to have no predictive power on Sirius XM's stock price. Lys WRT at Appendix B, SX Trial Ex. 240. Moreover, even if there were evidence that Sirius XM's stock price varied with changes in SAAR, that would still be irrelevant because a lower stock price is not necessarily an indication of a higher probability of disruption. Lys WRT at 46, SX Trial Ex. 240.

e. Sirius XM's Attempt to Seek a Windfall for Current Shareholders Based on Past Losses Should Be Ignored

668. Throughout Sirius XM's case, Sirius XM argues that the royalty rates should not go up so that Sirius XM can "recoup" past losses, whether it be losses in stock price or company accounting losses. *See, e.g.*, Frear WDT at 6-8, SXM Dir Trial Ex. 12; Stowell WDT at 16-17, SXM Dir Trial Ex. 18. As Dr. Lys explained, these arguments have nothing to do with an analysis of disruption. Lys WRT at 50-52, SX Trial Ex. 240. "Recouping" past losses will only create a windfall gain to current investors, and will not provide any recovery to the investors who previously owned Sirius XM's stock. Lys WRT at 52, SX Trial Ex. 240.

669. Sirius XM first argues that royalty rates should not go up so that its investors can recoup past stock losses. *See, e.g.*, Frear WDT at 6, SXM Dir Trial Ex. 12. To begin with, stock prices are not a measure of disruption because stock prices increase and decrease for a myriad of reasons depending on investor expectations, often having nothing to do with a disruption in business operations. Lys WRT at 27-28, SX Trial Ex. 240 (citing testimony of Steven Herscovici). But even if stock prices were relevant to the disruption analysis, the testimony of Professor Stowell, Mr. Frear, and Mr. Karmazin concerning investor losses is based simply on cherry-picking time periods. Lys WRT at 28, SX Trial Ex. 240. In fact, Dr. Lys found that when analyzing more recent time periods, shareholders' positive gains are greater in size than the losses that the Sirius XM witnesses highlight. Lys WRT at 28, SX Trial Ex. 240.

670. In his written testimony, Mr. Frear describes price decreases of 50 percent and 97 percent for any investors who purchased Sirius XM stock in January 2007 (prior to the financial crisis) and February 2000 (prior to the technology bubble bursting), Frear WDT at 7, SXM Dir Trial Ex. 12, but he does not mention the returns earned by any investors who purchased Sirius XM stock in February 2009 and reaped returns between 1,000 and 3,000 percent. Lys WRT at 28, SX Trial Ex. 240. Likewise, Liberty Media, the largest existing shareholder, invested approximately \$328 million in loans to Sirius XM in return for a 40% stake in the company. 6/7/12 Tr. 726:16-727:8 (Frear). Liberty Media received full payment on the balance of its loan, *see* 6/7/12 Tr. 746:9-12 (Frear), and Liberty Media's original stake in the company is worth approximately \$6 billion. 6/7/12 Tr. 727:9-12 (Frear). Mr. Frear readily agreed that Liberty Media has earned really good return on its Sirius XM investment. 6/7/12 Tr. 727:13-15 (Frear).

671. Dr. Lys explained that an additional and more substantial flaw in Sirius XM's testimonies on this issue are that they assume that the current rate determination should somehow

undo the losses of shareholders who invested in Sirius XM's predecessor companies over a decade ago, even if they likely no longer hold the stock. Lys WRT at 28, SX Trial Ex. 240. Mr. Stowell, for example, admitted that he did not know if *any* pre-2008 investors are still owners of Sirius XM stock today (and that he did not even know how anyone could know). 6/8/12 Tr. 1297:1-8 (Stowell). A simple comparison of shares outstanding and trading volume shows that on average, the entirety of Sirius XM's equity has changed hands several times since 2008 – indicating that the likelihood of a significant pre-2008 investor base currently possessing Sirius XM shares is remote.⁷¹ Lys WRT at 29, SX Trial Ex. 240. In other words, in reality, Sirius XM is simply asking this Court for a windfall gain for its current shareholders (most notably Liberty Media) to “recoup” past losses of certain prior investors who will not share in any gain.

672. Finally, as Dr. Lys pointed out, Sirius XM's focus on stock price decreases does not mention the total market capitalization of Sirius XM, nor how it compares to the firm's historical market capitalization. Lys WRT at 29, SX Trial Ex. 240. Mr. Frear, for example, compares the company's recent stock price to the stock price in February 2000 (and claims investors “have lost over 97% of their investment”). Frear WDT at 7, SXM Dir. Trial Ex. 12. But as Dr. Lys testified, focusing on the stock price alone is misleading because it ignores the fact that Sirius XM has more shares outstanding today than it did in the past. Lys WRT at 29, SX Trial Ex. 240. The total dollar value of Sirius XM's equity (known as market capitalization) is *larger* today – it is simply divided into more shares. Lys WRT at 29, SX Trial Ex. 240. Of the trading days in February 2000, the largest sum of Sirius and XM's market capitalizations was \$2.95 billion. Lys WRT at 29, SX Trial Ex. 240. Sirius XM's market capitalization is now \$16 billion, 8/20/12 Tr. 4044:2 (Lys), an increase of 542 percent over its value in early 2000.

⁷¹ The entirety of Sirius XM's equity changed hands 3.5 times in 2009, 5.9 times in 2010, and 4.8 times in 2011. Lys WRT at 29 n. 121, SX Trial Ex. 240.

673. Sirius XM's testimony concerning its need to "recoup" past operating losses is likewise irrelevant. For example, Mr. Karmazin states that "[a]fter two decades of substantial losses, even our recent profitability hardly makes a dent in recovering the several billions of dollars in capital that were invested to launch Sirius and XM and bring the Company to where it is now." Karmazin WDT at 18, SXM Dir Trial Ex. 19. As Dr. Lys explained, Sirius XM's analysis is severely flawed because it suffers from the "sunk cost fallacy." Lys WRT at 51, SX Trial Ex. 240. As a leading accounting textbook explains, sunk costs are "[p]ast costs that current and future decisions cannot affect and, hence, that are irrelevant for decision making." Lys WRT at 51, SX Trial Ex. 240. Regardless of their size, the upcoming royalty rates cannot change the fact that Sirius XM's founders chose to establish a business that required investments in satellites, marketing, and otherwise. Lys WRT at 51, SX Trial Ex. 240. Moreover, that Sirius XM may have made bad business decisions in the past – for example, agreeing to pay an automaker over 50% its revenues, 6/11/12 Tr. 1327:15-18 (Karmazin) – is not a basis to lower royalties now to make up for past losses.

674. Sirius XM's witnesses inappropriately focus on the time required to "pay back" Sirius XM's previous losses and capital expenditures, which is really just an extension of the sunk cost fallacy. Lys WRT at 51, SX Trial Ex. 240. For example, Mr. Frear states that "[a]ny increase to [Sirius XM's] costs, such as an increase in the SoundExchange royalty rate, will only lengthen the time it takes to recoup [the losses sustained in the past two decades]." Frear WDT at 7-8, SXM Dir Trial Ex. 12. Mr. Karmazin similarly testifies that "even with [Sirius XM's] now-positive annual earnings, it likely will take years of sustained performance for the Company just to break even on a cumulative basis." Karmazin WDT at 18, SXM Dir Trial Ex. 19. But as Dr. Lys explained, Sirius XM's business will not be disrupted if the date on which it recoups its

past losses shifts from one period to the next. Lys WRT at 51, SX Trial Ex. 240. Moreover, even if “recouping” these past losses made sense from an economic point of view, the fact of the matter is that it will only create a windfall gain to current investors (again, mainly Liberty Media), and will not provide any recovery to the investors who previously owned Sirius XM’s stock. Lys WRT at 51, SX Trial Ex. 240.

675. Finally, Professor Stowell’s analysis of past losses only compounds the “sunk cost fallacy” with erroneous analysis borne of severe ignorance about Sirius XM’s business. Professor Stowell’s analysis purports to show that increased royalty rates during the current rate term kept Sirius XM farther away from achieving positive cumulative EBIT. Stowell WDT at 16, SXM Dir Trial Ex. 18. The problem is that Professor Stowell failed entirely to account for the fact that, as Dr. Lys demonstrated, Sirius XM recovered roughly 97% of the increased royalties through the Music Royalty Fee while it was at the same time constrained from raising prices under the FCC Merger Order. *See* Lys WRT at 33 & Attachment 13, SX Trial Ex. 240; SXM Dir Trial Ex. 67 at ¶ 107. As a result, Dr. Lys explained, the increased royalty costs had very little impact on Sirius XM’s EBIT during the current rate term. Lys WRT at 52, SX Trial Ex. 240. Professor Stowell, however, erroneously assumed that Sirius XM’s revenues would have remained constant even if the royalty rate had remained at 2 percent.⁷² Stowell WDT at 15, SXM Dir Trial Ex. 18. Professor Stowell apparently was unaware that the Music Royalty Fee was a substantial source of revenue for Sirius XM because he insisted repeatedly that he views the Music Royalty Fee “as a cost, not as revenue.” 6/8/12 Tr. 1262:3-17 (Stowell). In reality, Sirius XM’s revenues would have dropped substantially without the royalty rate increase because its Music Royalty Fee revenue would have dropped substantially, and it would not have been

⁷² Sirius XM, on the other hand, takes the view that the Music Royalty Fee is a significant revenue source. *See, e.g.,* Lys WRT at SX 231-RP, p. 27, SX Trial Ex. 240.

permitted to make up that lost revenue through higher prices. Lys WRT at 52, SX Trial Ex. 240. Thus, Dr. Lys explained, because Professor Stowell failed to take this into consideration, and simply assumed that the Music Royalty Fee would have remained constant regardless of the royalty rate, his analysis in Exhibits 4 and 5 and paragraphs 31 and 33 is entirely unreliable. Lys WRT at 52, SX Trial Ex. 240.

IX. RATE PROPOSALS FOR PSS

A. SoundExchange's Rate Proposal for PSS

676. SoundExchange's rate proposal for the PSS is set forth in the Second Revised Proposed Rates and Terms of SoundExchange, Inc. For all licensed transmissions and related ephemeral recordings by a PSS, SoundExchange requests royalty rates that are a percentage of "Gross Revenues" as set forth below:

<u>Year</u>	<u>Percentage</u>
2013	15%
2014	20%
2015	25%
2016	35%
2017	45%

677. To ensure that a PSS pays a reasonable royalty when it derives Gross Revenues from transactions between the PSS and a customer that are not at arm's length (*i.e.*, the customer is an owner of equity or capital interests in the PSS or has any other relationship with the PSS such that the PSS and customer do not do business with respect to the provision of music service as if they were independent, unrelated parties), SoundExchange proposes that, notwithstanding the rates listed above, the royalty payable by a PSS for transmissions through such a customer (a "Partner") shall not be less than the product of multiplying such Partner's total number of subscribers to the PSS' programming by the PSS' average per-subscriber royalty payment for

transmissions through such PSS' top five highest-paying customers that are not Partners (based on total payment).

B. Music Choice's Rate Proposal for PSS

678. Music Choice's proposed PSS rate is set forth in the *Written Direct Statement of Music Choice*. Music Choice has proposed a rate of 2.6% of Music Choice's gross revenues.

X. SOUNDEXCHANGE'S PSS RATE PROPOSAL IS REASONABLE IN LIGHT OF THE ECONOMIC EVIDENCE

679. SoundExchange's proposed royalty rate for the PSS is supported by the economic analysis of Dr. George Ford. Ford WDT, SX Trial Ex. 79; Ford WRT, SX Trial Ex. 244. In the *SDARS I* proceeding, the Court outlined a two-step procedure for setting rates under the § 801(b) standard. The first step is to identify comparable marketplace royalty rates that serve as benchmarks, and which are "indicative of the prices that prevail for services purchasing similar music inputs for use in digital programming ultimately made available to consumers." *SDARS I*, 73 Fed. Reg. at 4088. As Dr. Ford explained, this step is the same willing buyer/willing seller standard that is used for setting the webcasting royalty rate. Ford WDT at 11, SX Trial Ex. 79. The second step of the analysis under § 801(b) is to evaluate the statutory policy objectives to determine whether any of the objectives "weigh in favor of divergence from the results indicated by the benchmark marketplace evidence." *SDARS I*, 73 Fed. Reg. at 4094. Dr. Ford used this two-step approach in his analysis of SoundExchange's rate proposal. Ford WDT at 11, SX Trial Ex. 79.

A. The Unique Features of the PSS Prevent Usage of a Single Benchmark

680. Dr. Ford adopted a benchmarking approach "to evaluating the reasonableness of the rate" proposed by SoundExchange. 6/18/12 Tr. 2808:20-22 (Ford). Benchmarking is a common approach for setting regulatory rates and "refers to the use of outcomes observed in

market transactions – the benchmark market – to aid in establishing a rate in situations where the market does not or is not permitted to operate effectively – the hypothetical target market.” Ford WDT at 11-12, SX Trial Ex. 79; 6/18/12 Tr. 2809:3-16 (Ford). Thus, the first step in establishing a PSS royalty is to define the hypothetical target market and then to analyze royalty rates from marketplace transactions “that look somewhat like [the hypothetical market] and can provide information that’s probative to the determination of the rate in the hypothetical market.” 6/18/12 Tr. 2809:8-16 (Ford); Ford WDT at 12, SX Trial Ex. 79.

681. In setting the PSS royalty, the hypothetical target market is the unregulated market for the sale of a blanket license of the sound recordings owned by a record label to the PSS. 6/18/12 Tr. 2809:8-10 (Ford). The PSS statutory license covers non-interactive audio streaming services provided over cable or satellite systems. Ford WDT at 12, SX Trial Ex. 79; 6/18/12 Tr. 2809:17-21 (Ford). Music Choice, for example, offers 46 genre-based music channels currently, Ford WDT at 12, SX Trial Ex. 79, and plans to increase the number of channels to over 300 in the first quarter of 2013. Del Beccaro WDT at 3, PSS Trial Ex. 1. Because the PSS license covers audio-only services provided to residential customers, the relevant revenues for assessing a percentage-of-revenue royalty are those generated by the PSS for their audio-only services. 6/18/12 Tr. 2809:22-2810:15 (Ford); Ford WDT at 12, SX Trial Ex. 79.

682. The PSS, however, have a number of distinctive features that make it difficult to identify a suitable benchmark market. Ford WDT at 12, SX Trial Ex. 79. The first such characteristic is that the PSS do not sell their services directly to consumers. Ford WDT at 12, SX Trial Ex. 79. The PSS instead “sell their service to multichannel video providers, who then bundle the service with television channels and offer consumers subscriptions to the entire

bundled service.” Ford WDT at 12, SX Trial Ex. 79. This intermediary role is in contrast to the other types of statutory services whose rates have been set by the CRJs as well as the marketplace agreements for digital music services. 6/18/12 Tr. 2810:20-2811:3 (Ford). In those other cases, “the royalty rates are dealing with a retail provider, an end user provider. So the person buying the good is actually interacting directly with consumers.” 6/18/12 Tr. 2811:3-6 (Ford).

683. The impact of the intermediary role is that because the PSS offer their service to cable companies on a wholesale basis, its revenues do not fully capture the value of the service and the sound recordings to end users. Ford WDT at 12, SX Trial Ex. 79. This is so because the retail revenues charged by the cable companies must exceed the wholesale revenues paid to the PSS. 6/18/12 Tr. 2811:16-20 (Ford). In other words, because a percentage-of-revenue rate is applied to the wholesale revenues of the PSS, “some part of the value of the performance rights may be captured by the downstream multichannel video providers.” Ford WDT at 12, SX Trial Ex. 79; 6/18/12 Tr. 2811:16-20 (Ford).

684. This can be seen, for example, in the disparate prices paid by different cable operators. As Dr. Ford testified, at the one end of the range are Music Choice’s three cable industry Partners, who pay only [REDACTED] per subscriber per month, while at the other of the range, over half of Music Choice’s direct customers – the cable systems that carry Music Choice – pay a licensing fee of [REDACTED] or more per subscriber per month. Ford WRT at 5, SX Trial Ex. 244. Yet both Dr. Ford and Dr. Crawford agree that there is no evidence that subscriber usage of Music Choice varies between cable operators. Ford WRT at 5, SX Trial Ex. 244; 8/23/12 Tr. 4783:4-14 (Crawford). Moreover, as Dr. Ford pointed out, the fact that over half of the cable systems that carry Music Choice pay about [REDACTED] per subscriber month in licensing fees

suggests (by economic logic) that the Music Choice service is worth at least [REDACTED] per month in the retail market. Ford WRT at 5, SX Trial Ex. 244. If not, then a profit-maximizing cable operator would not be willing to pay [REDACTED] for the input.⁷³ Ford WRT at 5, SX Trial Ex. 244. And, most likely, the retail value is even higher assuming there is some markup. Ford WRT at 5, SX Trial Ex. 244. This provides strong evidence that at least some of the cable operators (including all of the Partners) are capturing a significant part of the value of the performance rights.

685. The second distinctive feature of the PSS is that the audio service “gets bundled with video cable service, usually in a digital tier, with a hundred or more channels of video.” 6/18/12 Tr. 2811:22-2812:5 (Ford); Ford WDT at 13, SX Trial Ex. 79. There are only a small number of cable systems that offer a PSS service on a standalone basis. Ford WDT at 13, SX Trial Ex. 79. Bundling of this nature is not common among the digital audio services subject to statutory licenses. 6/18/12 Tr. 2812:6-11 (Ford). The CRJs have previously noted that the value of the performance right is derived from the “ultimate consumer markets.” *SDARS I*, 73 Fed. Reg. at 4093. The bundling of the PSS in a larger cable offering makes it difficult to determine the specific consumer value of the PSS. Ford WDT at 13, SX Trial Ex. 79. Yet cable companies routinely advertise Music Choice, for example, as an important component of their cable offerings. Ford WDT at 13, SX Trial Ex. 79.

686. Neither of these distinctive features of the PSS – the intermediary role or bundling with video content – means that the sound recordings used by the PSS are of low value. 6/18/12 Tr. 2812:17-2813:8 (Ford); Ford WDT at 13, SX Trial Ex. 79. As Dr. Ford explained, “the

⁷³ Notably, Dr. Ford found two instances of a standalone Music Choice Tier offered to subscribers, by XIT Communications (\$2.75 per month) and Kalona Cooperative Telephone Company (\$3.95 per month). Ford WDT at 13 n.19, SX Trial Ex. 79.

services are sold in almost every cable system. So the demand for the service is actually quite robust in that sense. It is a widely distributed and fairly widely consumed product.” 6/18/12 Tr. 2813:5-8 (Ford). Music Choice is a heavy user of sound recordings, as reflected in the amount of time that cable subscribers spend listening to the company’s music channels. Ford WRT at 2, SX Trial Ex. 244. Survey evidence submitted to the record by Music Choice suggests that of cable subscribers using the Music Choice service, each listens to an average of [REDACTED] per week, or [REDACTED] per month. Ford WRT at 4, SX Trial Ex. 244; Williams WDT at MC 38, p. 10, 14, PSS Trial Ex. 3. Assuming 15.375 songs per tuning hour,⁷⁴ on average subscribers receiving the Music Choice service listen to [REDACTED] songs per month (or [REDACTED] ATH per month).⁷⁵ Ford WRT at 4, SX Trial Ex. 244; Williams WDT at MC 38, p. 10, 14, PSS Trial Ex. 3. Evidence suggests that this intensity of use is within the range of some webcasters. Ford WRT at 4, SX Trial Ex. 244.

687. Although the intermediary role and bundling do not alter the ultimate consumer value for the PSS, they do greatly complicate the benchmark analysis. As Dr. Ford explained, there simply are not “marketplace agreements that match well with this intermediary issue or, really, this bundling issue either.” 6/18/12 Tr. 2814:13-16 (Ford). Music Choice has likewise acknowledged that the intermediary issue and bundling issue both make Music Choice “unique from other music services.” *See, e.g.,* Crawford WRT at 11, PSS Trial Ex. 42. The CRB has similarly recognized that the PSS has unique market characteristics that differ from other services. *See SDARS I*, 73 Fed. Reg. at 4089.

⁷⁴ See Final Rule and Order, *Digital Performance Right in Sound Recordings and Ephemeral Recordings*, Docket, No. 2005-1 CRB DTRA, 72 Fed. Reg. 24084, 24096 (May 1, 2007) (“*Webcasting II*”).

⁷⁵ This figure takes into account that only [REDACTED] of cable subscribers that receive Music Choice use the service. Ford WRT at 4, SX Trial Ex. 244;

B. The Current PSS Rate Is Far Below the Range of Rates Generally Seen in Marketplace Agreements for Digital Music

688. Having identified the hypothetical target market and its relevant features, Dr. Ford proceeded to analyze marketplace transactions in an attempt to locate a benchmark market from which to derive a royalty for the PSS. 6/18/12 Tr. 2813:12-2814:8 (Ford); Ford WDT at 12, SX Trial Ex. 79. The market evidence should consist of “market agreements that occur outside of any sort of compulsory setting where it[']s legitimately willing buyers and willing sellers entering into an agreement.” 6/18/12 Tr. 2813:13-16 (Ford); 6/18/12 Tr. 2822:15-2824:11 (Ford).

689. In the interest of efficiency, Dr. Ford relied on the analysis of hundreds of marketplace agreements conducted at the direction of Dr. Ordovery by Dr. Ordovery's staff. 6/18/12 Tr. 2815:13-2816:10 (Ford). Moreover, Dr. Ford received all of the agreements reviewed by Dr. Ordovery's staff, 6/18/12 Tr. 2816:15-17 (Ford), spoke with someone on Dr. Ordovery's staff regarding their review process, 6/18/12 Tr. 2816:11-14 (Ford), and personally reviewed a large number of agreements to confirm the results of Dr. Ordovery's staff's review, 6/18/12 Tr. 2816:18-2817:10 (Ford). The analysis focused on recent agreements, in an effort to determine current marketplace values of the services at issue. 6/18/12 Tr. 2866:5-21 (Ford).

690. Because of the distinctive features of the PSS, Dr. Ford was unable to locate “any contract that matched closely the peculiar nature of the PSS's business” in his review of marketplace agreements. Ford WDT at 13, SX Trial Ex. 79; 6/18/12 Tr. 2817:15-18 (Ford) (“I didn't find any intermediary transactions. I didn't find any transactions that were bundled with multi-channel video services in that sense, no.”). Despite the lack of a directly comparable benchmark service (and corresponding set of marketplace transactions), Dr. Ford concluded that the marketplace agreements that he reviewed could be used “in order to establish a zone of

reasonableness for revenue-based royalty fees.” Ford WDT at 13, SX Trial Ex. 79. As Dr. Ford explained, “the PSS service is a stream . . . of music content, for the most part, and all the services and agreements were essentially consumers buying music of some sort or another.” 6/18/12 Tr. 2817:18-21 (Ford).

691. Dr. Ford reviewed transactions in four different digital music markets: portable and non-portable interactive webcasting, cellular ringtones and ringbacks, and digital downloads. Ford WDT at 15-16, Table 1, SX Trial Ex. 79; 6/18/12 Tr. 2822:6-14 (Ford). Although the legal rights conveyed in the various services analyzed by Dr. Ford might differ under copyright law, he testified that as a matter of economics, those distinctions are largely irrelevant. Specifically, Dr. Ford noted that “[w]hat we have with Music Choice or with the download . . . is we have the acquisition of a property which is a song given to an end user or listened to . . . by a person. And that act is the use of that property, that copyrighted property which the musician has.” 6/18/12 Tr. 2819:5-10 (Ford). For the economist, which right under copyright law is implicated by a given service – performance, distribution, reproduction, etc. – is “not as much of a concern as the use of the property itself, and then ensuring that compensation is given to the participants in the creation of the content.” 6/18/12 Tr. 2819:18-21 (Ford).

692. In the contracts relied on by Dr. Ford, royalties are determined under a greater-of methodology that “contains at least two of these three components: i) a revenue-based royalty fee applied to retail revenues; ii) a per-play royalty fee; and iii) a per-subscriber royalty fee.” Ford WDT at 14, SX Trial Ex. 79; 6/18/12 Tr. 2824:16-2825:4 (Ford). Under such a structure, “you compute each component” and “[t]he highest component is what the royalty becomes.” 6/18/12 Tr. 2825:4-6 (Ford); Ford WDT at 14, SX Trial Ex. 79. In the event that the per-play or per-subscriber royalty rate is the greatest of the calculations, then the effective percentage-of-

revenue paid by the service would be higher than the contractual percentage-of-revenue. 6/18/12 Tr. 2861:3-13 (Ford).

693. Because SoundExchange proposed a percentage-of-revenue royalty rate, Dr. Ford focused his analysis on the revenue-based rates in the marketplace agreements. Ford WDT at 13, SX Trial Ex. 79; 6/18/12 Tr. 2825:7-11 (Ford). A central reason for focusing on the percentage-of-revenue rates is that the number of plays on the PSS cannot be accurately measured, eliminating a per-play rate as a meaningful royalty option. Ford WDT at 15, SX Trial Ex. 79; 2825:16-20 (Ford). By relying on the percentages of revenue in the contracts Dr. Ford’s analysis was intentionally conservative, because the effective percentages of revenue actually paid under those contracts may be higher as a result of the “greater of” structure. *See* 6/18/12 Tr. 2861:3-13 (Ford).

694. Based on the marketplace contracts that Dr. Ford relied on, the range of percentage-of-revenue royalty rates fall within a range of 45% to 70%, with one observed rate at 43%. Ford WDT at 15-16, SX Trial Ex. 79. The specific ranges for each service type are as follows:

<i>Type of Service</i>	<i>% of Retail Revenues</i>
Permanent Audio Download	70%
Cellular (Ringback/Ringtone)	43% to 50%
Interactive Subscription (Portable)	50% to 60%
Interactive Subscription (Non Portable)	50% to 60%

Ford WDT at 15-16, Table 1, SX Trial Ex. 79.

695. The primary advantage of focusing on revenue-based royalty rates is that such a royalty scales on the basis of the revenues of a given copyright user, and the user’s revenues are

tied to the value of the service as measured by retail price. Ford WDT at 14, SX Trial Ex. 79; 6/18/12 Tr. 2827:7-7 (Ford) (“[A] percent of revenue fee . . . always scales to the retail value or the sale price of the service.”). Because of the fact that such a rate scales with consumer value, “in marketplace agreements, a common revenue-based royalty rate is often applied across a wide range of services, even when the per-play or per-subscriber rates differ significantly between them.” Ford WDT at 14, SX Trial Ex. 79. And even within a single contract with a single user, “while the per-play or per-subscriber rates may differ across the type of services offered based on retail pricing differences, the revenue-based fee is relatively uniform across such services.” Ford WDT at 16, SX Trial Ex. 79. For example, both portable and non-portable interactive subscription audio streaming services are subject to the same basic percentage-of-revenue rates of 50% to 60%, Ford WDT at 16, Table 1, SX Trial Ex. 79, despite featuring substantially different per-subscriber rates. 6/18/12 Tr. 2829:15-2830:2 (Ford); *see, e.g.*, SXM Reb. Trial Ex. 115 at SX02 00167890 (December 2011 Rhapsody statement showing both portable and non-portable interactive rates at [REDACTED] of revenue even though per-subscriber rates were [REDACTED] for portable and [REDACTED] for non-portable); Bryan WDT at 9, SX Trial Ex. 66 (discussing Warner-MOG agreement including the same [REDACTED] of revenue for both portable and non-portable interactive streaming even though the per subscriber rates are [REDACTED] for portable and [REDACTED] for non-portable); Noll WDT at Appendix I, p.SXW3_00021466, SXM Dir. Trial Ex. 1 (2007 Slacker-Warner agreement showing both portable and non-portable interactive rates at 50% of revenue even though per-subscriber rates were \$7.50 for portable and \$5.00 for non-portable).

696. Because of the scaling of revenue-based rates, there is not massive variation of such rates across different services despite differences in service attributes. Instead, the rates tend to fall within a range that is bounded on the lower end by roughly 45%. 6/18/12 Tr. 2829:3-

14 (Ford); Ford WDT at 16, SX Trial Ex. 79. As Dr. Ford explained, in the digital music marketplace, “the particularities of services are presumed to be reflected in revenue differences, such that the application of a uniform revenue-based rate applied across very different services is acceptable to both sellers and buyers, thereby suggesting that the differences in revenues across services adequately reflect the differences in market values.” Ford WDT at 16, SX Trial Ex. 79. In commenting on the relative clustering of percentage-of-revenue rates across services, Dr. Ford comments that “despite the fact that there’s this enormous variety in the type of services being offered, the spread of the percentage rate is not that wide.” 6/18/12 Tr. 2879:11-2880:12 (Ford). As a result of Dr. Ford’s review of the marketplace rates and the clustering of percentage-of-revenue rates across services, he concluded that “the minimum and maximum of the market rates found in my sample of contracts – 43% to 70% – represent observed bounds on the zone of reasonableness for a revenue-based rate under a market-based mechanism.” Ford WDT at 16, SX Trial Ex. 79. SoundExchange’s proposed final year rate of 45% is almost exactly the lower bound of the range of rates observed by Dr. Ford and accordingly can “be presumed to be a reasonable proxy for a market outcome.” Ford WDT at 16, SX Trial Ex. 79; 6/18/12 Tr. 2831:8-15 (Ford).

1. The 26 Marketplace Agreements Identified by Music Choice Demonstrate the Reliability of Dr. Ford’s Zone of Reasonableness

697. Dr. Ford explained that the agreements he relied on are “representative of the meat of the industry, and there could be outliers.” 6/18/12 Tr. 2887:3-5 (Ford). During discovery, SoundExchange produced well over 2,000 digital music licensing agreements.⁷⁶

⁷⁶ During discovery, Music Choice and Sirius XM jointly served document requests on SoundExchange for digital music agreements, and SoundExchange produced the same set of agreements to both parties.

6/6/2012 Tr. 329:1-3 (Noll) (“[I]n fact, you received over 2,800 digital deals from the record companies? A. A very large number, yes.”); 6/6/2012 Tr. 330:2-11 (Noll) (“You do know you got an awful lot, over 2,000? A. Yes.”). Out of these more than 2,000 agreements, Music Choice was able to identify a total of only 26 agreements containing percentage-of-revenue royalty rates purportedly below the 43% rate in Dr. Ford’s zone of reasonableness. Crawford WRT at 21-22 & Appx. A-1, PSS Trial Ex. 42; *see also* 8/23/12 Tr. 4790:3-18 (explaining that the list of agreements in Appendix A-1 are the “ones that were below Dr. Ford’s 43 percent lower bound”). In other words, Dr. Crawford’s own analysis confirms that Dr. Ford’s range of rates was actually quite representative of the universe of agreements. Even according to Dr. Crawford’s interpretations of these agreements, only about 1% had percentage-of-revenue royalty rates below Dr. Ford’s lower bound. This provides substantial evidence that Dr. Ford’s range of rates was in fact “representative of the meat of the industry.” 6/18/12 Tr. 2887:3-5 (Ford). Moreover, as explained below, the evidence demonstrates that most of the 26 agreements identified by Dr. Crawford contain percentage-of-revenue royalty rates that are not comparable to Dr. Ford’s zone of reasonable rates or contain specific peculiarities that make the agreements outliers.

698. *First*, several of the agreements that Dr. Crawford listed in Appendix A-1 contain percentage-of-revenue figures that are not pro-rated, making it impossible to compare them to Dr. Ford’s pro-rated rates in the absence of additional information. Generally, digital music agreements contain rates that are calculated on a pro-rated basis according to the proportion of

When asked whether he was aware that SoundExchange produced over 2,000 digital music licenses agreements, Dr. Crawford responded: “I wasn’t aware of the specific number but I knew that they had produced quite a few.” 8/23/2012 Tr. 4789:17-22 (Crawford). That Dr. Crawford was not aware of the specific number of agreement produced is not surprising given that he [REDACTED], and the only agreements in his Appendix A-1 that he “looked at closely were the five near the bottom” of his list. 8/23/2012 Tr. 4749:20-4750:1 (Crawford); 8/23/2012 Tr. 4795:22-4796:7 (Crawford).

total songs played or distributed by the service that were accounted for by each record company's sound recordings catalog. Ordoover WDT at 19, SX Trial Ex. 74. At trial, Dr. Crawford correctly recognized that if a record company receives 10 percent of a music service's revenue, that is not equivalent to getting a pro-rated share of 10 percent of the service's revenue. 8/23/2012 Tr. 4795:1-7 (Crawford). In this scenario, for example, if the record company only accounts for 20 percent of the songs distributed on the service, a 10 percent rate on a non-pro-rated basis is equivalent to a 50 percent rate on a pro-rated basis. Dr. Crawford also correctly recognized that SoundExchange's proposed royalty rate is for the industry as whole (*i.e.*, pro-rated for each record label). 8/23/2012 Tr. 4795:8-21 (Crawford).

699. Despite Dr. Crawford's recognition at trial that pro-rated and non-pro-rated percentage-of-revenue rates are not comparable, Dr. Crawford candidly admitted that when reviewing agreements he did "not recall looking specifically at that issue" and was "not certain" whether some of the agreements he listed were based on non-pro-rated rates. 8/23/2012 Tr. 4795:22-4796:7 (Crawford). In fact, the revenue rates in several of the subscription agreements in Appendix A-1 are not pro-rated and therefore are not comparable to the rates in Dr. Ford's zone of reasonableness. *See, e.g.*, SX Trial Ex. 505 at SX02 00122234; SX Trial Ex. 504 at SX02 00118067. For example, Dr. Crawford listed a ringtone agreement [REDACTED]
[REDACTED]
[REDACTED]. SX Trial Ex. 509 at 2, 4. Without knowing [REDACTED] market share for this particular service, it is not possible to compare this non-pro-rated rate to Dr. Ford's pro-rated zone of reasonableness. But it is telling that the "per product" rate for these ringtones is

equivalent to standard wholesale rates in the industry.⁷⁷ Dr. Crawford wrongly claimed that these non-pro-rated rate agreements were “lower” than the rates in Dr. Ford’s zone of reasonableness, Crawford WRT at 21, PSS Trial Ex. 42, when in fact it is impossible to tell whether they are above or below without additional market share information.

700. *Second*, in addition to being non-pro-rated, several of the rates listed in Dr. Crawford’s table are cumulative, meaning that the record label receives the percentage listed *each time* the label’s song is distributed by the service. For example, Dr. Crawford listed an agreement [REDACTED]

[REDACTED]. SX Trial Ex. 505 at SX02 00122234. At trial, Dr. Crawford agreed that the face of the agreement suggests that the stated revenue rate is cumulative rather than fixed. 8/23/2012 Tr. 4803:1-12 (Crawford) ([REDACTED]

701. The clear purpose of these types of subscription agreements, where subscribers receive a set number of downloads or tokens per month, is to ensure that in the event that the services increases the subscription price, the label receives part of the additional revenue. For example, one of the agreements that Dr. Crawford relied on is a subscription download agreement between [REDACTED]. That agreement sets out the content fees

⁷⁷ According to Mr. Bryan, the standard rate for a ringtone is the greater of [REDACTED]
[REDACTED]. Bryan WDT at 12, SX Trial Ex. 66.

for the download service as [REDACTED]
[REDACTED]. Thus, the actual payment that results from the agreement that Dr. Crawford represented as having a “royalty rate[] lower than those in the 46 agreements that Dr. Ford relies on” is, in fact, no lower than [REDACTED]
[REDACTED]
[REDACTED]. SX Trial Ex. 504 at SX02 00118067. As Dr. Crawford acknowledged at trial, the revenue figure that he had included in his Appendix A-1, [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]. 8/23/2012 Tr. 4806:4-9 (Crawford).⁷⁸ In other words, contrary to Dr. Crawford’s claim that these agreements have lower rates than Dr. Ford’s zone of reasonableness, these agreements in fact have standard wholesale rates with cumulative percentage-of-revenue rates that bear no direct relationship to Dr. Ford’s zone of reasonableness.

⁷⁸ Dr. Crawford seemed confused by the notion that a subscription service in which subscribers receive a certain number of tokens might be priced so that the service would lose money if all the tokens were actually redeemed. In the [REDACTED] agreement discussed above, in which subscribers received [REDACTED], the label would nonetheless receive the greater of [REDACTED]
[REDACTED]. SX Trial Ex. 504 at SX02 00118067. When he was asked whether he would agree that, [REDACTED]
[REDACTED], Dr. Crawford responded, [REDACTED]
[REDACTED]
[REDACTED]. 8/23/2012 Tr. 4807:2-13 (Crawford). The simple truth is that [REDACTED] could remain profitable so long as a significant number of subscribers do not redeem all of their tokens each month. More importantly, anyone knowledgeable of [REDACTED] service (or who reviewed the agreements produced by SoundExchange) would know that [REDACTED] is not a “[REDACTED].”

702. *Third*, six of Dr. Crawford's 26 agreements are for non-interactive "radio" streaming services between the record labels and Last.fm and Slacker. As discussed in detail above, *see* Section V.C.2, such agreements are negotiated directly in the shadow of regulation and are not reflective of "market agreements that occur outside of any sort of compulsory setting where it[']s legitimately willing buyers and willing sellers entering into an agreement." 6/18/12 Tr. 2813:13-16 (Ford). Moreover, as Dr. Ford explained, even where rates for noninteractive webcasters are not directly set by regulation, the rates in such agreements are "certainly colored by" the statutory rates to the extent that the agreement may "refer back to whatever the current webcasting rates are established by . . . the judges or some percentage of them, some markup of them or whatever." 6/18/12 Tr. 2867:22-2868:11 (Ford). That phenomenon can be seen explicitly in some of the agreements that Dr. Crawford cites in Appendix A-1:

- ***Sony BMG-Last.fm*** (effective 5/25/2007, expired in 2009): Premium Subscription Radio rate is the greater of Sony BMG's pro rata share of 27.5% of gross revenues, \$0.65 per subscriber, and \$0.00135 per play during 2007 and an "Adjusted Rate" during 2008 of the greater of:
 - "(i) **the highest then-prevailing 'statutory rate'** payable by so-called 'large commercial webcasters' making digital public performances of sound recordings by means of eligible nonsubscription transmissions and for the making of ephemeral copies in furtherance of those digital public performances pursuant to the statutory licenses under 17 U.S.C. Sections 112 and 114, respectively (and the implementing regulations thereunder), plus Twenty-Five One-Thousands of One United States Cent (US\$0.00025),
 - or (ii) One Hundred Thirty-Five One-Thousands of One United States Cent (US\$0.00135)").

Noll WDT at Appx. G, SXM Dir. Trial Ex. 1 (emphasis added)

- ***EMI-Last.fm*** (effective 1/22/2008; expired in 2010): what Dr. Crawford termed the "basic" radio rate is "the greater of:
 - (i) The product of (x) One Hundred Fifteen Percent (115%) of the **then-prevailing 'statutory rate'** payable by so-called 'large commercial webcasters' making digital public performances of sound recordings under 17 U.S.C. Sections 112 and 114 (and the implementing regulations thereunder) that is expressed as a

‘per play’ basis, multiplied by (y) the total number of Plays made available through the Advertising Supported Radio Service to Users during the applicable month; and

- (ii) EMI’s Pro Rata Share multiplied by twenty-five percent (25%) of Net Advertising Revenue attributable to the Advertising Supported Radio Service”.

Noll WDT at Appx. F, SXM Dir. Trial Ex. 1 (emphasis added).

703. *Fourth*, several of the agreements in Dr. Crawford’s Appendix A-1 are for services that sell or distribute both music and non-music content. *See* SX Trial Ex. 506 ([REDACTED]); 8/23/2012 Tr. 4811:4-14 (Crawford) ([REDACTED]); [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]). Obviously when a service distributes more than just music, one would expect the percentage-of-revenue in those agreements to be lower. Indeed, Dr. Noll, Dr. Salinger, and Dr. Ordoover recognize that the royalty rate for the SDARS service must be adjusted to account for the non-music content. 8/16/12 Tr. at 3842:5-14 (Salinger); 6/5/12 Tr. 234:7-16 (Noll); Section V.B-C, *supra* (Ordoover). In short, the percentage-of-revenue rates for services that sell or distribute both music and non-music content are simply not comparable to the music-only rates in Dr. Ford’s zone of reasonableness.

704. Relatedly, Dr. Crawford’s Appendix A-1 also contained rates drawn from three Cricket agreements that apply to the entire prepaid, bundled cellular phone service, including voice, texting, and email, among other services. The rates for Cricket’s prepaid, bundled cellular phone service are not comparable to the music-only rates in Dr. Ford’s analysis. The royalty rates in the WMG-Cricket agreement are the greater of [REDACTED]

[REDACTED].

SXM Trial Ex. 26 at SX02 00129191, SX02 00129197. The rates in the UMG-Cricket agreement are [REDACTED]. Harrison WRT at 6, PSS. Trial Ex. 32. According to Aaron Harrison, [REDACTED] [REDACTED]. Harrison WRT at 6, PSS Trial Ex. 32. The service, called Muve Music, was built specifically for mobile phone use with customers less likely to have broadband access in the home. PSS Trial Ex. 5 at 13. At trial, Stephen Bryan testified that the WMG-Cricket agreement is “[REDACTED] [REDACTED].”⁷⁹ 6/13/2012 Tr. 2017:6-9 (Bryan). Again, given the bundled nature of this service, the percentage-of-revenue rate is plainly not comparable to the music-only rates in Dr. Ford’s zone of reasonableness.

705. Of the handful of remaining agreements in Dr. Crawford’s Appendix A-1 that do not fall within one of the four types of noncomparable rates described, many are for esoteric digital products that, in the absence of further explanation, cannot be considered relevant to the PSS rate. For instance, one of the agreements in the appendix is an agreement with SanDisk for “audio tracks on memory cards.” Crawford WRT at App. A-1, PSS Trial Ex. 42. Another agreement is for a now-defunct iLike Challenge iPhone game where users try to identify the

⁷⁹ Moreover, Aaron Harrison testified that Muve Music reaches a segment of the United States population with relatively little discretionary income, and the Cricket deal bundles music with an essential service (*i.e.*, phone service) that many individuals need to purchase notwithstanding their limited means. If a person with little discretionary income does not choose a Muve cell phone, chances are that he or she will not use any cash freed up by that decision to purchase another music product (such as Spotify). To put this hypothesis another way, if Muve does not substitute for other services, and its users do not otherwise participate in many licensed music transactions, the Muve arrangement is tapping revenue sources that were not otherwise available. That function has independent strategic value for record companies, apart from the particular revenue rate indicated by the agreement. Harrison WRT at 7, PSS Trial Ex. 32.

performers of hit songs. Crawford WRT at App. A-1, PSS Trial Ex. 42. Several more are for “coin-operated digital jukeboxes.” *See, e.g.*, PSS Trial Ex. 56 at 3-4. Dr. Crawford did not even attempt to describe the market characteristics of these services or otherwise justify their inclusion, acknowledging simply that the services are “also not comparable to PSS.” Crawford WRT at 21, PSS Trial Ex. 42.

706. Finally, for all of the agreements, Dr. Crawford did not compare the actual effective percentage-of-revenue rate paid with the royalty rate listed in his Appendix A-1. Rather, Dr. Crawford listed only one term, the gross revenue share, even though such agreements are generally structured as the greater of at least two or more terms, including a revenue-based fee, a per-subscriber fee, and a per-play fee. Crawford WRT at Appx. A-1, PSS Trial Ex. 42; Ford WDT at 14, SX Trial Ex. 79. In fact, Dr. Crawford conceded that for the licensing agreements he personally reviewed, all or virtually all had a “greater-of” royalty structure. 8/23/2012 Tr. 4791:5-12 (Crawford).⁸⁰ In order for Dr. Crawford to prove that these agreements “have royalty rates lower than those in the 46 contracts that Dr. Ford relied on,” Crawford WRT at 21-22, PSS Trial Ex. 42, he would have needed to examine the other elements of the greater-of formula. Indeed, doing so may have helped Dr. Crawford understand why some of the rates he listed in Appendix A.1 were plainly not comparable to Dr. Crawford’s zone of reasonableness.

707. In short, the fact that out of more than 2,000 digital music license agreements, Dr. Crawford and his staff (even under their own misguided interpretations of the agreements) were only able to identify roughly 1% of agreements with percentage-of-revenue rates purportedly

⁸⁰ Dr. Ford, of course, also made use of the gross revenue term, but this meant that, when measured against the proposed SoundExchange rates for the PSS, his range of marketplace rates was intentionally conservative. *See* Ford WDT at 14, SX Trial Ex. 79 (“Picking just one of the ‘greater of’ rate elements in a statutory setting . . . necessarily means that the statutory royalty payment will always be less than or equal to the payment made in corresponding marketplace transactions.”).

below Dr. Ford's zone of reasonableness provides compelling evidence that Dr. Ford's analysis was in fact "representative of the meat of the industry." 6/18/12 Tr. 2887:3-5 (Ford). This evidence is all the more compelling when taking into account that most of the 26 agreements and rates identified by Dr. Crawford are plainly not comparable to the rates in Dr. Ford's analysis for the reasons described above. Indeed, all five of the agreements that Dr. Crawford highlights as having rates at or below 10% are demonstrably noncomparable. *See* SX Trial Ex. 504; SX Trial Ex. 509 (Cricket discussion above). The remaining agreements are the "outliers" that Dr. Ford expected would exist, but Music Choice has not even attempted to show that its service is more similar to the services in these agreements as opposed to the 99% of agreements, across a wide ranges of services and products, fitting that fall within Dr. Ford's zone of reasonableness.

C. The Effect of the Low Rate is Exacerbated by the PSS's Intermediary Role, High Usage of Music by PSS Users, and Music Choice's Ownership Structure

708. There are three concerns related to the application of the percentage-of-revenue royalty to the PSS, two of which are general to the PSS and one of which is specific to Music Choice. The effects of these issues are heightened as a result of the dramatically lower rate currently charged to the PSS and would be further exacerbated by adoption of Music Choice's even lower proposed rate.

709. As discussed above, percentage-of-revenue rates scale with the value of the service to consumers, which is an advantage of using such a rate structure. But the fact that the percentage-of-revenue rates scales with the revenues that a given service is able to obtain is also a disadvantage to relying solely on such a royalty rate. This is so because "the use of a revenue-based royalty fee to the exclusion of other types of fees exposes copyright owners and performers to the risk of inadequate compensation for performance rights when a business plan generates little to no revenues." Ford WDT at 15, SX Trial Ex. 79; 6/18/12 Tr. 2827:8-2828:3

(Ford). This drawback to relying on revenue-based rates is mitigated in marketplace contracts that feature per-subscriber or per-play rates, because those metrics ensure “that copyright owners will be paid for their property even in cases in which the copyright user is unable to obtain revenues sufficient to render a reasonable revenue-based royalty payment for the performance rights.” Ford WDT at 14, SX Trial Ex. 79; 6/18/12 Tr. 2828:6-19 (Ford).

1. Intermediary Role and Revenues

710. The marketplace agreements on which Dr. Ford based his analysis all contain percentage-of-revenue rates that are applied to retail revenues of a service. Ford WDT at 16, SX Trial Ex. 79. As Dr. Ford explained, “[t]he revenues of webcasters . . . reflect the market value of the music content in the ultimate consumer market.” Ford WDT at 16, SX Trial Ex. 79. In contrast, the PSS revenues are not retail revenues, but rather wholesale revenues paid to the PSS by the cable operators that transmit the service to end users. Ford WDT at 16, SX Trial Ex. 79. Dr. Ford thus considered an upward adjustment to account for this intermediary issue. 6/18/12 Tr. 2831:18-2832:4 (Ford). The premise for such an adjustment is the fact that “[t]he intermediary role played by the PSS implies that their revenues are unlikely to fully account for the value of sound recordings in the consumer market.” Ford WDT at 17, SX Trial Ex. 79.

711. The CRJs have previously recognized that the value of sound recordings in the input market should be “driven by or derived from the ultimate consumer markets in which these inputs are put to use.” *Digital Performance Right in Sound Recordings and Ephemeral Recordings*, 72 Fed. Reg. 24084, 24092 (May 1, 2007). But with respect to the PSS, “we have this difficulty with assessing what the retail value is, and we have the problem that the PSS are not actually the recipients of the retail value. They are an intermediary.” 6/18/12 Tr. 2833:14-17 (Ford).

712. Economic theory strongly supports the conclusion that a portion of the markup by the cable operators of the PSS programming reflects consumer demand for the service. 6/18/12 Tr. 2840:6-11 (Ford). Both Dr. Ford and Dr. Crawford agree that there is no reason to believe that consumer usage varies significantly by cable operator.⁸¹ Ford WRT at 5, SX Trial Ex. 79; 8/20/12 Tr. 4198:3-16 (Ford); 8/23/12 Tr. 4783:4-14 (Crawford). But as Dr. Ford explained, the Music Choice's licensing fees are very different across different cable operators, where Music Choice's three cable industry Partners pay [REDACTED] per subscriber per month while over half of Music Choice's direct customers pay a licensing fee of [REDACTED] or more per subscriber per month. Ford WRT at 5, SX Trial Ex. 244. As Dr. Ford explained, the fact that over half of the cable systems that carry Music Choice pay about [REDACTED] per subscriber month in licensing fees suggests that the Music Choice service is worth at least [REDACTED] per month in the retail market. Ford WRT at 5, SX Trial Ex. 244. Otherwise a profit maximizing cable operator would not be willing to pay [REDACTED] for the input. Ford WRT at 5, SX Trial Ex. 244. This strongly suggests many of the large cable operators, including all of the Partners, are capturing a significant part of the value of the performance rights. As Dr. Ford explained, this problem is "part and parcel of the intermediary role played by Music Choice so that the end price is not the same across all of the end users, so you get very, very different payments – royalty payments for what would, presumably, be very close or the same amount of usage, which seems to be inconsistent with good rate practice." 8/20/12 Tr. 4198:10-16 (Ford).

713. Dr. Ford's minimum retail value of [REDACTED] is conservative because it assumes no markup by the cable operators. Ford WRT at 5, SX Trial Ex. 244. Dr. Ford testified that, for

⁸¹ As Dr. Ford testified, the fee that the PSS charge their cable company customers to carry the audio channels "does not depend on the hours of programming accessed by the final consumer, and the prices paid by the final consumer also do not depend on the amount of programming accessed." Ford WDT at 12, SX Trial Ex. 79.

example, Comcast, the nation's largest cable operator, receives about \$2.92 in retail video revenues for every \$1 of programming. Ford WRT at 5, SX Trial Ex. 244. This ratio suggests that the expected retail value of Music Choice may be around [REDACTED] per month. Ford WRT at 5, SX Trial Ex. 244. Meanwhile, the percent-of-revenue royalty rate is applied to revenue of only [REDACTED] per subscriber month for Music Choice. Ford WRT at 5, SX Trial Ex. 244; *see also* Ford WDT at 17-18, SX Trial Ex. 79. In other words, the current low percentage of revenue paid by Music Choice greatly undercompensates copyright owners and performers in light of the intermediary role played by Music Choice.

2. Intensity of Usage

714. In the *Webcasting II* proceeding, the CRJs recognized that under a percentage-of-revenue royalty structure, copyright owners could "receive little compensation for the extensive use of their property." *Digital Performance Right in Sound Recordings and Ephemeral Recordings*, 72 Fed. Reg. 24084, 24090 (May 1, 2007). Dr. Ford testified that Music Choice appears to exemplify that situation. Ford WRT at 3, SX Trial Ex. 244. In fact, Dr. Ford found that Music Choice's sound recording usage level is very high, approximating that of some commercial webcasters, but its royalty payments pale in comparison. Ford WRT at 3-4, SX Trial Ex. 244. Indeed, Dr. Ford found that Music Choice's current royalties are substantially lower than all of its competitors (other than Muzak). Ford WRT at 3-4, SX Trial Ex. 244; *see also* Del Beccaro WDT at 12, PSS Trial Ex. 1 (describing competitors).

715. To compare the rates that Music Choice plays with commercial webcasters and other competitors in the cable and satellite market, Dr. Ford approximated Music Choice's current royalty rate expressed as a per-subscriber or per-performance fee. Ford WRT at 3, SX Trial Ex. 244. In 2012, Music Choice (and the PSS generally) pays a royalty rate for the sound

recording performance right of 7.5% of gross audio revenues on a monthly average revenue per cable subscriber receiving its service of about [REDACTED]. Ford WRT at 3, SX Trial Ex. 244; *see also* Beccaro WDT at 12, PSS Trial Ex. 1. Per household receiving its service, the royalty payment for the performance right is [REDACTED] per month (*i.e.*, 7.5% of [REDACTED]). Ford WRT at 3-4, SX Trial Ex. 244. Dr. Ford then relied on survey evidence submitted to the record by Music Choice, which suggests that of cable subscribers using the Music Choice service, each listens to an average of [REDACTED] per week, or [REDACTED] per month. Ford WRT at 4, SX Trial Ex. 244; Williams WDT at MC 38, p. 10, 14, PSS Trial Ex. 3. Dr. Ford explained that assuming 15.375 songs per tuning hour,⁸² each subscriber receiving the Music Choice service listens on average to [REDACTED] songs per month (or [REDACTED] ATH per month). Ford WRT at 4, SX Trial Ex. 244. This figure takes into account that only [REDACTED] of cable subscribers that receive Music Choice use the service. Williams WDT at MC 38, p. 10, 14, PSS Trial Ex. 3. Dr. Ford then translated Music Choice's per-subscriber royalties into a rough per-play approximation, finding that Music Choice presently pays royalties of [REDACTED] per play. Ford WRT at 4, SX Trial Ex. 244. As Dr. Ford testified, this is an incredibly low royalty payment for the use of copyrighted works. Ford WRT at 4, SX Trial Ex. 244. For example, in 2012, non-interactive Commercial Webcasters pay \$0.0021 per play, 37 C.F.R. § 380.3(a)(1), a rate that is [REDACTED] times larger than that presently paid by Music Choice to the record labels for their copyrighted material.

716. Similarly, Dr. Ford testified that Music Choice and the PSS are paying royalty rates an order of magnitude lower than other parties, many of which are competitors of Music Choice and the PSS. Ford WRT at 4, SX Trial Ex. 244. For example, Dr. Ford found that close competitors of Music Choice in the market for cable audio services such as Galaxie and

⁸² *See Webcasting II*, 72 Fed. Reg. at 24096.

SonicTap (referred to as “CABSATs”) pay no less than [] times more (on average) than Music Choice presently pays for the same or similar use of property and in some cases the CABSATs pay no less than [] times more than Music Choice pays (on average) for the same set of rights. 37 C.F.R. § 380.3(a); Ford WRT at 4, SX Trial Ex. 244.

717. All of this evidence suggests that under the current rates, Music Choice is paying very little for its extensive usage of music and far less than its competitors.

3. Ownership of Music Choice

718. A further concern with relying solely on a percentage-of-revenue royalty rate arises out of Music Choice’s ownership structure. Although Music Choice is not the only PSS, it is the dominant service operating under that license (although it faces competition in the larger cable and satellite television radio market). 8/16/12 Tr. 3935:16-3936:11 (Del Beccaro). Music Choice is a partnership that includes among the partners three of the largest cable television operators in the United States – Comcast, Cox, and Time Warner Cable. Ford WDT at 15 n. 23, SX Trial Ex. 79. Dr. Ford initially raised a concern about this ownership structure in the context of a revenue-based rate, noting that the structure “produces an incentive to have a low transfer price between the intermediary ... and the end user, which increases the profits of the owners ... and produces a profit for the intermediary that’s just large enough to keep it in business.” 6/18/12 Tr. 2840:22-2841:5 (Ford).

719. Based on a careful review of documents produced in discovery, Dr. Ford subsequently concluded that his concerns about the ownership structure and its impact on Music Choice’s revenues were well-founded. In other words, as a result of Music Choice’s ownership structure, “we’re actually having a deflation in revenue at the intermediary ... and that revenue

is being shifted over to a branch of the business that is not taxed, so to speak.” 6/18/12 Tr. 2841:6-16 (Ford).

720. Oddly, counsel for Music Choice claimed, in objecting to Dr. Ford’s initial testimony about the economic theory related to Music Choice’s ownership structure, that any favorable treatment between Music Choice and its cable company owners would have to be disclosed as a related party transaction. 6/18/12 Tr. 2844:21-2845:2 (Ford). The implication of that assertion is that there are no such related party transactions disclosed in the relevant financial documents. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]. SX Trial Ex. 233 at PSS_366034 (p. 17); SX Trial Ex. 64 at PSS_002730 (p.18); Ford WRT at SX Ex. 362-RR, p. PSS_002751 (p.15), SX Trial Ex. 244. As Dr. Ford noted, the establishment of this [REDACTED]
[REDACTED]
[REDACTED]. Ford WRT at 19-20, SX Trial Ex. 244.

721. The evidence strongly suggest that Music Choice’s customer-partners receive favorable treatment. As summarized in Table 2 below, all of Music Choice’s Partners (Comcast, Time Warner, and Cox) pay an identical [REDACTED] per subscriber per month for the Music Choice audio service as a result of [REDACTED].⁸³ Ford WRT at 18-20 & Table 2, SX Trial Ex. 244. These three cable operators account for about [REDACTED] of Music Choice’s licensed

⁸³ SX Trial Ex. 72 at 2 ([REDACTED]
[REDACTED]”). See also 6/14/12 Tr. 2147:19-2149:10 (Del Beccaro).
[REDACTED].

subscribers. Ford WRT at 18, SX Trial Ex. 244. Non-affiliated cable operators, however, pay substantially more. Large, non-affiliated cable operators pay, on average, [REDACTED]. Ford WRT at 18, SX Trial Ex. 244. The Partner discount is over [REDACTED] relative to the largest, non-affiliated cable operators. Ford WRT at 18, SX Trial Ex. 244.

Table 2. Rate Terms for Music Choice Customer

	Basic Subs	Rate
<i>Partners</i>		
Comcast Cable Communications	[REDACTED]	[REDACTED]
Time Warner Cable	[REDACTED]	[REDACTED]
Cox Communications	[REDACTED]	[REDACTED]
Average		[REDACTED]
<i>Non-Partners</i>		
Charter	[REDACTED]	[REDACTED]
Verizon	[REDACTED]	[REDACTED]
AT&T Services, Inc	[REDACTED]	[REDACTED]
Cablevision	[REDACTED]	[REDACTED]
Average		[REDACTED]
Subscriber Weighted Average (All Non-Affiliates)		[REDACTED]
Median Rate (All)		[REDACTED]
Source: PSS 365233 (Data dated August 2011).		

Ford WRT at 19 Table 2, SX Trial Ex. 244.

722. Dr. Ford testified that although Mr. Del Beccaro attempts to attribute these large differences to buyer size, the excuse is inconsistent with the data. Ford WRT at 18, SX Trial Ex. 244. First, the Partners operate [REDACTED]

[REDACTED]

[REDACTED] Ford WRT at 18 & SX. Ex. 357-RP, p. 5 (Section 3.6), SX Trial Ex. 244.

Thus, if scale matters, it only matters to the largest partner. As Dr. Ford explained, Comcast Cable has a customer base [REDACTED] times larger than Time Warner and [REDACTED] times larger than Cox,

yet all the partners receive the same rate. Ford WRT at 18, SX Trial Ex. 244. Obviously, scale alone cannot be the sole explanation for these substantially discounted rates.

723. Second, the large unaffiliated cable operators are approximately as large as Music Choice partner Cox Communications. Ford WRT at 18, SX Trial Ex. 244. Charter, for example, has [REDACTED] million customers to Cox's [REDACTED] million customers. Ford WRT at 18, SX Trial Ex. 244. In fact, in the [REDACTED]
[REDACTED]
[REDACTED]. See SX Trial Ex. 70 at 41-42 (Music Choice-Charter Affiliation Agreement). Thus, Dr. Ford concluded, the Partners are treated quite differently, and much more favorably, than other customers. Ford WRT at 18, SX Trial Ex. 244.

724. Third, there is no scale-related discount between Charter, at [REDACTED] million subscribers and Cablevision at [REDACTED] million subs despite the difference of [REDACTED] million subscribers. Ford WRT at 19, SX Trial Ex. 244. In contrast, as Dr. Ford pointed out, there is a discount of about [REDACTED] between Charter and Cox with a difference of only [REDACTED] subscribers. *Id.* Thus, Dr. Ford concluded that Music Choice's Partners receive highly favorable rates that cannot be attributable to subscriber count alone. *Id.* These license fee differentials are very big for the larger cable operators, with the Partners' discount receiving [REDACTED] off the average non-partner rate ([REDACTED]) and [REDACTED] off the median non-partner rate ([REDACTED]). *Id.*

725. Moreover, while the rate data alone is compelling, Dr. Ford found that there is additional evidence that Music Choice offers preferential terms to cable operator Partners. Ford WRT at 19-21, SX Trial Ex. 244. First, a review of the contractual agreements between Music Choice and its customers suggests a [REDACTED]. For example, the partner affiliation agreements have explicitly called for a [REDACTED]

[REDACTED]
[REDACTED]. See, e.g., Ford WRT at 19 & SX Ex. 356-RR, pp. 4-6 (Section 3.2), SX Trial Ex. 244 (Time Warner Partner Affiliation Agreement, January 21, 2000). While later agreements have

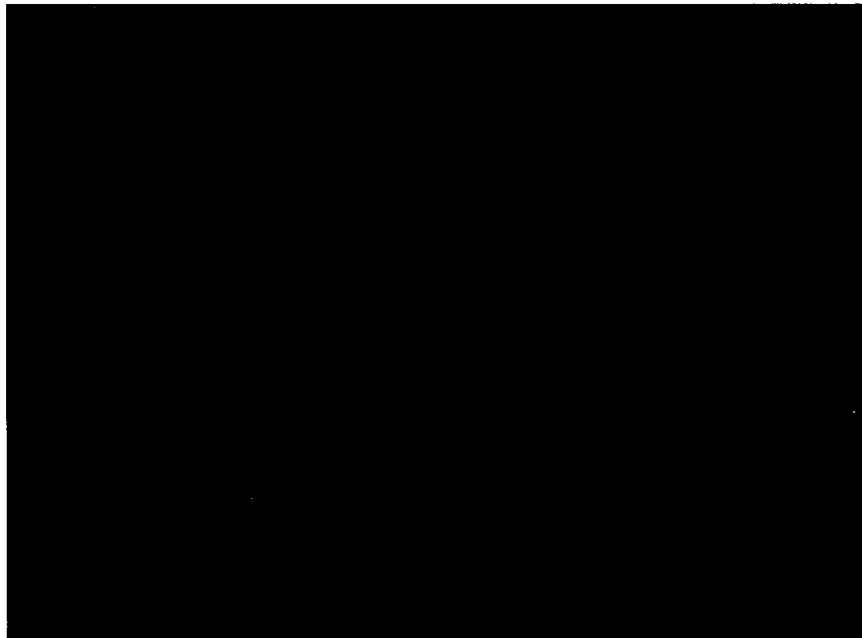
[REDACTED]
[REDACTED].⁸⁴ Ford WRT at 19 & SX Ex. 357-RR, p.3 (Section 3.3(a)), SX Trial Ex. 244 (Cox Affiliation Agreement, November 15, 2005) (active).

726. In fact, the current partner agreements contain [REDACTED]
[REDACTED]

[REDACTED].⁸⁵ Ford WRT at SX Ex. 357-RR, p.3 (Section 3.3), SX Trial Ex. 244. That formula was set collectively for all of the partners at the time, approximately a decade ago:

⁸⁴ See also Ford WRT at 19 n.65, SX Trial Ex. 244 (listing additional agreements with identical “partner return” provisions, including a Comcast agreement, an Adelphia agreement, and a form partner agreement).

⁸⁵ The current partner agreements state that [REDACTED]. Ford WRT at SX Ex. 357-RR, p.3 (Section 3.3), SX Trial Ex. 244. Schedule B then states that [REDACTED].” *Id.* at 64. Section 3.3(a) then provides the collectively agreed upon [REDACTED]. *Id.* at 3.



Ford WRT at SX Ex. 356-RR, p. 36, SX Trial Ex. 244 (Time Warner Partner Affiliation Agreement, January 21, 2000).⁸⁶ [REDACTED]

[REDACTED]

[REDACTED] Compare Ford WRT at SX Ex. 357-RR, p.3 (Section 3.3 (a)), SX Trial Ex. 244, with SX Trial Ex. 244 at 5 (Section 3.2(b)). As Music Choice’s financial statements explain:

“[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].” SX Trial Ex. 233 at PSS_366034 (p. 17).

727. This is in marked contrast to non-partner affiliates whose rates are not set [REDACTED]

[REDACTED]. Ford WRT at 20, SX Trial Ex. 244.

⁸⁶ See also Ford WRT at 19 n.65, SX Trial Ex. 244 (listing additional agreements with identical maximum license fee schedules, including a Comcast agreement, an Adelphia agreement, and a form partner agreement).

728. Second, Dr. Ford found direct communications between Music Choice and its partners suggesting the cable partners [REDACTED]. Ford WRT at 20, SX Trial Ex. 244. For example, in an email from Music Choice CEO Dave Del Beccaro to individuals at Time Warner Cable (a Music Choice partner) concerning the negotiations related to the introduction of a new Music Choice service called SWRV and the license fee that would be charged to Time Warner, Mr. Del Beccaro wrote:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED].

SX Trial Ex. 72.⁸⁷ As Dr. Ford testified, the communication largely speaks for itself. Ford WRT at 20, SX Trial Ex. 244. Music Choice is [REDACTED]

[REDACTED] and these [REDACTED]
[REDACTED] *Id.* The consequence of [REDACTED]
[REDACTED] *Id.*

Again, Dr. Ford found that the implication is clear: Music Choice is establishing rates for its

⁸⁷ Internal documents related to the development of the interactive music video service also make explicit the favorable treatment received by Partners. *See* Ford WRT at SX Ex. 358-RR, p. 13, SX Trial Ex. 244 (Music Choice Music Video Network Business Plan, December 2008).

Partners that are [REDACTED].⁸⁸ Ford WRT at 20, SX Trial Ex. 244.

729. Ultimately, Dr. Ford concluded that as Music Choice itself stated, in a presentation to its Partner, Time Warner Cable, [REDACTED] [REDACTED] and [REDACTED]

Ford WRT at 20-21 & SX Ex. 355-RR, p. 33, SX Trial Ex. 244.

D. Equitable Royalties for Transmissions Through PSS Partners

730. Because of the substantial evidence that Dr. Ford compiled concerning the large disparity between Music Choice's partner and non-partner license fees and the significant documentation that the partner license fees are not the result of arm's length negotiations, SoundExchange has proposed a mechanism to ensure that copyright owners and performers are paid fairly notwithstanding the favorable deals entered into between Music Choice and its partners. SX Second Revised Rate Proposal at 6-7 (filed September 26, 2012). This mechanism can be thought of as a minimum fee for partner transactions. However, the minimum fee is not fixed. Rather, it is calculated for each PSS based on its own arm's-length transactions with large carriers. Thus, it functions solely to ensure that a PSS cannot obtain a discount on the royalties paid for its partners' usage below the level implied by the pricing in its own arm's-length deals with its largest carriers.

731. Dr. Ford suggested that a minimum per-subscriber fee could be used for PSS generally because of concerns that they derive relatively low revenues from their high usage. Ford WDT at 18, SX Trial Ex. 79; 6/18/12 Tr. 2838:11-2839:19 (Ford). Dr. Ford testified in particular that a percentage-of-revenue rate structure was problematic where "the ownership

⁸⁸ See also Ford WRT at SX Ex. 359-RR, SX Trial Ex. 244 (email from Robin Dawson at Music Choice to Time Warner Cable employees containing virtually identical language).

structure affects revenues” because then “it’s affecting royalties.” 8/20/12 Tr. 4216:21-4217:8 (Ford). As Dr. Ford explained: “I believe that, if we are going to properly compensate someone for the use of their property, we ought to be compensating them for use and not have the compensation affected by peculiar ownership structures of the entities that easily arise.” 8/20/12 Tr. 4216:21-4217:8 (Ford).

732. SoundExchange has not elected to propose a per subscriber minimum in general at this time. However, the evidence of favorable treatment by Music Choice to its partners is so compelling that achieving the second statutory objective of “afford[ing] the copyright owner a fair return,” 17 U.S.C. § 801(b)(1)(B), requires some mechanism to prevent PSS from obtaining discounts in their royalty payments below the levels indicated by the statutory objectives by discounting their service to partners below the pricing offered to other large carriers.

733. In particular, SoundExchange proposes that for partners (and other non-arm’s length license agreements), the minimum per-subscriber royalty be equal to the average per-subscriber royalty paid by the PSS for its five highest-paying non-partner carriers (measured by total payment). Because the carriers paying a PSS the most in total will presumably tend to be larger carriers able to negotiate relatively favorable arm’s length deals, the minimum fee is tied to the pricing in the PSS’s own arm’s length carrier deals that will tend to be most favorable to the carriers.

734. For example, assume the royalty rate is 15% (as SoundExchange has requested for the first year) and a partner pays a PSS \$0.10 per subscriber while the PSS’s five highest-paying non-partner carriers average paying the PSS \$0.20 per subscriber. Under those circumstances, the PSS must pay royalties on the partner’s usage equivalent to at least \$0.03 per partner subscriber (15% of \$0.20) notwithstanding that under the 15% royalty rate, the PSS

otherwise would have had to pay only \$0.015 per partner subscriber. Importantly, the higher royalty payment that would be required in this situation is solely a function of the PSS's decision to discount its service to its partner by 50% relative to the pricing it secures in its own arm's length transactions with large non-partner carriers. If its partners do not receive more favorable deals, the minimum fee will not be a factor.

735. While this per subscriber minimum does not address all of the shortcomings with the percentage-of-revenue rate addressed by Dr. Ford, it ensures that ownership structure of the PSS does not cause the sound recording copyright owners and performers to be unfairly compensated.

XI. MUSIC CHOICE'S RATE PROPOSAL IS BASED ON THE PREVIOUSLY REJECTED MUSICAL WORKS BENCHMARK AND IS UNREASONABLE

736. Music Choice's rate proposal of 2.6% of revenues is detailed in the testimony of Music Choice CEO Mr. Del Beccaro. According to Dr. Ford, that argument contained in that rate proposal is as old as it is simple – the royalty rate for the sound recording performance right should be [REDACTED] the musical works rate. Ford WRT at 1, SX Trial Ex. 244. Mr. Del Beccaro's theory is based entirely on his interpretation of the 1998 decision of the Librarian of Congress. He provides no economic or financial analysis to support the proposal and no marketplace agreements are provided which link the proposed royalty to a market rate. While Section 801(b) does not require a pure market rate outcome, the Judges have previously determined that the selection of rates should begin with a legitimate market rate. Ford WRT at 1, SX Trial Ex. 244.

A. The Primary Justification for Music Choice's Benchmark is a Decision from 1998.

737. The primary justification for Music Choice's rate proposal is presented in the testimony of David Del Beccaro. Mr. Del Beccaro presents the exact same 2.6% rate that Music

Choice offered in the last proceeding (which ultimately settled) and on the exact same theory. See SX Ford WRT at 2-3 & SX Ex. 351-RP, SX Trial Ex. 244. Mr. Del Beccaro's theory is that in 1998 the Librarian of Congress applied the proper method of setting the PSS rate – using the sum of the rates that Music Choice pays for musical works as “the highest possible reasonable rate for the equivalent digital sound recording performance license.” Del Beccaro WDT at 9, PSS Trial Ex. 1. The Librarian then set the sound recording royalty at 65% of the musical works rate based, according to Mr. Del Beccaro, on consideration of “the various evidence relevant to the policy objectives contained in the statute.” Del Beccaro WDT at 9-10, PSS Trial Ex. 1. In Mr. Del Beccaro's opinion, the musical works rate remains the proper benchmark for the sound recording performance rate, but the rate should be reduced because: (1) the Librarian of Congress over-estimated the actual musical works rate when initially setting the sound recording rate in 1998; and (2) changed circumstances justifies setting the sound recording royalty at [REDACTED] rather than 65% of the musical works rate based on Mr. Del Beccaro's interpretation of the statutory policy factors. Del Beccaro WDT at 9-10, PSS Trial Ex. 1; Ford WRT at 6-7, SX Trial Ex. 244.

B. This Court and its Predecessors Have Repeatedly Rejected the Musical Works Benchmark

738. In rejecting the musical works benchmark in the subsequent *Webcasting I* proceeding, the Librarian noted that the only reason the musical works rate was considered relevant in the *PSS I* proceeding was that there was no other probative benchmark. See *Webcasting I* CARP, *Determination of Reasonable Rates and Terms for the Digital Performance of Sound Recordings and Ephemeral Recordings* (“*Webcasting I*”), 67 Fed. Reg. 45,240, 45,247 (July 8, 2002) (emphasizing that in *PSS I*, “the only reason the Register and Librarian focused on the musical works benchmark was because it was the only evidence that remained probative after

an analysis of the Panel's decision"). The Librarian further noted that the parties in the *PSS I* proceeding had not fully developed the issues related to the musical works rate in the record. *Id.*

739. As a result of that incomplete record in 1997, the CARP and the Librarian had no better benchmark on which to rely. But in today's more mature digital marketplace, there is no excuse for resorting to such an ill-conceived benchmark. Indeed, in *Webcasting I*, the CARP and the Librarian each rejected the musical works rate as a benchmark, *Webcasting I*, 67 Fed. Reg. at 45,247, and this Court likewise rejected it on multiple grounds in *Webcasting II*. *Webcasting II*, *Digital Performance Right in Sound Recordings and Ephemeral Recordings* ("Webcasting II"), 72 Fed. Reg. 24,084, 24,094 (May 1, 2007). In contrast to 1996 (when the record for the *PSS I* proceeding was developed), today multiple digital music markets for sound recordings have developed and abundant marketplace evidence demonstrates that musical works rights and sound recording rights are not valued the same in the marketplace.

740. The Court should reject use of the musical works benchmark in this case for the same reasons it rejected this benchmark in *Webcasting II*. In *Webcasting II*, the Court found that "substantial empirical evidence shows that sound recording rights are paid multiple times the amounts paid for musical works rights." See *Webcasting II*, 72 Fed. Reg. at 24,094. The Court also rejected reliance by the Services' expert on sunk cost as a justification for using the musical works benchmark. The Court found that "there is ample empirical evidence to controvert [the] premise the market for sound recordings and the market for musical works are necessarily equivalent." *Id.*

741. The evidence from the marketplace for the digital distribution of music shows that sound recording rights and musical works rights command enormously different license fees. A review of the royalty rates paid by various services, including permanent download services like

iTunes and interactive subscription services like Rhapsody, demonstrates that copyright holders of sound recordings continue to be paid multiple times the amounts paid for musical works rights. This was starkly summarized in the chart offered by Mr. Harrison showing the gulf between the prevailing sound recording and musical works rates in UMG agreements for a variety of services. Harrison WRT at 13-14, PSS Trial Ex. 32.

Service	Sound Recording Rate (in UMG agreements)	Publishing Rate	Rough Multiple
Digital Downloads	[REDACTED] – publishing rate of \$0.091 per track	\$0.091 per track	[REDACTED]
Ringtones (Mastertones)	[REDACTED] - publishing rate of \$0.24	\$0.24	[REDACTED]
On-Demand Music Videos	[REDACTED] – publishing rate of 15% of UMG’s receipts	15% of UMG’s receipts for synch rights, plus additional PRO fees	[REDACTED]
Portable Subscription Services	[REDACTED]	10.5% of revenue or \$0.50 per sub, with a minimum of 21% of label fees	[REDACTED]

Id at 14. As Mr. Harrison explained, “This consistently large differential across many disparate services demonstrates that there is no reasonable basis for deriving a statutory rate for sound recordings from the much lower rate for musical works.” *Id.* at 14.

742. Dr. Ford noted that, as recognized previously by the Judges, the royalty rate for the sound recording performance right is many multiples of the rate for the musical works right in marketplace transactions. For the percent-of-revenue rate element, the royalty for performance rights is typically six to twelve times more than the musical works rate. Ford WRT at 7, SX Trial Ex. 244; *see also* Harrison WRT at 13-14, PSS Trial Ex. 32.

743. Dr. Ford explained that the large differences in royalty rates observed in marketplace transactions reflect the sizeable differences in the costs and risks incurred by the various parties in creating and distributing musical performances. Ford WRT at 7, SX Trial Ex. 244. Dr. Crawford has failed to adequately explain why the musical works rate should be found to be an appropriate benchmark for the PSS despite repeated rejections in other rate-setting proceedings.

744. The music publishing business is fundamentally different in character from the sound recording business. As Charles Ciongoli previously testified, the two businesses play very different roles in creating and selling music, and vary enormously in terms of the magnitude of investments they make and risk they take in producing music. Crawford WDT at MC 59 (Ciongoli), p.3, PSS Trial Ex. 4.⁸⁹ While there is little consumer demand for musical works standing alone, consumers buy and listen to sound recordings—of which musical works are just one component. Crawford WDT at MC 59 (Ciongoli), p.3, PSS Trial Ex. 4. Thus, the recording business is a “high risk, high reward” business, while the music publishing business is “low risk,” with “consistent but lower returns.” Crawford WDT at MC 59 (Ciongoli), p.3, PSS Trial Ex. 4.

745. As Mr. Ciongoli previously testified, record companies invest significant sums of money up front in order to create their final music products. Then they invest additional money to market and promote that final product in the hopes of earning back through sales their significant upfront investments. Crawford WDT at MC 59 (Ciongoli), pp.3-4, PSS Trial Ex. 4.

⁸⁹ Music Choice admitted into evidence prior testimony of Charles Ciongoli and Mark Eisenberg as Exhibits MC 59 and MC 60. Pursuant to the Court’s order, SoundExchange is not relying on any designated testimony against Music Choice, only exhibits that have been admitted into evidence for use by all parties. SoundExchange is not aware of any court ruling that would permit one party to use evidence while preventing the opposing party from using the same evidence. Indeed, such a rule would raise significant due process implications.

These substantial expenditures include investments in recording costs, overhead, marketing, promoting, manufacturing and distributing the sound recordings. Ciongoli WDT at 8-11, SX Trial Ex. 67. However, rarely do the record companies recoup these upfront costs, as the vast majority of sound recordings are not ultimately profitable. Crawford WDT at MC 59 (Ciongoli), p.4, PSS Trial Ex. 4; Ciongoli WDT at 11, SX Trial Ex. 67.

746. By comparison, music publishers are not in the business of creating a final product and therefore, they do not undertake the same upfront investments that record companies do. They do not have to invest in creating, marketing, promoting, manufacturing, and distributing the musical works. Crawford WDT at MC 59 (Ciongoli), pp.4-5, PSS Trial Ex. 4. If and when a music publisher invests in musical works that do not already have a proven track record, they usually do so only after a record company has already signed the artist/songwriter and has thus made clear that it will be spending significant sums of money to help ensure the success of these musical works. Crawford WDT at MC 59 (Ciongoli), p.4, PSS Trial Ex. 4.

747. These differences in risk and investment are reflected in the different rates that sound recording copyright owners earn as compared to what musical works copyright owners receive. Crawford WDT at MC 59 (Ciongoli), p.5, PSS Trial Ex. 4.

C. Dr. Crawford's Economic Analysis Does Not Justify Reliance on the Musical Works Benchmark

748. Allegedly supporting the 2.6% rate and the use of the musical works as a benchmark is the testimony of Music Choice's economic expert, Dr. Gregory Crawford. According to Dr. Crawford, under no circumstances should the PSS royalty for the performance of sound recordings be greater than Music Choice's musical works royalty. More precisely, Dr. Crawford argues that under no circumstance should the royalty for the performance of sound recording be greater than 3.05%, which is purportedly (but not actually) Music Choice's profit

rate on its residential audio service. Crawford WDT at 6, PSS Trial Ex. 4. Dr. Crawford argues that the market-based royalty rate (absent compulsion) would fall in the range of 0.6% to 2.43%, which is below Music Choice's proposal and is orders of magnitude below any royalty rate observed in marketplace transactions. *Id.* Neither Mr. Del Beccaro nor Dr. Crawford provide a single example of a market negotiated royalty rate the performance right that is equal to or below the musical works rate. Ford WRT at 1-2, SX Trial Ex. 244. In other words, the use of the musical works rate as a benchmark has no economic foundation and no empirical support in market transactions. The musical works rate remains a poor benchmark and Dr. Crawford's reliance on it is misplaced. Ford WRT at 2, SX Trial Ex. 244.

1. Dr. Crawford's Application of the Nash Bargaining Framework is Flawed.

749. Dr. Crawford justifies his use of the musical works rate as a benchmark and defends his resulting proposal of a very low royalty rate for the sound recording performance right used by the PSS on the basis of his application of the economic concept of a Nash Bargaining Solution. Crawford WDT at 11-39, PSS Trial Ex. 4. As Dr. Ford testified, the Nash Bargaining Solution is a highly abstract theoretical concept in which bargaining outcomes are required to satisfy a number of axioms including: 1) invariance to affine transformations; 2) Pareto optimality; 3) independence of irrelevant alternatives; and 4) symmetry. Ford WRT at 8, SX Trial Ex. 244. The purpose of Nash's theory was to evaluate how the *surplus* from a transaction will be divided among participants. *Id.* Assuming the parties to the transaction have equal bargaining power and both have something to gain if a deal is reached, the surplus from the transaction will be split evenly between the buyer and seller. Of course, if these assumptions are violated (say, unequal bargaining power), the even split of the surplus need not occur. *Id.*

750. Dr. Ford testified that the first problem with applying Nash's theory to the determination of a royalty rate is that a royalty does not split surplus, it splits revenues. Ford WRT at 8, SX Trial Ex. 244. An even split of surplus does not imply an even split of revenues. *Id.*

751. Another problem, Dr. Ford explained, is that Nash theory also requires that no action be taken by one of the individuals without the consent of the other. Ford WRT at 8, SX Trial Ex. 244. Given that this case involves a compulsory license, Nash's solution applied to this case is of questionable relevance. *Id.* As Dr. Ford testified, there may be a Nash solution under compulsion, but it looks nothing like a market outcome, nor would it look like the "reasonable" and "fair" outcomes contemplated by copyright law. Ford WRT at 8, SX Trial Ex. 244.

752. Dr. Ford also identified other defects with Dr. Crawford's application of the Nash Bargaining Solution to the question of royalty rates. First, Dr. Crawford considers only a two-party transaction between record labels and the PSS even though Dr. Crawford explicitly recognizes that there are at least three parties to the transaction: 1) the record labels; 2) the PSS as a content intermediary; and 3) the cable operator customers of the Music Choice service. Ford WRT at 14, SX Trial Ex. 244. Ignoring the output market in which the PSS offer their products omits a number of significant factors that would influence the Nash solution. *Id.* While Dr. Crawford recognized that all three parties exist, he did no analysis of the output market. 8/20/12 Tr. 4212:10-11 (Ford).

753. As Dr. Ford explained, in Nash's seminal paper, he considers only the case of the two-person zero sum game. Ford WRT at 14, SX Trial Ex. 244. Yet, given the intermediary status of the PSS, the surplus from the transaction is not a fixed, zero-sum game. *Id.* Dr. Crawford also assumes the PSS have market power (in fact, he assumes the PSS are a monopoly

– both of them). *Id.* But Dr. Ford points out that if true, then the company has the power to pass through, to a greater or lesser degree, any cost increase to its cable operator customers. *Id.* In fact, many of Music Choice’s agreements with cable operators include [REDACTED] [REDACTED].⁹⁰ Consequently, Dr. Ford testified, the surplus available is unique at each royalty rate. *Id.* A proper Nash Bargaining analysis of the transaction involves all three parties, and this would be a very complex problem.⁹¹ In the case of percent-of-revenue royalties, economic research suggests that the Nash solutions are very complex and, to some extent, intractable from a practical perspective even in a two-party transaction. *Id.*

754. Dr. Ford testified that the complexity of the three-party transaction arises in part because Music Choice’s role as an intermediary introduces an additional bargain in the output market and all three bargains must be considered jointly. Ford WRT at 15, SX Trial Ex. 244. The effects of bargaining in the output market are plainly illustrated by the sizable differences in license fees paid to Music Choice by its cable operator customers, which in turn results in a large differential in the royalties paid to copyright owners under a percent-of-revenue royalty rate. *Id.* The large differences in royalty for the same right (a [REDACTED] difference) are a significant concern. *Id.* Market agreements typically guard against such large differences in royalties for the same or similar use of property (e.g., by including a per-subscriber or per-play rate element). *Id.*

755. Similarly, Dr. Crawford ignored in his Nash Bargaining Solution the unique ownership structure of Music Choice. Ford WRT at 15, SX Trial Ex. 244. As Dr. Ford explained, adding to a three-party Nash game an ownership interest between two parties is likely

⁹⁰ See 6/14/12 2152:15-2154:10 (Del Beccaro); *see also, e.g.*, Ford WRT at SX Ex. 357-RR, p. 4, SX Trial Ex 244; Ford WRT at SX Ex. 356-RR, p. 5, SX Trial Ex 244; SX Trial Ex. 71 at 16.

⁹¹ 6/12/12 Tr. 1767:8-16 (Crawford) (“A second market that is also important is the market for the outputs of the PSS provider itself.”).

to add a great deal of complexity to the model. *Id.* As discussed in Section X.C.3, there is compelling evidence that Music Choice's partners receive favorable terms and conditions for the Music Choice service, paying about [REDACTED] than other large cable operators. As a percent of revenue royalty rate, these discounts directly affect royalties. Ford WRT at 15, SX Trial Ex.

244. In a market setting, it is likely that the record labels would attempt to limit the ability of Music Choice to reduce royalty payments because of its ownership structure. *Id.* For example, the terms of a marketplace agreement between [REDACTED] for a service that is sold on intermediary basis to mobile phone providers. This agreement specifically states that, "[REDACTED]

[REDACTED].” Noll WDT, Appendix K at 64, SXM Trial Ex. 1. Dr. Ford explained that clearly the relationship between the copyright user and its downstream agents is a concern and the record labels explicitly address it in their marketplace agreements. Ford WRT at 15, SX Trial Ex. 244. Dr. Ford testified that there is no reason to ignore such relationships in this proceeding, since the outcome of marketplace transactions is integral to the determination of rates under 801(b) and Dr. Crawford claims to be establishing a royalty rate that arises in market transactions absent compulsion. *Id.*

756. Furthermore, Dr. Ford pointed out that Dr. Crawford completely ignored in his bilateral monopoly assumption the testimony of Music Choice CEO Mr. Del Beccaro regarding the marketplace reality that Music Choice has a number of competitors. Ford WRT at 15, SX Trial Ex. 244. According to Mr. Del Beccaro:

Music Choice competes for customers, listeners, and advertising revenue with many businesses, including traditional AM/FM radio and digital AM/FM radio, Galaxie [], Internet-based audio providers and other actual or potential DBS and cable audio service providers. [] Pandora and other “over-the-top” (“OTT”)

content providers represent a new competitive entrant into the residential audio market. [] Recently, Spotify, a very popular service in Europe, entered the US music streaming market. And in November, Google and Apple, the twin 800-pound gorillas of the technology world, both announced music streaming services. Google TV promises to effectively bring the entire Internet and all of its music delivery services (e.g., Pandora, LastFM, Spotify, Live365, Shoutcast, etc.) to the television.

Del Beccaro WDT at 36-37, PSS Trial Ex. 1; Ford WRT at 15-16, SX Trial Ex. 244.

757. Dr. Ford testified that other cable audio services, including Galaxie and Sonic Tap, offer essentially the same service as Music Choice to cable operators, and both have taken customers from Music Choice ([REDACTED]). Ford WRT at 16, SX Trial Ex. 244. Indeed, Dr. Ford explained that the only material difference between these competitors and the PSS, for the purpose of setting a royalty rate, is that statutory license under which the services operate. *Id.* at 16 n. 54. In light of these numerous alternatives, it is clear that customers have many choices for listening to music both on their televisions and other devices.⁹² *Id.* at 16. Likewise, SoundExchange has many alternatives so “if they don’t do a deal with Music Choice, they could possibly do a deal with other players in the same game,” like Galaxy, Sonic Tap, Pandora, or others. 8/20/12 Tr. 4214:17-4215:2 (Ford). But Dr. Crawford’s analysis assumes, contrary to facts, that “if SoundExchange doesn’t do a deal with Music Choice, . . . they get no surplus at all.” 8/20/12 Tr. 4214:11-16 (Ford). As a result, Dr. Ford concluded that a bilateral monopoly version of Nash’s theory is unlikely to say anything meaningful about the PSS royalty rate. Ford WRT at 16, SX Trial Ex. 244.

758. Finally, Dr. Crawford’s application of the Nash Bargaining Solution is unsound as a result of his determination that there is a “promotional” effect of the PSS services, and that this promotional effect leads to a lower royalty rate for SoundExchange than for the rights holder of

⁹² As Mr. Del Beccaro observed, these services make “direct access to audio programming by residential consumers more prevalent.” Del Beccaro WDT at 37, PSS Trial Ex. 1.

the musical work. Specifically, Dr. Crawford asserted that the PSS service promotes CD sales and that the record labels (as owners of the sound recordings) earn higher surplus from such sales than do the publishing companies (as owners of the musical works). Crawford WDT at 6, PSS Trial Ex. 4. Under Dr. Crawford's theory, the labels receive a disproportionate gain from the promotional effect, and this additional gain implies a lower surplus from the transactions with the PSS. Because of this lower surplus from the transactions between the sound recording owners and the PSS, Dr. Crawford concluded that the Nash Bargaining Solution implies that the labels should receive a lower royalty than the copyright owners of the musical work. But as Dr. Ford explained, even if this argument were correct, the split of surplus says nothing particular about the split of revenues, and royalty rates split revenues. Ford WRT at 9, SX Trial Ex. 244. Moreover, Dr. Crawford's conclusion is based on (at least) two additional faulty premises: 1) Dr. Crawford relied on exceedingly weak evidence to conclude that there is a promotional effect; and 2) Dr. Crawford assumed that the record labels' higher revenues in the sale of CDs is a result of earning a higher surplus. Ford WRT at 8-9, SX Trial Ex. 244. All of these problems are explored more fully in the next Section.

2. Dr. Crawford's Conclusions about the Promotional Benefits of the PSS Are Unsupported.

759. Central to Dr. Crawford's application of the Nash Bargaining Solution is the unsupported conclusion that the PSS are promotional of the sale of sound recordings. For the reasons explained below, the evidence does not support Dr. Crawford's conclusion that there is a promotional effect from the PSS or that any promotional benefit would lead to a royalty rate below the musical works rate.

a. Music Choice's Evidence of Promotional Benefits Is Outdated, Anecdotal, and Confuses Correlation with Causation

760. A cornerstone of Dr. Crawford's Nash Bargaining analysis is that Music Choice (and by extension the PSS generally) promotes the sale of CDs and digital downloads. But Dr. Crawford's evidence on the promotional effect of Music Choice is incredibly weak, anecdotal, and outdated. Ford WRT at 9, SX Trial Ex. 244. Dr. Crawford candidly acknowledged that he conducted no quantitative analysis of his own to demonstrate a promotional effect. 6/13/12 Tr. 1946:5-7(Crawford) ("I also would have liked to quantify the promotional benefit, and I, again, did not have the data available."). Instead, Dr. Crawford, in his direct testimony, relied heavily on surveys which purport to show that Music Choice's customers typically purchase more CDs than the average person. But, as Dr. Crawford acknowledged, none of these surveys he relied on claim to establish a causal relationship that implies the more hours listened to Music Choice, the more CDs someone purchases. Ford WRT at 9, SX Trial Ex. 244; 6/13/12 Tr. 1926:8-11 (Crawford) ("I worry quite frequently about the distinction between correlation and causation.").

761. Dr. Crawford's argument appears to confuse correlation with causation. Ford WRT at 9, SX Trial Ex. 244. As Dr. Ford explained: "The surveys that were used in this case to support the argument of promotion . . . look at Music Choice listeners and see if they buy more CDs than do non-music choice listeners, but that doesn't address the issue of causation. It's just a correlation. If Music Choice listeners just like music and they consume music in lots of different ways, go to more concerts or more bars on the weekends or play guitar at home or whatever it may be, then it just may be a consequence of the high intensity of demand for music, generally." 8/20/12 Tr. 4218:2-12 (Ford).

762. Dr. Ford offered a simple numerical example to illustrate the difference between correlation and causation. Ford WRT at 9, SX Trial Ex. 244. Assume there are two types of people – those that like music and those that do not. In the absence of the PSS, say that those

who like music purchase 10 CDs per year. Those who do not like music purchase none. If a PSS-style music channel service is introduced to the market, then presumably only those who like music will use the service. Suppose, for example, that those who like music and listen to the music channel service reduce their consumption to 5 CDs per year since the music channels meet part of their demand for listening, while those who do not like music continue to purchase no CDs. Comparing purchases across those who listen to a PSS and those who do not would reveal that PSS listeners purchase more CDs than do non-listeners. As the example shows, however, this difference does not indicate a promotional effect, but quite the opposite – the music channel services reduces the consumption of CDs by half. Plainly, observing a difference in average consumption levels does not imply a causal effect. Ford WRT at 9, SX Trial Ex. 244.

763. In fact, there is some evidence to suggest that this confusion between correlation and causation is applicable here. Ford WRT at 10, SX Trial Ex. 244. One survey relied upon by Dr. Crawford suggests that Music Choice listeners are large consumers of all types of media. *See Williams WDT at MC36, PSS Trial Ex. 3.* According to this survey, Music Choice listeners are more likely than the average person in the U.S. population (of a specified age group either 12 years or older, or 18 years or older) to [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. Given the patterns of

consumption revealed by this survey, Dr. Ford concluded that the risk of confusing a causal effect with correlation is plainly very high. Ford WRT at 10, SX Trial Ex. 244.

764. This survey evidence suggests a threat of substitution as much or more as it does a promotional effect. Ford WRT at 10, SX Trial Ex. 244. Given that there are only 24 hours in a day, and Music Choice's own survey indicates that its average user listens for about [REDACTED], Williams WDT at MC38, p. 14, PSS Trial Ex. 3, Dr. Ford pointed out it is unclear when the customer would have time to listen to a CD. In an ideal situation, the record labels would prefer that Music Choice's customers were of the type that did not regularly purchase CDs. If these low music purchasers chose to listen to music in an alternative format, such as Music Choice, the total number of revenue-generating customers increases, thereby increasing total royalties. But if Music Choice's customers are those that typically purchase a lot of CDs or consume music in other forms that pay higher royalties than the PSS, then the threat of substitution is very significant, since the customer base using Music Choice is an otherwise healthy source of revenue in other markets. Moreover, the record labels would obviously prefer to have a person listen to [REDACTED] hours of music using the service of an interactive webcaster, a commercial webcaster, or even a CABSAT's service, than using the very low royalty generating Music Choice service. Ford WRT at 10, SX Trial Ex. 244.

765. On rebuttal, Dr. Crawford relied upon a different survey from 2006 which asked consumers, among other questions, (1) whether they purchased any CDs in the past year by a new artist or band whose music they had never purchased before; and (2) what factors influenced the decision to purchase that CD. 8/23/12 Tr. 4697:10-4698:22 (Crawford); Crawford WRT at MC 77, PSS Trial Ex. 42. Dr. Crawford claimed that because [REDACTED]% of respondents who purchased CDs from a new artist listed Music Choice/DMX as an influence in the decision, the survey pinned down "a causal effect" demonstrating Music Choice's promotional value. 8/23/12 Tr. 4700:17-22 (Crawford). In fact, the survey offers no evidence on whether Music Choice is

net promotional or substitutional on the purchase of CDs, let alone for other music services. The survey does not even attempt to measure the substitutional effect of Music Choice – whether consumers watched Music Choice instead of purchasing CDs or listening to other music services. 8/23/12 Tr. 4742:9-14 (Crawford). Even the question of “influence” does not actually measure whether consumers bought any additional CDs because of Music Choice. 8/23/12 Tr. 4742:2-8 (Crawford). Moreover, to the extent the survey shows any promotional value for Music Choice (which it does not), the survey shows even more promotional value for online streaming services.⁹³ 8/23/12 Tr. 4701:2-4702:10 (Crawford). In short, this survey, like the other surveys relied upon by Dr. Crawford, offers no evidence as to the net promotional or substitutional effect of Music Choice or any other services.

766. More fundamentally, Dr. Crawford’s singular focus on CD sales and downloads is at odds with the thinking of the record companies on the promotion/substitution analysis. As Stephen Bryan testified, “Whereas in the past WMG was primarily concerned about the sales of physical products, such as CDs, we now view each potential distribution model in terms of its impact on all other distribution channels. . . .” Bryan WDT at 3, SX Trial Ex. 66. There are a wide range of digital services that appeal to different consumers, but all have the potential to substitute for each other and WMG is vigilant in negotiating agreements in the marketplace that prevent damaging potentially more lucrative distribution channels. Bryan WDT at 3, SX Trial Ex. 66. Mr. Ciongoli expressed the same view, noting that many consumers simply choose to access music through the various services rather than purchasing any music at all. Ciongoli WDT at 4-6, SX Trial Ex. 67.

⁹³ Dr. Crawford tried to distinguish these services by claiming they must be non-interactive Internet radio stations, which he believes are more likely to have a promotional effect rather than a cannibalization effect. 8/23/12 Tr. 4701:2-4702:10 (Crawford). In fact, Sirius XM’s internal research has found that [REDACTED]. SX Trial Ex. 8 at 22.

767. Given the multiple digital distribution services available, the record company executives view each service as potentially a substitute for others. Mr. Harrison testified that people have a limited number of hours in a day, and they generally use only one music delivery platform at a time. If someone is tuned into Music Choice in the living room, he is probably not simultaneously calling up tracks on a MOG subscription. The more hours users dedicate to Music Choice, the fewer hours they will have for other services, and the less likely they are to pay for separate music subscriptions. Harrison WRT at 12, PSS Trial Ex 32. That Music Choice users are spending [REDACTED] listening to Music Choice, Williams WDT at MC44, p. 13, PSS Trial Ex. 3, means at a minimum those hours are not spent listening to other services that pay far higher royalties. The quantitative evidence put forth by Music Choice is simply too flimsy to provide any reliable basis to support Dr. Crawford's promotional claims.

768. In addition to survey evidence, Dr. Crawford also relied on anecdotal evidence of the promotional value of Music Choice presented in the testimony of Damon Williams. Mr. Williams' primary evidence for his assertion that "Music Choice promotes artists and sells records" was a series of "testimonials" that Music Choice received from record labels and artist representatives. Williams WDT at 4-6, PSS Trial Ex. 3; Williams WDT at MC 28, pp.1-3, PSS Trial Ex. 3. During his direct examination Mr. Williams characterized the testimonials as "part of the process of them lobbying us for airplay." 6/12/2012 Tr. 1671:14-15 (Williams). But Mr. Williams admitted on cross examination that he had asked his employee, Gary Susalis, to solicit the testimonials so that he could submit them as evidence in this proceeding. 6/12/2012 Tr. 1710:19-21 (Williams); 6/12/2012 Tr. 1713:6-10 (Williams). In order to collect these "testimonials," Mr. Susalis had emailed employees at record labels asking with the following identical request: "We are doing a survey and I need your help. Can you please give me a quote

on how MC helps the bands you promote? I really appreciate it.” *See, e.g.*, SX Trial Ex. 59 (email to Warner Music Group employee); SX Trial Ex. 60 (email to Brian Teitelman of METALINSIDER.NET); SX Trial Ex. 61 (email to Roadrunner Records employee). One recipient provided the requested quote and then asked for affirmation from Mr. Susalis: “Is that good?” SX Trial Ex. 61. Despite the representation to labels that Music Choice was conducting a survey, Mr. Williams admitted on cross examination that there was no survey, and stated, “I think Gary used the word ‘survey.’ I think that’s his own expression of what I requested him to do.” 6/12/2012 Tr. 1711:2-9 (Williams). Mr. Susalis did not tell the individual he was soliciting that he was going to use the results of the “survey” as a testimonial in this proceeding. 6/12/2012 Tr. 1713:17-20 (Williams).

769. But even if Music Choice had presented actual evidence of labels “lobbying” Music Choice for airplay (rather than being solicited for a positive statements), there is an independent reason why labels would want Music Choice to play from a label’s catalog, regardless of whether Music Choice actually promotes additional sales. The more of a label’s catalog played by Music Choice relative to other label’s music, the greater the share of the royalty pool received by the label. Ford WRT at 10-11, SX Trial Ex. 244. Tellingly, even when Music Choice sponsors custom promotions for artists and labels, the artists and labels still do not waive their royalties. 6/12/2012 Tr. 1731:7-11 (Williams). Thus, even if Music Choice (or the PSS generally) do not promote sales overall, the play of a particular label’s catalog increases the label’s revenue based on the share of the royalty pool. Ford WRT at 10-11, SX Trial Ex. 244.

770. In addition, Mr. Williams offered as evidence that Music Choice is promotional a list of plaques that Music Choice had received from the record industry. Williams WDT at 6-7 & MC 29, PSS Trial Ex. 3. But 22 of the 33 plaques he listed are at least six years old because

they were also included as exhibits to his 2006 written direct testimony, and some of the plaques appear in the list two or three times because they were sent to multiple individuals at Music Choice. 6/12/2012 Tr. 1718:8-16 (Williams).

771. Finally, much of Mr. Williams' testimony is focused on discussing promotional activities primarily related to Music Choice's video service, not its residential audio service which is the aspect of its business governed by the PSS statutory license. See 6/12/12 Tr. 1733:17-1735:3 (Williams); Ford WRT at 10-11, SX Trial Ex. 244.

772. In sum, the anecdotal evidence of Music Choice's promotional value offered by Mr. Williams is no more compelling than its flawed survey evidence.

b. Dr. Crawford's Explanation of the Benefits for Publishers and Sound Recording Copyright Owners is Incomplete

773. Furthermore, Dr. Crawford misinterpreted the effect of the purported promotional benefit of Music Choice. Ford WRT at 12, SX Trial Ex. 244. Essential to the results of Dr. Crawford's Nash Bargaining Solution is the assumption that the record labels receive a larger surplus (or profit) from the sale of a CD (or download). Thus, when Music Choice allegedly causes additional CD sales, the record labels allegedly receive additional surplus that they would not have otherwise received. Dr. Crawford provides no evidence to support this claim. Ford WRT at 12, SX Trial Ex. 244. Rather, Dr. Crawford observed:

In the 1996 rate proceeding for the PSS sound recording performance rights, the record labels presented evidence showing that for every dollar spent on a CD, 5 cents went to copyright owners of musical works, 7-10 cents went to the recording artist, and 56-88 cents went to the record companies. I am aware of no evidence that the shares of different rights holders of CD sales are qualitatively dissimilar today.

Crawford WDT at 10, PSS Trial Ex. 4. But as Dr. Ford explained, the division discussed here is of *revenues* from the sale of a CD; the evidence does not address the *surplus* obtained from the

sale of the CD, Ford WRT at 12, SX Trial Ex. 244, a fact that Dr. Crawford acknowledged on cross examination. 6/13/12 Tr. 1903:13-1904:1, 1940:8-22 (Crawford).

774. As Dr. Ford testified, Dr. Crawford's evidence reveals only that in market transactions the record labels and artists receive many multiples of the *revenue* (no less than 12-times) from a CD sale than do the copyright owners of the musical works. Ford WRT at 12, SX Trial Ex. 244. As has been recognized by the Court in prior decisions, in the normal course of business the record companies do receive many times the revenues that the copyright owners of the musical works receive. *Webcasting II*, 72 Fed. Reg. at 24094 (noting that "substantial empirical evidence shows that sound recording rights are paid multiple times the amounts paid for musical works rights"). But the reason for this difference is that the labels shoulder far more of the costs and risks to produce a recording than do the owners of the musical work, and thus they are compensated more in market transactions. If the labels do not receive sufficient revenues to cover these higher costs and earn a fair return, then the labels would not continue to make music. Ford WRT at 12, SX Trial Ex. 244.

775. Dr. Ford testified that higher revenue does not imply higher surplus, and the split of surplus from a transaction may look nothing like the split of revenue. That record labels receive higher revenues from the sale of CDs (or other distributions of music) because their costs are higher is further supported by evidence of the relative profitability of record labels as compared to music publishers. Ford WRT at 12-13, SX Trial Ex. 244.

776. Dr. Ford explained that recent evidence on the relative profitability of musical works and recorded music can be gleaned from the financials of Warner Music Group, a large and (until recently) publicly traded record company. Ford WRT at 13, SX Trial Ex. 244. Warner's financial statements report separate financials for "Recorded Music," which is their

business associated with the creation of records, and “Music Publishing,” which is their business associated with their copyrights for musical works. *Id.* As shown in Table 1 below, in 2011, Warner’s Operating Income for its Recorded Music segment was 4.7% of segment revenues, whereas the profit rate for its Music Publishing segment was 13.4% of segment revenues. *Id.* This difference in profitability is persistent over time. *Id.* As Dr. Ford explained, the evidence reveals that the profitability of Music Publishing is about 3-fold larger than the profitability of Recorded Music for every dollar of revenue. *Id.* These facts suggest that Dr. Crawford’s assertion that the labels obtain greater surplus from sales than do the rights owners of musical works is precisely backwards. *Id.* Furthermore, these data show that the “surplus” or “profit” is only a small share of revenue, confirming the obvious point that a surplus split need not be equal to a revenue split. *Id.*

Table 1. Relative Profitability of Recorded Music and Music Publishing

	<u>(in millions)</u>			
	2011	2010	2009	2008
Recorded Music				
Revenue	\$2,344	\$2,455	\$2,642	\$2,905
Oper. Income	\$110	\$102	\$149	\$228
Profitability	4.7%	4.2%	5.6%	7.8%
Music Publishing				
Revenue	\$544	\$556	\$582	\$628
Oper. Income	\$73	\$86	\$97	\$96
Profitability	13.4%	15.5%	16.7%	15.3%
Relative Profitability (Music Publishing/Recorded Music)	2.9	3.7	3.0	1.9
Source. Warner Music Group, S.E.C. Form 10-K, Years 2011 (p. 62) and 2010 (p. 61).				

Ford WRT at 13 tbl. 1, SX Trial Ex. 244.

777. In sum, Dr. Ford concluded that Dr. Crawford’s Nash Bargaining analysis is plainly improper for establishing a royalty rate for the sound recording performance rights paid

by the PSS. Ford WRT at 13, SX Trial Ex. 244. The theory is concerned with surplus division, not revenue division, and Dr. Crawford's reliance on weak evidence of promotion and his unfounded assumption about the relative profitability of recorded music and musical works renders his analysis defective and irrelevant. *Id.* at 14. Dr. Crawford's use of a Nash framework in a compulsory setting is also inappropriate, since an important component of any Nash bargain is that the parties to the transactions are free to walk away if both parties cannot gain from the situation. *Id.* Given these defects, Dr. Ford found it unsurprising that Dr. Crawford's analysis fails to accurately predict actual market outcomes. Dr. Ford concluded that the only relevance of the musical works rate to this proceeding is that the royalty revenues for SoundExchange should be many multiples of the revenues related to the rights for musical works. *Id.* Such a conclusion is consistent with this Court's prior consideration of the musical works right as a benchmark, and also consistent with available marketplace evidence. *Id.*

c. Dr. Crawford Ignored Marketplace Evidence about the Effect of Music Choice's Alleged Promotional Benefit

778. Finally, Dr. Crawford's argument that the alleged promotional effect will result in a lower royalty rate in marketplace agreements is belied by Music Choice's own experience with the rights it must acquire to offer its video services. Ford WRT at 11, SX Trial Ex. 244. According to one of the surveys relied upon by Dr. Crawford in his promotion analysis, a Music Choice video-on-demand user is [REDACTED] to have purchased more than 10 CDs in the past year than a Music Choice music channel listener, and both groups are [REDACTED] [REDACTED] to have purchased more than 10 CDs. Williams WDT at MC36, PSS Trial Ex. 3; see also 6/13/12 Tr. 1929:18-1934:21 (Crawford) (discussing the results of the survey showing that [REDACTED] [REDACTED]). Dr. Crawford

agreed that as a matter of economics, a record label would take into account the promotional or substitutional effect of a given service in negotiating marketplace transactions for that service. 6/13/12 Tr. 1936:16-1937:4 (Crawford). Nevertheless, the marketplace royalties for Music Choice's video service paid to the record labels are [REDACTED] than those paid to the copyright owners of musical works. Ford WRT at 11-12, SX Trial Ex. 244 (citing SX Trial Ex. 56, at 20-21 (Music Choice 2012 Budget dated 11/11/2011)).⁹⁴ Under Dr. Crawford's theory of promotion and royalty rates, this should not occur. Dr. Crawford's theory is incapable of explaining the outcomes of actual marketplace transactions, which is the mark of a poor economic model. *Id.*

D. Dr. Crawford's Analysis of Music Choice's Historical Financial Results is Flawed.

779. In the last section of his direct testimony, Dr. Crawford provided an analysis of Music Choice's historical finances with the purpose of affirming his application of the Nash Bargaining Solution to the question of the proper PSS royalty. Using this historical information, he calculated Music Choice's economic profit over a five-year period, which he estimated to be 3.05% of music channel revenues. Crawford WDT at 47-48, PSS Trial Ex. 4. Using the fifty-fifty split from the simplest case of the Nash bargain, he then concluded that a proper royalty rate for SoundExchange is 1.52%, with a reasonable royalty range of 0.61% to 2.43% based on an arbitrary profit split of 20% or 80% (a symmetric departure from the 50% Nash rate). *Id.* at 48. While Dr. Crawford claimed that this range, 0.61% to 2.43%, "reflects arm's-length negotiations between PSS such as Music Choice and independent record companies," *id.* at 50, he failed to provide any evidence from market transactions that support such a low royalty rate paid to the

⁹⁴ As Mr. Del Beccaro acknowledged, the rates for the sound recording rates for the video service are also "significantly higher than those it pays for audio." 6/11/12 Tr. 1511:6-10 (Del Beccaro).

record labels and performers. Ford WRT at 21, SX Trial Ex. 244. Indeed, Dr. Crawford acknowledged that of the thousands of digital licensing agreements that SoundExchange produced in discovery, he did not believe that any had royalty rates even at or below the combined musical works rate that Music Choices pays of [REDACTED]. 8/23/12 Tr. 4790:3-13 (Crawford).

780. Dr. Ford testified that in addition to the error of describing such a low royalty as a market rate, there are many other defects in Dr. Crawford's financial analysis. First, Dr. Crawford failed to establish a persuasive explanation for his contention that the financial analysis somehow corroborates his use of the Nash Bargaining Solution. In fact, the financial analysis, if anything, rejects Dr. Crawford's arguments based on the Nash analysis. Ford WRT at 21, SX Trial Ex. 244. Moreover, as Dr. Ford explained, the financial analysis is based on the fallacious idea that one can determine a Nash outcome by dividing one party's historical profits in half. The division of historical profits of one party to the transaction, particularly when those financial results are generated under the shadow of regulation and compulsion, has nothing to do with Nash's theory. Ford WRT at 22, SX Trial Ex. 244. Second, despite his desire to do so, Dr. Crawford did not conduct an analysis on the residential audio business. The financial information provided him by Music Choice includes costs and revenues from other business segments including commercial services and video services. Ford WRT at 21-22, SX Trial Ex. 244.

1. Music Choice's Decision to Consolidate Its Audio and Video Businesses Distorts Its Financial Performance.

781. Dr. Crawford's financial analysis presented a misleading picture of Music Choice's financial condition because substantial expenses unrelated to Music Choice's residential audio service (which are not a part of this proceeding) were included in Dr.

Crawford's analysis. Ford WRT at 24-25, SX Trial Ex. 244. As a result, Dr. Crawford's calculations presented a highly distorted view of the profitability of Music Choice's residential audio service. *Id.* Dr. Crawford's financial analysis consisted of the calculation of a measure of profits, which he refers to as the "earnings residual" and in some cases "operating income." *Id.* This earnings residual is, for the most part, revenues less expenses, where expenses are purged of SoundExchange royalties and include a return to capital. *Id.*

782. As Dr. Ford explained, Music Choice has three primary business segments: 1) music channels (indicated by subscript M); 2) music videos (V);⁹⁵ and 3) commercial services sold to businesses (C). Let revenues be R and expenses be E . Music Choice pays royalties to SoundExchange which are labeled SX . According to Dr. Crawford, his intent was to calculate the earnings residual (π) as

$$\pi = R_M - E_M + SX, \quad (1)$$

where the residual is computed only for the residential audio music channel segment.⁹⁶ Dr. Crawford contended that a "Nash" royalty rate will be half the earnings residual divided by music channel revenues [royalty rate = $0.50(\pi/R_M)$]. Dr. Ford testified that while Dr. Crawford wanted to calculate Expression (1), his review of Music Choice's financial records indicated that the actual calculation of the earning residual by Dr. Crawford is

$$\pi' = R_M + R_V - (E_M + E_V + E_C) + SX, \quad (2)$$

Expression (2) shows that the calculation of the earnings residual is the sum of revenues from the residential music channel and music video segments less the expenses from the residential music

⁹⁵ To be clear, there are actually two different video services offered by Music Choice. *See* 6/11/12 Tr. 1518:7-1519:2 (Del Beccaro).

⁹⁶ 6/12/12 Tr. 1859:17-20 (Crawford) ("Q: Your intention in your testimony was to distinguish between the residential audio service and any of Music Choice's other services, correct? A: That's how I wanted to start, yes.").

channel, music video, and commercial service segment. While commercial revenues are excluded, the expenses from the segment are included in the calculation. The royalty rate computed by Dr. Crawford uses the formula $0.50(\pi'/R_M) = 1.52\%$, which applies only to music channel revenues. Ford WRT at 24, SX Trial Ex. 244.

783. Obviously, this calculation of the profit from the PSS-compliant service – music channels sold to residential subscribers – is invalid. It is also inconsistent with Dr. Crawford’s own stated intention to analyze the profit of the audio-only service. Dr. Crawford was apparently informed by Music Choice personnel that it was not possible to allocate expenses between the video and audio components of the company’s business. 6/12/12 Tr. 1859:21-1860:21 (Crawford). Evidence in the record directly contradicts that claim. In response to discovery requests, Music Choice provided segment-specific financial records. Ford WRT at 24-25, SX Trial Ex. 244.

784. Dr. Ford observed that Music Choice’s financial data reveals that the information provided to Dr. Crawford reduces the earnings residual for the audio service by including expenses and financial losses from other, non-PSS segments of Music Choice’s business.⁹⁷ First, Music Choice’s video business, [REDACTED]

[REDACTED]

⁹⁷ Dr. Ford found there were other unexplained inconsistencies with the financial data on which Dr. Crawford based his analysis. Ford WRT at 25 n. 84, SX Trial Ex. 244. For example, neither Dr. Crawford nor Mr. Del Beccaro could explain why the amount that Dr. Crawford reported for [REDACTED] [REDACTED]. See 6/13/12 Tr. 1856:8-1860:2 (Crawford); 6/14/12 Tr. 2139:12-2140:18 (Del Beccaro).

[REDACTED]
 [REDACTED]
 Adding expenses from the commercial segment also lowers the earnings residual and, in turn, the royalty rate proposed by Dr. Crawford. Notably, [REDACTED]
 [REDACTED], but Music Choice excluded commercial revenues from the financial data provided to Dr. Crawford. Put plainly, video revenues and costs were included, [REDACTED]
 [REDACTED], while commercial expenses were included but segment revenues were not, [REDACTED]. In both cases, the decision regarding what to include and exclude had the effect of shrinking the earnings residual, thereby biasing downward the estimate of profitability. Ford WRT at 24-25, SX Trial Ex. 244.

785. Dr. Ford testified that there is an additional consequence from the inclusion of video revenue and expenses in the financial calculations. Music Choice's video business [REDACTED]
 [REDACTED]
 [REDACTED]. The percent royalty fee applies only to residential audio revenue. Mr. Del Beccaro's testimony reveals, however, that Music Choice clearly believes that video services are the [REDACTED]. So while the losses from the video business are included in the calculation thereby deflating SoundExchange's royalty, the copyright owners and performers stand to receive no benefit under the statutory license from the upside of high growth in video revenues. This lopsided calculation is highly favorable to Music Choice but penalizes SoundExchange. This distortion is best dealt with by excluding both video revenues and expenses from the calculation of profits. Ford WRT at 25-26, SX Trial Ex. 244.

⁹⁸ See SX Trial Ex. 58 at 8 (Music Choice Video Statement of Operations (Unaudited) for Period Ending 12/31/10).

786. Dr. Ford explained that using financial reports created and provided by Music Choice, it is possible to approximate the earnings residual for the PSS-compliant service – residential music channels. Dr. Ford’s calculations rely on Music Choice’s own internal allocation of revenues and expenses. Presumably, the person or persons doing such allocations understands the business and made such allocations with the intent of using the information for business planning. Also, these allocations appear to be done for business purposes, so it is reasonable to conclude that these records, unlike the solicited emails discussed by Mr. Williams, do not reflect any effort to influence the outcome of this proceeding. Even if these allocations have imperfections, Dr. Ford’s calculations reveal, at a minimum, that an effort to focus solely on the residential audio service is likely to produce substantially different results than those reported by Dr. Crawford. Table 3 summarizes the calculation of the earnings residual for the residential music channel services alone for the years 2008 through 2010.⁹⁹ Dr. Ford stated that his calculations use the same methods as those of Dr. Crawford, changing only the data so as to reflect the residential music channel segment. To be highly conservative, Dr. Ford included in the calculation the same return to capital as did Dr. Crawford, even though this return may reflect other business segments.¹⁰⁰ SoundExchange royalties are not separated in the financial

⁹⁹ Detailed financial breakdowns by segment were provided for these three years. While the detailed information was unaudited, the differences between the unaudited and audited data were less than $\pm 3\%$ over this period. See Ford WRT at SX Ex. 360-RR, p. 2 (Music Choice Unaudited Financial Statements for period ending December 31, 2008), SX Trial Ex. 244; Ford WRT at SX Ex. 361-RR, p. 2 (Music Choice Unaudited Financial Statements for period ending December 31, 2009), SX Trial Ex. 244; SX Trial Ex. 58; SX Trial Ex. 64 (Music Choice and Subsidiaries Consolidated Financial Statements 2009 and 2010); Ford WRT at SX Ex. 362-RR (Music Choice and Subsidiaries Consolidated Financial Statements 2007 and 2008), SX Trial Ex. 244.

¹⁰⁰ Dr. Ford stated that his review of the financial records suggests that these assets include those related to the provision of video services. As a result, the computed profit margins are biased downward.

documents, so they are computed as 7.25% of revenues.¹⁰¹ Ford WRT at 26-27, SX Trial Ex.

244.

Table 3. Earnings Residual for Residential Audio Channels

	<u>(In thousands)</u>			
	2008	2009	2010	Sum
Revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Expenses	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Return to Capital	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Expenses + Return to Capital	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Add: SX: Royalty (7.25% Revenue)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Royalty Adj. Operating Income	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Earnings Residual as Share of Revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

787. Dr. Ford explained that from Table 3, it is apparent that the residential audio segment of Music Choice is very profitable, with a return of [REDACTED] over the entire interval. (The Earnings Residual is labeled “Royalty Adj. Operating Income.”) Profitability is likewise stable, with a range of profit rates of [REDACTED]. Plainly, Dr. Crawford’s calculations based on information provided by Music Choice do not accurately represent the profitability of the residential audio service (reducing the profit rate to 3.05%), a direct consequence of overstating expenses by including revenues and costs from services not relevant to this proceeding. Splitting the “surplus” between SoundExchange and Music Choice, as Dr. Crawford recommended, would result in a royalty rate of about [REDACTED], with a range of [REDACTED] (based on a 20% or 80% split of the earnings residual). In light of the evidence from Table 1 showing that music recording is less profitable than music publishing, this royalty rate in excess

¹⁰¹ In Dr. Crawford’s table, Crawford WDT at Appendix B.3, PSS Trial Ex. 4, SoundExchange royalties are consistently 7.25% of revenues. Dr. Ford did not use the SX royalties reported by Dr. Crawford since the revenues from the segment detail are not identical to those Dr. Crawford reports. Segment revenues from the detailed financials are about 3% higher than those reported by Dr. Crawford.

of the musical works rate is entirely consistent with Dr. Crawford's prescriptions based on Nash's theory and promotion. Ford WRT at 27, SX Trial Ex. 244.

788. Dr. Ford testified that, given the very large difference in the profit rate calculated by Dr. Crawford and that calculated using the segment-specific financial allocations done by Music Choice, it was unreasonable for Dr. Crawford to not even attempt any allocation of costs or not to demand such information that permitted such calculations. Revenues, and many types of costs, however, are easily assigned to particular lines of business. Expenses related to rights, for example, should be easily allocated to the various segments, as should programming costs and operations. Ford WRT at 27, SX Trial Ex. 244.

789. Dr. Ford stated that some costs, such as those categorized as "General & Administration", are often viewed as common or shared across the entire business entity.¹⁰² To provide a highly conservative estimate of the profitability of the residential music channel segment that takes into account such shared costs, Dr. Ford assigned *all* "General & Administrative" expenses of the firm to the residential audio service. Again, as shown in Table 4, even under this extreme allocation of potentially common expenses, the earnings residual remains very high for the segment [REDACTED]. Using Dr. Crawford's proposed calculation, the point estimate of the royalty is [REDACTED] with a range of [REDACTED]. Ford WRT at 27-28, SX Trial Ex. 244.

¹⁰² Music Choice did, however, allocate assets to various segments using a revenue allocation factor. See Crawford WDT at Appendix B.2, PSS Trial Ex. 4.

Table 4. Earnings Residual for Residential Audio Channels**(In thousands; Including All G&A Expenses)**

	2008	2009	2010	Sum
Revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Expenses	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Return to Capital	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Expenses + Return to Capital	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Add: SX: Royalty (7.25% Revenue)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Royalty Adj. Operating Income	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Earnings Residual as Share of Revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

790. Dr. Ford further explained that, as discussed above, Music Choice's ownership structure raises serious concerns about the company's revenues. Specifically, the lower licensing fees afforded Partners cuts revenues deeply, and the lower revenues result in lower royalties. While the Partners account for about [REDACTED] of Music Choice's licensed subscribers, they account for only about [REDACTED] of Music Choice's revenues.¹⁰³ In the financial simulation below, Dr. Ford attempted to provide an estimate of the impact of the favored treatment provided to Music Choice's Partners by applying the lowest license fee charged to other large cable systems to Music Choice's Partners ([REDACTED] per subscriber month rather than [REDACTED] per subscriber month).¹⁰⁴ Since the Partners represent over half of the ultimate end users of Music Choice's service, the effect on revenues is significant ([REDACTED]).

As detailed in Table 5, bringing the Partner license fee to a level consistent with other large cable operators increases the profitability of the music channel segment to [REDACTED]. Applying Dr. Crawford's proposed split, the royalty rate would be [REDACTED] with a range of [REDACTED]. Ford WRT at 28-29, SX Trial Ex. 244.

¹⁰³ See SX Trial Ex. 58 at 5.

¹⁰⁴ This assumption causes revenues to rise, and thus royalty expenses to rise – Dr. Ford testified that he took this fact into account. Ford WRT at 28, SX Trial Ex. 244.

Table 5. Earnings Residual for Residential Audio Channels**(In thousands; Adjusted Partner Revenue)**

	2008	2009	2010	Sum
Revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Expenses	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Return to Capital	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Expenses + Return to Capital	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Add: SX: Royalty (7.25% Revenue)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Royalty Adj. Operating Income	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Earnings Residual as Share of Revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

791. Dr. Ford testified that if the financial condition of the copyright user is relevant to the determination of a royalty rate, then these alternative calculations of the profitability of Music Choice's residential audio service are significant. All of the alternatives reveal that the residential audio service is very profitable. The paltry profit rate computed by Dr. Crawford is a direct result of including expenses from business segments that are not under the PSS umbrella, which results in a very inaccurate view of the profitability of music channels. Dr. Ford concluded that his review of the data suggested that the low profit rate computed by Dr. Crawford is largely a result of Music Choice's decision to enter the music video business. As is usual with entry into almost any market, including Music Choice's entry into the music video business, the upfront costs are high and revenues low, leading to losses in the early years. Normally, however, the up-front working capital required to enter a new business segment is funded by the capital markets. Mr. Del Beccaro stated that Music Choice has been [REDACTED]

[REDACTED]

[REDACTED].¹⁰⁵ Although capital may be difficult to acquire, it is not the responsibility of the record labels and performers to finance Music Choice's entry into non-

¹⁰⁵ 6/14/12 Tr. 1507:8-10 (Del Beccaro).

PSS services and, in Dr. Ford's opinion, it is also not the responsibility of the Court to set a very low royalty rate under a compulsory license to force SoundExchange to subsidize Music Choice's expansion efforts. If Music Choice wants the record labels and performers to invest in its expansion, then Music Choice should seek their participation in a market setting, not a regulated one. Ford WRT at 29, SX Trial Ex. 244.

792. Dr. Ford testified that the PSS designation under the statute appears to be limited to audio channels delivered over multichannel video services, not any service a qualifying PSS chooses to offer.¹⁰⁶ As Dr. Crawford admits, other PSS do not offer video services, so the PSS-service does not require video service as a money-losing add on. 6/13/12 Tr. 1875:18-1876:1 (Crawford). Limiting the financial analysis to residential audio-only channels reveals that the PSS-compliant service is very profitable. Music Choice is certainly free to offer any service it believes may one day generate a profit. But it is not the responsibility of the record labels and performers to subsidize the losses from its other business segments. In fact, the financial data suggest that Music Choice is attempting to use the compulsory license to force SoundExchange into providing capital for Music Choice's expansion into the music video business. Ford WRT at 22, SX Trial Ex. 244.

793. Mr. Del Beccaro testified that Music Choice believes that having a video service is essential to the survival of the company.¹⁰⁷ He further testified that he believes that if Music Choice did not offer its video service in a bundle to its cable operator customers the per-

¹⁰⁶ 6/11/12 Tr. 1510:21-5 (Del Beccaro) (explaining that Music Choice does not get the rights for its video services under the compulsory license).

¹⁰⁷ 6/11/12 Tr. 1510:21-1511:5 (Del Beccaro); *see also* 6/12/12 Tr. 1832:15-1833:3 (Crawford) ("[I]n order to maintain a viable service in the market, they needed to include video with it, and so it became a necessary product in order to remain a viable competitor in the market.").

subscriber licensing fees would be lower, by a “significant amount.”¹⁰⁸ Evidence in the record directly contradicts that claim. Most notably, at least some of Music Choice’s cable operator customers do not carry the video service. Yet the licensing fees for those customers remain much higher than the average licensing fee received by Music Choice. In fact, according to information provided in discovery, over [REDACTED] of Music Choice’s affiliates do not currently carry the Music Choice video-on-demand service. Ford WRT at 21-22, SX Trial Ex. 244. Indeed, Mr. Del Beccaro testified that none of Music Choice’s current competitors offer video products. 8/16/12 Tr. 3889:8-10 (Del Beccaro). Music Choice may well believe that a video product is important to its business and to maintain a competitive advantage, but the evidence strongly suggests it is not a necessary part of a PSS or CABSAT service.

2. Music Choice’s Ownership Structure Has a Material Impact On Its Financial Performance Unrelated to Consumer Demand for the Service.

794. Another flaw in Dr. Crawford’s analysis is that he fails to account for the effects of Music Choice’s ownership structure. As described in detail in Section X.C.3, there is compelling evidence that Music Choice grants preferable treatment to its three cable partners – Comcast, Cox, and Time Warner Cable – over its non-partner cable customers. This structure has a distorting effect on the revenue that Music Choice obtains for its services. In particular, Dr. Ford found that Music Choice’s partners receive highly favorable rates that cannot be attributable to subscriber count alone. Ford WRT at 18, SX Trial Ex. 244. The partner discount is over [REDACTED] relative to the largest, non-affiliated cable operators. Ford WRT at 18, SX Trial Ex. 244. When compared to other cable operators, the differential is even larger, with the

¹⁰⁸ 6/14/12 Tr. 2200:9-19 (Del Beccaro).

partners receiving discounts of [REDACTED] off the average non-partner rate ([REDACTED]) and [REDACTED] off the median non-partner rate ([REDACTED]). *Id.*

795. Because Dr. Crawford relied on Music Choice's financial performance as corroborative evidence of his conclusion that the PSS royalty rate should be less than the musical works royalty rate, the effects of Music Choice's ownership structure are critical to assessing the reasonableness of Music Choice's proposed rate. Ford WRT at 2, SX Trial Ex. 244. But Dr. Crawford entirely ignored this issue. Indeed, he did even not review a single Music Choice contract with its affiliates, 8/23/12 Tr. 4787:9-14 (Crawford); he simply took Mr. Del Beccaro's word that the agreements were all made in arm's length negotiations. With a strong likelihood that the company's revenue and profits are artificially low because of the ownership structure, Dr. Crawford's arguments that the company's profits should be split to determine a proper compensation for SoundExchange is untenable. Ford WRT at 20-21, SX Trial Ex. 244.

3. Dr. Crawford's Reliance on Music Choice's Financial Results Ignores Evidence of Usage Intensity and Consumer Demand.

796. As discussed in detail in Section X.C.2, Music Choice is a heavy user of sound recordings, as reflected in the amount of time that cable subscribers spend listening to the company's music channels. But its current rates are far below its competitors. Ford WRT at 3-4, SX Trial Ex. 244. Lowering the royalty rate to 2.6% of audio revenues will only exacerbate the usage intensity problems. Whereas Music Choice is presently paying royalties of approximately [REDACTED] per play, it has proposed to pay roughly only [REDACTED] per play. *Id.* at 4. In other words, even though non-interactive Commercial Webcasters currently pay a rate that is [REDACTED] times larger than that presently paid by Music Choice – \$0.0020 per play, 37 C.F.R. § 380.3(a)(1) – Music Choice is proposing a new rate that is [REDACTED] times larger. *Id.*

797. Similarly, under the Music Choice proposal, [REDACTED]

[REDACTED]. *Id.* For over half of the cable subscribers receiving Music Choice's service (those buying service from its Partners), the per-subscriber royalty would be only [REDACTED] per month and the per-play royalty [REDACTED] per play. *Id.* Close competitors such as Galaxie and SonicTap must pay over [REDACTED] as much per subscriber as would Music Choice for the bulk of its licensed subscribers. *Id.*

798. Dr. Crawford's methodology and reliance on Music Choice's historical financials entirely ignores this problem, plainly undercompensating copyright owners for extensive use of their property in comparison to other music services.

4. Dr. Crawford Did Not Include the PSS' Purported Promotion Effect in His Financial Analysis.

799. Although the promotion issue is the sole basis for Dr. Crawford's argument that SoundExchange's royalty should be lower than the musical works rate, *Dr. Crawford did not include the promotional effect in his financial analysis*, stating "I exclude this promotional benefit from my analysis." Crawford WDT at 45, PSS Trial Ex. 4. As Dr. Ford explained, excluding the promotional effect from the analysis has important implications. Ford WRT at 23, SX Trial Ex. 244. First, Dr. Crawford's conclusion that SoundExchange's royalty rate should be less than the musical works rate depends on the promotional effect (and his faulty conclusion about the relative surplus from CD sales), but he ignored this promotional effect in his financial analysis. *Id.* Second, as Dr. Crawford stated, "if there were no promotional benefits at all, the model would predict equal royalty rates." 6/13/12 Tr. 1937:17-18 (Crawford); *see also* 6/13/12 Tr. 1880:4-19 (Crawford). Yet, Dr. Crawford then conducted a financial analysis that he

claimed indicates that the proper, market-based royalty rate is 1.52% of residential audio revenues, which is a rate much smaller than the musical works rate.

800. Dr. Crawford also concluded that the royalty rate should be no greater than 3.05%, which again is much lower than the musical works rate. So while his theory predicts an equal royalty rate between the labels and copyright owners of the musical work if the promotional benefit is excluded from his analysis, Dr. Crawford then offered an analysis that computes a royalty rate well below the musical works rate. As Dr. Ford testified, this result is inconsistent with Dr. Crawford's primary conclusion from the Nash bargaining framework. Ford WRT at 23, SX Trial Ex. 244. Either Dr. Crawford's own testimony is an indictment against his financial analysis, or else his financial analysis is an indictment against his theoretical discussion. As Dr. Ford concluded, the fact of the matter is that the financial analysis has absolutely nothing to do with Nash's theory, so the discrepancies between the empirics and theory are not surprising. *Id.*

XII. ANALYSIS AND APPLICATION OF THE § 801(B) FACTORS TO THE PSS

801. According to this Court's decision in *SDARS I*, the next step after assessment of marketplace benchmarks is to determine "whether [the 801(b)] policy objectives weigh in favor of divergence from the results indicated by the benchmark marketplace evidence." *SDARS I*, 73 Fed. Reg. at 4094. The evidence submitted in this proceeding indicates SoundExchange's rate proposal satisfies the policy objectives of § 801(b).

A. This Court's Precedent and Economic Theory Indicate that the First Three § 801(b) Factors Are Satisfied by a Market Rate

802. The following four policy objectives govern rate-setting for the blanket license at issue in this proceeding:

- a) To maximize the availability of creative works to the public;

- b) To afford the copyright owner a fair return for his creative work and the copyright user a fair income under existing economic conditions;
- c) To reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication; and
- d) To minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices.

37 U.S.C. § 801(b)(1).

803. In *SDARS I*, the Copyright Royalty Judges determined that no deviation from the marketplace benchmarks was necessitated by any of the first three § 801(b) factors. *SDARS I*, 73 Fed. Reg. at 4094-97.

804. As explained in greater depth in Section VIII.A., above, with respect to the *SDARS*, economic theory supports the conclusion that the first three § 801(b) factors are satisfied by a market rate.

805. With respect to the first § 801(b) factor, Dr. Ford testified that “the market outcome is the best way to balance the two issues of both the provision of material and then the dissemination or distribution of that material.” 6/18/12 Tr. 2847:5-17 (Ford); Ford WDT at 19-20, SX Trial Ex. 79. Moreover, as Dr. Ford explained, “[i]f the PSS were to cease offering their services, presumably their business and customers would shift to alternative providers of digital music.” Ford WDT at 19, SX Trial Ex. 79. Those alternative providers pay higher royalty rates than the PSS (as do all digital music services), so that “shift of business would lead to a higher level of availability of creative works to the public by stimulating supply, and having little to no effect on demand.” Ford WDT at 20, SX Trial Ex. 79.

806. With respect to the second § 801(b) factor, economic theory supports the CRJ’s prior determination that “a fair income is . . . consistent with reasonable market outcomes.”

Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital

Audio Radio Services, Final Rule and Order, 73 Fed. Reg. 4080, 4095 (Jan. 24, 2008). Dr. Ford also noted that this statutory factor “does not appear to infer favoritism to one side of the market or the other.” Ford WDT at 20, SX Trial Ex. 79; 6/18/12 Tr. 2847:18-2848:6 (Ford). In fact, “in some cases, it may not be possible to have a fair return and a fair income per buyer.” 6/18/12 Tr. 2848:7-13 (Ford). But this factor should not be used to allow for favoritism to particular firms in a competitive outcome. Ford WDT at 20-21, SX Trial Ex. 79. As Dr. Ford explained “[i]f the user paying the lower rate takes business from the user paying a higher rate, then the income of the copyright owner is diminished, and this result hardly seems ‘fair,’ since no seller would intentionally sabotage its own profits in an unregulated market setting.” Ford WDT at 21, SX Trial Ex. 79.

807. Finally, with respect to the third § 801(b) factor, Dr. Ford testified that “I see no reason to believe, and have seen no evidence to support, an argument that the PSS make a contribution to availability or creative expression that is relatively more significant than those services considered as benchmarks.” Ford WDT at 21, SX Trial Ex. 79. Economic theory would support the conclusion, reached previously by the CRJs, that this factor is “take into account in negotiations in deals in markets that are not influenced by compulsion,” and it would therefore “be hard to improve upon a market outcome on that factor.” 6/18/12 Tr. 2849:10-16 (Ford).

808. Dr. Ford also testified that Dr. Crawford’s application of the Section 801(b)(1) policy factors is unsound. He explained that Section 801(b)(1)(B) requires the Judges to consider both whether or not the rates they set permit the copyright owners to earn a fair return and whether the rate provides a fair income to the copyright user. Dr. Crawford’s theoretical and financial analysis, and consequently his recommended royalty rate, ignores completely the

question of a fair return for copyright owners.¹⁰⁹ His analysis addresses only the issue of a fair income in the context of Music Choice's profitability, without any regard to whether its business plan will permit the record labels and performers to be fairly compensated for their opportunity costs so that they are encouraged to produce new creative works. Because of this omission, it is not possible to conclude that his recommendations will lead to a reasonable royalty rate. Ford WRT at 29-30, SX Trial Ex. 244.

809. Dr. Ford explained that by ignoring the costs of making recordings, Dr. Crawford's treatment of the fair return/fair income question is fundamentally off base. He is also guilty of a number of more practical errors. First, based on his financial calculations, Dr. Crawford concluded that the royalty rate should not equal 3.05% because that "would give all of the expected surplus from Music Choice's residential music business to the record labels," which he concluded would not be "fair."¹¹⁰ He also argued that a rate exceeding 3.05% "would put Music Choice at significant risk of exiting the industry."¹¹¹ These claims conflict with his testimony in a number of ways. Dr. Crawford's financial analysis counts as an expense Music Choice's return on assets. Thus, the 3.05% profit rate this presumably represents a super-competitive return. The copyright owners, the other party to this hypothetical bargain, also have assets requiring a return, but those enter nowhere in the calculation. Also, Dr. Crawford stated that establishing royalty rates in consideration of a "fair income" does not mean that the

¹⁰⁹ 6/13/12 Tr. 1912:10-20 (Crawford) ("Q. In analyzing the first of these two factors, to afford the copyright owner a fair return for his creative work and the copyright user a fair income under existing economic conditions, you did not quantify the cost incurred by copyright owners, correct? A. That is correct. But as I mentioned in my report, I would have liked to, but I simply did not have the data available.").

¹¹⁰ Crawford WDT at ¶ 174, PSS Trial Ex. 4.

¹¹¹ Crawford WDT at ¶ 183, PSS Trial Ex. 4.

copyright user is guaranteed a certain level of profitability.¹¹² Yet, it is hard to interpret his financial analysis as meaning anything else. Ford WRT at 30, SX Trial Ex. 244.

B. The Current PSS Rate and Music Choice's Proposed Rate Are Disruptive

810. As discussed above in the context of Sirius XM's financial performance, the CRJs established a standard for disruption in the first SDARS proceeding. The disruption factor, the final § 801(b) factor, "is best understood as a concern over the economic impacts of changes in rates, rate structures, or other factors influenced by the decisions of the Copyright Royalty Judges." Ford WDT at 22, SX Trial Ex. 79 (citing *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, Final Rule and Order, 73 Fed. Reg. 4080, 4095 (Jan. 24, 2008)).

811. But the disruption factor also clearly states that consideration must be given to the "structure of the industries involved." 17 U.S.C. § 801(b)(1)(D). And as Dr. Ford explained, "if you want to disrupt the structure of an industry, then give favorable treatment to particular firms in that industry, and you'll create the disruption by shifting market share to some firms versus others." 6/18/12 Tr. 2851:11-17 (Ford). Music Choice's proposed PSS rate (and the current PSS rate as well) would (and does) cause such disruption.

1. The Artificially Low Rate Provides Music Choice an Insurmountable Competitive Advantage

812. Dr. Ford testified that "the current practice of applying an exceedingly low rate to deflated revenues is disruptive of industry structure, especially where there are identical services already paying a higher rate." Ford WDT at 23, SX Trial Ex. 79. Dr. Ford explained that the highly favorable royalty rates obtained by the PSS today, and the exceedingly low rates Music Choice proposes to pay SoundExchange in this proceeding, will almost certainly tilt the playing

¹¹² 6/13/12 Tr. 1913:10-15 (Crawford).

field in the favor of Music Choice, disrupting the natural evolution of the music delivery industry. Indeed, this tilt appears to be the intent of Music Choice's proposal. In Mr. Del Beccaro's view, if Music Choice does not get a highly favorable rate, its "business is at risk." Del Beccaro WDT at 9, PSS Trial Ex. 1. From an economic standpoint, a "reasonable" rate is not one that subsidizes a poor business plan or protects one competitor to the detriment of competition. Ford WRT at 17, SX Trial Ex. 244.

813. Dr. Ford explained that lowering the royalty payment to 2.6% of audio revenues, as Music Choice proposes, exacerbates the already profound rate advantages of the company. At 2.6% of revenue, the average royalty payment is [REDACTED] per subscriber month and [REDACTED] per play. In other words, under the Music Choice proposal, [REDACTED]
[REDACTED]
[REDACTED]. For over half of the cable subscribers receiving Music Choice's service (those buying service from its Partners), the per-subscriber royalty would be only [REDACTED] per month and the per-play royalty [REDACTED] per play.¹¹³ Close competitors such as Galaxie and SonicTap must pay over [REDACTED] as much per subscriber as would Music Choice for the bulk of its licensed subscribers. Ford WRT at 4-5, SX Trial Ex. 244.

814. Dr. Ford testified that these comparisons of averages are disturbing enough, but they ignore the sizeable variation in monthly subscriber fees received by Music Choice cable operators. While Music Choice's average licensing fee to its cable company customers is about [REDACTED] per subscriber month, this average conceals an extremely wide range of licensing fees charged by Music Choice. On one end of the range are Music Choice's three cable industry

¹¹³ This rate is based on the Partner per-subscriber rate of [REDACTED].

Partners, who pay only [REDACTED] per subscriber, per month. And on the other end of the range, well over half of Music Choice's direct customers – the *cable systems* that carry Music Choice – pay a licensing fee of [REDACTED] or more per subscriber, per month. There is no evidence suggesting, however, that the residential cable subscribers (and therefore, the end-users of Music Choice) of the cable systems that pay the highest licensing fee to Music Choice use the service any more or less intensively than the subscribers of the cable systems paying the lowest licensing fee. Ford WRT at 5, SX Trial Ex. 244.

815. Dr. Ford testified that this distribution of license fees also reveals the profound effect the intermediary role has on royalty payments when a percent-of-revenue rate is used from transactions involving retail (not wholesale) transactions. The fact that over half of the cable systems that carry Music Choice pay about [REDACTED] per subscriber month in licensing fees suggests (by economic logic) that the Music Choice service is worth at least [REDACTED] per month in the retail market. If not, then a profit maximizing cable operator would not be willing to pay [REDACTED] for the input. This minimum retail value assumes no markup by the cable operator, which is a highly conservative assumption. For example, Comcast, the nation's largest cable operator, receives about \$2.92 in retail video revenues for every \$1 of programming, suggesting that the expected retail value of Music Choice is about [REDACTED] per month. Under the standard marketplace agreement, the proper royalty for a music channel service could be about [REDACTED] per subscriber month.¹¹⁴ Yet, in actuality, the percent-of-revenue royalty rate is applied to revenue of only [REDACTED] per subscriber month. Ford WRT at 5, SX Trial Ex. 244.

816. Dr. Ford observed that with royalties calculated as a percent-of-revenue, the difference in royalties per cable subscriber is likewise substantial. At the proposed 2.6% rate,

¹¹⁴ The typical royalty for labels is about 45-60%. Ford WRT at 5 n.10, SX Trial Ex. 244.

SoundExchange would receive [REDACTED] (the calculation is [REDACTED]) per month for some of its licensed subscribers but only [REDACTED] (the calculation is [REDACTED]) per month from others, a [REDACTED] difference for a nearly identical use of rights. On a per-play basis, Music Choice's partners, who pay a very low license fee to Music Choice generate only [REDACTED] per play. To put that rate in perspective, a non-interactive Commercial Webcaster pays a royalty rate [REDACTED] per play than would Music Choice for the plays enjoyed by the Music Choice Partners' residential subscribers. Ford WRT at 5-6, SX Trial Ex. 244.

817. Dr. Ford pointed out that Mr. Del Beccaro's testimony provides another example of this problem in action. DirecTV is one of the largest providers of multichannel video services in the U.S., with about 20 million customers. Included in its bundle of channels are SonicTap's genre-based music channels. SonicTap is a member of the regulated class of operators which are subject to a statutory royalty rate of the greater of 15% of revenue or \$0.0265 per subscriber for bundled services or \$0.0159 for stand-alone services.¹¹⁵ Mr. Del Beccaro stated on cross examination that Music Choice is attempting to regain DirecTV's business and [REDACTED] [REDACTED]. 6/14/12 Tr. 2146:11-15 (Del Beccaro). At this license fee and Music Choice's proposed royalty of 2.6%, Music Choice would pay SoundExchange an average royalty of only [REDACTED] per subscriber month. Under current regulations, SonicTap must pay no less than \$0.0159 per subscriber month in royalties to SoundExchange, a rate that is [REDACTED] than that Music Choice seeks to pay (and [REDACTED] than it pays today). This substantial cost advantage is certain to tilt the

¹¹⁵ 37 C.F.R. § 383.3(a). Note that this rate structure undercuts Music Choice's claims that somehow bundling its high-cost/low-revenue video service with its low-cost/high-revenue audio service should result in a lower royalty rate. The rate the CABSATs pay when their audio service is sold on a standalone basis is significantly lower than the rate paid when the audio service is bundled with something else.

playing field in favor of Music Choice. It will be difficult for any of Music Choice's competitors to overcome such an enormous cost disadvantage, which is purely a consequence of a regulatory decision. To continue to provide such an advantage to the PSS is certain to disrupt "the structure of the industries" by creating an artificial low-cost provider, and this course impinges on "generally prevailing industry practices" which have the competitors to Music Choice paying either market rates or regulated rates much closer to market rates. Ford WRT at 31-32, SX Trial Ex. 244.

818. Far from denying these artificial competitive advantages in the marketplace, Music Choice explicitly touts its market-sheltered status when negotiating with affiliates. In a presentation to [REDACTED] explaining why the MSO should opt for Music Choice as opposed to one of its competitors, Music Choice boasted, "[REDACTED] [REDACTED]" and, tellingly, "[REDACTED] [REDACTED]". Ford WRT at SX Ex. 355, p.PSS_023656, SX Trial Ex. 244. The 801(b) factors were never intended to foster this kind of blatant market interference, and indeed, § 801(b)(1)(d) forbids imposition of a rate that would have this effect on the industry in which Music Choice competes.

2. Competitors Paying a Higher Rate Could Replace Music Choice

819. Of course, increasing the rate paid by the PSS, might be "disruptive" in the sense that it may affect the business plan of Music Choice, but such a change "may favor more efficient providers of the same service with better business plans." Ford WDT at 22, SX Trial Ex. 79. "Shifting business to more efficient, more innovative firms may be termed "disruptive," but such a shift is the lifeblood of market outcomes." Ford WDT at 22-23, SX Trial Ex. 79.

3. Dr. Ford explained that Dr. Crawford's discussion of the 801(b)(1)(D) objective is flawed.

820. The disruption factor is not intended to protect a bad business plan or subsidize entry into new lines of business. In Dr. Ford's opinion, as formed in part from the Judges earlier decision in setting a PSS rate, this factor is best understood as a concern over the economic impacts of changes in rates, rate structures, or other factors influenced by the decisions of the Copyright Royalty Judges. Ford WRT at 30-31, SX Trial Ex. 244.

C. SoundExchange's Proposed PSS Rate Would Not Be Disruptive.

821. Dr. Ford offered three explanations for why SoundExchange's rate proposal is not disruptive. First, the proposed rate, which ends at 45%, concludes at the low end of observed marketplace rates and is therefore still favorable to the PSS. Ford WDT at 21, SX Trial Ex. 79. Second, SoundExchange's proposed rate maintains the familiar revenue-based structure under which the PSS have been operating. Ford WDT at 21, SX Trial Ex. 79; 6/18/12 Tr. 2850:16-19 (Ford). And finally, SoundExchange's proposal features a gradual increase of the royalty rate, thereby attenuating the effect of the increase over a number of years, a method that has been previously approved by the CRJs for minimizing disruption. Ford WDT at 21, SX Trial Ex. 79; 6/18/12 Tr. 2850:4-22 (Ford).

822. Dr. Ford also testified regarding the financial effects of applying the 45% market-based royalty. He noted that Mr. Del Beccaro claims that if the royalty rate does not decline substantially, the company's music channel business will be at risk. Mr. Del Beccaro even claimed during his oral testimony that Music Choice would be put out of business if SoundExchange's 45% rate proposal was adopted.¹¹⁶ In order to assess this claim, Dr. Ford used Music Choice's historical finances to simulate the effect of a 45% royalty on Music Choice's Operating Income from residential audio services using the information summarized in Table 3.

¹¹⁶ 6/11/12 Tr. 1515:12-18 (Del Beccaro).

The results are summarized in Table 6. He assumed that revenues are unchanged, and the 45% royalty rate applies to historical revenues. The calculations follow Dr. Crawford's definition of Operating Income.

Table 6. Earnings Residual for Residential Audio Channels

	<u>(Thousands \$)</u>			
	2008	2009	2010	Sum
Revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Expenses less SX Royalties	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SX Royalty (at 45%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Return to Capital	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Expenses + Return to Capital	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Operating Income	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Operating Income as Share of Revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

823. As shown in the table, the residential audio business continues to produce a positive Operating Income [REDACTED] at the 45% royalty rate. If Table 6 is adjusted to include the additional revenue from the elimination of the Partner-preferred rate (as in Table 4), the profit rate is [REDACTED], and this profit rate is above-and-beyond the competitive return on assets. Including all the "General & Administrative" expenses (as in Table 5) reduces this profit rate to [REDACTED]. While the lower overall income may provide less of a subsidy to the video segment, the residual music channel segment remains profitable (including a return to capital). If Music Choice fails to make an income sufficient to warrant its continued operation, it will not be for a lack of profit in its residential music channel segment. Ford WRT at 32, SX Trial Ex. 244

XIII. TERMS

A. Definition of “Gross Revenues” for SDARS

824. SoundExchange has proposed in this proceeding certain changes to the definition of “Gross Revenues” for the SDARS, which currently is codified at 37 C.F.R. § 382.11. These changes are intended to achieve two very important goals: (i) conform the royalty base to the economics underlying the percentage rate, thus tailoring the royalties paid by Sirius XM more closely to the value of the rights licensed by, among other things, preventing the double-counting of exclusions such as the value of Sirius XM’s non-music content and pre-1972 sound recordings; and (ii) make the definition easier to administer and less susceptible to interpretation and manipulation. Bender WDT at 12, SX Trial Ex. 75.

825. With respect to the first of these points, this Court has recognized that “to properly implement a revenue-based metric, a definition of revenue that properly relates the fee to the value of the rights being provided is required.” *SDARS I*, 73. Fed. Reg. at 4087. In *SDARS I*, this Court found “little evidence to support [the parties’] respective proposed definitions of revenue.” *Id.* Here, the evidence in this proceeding overwhelmingly indicates that changes to the definition of Gross Revenue are required to properly relate it to the economics of the proposed rates.

826. “[A] percentage-of-revenue metric has two critical components – the percentage rate and the revenue base against which that rate is applied to determine licensing fees. Importantly, these two components should be assessed jointly” Ordoover WDT at 23 n. 26, SX Trial Ex. 74. The royalty base and percentage rate are not two distinct questions that this Court can decide separately. Any percentage rate derived from a marketplace benchmark will assume a royalty base. If the benchmark-based percentage is applied to a similar royalty base,

the benchmark percentage will have been properly transposed into the target market. If the benchmark-based percentage were applied to a royalty base that was half as inclusive, or twice as inclusive, as in the benchmark market, the resulting payments would be half or twice what is indicated by the benchmark. Thus, the definition of Gross Revenues to which a benchmark-based percentage is to be applied must be calibrated to match, as closely as practicable, the royalty base in the benchmark market. Any other approach will lead to an economically invalid transposition of the benchmark percentage into the target market.

827. With respect to the second of these points, this Court has expressed a preference for terms that are “easier to administer” and “reduce transaction costs.” *SDARS I*, 73 Fed. Reg. at 4088 (discussing definition of Gross revenues); *see also* Mechanical and Digital Phonorecord Delivery Rate Determination Proceeding, 74 Fed. Reg. 4510, 4516 (Jan. 26, 2009) (cents rate structure minimizes disputes and constrains transaction costs). Those goals would be served by revising the definition of Gross Revenues to minimize the potential for arbitrary allocations and disputed judgment calls.

1. The Current Definition Does Not Sufficiently Relate the Royalties Paid to the Value of the Rights Licensed.

828. During the current rate period, Sirius XM has been required to pay SoundExchange on a percentage of revenue basis, at the following percentages of its “Gross Revenues,” as that term is defined in the regulations: 6.0% in 2007 and 2008; 6.5% in 2009; 7% in 2010; 7.5% in 2011; and 8.0% in 2012. *Bender WDT* at 4, *SX Trial Ex.* 75.

829. However, the SDARS royalty base established by the definition of “Gross Revenues” in 37 C.F.R. § 382.12 draws distinctions among various categories of Sirius XM revenue – including some categories in the royalty base and excluding others. *Bender WDT* at 4-5, *SX Trial Ex.* 75.

830. The result of this complicated definition of gross revenues has been that Sirius XM is paying SoundExchange royalties calculated off a base that is well less than Sirius XM's total revenues – and significantly less than even its total subscription revenues. According to revenue data from Sirius XM's publicly available SEC filings, its total "subscriber revenues" were \$2,287,503,000 in 2009; \$2,414,174,000 in 2010; and \$1,922,917,000 for the first nine months of 2011. Bender WDT at 5, SX Trial Ex. 75.

831. By comparison, the revenue that Sirius XM reported to SoundExchange for those same periods of time was as follows [REDACTED] in 2009; [REDACTED] in 2010; and [REDACTED] for the first nine months of 2011. Bender WDT at 5, SX Trial Ex. 75.

832. Thus, the royalty base defined by "Gross Revenues" amounted to approximately [REDACTED] of the subscriber revenues that Sirius XM reported in 2009; [REDACTED] in 2010; and [REDACTED] for the first nine months of 2011. Bender WDT at 5, SX Trial Ex. 75.

833. When calculated as a percentage of the *total revenues* (as opposed to a percentage of subscriber revenues as defined by Sirius XM in its public filings) listed in Sirius XM's SEC filings, Sirius XM reported to SoundExchange only [REDACTED] of its total revenues in 2009; [REDACTED] in 2010; and [REDACTED] for the first nine months of 2011. Bender WDT at 5-6, SX Trial Ex. 75.

834. In the previous SDARS proceeding, Docket No. 2006-1 CRB DSTRA, the Judges defined the upper bound of the zone of reasonable rates by using an "adjusted benchmark of \$1.40 per subscriber per month [that] is the equivalent of 13% on a percentage of subscriber revenue basis." 73 Fed. Reg. at 4,093. While the Judges did not set a per-subscriber rate, they appeared to assume this relationship between a per-subscriber payment and percentage of revenues. Bender WDT at 6, SX Trial Ex. 75.

835. Mr. Bender therefore analyzed how closely Sirius XM's actual royalty payments have come to this expected relationship. He adjusted the \$1.40 per subscriber to the relevant royalty rates (e.g., because 13% correlates to \$1.40 per subscriber, then 6.5% correlates to \$0.70 per subscriber) and compared that number to the per subscriber royalties actually paid by Sirius XM. He calculated the per subscriber royalty by dividing the total actual royalties paid by Sirius XM by the daily weighted average subscribers reported by Sirius XM in its public filings for the same time period and converted that number into a monthly figure. Bender WDT at 6, SX Trial Ex. 75.

836. Mr. Bender's analysis showed that Sirius XM has paid well less than was contemplated by the *SDARS I* decision (roughly [REDACTED] less each year), in large part because Sirius XM has only reported to SoundExchange less than 100% of its subscriber revenues.

Bender WDT at 6-7, SX Trial Ex. 75. He set forth his analysis in the following chart:

	Statutory Rate Set by Judges	Equivalent Assumed Per Subscriber Rate	Actual Royalties Paid per Weighted Average Subscriber	Actual/Expected
2011 (through Q3)	7.5%	\$0.808	[REDACTED]	[REDACTED]
2010	7.0%	\$0.754	[REDACTED]	[REDACTED]
2009	6.5%	\$0.700	[REDACTED]	[REDACTED]
2008	6.0%	\$0.646	[REDACTED]	[REDACTED]
2007	6.0%	\$0.646	[REDACTED]	[REDACTED]

837. Thus, the current definition of Gross Revenues has resulted in payments to SoundExchange significantly less than appears to have been assumed in the *SDARS I* decision. This clearly indicates that the current royalty base defined by Gross Revenues does not match the royalty rate this Court found to be indicated by the interactive subscription services benchmark in the last proceeding.

2. The Definition of Gross Revenues Should Not Contain an Exclusion for Non-Music Programming

838. Paragraph (3)(vi)(B) of the current definition of “Gross Revenues,” which Sirius XM proposes keeping, allows an exclusion from the royalty base for “[r]evenues recognized by Licensee for the provision of . . . [c]hannels, programming, products and/or services offered for a separate charge where such channels use only incidental performances of sound recordings.” 37 C.F.R. § 382.11. Such an exclusion is economically invalid, because it double-discounts for non-music programming. It also makes no sense from an accounting perspective, and has been used improperly by Sirius XM to reduce its royalty payments through arbitrarily allocations bundled package prices even where the channels are not “offered for a separate charge.” 8/13/12 Tr. at 3103:7-3105:2 (Frear); SX Trial Ex. 207.

a. Because the Proposed Rates Already Account for the Value of Non-Music, Any Additional Exclusion from the Royalty Base Would be Double Counting

839. It is undisputed that the rates proposed by both Dr. Ordoover and Dr. Noll reflect the fact that roughly half of the value of Sirius XM’s satellite service is derived from its music programming and roughly half from its non-music programming.

840. As described above, Dr. Ordoover calculated the upper boundary of his range of reasonable rates by, among other things, reducing the corresponding marketplace benchmarks by approximately 50% to reflect the fact that approximately 50% of the value of Sirius XM’s services is non-music. *See supra*, Section V.B.3.

841. Likewise, Dr. Ordoover derived the lower boundary of his range of reasonable rates by measuring the consumer demand only for music. Specifically, he calculated a per-subscriber rate that reflects what users are willing to pay only for music, and then converted that music-only per-subscriber rate into a percent of revenue. To do so, he used a formula in which the numerator reflected a music-only service while the denominator reflected the retail price for a

service that combines music and non-music content. Accordingly, the resulting rate appropriately is applied against Sirius XM's total subscription revenues, and the application of the rate does not require any further adjustment to Sirius XM's subscription revenues to account for the estimated portion reasonably attributable to the distribution of non-music content. *See supra* V.B.4; Ordover WDT at 23 n. 26, 32-33, SX Trial Ex. 74.

842. Significantly, both Dr. Noll and Dr. Salinger agreed that Dr. Ordover properly valued the music content of Sirius XM's SDARS service at approximately 50%. 8/16/12 Tr. at 3842:5-14 (Salinger); 6/5/12 Tr. 234:7-16 (Noll).

843. And both agreed that Dr. Ordover's proposed range of rates properly excludes the entire non-music value of Sirius XM's SDARS service. *See supra* Section V.B.; 8/16/12 Tr. at 3794:13-3795:9 (Salinger); 8/15/12 Tr. 3547:2-3548:1 (Noll). *See also* 6/15/12 2476:15-19 (Bender).

844. Likewise, Dr. Noll adjusted his proposed rate, derived from the Last.fm marketplace benchmarks, to account for the fact that roughly half of Sirius XM's service is non-music. Dr. Noll's implicit price calculations acknowledged that 55% of Sirius XM's content is the music and comedy at issue in this proceeding. Noll WDT at 88, SXM Dir. Trial Ex. 1.

845. In other words, it is not disputed by either party that all of the top-line percentage rates proposed in this proceeding are already discounted by roughly half of what they otherwise would be to take into account the non-music portion of the SDARS' service.

846. As a result, these top-line percentage rates must be applied to a royalty base consisting of all of Sirius XM's SDARS subscription revenue, including music and non-music. Ordover WDT at 32-33, SX Trial Ex. 74. It would be an obvious double counting error – that no witness's testimony supports – to adopt a percentage rate that is designed to exclude the value of

non-music programming and then to define Gross Revenues in a way that excludes SDARS subscription revenue purportedly recognized for the provision of non-music programming, even when offered for a separate fee. No economist in this case has testified to the contrary.

b. An Exclusion for Revenue from Non-Music Channels is Artificial and Encourages Manipulation to Reduce the Royalty Base in Unprincipled Ways.

847. As explained above, excluding revenue recognized for non-music programming from Gross Revenues (*i.e.*, the royalty base), makes no economic sense and is inconsistent with the fact that the proposed percentage rates already account for the value of Sirius XM's non-music programming. The exclusion in the current definition is equally inappropriate from an accounting perspective and would enable Sirius XM to artificially reduce the royalty base in a way that bears no relation to the revenues it takes in.

848. For example, in response to questioning from Judge Wisniewski, Mr. Frear insisted that Sirius XM cannot and does not allocate revenue across different types of programming, including music and non-music, based on the intent of the subscriber. As he explained: "How do you allocate the revenues and the subscription intent? For us it would be an artificial thing to do. What we're trying to do is sell a broad package of content to as many people as we can at the highest price we can so we can continue to drive and improve the business and generate higher returns for shareholders. There isn't any decision I would make by going in and trying to split those packaged revenues and say, well, I think this much I'm going to attribute to Howard Stern, and I'm going to attribute this much to baseball and this much to Alt Nation this much to our bluegrass channel. It's not going to help us in our business decision making so it's not an activity we would undertake." 8/13/12 Tr. at 3053:10-3054:3 (Frear).

849. Dr. Lys confirmed that Mr. Frear was right. As Dr. Lys explained, Sirius XM books subscription revenue as subscription revenue, and does not “recognize” certain portions of it as coming from certain types of programming on the SDARS service and other portions coming from other programming. Lys WDT at 54, SX Trial Ex. 240-RP. To do so, as both Mr. Frear and Dr. Lys insisted, would be artificial and impossible to do with any accuracy.

850. Yet, that is precisely what Sirius XM does in order to reduce the royalty base. On cross examination, Mr. Frear admitted that, even where music and non-music are offered in a bundled package, Sirius XM arbitrarily allocates some portion of the bundled package price to non-music and thus excludes it from Gross Revenues. Specifically, he testified that the Sirius Premier package contains both music and non-music channels and is offered only for one bundled price of \$17.99. Nevertheless, he unapologetically explained that Sirius XM excludes \$3.50 of that subscription revenue from Gross Revenues because that amount is, in Sirius’s opinion, revenue allocable to the Howard Stern and other non-music channels contained in the bundled package. 8/13/12 Tr. at 3103:7-3105:2 (Frear); SX Trial Ex. 207.

851. Moreover, according to Mr. Frear, this sort of manipulation not only will continue, it will get worse. At times, Mr. Frear feigned great umbrage and offense at the suggestion that Sirius XM would intentionally manipulate its product offerings in order to reduce the royalty base. 8/13/12 Tr. at 3033:20-3034:6 (Frear) (“he [Mr. Bender] actually has no evidence of us being manipulators and things like that. So I find his potential threats somewhat offensive”). Nevertheless, he very matter-of-factly stated on cross-examination that, if the CRJs were to raise rates in this proceeding, Sirius XM “would have to go through and evaluate” whether to disaggregate its basic package, which currently sells for \$14.49 per month, into music

and non-music components in an attempt to reduce the royalties owed to SoundExchange.

6/7/12 Tr. at 699:19-700:21 (Frear).

852. Currently, when a Sirius XM subscriber has the basic package, the entire subscription price of \$14.49 per month is included in Gross Revenues. As Mr. Frear explained, however, Sirius XM would consider breaking the package up into music and non-music packages and including only the price of the music package in Gross Revenues. 6/7/12 Tr. at 699:19-700:21 (Frear). He suggested that Sirius XM could make the music package price as low as \$3.00, and freely admitted that this “would seem to introduce substantial risk to the music industry.” *Id.* This substantial risk, simply put, is that by breaking up the basic package product offering into a music package for \$3.00, and a non-music package or packages for \$11.49, Sirius XM could reduce the Gross Revenue on which it paying statutory royalties by as much as 79%. (In reality, it is not at all clear that Sirius XM would ever offer a music package for as low as \$3.00. They currently are charging \$9.99 for the music-only package. But there is no reason to doubt Mr. Frear that Sirius XM will consider breaking up its \$14.49 basic package into music and non-music packages where the price of the music-only package is far less than \$14.49).

853. Under both scenarios – bundled as the basic package currently is, and disaggregated as Mr. Frear says Sirius XM will consider – Sirius could play the identical mix of content, its subscribers could listen to the identical mix of content, and Sirius XM’s revenue per subscriber would be unchanged. Yet, under one scenario, Sirius would allocate \$14.49 per user per month to the Gross Revenues royalty base and under the other, it would allocate as little as \$3.00 per user per month. The regulations cannot permit this type of manipulation that could so dramatically affect the royalty base while bearing no relationship whatsoever to Sirius XM’s revenues, the content it plays, or the consumer demand for its service.

854. Such manipulation is sufficiently unprincipled on its own. It is all the more improper, however, in light of the fact discussed above that the headline percentage rates proposed in this case already account for the fact that the SDARS service is half non-music. The rates already are, effectively, 50% of what they otherwise would be on an all music service. Thus, if Sirius XM wanted to propose that it pay *no* royalties on separately priced non-music channels and packages (which it currently is doing even where the music and non-music channels are bundled in a single package, 8/13/12 Tr. at 3103:7-3105:2 (Frear); SX Trial Ex. 207), it should be paying *double* the headline percentage rate on revenue from all music-only channels and packages.

855. As Mr. Karmazin testified, Sirius XM currently has approximately [REDACTED] non-music-only subscribers and over [REDACTED] music-only subscribers. Karmazin WDT at 15, SXM Dir. Trial Ex. 19. Sirius XM excludes from the royalty base *all* of the revenue associated with the non-music subscribers. Yet, on the music-only revenue, Sirius XM is paying a headline rate that is reduced by 50% to account for the fact that the service is only half music. If Sirius XM is permitted to exclude revenue associated with non-music packages, it should be paying double the headline percentage rate for music-only packages.

856. The CRJs should eliminate any exclusion from Gross Revenues for revenue allegedly “recognized” for non-music programming (bundled or separately priced). The headline rates proposed by all parties already account for the fact that the service is only half music. Eliminating the exclusion is required (i) to make the royalty base match the adjusted headline percentage rate, (ii) to ensure that the percent-of-revenue royalty properly equates to the per-subscriber rate from which it was derived, and (iii) to prevent Sirius XM from gaming and

manipulating the royalty base in ways wholly untethered to any articulable economic, accounting or marketplace realities.

3. The Evidence Does Not Support a Revenue Exclusion for Spins of Pre-1972 Sound Recordings.

857. It is undisputed that, in purported reliance on paragraph (3)(vi)(D) of the definition of Gross Revenues, 37 C.F.R. § 382.11, Sirius XM excludes from Gross Revenues each month an amount allegedly corresponding to revenue recognized for its transmission of sound recordings fixed prior to 1972. Such an exclusion is economically invalid and, as an accounting matter, is improper even under the current regulations. In fact, the evidence shows that Sirius XM takes this exclusion in an unprincipled and haphazard way that bears no relationship to how it recognizes revenue or to any other articulable accounting principle. The language relied upon by Sirius XM in taking its deduction should not be continued.

858. It is undisputed that Sirius XM excludes roughly between [] and []% of its subscription revenue on the purported basis that it “recognizes” that revenue for the provision of pre-1972 recordings, thereby lowering its sound recording royalty costs by the same percentage. Lys WRT at 54, SX Trial Ex. 240; Lys WRT at SX Ex. 242-RR, p. 1, SX Trial Ex. 240. However, as Dr. Lys explained, Sirius XM did not actually recognize any revenue on its books for those recordings. “One cannot go to Sirius XM’s general ledger, or to any other accounting records, and identify any revenue associated with pre-1972 recordings. That is because no subscriber paid any amount of money for access to Sirius XM’s pre-1972 recordings. Rather, these recordings were simply part of the mix of content on Sirius XM’s service – no different than the non-music content Sirius XM also offers – for which there is no charge and no revenue recognized by Sirius XM.” Lys WRT at 54, SX Trial Ex. 240.

859. This is consistent with Mr. Frear's insistence that "How do you allocate the revenues and the subscription intent? . . . There isn't any decision I would make by going in and trying to split those packaged revenues and say, well, I think this much I'm going to attribute to Howard Stern, and I'm going to attribute this much to baseball and this much to Alt Nation, this much to our bluegrass channel. It's not going to help us in our business decision making so it's not an activity we would undertake." 8/13/12 Tr. at 3053:10-3054:3 (Frear). In other words, because Sirius XM does *not* "recognize" revenue based on the types of sound recordings it plays, trying to allocate subscription revenue by channel or genre of music is artificial and arbitrary, and contrary to a regulation predicated on revenue recognition.

860. Yet, again, that is precisely what Sirius XM wants to do. As Sirius itself explained, it [REDACTED]
[REDACTED]. In particular, "[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]." Lys WRT at 54 & n. 247, SX Trial Ex. 240 (quoting Sirius XM Radio Inc.'s Responses and Objections to SoundExchange's First Set of Interrogatories, pp. 10-11).

861. Unmoored from any accounting principles regarding the recognition of revenue, as Mr. Frear admits, Dr. Lys demonstrated the irrationality of Sirius XM's interpretation of the revenue definition it seeks to retain: "Sirius XM actually deducts the same [REDACTED] to [REDACTED]% from revenue it collects for the Music Royalty Fee as revenue 'recognized' for pre-1972 recordings. Even though the Music Royalty Fee is supposed to pass through only royalty costs actually

incurred, Sirius XM effectively claims (through this deduction) that it earns [] to []% of the Music Royalty Fee for pre-1972 recordings upon which it claims to owe no sound recording royalty. In other words, if one were to believe these allocations to be accurate, Sirius XM would simply be pocketing a portion of the Music Royalty Fee as pure profit, not as a royalty cost pass-through. This makes no sense and displays exactly how Sirius XM wishes to retain a revenue definition that it can manipulate to lower royalty costs. Indeed, if Sirius XM had actually earned part of the Music Royalty Fee for recordings upon which it owed no royalties, Sirius XM presumably would have violated the FCC Merger Order. Lys WRT at 54-55, SX Trial Ex. 240; Lys WRT at SX Ex. 242-RR, p. 1, SX Trial Ex. 240.

862. Dr. Lys further explained the irrationality of the fact that Sirius XM happily excludes whatever percentage of revenue they feel is attributable to pre-1972 sound recordings, but they do not make the corresponding adjustment to the various other exclusions from Gross Revenues when it would disadvantage them, such as credit card expenses and bad debt, all of which Sirius excludes from Gross Revenue *without* the [] to []% reduction. As Dr. Lys rather colorfully explained, “if you really believe the procedure that Sirius does, then the people who actually listen to pre-’72 don’t have credit cards and they don’t default on their bad debts. It’s only the people that listen to the post 1972 recordings. So they reduce the revenue by whatever percentage but they don’t adjust the expenses accordingly. So in effect, you’re telling me that these people don’t default. They don’t have credit card fees. They all paid cash. It’s hard to believe.” 8/20/12 Tr. at 4128:19-4129:6 (Lys); Lys WRT at SX Ex. 242-RR, p. 1, SX Trial Ex. 240.

863. It is quite remarkable that to justify such a significant exclusion that reduces the royalty base by [] to []% every month, Sirius XM offered literally no credible evidence. It

offered *no evidence* to demonstrate why or how pre-1972 recordings should affect the royalties in light of how the experts (including even their own experts) calculated their proposed benchmark rates. It offered *no evidence* to show why or how any given percentage of its pre-1972 “spins” should result in the same, if any, reduction of “recognized” revenue¹¹⁷, and it offered *no evidence* to show that it properly categorizes what is a pre-1972 recording and what may be a re-record or what may have been remixed or remastered. Other than Mr. Frear’s conclusory statement that the lawyers talked to the finance team, 8/13/12 Tr. 3125:3-3126:3 (Frear), Sirius offered *no evidence* to describe what its process for identifying pre-1972 sound recordings even is.

864. In light of Sirius XM’s complete failure to present the Court with any evidence whatsoever, Sirius XM has failed to carry its burden of justifying an exclusion from Gross Revenues of revenue purportedly recognized for the playing of pre-1972 sound recordings.

4. Because Both Dr. Ordovery and Dr. Noll Employed Broad Concepts of Revenue in Their Benchmarks, the Definition of Gross Revenues Should be Correspondingly Broad

865. Dr. Ordovery’s analysis of the interactive music services benchmark employs a broad concept of total revenue. *See generally* Ordovery WDT at 18-25, SX Trial Ex. 74. This is consistent with the approach of record companies in negotiating agreements in the benchmark market. Stephen Bryan testified about two overarching considerations that WMG takes into account when negotiating a revenue definition in a marketplace agreement. Bryan WDT at 14-15, SX Trial Ex. 66. First, WMG strives to ensure that the revenue definition accurately captures

¹¹⁷ The only evidence that Sirius XM has put in the record regarding pre-1972 sound recordings is the results of a single question, Question 9, in Dr. Hauser’s survey. That survey was thoroughly discredited by Dr. Simonson, who demonstrated the myriad ways in which the Hauser Survey fails to provide any reliable information regarding subscribers’ “willingness to pay” for pre-1972 recordings. Simonson WRT at 19-21, SX Trial Ex. 65.

the revenue that is generated by the use of its sound recordings. Bryan WDT at 14, SX Trial Ex. 66. Second, WMG works to keep the revenue definition specific, avoiding carve-outs that are open to interpretation and thus susceptible to “gaming” by the service. Bryan WDT at 14-15, SX Trial Ex. 66. If this Court adopts a percentage rate based on these benchmarks, the Gross Revenues royalty base must be similarly broad.

866. Dr. Noll repeatedly stated that the royalty base he used to calculate his proposed benchmark rates was Sirius XM’s Average Revenue Per User (“ARPU”). Specifically, Dr. Noll opined that it would make more sense to use Sirius XM’s Average Revenue Per User (ARPU) rather than the retail price for Sirius XM’s basic subscription package. “The correct starting point for the first procedure is the average revenue per user (ARPU), not the sticker price.” Noll WRT at 5, 18-19, SXM Reb. Trial Ex. 6. He suggested further that “I doubt Dr. Ordovery disagrees that ARPU, not sticker price, is the correct basis for calculating royalties.” Noll WRT at 20 n.5 (SXM Reb. Trial Ex. 6). Both of these approaches lead to the conclusion that the definition of Gross Revenues broadly should encompass the revenue Sirius XM derives from the provision of SDARS service without significant deductions.

867. To the extent that the headline rates in this proceeding ultimately are derived by looking to Sirius XM’s ARPU as the appropriate royalty base, it necessarily follows that the definition of Gross Revenues *must* include *all* sources of revenue that Sirius XM’s includes in its ARPU calculations. In other words, as matters of both sound economics and simple mathematics, there must be an apples-to-apples comparison between the revenue used to devise the rate, and the revenue based on which that rate is paid.

868. Mr. Frear admitted on cross-examination that the categories of Sirius XM’s revenues that appear on SoundExchange Trial Exhibit 207 all go into Sirius XM’s calculation of

ARPU. 8/13/12 Tr. 3127:1-14 (Frear); SX Trial Ex. 207. Those revenues include, among other things, all subscription revenue including any allegedly allocable to non-music, or pre-1972 content and without any credit card or bad debt expense deductions, activation fees, so-called “swap” fees, advertising revenue, and more. All of those revenues, without carve outs, must remain in the definition of Gross Revenues if the headline rate is derived from a rate base based on Sirius XM’s Average Revenue Per User.

5. The Current Definition Is Difficult to Administer and Too Open to Interpretation.

869. Finally, with respect to all revenue carve outs and exclusions, Dr. Lys testified that, from an accounting perspective, it is always preferable to base contracts on a financial definition that is clear-cut to administer and easy to audit. For revenue, such a definition requires clear rules as to what is and is not included in the revenue measure as well as the availability of reliable financial records to implement the measure. Where a revenue definition is open to multiple interpretations or where the definition permits a party to exclude revenue that cannot be accounted for through general ledger accounts maintained in the ordinary course of business, the definition is virtually certain to be deficient from an accounting and auditing perspective. The revenue definition proposed by Sirius XM should be rejected because it contains ambiguous revenue carve-outs that Sirius XM has manipulated to report lower revenue during the past rate term and is likely to continue manipulating in the future. Lys WRT at 54, SX Trial Ex. 240.

870. In turn, Mr. Bender showed that what Dr. Lys discussed in theory, is also true as a matter of real world application. He explained that the current definition of “Gross Revenues” draws complicated distinctions among various categories of Sirius XM revenue that are included in or excluded from the royalty base, which in practice “have proven to be imprecise, uncertain and open to interpretation.” Bender WDT at 12, SX Trial Ex. 75.

871. This makes the rate structure difficult to administer, because it requires Sirius XM to make judgments about how to classify its revenues. In addition, the current definition makes it impossible for SoundExchange to determine, based on the statements of account and reports of use that Sirius XM provides, to what extent Sirius XM's judgments about application of each of the various limitations and exclusions accounts for the discrepancy between Sirius XM's publicly-reported total revenues and the revenues reported to SoundExchange. Bender WDT at 12-13, SX Trial Ex. 75.

872. While SoundExchange can conduct audits of Sirius XM to try to learn that information, if SoundExchange and Sirius XM disagree about whether an inclusion or exclusion (or the amount of an inclusion or exclusion) is appropriate, SoundExchange and/or individual beneficiaries would presumably need to resort to expensive litigation to enforce their rights. Bender WDT at 13, SX Trial Ex. 75.

873. The current definition identifies two categories of revenue for inclusion in the royalty base, and nine separate categories of exclusion. The metes and bounds of each of these eleven categories are specified by regulatory language that, in most cases, is potentially subject to interpretation and susceptible to manipulation, which can lead to disputes. All together, this complicated definition greatly obfuscates Sirius XM's reporting to SoundExchange. In addition, these categories create the possibility that Sirius XM may try to label fees in ways that it may assert reduce its payments to SoundExchange while Sirius XM nonetheless realizes the revenue, and does so based at least in part on demand for the music available through its service. Bender WDT at 13, SX Trial Ex. 75.

874. For example, the current definition prescribes that the royalty base is to include "[s]ubscription revenue recognized by Licensee directly from residential U.S. subscribers for

Licensee's SDARS." That might seem straightforward, but trying to map that concept onto Sirius XM's publicly-reported financial statements illustrates the potential for uncertainty and disputes. Sirius XM's Form 10-Q for the period ending September 30, 2011 reports a category of "[s]ubscriber revenue," which it says "consists of subscription fees, revenue derived from agreements with certain daily rental fleet operators, non-refundable activation and other fees." 10-Q at 10. Similarly, the 10-Q refers elsewhere to "activation and subscription-related fees," which Sirius seems to view as different from "subscription fees" for purposes of its public filings. 10-Q at 25. The 10-Q notes that some of these subscriber revenues are "received from OEMs [automakers] for subscriptions included in the sale or lease price of vehicles." 10-Q at 10. The present regulatory language potentially opens the door to debate over whether activation fees and other "subscription-related fees" should be treated as "subscription revenue" or whether subscriptions paid for by automakers are revenues "directly from residential U.S. subscribers." Bender WDT at 13-14, SX Trial Ex. 75.

875. As to exclusions from the royalty base, some are straightforward, but most are problematic. A number of them create possibilities for Sirius XM to undervalue the sound recording performance rights licensed to it by structuring payment streams to fall into those categories. Bender WDT at 14, SX Trial Ex. 75.

B. Direct License Adjustment for SDARS

876. SoundExchange's initial rate proposal in this proceeding did not include a mechanism to reduce royalty payments based on use of directly licensed recordings, because only a very small percentage of the sound recordings that Sirius XM now plays are directly licensed.

877. For many of the same accounting reasons discussed above, it would make no sense to account for the value of directly licensed usage through a carve out from Gross Revenues. As Mr. Bender explained, “Sirius XM does not provide separately-priced music channels using only directly licensed recordings. Accordingly, Sirius XM’s use of directly-licensed recordings has nothing to do with revenue recognition. In specifying a statutory rate structure for the coming rate period, Sirius XM’s gross revenues should be defined in a manner consistent with generally-accepted accounting principles and Sirius XM’s own accounting for and reporting of its revenue. Any adjustment of Sirius XM’s royalty payments to reflect direct licensing should be dealt with separate and apart from the question of what should be considered an appropriate definition of Sirius XM’s gross revenues from the provision of a satellite radio service.” Bender WRT at 3, SX Trial Ex. 239.

878. This is consistent with observations Dr. Lys made in another context. As Dr. Lys explained, Sirius XM books subscription revenue as subscription revenue, and does not “recognize” certain portions of it as coming from certain types of programming on the SDARS service and other portions coming from other programming. Lys WDT at 54, SX Trial Ex. 240.

879. The questions of whether and how to adjust royalty payments based on directly licensed usage are entirely distinct from revenue. For the reasons set forth below, SoundExchange does not believe that the magnitude of directly licensed usage warrants an adjustment, or that Sirius XM is capable of implementing an adjustment with a reasonable degree of accuracy. However, SoundExchange believes it is very important that if such an adjustment is to be made, the mechanism for doing so should be fair, clear and transparent. Hence, SoundExchange has suggested a mechanism for making such an adjustment if this Court concludes that one is necessary.

880. “[M]aking an adjustment for direct licensing requires determining the relative value of statutory usage and directly-licensed usage.” Bender WRT at 2, SX Trial Ex. 239. This kind of allocation among different licenses is common. “[L]icenses entered into by record companies often specify a percentage of revenue rate that assumes 100% usage of the licensor’s recordings, and then provide for payment of only that licensor’s proportionate share of the product of the service’s gross revenues and the agreed-upon percentage rate.” Bender WRT at 2, SX Trial Ex. 239.

1. The Evidence Demonstrates That Sirius XM and its Agent MRI Are Not Competent to Administer a Direct License Adjustment.

881. Regardless of whether this Court were to adopt a direct license adjustment of the type proposed by Mr. Bender (explained further below), or one that provides for an exclusion from Gross Revenue (which would make no economic or accounting sense), it is beyond dispute that implementation of either approach would require Sirius XM, or its accounting agent MRI, to be able to identify which sound recordings are directly licensed and which are not.

882. Sirius XM has proffered no evidence in this proceeding that either it or MRI is reliably and regularly capable of doing that. Indeed, the evidence is that they affirmatively cannot.

883. During the direct phase of the trial, the Court twice asked Sirius XM to provide in rebuttal an analysis showing how many directly licensed labels were among Sirius XM’s top most played labels. 6/7/2012 Tr. 686:19-687:2 (Frear); 6/7/2012 Tr. 853:13-854:8 (Gertz). Mr. Gertz then tried to offer such an analysis in rebuttal, but failed miserably. In fact, the MRI analysis was so badly botched that Sirius could not even correct it in the nearly six weeks that elapsed between its submission and Mr. Gertz’s oral testimony. Rather, Sirius was forced to withdraw the entire analysis.

884. For several reasons, it should not have been difficult for Sirius and MRI to identify the recordings that were directly licensed. First, rebuttal testimony was due July 2 – nearly an entire month after Judge Roberts made his requests for the information. Second, Mr. Gertz explained that MRI used playlist data from April 2012, which was the then-most recent month of data that MRI already had processed for submission of Sirius XM’s Reports of Use to SoundExchange. (April Reports of Use were due to SoundExchange by June 16.) Gertz WRT at 5, SXM Reb. Trial Ex. 8.

885. Thereafter, on August 3, 2011, SoundExchange filed a motion to strike and to compel in which SoundExchange exposed the many patent errors in Mr. Gertz’s report. Because Mr. Gertz was not scheduled to testify at the rebuttal hearing until approximately August 15, Sirius XM would have had ample time to remedy the errors by submitting corrected testimony had the errors been of any reasonable order of magnitude. The errors in the MRI analysis, however, were not of a reasonable order of magnitude.

886. Rather, as SoundExchange demonstrated, approximately *one third to nearly half* of all of Sirius XM’s plays that MRI had counted as directly licensed were not, in fact, directly licensed at all. *See SoundExchange’s Motion to Strike the Play Share Analysis from the Rebuttal Testimony of Ronald H. Gertz, David Frear, and Roger Noll*, at 7 (filed August 9, 2012). There are other indications that Sirius XM’s direct license share may have been overstated by an even greater amount. *See supra* at VI.B.1.

887. In response, Sirius XM made excuses that it had only little time (almost a month) to analyze millions of plays (that had already been processed for submission in Reports of Use to SoundExchange. *See Sirius XM’s Response Mooting SoundExchange’s Motion*, at 1 (filed Aug. 9, 2011). That, however, is precisely what MRI is supposed to be able to do – process millions

of plays every month, and do it right. But it could not. And neither could Sirius XM. Rather, Sirius had to admit that “the process is simply too complicated” and it withdrew the Gertz analysis altogether. *Id.*

888. Because of Sirius XM’s and MRI’s very significant errors in trying to compute the direct licensed share, the magnitude of the actual direct licensed usage is not entirely clear. The only other play share evidence in the record is an analysis conducted by MRI in 2010. That analysis, unfortunately, is equally flawed.

889. That analysis shows that over half of Sirius XM’s 85 directly licensed labels had a market share of 0% of all Sirius XM plays, SX Trial Ex. 301 at 54-58, and that all 85 labels combined accounted for only 2%. SX Trial Ex. 301 at 54-58 (listing estimated market share of directly licensed labels); SX Trial Ex. 21 at 2-3 (explaining market share analysis methodology); SX Trial Ex. 20 (market share analysis).

890. Even that data – the best currently in the record – is not remotely reliable and MRI has recognized that it overstates the market share of Sirius XM’s direct licensees. According to an email from Mr. Gertz of MRI to Cynthia Greer, associate general counsel at Sirius XM, the analysis was only able to identify 71.12% of the total plays on Sirius XM’s SDARS service due in part to “bad or missing” data received from Sirius XM. SX Trial Ex. 21 at 2-3. Worse still, MRI elected not to pursue a comprehensive clean-up effort because, in the words of Mr. Gertz, a “current effort at data clean-up for reporting purposes would only benefit SoundExchange.” SX Trial Ex. 21 at 3.

891. Accordingly, Sirius XM has failed to present this Court with evidence demonstrating that direct licensing is a sufficiently significant economic phenomenon to justify the additional complexity of adjusting royalty payments to accommodate it. Nor is there

evidence in the record that Sirius XM and MRI regularly and reliably can determine the number of Sirius XM's plays that are of directly licensed sound recordings each month. To the contrary, between Sirius XM's "bad or missing data" and MRI's rank incompetence, it is clear that they are simply unable to do so. As a result, MRI and Sirius XM certainly cannot be relied on to regularly and reliably implement any adjustment to Gross Revenue or to the royalties owed to SoundExchange that requires them to calculate the percentage of their monthly plays that are of directly licensed sound recordings. Because any adjustment would require such an analysis, Sirius XM is not, on this record, entitled to any such adjustment or exclusion.

2. SoundExchange's Proposed Alternative

892. If the Court nevertheless wishes to adopt some form of adjustment to account for directly licensed usage, then, as explained above, permitting Sirius XM to allocate subscriber revenue between statutory usage and directly-licensed usage based on counting all plays on all channels equally (*i.e.*, just counting "spins") would not be appropriate. Bender WRT at 4, SX Trial Ex. 239. Rather, "a fair adjustment for direct licensing must take into account the extent to which subscribers actually listen to directly-licensed recordings. The more precisely such an adjustment does that, the fairer it will be." *Id.* at 5.

893. In its revised rate proposal, SoundExchange has proposed that the Direct License Share (*i.e.*, the percentage reduction in the payable statutory royalty amount due to direct licensing) approximate the proportion of actual listens for which an SDARS relies upon direct licenses rather than the statutory license. Bender WRT at 5, SX Trial Ex. 239.

894. To do this, SoundExchange is proposing what it presented in the rebuttal case as "Alternative 4." That is, computing the Direct License Share based on analogous Internet webcasting data. The methodology for using webcast data to determine the Direct License Share

is straightforward (assuming Sirius XM can actually distinguish usage that is directly licensed from usage under the statutory license). First, one needs to identify the webcast channels to be used in the calculation. (These are referred to as the “Reference Channels”). These are webcast music channels that directly correspond to satellite channels that can be received by all subscribers to the Sirius or XM service. Internet-only channels should not be used in the calculation, because they do not necessarily bear any relationship to content on the satellite channels. Nor should any channels that are not received by substantially all subscriber radios. Bender WRT at 9, SX Trial Ex. 239.

895. Then, for each month, the Direct License Share is simply the result of dividing the Internet performances of directly-licensed recordings on the Reference Channels by the total number of Internet performances of all recordings on the Reference Channels. To provide transparency, it is important that Sirius disclose these calculations to SoundExchange. Bender WRT at 9, SX Trial Ex. 239.

896. This methodology is far from ideal, because it employs usage on one platform (Internet webcasting) as a proxy to measure the relative value of direct licensed and statutory licensed recordings on a different platform (satellite radio). Bender WRT at 8-9, SX Trial Ex. 239. However, it is far superior to any other method that does not even attempt to take listenership into account. *Id.* at 9. It is also practicable (again assuming Sirius XM can actually distinguish usage that is directly licensed from usage under the statutory license), because Sirius XM is supposed to pay SoundExchange based on webcast performances. *Id.* at 8.

C. Other SDARS Terms

897. Section 114(f)(1)(B) of the Copyright Act requires the Copyright Royalty Judges to establish both rates and terms. The CRJs have explained that “it is our obligation to adopt

royalty payment and distribution terms that are practical and efficient.” *Webcasting II*, 72 Fed. Reg. at 24102 (May 1, 2007).

898. The CRJs have further stated that “we seek to maintain consistency across the licenses set forth in Sections 112 and 114. Consistency promotes efficiency thereby reducing the overall costs associated with the administration of the licenses.” *SDARS I*, 73 Fed. Reg. at 4098-99. If a party seeks a variance from terms that are otherwise consistent across licenses, the burden is upon that party to show the “need for and the benefits of variance.” *Id.* at 4,099. Over the course of prior CRJ proceedings, terms have become more consistent across the statutory licenses.

1. SoundExchange’s Proposed SDARS Terms

899. Apart from the definition of Gross Revenues discussed above, SoundExchange generally proposes continuing the same terms in this proceeding as the CRJs adopted in the *SDARS I* proceeding, subject to certain technical and conforming changes. The terms that SoundExchange proposes are substantially the same as the terms currently applicable to webcasting services, as adopted by the CRJs in *Webcasting III*. Consistency across terms enables SoundExchange and the parties to assess the effectiveness of terms based on experience, and aids SoundExchange administration of and services’ compliance with the licenses. *Bender WDT* at 18-20, SX Trial Ex. 75.

900. In sections 382.11 and 382.12 of the current regulations, SoundExchange proposes deleting the concept of a “residential” SDARS subscriber (which appears in the definitions of “Gross Revenues” and “Residential”) because it is simply a confusing artifact of that term being used in the PSS regulations. The SDARS service is not primarily residential (in the sense of being delivered to homes). In the SDARS regulations, a “residential” subscriber is

defined as simply a subscriber, meaning that the word “residential” in the definition does not add any value to the definition but only creates the possibility for confusion. Bender WDT at 20, SX Trial Ex. 75.

901. In section 382.13(e)(3), SoundExchange proposes deleting the requirement that the signature on a statement of account be “handwritten,” because it would be efficient (and hence reduce transaction costs) for both licensees and SoundExchange if SoundExchange were to automate the process of ingesting statements of account and reports of use, and this requirement can only interfere with trying to obtain such efficiencies. *See SDARS I*, 73 Fed. Reg. at 4098-99 (“Consistency promotes efficiency thereby reducing the overall costs associated with the administration of the licenses.”) In contrast to the *Webcasting III* proceeding, in which the Judges declined to adopt this request, dropping this requirement in this proceeding would create no issues of inconsistency among services of the same type. Bender WDT at 20-21, SX Trial Ex. 75.

902. In addition, SoundExchange has proposed several minor technical and conforming changes, as reflected in the redlined draft proposed regulations that SoundExchange has submitted.

903. No party has opposed any of these proposed changes to the license terms. *See Webcasting III*, 76 Fed. Reg. at 13043 (adopting technical and conforming changes proposed by SoundExchange where they were not opposed by any party).

2. Sirius XM’s Proposed SDARS Terms

904. Sirius XM has proposed maintaining the current SDARS terms, without change. Nonetheless, to date, Sirius XM has not indicated any opposition to SoundExchange’s proposed changes to the SDARS terms (though Sirius XM does of course oppose SoundExchange’s

proposals to change the definition of gross revenues and SoundExchange's direct license adjustment).

D. PSS Terms

1. SoundExchange's Proposed PSS Terms

905. Whereas the current SDARS and webcasting terms are largely consistent with each other, the PSS terms are not. Bender WDT at 21, SX Trial Ex. 75. The divergence between the PSS terms on the one hand, and the SDARS/webcasting terms on the other, can be inconvenient and produce transaction costs. Bender WDT at 21, SX Trial Ex. 75. It is impractical and inefficient to have different terms for different licenses. Accordingly, SoundExchange is proposing to conform the PSS terms in large part to the terms for the other statutory licenses. Bender WDT at 21, SX Trial Ex. 75.

906. First, in proposed Section 382.2, SoundExchange proposes collecting applicable definitions in one place for the convenience of users of the regulations. The definitions of gross revenues and licensee are relocated from Sections 382.1(d) and 382.2(e) in the current regulations, but SoundExchange does not propose to change them substantively at this time. The other definitions would be new to the PSS but are used in the SDARS and webcasting regulations. Bender WDT at 21, SX Trial Ex. 75.

907. Second, in proposed Section 382.3(d), SoundExchange proposes applying the late fee to a late statement of account. This would be consistent with the SDARS and webcasting regulations. As the Judges have found in prior proceedings, SoundExchange's need for both a payment and statement of account to be able to distribute the payment warrants applying the late fee to both. Bender WDT at 21-22, SX Trial Ex. 75.

908. Third, in proposed Section 382.4(c), SoundExchange proposes to relocate the statement of account requirement buried in the confidentiality provision of current Section 382.4(b), but to adapt it to include the enumerated data elements from the SDARS regulations. Bender WDT at 22, SX Trial Ex. 75.

909. Fourth, where current Section 382.3(c)(2) has an escheat provision that is in addition to, and a little different from, current Section 382.7, SoundExchange proposes to include in proposed Section 382.4(d)(2) a reference to the primary escheat clause, which would be renumbered as Section 382.8. Bender WDT at 22, SX Trial Ex. 75.

910. Fifth, in proposed Section 382.5, for the sake of consistency, SoundExchange proposes conforming the confidentiality regulations to the SDARS regulations. Bender WDT at 22, SX Trial Ex. 75. These changes to the confidentiality regulations would also make the PSS confidentiality regulations more similar to the Business Establishment Services confidentiality regulations, under which Music Choice operates a service. *See* Section 384.5.

911. Sixth, in proposed Sections 382.6 and 382.7, SoundExchange proposes conforming the very different PSS audit provisions, to avoid having to maintain separate audit processes (potentially applicable to the same audited party). However, current Sections 382.5(f) and 382.6(f) provide for audit fee shifting in the case of a 5% underpayment, and the same considerations do not warrant doubling that threshold to the levels in the SDARS and webcasting regulations. The 10% threshold is high. SoundExchange would rather administer two separate fee-shifting calculations than provide incentives for services to underpay by such a large margin. Bender WDT at 22, SX Trial Ex. 75. SoundExchange's proposed changes to the audit regulations would make the PSS audit regulations virtually identical to the Business

Establishment Services audit regulations (except for the 5% fee-shifting threshold), under which Music Choice operates a service. *See* Section 384.7.

912. In addition, SoundExchange has proposed several minor technical and conforming changes, as reflected in the redlined draft proposed regulations that SoundExchange has submitted

913. In sum, the foregoing changes, including the technical edits set forth in SoundExchange's redlined proposed regulations, would materially simplify administration of the PSS license. Bender WDT at 22, SX Trial Ex. 75.

2. Music Choice's Proposed PSS Terms

914. Music Choice has proposed maintaining the current PSS terms without change.

Written Direct Statement of Music Choice.

XIV. DESIGNATION OF A COLLECTIVE

915. SoundExchange proposes that it should be designated as the sole Collective to collect and distribute statutory royalties for the period 2013-2017. *See* SoundExchange's proposed §§ 382.2, 382.11. Bender WDT at 18, SX Trial Ex. 75.

A. SoundExchange Should Be the Sole Collective.

916. In *Webcasting II*, the Judges found "that selection of a single Collective represents the most economically and administratively efficient system for collecting royalties under the blanket license framework created by the statutory licenses." 72 Fed. Reg. at 24104. Furthermore, the D.C. Circuit held that "in selecting SoundExchange as the sole collective, the Judges fulfilled Congress's expectation that they would designate a single entity to receive royalty payments from licensees." *Intercollegiate Broad. Sys., v. Copyright Royalty Bd.*, 574 F.3d 748, 771 (D.C. Cir. 2009).

917. In *Webcasting II*, the Judges designated SoundExchange “as the Collective to receive statements of account and royalty payments from Licensees due under § 380.3 and to distribute such royalty payments to each Copyright Owner and Performer, or their designated agents, entitled to receive royalties under 17 U.S.C. 112(e) or 114(g).” 37 C.F.R. § 380.4(b); *see Webcasting II*, 72 Fed. Reg. at 24105 (“SoundExchange is the superior organization to serve as the Collective for the 2006-2010 royalty period.”).

918. In *SDARS I*, the Judges again designated SoundExchange as the Collective, noting that no party had requested the designation of multiple collectives, no other party requested to be selected as the Collective, no party opposed SoundExchange’s designation, and that SoundExchange had a “track record of serving as a Collective.” 73 Fed. Reg. at 4099.

919. In *Webcasting III*, the Judges cited these prior designations, noted that no party had submitted evidence that would compel a different outcome or had requested the designation of multiple collectives. The Judges further observed that artists and copyright owners support SoundExchange, and that SoundExchange and its predecessor had served as the Collective since the inception of the statutory licenses and thus had “accumulate[ed] a wealth of knowledge and expertise in administering these licenses.” For all these reasons, the Judges once again designated SoundExchange as the sole Collective. *See Webcasting III*, 76 Fed. Reg. at 13042-43.

920. The same circumstances are true here: no party other than SoundExchange has requested to be selected as the Collective, no party has proposed multiple collectives, no party has opposed the designation of SoundExchange as the Collective, artists and copyright owners support SoundExchange’s designation, and SoundExchange has presented evidence of its proven

track record of administering the statutory licenses efficiently and in the best interests of royalty recipients.

921. The evidence in this proceeding supports the same result as in past proceedings. SoundExchange should be designated the sole Collective to collect and distribute royalties for the 2013-2017 statutory period. Bender WDT at 18-19, SX Trial Ex. 75.

1. SoundExchange Has Experience Administering the Statutory Licenses.

922. SoundExchange has considerable experience and expertise in administering the Section 112 and 114 statutory licenses. It has processed billions of sound recording performances, and has continued to increase the size of its membership and the number of record label and artist accounts that it maintains. SoundExchange has over 4 million sound recordings in its database of recordings. Bender WDT at 18-19, SX Trial Ex. 75; 6/15/12 Tr. 2467:8-15 (Bender).

923. As of November 2011, SoundExchange had approximately 12,700 rights owner members and 30,250 artist members. Bender WDT at 4, SX Trial Ex. 75. SoundExchange also distributes statutory royalties to non-members (both copyright owners and artists) as if they were also members. Bender WDT at 4, SX Trial Ex. 75. In total, as of November 2011, SoundExchange maintained accounts for more than 20,100 rights owners and more than 45,000 artists, including members and non-members. Bender WDT at 4, SX Trial Ex. 75. In each of its quarterly distributions, SoundExchange sends checks to approximately 18,000 – 20,000 royalty recipients. 6/15/12 Tr. 2466:10-12 (Bender).

924. SoundExchange has a demonstrated record of serving the interests of recording artists. SoundExchange has represented artists and record labels on a vast array of issues, including rate-setting and notice and recordkeeping. SoundExchange undertakes a number of

measures to protect the interests of artists and copyright owners under the statutory licenses, including by conducting audits of licensees, seeking and obtaining compliance by noncompliant licensees, and engaging in other enforcement and compliance measures. Since its founding, SoundExchange has, on behalf of all artists and record labels, sought the establishment of fair royalties and regulations that enable the prompt, fair and efficient distribution of royalties to all those artists and copyright owners entitled to such royalties. Bender WDT at 3, SX Trial Ex. 75.

2. Artists and Copyright Owners Support SoundExchange as the Sole Collective.

925. SoundExchange presented artist and copyright owner testimony in support of designating SoundExchange as the sole Collective. *See Webcasting II*, 72 Fed. Reg. at 24105 (“As the direct beneficiaries of the royalties collected under the statutory licenses, the copyright owner and performer testimony on this point is particularly persuasive.”).

926. From the artist perspective, Raymond M. Hair, the International President of the American Federation of Musicians of the United States and Canada (“AFM”), testified on behalf of AFM’s 90,000 professional musician members. Hair WDT at 3, SX Trial Ex. 73.

927. His testimony expressed “AFM’s support for the designation of SoundExchange as the sole Collective to collect and distribute the royalties at issue in this proceeding for the period of 2013 through 2017.” Hair WDT at 3, SX Trial Ex. 73. He identified several reasons for artists’ support of SoundExchange, including that SoundExchange represents the interests of copyright owners and recording artists alike, that SoundExchange is a non-profit organization that does not reduce royalty payments by taking a profit and that makes decisions in the best interests of the royalty recipients, and that SoundExchange has “substantial and unparalleled” experience administering the statutory licenses. Hair WDT at 6-8, SX Trial Ex. 73.

928. From the copyright owner perspective, major label witness, Stephen Bryan (Executive Vice President of Digital Strategy and Business Development, Recorded Music, Warner Music Group), testified that “in the interest of efficiency,” there “should be one unified licensing collective and that SoundExchange should be that collective.” Bryan WDT at 17, SX Trial Ex. 66. He observed that “[b]ased upon its track record, SoundExchange deserves to maintain its position as the only collective.” *Id.* (noting SoundExchange’s non-profit status, equal representation of artists and copyright owners, and experience administering the license).

929. Similarly, independent label witness, Darius Van Arman (Founder, Jagjaguwar), testified that “I believe SoundExchange has earned the right to continue serving as the sole collective,” observing among other things that SoundExchange represents the interests of both recording companies and artists, “has a good track record of advocating on behalf of copyright owners and performers,” and is a non-profit organization “which ensures that the goal is to maximize royalties for recipients.” Van Arman WDT at 8, SX Trial Ex. 77.

3. SoundExchange Represents Both Copyright Owners and Recording Artists.

930. As this Court previously observed, “SoundExchange is controlled by an 18-member Board of Directors comprised of equal numbers of representatives of copyright owners and performers.” *Webcasting II*, 72 Fed Reg. at 24,104. That remains true today. Bender WDT at 2, SX Trial Ex. 75. Copyright owners are represented by board members associated with the major record companies (four), independent record companies (two), the Recording Industry Association of America (two), and the American Association of Independent Music (one). Artists are represented by one representative each from the American Federation of Musicians (“AFM”) and the American Federation of Television and Radio Artists (“AFTRA”). There are

also seven at-large artist seats, which are currently held by a recording artist and artists' lawyers and managers. Bender WDT at 3, SX Trial Ex. 75.

931. This direct representation of artists and copyright owners "has ensured that SoundExchange is committed to serving [artists'] interests as well as the interests of copyright owners." Hair WDT at 6, SX Trial Ex. 73. SoundExchange is "answerable to the demands of copyright owners and performers for honest, fair and efficient distributions," and its Board members "bring the views and concerns of a broad range of performers to the decision-making process at SoundExchange." Hair WDT at 6, SX Trial Ex. 73. SoundExchange represents both "major and independent label[s] alike." Van Arman WDT at 8, SX Trial Ex. 77.

932. SoundExchange has demonstrated its commitment to artists by "engaging in extensive efforts to make performers aware of the royalties they are owed, to find and enroll them, and to get royalties into their hands." Hair WDT at 6, SX Trial Ex. 73. "Perhaps the best evidence of SoundExchange's commitment to the fair representation of artists and copyright owners is that tens of thousands of artists and copyright owners have registered with SoundExchange." Hair WDT at 7, SX Trial Ex. 73.

4. SoundExchange Is a Non-Profit.

933. SoundExchange is a Section 501(c)(6) nonprofit organization established to ensure the prompt, fair and efficient collection and distribution of royalties payable to performers and sound recording copyright owners for digital audio transmissions of sound recordings over, among other things, the Internet, wireless networks, cable and satellite television networks, and satellite radio services (hereinafter collectively "services" or "licensees"). Bender WDT at 2, SX Trial Ex. 75.

934. As a non-profit organization, SoundExchange collects royalty payments for distribution to artists and copyright owners, not for its own financial gain, and its “incentives are properly aligned with the interests of royalty recipients.” Hair WDT at 7, SX Trial Ex. 73.

5. SoundExchange Administers the Statutory Licenses Efficiently.

935. SoundExchange effectively controls the administrative costs associated with royalty collection and distribution. SoundExchange has 69 full-time staff members. In 2010, its administrative rate was 6.7%. By comparison, the American Society of Composers, Authors and Publishers (“ASCAP”) reported operating expenses of 14.3% for the same year. Bender WDT at 4, SX Trial Ex. 75.

B. Designating Multiple Collectives Would Be Inefficient.

936. This Court previously recognized that “[t]ransaction costs to the users of [a blanket] license are minimized when they can make payment to a single Collective, as opposed to allocating their payments among several.” *Webcasting II*, 72 Fed. Reg. at 24104. A single Collective “presents the most economically and administratively efficient system for collecting royalties under the blanket license framework created by the statutory licenses.” *Webcasting III*, 76 Fed. Reg. at 13042 (quoting *Webcasting II*).

937. Having more than one Collective would be inefficient, and there is no evidence in the record to support any such scheme. SoundExchange’s system presently contains entries for tens of thousands of copyright owners and performers and millions of sound recordings. Bender WDT at 18-19, SX Trial Ex. 75. Designating more than one Collective would create greater overall costs because copyright owners and performers would have to pay for duplicative systems for license administration. Bender WDT at 19, SX Trial Ex. 75. *See also* Hair WDT at

8-9, SX Trial Ex. 73 (opposing multiple collectives and stating that “a single Collective avoids redundancy and streamlines costs, to the benefit of performers”).

C. No Other Party Has Asked to Be Designated a Collective.

938. SoundExchange is the only party that has asked to be designated as the Collective and that has submitted evidence into the record relevant to the issue. No other party has proposed designating more than one Collective. There is no evidence in the record to support the designation of any other entity as *the* Collective, or even as *a* Collective. No party has objected to the designation of SoundExchange as the sole Collective.

939. Although RLI filed a petition to participate in this proceeding, it withdrew from the proceeding before the submission of written direct cases, and did not participate as a party to the proceeding (though MRI’s Ronald Gertz did appear as a witness on behalf of Sirius XM Radio).

D. SoundExchange’s Operations

940. SoundExchange has worked for many years to develop sophisticated systems, business processes and extensive databases uniquely suited to the challenging task of distributing statutory royalties. Bender WDT at 7, SX Trial Ex. 75. SoundExchange’s Chief Operating Officer, Jonathan Bender, testified about the procedures SoundExchange uses to collect and distribute royalties.

1. Receipt of Payment

941. SoundExchange’s Royalty Administration and Distribution Services Departments receive from statutory licensees royalty payments, statements of account, and reports of use. The statements of account reflect the licensee’s calculation of the payments for the reporting

period, and the reports of use report performances of specific sound recordings. Bender WDT at 7, SX Trial Ex. 75.

942. When SoundExchange receives payment from a licensee, that payment is logged into SoundExchange's licensee database. If the licensee operates services in multiple rate categories, the royalty payments are allocated among the applicable rate categories based on the statements of account. Bender WDT at 7, SX Trial Ex. 75.

2. Loading Reports of Use

Reports of use are associated with a service's payments and statements of account for a particular period and loaded into SoundExchange's system. The reports are supposed to provide information about the sound recording title, album, artist, marketing label, International Standard Recording Code and other information. Bender WDT at 8, SX Trial Ex. 75.

943. In some instances, services – including the SDARS and PSS – fail to accurately report identifying data for sound recordings, in which case SoundExchange staff has to research the partially identified sound recording in order to identify accurately the sound recording copyright owners and performers entitled to royalties. Bender WDT at 8, SX Trial Ex. 75.

3. Matching

944. SoundExchange's systems seek to match the recordings reported in licensee reports of use with information in SoundExchange's database concerning known recordings and their copyright owners and performers. SoundExchange uses an algorithm to try to match identical and similar data elements and combinations of data elements from the incoming log against performance information previously received from the services. If there is a match for a particular sound recording, then the program identifies the corresponding copyright owner and performer information. However, a reported recording might not match a known recording if,

for example, the service has performed a recording by an unsigned band, or a very new, old, foreign or other obscure recording that has not previously been reported to SoundExchange, or if the service has provided incomplete or incorrect identifying information. Bender WDT at 8-9, SX Trial Ex. 75.

4. Research

945. SoundExchange has built its database of sound recordings from scratch, based on information reported to it by services. To the extent a reported recording does not sufficiently match a known recording, SoundExchange personnel will research the recording in an effort to determine whether it should be added to SoundExchange's database or whether it is in the database under different identifying information. Bender WDT at 9, SX Trial Ex. 75.

946. This research requires a significant amount of staff time. Such research is often required for new releases, works reported for the first time, works from small labels, compilation albums and foreign repertoire. Bender WDT at 9, SX Trial Ex. 75. SoundExchange conducts extensive quality assurance and has a process for resolving conflicts that may arise between payees. Bender WDT at 9, SX Trial Ex. 75.

5. Account Assignment

947. SoundExchange then assigns reported sound recording performances to accounts belonging to copyright owners and performers. Performances for which a copyright owner or artist account is not identifiable (e.g., because the recording reported has not yet been matched to a recording known to SoundExchange) are assigned to an account for later review and research. This is often the result of poor quality data provided by licensees. Performances assigned to these accounts are processed through the steps that follow as soon as identification is made, with

the associated royalties being released in the next scheduled distribution. Bender WDT at 9-10, SX Trial Ex. 75.

6. Royalty Allocation

948. Once account assignment has occurred, a service's royalty payments for a given distribution period are allocated to sound recordings used by that service during that period and to SoundExchange's costs deductible under Section 114(g)(3). Before distribution of allocated funds, SoundExchange takes several quality assurance steps to ensure accounts are payable, address and tax identification information is complete, performances in conflict are resolved and copyright owner conflicts are resolved (to the extent practicable). Bender WDT at 10, SX Trial Ex. 75.

949. SoundExchange distributes SDARS and PSS royalties to performers and copyright owners based on the reporting that the services provide to SoundExchange. If a service reports to SoundExchange that it played a recording under the statutory license, SoundExchange does not second-guess the service's determination that it in fact performed the recording in reliance on the statutory license. Bender WDT at 10, SX Trial Ex. 75.

7. Adjustment

950. Once allocations are completed, it is sometimes necessary to adjust particular accounts to rectify reporting and other errors that occurred in prior distributions. Adjustments typically take the form of an additional payment or a reduced payment to an existing account in the next scheduled distribution. For copyright owners and artists who are newly identified and for whom royalties have been accruing, a new account is created and the relevant royalties attributed to the account for unidentified performances are transferred to the new account. Adjustments are also made from suspense accounts to copyright owner and artist accounts based

on registrations received during the period between distributions. Bender WDT at 10-11, SX Trial Ex. 75.

8. Distribution

951. This process begins with consolidating allocations across licensees' reports of use within a license category according to earning entity, which are then assigned to copyright owners, artists, or certain other payees (such as a producer who an artist directs SoundExchange to pay) based on the payment instructions for each. Next, the system generates a payment file, which SoundExchange transmits to its banking partner. SoundExchange generally provides each royalty-earning entity with a statement reflecting the performances -- and the licenses under which the sound recordings were performed -- for which the royalty payment is made. When there is a payable balance in a payee's account above the distribution threshold, a check is mailed or funds are electronically transferred. Bender WDT at 11-12, SX Trial Ex. 75.

952. SoundExchange presently conducts distributions at least four times a year for statutorily licensed uses (*i.e.*, performances pursuant to 17 U.S.C. §§ 112(e) and 114) and, at times, for non-statutorily licensed performances for which SoundExchange has collected royalties, typically from foreign performing rights organizations that have money for U.S. performers or copyright owners. Bender WDT at 11, SX Trial Ex. 75.

953. The threshold for distributing royalties to a payee is \$10. Distributing smaller amounts would incur significant additional transaction costs. Every payee with a balance greater than \$10 receives at least an annual distribution.

954. Payments for which SoundExchange lacks sufficient information to distribute to the appropriate copyright owner or performer are allocated to separate accounts in accordance

with 37 C.F.R. § 382.7 (with respect to PSS payments) and § 382.17 (with respect to SDARS payments).

XV. SECTION 112 ROYALTY AND MINIMUM FEE FOR EPHEMERAL COPIES

955. The record in this proceeding unanimously supports SoundExchange's proposal of a bundled rate for both the Sections 112 and 114 rights, five percent (5%) of which shall be allocated as the Section 112 royalty for the making of ephemeral copies.

A. The Stipulation Between the Parties

956. The three parties to this proceeding submitted a joint proposal for a single bundled rate with a percentage attributable to the Section 112 license and a percentage attributable to the Section 114 license. *See Stipulation of SoundExchange, Inc., Sirius XM Radio Inc. and Music Choice Regarding the Royalty and Minimum Fee Payable for the Making of Ephemeral Recordings* (May 25, 2012).

957. When the parties in *Webcasting III* submitted a similar stipulation concerning the ephemerals rate, the CRJs accepted and adopted the stipulation as settling the issue, noting that there was no objection to the stipulation and evidence to support it. *See* 76 Fed. Reg. at 13027. The same holds true here – no party objects to the stipulation and (as set forth below) there is evidence to support it. SoundExchange thus asks that the parties' stipulation be accepted and adopted.

958. The stipulation proposes that royalty payments should be allocated between the Section 112 license and the Section 114 license by substantially the following regulatory language:

“The royalty payable under 17 U.S.C. 112(e) for the making of phonorecords used by the Licensee solely to facilitate transmissions for which it pays royalties as and when

provided in this subpart shall be included within, and constitute 5% of, the total royalties payable under 17 U.S.C. 112(e) and 114.”

959. With respect to the SDARS minimum fee, stipulation proposes that it should be governed by substantially the following regulatory language:

“Each Licensee making Ephemeral Recordings pursuant to 17 U.S.C. 112(e) shall make an advance payment of \$100,000 per year, payable no later than January 20th of each year. The annual advance payment shall be nonrefundable, but the Ephemeral Recordings royalties due and payable for a given year or any month therein under [cross reference to bundled royalty rate and ephemerals allocation] shall be recoupable against the annual advance payment for such year; Provided, however, that any unused annual advance payment for a given year shall not carry over into a subsequent year.”

960. With respect to the PSS minimum fee, the stipulation proposes that it should be governed by substantially the following regulatory language:

“Each Licensee making a digital performance of sound recordings pursuant to 17 U.S.C. 114 and Ephemeral Recordings pursuant to 17 U.S.C. 112(e) shall make an advance payment of \$100,000 per year, payable no later than January 20th of each year. The annual advance payment shall be nonrefundable, but the royalties due and payable for a given year or any month therein under [cross reference to bundled royalty rate] shall be recoupable against the annual advance payment for such year; Provided, however, that any unused annual advance payment for a given year shall not carry over into a subsequent year.”

B. Evidence Supports the Stipulation.

961. Evidence in the record supports the terms of the parties’ stipulation.

1. Ephemeral Copies Have Value

962. As an initial matter, “PSS and SDARS must have both the ephemeral copy right as well as the performance right in order to operate their services.” Ford WDT at 6, SX Trial Ex. 79. Accordingly, Dr. Ford concluded that “ephemeral copies have economic value to services that publicly perform sound recordings because these services cannot as a practical matter properly function without those copies.” Ford WDT at 5-6, SX Trial Ex. 79.

C. The Ephemeral Royalty Typically Is Bundled with the Correlative Section 114 Royalty and Is Expressed as a Percentage Thereof.

963. Historically,

in the marketplace deals between record companies and music services, such as webcasters, for non-statutory forms of licenses, it is typical for ephemeral copy rights to be expressly included among the grant of rights provided to the services. Most these agreements do not set a distinct rate for those ephemeral copies, incorporating them instead into the overall rate that the music services pay for the combined ephemeral copy rights and performance rights.

Ford WDT at 6, SX Trial Ex. 79.

964. Bryan also explained that, although WMG grants the ephemeral right and the performance right separately in its marketplace agreements, “we do not set different license fees for the rights.” Rather, he testified that “our agreements contain blended rates that compensate WMG for all of the licensed uses of our sound recordings.” Bryan WDT at 16, SX Trial Ex. 66.

965. In turn, Dr. Ford observed that “marketplace benchmarks show that the royalty rate for ephemeral copies, if directly established, is almost always expressed as a percentage of the overall royalty rate for combined activities under Sections 112 and 114.” Ford WDT at 6, SX Trial Ex. 79. In this regard, the “marketplace has spoken with near unanimity in structuring the Section 112(e) ephemeral reproduction license as a percentage of the Section 114

performance royalty where such performance royalty is established.” Ford WDT at 8, SX Trial Ex. 79.

966. As Dr. Ford explained, there are “numerous voluntary agreements between willing buyers and willing sellers in which the rate for the ephemeral reproduction license was expressed as a percent of the performance royalty.” Ford WDT at 8, SX Trial Ex. 79. He described as one specific example as “an agreement between a major record label and a webcaster that covered ad-supported internet radio service, subscription radio service, and on-demand streaming and recited the parties’ agreement that 10% of the royalty payments made under the agreement shall be designated as payment for ephemeral copies.” Ford WDT at 7, SX Trial Ex. 79.

D. The Results of the Negotiation Between the Record Companies and the Artists Represents the Appropriate Marketplace Rate.

967. As Dr. Ford explained, “the willing buyer/willing seller market analysis suggested by Section 112(e) for ephemeral rates must reflect th[e] statutory alteration to the market dynamics whereby the artists and the record companies jointly have a real interest in negotiating the Section 112(e) rate while the PSS and SDARS (as the willing buyers) do not.” Ford WDT at 9, SX Trial Ex. 79.

968. More specifically, where (as they have been everywhere) the Sections 112 and 114 royalties are bundled, the willing buyer/willing seller *rate* required by statute is that bundled rate. The *allocation* of that bundled rate between the Sections 112 and 114 rights that would obtain in a willing buyer/willing seller transaction, however, would be the allocation negotiated not with the webcasting services, but between the copyright owners and the artists. As Dr. Ford explained, “the only actors in the hypothetical three-party market established by the statute – PSS/SDARS, record companies, and artists - that have any economic interest in the measure of

that allocation are the artists and the copyright owners.” Ford WDT at 6, SX Trial Ex. 79. Thus, “SoundExchange’s proposals in *SDARS I* and *Webcasting III* as to that allocation, both of which were adopted by the Judges, are the best measure of how a willing buyer and a willing seller would allocate royalty payments between performance royalties and ephemeral copies, and would value the ephemeral license in the course of a marketplace negotiation for public performances.” Ford WDT at 6, SX Trial Ex. 79.

969. Bryan reiterated this point, explaining that “the only parties that I am aware of that have expressed a strong position on the value of the ephemeral right are the artist representatives within SoundExchange.” Bryan WDT at 16, SX Trial Ex. 66.

970. And, of course, the fact that Sirius XM and Music Choice have agreed to the allocation arrived at by the artists and copyright owners essentially proves the point. *See Stipulation of SoundExchange, Inc., Sirius XM Radio Inc. and Music Choice Regarding the Royalty and Minimum Fee Payable for the Making of Ephemeral Recordings* (May 25, 2012).

971. The “best indication of the proper allocation of royalties” is an “agreement between the record companies and the artists.” Ford WDT at 10, SX Trial Ex. 79. The evidence shows that “recording artists and record companies have determined that the royalty rate for the Section 112 license should be five percent (5%) of the bundled royalties under Section 112(e) and 114,” which essentially is the same evidence that formed the basis of the stipulation in *Webcasting III*, which the CRJs adopted. Ford WDT at 10, SX Trial Ex. 79.

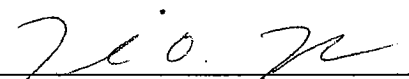
972. As a result, the stipulation “credibly represents the result that would in fact obtain in a hypothetical marketplace negotiation between a willing buyer and the interested willing sellers under the relevant constraints.” Ford WDT at 10, SX Trial Ex. 79.

973. In the end, the Register made clear in its 2008 review of the *SDARS* decision that nothing prohibits the Copyright Royalty Judges from bundling the Section 114 and 112 royalties where they specify the percentage that is attributable to each license. *Review of Copyright Royalty Judges Determination*, 73 Fed. Reg. at 9143 (Feb. 19, 2008). The Judges adopted the same rate structure in the resolution of the remand of the *SDARS* proceeding, Docket No. 2006-1 CRB DSTRA, with 5% of the bundled royalty attributable to the Section 112 license and 95% attributable to the Section 114 license. *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, 75 Fed. Reg. 5513 (Feb. 3, 2010); *see also Digital Performance Right in Sound Recordings and Ephemeral Recordings for a New Subscription Service*, 75 Fed. Reg. 14074 at 14075 (adopting the same rate structure in Docket No. 2009-2 CRB New Subscription II). Similarly, the parties' similar stipulation was adopted in *Webcasting III*. The record in this proceeding provides every reason to follow that same approach here and no reason to deviate from it.

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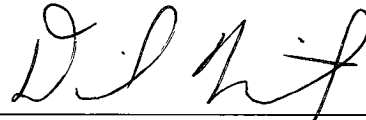
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September 26, 2012

CERTIFICATE OF SERVICE

I, David Moskowitz, do hereby certify that copies of the foregoing **Proposed Findings of Fact and Conclusions of Law of SoundExchange, Inc. (Public Version)** were sent via electronic mail and First Class mail on the 1st day of October 2012, to the following:

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