

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

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<b>In re</b>	)	
	)	
<b>DETERMINATION OF ROYALTY</b>	)	<b>Docket No. 14-CRB-0001-WR (2016-2020)</b>
<b>RATES AND TERMS FOR</b>	)	
<b>EPHEMERAL RECORDING AND</b>	)	
<b>DIGITAL PERFORMANCE OF</b>	)	
<b>SOUND RECORDINGS (<i>WEB IV</i>)</b>	)	
	)	

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 REBUTTAL STATEMENT OF PANDORA MEDIA, INC.**

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# PUBLIC VERSION

Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
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In re )  
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 DETERMINATION OF ROYALTY ) Docket No. 14-CRB-0001-WR (2016-2020)  
 RATES AND TERMS FOR )  
 EPHEMERAL RECORDING AND )  
 DIGITAL PERFORMANCE OF )  
 SOUND RECORDINGS (*WEB IV*) )  
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INTRODUCTORY MEMORANDUM TO THE  
WRITTEN REBUTTAL STATEMENT OF  
PANDORA MEDIA, INC.

Pandora Media, Inc. (“Pandora”) is pleased to present its written rebuttal statement and First Amended Proposed Rates and Terms to the Judges. Pandora’s rebuttal statement includes four witness statements responding to the written direct statement of SoundExchange, Inc. (“SoundExchange”), each of which is summarized below.

**INTRODUCTORY STATEMENT**

Issue is now squarely joined concerning the most appropriate benchmark for rate-setting in this proceeding. The contrasting positions are stark. SoundExchange, chiefly through the testimony of Professor Daniel Rubinfeld, takes the position – as it has in nearly every CRB proceeding since *Web II* – that the appropriate benchmark for *non-interactive statutory licensees* is the licenses between major recording companies and *interactive, on-demand streaming services* such as Spotify and Rhapsody. In contrast, Pandora endorses benchmarks reflecting direct licenses entered into in this very statutory market, that is, between individual record companies and the very statutory licensees involved here for the very same rights to be valued in this proceeding. For multiple reasons systematically addressed in Professor Carl Shapiro’s

rebuttal economic testimony, an evaluation of the comparative merits of these competing approaches leads to a one-sided conclusion.

In both the *Web III* and *Satellite II* Determinations, the Judges rightfully noted the limited usefulness of the interactive service benchmark. In *Satellite II*, the Judges did “not find that the market for interactive subscription streaming services as characterized by Ordover in this proceeding offers a foundation to support a comparable benchmark from which to begin an analysis of reasonable rates for SDARS for the upcoming license period.” 78 Fed. Reg. 23,054, 23,065 (Apr. 17, 2013). In the *Web III Remand*, the Judges found the benchmark to be of “some, albeit limited assistance in determining the royalty rate in the noninteractive market.” 79 Fed. Reg. at 23118 (Apr. 25, 2014). Nothing SoundExchange argues here overcomes the shortcomings in the interactive service benchmark that led to these prior criticisms. Indeed, the record developed here serves only to confirm the inappropriateness of relying upon that benchmark in determining rates to govern statutory licensees’ digital transmissions of sound recordings for the 2016-2020 period.

Recognizing its frailties, SoundExchange attempts to resuscitate the interactive services benchmark via the argument – reiterated nearly verbatim in every piece of its direct-phase testimony – that statutory webcasters and on-demand services are “converging” in the marketplace, such that listeners to statutory services, were such services to disappear, would instead flock in large numbers to interactive subscription services like Spotify and Rhapsody. The leap of factual and economic faith that undergirds this theory and leads SoundExchange to its Promised Rate-Land is the notion that if services like Pandora are a substitute for Spotify, such statutory services should pay the same rates as Spotify. The problem with this construct is its utter lack of support, factually or economically.

Documents from the files of the record companies themselves tell an entirely different story: There exists a broad pool of users who are content with “lean-back” services – in the past terrestrial radio, now Internet radio – who never did and never will be willing to pay for music, certainly not the \$9.99/month charged by interactive services. Those willing to subscribe to an interactive service constitute a small and distinct group of “avid” music listeners. The record industry recognizes that any suggestion that such listeners would do so if free services like Pandora were not available is fantasy. [REDACTED]

[REDACTED]

[REDACTED]

Lest there be any doubt, Pandora retained leading research firm Edison Research to conduct a survey of consumers addressing this convergence thesis. That survey, the results of which are presented by Edison President Larry Rosin, confirms what the labels already know: that time spent listening to Pandora and other statutory services is time that used to be spent on terrestrial radio (or is new listening time); that consumers’ willingness to pay for on-demand services is very low, not only at \$9.99, but even at \$4.99 or \$2.99; and that if free services went away, the vast majority of users of such services wouldn’t subscribe to Spotify or other on-demand services but would go back to terrestrial radio or listen to music less. The Edison study also shows that many subscribers to on-demand services also listen to Internet radio services such as Pandora and iHeart radio – leading to the opposite conclusion from that SoundExchange seeks to establish: statutory and on-demand services are *complements*, not substitutes for one another.

SoundExchange’s direct case offers a closely related argument equally bereft of factual or economic support: that Internet radio is allegedly replacing listening to paid forms of music (a

so-called shift from “ownership” to “access”), and that it is somehow the duty of statutory webcasters to make up for the shortfall in record sales through the Judges levying dramatically increased statutory royalties. But SoundExchange offers not a stitch of evidence, save for naked assertions, that webcasters have *caused* the decline which SoundExchange now expects them to compensate for. To the contrary, as described by Pandora rebuttal witnesses Professor Carl Shapiro and Dr. Steven Peterson, the documentary evidence from the record industry’s own files and statements from their own mouths (or their counsel’s) again tell a different story: namely, that [REDACTED] What is more, even were the advent of Internet radio the “cause” of declining record sales, no sound principle of economics guarantees prior levels of success to entities whose fortunes are adversely influenced by advances in technology, changes in consumer preference, and the like.

SoundExchange’s clinging onto the interactive services benchmark suffers an even more fundamental flaw, as exposed by further record company admissions and explained by Professor Shapiro. In its *Web III Remand*, the Judges expressed concern over the circumstance in which the repertories of all of the major record labels were required by a licensee, such that the repertories were “necessary complements” and “each record company would have an incentive to charge a monopoly price to maximize its profits without concern for the impact on the market writ large.” 79 Fed. Reg. at 23114. The record of this proceeding – attested to by the record industry itself – indicates precisely that circumstance in relation to the major record companies’ dealings with interactive services. In submissions to the Federal Trade Commission in support of the merger of UMG’s recorded music business with that of EMI, [REDACTED]

[REDACTED]

[REDACTED]. Adopting the terminology used by the Judges in the *Web III Remand*, [REDACTED]

The implications of these admissions for the viability of SoundExchange’s rate model are profound. The role of the Judges is to set rates that approximate those that a willing buyer would pay a willing seller in an effectively competitive marketplace. *See Web III Remand*, 79 Fed. Reg. at 23114 n.37. If, as is now conceded, the licensing observed in the interactive services market in completely non-competitive – if it affords “each record company [the] incentive to charge a monopoly price to maximize its profits” – utilization of the fruits of that licensing experience as a benchmark here is completely inappropriate. Although he authored submissions to the FTC on the record industry’s behalf acknowledging these market realities, Professor Rubinfeld’s direct testimony is notably silent as to its implications here. Professor Shapiro’s rebuttal testimony fills that credibility gap. Professor Shapiro also catalogues the many other shortcomings of Professor Rubinfeld’s testimony.

Professor Shapiro contrasts the ill-fit of the interactive services benchmark with the much closer fit of the direct license experience of both Pandora and iHeartMedia as benchmarks here. Those licenses involve the precise rights that are the subject of this proceeding, negotiated between the very willing buyers and sellers whose interests are at stake in this proceeding. Professor Shapiro points out that, in contrast to the lot of the interactive services, statutory licensees like Pandora have greater ability to “steer” their usage (*i.e.*, determine the frequency of plays) of the repertoires of record labels, including the majors, without adverse effects. This places them on a footing that would be expected (barring the sorts of market-distorting

disincentives on the part of the record labels now present that Professor Shapiro also addresses) to induce more price competition between and among record labels for plays on such services in a workably competitive marketplace.

Professor Shapiro also responds to Professor Rubinfeld's effort to diminish the force of the direct license agreements as supposedly tainted by the "shadow of" the statutory license. He points out that Professor Rubinfeld's analysis is exactly backwards – that the effect of the statutory license on the observed transactions, if anything, is to *elevate* the rates paid above competitive levels, not vice versa.

The rebuttal testimony of Pandora CFO Mike Herring puts the lie the contention by Dr. David Blackburn and other SoundExchange witnesses that Pandora's current financial state is the result of self-inflicted wounds and that Pandora could improve its financial performance simply by selling more ads. Mr. Herring details both the careful attention and tremendous amount of money that Pandora has paid (and continues to pay) to grow to a size (especially in local markets) where it can compete with terrestrial radio for advertising dollars, and to invest in the systems and sales force needed to make such ad sales. Mr. Herring's testimony recounts the complexity of developing a sustainable, long-term advertiser-supported webcasting service in a strongly competitive environment. That testimony exposes the fallacies in Dr. Blackburn's and SoundExchange's record-label witnesses' factually erroneous claims and simplistic suggestion that Pandora could simply sell more ads – and presumably cover the dramatic rate increases proposed by SoundExchange – without any harm to Pandora's financial performance or future profitability. Mr. Herring also addresses SoundExchange's proposed terms, most notably the fact that SX proposes a revenue definition that would impermissibly sweep in a vast amount of activity unrelated to performances covered by the statutory license.

Economist Dr. Steven Peterson, jointly sponsored by NAB and Pandora, also responds to the testimony of SoundExchange witness Dr. Blackburn, who labors to demonstrate that existing royalty rates (and, by implication, SoundExchange's rate proposal here) have somehow led to a flourishing Internet radio industry. Dr. Peterson reveals, among other shortcomings in Dr. Blackburn's testimony, that the supposed growth in the Internet radio market identified by Dr. Blackburn has occurred primarily in segments that pay less than the commercial statutory rates: Dr. Blackburn's numbers are dominated by noncommercial services and others paying only minimum fees. Dr. Peterson supplements Mike Herring in dismantling the contentions that Pandora's current unprofitability is a self-inflicted wound and that Pandora, if it wanted, could simply ramp up advertising sales to cover any royalty increase without adverse economic consequence to Pandora's health or long-term viability.

Dr. Peterson also explains in his rebuttal testimony why the testimony of SoundExchange witness Professor Daniel McFadden provides no support to Professor Rubinfeld's attempt to adjust the interactive service benchmark. As Dr. Peterson explains, Professor McFadden's "willingness to pay" estimates (in addition to being lower than the market price of the services at issue) actually measure a different bundle of features than the retail price ratio calculated by Professor Rubinfeld. Any similarity between the two is mere happenstance.

### **SUMMARY OF TESTIMONY**

In support of the foregoing, Pandora's rebuttal witnesses will testify as follows:

#### **Michael Herring**

Mike Herring is Pandora's Chief Financial Officer, and also testified in the direct phase of this proceeding. Mr. Herring's rebuttal testimony principally responds to the testimony of SoundExchange's economist Dr. Blackburn and several of SoundExchange's fact witnesses



which suggests that Pandora is artificially limiting its advertising inventory and revenue, and deferring short-term profitability, in favor of growing its user base. Mr. Herring explains that SoundExchange's contentions in this regard are flawed for a number of reasons.

First, Mr. Herring testifies that SoundExchange's proffer of evidence ignores the fact that under its per-play royalty formulation, Pandora pays hundreds of millions of dollars in sound recording performance royalties, irrespective of its revenues. Second, SoundExchange fails to capture the complex real-world considerations that Pandora must take into account in determining the optimal, revenue-maximizing level of advertisements on its service. That is, a larger number of advertisements results in both fewer payable performances and less ad revenue (against fewer listener hours, to the extent listeners leave Pandora's service), meaning fewer dollars flowing to SoundExchange. Finally, SoundExchange's critique of Pandora's business strategy misapprehends the realities of business economics for an ad-supported Internet radio service, and fails to grasp the challenges Pandora has faced, and continues to face, in achieving long-term profitability and value. In this regard, Mr. Herring's rebuttal testimony explains: (i) to the extent Pandora might be seen to have foregone short-term profits, it has done so to grow its audience and build its sales organization, which in turn has enabled Pandora to attract the type of high-value advertising that will contribute to its long-term profitability; (ii) contrary to SoundExchange's contentions, there is a clear and meaningful difference between listener desires for lean-back services (such as Pandora) and lean-in services (such as Spotify), and listeners' use of the former do not cannibalize the latter. In sum, Mr. Herring testifies that, in his opinion, Pandora's proposed rates in this proceeding best represent the rates that will permit Pandora to continue to invest in the scale, systems, and staff required to monetize its audience.

Mr. Herring's rebuttal testimony also responds to SoundExchange's contention that the license agreements between interactive services and the major record labels serve as the appropriate benchmark for the statutory license rates for non-interactive services like Pandora. Contrary to SoundExchange's proffer, Mr. Herring explains that Pandora's direct license with Merlin, and the newly-executed license with Naxos, reflect the workings of competition in the market for sound recording performance rights. [REDACTED]

[REDACTED]

To date, Pandora has succeeded in increasing directly-licensed spins of Merlin recordings by [REDACTED], resulting in an effective rate under the Merlin license of [REDACTED] per ad-supported play;

[REDACTED]

[REDACTED].

Mr. Herring also responds to the suggestion of several SoundExchange fact witnesses that recording artists are not being fairly compensated at the royalty rate Pandora currently pays for sound recording performances. Mr. Herring testifies that, under the rates it currently pays – and not SoundExchange's proposed "strong" (*i.e.*, significantly higher) rates – Pandora pays significant sums to recording artists. Accordingly, Mr. Herring testifies that Pandora's more than [REDACTED] in annual payments overall and its indisputably generous payments to the most productive artists and labels belies the notion that sound recording artists are under-compensated under Pandora's prevailing rate structure.

Finally, Mr. Herring responds to SoundExchange's proposed revisions to the terms and definitions that govern statutory licensees like Pandora. In this regard, Mr. Herring explains that SoundExchange's proposed revised definition of Gross Revenues includes numerous categories of revenue that the Judges have previously (and rightly) excluded, all of which are unrelated to

Pandora's webcasting service, and some of which are never collected in the first instance. Mr. Herring further testifies that SoundExchange's proposals concerning the ephemeral recordings definition, provisions concerning accelerated timing of royalty payments, provisions concerning verification of royalty payments, and provisions concerning unclaimed funds are inappropriate.

**Carl Shapiro**

Professor Carl Shapiro, Transamerica Professor of Business Strategy at the Haas School of Business at the University of California at Berkeley, presented testimony in the first phase of this proceeding establishing the economic basis for Pandora's rate proposal. In his rebuttal testimony, Professor Shapiro responds to SoundExchange's rate proposal and the justifications presented in support thereof – focusing primarily on the direct testimony of Professor Rubinfeld. Professor Shapiro first explains that the analytic framework embraced by Professor Rubinfeld is fundamentally flawed, as it utterly fails to address a critical threshold question – whether the market in which the benchmark agreements are negotiated is workably competitive. When the state of competition in Professor Rubinfeld's preferred benchmark market – that in which interactive services secure the necessary rights to perform sound recordings – is analyzed, it becomes abundantly clear that that market is fatally infected with the market power of the major labels. This is because, as Professor Rubinfeld and the clients he represents have conceded, the interactive benchmark market is one dominated by multiple “must have” sellers. As the Copyright Royalty Judges have recognized, under such circumstances, the rates secured by the record labels will be even higher than the rates that would arise in a market monopolized by a single record company. This finding alone renders the interactive benchmark unusable.

Professor Shapiro then goes on to explain that even were one to work within Professor Rubinfeld's incomplete framework, the interactive service benchmark still suffers from

significant drawbacks – drawbacks that Professor Rubinfeld entirely ignores. As Professor Shapiro explains, the interactive services are fundamentally different from statutory webcasters as buyers of rights to perform sound recordings. First, statutory webcasters have a much greater ability than do interactive services to adjust the mix of the music they play in response to differences in the royalty rates charged by different record companies. Second, statutory webcasters are more promotional of music sales, on net, than are interactive services. Accounting for these differences would lead to dramatically lower rates paid by statutory webcasters than are paid by interactive services. Yet, rather than make any effort to account for, or even consider, these obvious and critical differences, Professor Rubinfeld simply ignores them. Where Professor Rubinfeld does attempt to address differences between the interactive services and statutory webcasters, his efforts, as Professor Shapiro explains, are economically meaningless and result in vastly overstated rates.

Professor Shapiro then goes on to explain that Professor Rubinfeld’s analysis of the impact that the “shadow” of the statutory license has on agreements negotiated between record labels and statutory webcasters is deeply flawed. Indeed, Professor Rubinfeld has it exactly backwards. As Professor Shapiro explains, Professor Rubinfeld’s conclusion that the rates negotiated between statutory webcasters and record labels are below the competitive rate is based on a significant error. Correcting for this error leads to the opposite result: these agreements result in rates that are above the competitive rate. Not only does this correction eliminate Professor Rubinfeld’s primary objection to using agreements negotiated between statutory webcasters and record labels, it also demonstrates that Pandora’s own rate proposal is conservative – it is above the competitive rate.

Finally, Professor Shapiro addresses two additional assertions raised by SoundExchange in an effort to support its fee proposal, namely, that the interactive services and statutory webcasters are “converging” and that high royalty rates are necessary to make up for the decline in record company revenues – a decline that SoundExchange asserts was caused by the statutory webcasters. As Professor Shapiro explains, both of these assertions are factually incorrect. In addition, even were there some merit to either of these claims, which there is not, they are both entirely disconnected from the willing buyer / willing seller standard that both Professor Rubinfeld and Professor Shapiro embrace. Accordingly, both of these assertions are entirely irrelevant to the rate-setting task at hand.

### **Larry Rosin**

Larry Rosin is the president and co-founder of Edison Research (“Edison”), a leading survey research company. His rebuttal testimony responds to assertions made by SoundExchange witnesses that: (i) there is a purported “convergence” between on-demand music services like Spotify and Rhapsody and non-interactive Internet radio-type services like Pandora and iHeartMedia; and (ii) non-interactive services are inhibiting the growth of paid on-demand online services. At Mr. Rosin’s direction and under his supervision, Edison conducted a survey in January 2015 to gather data on usage of various kinds of music services, on whether on-demand services and non-interactive services are substitutes or serve different functions, and on consumers’ willingness to pay for access to music from different types of digital music services (the “2015 Music Survey”).

As Mr. Rosin explains, the 2015 Music Survey shows that the market for paid, on-demand music services is limited. The overwhelming majority of consumers are “not at all likely” or “not very likely” to pay the current monthly rate of \$9.99 for an on-demand music

service. Even at substantially reduced prices, the market for such on-demand services remains quite limited. Mr. Rosin explains that, when asked, most consumers indicated that if free online music services were no longer available, they would revert to listening to free, over-the-air broadcast radio stations, watch music videos or listen to music on YouTube or Vevo, or simply listen to less music. Only 9% of users of free online music services would choose to pay a fee to subscribe to an on-demand online service in those circumstances.

Additionally, Edison's 2015 Music Survey demonstrates that almost none of the time that consumers spend listening to non-interactive online services is replacing time those consumers previously were spending listening to an on-demand service. Most of the time consumers spend listening to non-interactive services is either time they would have spent listening to terrestrial radio or it is new time that would not have been spent listening to any music at all.

Mr. Rosin concludes that consumers overwhelmingly prefer free "lean-back" services like Pandora and broadcast radio, and only a small group of avid music fans rely primarily on on-demand options. He finds no support for the suggestion from SoundExchange and its witnesses that Pandora and other non-interactive services are significantly inhibiting uptake of on-demand services; his research demonstrates otherwise.

**Steven R. Peterson**

Steven R. Peterson, Ph.D. is an Executive Vice President at Compass Lexecon, an economics consulting firm that specializes in the economics of competition, finance, and regulation. His rebuttal testimony – jointly sponsored by Pandora and NAB – addresses the direct-phase testimony of SoundExchange witnesses Dr. Blackburn, Professor McFadden, and Professor Rubinfeld.

With respect to Dr. Blackburn's testimony, Dr. Peterson reveals that Dr. Blackburn's claims that the statutory webcasting industry is healthy and that it is unlikely that commercial statutory license rates are "choking off growth" not only are premised on an economically incoherent standard, but are simply untrue: Dr. Blackburn's webcaster counts and analysis of survival rates cannot support his conclusions regarding the commercial statutory rates because they include hundreds of webcasters who pay only the minimum license fees or are subject to rates that are significantly below the commercial statutory rates. Dr. Peterson also refutes Dr. Blackburn's suggestion that if ad-supported statutory webcasters were less attractive, many of the listeners leaving them would sign up for services with a monthly fee, explaining that Dr. Blackburn's analysis fails to account for other sources of competition to both free custom services like Pandora and to subscription streaming services. Finally, Dr. Peterson addressed Dr. Blackburn's claim that Pandora has intentionally delayed its profitability and could increase such profitability to cover royalty increases if it desired – including by simply selling more advertisements. Dr. Blackburn offers no evidence that Pandora has not acted to maximize its profits or has acted sub-optimally, leaving money on the table. Moreover, Dr. Blackburn fails to account for the fact that cost increases – including those occasioned by the ad-load increases he advocates for Pandora – always lead to reduced profitability and lower incentives to invest in the future.

With respect to Professor McFadden's testimony, Dr. Peterson explains that the average estimates of willingness to pay calculated by Professor McFadden's study mask the divergent willingness to pay of individual consumers – many of whom do not just have a low willingness to pay for many features of music streaming, but a *negative willingness to pay*. Dr. Peterson also reveals that Professor McFadden's "willingness to pay" estimates (in addition to being lower

than the market price of the services at issue) actually measure a different bundle of features than the retail price ratio calculated by Professor Rubinfeld – and thus lend no support whatsoever to Professor Rubinfeld’s interactivity adjustment. As such, Professor McFadden’s study is entirely irrelevant to SoundExchange’s case.

February 23, 2015

Respectfully submitted,

Handwritten signature of R. Bruce Rich in cursive, followed by a slash and the initials 'SP'.

R. Bruce Rich (N.Y. Bar No. 1304534)

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**FIRST AMENDED PROPOSED RATES AND TERMS OF PANDORA MEDIA, INC.**

Pursuant to 37 C.F.R. § 351.4(b)(3), Pandora Media, Inc. (“Pandora”) proposes the following range of rates for subscription and nonsubscription commercial webcasters under the statutory license provided by 17 U.S.C. § 114, together with the making of ephemeral recordings necessary to facilitate such transmissions under the statutory license provided by 17 U.S.C. § 112(e) during the period January, 1, 2016 through December 31, 2020:

**A. Low End of Proposed Range**

A royalty equal to the greater of (i) or (ii) below:

(i) A usage-based royalty computed on a per-performance basis as follows:

YEAR	PER NONSUBSCRIPTION PERFORMANCE	PER SUBSCRIPTION PERFORMANCE
2016	\$0.00110	\$0.00215
2017	\$0.00112	\$0.00218
2018	\$0.00114	\$0.00222
2019	\$0.00116	\$0.00226
2020	\$0.00118	\$0.00230

(ii) 25% of Revenue from Eligible Transmissions.

**B. High End of Proposed Range**

A royalty equal to the greater of (i) or (ii) below:

(i) A usage-based royalty computed on a per-performance basis as follows:

YEAR	PER NONSUBSCRIPTION PERFORMANCE	PER SUBSCRIPTION PERFORMANCE
2016	\$0.00120	\$0.00224
2017	\$0.00123	\$0.00228
2018	\$0.00125	\$0.00232
2019	\$0.00127	\$0.00236
2020	\$0.00129	\$0.00240

(ii) 25% of Revenue from Eligible Transmissions.

Pandora proposes that the combined Section 112/114 royalty described above be allocated 5% to Section 112 and 95% to Section 114, in the manner presently set forth in 37 C.F.R. § 380.3(c).

The attached proposed rates and terms provide more detail on the applicable definitions of “Performance” and “Revenue” (among others), an appropriate credit for directly licensed sound recording performances, and the allocation of license fees between the Section 114 and 112 licenses, along with other generally technical and conforming changes to the existing regulations discussed in the written direct and rebuttal testimony of Pandora CFO Mike Herring. Other than the changes shown below in redline, Pandora proposes that the terms currently set forth in 37 C.F.R. § 380 be continued.

37 C.F.R. PART 380  
[PROPOSED CHANGES IN REDLINE]

SUBPART A – RATES AND TERMS FOR COMMERCIAL WEBCASTERS AND  
NONCOMMERCIAL WEBCASTERS

...

§ 380.2 Definitions.

For purposes of this subpart, the following definitions shall apply:

...

*Commercial Webcaster* is a Licensee, other than a Noncommercial Webcaster, that makes eligible digital audio transmissions of sound recordings pursuant to the statutory licenses under 17 U.S.C. 112 and 114.

...

*Eligible Transmission* is a subscription or nonsubscription transmission made by Licensee that is subject to licensing under 17 U.S.C. §114(d)(2) and the payment of royalties under 37 C.F.R. Part 380.

...

*Performance* is each instance in which any portion of a sound recording is publicly performed to a listener in the United States by means of a digital audio transmission ~~(e.g., the delivery of any portion of a single track from a compact disc to one listener).~~ but excluding the following:

- (1) A performance of a sound recording that does not require a license (e.g., a sound recording that is not copyrighted);
- (2) A performance of a sound recording for which the service has previously obtained a license from the Copyright Owner of such sound recording; and
- (3) An incidental performance that both:
  - (i) Makes no more than incidental use of sound recordings including, but not limited to, brief musical transitions in and out of commercials or program segments, brief performances during news, talk and sports programming, brief background performances during disk jockey announcements, brief performances during commercials of sixty seconds or less in duration, or brief performances during sporting or other public events, and
  - (ii) Other than ambient music that is background at a public event, does not contain an entire sound recording and does not feature a particular sound recording of more than thirty seconds (as in the case of a sound recording used as a theme song).

...

Revenue is all money earned by Licensee consistent with Generally Accepted Accounting Principles (“GAAP”) which is derived by the Licensee from making Eligible Transmissions in the United States, and shall be comprised of the following:

(a) Subscription revenue earned by Licensee directly from U.S. subscribers for making Eligible Transmissions; and

(b) Licensee's advertising revenues, or other monies received from sponsors, if any, attributable to advertising on channels making Eligible Transmissions, other than those that use only incidental performances of sound recordings, less advertising agency and sales commissions.

For the avoidance of doubt, Revenue shall exclude revenue from activities other than making Eligible Transmissions, as well as sales and use taxes, shipping and handling, credit card, invoice, and fulfillment service fees.

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§ 380.3 Royalty fees for the public performance of sound recordings and for ephemeral recordings.

(a) **Royalty rates.** Royalty rates ~~and fees~~ for ~~e~~Eligible ~~digital~~ ~~T~~ransmissions of sound recordings made pursuant to 17 U.S.C. 114, and the making of ephemeral recordings pursuant to 17 U.S.C. 112(e) are as follows:

~~(1) **Commercial Webcasters:** For all digital audio transmissions, including simultaneous digital audio retransmissions of over the air AM or FM radio broadcasts, and related Ephemeral Recordings, a Commercial Webcaster will pay a royalty of: \$0.0019 per performance for 2011; \$0.0021 per performance for 2012; \$0.0021 per performance for 2013; \$0.0023 per performance for 2014; and \$0.0023 per performance for 2015.~~

(1) **Commercial Webcasters:** (a) For all Eligible Transmissions and related Ephemeral Recordings, a royalty equal to the greater of (i) or (ii) below:

(i) A usage-based royalty computed on a per-performance basis as follows:

<u>YEAR</u>	<u>PER NON-SUBSCRIPTION PERFORMANCE</u>	<u>PER SUBSCRIPTION PERFORMANCE</u>
<u>2016</u>	<u>\$0.00110</u>	<u>\$0.00215</u>
<u>2017</u>	<u>\$0.00112</u>	<u>\$0.00218</u>
<u>2018</u>	<u>\$0.00114</u>	<u>\$0.00222</u>
<u>2019</u>	<u>\$0.00116</u>	<u>\$0.00226</u>
<u>2020</u>	<u>\$0.00118</u>	<u>\$0.00230</u>

(ii) 25% of Revenue from Eligible Transmissions.

(b) The determination of whether Licensee shall pay according to (a)(i) or (ii) above for a given payment period shall be made with respect to all Performances, regardless of whether Licensee has licensed any such Performances directly from the copyright owner or an agent of the owner.

If, after such determination, Licensee is subject to subparagraph (i), it need not make a payment under this Section for any directly licensed Performances or Performances of sound recordings fixed before February 15, 1972.

If, after such determination, Licensee is subject to subparagraph (ii), the fee owed may, prior to payment, be reduced by a percentage referred to herein as the “Direct License Share,” which is the result of dividing Licensee’s Performances of directly-licensed recordings by the total number of Licensee’s Performances of all sound recordings during the payment period.

...

**(c) *Ephemeral recordings.*** The royalty payable under 17 U.S.C. 112(e) for the making of all Ephemeral Recordings used by the Licensee solely to facilitate transmissions ~~for which it pays royalties~~made pursuant to 17 U.S.C. 114 shall be included within, and constitute 5% of, the total royalties payable under 17 U.S.C. 112(e) and 114. A Licensee is authorized to make more than one Ephemeral Recording of a sound recording as it deems necessary to make noninteractive digital audio transmissions pursuant to 17 U.S.C. 114.

§ 380.4 Terms for making payment of royalty fees and statements of account.

...

**(e) *Late payments and statements of account.*** A Licensee shall pay a late fee of 1.5% per month, or the highest lawful rate, whichever is lower, for any payment ~~and/or~~ statement of account received by the Collective after the due date. Late fees shall accrue from the due date until payment and the related statement of account are received by the Collective. A single late fee of 1.5% per month shall be due in the event both a payment and statement of account are received by the Collective after the due date.

**(f) *Statements of account.*** Any payment due under § 380.3 shall be accompanied by a corresponding statement of account. A statement of account shall contain the following information:

...

**(8)** A statement to the following effect:

I, the undersigned owner or agent of the Licensee, or officer or partner, have examined this statement of account and hereby state that it is true, accurate, and complete to my knowledge after reasonable due diligence.

This attestation shall not prevent a Licensee from making good faith revisions or adjustments to its Statements of Account that it later determines to be necessary to accurately reflect its liabilities due under this Subpart.

§ 380.6 Verification of royalty payments.

...

(c) *Notice of intent to audit.* The Collective must file with the Copyright Royalty Judges a notice of intent to audit a particular Licensee, which shall, within 30 days of the filing of the notice, publish in the Federal Register a notice announcing such filing. The notification of intent to audit shall be served at the same time on the Licensee to be audited. Any such audit shall be conducted by an independent and Qualified Auditor identified in the notice, and shall be binding on all parties. Subject to Section 380.6(e), a Qualified Auditor must determine the accuracy of royalty payments made to the collective, including whether an underpayment or overpayment of royalties has been made, and the Qualified Auditor may not be compensated on a contingency fee basis.

...

(h) *Make-up payments or credits.* Upon the conclusion of the verification and the resolution of all claims between the Collective and the Licensee, (i) the Licensee shall, in the case of any underpayment, remit the amount of any agreed-upon underpayment to the Collective, as mutually agreed by the Collective and the Licensee, which agreement may, but need not, include installment payments, with interest, at the rate specified in Section 380.4(e) and (ii) the Collective shall, in the case of any overpayment, credit the account of the Licensee in the amount of any agreed upon overpayment to the Collective, with interest, at the rate specified in Section 380.4(e).

...

§ 380.8 Unclaimed funds.

If the Collective is unable to identify or locate a Copyright Owner or Performer who is entitled to receive a royalty distribution under this subpart, the Collective shall retain the required payment in a segregated trust account for a period of 3 years from the date of distribution. No claim to such distribution shall be valid after the expiration of the 3-year period. After expiration of this period, the Collective shall handle such funds in accordance with ~~may apply the unclaimed funds to offset any costs deductible under 17 U.S.C. 114(g)(3). The foregoing shall apply notwithstanding the~~ applicable common law or ~~statutes of any~~ State law.

37 C.F.R. PART 380 [PROPOSED CHANGES: CLEAN VERSION]

SUBPART A – RATES AND TERMS FOR COMMERCIAL WEBCASTERS AND  
NONCOMMERCIAL WEBCASTERS

...

§ 380.2 Definitions.

For purposes of this subpart, the following definitions shall apply:

...

*Commercial Webcaster* is a Licensee, other than a Noncommercial Webcaster, that makes eligible digital audio transmissions of sound recordings pursuant to the statutory licenses under 17 U.S.C. 112 and 114.

...

*Eligible Transmission* is a subscription or nonsubscription transmission made by Licensee that is subject to licensing under 17 U.S.C. §114(d)(2) and the payment of royalties under 37 C.F.R. Part 380.

...

*Performance* is each instance in which any portion of a sound recording is publicly performed to a listener in the United States by means of a digital audio transmission, but excluding the following:

- (1) A performance of a sound recording that does not require a license (*e.g.*, a sound recording that is not copyrighted);
- (2) A performance of a sound recording for which the service has previously obtained a license from the Copyright Owner of such sound recording; and
- (3) An incidental performance that both:
  - (i) Makes no more than incidental use of sound recordings including, but not limited to, brief musical transitions in and out of commercials or program segments, brief performances during news, talk and sports programming, brief background performances during disk jockey announcements, brief performances during commercials of sixty seconds or less in duration, or brief performances during sporting or other public events, and
  - (ii) Other than ambient music that is background at a public event, does not contain an entire sound recording and does not feature a particular sound recording of more than thirty seconds (as in the case of a sound recording used as a theme song).

...

Revenue is all money earned by Licensee consistent with Generally Accepted Accounting Principles (“GAAP”) which is derived by the Licensee from making Eligible Transmissions in the United States, and shall be comprised of the following:

- (a) Subscription revenue earned by Licensee directly from U.S. subscribers for making Eligible Transmissions; and
- (b) Licensee's advertising revenues, or other monies received from sponsors, if any, attributable to advertising on channels making Eligible Transmissions, other than those that use only incidental performances of sound recordings, less advertising agency and sales commissions.

For the avoidance of doubt, Revenue shall exclude revenue from activities other than making Eligible Transmissions, as well as sales and use taxes, shipping and handling, credit card, invoice, and fulfillment service fees.

...

§ 380.3 Royalty fees for the public performance of sound recordings and for ephemeral recordings.

(a) **Royalty rates.** Royalty rates for Eligible Transmissions of sound recordings made pursuant to 17 U.S.C. 114, and the making of ephemeral recordings pursuant to 17 U.S.C. 112(e) are as follows:

(1) **Commercial Webcasters:** (a) For all Eligible Transmissions and related Ephemeral Recordings, a royalty equal to the greater of (i) or (ii) below:

(i) A usage-based royalty computed on a per-performance basis as follows:

YEAR	PER NON-SUBSCRIPTION PERFORMANCE	PER SUBSCRIPTION PERFORMANCE
2016	\$0.00110	\$0.00215
2017	\$0.00112	\$0.00218
2018	\$0.00114	\$0.00222
2019	\$0.00116	\$0.00226
2020	\$0.00118	\$0.00230

(ii) 25% of Revenue from Eligible Transmissions.

(b) The determination of whether Licensee shall pay according to (a)(i) or (ii) above for a given payment period shall be made with respect to all Performances, regardless of whether Licensee has licensed any such Performances directly from the copyright owner or an agent of the owner.



If, after such determination, Licensee is subject to subparagraph (i), it need not make a payment under this Section for any directly licensed Performances or Performances of sound recordings fixed before February 15, 1972.

If, after such determination, Licensee is subject to subparagraph (ii), the fee owed may, prior to payment, be reduced by a percentage referred to herein as the “Direct License Share,” which is the result of dividing Licensee’s Performances of directly-licensed recordings by the total number of Licensee’s Performances of all sound recordings during the payment period.

...

**(c) *Ephemeral recordings.*** The royalty payable under 17 U.S.C. 112(e) for the making of all Ephemeral Recordings used by the Licensee solely to facilitate transmissions made pursuant to 17 U.S.C. 114 shall be included within, and constitute 5% of, the total royalties payable under 17 U.S.C. 112(e) and 114. A Licensee is authorized to make more than one Ephemeral Recording of a sound recording as it deems necessary to make noninteractive digital audio transmissions pursuant to 17 U.S.C. 114.

§ 380.4 Terms for making payment of royalty fees and statements of account.

...

**(e) *Late payments and statements of account.*** A Licensee shall pay a late fee of 1.5% per month, or the highest lawful rate, whichever is lower, for any payment or statement of account received by the Collective after the due date. Late fees shall accrue from the due date until payment and the related statement of account are received by the Collective. A single late fee of 1.5% per month shall be due in the event both a payment and statement of account are received by the Collective after the due date.

**(f) *Statements of account.*** Any payment due under § 380.3 shall be accompanied by a corresponding statement of account. A statement of account shall contain the following information:

...

**(8)** A statement to the following effect:

I, the undersigned owner or agent of the Licensee, or officer or partner, have examined this statement of account and hereby state that it is true, accurate, and complete to my knowledge after reasonable due diligence.

This attestation shall not prevent a Licensee from making good faith revisions or adjustments to its Statements of Account that it later determines to be necessary to accurately reflect its liabilities due under this Subpart.

...

§ 380.6 Verification of royalty payments.

...

(c) ***Notice of intent to audit.*** The Collective must file with the Copyright Royalty Judges a notice of intent to audit a particular Licensee, which shall, within 30 days of the filing of the notice, publish in the Federal Register a notice announcing such filing. The notification of intent to audit shall be served at the same time on the Licensee to be audited. Any such audit shall be conducted by an independent and Qualified Auditor identified in the notice, and shall be binding on all parties. Subject to Section 380.6(e), a Qualified Auditor must determine the accuracy of royalty payments made to the collective, including whether an underpayment or overpayment of royalties has been made, and the Qualified Auditor may not be compensated on a contingency fee basis.

...

(h) ***Make-up payments or credits.*** Upon the conclusion of the verification and the resolution of all claims between the Collective and the Licensee, (i) the Licensee shall, in the case of any underpayment, remit the amount of any agreed-upon underpayment to the Collective, as mutually agreed by the Collective and the Licensee, which agreement may, but need not, include installment payments, with interest, at the rate specified in Section 380.4(e) and (ii) the Collective shall, in the case of any overpayment, credit the account of the Licensee in the amount of any agreed upon overpayment to the Collective, with interest, at the rate specified in Section 380.4(e).

...

§ 380.8 Unclaimed funds.

If the Collective is unable to identify or locate a Copyright Owner or Performer who is entitled to receive a royalty distribution under this subpart, the Collective shall retain the required payment in a segregated trust account for a period of 3 years from the date of distribution. No claim to such distribution shall be valid after the expiration of the 3-year period. After expiration of this period, the Collective shall handle such funds in accordance with applicable common law or State law.

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

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**In re** )  
 )  
 )  
**DETERMINATION OF ROYALTY** ) **Docket No. 14-CRB-0001-WR (2016-2020)**  
**RATES AND TERMS FOR** )  
**EPHEMERAL RECORDING AND** )  
**DIGITAL PERFORMANCE OF** )  
**SOUND RECORDINGS (*WEB IV*)** )  
 )  

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**INDEX OF WITNESS TESTIMONY  
PANDORA MEDIA, INC.**

<b>Witness</b>	<b>Title</b>
Michael Herring	Chief Financial Officer, Pandora Media, Inc.
Professor Carl Shapiro	Professor of Business Strategy, Haas School of Business, University of California at Berkeley.
Larry Rosin	Co-Founder & President, Edison Research.

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

In re	)	
	)	
	)	
<b>DETERMINATION OF ROYALTY RATES AND TERMS FOR EPHEMERAL RECORDING AND DIGITAL PERFORMANCE OF SOUND RECORDINGS (<i>WEB IV</i>)</b>	)	<b>Docket No. 14-CRB-0001-WR (2016-2020)</b>
	)	
	)	

**INDEX OF REBUTTAL EXHIBITS  
PANDORA MEDIA, INC.**

Exhibit No.	Sponsoring Witness	Description
Pandora Ex. 14	Michael Herring	Interview of Tom Conrad, Pandora’s former Chief Technology Officer, at GigaOM RoadMap 2011, video titled “How People are Driving Music’s Change” (Video).
Pandora Ex. 15	Michael Herring	Sound Recording Direct License Agreement between Pandora Media, Inc. and Naxos of America, Inc., dated January 1, 2015. (RESTRICTED)
Pandora Ex. 16	Michael Herring	Reply Comments of Pandora Media, Inc. in Recordkeeping Rulemaking, dated September 5, 2014.
Pandora Ex. 17	Carl Shapiro	Universal Music Group’s White Paper Concerning Proposed Acquisition and Merger Guidelines, dated July 23, 2012. (Bates No. SNDEX0269104). (RESTRICTED)
Pandora Ex. 18	Carl Shapiro	Letter from Glenn D. Pomerantz to Robert Tovsky, dated June 22, 2012. (Bates No. SNDEX0268978). (RESTRICTED)
Pandora Ex. 19	Carl Shapiro	Presentation to the Federal Trade Commission, titled “Proposed Acquisition by UMG of EMI’s Recorded Music Business,” dated May 10, 2012. (Bates No. SNDEX0268929). (RESTRICTED)
Pandora Ex. 20	Carl Shapiro	Sony Music Presentation, titled “GDB Strategy, SME Curated Music,” undated. (Bates No. SNDEX0214793). (RESTRICTED)

**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
THE LIBRARY OF CONGRESS  
Washington, D.C.**

---

<b>In re</b>	)	
	)	
	)	
<b>DETERMINATION OF ROYALTY RATES AND TERMS FOR EPHEMERAL RECORDING AND DIGITAL PERFORMANCE OF SOUND RECORDINGS (<i>WEB IV</i>)</b>	)	<b>Docket No. 14-CRB-0001-WR (2016-2020)</b>
	)	
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**DECLARATION AND CERTIFICATION OF TODD D. LARSON  
(On behalf of Pandora Media, Inc.)**

1. I am counsel for Pandora Media, Inc. (“Pandora” or the “Company”) in the above-captioned case. I respectfully submit this declaration and certification pursuant to Rule 350.4(e)(1) of the Copyright Royalty Judges Rules and Procedures, 37 C.F.R. § 350.4(e)(1), and per the terms of the Protective Order issued October 10, 2014 (“Protective Order”). I am authorized by Pandora to submit this Declaration on the Company’s behalf.

2. I and persons under my review have reviewed Pandora’s Written Rebuttal Statement, witness statements, exhibits and appendices, and Redaction Log submitted in this proceeding. I have also reviewed the definitions and terms provided in the Protective Order. After consultation with my client, I have determined to the best of my knowledge, information and belief that portions of Pandora’s Written Rebuttal Statement, witness statements, and accompanying exhibits and appendices contain information that is “Protected Material,” as defined by the Protective Order. The Protected Material is identified in the Redaction Log, shaded in the printed copies of Pandora’s filing, and described in more detail below.

3. Such Protected Material includes, but is not limited to, testimony and exhibits involving (a) contracts, contractual terms, and contract strategy that are proprietary, not available to the public, highly competitively sensitive and, at times, subject to express confidentiality provisions with third parties; (b) highly confidential internal business information and financial data that are proprietary, not available to the public, and commercially sensitive; and (c) highly confidential and non-public information relating to the percentage of plays on Pandora by specific record labels. Additionally, certain of the Protected Material that is to be filed along with Pandora's written rebuttal statement has been so designated by SoundExchange, or the other participants in the above-captioned proceeding, and Pandora is therefore bound to treat it as such under the Protective Order.

4. If the designated contractual, strategic, financial, and performance information of Pandora were to become public, it would place Pandora at a commercial and competitive disadvantage, unfairly advantage other parties to the detriment of Pandora, and jeopardize its business interests. Information related to confidential contracts or relationships with third-party content providers, for example, could be used by Pandora's competitors, or by other content providers, to formulate rival bids, bid up Pandora payments, or otherwise unfairly jeopardize Pandora's commercial and competitive interests.

5. With respect to the financial information in the Restricted materials, I understand that Pandora has not disclosed to the public or the investment community the financial information that it seeks to restrict here (including, but not limited to, sub-categories of revenue attributable to specific sources). As a result, neither the Company's competitors nor the investing public has been privy to that information, which the Company has viewed as highly confidential and sensitive, and has guarded closely. In addition, when Pandora does disclose information

about the Company's finances to the market as required by law, the Company provides accompanying analysis and commentary that contextualizes disclosures by its officers.

6. The information that Pandora seeks to restrict under the Protective Order, while truthful and accurate to the best of each witness's knowledge, was not intended for public release or prepared with that audience in mind, and therefore was not accompanied the type of detailed explanation and context that usually accompanies such disclosures by a company officer. Moreover, the statements containing the information have not been approved by Pandora's Board of Directors, as such sensitive disclosures usually are, or accompanied by the typical disclaimers that usually accompany such disclosures. Pandora could experience negative market repercussions, competitive disadvantage, and even possible legal exposure were this confidential financial information released publicly without proper context or explanation.

7. Pandora has also marked certain additional material as Restricted where the material was so designated by SoundExchange or iHeartMedia.

8. The written rebuttal statement of Michael Herring, Chief Financial Officer of Pandora, contains material non-public information concerning Pandora's royalty payments to artists and SoundExchange, employee headcount, and its monetization of listeners, as well as non-public financial information such as its revenues, losses, and total investments to date. Mr. Herring's testimony also contains confidential information regarding Pandora's listener metrics, and the audience size for Pandora in twenty-five metropolitan markets. The testimony also includes confidential information regarding the percentage of spins for certain artists and the terms of agreements with third-party content providers that are subject to confidentiality provisions. Additionally, Mr. Herring's testimony provides detailed information regarding confidential and proprietary technology relating to Pandora's advertising sales organization. Mr.

Herring's testimony also includes non-public information regarding Pandora's ad revenues, advertising sell-through rates, ad inventory, ad loads, and listener hours. Disclosure of these details would, for the reasons described in paragraphs 4-6 above, competitively disadvantage Pandora.

9. The written rebuttal statement of Carl Shapiro contains material non-public information regarding the terms of agreements between Pandora and iHeartMedia with third-party content providers which iHeartMedia designated as Restricted, various metrics regarding listener habits and the market shares for various types of streaming and other audio services. Professor Shapiro also includes information obtained from documents produced as Restricted by SoundExchange, including internal record label strategy documents and documents that were submitted, among other things, in connection with regulatory investigations concerning the then-proposed merger of major record companies Universal Music Group and EMI. Additionally, Professor Shapiro's testimony includes information regarding the number of spins of Merlin artists by Pandora, the size of Pandora's music library, Pandora strategy, the results of steering experiments, the combined percentage of performances by iHeartMedia and Pandora, and information regarding streaming and music revenue. Disclosure of these details would, for the reasons described in paragraph 4 above among others, competitively disadvantage Pandora.

10. The contractual, commercial and financial information described in the paragraphs above and detailed on the accompanying Redaction Log must be treated as restricted "Protected Material" in order to prevent business and competitive harm that would result from the disclosure of such information while, at the same time, enabling Pandora to provide the Copyright Royalty Judges with the most complete record possible on which to base their determination in this proceeding.



Pursuant to 28 U.S.C. § 1746 and 37 C.F.R. § 350.4(e)(1), I hereby declare under the penalty of perjury that, to the best of my knowledge, information and belief, the foregoing is true and correct.

Dated: February 23, 2015  
New York, NY

Todd Larson / SP

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*Counsel for Pandora Media, Inc.*

**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
THE LIBRARY OF CONGRESS  
Washington, D.C.**

	)	
<b>In re</b>	)	
	)	
<b>DETERMINATION OF ROYALTY</b>	)	<b>Docket No. 14-CRB-0001-WR (2016-2020)</b>
<b>RATES AND TERMS FOR</b>	)	
<b>EPHEMERAL RECORDING AND</b>	)	
<b>DIGITAL PERFORMANCE OF</b>	)	
<b>SOUND RECORDINGS (<i>WEB IV</i>)</b>	)	
	)	

**REDACTION LOG FOR THE WRITTEN  
REBUTTAL STATEMENT OF PANDORA MEDIA, INC.**

Pursuant to the requirements of the Protective Order entered by the Copyright Royalty Judges on October 10, 2014 (the “Protective Order”), Pandora Media, Inc. (“Pandora” or the “Company”) hereby submits the following list of redactions from its Written Rebuttal Statement filed February 23, 2015, and the undersigned certify, in compliance with 37 C.F.R. § 350.4(e)(1), that the listed redacted materials meet the definition of “Restricted” contained in the Protective Order.

<b><u>Document</u></b>	<b><u>Page/Paragraph/Exhibit No.</u></b>	<b><u>General Description</u></b>
Introductory Memorandum to the Written Rebuttal Statement of Pandora Media, Inc.	Page 3	Contains material designated as Restricted by SoundExchange.
	Page 4	Contains material designated as Restricted by SoundExchange.
	Page 5	Contains material designated as Restricted by SoundExchange.

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	Page 9	Contains material non-public information concerning the confidential terms of a license agreement between Pandora and Naxos, the confidential terms of a license agreement between Pandora and Merlin, spins of Merlin recordings on Pandora, and Pandora's annual payments to SoundExchange.
Written Rebuttal Testimony of Michael Herring	Page 3, Paragraph 5	Contains material non-public financial information concerning statutory royalties incurred in 2014.
	Page 4, Paragraph 8 n.2	Contains material non-public financial information concerning Pandora's cumulative net loss and total investment.
	Page 5, Figure 1	Contains material non-public financial information concerning Pandora's monetization of listeners and total listening hours.
	Page 6, Figure 2	Contains material non-public and proprietary information regarding listener habits.
	Page 9, Paragraph 17	Contains material non-public financial information regarding royalty payments.
	Page 11, Paragraph 22	Contains material non-public financial information regarding Pandora employee headcount and royalty payment forecasts.
	Page 14, Paragraph 29	Contains material non-public information regarding Pandora's proprietary advertising processing systems.
	Page 15, Paragraph 30	Contains material non-public information regarding Pandora

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
		employee headcount.
	Page 16, Paragraphs 32-33	Contains material non-public information regarding Pandora's proprietary process for advertising optimization and Pandora employee headcount.
	Page 17, Paragraph 35	Contains material non-public information regarding Pandora employee headcount.
	Page 17, Paragraph 36	Contains material non-public information regarding registered account metrics.
	Page 17, Paragraph 36 n.15	Contains material non-public information regarding listener metrics.
	Page 18, Figure 3	Contains material non-public information regarding the size of the audience of Pandora and the largest terrestrial radio stations across 25 markets.
	Page 19, Paragraph 39	Contains material non-public information regarding Pandora employee headcount.
	Pages 19-20, Paragraph 40	Contains material non-public information regarding Pandora's advertising sell-thru rate and ad inventory.
	Page 21, Figure 4	Contains material non-public information regarding data on the effect of higher ad loads on listener hours.
	Page 21, Paragraph 43	Contains material non-public financial information regarding revenue generated based on listener hours.

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	<p>Page 21, Paragraph 44</p> <p>Page 23, Paragraph 47</p> <p>Page 24, Paragraph 50</p> <p>Page 24, Paragraph 51</p> <p>Page 25, Paragraph 53</p> <p>Pandora Exhibit 15</p>	<p>Contains material non-public information regarding Pandora employee headcount.</p> <p>Contains material non-public information regarding the amount of advertising revenue generated per thousand hours of desktop listening in a certain demographic area.</p> <p>Contains material non-public information regarding Pandora's increased percentage of spins of Merlin artists, terms of the confidential license agreement with Merlin, and the percentage of spins on Pandora of Merlin artists.</p> <p>Contains material non-public information concerning the terms of a confidential license agreement with Naxos.</p> <p>Contains material non-public information concerning royalty payments made to artists and their labels.</p> <p>Contains material non-public information regarding the confidential terms of the license agreement between Pandora and Naxos.</p>
<p>Written Rebuttal Testimony of Carl Shapiro</p>	<p>Table of Contents</p> <p>Page 9, Figure 2</p>	<p>Contains material designated as Restricted by SoundExchange.</p> <p>Contains material non-public and proprietary information regarding listener habits.</p>

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	Page 10, Figure 3	Contains material non-public and proprietary information regarding listener habits.
	Page 11 & Figure 4	Contains material non-public information regarding market shares for various streaming services.
	Page 14, n.27	Contains material designated as Restricted by SoundExchange.
	Pages 15-16 & n.34	Contains material designated as Restricted by SoundExchange.
	Page 16	Contains material designated as Restricted by SoundExchange.
	Page 17	Contains material designated as Restricted by SoundExchange.
	Page 19 & n.51	Contains material designated as Restricted by SoundExchange.
	Page 20 & n.53	Contains material designated as Restricted by SoundExchange.
	Page 21	Contains material designated as Restricted by SoundExchange.
	Page 23	Contains material non-public information regarding Pandora's increased percentage of spins of Merlin artists; results of steering experiments; the size of Pandora's music library and material designated as Restricted by SoundExchange and iHeartMedia.
	Page 24 & nn.74, 75	Contains material non-public information concerning steering and promotional activities by services, and material designated as Restricted by SoundExchange.

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	Page 25 & Table 1 & n.77	Contains material non-public information concerning steering results and material designated as Restricted by SoundExchange.
	Page 26 & n.79	Contains material designated as Restricted by SoundExchange.
	Page 27 & nn.80, 85	Contains material designated as Restricted by SoundExchange.
	Page 28	Contains material designated as Restricted by SoundExchange
	Page 29	Contains material designated as Restricted by SoundExchange.
	Page 31	Contains material designated as Restricted by SoundExchange.
	Page 32	Contains material designated as Restricted by SoundExchange.
	Page 35	Contains material designated as Restricted by SoundExchange.
	Page 37	Contains material designated as Restricted by iHeartMedia and material non-public information concerning terms of confidential license agreements between Pandora and Merlin, and Pandora and Naxos.
	Page 38, Figure 8 & n.123	Contains material designated as Restricted by iHeartMedia and material non-public information concerning terms of confidential license agreements between Pandora and Merlin, and Pandora and Naxos.

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	Page 39	Contains material designated as Restricted by iHeartMedia and SoundExchange, and material non-public information regarding the combined percentage of performances represented by Pandora and iHeartMedia during specified time period.
	Page 40 & n.127	Contains material designated as Restricted by SoundExchange and material non-public information concerning the negotiation and confidential terms of a license agreement between Pandora and Merlin.
	Page 41 & n.130	Contains material designated as Restricted by iHeartMedia and SoundExchange, and non-public information concerning terms of confidential license agreement between Pandora and Merlin.
	Page 42	Contains material designated as Restricted by iHeartMedia, and material non-public information concerning terms of confidential license agreement between Pandora and Merlin, and Pandora and Naxos.
	Pages 45-46	Contains material designated as Restricted by SoundExchange.
	Page 48	Contains material designated as Restricted by SoundExchange.
	Page 49	Contains material designated as Restricted by SoundExchange.
	Page 50	Contains material designated as Restricted by SoundExchange.



February 23, 2015

Respectfully submitted,

*Todd Larson /s/*

R. Bruce Rich (N.Y. Bar No. 1304534)

Todd Larson (N.Y. Bar No. 4358438)

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*Counsel for Pandora Media, Inc.*

**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
THE LIBRARY OF CONGRESS  
Washington, D.C.**

**In re**

**DETERMINATION OF ROYALTY  
RATES AND TERMS FOR  
EPHEMERAL RECORDING AND  
DIGITAL PERFORMANCE OF  
SOUND RECORDINGS (*WEB IV*)**

**Docket No. 14-CRB-0001-WR (2016-2020)**

**CERTIFICATE OF SERVICE**

I, Sabrina A. Perelman, hereby certify that a copy of the foregoing public version of the Written Rebuttal Statement of Pandora Media, Inc. has been served on this 23rd day of February, 2015 by electronic mail and overnight mail on the following parties, unless otherwise noted:

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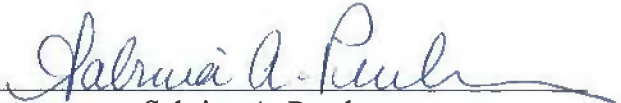
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*GEO Music Group*



Sabrina A. Perelman

# PUBLIC VERSION

**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
THE LIBRARY OF CONGRESS  
Washington, D.C.**

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<b>In re</b>	)	
	)	
	)	
<b>DETERMINATION OF ROYALTY RATES AND TERMS FOR EPHEMERAL RECORDING AND DIGITAL PERFORMANCE OF SOUND RECORDINGS (<i>WEB IV</i>)</b>	)	<b>Docket No. 14-CRB-0001-WR (2016-2020)</b>
	)	<b>DRAFT</b>
	)	
	)	

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**WRITTEN REBUTTAL TESTIMONY OF MICHAEL HERRING**

**(On behalf of Pandora Media, Inc.)**

**Introduction**

1. My name is Mike Herring. I am the Chief Financial Officer of Pandora Media, Inc. (“Pandora” or “the Company”). I previously provided testimony during the direct phase of this proceeding.

2. I offer this rebuttal testimony to address several issues raised in SoundExchange’s written direct statement: (a) SoundExchange’s contention, discussed in the testimony of SoundExchange’s economist David Blackburn as well as several fact witnesses, that Pandora is artificially limiting advertising inventory and deferring short-term profitability in favor of user growth; (b) the premise that the interactive-service benchmarks on which SoundExchange relies serve as suitable proxies for the statutory license fees to be paid by a non-interactive service like Pandora, especially when viewed against the economic terms of the direct licenses that Pandora has been entering into; (c) SoundExchange’s suggestion that recording artists are not being fairly compensated at the royalty rate Pandora currently pays for sound recording performances; and

(d) SoundExchange’s proposed revisions to the terms and definitions that govern statutory licensees.

### **“Sell More Ads” Is a Straw Man**

3. In an attempt to divert the Judges’ attention away from SoundExchange’s exorbitant rate proposal, which surely fails the “willing buyer/willing seller” standard, SoundExchange has offered testimony from several witnesses in an attempt to legitimize that rate proposal on the basis of Pandora’s supposed ability to pay the extraordinary fees sought. SoundExchange’s witnesses – chief among them Dr. Blackburn – argue that Pandora is *purposefully* not doing enough to monetize its listener base – mainly by failing to increase the number of ads we stream per hour of listening (what we refer to as our “ad load”). SoundExchange further contends that Pandora is intentionally foregoing short-term revenue and profitability so as not to sacrifice growth of its user base.<sup>1</sup> The transparent thrust of this testimony is: “Pandora, just sell more ads and you will be able to afford to pay what we are asking.”

4. As I understand the standard applied in this proceeding, the Judges are to determine the rate to which a willing buyer and willing seller would agree in a workably

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<sup>1</sup> These themes pervade SoundExchange’s direct case. For example, SoundExchange’s principal economic expert, Daniel Rubinfeld, testifies that “Pandora has recently indicated that it has reached an ‘inflection point’ in its profitability, having made a policy choice in the past to sacrifice profits in return for growth.” Written Direct Testimony of Daniel Rubinfeld (“Rubinfeld WDT”) at ¶ 83 n.65; *id.* ¶ 117. *See also* SX Introductory Memorandum at 14 (“webcasters often forego short-run profitability in favor of user and market share growth”); Written Direct Testimony of David Blackburn (“Blackburn WDT”) at ¶ 54 (Pandora has an “expressed strategy of foregoing short-run profits in favor of longer-run growth . . . allowing Pandora to keep revenues even lower . . .”); *id.* ¶¶ 55-58, 63-81 (Discussion of Webcasters’ “Incentive to Increase Marketshare” and Pandora’s strategy to do so); Written Direct Testimony of Aaron Harrison (“Harrison WDT”) ¶ 13 (“webcasting services have been slow to increase advertising inventory because they are currently focusing on growth in number of users and listener hours, rather than monetization and profit”); Written Direct Testimony of Dennis Kooker (“Kooker WDT”) at 14; Written Direct Testimony of Simon Wheeler (“Wheeler WDT”) ¶ 38 (“I remain skeptical of the immediate ability or desire of many online ad-supported webcasters to generate revenue. . . . It seems to me that many are still trying to attract a critical mass of users by providing to them as much music as they can.”).



competitive market. The Judges are not, as I understand it, tasked with determining the rate any particular party theoretically could pay and remain in business. The rate that Pandora is theoretically *capable* of paying is simply not informative to the Judges of the rates at which Pandora would be a “willing buyer” of statutory sound recording performance rights.

5. SoundExchange’s supposed evidence along these lines is flawed for numerous additional reasons. To start, it ignores the fact that the royalty formula under which Pandora pays SoundExchange includes a per-play as well as a percent-of-revenue prong. Accordingly, even if Pandora did not run a single ad and earned nothing, SoundExchange’s members would still be paid for every play; indeed, under such payment metric, Pandora incurred over [REDACTED] [REDACTED] in statutory royalties in 2014 alone, making us the single largest statutory licensee and accounting for approximately half of SoundExchange’s statutory royalty distributions. Both Pandora and SoundExchange have proposed a continuation of per-play rates as an element of their rate proposals going forward.

6. SoundExchange’s singular focus on Pandora’s current ad loads also fails to capture real-world dynamics, including the fact that the more ads Pandora runs, the less music it performs, meaning reduced per-play royalties. Similarly, to the extent Pandora loses listeners because of increased ad loads, it would mean *both* fewer payable performances *and* less ad revenue, meaning fewer dollars flowing into SoundExchange’s coffers. As detailed below, the cumulative impact of a seemingly innocuous decline in listening hours can result in very significant declines in revenue over time.

7. Even more fundamentally, SoundExchange’s breezy critique of Pandora’s business strategy misapprehends the realities of business economics, particularly in the marketplace in which we operate: the market for lean-back radio style listening. It fails to grasp

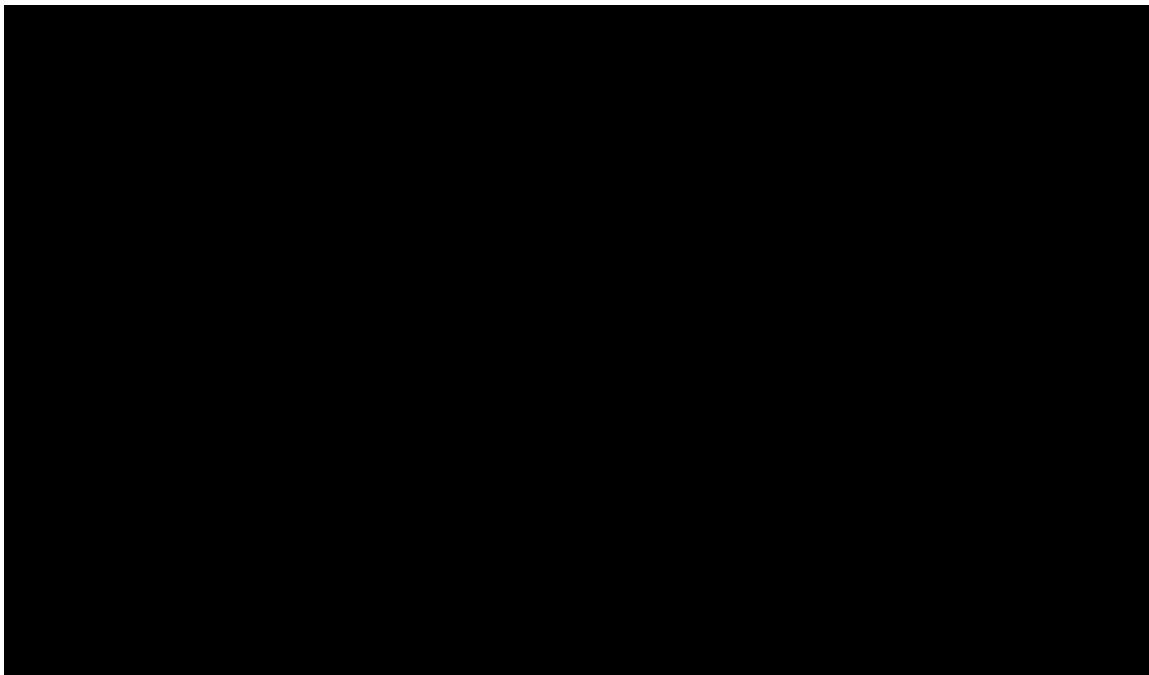
the challenges advertising-supported non-interactive music services face in achieving long-term profitability, as well as the higher *long-term* value such services promise over subscription-based models. I address these considerations in some detail in the succeeding sections, and summarize my key observations below.

8. First, SoundExchange’s myopic focus on short-term profitability ignores the fundamental realities of growing a business like Pandora to scale. Because the business decisions that Pandora makes today affect its profitability in the future, Pandora *is* maximizing profitability, just not necessarily the profitability of the current quarter. Future profits are always a concern for Pandora—like any business—and lower future profits resulting from doing things to increase profits today (*e.g.*, by increasing ad loads too quickly) are “costs” that offset the “value” of today’s higher profits. Pandora is keenly focused on revenue growth, and has invested *all* of its revenue *and more*<sup>2</sup> back into its business, investing in engineering, sales, sales support, and other critical components necessary to grow an ad-supported business at scale. As shown in Figure 1 below, Pandora has actually *increased* the monetization of its listeners at the same time it has grown its total listening hours. It seems elementary that such investment in *long-term* profitability stands to serve not only Pandora and its investors, but also the entire record industry, well.

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<sup>2</sup> Pandora had a cumulative net loss of approximately [REDACTED] as of the end of 2014. Combined with its total revenue of nearly [REDACTED], Pandora’s total investment is almost [REDACTED] over the life of the Company.

**Figure 1**  
**[RESTRICTED]**



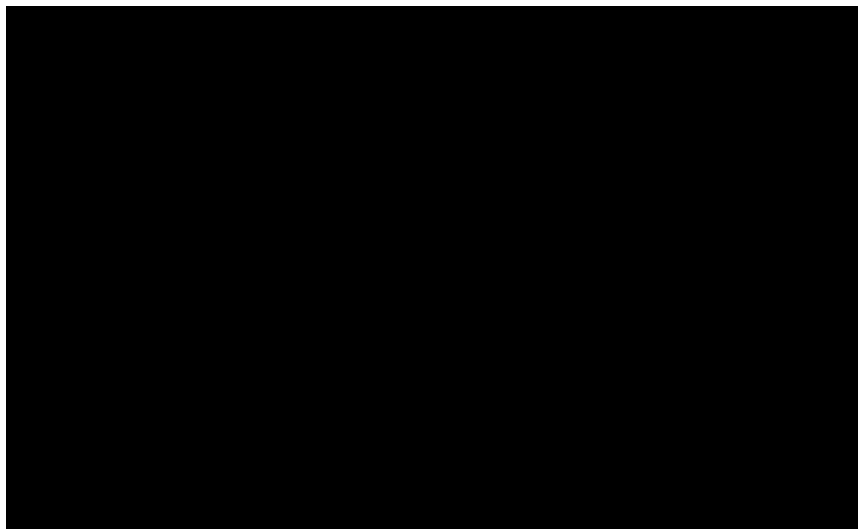
9. Second, by stating or implying that *but for* services such as Pandora, everyone who listens to music would subscribe to a paid service that generates a higher average revenue per user (“ARPU”) grossly mischaracterizes the market for music consumption.<sup>3</sup> There is a clear and meaningful difference between lean-back services such as Pandora and lean-in services such as Spotify. As Figure 2 below shows, the vast majority of music consumers “lean back” when listening to music.<sup>4</sup>

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<sup>3</sup> See Harrison WDT ¶ 16 (suggesting “that Pandora is streaming music to users who might otherwise pay for a subscription or use a higher ARPU streaming service”); see also Kooker WDT at 15, 17; Wilcox WDT at 4-5; Wheeler WDT ¶¶ 30, 35, 38.

<sup>4</sup> Edison “Share of Ear” study, Fall 2014. (“Lean-In” defined as owned music and Spotify, but does not include audio/video lean-in services such as YouTube and Vevo. “Lean-Back” defined as AM/FM radio, Sirius, TV Music Channels, Pandora, iHeart Radio and iTunes Radio.). See also Pandora Exhibit 14 (Interview of Tom Conrad, Pandora’s former Chief Technology Officer, at GigaOM RoadMap 2011) at 1:34-1:43 (“About 80 percent of music consumption, by hours, happens in . . . radio.”) (available at <https://gigaom.com/2011/11/11/pandora-roadmap-2011/>).

**Figure 2**  
**[RESTRICTED]**



10. As Spotify’s CEO stated, “I don’t really view [Pandora] as a competitor. . . . We don’t want to be the radio service. . . We want to be the place where you store and collect, where you build your playlist for your dinner party or your workout. That is very different from Pandora.”<sup>5</sup>

11. Consumer research shows that few people who listen to music spend much money on music; the vast majority of the music-consumers view hearing ads as the appropriate “price” to pay to listen to music.<sup>6</sup> According to a leading music consumer research firm, 77% of music

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<sup>5</sup> Georg Szalai, Spotify’s Daniel Ek Zings Dr. Dre’s Beats Music, *The Hollywood Reporter* (January 22, 2014), available at <http://www.hollywoodreporter.com/news/spotify-daniel-ek-zings-dr-672509>; see also Pandora Exhibit 14 at 10:19-13:40.

<sup>6</sup> See, e.g., MIDiA Research, *U.S. Music Consumer Deep Dive* at 7 (January 2015) (“subscriptions remain fundamentally niche in reach and scale with just 7% penetration. With more than a decade of product offerings the US subscription market is hardly virgin territory. Much of the addressable base for \$9.99 subscriptions has been tapped. The next wave of subscribers will require cheaper tiers. In the meantime Apple’s re-launch of Beats Music – whatever name it finally hits upon – will undoubtedly have the most opportunity to expand the market further. Much initial growth however will likely come at the direct expense of the subscription incumbents.”); Morgan Stanley, *1st Annual MS Music and Radio Survey* at 2 (January 14, 2015) (finding that 70% of survey respondents indicated little or no willingness to pay for a subscription service). See also Pandora Exhibit 14 at 4:46-5:18 (“Fully half of this country doesn’t spend any money on music in a year. Another 40 percent spends about \$14 – 15, something like a single CD a year, and then there is just the 10 percent of people – like you and I – that buy a lot of music. If you want

listeners spend almost nothing on music.<sup>7</sup> As part of its rebuttal case, Pandora is submitting a new consumer survey the results of which confirm:

- the very small percentage of listeners to lean-back services like Pandora who would consider paying any significant money to subscribe to a lean-in service;
- that if free online music services were no longer available, most consumers would revert to broadcast radio, watch music videos or listen to music on YouTube or Vevo, or simply listen to less music, as opposed to subscribing to a lean-in service; and
- that time spent listening to online, non-interactive services is mostly replacing time spent listening to broadcast radio or is new time that would not have been spent listening to any music at all—almost none of it is taken from listening to lean-in services like Spotify.

While lean-back services such as Pandora may (today) generate a lower ARPU, the size of the lean-back market is so much larger than the lean-in market that, in my opinion, the long-term revenue opportunity for record labels and recording artists is in the lean-back market.

12. The rates Pandora has proposed in this proceeding represent, in my opinion, the best rates for maximizing the long-term revenue of record labels and artists by enabling services such as Pandora to invest in the scale, systems and staff necessary to monetize the Internet radio listener audience. Conversely, the rates SoundExchange proposes would *decrease* the royalties paid by Pandora by diverting revenues needed by Pandora to grow our listenership and advertising revenue (and thereby long-term royalty payments to the record industry) to short-term royalty payments. As I discussed in my direct testimony, if SoundExchange's proposed rates were adopted, Pandora may have to restrict listener hours as we did when we capped mobile listening in 2013, which had the effect of reducing our royalty payments. *See* Written Direct Testimony at ¶ 7.

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to play in that 90 percent opportunity, which is what gets us excited, you have to devise products that have a compelling ad-supported experience.”).

<sup>7</sup> *See* MIDiA Research, *Music Consumer Segmentation* (December 2014) at 6-7.

## **I. GROWING AN ADVERTISING SUPPORTED BUSINESS**

13. The elements required to create and maintain an economically successful advertising supported business are straightforward. At a high level, these elements fall into three categories:

- Scale: having a verifiably measurable audience of sufficient size to be of value to advertisers;
- Systems: providing advertisers with efficient, trustworthy mechanisms to plan and transact advertising campaigns; and
- Staff: having the sales and support resources necessary to convince advertisers to entrust their business with you and to reliability execute campaign after campaign.

Putting all of these elements together, however, is extremely difficult, especially in the context of a new type of advertising (such as internet delivered audio advertising) and a new form of ad delivery (such as mobile phones).

### **A. Scale: Growing a Measurable Audience of Sufficient Size**

14. The first element required for success is attracting an audience of sufficient size. Advertisers generally want to limit their spending to a relatively small number of media properties, each of which contributes meaningfully to the advertiser's goals. Subscale media properties simply are not worth the time and effort of advertisers and their agencies.

#### **1. Growing Audience**

15. A nationwide media property that seeks ultimately to attract both national and local advertising spending will typically seek to grow audience in the following sequence:

##### ***a. National Audience***

16. First is the need to grow a national audience of sufficient scale to be of value to national advertisers. This audience is typically referred to as the National Network Audience. Large, national and international companies such as auto manufacturers (*e.g.*, Ford), big box

retailers (*e.g.*, Walmart), and consumer packaged goods companies (*e.g.*, Procter and Gamble) that want to reach a wide, national audience with little or no local differentiation are the primary National Network advertisers. National Network advertising is typically sold at relatively low rates because the advertiser is more interested in reach (*i.e.*, brand awareness) than targeting (*i.e.*, activating consumers).

17. In the circumstance in which the platform distributes content to attract audience and pays for that content on a percentage-of-revenue basis, growing a national audience is relatively easy. That is, the additional incremental audience does not necessarily increase the cost of content distributed. In the circumstance in which distributed content is paid for on a per-use basis, however, growing a national audience can be extremely expensive. For example, Pandora paid more than ██████████ in sound recording performance royalties before it grew its audience to the point where it ran its first national audio ad campaign, which was for FOX TV's American Idol in January 2009.<sup>8</sup>

***b. Spot Audience***

18. Second is the need to grow a local audience in each of the top 10 - 20 metropolitan areas of sufficient scale to be of value to advertisers who focus on these top markets. In National Spot advertising, large advertisers seek to target specific (usually large) markets. For example, a home improvement retailer such as the Home Depot might want to advertise snow blowers in Boston, Chicago, Denver, Detroit, Philadelphia, Pittsburgh, New York, Minneapolis-St. Paul, and St. Louis. A variant of this type of advertising is commonly known as Local Spot advertising. Extending the Home Depot example to Local Spot advertising, Home Depot may be interested in advertising snow blowers in Boston, shovels in

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<sup>8</sup> Initially, Pandora was limited to selling display ads, which it could not monetize at levels it has reached with audio advertisements.

New York and deicers in Chicago. In order to attract National and/or Local Spot advertising, a platform such as Pandora needs an audience equivalent to the number 4 or number 5 terrestrial radio station in that market (approximately 6-8% of the relevant demographic). National and Local Spot advertising is sold at a premium to National Network ads because of the increased audience targeting.

*c. Local Audience*

19. Third is the need to grow an audience of sufficient scale in more and more local markets to be of value to advertisers who limit their focus to just one of these individual local markets. Here, again, a platform needs at least 6-8% of the targeted demographic in a local market to attract Local ad spend. Local ads are sold at the highest rate because they are the most targeted. National, regional and local advertisers are all competing to reach a targeted demographic in a targeted local market.

20. While Local advertising commands the highest rate, building a local audience large enough to attract those Local ad dollars is the most challenging audience to grow. Other participants in this proceeding have expressed similar challenges in monetizing a local audience.<sup>9</sup>

21. In addition to being the most difficult audience to grow, Local ad sales are also the most “expensive” to grow. National Network and National and Local Spot advertising is often bought directly by the advertiser or by an advertising agency. Advertising agencies may control the advertising budgets of multiple large advertisers. Therefore, a relatively small sales force located in a few markets can be built that targets these large national advertisers and their agencies.

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<sup>9</sup> See Written Direct Testimony of Ben Downs, Vice President and General Manager of Bryan Broadcasting, Inc., at 10 (describing how difficult it is to sell ads in local markets when audience is too small; “In order to even begin to interest advertisers in our streaming audience, we need to increase our listener base significantly.”); *id.* at 11 (explaining that a small local online audience leads to a lack of demand [that] limits the number of ads our stream provider can sell on our streams”).



22. In contrast, the only way to sell Local ads is by having “feet on the street.” A local sales force is very expensive to build; each local market requires dedicated sales, sales management and sales operations resources. Growing a local sales force means constantly reinvesting the profits of the business into future revenue growth, which is exactly what Pandora has done over the last three years, going from a few local sellers in a handful of markets to [REDACTED] local sellers in [REDACTED] markets. The financial resources Pandora has historically had available to reinvest in growing its local salesforce are severely constrained by the very high royalty obligations it pays to SoundExchange. But for these royalty payments, Pandora could have invested *even more* in developing its local salesforce and could be generating even more revenue than it currently is. By our estimates, if Pandora’s royalty obligations had been only 10% lower, thus allowing us to increase sale-force investment and avoid caps on listening hours, Pandora could have grown total revenue by an additional [REDACTED] and also have generated an additional [REDACTED] in royalties to the record industry.

## 2. Measuring the Audience

23. Advertisers require that the audience they are “buying” is verifiably measurable. For example, when making advertising buying decisions on terrestrial radio platforms, advertisers usually compare stations’ Nielsen Audio (formerly Arbitron) ratings. Nielsen Audio radio ratings measures the size of a station’s audience by collecting data from a random sample of a population throughout the United States, primarily in 294 metropolitan areas, using either its proprietary Portable People Meters (“PPMs”) or a written diary.

24. When Pandora launched in late 2004, there was no equivalent rating service to measure Internet radio audience. This lack of verifiable audience measurement created problems

not only for Pandora, but as well for terrestrial broadcasters that also simulcast their signal online.<sup>10</sup>

25. The lack of verifiable audience measurement was not a critical issue when Pandora launched because it did not have an audience of sufficient scale to attract even National Network advertising. As Pandora grew, it began measuring its audience using internal server log files. This internal measurement was not sufficiently verifiable to satisfy most advertisers, so in 2010 Pandora engaged Edison Research, a market research firm with a particular emphasis on media research. Edison took Pandora's log files and compiled audience calculations for our top 10 markets. Because Edison was using Pandora's internal log files, this measurement was also not sufficiently verifiable to satisfy most advertisers. In 2011 Pandora approached both Nielsen (then Arbitron) and Triton Digital regarding measuring Pandora's audience in a way that satisfied the standards of the Media Rating Council ("MRC").<sup>11</sup> Triton uses a beacon-based technology to measure Pandora's audience. This technology is similar to Nielsen Audio's PPMs, but Triton's measurement is based on census calculations, while Nielsen Audio's measurement is based on survey panels. In May, 2012, Triton announced an audience rating system for Pandora (and other Internet radio platforms) that extended into local markets. This provided, for the first time, verifiable audience measurement that satisfied advertisers.<sup>12</sup>

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<sup>10</sup> See, e.g., Written Direct Testimony of John Dimick, Senior Vice President of Programming & Operations at Lincoln Financial Media Company, at 7 ("[A] major problem with converting that understanding into advertising dollars has been the *lack of a demonstrated audience* or a consistent ratings boost based on the streaming listenership. While streaming audience measurement remains in its infancy, advertisers have a high comfort level with over-the-air ratings.") (emphasis added); *id.* at 9 ("Advertisers base their buys and the rates they are willing to pay on consistent, demonstrated ratings.")

<sup>11</sup> The Media Ratings Council is an industry-funded organization created at the behest of Congress to review and accredit audience rating services. In addition to setting minimum standards for media rating research, the MRC monitors the activity of rating services through annual external audits of rating service operations performed by a specialized team of independent CPA auditors.

<sup>12</sup> Triton obtained MRC accreditation in March 2014.

26. Obtaining Triton's MRC-accredited ratings was the critical gating item to Pandora's ad inventory being integrated into media-buying platforms of Mediaocean,<sup>13</sup> Strata,<sup>14</sup> and Telmar,<sup>15</sup> the largest media buying and planning platforms for National Spot and Local Spot radio advertising. As discussed below, integration into these types of media buying systems is part of the infrastructure investment that an ad-supported business must build to be successful at scale.

**B. Systems: Providing Advertisers with Efficient Mechanisms to Plan and Transact**

27. All major ad spending, both national and local, hinges on a set of systems that (1) enable advertisers to efficiently and reliably plan, execute and measure advertising campaigns and (2) allow platforms to deliver the right audience across all campaigns, especially at scale. Certain systems, such as the independent verified measurement of audience and media buying, require working with third-parties, such as Pandora's integrations with Triton and Mediaocean, Strata, and Telmar.

28. Beyond audience measurement and media buying, other systems must enable the platform to efficiently transact and execute a high volume of advertising campaigns. At the scale of a platform such as Pandora, such transactional activity must be managed automatically (*i.e.*, via computers) lest the volume of transactions consume countless hours of manual administration.

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<sup>13</sup> Mediaocean is an advertising services company that provides advertising purchasing and other services to clients, handling over \$130 billion of advertising spending a year.

<sup>14</sup> Strata Marketing Inc. is a software company that provides a suite of tools for planning buying various forms of media, including TV, cable, radio, print, digital and outdoor, and handles more than \$50 billion worth of media buys annually.

<sup>15</sup> Telmar is a leading supplier of advertising and media information software that allows advertisers and ad agencies to plan and optimize media purchases across digital, print, broadcast and outdoor platforms.

29. For Pandora today, these systems encompass a wide variety of business functions necessary to produce, schedule and deliver advertising on behalf of national and local advertisers. Getting to this point, however, involved a considerable amount of investment in time and engineering resources. For example, when Pandora began selling ads, it had to invest in ad operations, specifically, ad media servers that could deliver audio and display ads to listeners. As its ad volume increased, Pandora had to invest in order management, specifically the order management software that manages the workflow from the execution of the sale (commonly referred to as an insertion order) to the trafficking of the ad to listeners. Initially, Pandora relied on third-party software. Due to our unique business (*i.e.*, the sale of both display digital and audio advertisements), these third-party systems often required more than ten people across various departments to process a single order. Pandora invested in the development of its own proprietary order management software known as [REDACTED], which has reduced the average order processing time significantly. [REDACTED]

[REDACTED]

[REDACTED]

This greatly increased our order management efficiency, enabling our sales efforts and reducing our operational costs. Pandora continues to invest significant time and resources in adding functionality to [REDACTED] and other advertising technology solutions to drive towards improving the advertising buying experience while also optimizing pricing yield and increasing operational efficiency. For example, [REDACTED]

30. As its ad volume increased further, Pandora invested in growing its ad trafficking organization. Pandora now employs █ people who work on building advertising “creatives”; *e.g.*, the display, audio, and custom advertiser video ads that must be capable of being rendered on a wide variety of desktops, tablets and mobile phones. Pandora’s ad volume, and the creative requirements that flow therefrom, is many magnitudes higher than terrestrial radio. In the first instance, Pandora serves a larger volume of a wider variety of ads (display, audio and video) than any terrestrial radio broadcaster also engaged in webcasting. Because of the wide variety of devices and the multitude of screen sizes commonly used by consumers, Pandora’s creatives must be compatible with a very wide range of formats. In the second instance, Pandora delivers individual ads to individual listeners, in comparison to a terrestrial radio broadcaster, which can deliver a single audio ad to all of its listeners at the same time (that is the definition of “broadcast”). Said differently, to deliver 1,000,000 “impressions,” Pandora has to deliver 1,000,000 ads, while a large terrestrial broadcaster such as Z-100 in New York might only have to deliver 15 or 16 ads and Pandora has to be able to track each “impression” so that it can report back to the advertiser on the success of the campaign.

31. Because personalized Internet radio services such as Pandora deliver individual streams to individual listeners, in addition to higher volume of ads served, Pandora has had to invest in far more complex systems of ad management. That is, just as Pandora delivers personalized music, it also delivers “personalized” ads. Therefore, Pandora has had to build an entire infrastructure that could identify the “right” ad to play to the “right” listener at the “right” time. Because we collect a listener’s age, gender, and zip code at registration, we know these basic demographic facts about our audience. If an advertiser requested, we can, for example, target women aged 25-35 in New York with a particular advertisement. This ability to target

specific audiences enables us to attract advertising, as well as obtain higher rates for those ads, because advertisers know that their ads are being delivered to those listeners that are most likely to be consumers of their products.

32. To obtain even higher ad rates, Pandora engages in far more sophisticated audience targeting. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Pandora employs [REDACTED] engineers to support this kind of advertising technology.

33. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**C. Staff: Selling and Support Resources to Attract and Retain Advertisers**

34. Scale and systems are necessary but not sufficient; ultimately, advertisers and their agencies need convincing that their advertising spend on a service like Pandora will be successful. Making this “sell” – accessing the right people and convincing them to try something “new” – requires experienced, talented and trained sales representatives and support staff

physically present in every place where major decision makers do business. Building a team capable of selling hundreds of millions of dollars of advertising all across the U.S. is a major challenge, requiring years of effort and investment.

35. Moreover, this staffing effort must be carefully coordinated lest it fall out of sync with the scale of the media property's audience or the sophistication of its systems. That is, hiring must keep pace with growing inventory to ensure it is sold, but our sales force cannot grow so fast such that it out-paces inventory and our sellers sit idle. To accomplish all of these objectives, Pandora has hired nearly [REDACTED] people in sales and sales management and another [REDACTED] in sales support roles. Of those new hires, [REDACTED] have been specifically added to our Local sales, sales management and sales support teams.

## **II. PANDORA'S EXPERIENCE**

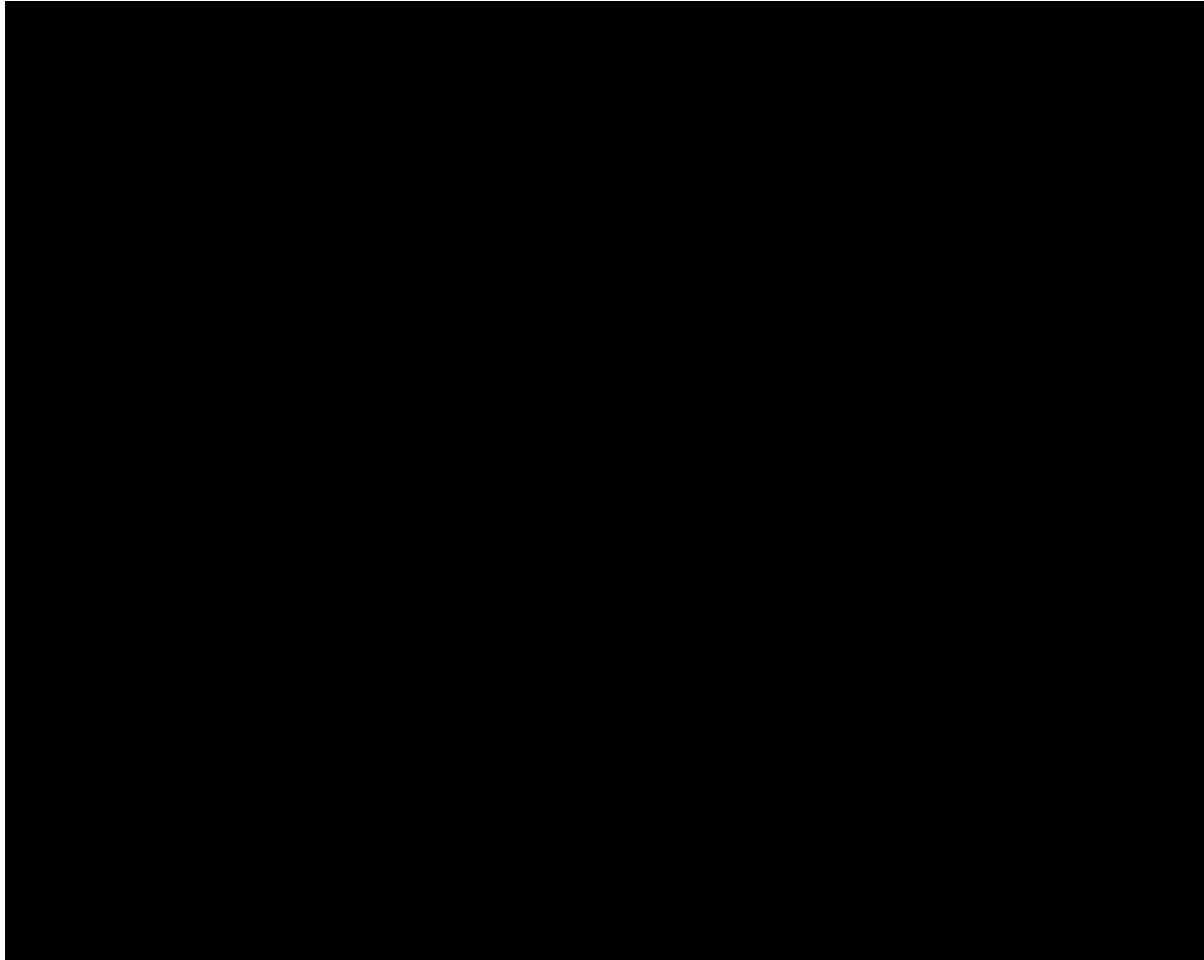
### **A. Pandora's Audience Growth**

36. In December 2005, after its first full year of operation, [REDACTED] registered accounts logged onto and listened to music on Pandora. In December 2014, [REDACTED] registered accounts logged into and listened to music on Pandora.<sup>16</sup> As Figure 3 demonstrates, based on size of audience, Pandora was the largest radio "station" in all of the top 25 DMAs.

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<sup>16</sup> The total number of listeners is likely higher, since evidence shows that [REDACTED] of our listeners share accounts.

**Figure 3**  
**[RESTRICTED]**



**B. Pandora’s Ad-Load Growth**

37. Pandora is very serious about revenue growth. In fact, one of our “Principles” is “Revenue is our oxygen.” Pandora recognizes that generating revenue is the way we will grow our company, by reinvesting that revenue into software engineers to build a better service, sales reps to sell our ad inventory, and marketing efforts to increase our listenership. Pandora’s entire revenue organization, including the Chief Revenue Officer, has, since 2006, been heavily incentivized to generate as much revenue as possible.

38. The key to generating revenue growth is growth in the number of our listening hours. The greater the number of listening hours, the larger the amount of ad inventory we have



to sell. However, because Pandora pays a per-track, per-listener royalty, growing listener hours means increased content costs. As described in my original written direct statement, on at least two occasions Pandora has capped listening—thereby driving down listener hours—when our growth in listener hours was outstripping our ability to monetize those additional hours.

1. Supply Does Not Drive Demand

39. For Pandora, like most ad-supported services, there is a complex interrelationship of factors that must be weighed, balanced and optimized to maximize revenue. Pandora employs █ people in revenue operations (*e.g.*, pricing and yield management) and sales operations (*e.g.*, sales analytics) to undertake this task. In ascertaining how Pandora can sell the highest number of advertisements for the highest price, these employees estimate such effects as (i) the impact increased ad inventory would have on the pricing Pandora could realize for its ads, and (ii) the impact increased ad load would have on overall listener hours. The notion, pressed by SoundExchange, that simply increasing ad inventory would generate increased ad revenue, without taking account of the need carefully to manage both the prices Pandora can obtain for selling advertising and levels of listenership, fails to account for these marketplace realities.

*a. Pandora, like all advertising-based services, seeks to optimize its “sell thru” rate*

40. Because supply does not drive demand, an ad-supported service such as Pandora seeks to optimize its sell-thru rate. Where demand closely matches supply, Pandora is able to charge its maximum rate. The flip side, of course, is that demand fluctuates and keeping supply too close to demand risks having unmet demand. Pandora, therefore, tries to keep its sell thru rate for audio ads in the 25 – 54 demographic around █ of inventory.<sup>17</sup> As Pandora achieves

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<sup>17</sup> Pandora is able to “sell” this demographic to advertisers at higher RPMs than it can “sell” the 13 – 24 or 55+ demographics.

this level, it increases its ad load. In just the last two years, Pandora has increased its ad inventory by more than ■■■■, while increasing ads sold by ■■■■. Because Pandora only increases ad load when it receives the strong market signal that demand does or is about to outstrip supply, Pandora has been able to *increase* ad prices *and* revenue per listener hour, particularly for audio ads, against our primary demographic.

***b. Pandora Optimizes for the “Lifetime Value” of Each Listener***

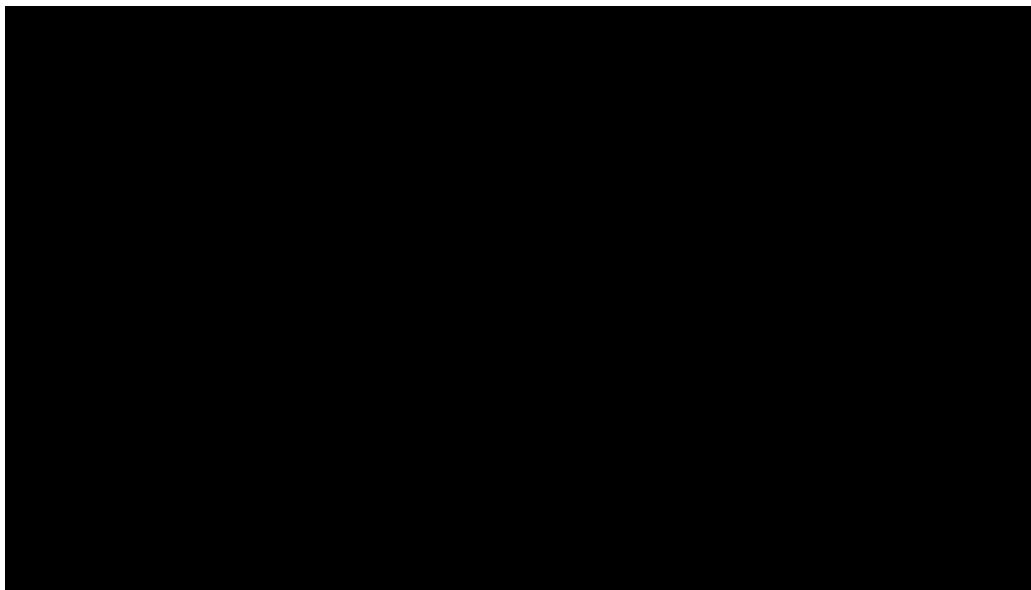
41. Another fallacy of the “Simply Sell More Ads” critique is its failure to take account of the need to optimize ad load in a manner that maximizes the revenue generated over the “life” of a listener.<sup>18</sup> We know that serving no ads generates no revenue, and that serving nothing but ads generates no listening (and, therefore, no revenue). The key is to find the right balance point between those extremes that will maximize long-term revenue.

42. The triple goal of ad-supported services is to (1) increase usage, (2) increase ad load, and (3) increase revenue per user. Pandora has been able to achieve all three. To do so, Pandora rigorously studies the impact of additional advertising on listener engagement, including studying listener behavior to determine the impact of various ad loads on listener engagement. In the most recent such study, we were able to determine the impact on listener hours of various levels of ad load. As Figure 4 shows, higher ad load results in reduced listener hours.

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<sup>18</sup> See PAN\_CRB\_00065198 (LTV Model 08.26.2014).

**Figure 4**  
**[RESTRICTED]**



43. A reduction in listener hours reduces our ad inventory, which reduces our ability to generate ad revenue. [REDACTED]

[REDACTED] By empirically studying the effects of ad load, Pandora can maximize long-term revenue generation by optimizing ad load to yield maximum listener hours and utilize targeting and segmentation to yield maximum revenue per advertisement.

2. Pandora Invests in Demand Creation

44. Even though supply does not drive demand, Pandora is not without means to stimulate demand. In fact, everything described above are investments Pandora has made in creating demand for advertisements. The [REDACTED] sales people, especially the [REDACTED] Local sellers, are creating demand by knocking on doors and explaining the value to advertisers of advertising on our platform. The [REDACTED] people in Pandora's Sales Marketing group research the market and build collateral to help our sellers most effectively tell that story. The audience measurement by Triton Digital and subsequent integrations with Mediaocean, Strata and Telmar create demand by making advertising on our platform more analogous to purchasing terrestrial radio ads. By

enabling Pandora to more efficiently deliver and report on the effectiveness of ads run on our platform, Pandora's investment in automation such as Slingshot drive demand.

### 3. More Ads vs. "Better" Ads?

45. A variant of the "simply sell more ads" gloss over reality is, "Pandora, FM stations broadcast more ads per hour than you; why don't you just be more like them?" Pandora's answer is that the approach taken by terrestrial radio stations would *not* maximize revenue in the context of a service like Pandora. First, and perhaps most important, there is substantial data indicating that, while FM stations *broadcast* a higher number of ads, many of those ads are not listened to by consumers. It is critical to understand that in the FM world, consumers can and frequently do change stations when a pod of ads begins on a given station. According to research by Added Value, a global marketing consultancy with over 30 years of experience, 79% of terrestrial radio listeners usually change the station when an advertisement comes on. Thus, there is a very significant difference between the number of ads an individual radio station broadcasts in an hour and the number of ads consumers *actually listen to* in an hour.

46. By contrast, on Pandora consumers cannot skip an ad. Even if they change from one Pandora station to another, the second station will not start playing until the ad is done playing. Thus, talking about the number of ads an individual FM radio station broadcasts in an hour and the number of ads played on Pandora in an hour is an apples-to-oranges comparison. In one case, the consumer actually listens to the ads (Pandora); in the other case they quickly switch to another station (FM radio).

47. The relevant comparison is not how many ads Pandora runs each hour versus FM radio, but how much revenue is generated by each hour of listening. By this metric, Pandora actually monetizes better than FM radio does in three of the largest radio markets, where Pandora has for the longest time had a dedicated local sales force. For example, in San Francisco,

Pandora's revenue per thousand hours of listening on desktop is [REDACTED], which is higher than average terrestrial radio revenue per thousand hours of listening. Pandora achieves this higher RPM with a lower ad-load for the listener, which drives longer listening, which creates additional ad inventory; *i.e.*, a true virtuous cycle. Over time, we expect that favorable metric to extend to additional markets.

**Pandora's Direct Licenses Reflect a Superior Benchmark to  
SoundExchange's On-Demand Benchmark**

48. SoundExchange has built its case around record-company agreements with on-demand services such as Spotify and Rhapsody. Pandora, however, has executed direct license agreements that we believe provide a much better benchmark. First, these agreements cover non-interactive webcasting of the kind covered by the statutory license, meaning, they reflect what Pandora as a willing buyer has demonstrated it is willing to pay to willing sellers for the very rights at issue in this proceeding. Second, the Pandora agreements reflect the workings of competition. Our agreement with Merlin, for example, covering the repertoires of numerous independent record labels, provides for a lower effective per-play rate as we "steer" our plays toward directly-licensed repertory, and thus provides us with a competitive incentive to play directly-licensed tracks more heavily than we would otherwise.

49. As I noted in my direct testimony, the Merlin agreement covers significant and critically-acclaimed sound recordings, including winners of Grammys and other major record-industry awards. At this year's 57th Annual Grammy Awards, artists associated with Merlin labels won the awards in categories for Best Jazz Vocal Album (Concord); Best Jazz Instrumental Album (Concord); Best Bluegrass Album (Concord); Best Folk Album (ATO); Best Gospel Album (eOne); and Dance/Electronic Album of the Year (Warp).

50. Since signing the Merlin agreement, we have succeeded in increasing directly-licensed spins by approximately [REDACTED]. This means that the effective rate we are paying Merlin on behalf of participating labels is [REDACTED] per ad-supported play. Based on those Merlin labels that have opted in to the agreement, the license covers about [REDACTED] of our total performances.

51. In January, we signed a direct license agreement with Naxos, a leading classical music label. See Pandora Exhibit 15. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

#### **Pandora's Payments to Artists**

52. In October 2012, Pandora posted on its company blog the payments that Pandora would make to certain artists in the coming twelve months (*i.e.*, October 2012 through September 2013).<sup>19</sup> In that post, Pandora stated:

Have you heard of Donnie McClurkin, French Montana or Grupo Bryndis? If you haven't you're not alone. They are artists whose sales ranks on Amazon are 4,752, 17,000 and 183,187, respectively. These are all working artists who live well outside the mainstream – no steady rotation on broadcast radio, no high profile opening slots on major tours, no front page placement in online retail. What they also have in common is a steady income from Pandora. In the next twelve months Pandora is on track to pay performance fees of \$100,228, \$138,567 and \$114,192, respectively, for the music we play to their large and fast-growing audiences on Pandora.

And that's just the tip of the iceberg. For over two thousand artists Pandora will pay over \$10,000 dollars each over the next 12 months (including one of my favorites, the late jazz pianist Oscar Peterson), and for more than 800 we'll pay over \$50,000, more than the income of the average American household. For top

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<sup>19</sup> Pandora and Artist Payments, The Pandora Blog (October 9, 2012), <http://blog.pandora.com/2012/10/09/pandora-and-artist-payments/>.

earners like Coldplay, Adele, Wiz Khalifa, Jason Aldean and others Pandora is already paying over \$1 million each. Drake and Lil Wayne are fast approaching a \$3 million annual rate each.

53. In response to testimony from SoundExchange witnesses Fletcher Foster (Iconic), Raymond Hair (AFM), and Michael Huppe (SoundExchange), individually and collectively seeking to convey the impression that without “strong” (*i.e.*, significantly higher) statutory rates than the rates under which Pandora is now operating, recording artists will be deprived of “fair compensation,” I want to update the above referenced numbers. In 2014, Pandora paid [REDACTED] or more to more than [REDACTED] recording artists and their respective labels. In fact, Pandora paid the equivalent of the median U.S. household income of \$52,000 to more than [REDACTED] artists and their labels. Pandora paid [REDACTED] or more to nearly [REDACTED] artists and their labels. And what about Donnie McClurkin, French Montana, and Grupo Bryndis? Pandora paid them (and their labels) about [REDACTED], [REDACTED] and [REDACTED], respectively, increases of [REDACTED], [REDACTED] and [REDACTED] since the October 2012 blog post. In short, sweeping and unsupported generalizations as to allegedly systematic under-compensation of artists under Pandora’s prevailing rate structure are wholly unfounded. Pandora’s more than [REDACTED] in annual royalties overall and its indisputably generous payments to the most productive artists and labels utterly belies such a notion.

#### **SoundExchange’s Proposed Amendments To The Terms Should Be Rejected**

54. In this portion of my rebuttal testimony, I respond to SoundExchange’s proposed Rates and Terms for the 2016-2020 rate period, including, but not limited to, proposed modifications to Sections 380.2, 380.3, 380.4, and 380.6 of the Copyright Royalty Board’s regulations, 37 C.F.R. §§ 380.2, 380.3, 380.4 & 380.6.

#### **A. SoundExchange’s Proposed Definition of Revenue Should Be Rejected**

55. As part of SoundExchange’s rate proposal, which includes a percent-of-revenue prong, SoundExchange has proposed a new definition of “Gross Revenue.” The governing

webcasting regulations, which to date have been based on a per-play royalty rate, have not previously contained such a definition of revenue. The new Gross Revenue definition that SoundExchange proposes here, however, is very different from the revenue definitions adopted by the Judges in the past for other types of services that do pay based on a percentage of their revenue, including satellite radio (37 C.F.R. § 382.11), preexisting subscription services (Music Choice) (37 C.F.R. § 382.2) and cable/satellite music services (37 C.F.R. § 383.2).

56. Notably, SoundExchange’s proposed revenue definition here includes certain unrelated sources of revenue that the Judges have typically and rightly *excluded* – often over the objection of SoundExchange – in the regulations applicable to the other licensee categories:

a) **Product and Sales**: SoundExchange’s revenue definition would require Pandora and other licensees to include revenue from “sales of products and services offered as part of or through the Service, including revenue from products and services that are Bundled with the Service.”<sup>20</sup> SoundExchange’s revenue definition also includes “Revenue from any software or other product associated with the Service,” including “placement fees for such software or other product.” Assuming Pandora is the licensed “Service” under this definition (we “make eligible transmissions”), this broad definition could be read to sweep in all manner of equipment sales, media player software and other “app” sales, and, most notably, advertising or subscription revenue paid for other non-statutory services offered by Pandora. For that matter, it could include Pandora t-shirts and coffee mugs, if those items were sold “through” or “associated with” the Service.<sup>21</sup>

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<sup>20</sup> “Service” is not limited to transmissions covered by the statutory license, but rather is more broadly defined as a service that “makes eligible transmissions,” even if such transmissions comprise only part of the service offering. “Bundled” is defined as a situation where the user must take/use/receive both the Service and some other product/service.

<sup>21</sup> The only exception allowed by SoundExchange is for products where the Service is Bundled with other products or services “that do not involve the Service.” This exception will have limited effect in shielding



By contrast, such unrelated revenues are explicitly *excluded* from the definition of “Gross Revenues” for satellite radio. See, for example, 37 C.F.R. § 382.11 at (3)(i) (excluding revenue from sale and/or license of equipment and/or other technology, including bandwidth and receiving devices); (3)(ii) (excluding revenue from intellectual property licenses); (3)(vi)(B) (excluding revenue for “products and/or other services offered for a separate charge where such channels use only incidental performances of sound recordings”); and 3(vi)(D) (excluding revenue from “products and/or other services for which the performance of sound recordings and/or the making of Ephemeral Recordings is exempt from any license requirement or is separately licensed”).

b) **Advertising Agency Commissions**: SoundExchange’s proposed revenue definition includes advertising revenue, as is common, but does not allow for the deductions of ad agency commissions paid by the licensee (which deduction is also common). That not only is unfair, it is at odds with the revenue definitions governing other statutory licensees,<sup>22</sup> not to mention in Pandora’s agreements with ASCAP and BMI. SoundExchange’s witnesses have provided no explanation or justification for parting with standard industry practice or the prior regulations on this point.

c) **Data**: SoundExchange’s proposed revenue definition includes “Revenue generated by the use of exploitation of data gathered or generated from the Service.” The regulations governing satellite radio, by comparison, include only advertising and subscription

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unrelated revenue. First and foremost, a Service might offer other optional products or services – ticket sales, for example – in some arrangement less formal than a “Bundle” (which, under SoundExchange’s definition, requires a situation where the user *must* take/use/receive *both* the Service *and* other product/service). Second, SoundExchange provides no guidance to determine whether a Bundled service is or is not “involved” with the licensed Service.

<sup>22</sup> See, e.g., 37 C.F.R. § 382.11 (“gross revenues” definition) at (1)(ii) (excluding “advertising agency and sales commissions”); § 382.2(e)(2) (excluding “advertising agency commissions not to exceed 15% of those fees incurred to a recognized advertising agency not owned or controlled by Licensee”); § 383.2(g)(1)(ii) (same).

revenue. See 37 C.F.R. § 382.11. Those regulations also exclude revenue for “current and future data services offered for a separate charge.” 37 C.F.R. § 382.11 at (3)(vi)(A).

d) **Bad Debt**: SoundExchange’s proposed revenue definition does not allow licensees to reduce the revenue base on account of bad debt. Bad debt expense reflects revenue that was initially booked as earned but that was not ultimately collected from the customer. SoundExchange is therefore proposing, again, that it and its members should get a cut of revenue that is never actually collected. The revenue definitions governing satellite radio and preexisting services exclude “bad debt expense” (§ 382.11 at (3(v))) and “bad debts actually written off during the reporting period” (§ 382.2 at (2)), as does the definition that applies to New Subscription Services (37 C.F.R. § 383.2 at (g)(viii) (requiring inclusion only of bad debts “recovered”)).

e) **Other Fees**: SoundExchange’s proposed revenue definition leaves out another exclusion found in the satellite radio revenue definition: the exclusion for “Sales and use taxes, shipping and handling, credit card, invoice, and fulfillment service fees.” Instead, it includes a deduction solely for sales, excise, and use taxes. The other items, however, no different than taxes, reflect fees that licensed services collect, not for the music service itself, but to cover costs charge by third parties for delivering the service – most of which are simply passed through to such third-parties (such as the local taxing authorities). In the case of credit card fees, while Pandora recognizes revenue for subscriptions paid by credit card, the credit card companies deduct their fees off the top prior to passing the revenue to Pandora. As a result, the revenue actually collected by Pandora is less (by the amount of the fees) than what is initially recognized. Absent such a deduction, Pandora would be paying royalties on revenues it does not actually collect.

57. SoundExchange and its members have no entitlement to streams of revenue that are paid for items other than statutory streaming or (as to bad debt and credit card fees) are never collected in the first place. There is no reason SoundExchange should receive a share of the Company's revenues earned for lines of business, service offerings, data sales, or software and equipment sales that are not covered by the statutory license merely because Pandora is required to pay a royalty for performances that *are* covered by its statutory license. This could include the launch of an interactive streaming service (which would be separately licensed from sound recording copyright owners) or a business establishment service (where there is an exemption for the public performance of sound recordings). And there is even less reason for Pandora to be taxed on revenue that is never collected.

58. For just these reasons, such unrelated revenues are, as noted above, *excluded* from the definition of "Gross Revenues" for satellite radio and other categories of licensees. These exclusions grew from the Judges' recognition in the *Satellite I* proceeding that "[i]n order 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."<sup>23</sup> The Judges accordingly defined "Gross Revenue" through a variety of exclusions in order to "more clearly delineate the revenues related to the value of the sound recording performance rights at issue."<sup>24</sup> Notably, when SoundExchange attempted to eliminate those exclusions in the *Satellite II* proceeding, the Judges rejected that attempt, explaining that they were "driven by the admonition in SDARS-I to include only those revenues related to the value of the sound recording performance rights at issue in this proceeding. The Judges are satisfied that the exclusions permitted in the current

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<sup>23</sup> See *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, Docket No. 2006-1 CRB DSTRA ("*Satellite I*"), Fed. Reg. Vol. 73, No. 16 p. 4087 (Jan. 24, 2008).

<sup>24</sup> *Id.*

Gross Revenues definition remain proper.” 78 Fed. Reg. 23054, at 23072 (citing SDARS–I, 73 FR at 4087) (internal citations omitted).<sup>25</sup> SoundExchange’s witnesses do not explain why the situation should be different here.

59. In sum, in order to ensure that SoundExchange is only paid on the portion of revenues derived by a licensee from operations under the statutory license, the regulations must account for the possibility that a service such as Pandora may be involved in multiple lines of business that fall outside of the scope of this proceeding, and may earn revenues from the operation of such services that are entirely distinct from the operations for which the Judges are currently establishing a royalty rate. The regulations should make clear that revenues of the licensee that are derived from any other service operated by the licensee are not to be included in the revenue base on which royalties are payable to SoundExchange.

60. Pandora’s definition of revenue does just that: it includes all money earned according to GAAP<sup>26</sup> derived from making eligible transmissions in the United States, and excludes revenue from activities other than making eligible transmissions or from eligible transmissions outside the United States.

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<sup>25</sup> The Judges continued: “In defining *Gross Revenues*, the Judges plainly stated that it was their intention to unambiguously relate the fee charged for a service provided by an SDARS to the value of the sound recording performance rights covered by the statutory licenses.” *Satellite II*, 78 Fed. Reg. at 23072 (citing SDARS–I, 73 FR at 4087).

<sup>26</sup> SoundExchange’s proposal, in addition to the problems noted above, defines revenue to include “all amounts paid, payable, credited, or creditable to Licensee, received or receivable by or on behalf of Licensee, or recognized by Licensee as revenue under United States Generally Accepted Accounting Principles (U.S. GAAP).” That proposal is redundant at best and confusing at worst: it is not at all clear, for example, how revenue that is “credited” or “creditable” is different than revenue that is “payable.” It also creates the possibility for audit disputes, *i.e.*, that SoundExchange or its auditors might identify revenues never recognized or received by Pandora as nonetheless being somehow “creditable” or “payable.”

## B. Ephemeral Recordings Definition

61. SoundExchange has proposed to retain the language in Section 380.3 of the current regulations, which states:

*Ephemeral recordings.* The royalty payable under 17 U.S.C. 112(e) for the making of all Ephemeral Recordings used by the Licensee solely to facilitate transmissions **for which it pays royalties** shall be included within, and constitute 5% of, the total royalties payable under 17 U.S.C. 112(e) and 114.

62. Pandora has two concerns with SoundExchange's proposal. First, as indicated by the bolded language above, it appears to permit the making of ephemeral recordings only for sound recordings for which a performance royalty is paid. However, the definition of "Performance" proposed by SoundExchange (which mirrors the current definition and Pandora's proposed definition) exempts certain performances from payment, for example, "incidental" performances including "transitions in and out of commercials." *See* 37 C.F.R. § 380.2. This creates the possibility (likely unintended) that ephemeral copies of sound recordings that are used by a service for non-compensable performances under Section 114 might not be authorized under the regulations. To remedy this issue, Pandora has proposed the following simple change to Section 380.3:

*Ephemeral recordings.* The royalty payable under 17 U.S.C. 112(e) for the making of all Ephemeral Recordings used by the Licensee solely to facilitate transmissions ~~for which it pays royalties~~ *made pursuant to 17 U.S.C. 114* shall be included within, and constitute 5% of, the total royalties payable under 17 U.S.C. 112(e) and 114.

This edit clarifies that a webcaster is licensed to make ephemeral copies of sound recordings the performances of which are either payable *or* exempted from payment under Section 114.

63. In addition, the regulations adopted by the Judges should affirmatively state that statutory licensees are permitted to make as many ephemeral phonorecords of sound recordings as the licensee needs to optimize their statutory service. Clarification of this point – which I

don't understand SoundExchange to be contesting – is important because the statute provides that a statutory licensee is entitled “to make no more than 1 phonorecord of the sound recording (*unless the terms and conditions of the statutory license allow for more*).” 17 U.S.C. § 112(e)(1) (emphasis added). The terms of the statutory license *should* call for “more,” for the obvious reason that statutory internet radio streaming necessarily involves making multiple copies to facilitate transmissions in different streaming formats and at different bit rates, to have backup copies available for disaster recovery purposes, and to handle the volume of a popular national streaming service, among other reasons. To eliminate any doubt, we recommend adding the following sentence to Section 380.3: “A Licensee is authorized to make more than one Ephemeral Recording of a sound recording as it deems necessary to make noninteractive digital audio transmissions pursuant to 17 U.S.C. 114.”

### **C. Accelerated Timing of Royalty Payments**

#### **1. 30-Day Payment Window**

64. SoundExchange has proposed amending Section 380.4(c) of the regulations so that the timing of royalty payments be shortened from 45 to 30 days in order to expedite the royalty distribution process for artists and copyright owners. SoundExchange also calls for corresponding changes in the delivery deadlines for statements of account and reports of use. These changes should be rejected for several reasons, both procedural and substantive.

65. First, as the Judges know, there is a separate rulemaking proceeding addressing notice and recordkeeping regulations. In that proceeding, SoundExchange has already sought to shorten the period for delivery of reports of use from 45 to 30 days. Pandora and a number of other statutory licensees have opposed that recommendation and filed detailed comments explaining their opposition. There is no reason to rule on that topic here as well when it has been fully litigated elsewhere – or to give SoundExchange a second avenue for pursuing its desired

result. Moreover, if the Judges reject SoundExchange’s proposal in that separate proceeding to shrink the timing for submitting reports of use (thus maintaining the current 45-day window), it would make little sense to rule here that statements of account and payments should be submitted in a shorter 30-day window. As should be obvious, the statements of account and payment calculations are premised on the performances contained in the reports of use; if the reports are still being completed and vetted when the payment comes due (under the shorter 30-day window), it raises the possibility that the statements of account and payments could suffer from inaccuracies or – more likely – licensees would essentially be forced to complete their reports of use in 30 days to avoid such inaccuracies even though the deadline would be 45 days.

66. As Pandora explained in the separate recordkeeping rulemaking, there are also solid substantive reasons not to reduce the time period for delivering reports of use from 45 to 30 days – reasons that apply equally to monthly payments and statements of account (as SoundExchange proposes here):

SoundExchange proposes that licensees be required to deliver ROUs in 30 rather than 45 days. . . . The alleged reason for accelerating payment is to enable expedited payments to copyright owners and artists. . . .

There is simply no basis for accelerating the delivery of ROUs under the existing regulations. As SoundExchange appears to acknowledge, it is already able to distribute the overwhelming majority of royalties paid to it, and there appears to be little demand for accelerating payments by 15 days. Moreover, it strains credulity that reporting to SoundExchange could be improved by giving statutory licensees *less time* to complete ROUs. If SoundExchange is truly receiving ROUs that are incomplete or untimely, then perhaps the extant regulations are already too burdensome or the time period for reporting is too short. There is no evidence that accelerating reporting obligations will improve the quality of reporting, which is SoundExchange’s stated goal.

...

The preparation of ROUs can be challenging. As described above, Pandora currently plays over 1.5 million unique sound recordings. This means that for any given month, Pandora generates an ROU with no fewer than 1.5 million rows of data. To compile those over 1.5 million rows of data, Pandora must determine the

play counts for each one of those 1.5 million songs from billions of server instances (i.e., each time a user received a transmission of a sound recording). It takes significant resources to generate those reports and track performances at the volume at which Pandora operates.

...

Although Pandora can and does comply with today's reporting requirements within 45 days, accelerating ROU delivery while at the same time increasing the information to be included within ROUs while being subject to financial penalties for failing to do so accurately, will impose a significant and unreasonable burden on Pandora (and likely many other statutory licensees).

*See* Reply Comments of Pandora Media, Inc. in Recordkeeping Rulemaking at 15-17 (Sept. 5, 2014) (attached here as Pandora Exhibit 16).

67. The significant burden imposed upon licensees by shortening the payment and reporting deadlines from 45 to 30 days will not improve the quality of royalty calculations or reporting. Rather, accelerated payment and reporting will likely only lead to more hardships on licensees and greater likelihood of errors in payment calculation and reporting. That is simply not justified. The regulations should not impose significant additional burdens upon licensees for a marginal (if any) speedup in SoundExchange royalty allocation and distribution – especially if it introduces the possibility of errors in such distributions. SoundExchange recently touted that it distributed \$773 million in royalties in 2014, an increase of 31% over 2013 distributions. This was accomplished with payment and reporting deadlines of 45 days. The system is not broken and no fix is required.<sup>27</sup>

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<sup>27</sup> Marketplace agreements for the same rights at issue in this proceeding support retention of a 45-day payment period. *See* Agreement between Pandora Media Inc. (“Pandora”) and Music and Entertainment Rights Licensing Independent Network B.V. (“Merlin”), § 12.a.



**D. Verification of Royalty Payments.**

**1. Definition of “Qualified Auditor”**

68. SoundExchange attempts to expand the universe of entities that can conduct a verification of a statutory webcaster by proposing elimination of the current requirement that a “Qualified Auditor” be a certified public accountant. Instead, SoundExchange seeks to allow any “person, who by virtue of education or experience, is appropriately qualified to perform an audit to verify royalty payments related to performances of sound recordings.” The Judges should reject this proposal for the same reasons they rejected a similar effort in *Webcaster II*.

69. Importantly, it is unclear what “by virtue of education or experience” means. What “education” or “experience” – apart from the rigorous accreditation and standards applied to CPAs – is appropriate for conducting an audit of a statutory licensee? Must the education or experience be in copyright law, network design or engineering, finance, accounting, or something else? Is one survey course in accounting sufficient? SoundExchange does not answer these questions.

70. But the Judges in *Webcaster II* did. There they noted that the purpose of verifications is not to provide them at the lowest price but to establish a high degree of credibility in the results of the verification. That credibility is achieved by requiring verifications solely by those who are governed by accepted standards and practices of auditing and standards of conduct:

By eliminating the requirements that an auditor be a CPA and independent from SoundExchange, SoundExchange is seeking to transform the prior verification process into what it calls “technical audits.” Technical audits would, in SoundExchange’s view, reduce its costs by allowing in-house technical experts to conduct the audits rather than outside CPAs, who might lack the technical capability for the data processing and analysis and may be more expensive than in-house personnel. The Copyright Royalty Judges have reviewed the record company/ music service agreements submitted by the parties and note that some agreements permit technical audits. Others, however, require the auditors to be

CPAs, and that the auditor be independent of both the licensor and licensee. While technical audits by in-house personnel might be cheaper for the Collective, we conclude that it is more important, in the interest of establishing a high level of credibility in the results of the audit, that the auditor be independent of both parties. Likewise, we find that requiring the auditor to be certified further raises confidence levels in the audit. CPAs have experience in the field of accounting, are familiar with the accepted standards and practices for auditing, and are governed by standards of conduct. If technical skills are required to process the data of a Service, the auditor can request assistance. In sum, the Copyright Royalty Judges are requiring that the auditor be certified and independent of both SoundExchange and the Service being audited.

Final Rule and Order in Digital Performance Right in Sound Recordings and Ephemeral Recordings, Docket No. 2005-1 CRB DTRA, 72 Fed. Reg. 24084, 24109 (May 1, 2007) (internal citations omitted).

71. This statement remains true today. I note that American Institute of Certified Public Accounts, Inc. (“AICPA”) recently revised its Code of Professional Conduct (effective December 15, 2014) (the “Code”), to clarify the rules that apply to all “members,” which includes a “member” in public practice, in business, and even to those who are retired or unemployed. *See* Code Section 0.100.02. These rules are designed to ensure the objectivity and integrity of members of the accounting profession. *See* Code Sections 0.300.030.02 and .04. The Code states that “[i]ntegrity is measured in terms of what is right and just” (Section 0.300.040.04) and prohibits the “subordination of the [auditor’s] judgment” to the interests of its client – here, SoundExchange. Code Section 0.300.050.03.

72. I have significant concerns about permitting an audit by a non-Qualified Auditor, as that term is currently defined in 37 C.F.R. § 380.2, that is not bound by these obligations. Specifically, I am troubled by the prospect of an auditor not governed by the Code conducting an audit solely to determine whether a licensee has *underpaid* royalties to SoundExchange rather than determining the *accuracy of payments* – whether underpayments or overpayments – under the statutory license. Following discussions with a representative of a music service that has

been audited by one of SoundExchange's preferred auditors, I understand that the auditor (not a CPA, and therefore not a Qualified Auditor) has conducted regular audits solely to determine underpayments to a licensor. This approach could be particularly problematic where licensees undertake direct licensing efforts alongside reliance upon the statutory license to secure rights to sound recordings, as Pandora has done. If SoundExchange's auditor were not bound by standards of conduct, the auditor could search solely for evidence that a licensee had mistakenly claimed direct-license credit for a track not actually covered by the direct license (and thus underpaid SoundExchange), but not attempt to determine whether the licensee had overlooked performances where it could have claimed a direct-license credit (and thus overpaid SoundExchange).

73. Restricting audits to Certified Public Accountants will help avoid this result and ensure that the integrity of the audits is not brought into question by the auditor only looking for underpayments. To further ensure the independence of an auditor, the auditor should be prohibited from conducting audits on a contingency fee basis. Qualified Auditors should either be compensated on a flat fee or time and materials basis, but excluding any time spent consulting with SoundExchange, which should not be at the expense of the licensee. Finally, the regulations should be amended so that an auditor must determine whether an underpayment *or overpayment* has been made to the collective. Statutory licensees should not be penalized if they inadvertently overpay royalties to SoundExchange.<sup>28</sup> In the event of any such overpayment, the regulations should provide for a credit or refund to the licensee, with interest. As interest is

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<sup>28</sup> Pandora's proposed rates and terms amend § 380.6(c) to add the following: "Subject to Section 380.6(e), a Qualified Auditor must determine the accuracy of royalty payments made to the collective, including whether an underpayment or overpayment of royalties has been made, and the Qualified Auditor may not be compensated on a contingency fee basis."

currently chargeable for any underpayment of royalties, interest should also be credited for any overpayment of royalties.<sup>29</sup>

## **2. *Acceptable Verification Procedure***

74. SoundExchange has also proposed the deletion of Section 380.6(e), which provides that an audit of a licensee already performed in the ordinary course of business shall “serve as an acceptable verification procedure.” This provision has been included in all of the regulations adopted for Webcasting since *Webcasting I*. It ensures that a licensee that is already subject to an audit by a Qualified Auditor in the normal course of business will not have to be burdened with a second audit by SoundExchange. I understand that it was negotiated by representatives of the recording industry and licensees in 2002, and there is no reason for that provision to now be excised from the regulations.

75. Where a statutory licensee is audited by a Qualified Auditor and the Qualified Auditor has concluded that the licensee’s financial statements present fairly, in all material respects, the consolidated results of the licensee’s operations and cash flows in conformity with U.S. generally accepted accounting principles (GAAP), that audit should suffice and preclude any further audits under CRB regulations. Pandora’s auditors would not be able to reach that conclusion and certify Pandora’s financial statements if Pandora was not accurately calculating its liabilities to SoundExchange, particularly where Pandora’s payments to SoundExchange are Pandora’s single largest expense.

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<sup>29</sup> Pandora’s First Amended Proposed Rates and Terms adds the following Section 380.6(h): “Make-up payments or credits. Upon the conclusion of the verification and the resolution of all claims between the Collective and the Licensee, (i) the Licensee shall, in the case of any underpayment, remit the amount of any agreed-upon underpayment to the Collective, as mutually agreed by the Collective and the Licensee, which agreement may, but need not, include installment payments, with interest, at the rate specified in Section 380.4(e) and (ii) the Collective shall, in the case of any overpayment, credit the account of the Licensee in the amount of any agreed upon overpayment to the Collective, with interest, at the rate specified in Section 380.4(e).”

76. If the Judges accept SoundExchange’s proposal on the theory that a routine financial audit may not devote sufficient attention to server log records and other more technical aspects of a licensee’s royalty reporting mechanisms, then the Judges should at least retain the right of a licensee to have a Qualified Auditor conduct a verification of server logs in the ordinary course of business to serve as an acceptable form of verification. SoundExchange is currently in the position to wield an audit as a weapon, and licensees should not be subject to such harassment by either SoundExchange or the record companies that control it.

**E. Unclaimed Funds**

77. SoundExchange has proposed in its Proposed Rates and Terms to push forward the current regulation for the treatment of so-called “unclaimed funds.” Current regulations provide that in the event a sound recording copyright owner or featured artist entitled to a portion of a pool of royalties (presumably the royalties for a calendar month) fails to register with the collective within three years of the date of first distribution of all or any portion of that pool of royalties by SoundExchange, SoundExchange may retain those unclaimed funds for its own purposes notwithstanding the common law or statutes of any State. *See* 37 C.F.R. § 380.8.

78. Pandora does not believe the Copyright Royalty Board has the authority to preempt the statutes of any State. Pandora therefore proposes the following amendment to 380.8:

If the Collective is unable to identify or locate a Copyright Owner or Performer who is entitled to receive a royalty distribution under this subpart, the Collective shall retain the required payment in a segregated trust account for a period of 3 years from the date of distribution. No claim to such distribution shall be valid after the expiration of the 3-year period. After expiration of this period, the Collective *shall handle such funds in accordance with* ~~may apply the unclaimed funds to offset any costs deductible under 17 U.S.C. 114(g)(3). The foregoing shall apply notwithstanding the~~ common *or State* law ~~or statutes of any State.~~



PANDORA EX 14

MEDIA FILE

PLEASE SEE CD WITH MEDIA FILE

PANDORA EX 15

RESTRICTED DOCUMENT

Subject to Protective Order in Docket No. 14-CRB-0001-WR  
(2016-2020) (*Web IV*)



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

In the Matter of:	)	
	)	
Notice and Recordkeeping for Use of	)	Docket No. 14-CRB-0005 (RM)
Sound Recordings Under Statutory License	)	
	)	

**REPLY COMMENTS OF  
PANDORA MEDIA, INC.**

Pandora Media, Inc. (“**Pandora**”) respectfully submits these Reply Comments in response to the comments filed by other parties in response to the Copyright Royalty Board’s Notice of Proposed Rulemaking for Notice and Recordkeeping for Use of Sound Recordings Under Statutory License dated May 2, 2014, 79 Fed. Reg. 25038 (May 2, 2014) (as amended by the *Order Granting NAB Motion for Extension of Time for Commenting in the Copyright Royalty Judges’ Notice and Recordkeeping Rulemaking* (May 22, 2014)) (the “**NPRM**”) (each, a “**Comment**”).

Our Reply Comments are largely supportive of and consistent with the Comments filed by the other statutory licensees.

**I. BACKGROUND.**

Pandora is the largest and most successful eligible nonsubscription transmission service in operation today and, in fact, since the establishment of the statutory license for webcasting in 1998. Our *total* share of U.S. radio listening (including terrestrial radio) as of June 2014 is

estimated at 8.9%. Our total listener hours in the second quarter of 2014 were 5.04 billion. We had 76.4 million active listeners<sup>1</sup> as of the end of the second quarter of 2014.

We currently have approximately 2.5 million songs in our library and that number is growing by approximately 7,500 to 10,000 every week.<sup>2</sup> Every month we perform more than 1.5 million unique songs by more than 100,000 recording artists, approximately 80% of whom do not receive airplay on terrestrial radio.<sup>3</sup>

We are also the largest single payor of royalties to SoundExchange, Inc. (“**SoundExchange**”), and will pay approximately \$400 million in royalties to SoundExchange in 2014 for the right to make digital audio transmissions of sound recordings and ephemeral phonorecords pursuant to the statutory licenses set forth in Sections 114 and 112 of the

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<sup>1</sup> We consider an “active listener” to be a registered user that has requested audio from our servers within the trailing 30 days from the end of each calendar month.

<sup>2</sup> For comparison purposes, many broadcast stations have music libraries only a fraction of the size of Pandora’s. *See, e.g.*, Joint Comments of the National Association of Broadcasters and the Radio Music License Committee Regarding the Copyright Royalty Judges’ Notice and Recordkeeping Rulemaking, Docket No. 14-CRB-0005 (RM), at 53 (June 30, 2014) (“**Joint Broadcaster Comments**”) (the National Association of Broadcasters and the Radio Music License Committee are the “**Joint Broadcasters**”); *id.*, at Exhibit B, Declaration of Jim Tinker, Salem Los Angeles, at 4 (“For our Los Angeles stations, we maintain data for approximately 6,500 pieces of music (which includes incidental music), and our other markets are similar.”); *id.*, at Exhibit D, Declaration of Michael Cooney, Beasley Broadcast Group, at 3 (“The burden is exacerbated because Beasley maintains different databases for its 11 different markets, and its databases on average include information regarding approximately 3,000 songs – approximately 33,000 recordings overall . . .”); *id.*, at Exhibit E, Declaration of Chris Moran, West Virginia Radio Corporation, at 4 (“Because we maintain separate databases for our 19 different stations that stream, and our databases on average include information regarding approximately 500-700 recordings, I would estimate that we would have to revisit approximately 10,000-15,000 database entries overall.”); *id.*, at Exhibit G, Declaration of Douglas Myer, WDAC, at 2 (“Over the years, we have developed a large music information database that includes information for approximately 23,000 sound recordings.”).

<sup>3</sup> *See* Executive Summary of Written Testimony of Chris Harrison, Vice President, Business Affairs, Pandora Media, Inc., Music Licensing under Title 17: Part Two: Hearing before the H. Comm. on the Judiciary, 113th Cong. 1, at 4 (June 25, 2014), [http://judiciary.house.gov/\\_cache/files/d846ac2e-4564-4406-89da-9cfa68c8a1f5/062514-music-license-pt-2-testimony-pandora.pdf](http://judiciary.house.gov/_cache/files/d846ac2e-4564-4406-89da-9cfa68c8a1f5/062514-music-license-pt-2-testimony-pandora.pdf).

Copyright Act, 17 U.S.C. §§ 114, 112 (the “**Statutory Licenses**”). Since our launch, we have paid nearly \$1 billion in total royalties to SoundExchange.<sup>4</sup>

We have invested tens of millions of dollars to develop our technology, both for the purposes of creating our proprietary Music Genome Project and to provide copyright owners with *reasonable notice* of the use of sound recordings under the Statutory Licenses. On a monthly basis we provide SoundExchange with detailed Reports of Use (each, an “**ROU**”) that identify the more than 1.5 million unique sound recordings we perform each month.

We provide this background information to indicate the size of Pandora and the scope of our activities under the Statutory Licenses. We are the largest entity whose sole business is statutory webcasting. We are also larger than many terrestrial radio stations, with respect to both revenue and audience size.<sup>5</sup> Yet we share many of the objections to SoundExchange’s proposed revisions to the existing notice and recordkeeping regulations as those expressed by the other parties that have filed Comments.

As the Joint Broadcasters state, “SoundExchange seeks to impose substantial new burdens and draconian penalties on [licensees] . . . without any showing that such burdens or penalties are necessary or reasonable.”<sup>6</sup> SoundExchange, by its own admission, appears quite adept at distributing the royalties that we and other entities operating under the Statutory Licenses pay to the organization. In its own petition for this NPRM, SoundExchange

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<sup>4</sup> For comparison purposes, as of June 25, 2014, SoundExchange reported that it has paid out more than \$2 billion in royalties. See Statement of Michael Huppe, President and CEO, SoundExchange, Inc., Music Licensing under Title 17: Part Two: Hearing before the H. Comm. on the Judiciary, 113th Cong. 1 at 2 (June 25, 2014), <http://docs.house.gov/meetings/JU/JU03/20140625/102411/HHRG-113-JU03-Wstate-HuppeM-20140625.PDF>.

<sup>5</sup> Cf. Joint Broadcaster Comments, Exhibit C, Declaration of Sandhi Kozsuch, Cox Media Group, LLC, at 2 (“Cox Media Group is a major media company with national breadth, reaching over 14 million Americans each week through its radio properties.”).

<sup>6</sup> Joint Broadcaster Comments, at 2.

acknowledged that it only had roughly 1.2% of total royalties identified as “undistributable due to missing or unusable ROUs.”<sup>7</sup>

As a result of this nominal percentage, SoundExchange now seeks to impose new and onerous reporting burdens on statutory licensees. As the Joint Broadcasters put it, “[t]here is a unifying theme to SoundExchange’s requests. SoundExchange’s clear aim is to make its own job easier by shifting any of its (as yet undemonstrated) burdens to others . . . .”<sup>8</sup> We agree with this characterization, and that this shifting of burdens and costs is an improper basis for modifying existing regulations.

As the Joint Broadcasters note, the Copyright Act only mandates that the Copyright Royalty Judges (“**CRJs**” or “**Judges**”) “establish requirements by which copyright owners may receive reasonable notice of the use of their sound recordings under this section.”<sup>9</sup> “Reasonable notice” does not – and indeed should not – require that statutory licensees undertake SoundExchange’s requested measures because such measure(s) will make SoundExchange’s job of collecting and distributing royalties easier. Rather, as the Joint Broadcasters have indicated, the Judges should balance the costs and burdens imposed on statutory licensees by the proposed new regulations against the ability of SoundExchange to distribute the royalties it receives in a reasonable and fair manner under the existing regulations.<sup>10</sup>

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<sup>7</sup> Petition of SoundExchange, Inc. for a Rulemaking to Consider Modifications to Notice and Recordkeeping Requirements for Use of Sound Recordings Under Statutory License, at 28 (Oct. 21, 2013) (“**SoundExchange Petition**”). Surprisingly, SoundExchange gives no further information on its high degree of efficiency in distributing royalties in its Comments in response to the NPRM, possibly because there may be a realization that being highly efficient in distributing royalties under existing regulations may undermine any petition for amendments to those regulations.

<sup>8</sup> Joint Broadcaster Comments, at 2.

<sup>9</sup> *Id.*, at 13, citing 17 U.S.C. § 114(f)(4)(A).

<sup>10</sup> *Id.*, at 13-19.

What SoundExchange has failed to explain, both in its initial Comments and in SoundExchange’s Petition, is why more comprehensive and accelerated reporting and onerous penalties – such as additional late fees for non-compliant ROUs – are appropriate in a regime where the governing statute requires licensees only to provide copyright owners with *reasonable notice* of use of sound recordings,<sup>11</sup> rather than perfect notice, which appears to be SoundExchange’s objective.<sup>12</sup>

Furthermore, SoundExchange fails to show why measures that it could take to improve its distribution rate (i.e., to reduce or eliminate that 1.2% of undistributable royalties) – such as using additional proxy distributions or sharing its database of identifying information for sound recordings owned by the copyright owners it represents – would not be a more efficient and cost effective remedy for resolving undistributable royalties than the imposition of new reporting obligations that a vast majority of statutory licensees would likely be unable to meet or afford under any definition of “reasonable.”<sup>13</sup> Pandora – and likely many, if not most, other statutory

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<sup>11</sup> See 17 U.S.C. § 114(f)(4)(A) (“The Copyright Royalty Judges shall also establish requirements by which copyright owners may receive reasonable notice of the use of their sound recordings under this sections, and under which records of such use shall be kept and made available by entities performing sound recordings.”).

<sup>12</sup> We note that in its Motion for Extension of Time for Reply Comments, SoundExchange argued that allowing more time for the filing of reply comments would permit the development of a more complete administrative record. However, as the proponent of changes to the existing regulations, Pandora believes that SoundExchange should have submitted any supporting evidence for more onerous reporting regulations in its initial comments rather than holding them back for reply comments, when parties opposing SoundExchange would lack an opportunity to respond. See SoundExchange, Inc. Motion for Extension of Time for Reply Comments, Docket No. 14-CRB-0005 (RM), at 1 (July 14, 2014).

<sup>13</sup> See Comments of KBHU-FM, Docket No. 4-CRB-0005 (RM), at 2 (May 19, 2014) (“KBHU-FM is very relieved to see that the proposed regulations included the qualifier, “if feasible” with respect to reporting the ISRC because it is absolutely not feasible for that to happen at KBHU-FM. We simply do not have the staff or the resources to accomplish this.”); Joint Broadcaster Comments, Exhibit G, Declaration of Douglas Myer, WDAC, at 4 (“The ISRC is also a 12-digit alphanumeric code that would need to be manually entered into our automation system for over 20,000 songs (if it is even available). This seems to me to be a herculean task that would require at least 1,500 hours of labor (assuming approximately 5 minutes per song for research and data entry.”); *id.*, at Exhibit H, Declaration of Gregory Bone, Cape Cod Broadcasting, at 3 (“For our 1,500 classical recordings, this would take an estimated 375

licensees – would have to expend substantial resources in coming into compliance with these new reporting regulations – sums that may far exceed what SoundExchange would have to expend to achieve the same objectives through changes in its own practices and processes. And, as the Copyright Office has previously noted, “the burdens associated with reporting information cannot be so high as to be unreasonable or to create a situation where many services cannot comply.”<sup>14</sup>

If SoundExchange decries the quality of reporting from licensees and the ROUs already delivered (or never delivered), then the CRJs should, at a minimum, ask at least three questions before even considering the imposition of more onerous and comprehensive reporting requirements. First, what is the dollar amount and percentage of royalties collected by SoundExchange on a recurring basis that are not supported by ROUs? Knowing that in 2013, “approximately two-thirds of licensees required to deliver reports of use have not delivered at least one required report, and at least one quarter of such licensees have not delivered any such reports at all”<sup>15</sup> sounds disturbing, however, what SoundExchange has previously failed to disclose is whether these licensees only account for a small fraction of the total royalties collected by SoundExchange or small dollar amounts. If these two-thirds of licensees only represent a small percentage of total royalties collected by SoundExchange, then it does not seem wise, appropriate, or reasonable for the recordkeeping regulations to be made more onerous and compliance more expensive for what can only be described as marginal benefit.

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hours of time by someone with sufficient knowledge to identify this information (most likely our classical music director). We simply do not have the resources for this.”)

<sup>14</sup> Copyright Office Interim Regulations in Notice and Recordkeeping for Use of Sound Recordings Under Statutory License, Docket No. RM 2002-1E, 48 Fed. Reg. 11515, 11521 (May 11, 2004).

<sup>15</sup> See Comments of SoundExchange, Docket No. 4-CRB-0005 (RM), at 12 (June 30, 2014) (“**SoundExchange Comments**”).

Second, are the royalties for which SoundExchange lacks ROUs from services that are largely offering narrow playlists of music for which proxy distributions or sample reporting would be particularly appropriate (e.g., from terrestrial radio stations)? We simply cannot tell from SoundExchange's filings. However, as the Joint Broadcaster Comments point out, where there is little variation in a licensee's use of music, then the use of either sample reporting or proxy distributions would appear much more reasonable than costly census reporting.<sup>16</sup>

Third, without knowing the types of licensees that fail to provide ROUs, the CRJs are deprived of the ability to conduct a balancing of interests to determine whether imposing new reporting obligations on entities lacking SoundExchange's extensive financial resources (it has already distributed \$2 billion in royalties) is justified when SoundExchange has far more ample resources and access to information with regards to both the identification of sound recordings released to the public with the consent of copyright owners and the ownership of the copyrights of such recordings. To paraphrase William Shakespeare, the fault in insufficient reporting may lie not with the licensees but with SoundExchange itself, which may already have in its possession the tools to improve royalty reporting and distribution.

As the Joint Broadcaster Comments note, SoundExchange's Petition and Comments were devoted principally to increasing the reporting and financial burdens on statutory licensees without providing empirical evidence to support changes to existing regulations when viewed through the prism of (1) whether more notice is necessary (i.e., does reasonable notice, as

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<sup>16</sup> See Joint Broadcaster Comments, at 53 ("*Second*, sampling would be particularly well-suited to measure music use for radio broadcast streams because radio stations focus more on 'mainstream' music and have more targeted playlists than do large multi-channel custom webcast services.") (emphasis in original) (internal citations omitted).

required by statute, require more reporting) and (2) should statutory licensees bear those costs.<sup>17</sup> Pandora respectfully believes that SoundExchange has failed to present sufficient evidence to support imposing new obligations on statutory licensees, and the majority of SoundExchange's proposed amendments to existing regulations should be rejected.

Pandora's reply to the other Comments filed in this rulemaking is not comprehensive and does not address every comment of every other party. Rather, Pandora only replies to a number of the Comments that address certain proposed amendments to the existing regulations. Silence with respect to any particular proposed amendment should not be deemed consent to such proposed amendment and, absent an express indication of approval, Pandora reserves all objections to any proposed amendments to existing notice and recordkeeping regulations.

## II. **OBJECTIONS TO CERTAIN SOUNDEXCHANGE PROPOSALS.**

### A. Reporting of ISRCs.

SoundExchange proposes to make the reporting of ISRC's mandatory "where available and feasible." According to SoundExchange, this should be required because "(1) ISRCs are the gold standard for identifying recordings with precision; (2) they are often available to services today; and (3) ISRCs will only become more available as the digital music market matures."<sup>18</sup>

SoundExchange has also said that:

ISRCs typically will be available to services. ISRCs are widely used by record companies and most digital distribution companies for purposes of rights administration, and are used for reporting purposes in direct license agreements between record companies and webcasting and on-demand services. Larger services that receive electronic copies of recordings typically receive ISRCs as part of the accompanying metadata. To the extent services obtain recordings from commercial products, the ISRC

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<sup>17</sup> *See id.*, at 2 ("There is a unifying theme to SoundExchange's requests. SoundExchange's clear aim is to make its own job easier by shifting any of its (as yet undemonstrated) burdens to others, where the burden is clear. That is not a 'reasonable' standard of 'reasonable' for the Judges to apply.").

<sup>18</sup> SoundExchange Comments, at 7.



generally should be encoded thereon, and when present, easily can be extracted with widely-available software tools.<sup>19</sup>

These statements are unsupported and lack record evidence.

First, Pandora has a database of approximately 2.5 million sound recordings. Yet even with all of the financial resources that Pandora has invested in webcasting and reporting, we still lack ISRCs for approximately 600,000 discrete sound recordings. We have this gap notwithstanding the fact that we have a joint marketing agreement with Apple that provides Pandora with substantial metadata for sound recordings in the iTunes music store that is not otherwise made publicly available by Apple. We therefore do not know on what basis SoundExchange claims that ISRCs are typically available. Typically available to whom? If to SoundExchange, then we would welcome the sharing of such information with the statutory licensee community so that all licensees could provide more accurate reporting to meet SoundExchange's professed needs.<sup>20</sup>

Second, we also do not know whether ISRCs for the approximately 600,000 recordings without such information in our database are available and feasible, and it could be a burdensome and expensive undertaking for us to make such a determination. What, in fact, is available and feasible? All SoundExchange has said is the following:

SoundExchange is mindful that for some services, particularly smaller services or noncommercial services, ISRCs may not be available, or it may not be feasible to extract ISRCs from the metadata of the library of sound recordings in their possession.

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<sup>19</sup> SoundExchange Petition, at 22-23.

<sup>20</sup> When Pandora previously requested access to SoundExchange's database of label ownership information to better identify sound recordings transmitted by Pandora, our requests were rebuffed. Specifically, SoundExchange indicated that it does not allow third parties to access its rights holder database. It is our understanding that SoundExchange may soon be announcing a program to share certain information in its database with licensees, including ISRCs, but that program appears to be both experimental and voluntary (i.e., SoundExchange is not required to provide such information to any licensees). If SoundExchange is not required to share the ISRC and other identifying information that it has in its possession, then it strikes us as improper to demand that licensees report such information or risk penalties for failing to do so

SoundExchange is also mindful that for some recordings an ISRC may not have been issued, or may not have been encoded in a copy provided to a service. In those cases, services would not run afoul of the requirements to provide ISRCs, because the “available and feasible” standard would excuse them from providing ISRCs. As a result, the fact that ISRCs may be unavailable, or their reporting infeasible, for some services or recordings today is not a reason to reject SoundExchange’s proposal.<sup>21</sup>

If one dissects the SoundExchange Comments, then Pandora could be facing significant uncertainty as to its ability to comply with amended regulations. We are neither small nor noncommercial. We also may not know whether ISRCs have been issued for some or all of the 600,000 recordings for which we lack such information. As Mr. Rusty Hodge of SomaFM has noted:

To begin with, many commercially released sound recordings do not even have an ISRC assigned to them. Artists are not required to obtain an ISRC when distributing a sound recording, and many do not. Although the three major record labels and many larger independent record labels may purchase ISRCs in large, cost-efficient blocks, registration for an ISRC presents discouraging administrative and financial barriers to individual artists who are not affiliated with a recording label. The ISRC registration fee is a burdensome expense for amateur musicians and a serious impediment to financially challenged artists in developing countries. Even artists who distribute through well-established music services may lack ISRCs. Consider, for example, TuneCore, a large, independent music distributor on the Apple iTunes platform, with a long-standing policy of issuing its own song identifier numbers that are formatted like ISRCs but are not actually registered ISRCs.<sup>22</sup>

Mr. Ethan Diamond, the co-founder and CEO of Bandcamp, Inc., has provided similar information:

Sound recordings sold by Bandcamp rarely contain ISRCs. Only 8.5% of the albums we sell have ISRC information provided for each of the sound recordings on the album. . . .

There are many reasons why a sound recording might not include an ISRC. For example, certain digital file formats, media types, and common music software simply do not support ISRCs. However, the most common reason for sound recordings sold on Bandcamp lacking an ISRC is because the artist/label failed to provide one to us when uploading their tracks to our servers. Many independent artists (who provide the bulk of

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<sup>21</sup> SoundExchange Comments, at 6.

<sup>22</sup> Joint Broadcaster Comments, Exhibit K, Declaration of Rusty Hodge, at 2-3.

the tracks we sell) simply do not have ISRCs to provide. In my experience, most of the independent artists who form our target demographic have little interest in obtaining ISRCs for their sound recordings due to the administrative hassle, the expense, and the fact that ISRCs are completely optional and not particularly useful to them.<sup>23</sup>

Based upon the Declarations of two well-regarded industry leaders, there is evidence in the record directly contradicting the SoundExchange Comments. Under SoundExchange's proposed amended regulation, would Pandora still need to conduct additional research on all of those 600,000 recordings only to find that no ISRCs were ever issued for such recordings? How much additional research and at what expense would be *feasible*? Moreover, what if SoundExchange has an ISRC number for one, some, or many of those 600,000 sound recordings because it received the information directly from one of its member record labels; would that mean that the information is "available and feasible" as a matter of law because it is in SoundExchange's possession, even if SoundExchange refuses to share such information with statutory licensees? There is simply no guidance on how this reporting obligation would apply and what penalties could be imposed upon Pandora under SoundExchange's proposed regulation. Such uncertainty seems inconsistent with a statutory requirement that only requires reasonable notice.

Third, in a recent Copyright Office roundtable meeting in Nashville, Tennessee, a Senior Vice President of Business and Legal Affairs for the RIAA rejected the suggestion that sound recording copyright owners be required to identify ISRC numbers in copyright registrations because the RIAA's "members feel very strongly that there's a lot of just legwork that's involved in tracking all this [ISRCs], and that ***making ISRC numbers mandatory in either registration or***

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<sup>23</sup> *Id.*, at Exhibit L, Declaration of Ethan Diamond, at 2. Pandora's own experience with self-submitted recordings by unsigned artists is consistent with the statements of Messrs. Hodge and Diamond. We receive approximately 800 unsolicited album submissions each week. Of those submissions, only approximately 40% (or 320 albums) are ingested into our music library. Out of those 320 albums, only approximately 20% contain ISRCs.

*recording documents would be burdensome.*<sup>24</sup> How can sound recording copyright owners claim, on the one hand, that an obligation for them to report ISRCs in registration or recording documents is “burdensome,” while, on the other hand, claim that ISRCs are a gold standard that all statutory licensees should report when such information is “available and feasible?” This is clearly a case where what is good for the goose is good for the gander. If the record industry cannot be burdened with reporting ISRCs in public registrations with the United States Copyright Office, then statutory licensees should not be subject to a mandatory reporting obligation of such information under the Statutory Licenses.

Fourth, if Pandora were subject to financial penalties for failure to provide ISRCs for approximately 600,000 tracks, then we may have no recourse but to stop playing such sound recordings. By penalizing a licensee for not reporting ISRCs under an imprecise standard, the licensee may have no choice but to stop playing any music for which the licensee lacks an ISRC in its database, regardless of whether an ISRC was ever issued or is “available and feasible.” Pandora may simply choose not to expend time, resources, or money trying to chase down information that it may eventually discover does not exist, if the alternative is to simply remove a sound recording from the service. This could mean the disappearance of scores or hundreds of thousands of sound recordings by independent labels and unsigned artists from webcasting services.

If the major labels are the primary issuers of ISRCs but many smaller labels and unsigned artists do not apply for and include ISRC numbers in their releases, then the result of this new regulation could be extremely beneficial to the major labels (e.g., Sony Music, Universal Music Group, and Warner Music Group), who control one third of the seats on the SoundExchange

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<sup>24</sup> Transcript of United States Copyright Office, Music Licensing Study Public Roundtable, Nashville, TN, at 283 (June 4, 2014).

Board of Directors (inclusive of the two seats controlled by the Recording Industry Association of America, or “RIAA”).<sup>25</sup> Performances of major label content would increase as a percentage of total performances while recordings released by independent labels and unsigned artists disappear from services such as Pandora.

Fifth, as a predominantly statutory licensee, we (and others operating under the Statutory Licenses) are not required to enter into direct license agreements with record companies for the majority of sound recordings performed on our service. The statutory license is an alternative to direct licenses, which are required for entities wishing to offer on-demand (i.e., interactive) services. The CRJs should therefore not assume that any statutory licensees have direct agreements with record companies pursuant to which the statutory licensees receive ISRCs directly from copyright owners.

Sixth, we do not know if ISRCs are in fact *widely used* by record companies because copyright owners failed to submit initial comments providing information as to (1) the number of record labels that regularly assign ISRCs to sound recordings, (2) when labels started assigning ISRCs, (3) the number of sound recordings commercially released that contain ISRCs, and (4) the number of commercially released sound recordings that do not contain ISRCs. What we do know is that SoundExchange represents more than “24,000 copyright owner accounts,”<sup>26</sup> yet when acting on behalf of these 24,000 copyright owner accounts, SoundExchange has failed to put forth any information that would permit the CRJs to determine the accuracy of SoundExchange’s statements. Because SoundExchange has failed to provide such information in its initial Comments, Pandora respectfully requests that the CRJs reject SoundExchange’s

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<sup>25</sup> See <http://www.soundexchange.com/about/our-team/board-of-directors/>.

<sup>26</sup> See Statement of Michael Huppe, President, SoundExchange, Inc., Music Licensing Under Title 17: Part One: Hearing before the H. Comm. On the Judiciary, 112th Cong. 2, at 2 (March 28, 2012) <http://judiciary.house.gov/files/hearings/Hearings%202012/Huppe%2011282012.pdf>.

assertion that ISRCs are widely used, notwithstanding any information that SoundExchange may include in its reply comments.<sup>27</sup>

Seventh, in its Comments, SoundExchange indicates that it “hopes” to be able to make its database of ISRCs available to statutory licenses, yet it has placed no timetable on making such information available or, in fact, made a firm commitment to doing so:

[A]s SoundExchange continues to enhance its computer systems and work with interested services to improve reporting, SoundExchange *hopes that it will be able to provide ISRCs to interested services*, either by offering them an ISRC search capability for recordings in its repertoire database or supplying them ISRCs that are missing from their reports of use (when the recordings can be identified in SoundExchange’s repertoire database with reasonable confidence from other available information including the album title and marketing label name).<sup>28</sup>

As noted above, we believe that SoundExchange may be announcing a plan for providing ISRCs to interested services for the first time in its reply comments. Frankly, this is too late as it deprives licensees of the opportunity to comment upon any SoundExchange proposals. Absent a binding obligation to make ISRCs (and other identifying metadata) available to statutory licensees, SoundExchange’s statement is only that: a statement. Until such time as the SoundExchange database is made publicly available without restriction, Pandora respectfully believes that the CRJs should not assume that such a database will be provided and should therefore reject an amendment to existing regulations that would require reporting of ISRCs.

Pandora supports Sirius XM Radio Inc.’s (“Sirius XM”) suggestion that, where SoundExchange or its members possess ISRC data, they should be required to make that

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<sup>27</sup> It is worth noting that the American Association of Independent Music (“A2IM”) supports SoundExchange’s request for ISRC numbers, but also fails to give any evidence that ISRCs are widely applied by its own member labels. Comments of American Association of Independent Music, Docket No. 4-CRB-0005 (RM), at 3 (undated). Both SoundExchange and A2IM have failed to introduce any record evidence of the widespread use of ISRCs, whether as an absolute number of the total sound recordings released by their respective member labels or as a percentage of the sound recordings reported to SoundExchange by statutory licensees.

<sup>28</sup> See SoundExchange Comments, at 7 (emphasis added).

information publicly available.<sup>29</sup> If there truly is a desire to make ISRCs a “gold standard,” then the parties that assign those numbers – or their agent, SoundExchange – should make that information widely available in useable form so that all parties can seek to incorporate such information into ROUs. And if an ISRC is not made publicly available by SoundExchange for a sound recording that has been released to the public with the consent of a copyright owner, then the CRJs should create a presumption that there is no available and feasible ISRC for such sound recording.

B. Late Fees and Accelerated Reporting.

SoundExchange proposes that licensees be required to deliver ROUs in 30 rather than 45 days and be subject to an additional late fee<sup>30</sup> for the failure to provide late or noncompliant reports of use.<sup>31</sup> The alleged reason for accelerating payment is to enable expedited payments to copyright owners and artists.<sup>32</sup> The justification for imposing a late fee for late or incomplete ROUs is to ensure that “licensees are motivated to provide the information necessary to allow SoundExchange to distribute royalties with reasonable precision.”<sup>33</sup>

There is simply no basis for accelerating the delivery of ROUs under the existing regulations. As SoundExchange appears to acknowledge, it is already able to distribute the overwhelming majority of royalties paid to it, and there appears to be little demand for

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<sup>29</sup> See Comments of Sirius XM Radio Inc., Docket No. 14-CRB-0005 (RM), at 2 (June 30, 2014) (“To the extent published recordings do have an ISRC assigned, and that information in SoundExchange’s possession, Sirius XM would support a regulation requiring SoundExchange (or its members) to make that information available to licensees in a format allowing licensees easily to ingest it into their internal databases of sound recording information.”).

<sup>30</sup> Statutory licensees are already subject to a late fee for the late payment of royalties and/or late delivery of statements of account. 37 C.F.R. § 380.4(e).

<sup>31</sup> See SoundExchange Comments, at 12; SoundExchange Petition, at 30-31.

<sup>32</sup> See SoundExchange Petition, at 31.

<sup>33</sup> SoundExchange Comments, at 12.

accelerating payments by 15 days. Moreover, it strains credulity that reporting to SoundExchange could be improved by giving statutory licensees *less time* to complete ROUs. If SoundExchange is truly receiving ROUs that are incomplete or untimely, then perhaps the extant regulations are already too burdensome or the time period for reporting is too short. There is no evidence that accelerating reporting obligations will improve the quality of reporting, which is SoundExchange's stated goal.<sup>34</sup>

There is also no indication that licensees lack motivation to deliver ROUs in a timely manner, at least those that are paying substantial royalties to SoundExchange. SoundExchange fails to identify the total amount of royalties at issue for which late ROUs have been provided or what percentage of total royalties those late ROUs represent. We therefore do not know if this is a material problem that calls out for the imposition of a punitive late fee, regardless of whether SoundExchange has received the required royalty payment from a statutory licensee.

As the Joint Broadcaster Comments also point out, SoundExchange is already entitled to receive a late fee when a royalty payment is not paid in a timely manner.<sup>35</sup> SoundExchange should not be entitled to (1) an additional late fee in the case that royalties are paid timely and an ROU is late or (2) a double late fee if a payment is late and an ROU is late. There is simply no justification for imposing multiple penalties.

The preparation of ROUs can be challenging. As described above, Pandora currently plays over 1.5 million unique sound recordings. This means that for any given month, Pandora generates an ROU with no fewer than 1.5 million rows of data. To compile those over 1.5

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<sup>34</sup> *Accord* Joint Broadcaster Comments, at 61 (“Maintaining a 45-day deadline also is an efficient outcome, as it would minimize reporting errors that would lead to amended reports and additional processing time by SoundExchange by ensuring that Broadcasters have adequate time to prepare the ROUs in the first instance.”).

<sup>35</sup> *See id.*, at 56-58.



million rows of data, Pandora must determine the play counts for each one of those 1.5 million songs from billions of server instances (i.e., each time a user received a transmission of a sound recording). It takes significant resources to generate those reports and track performances at the volume at which Pandora operates.

It is also unclear on what basis SoundExchange might claim that any monthly ROU was noncompliant, and therefore subject to a late fee.<sup>36</sup> Without a specific definition of compliance or even substantial compliance, SoundExchange, or the sound recording copyright owners it represents, could indiscriminately accuse a statutory licensee of failing to comply with governing regulations, be subject to onerous late fees, and, potentially, copyright infringement for failing to comply with regulations promulgated under the Statutory Licenses.<sup>37</sup>

Although Pandora can and does comply with today's reporting requirements within 45 days, accelerating ROU delivery while at the same time increasing the information to be included within ROUs while being subject to financial penalties for failing to do so accurately, will impose a significant and unreasonable burden on Pandora (and likely many other statutory licensees).<sup>38</sup>

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<sup>36</sup> See Comments of KBCU-FM, Docket No. 4-CRB-0005 (RM), at 3-4 (May 22, 2014) ("What constitutes a non-compliant ROU? Is that one line of data with missing information or a typo? What is the threshold level of non-compliance which would justify a late fee?").

<sup>37</sup> Pandora does not concede that a statutory license would be subject to liability for copyright infringement if it failed to provide a fully compliant ROU. However, Pandora does not know whether individual copyright owners may take a contrary position that could only be resolved in federal district court.

<sup>38</sup> Cf. Joint Broadcaster Comments, Exhibit B, Declaration of Jim Tinker, Salem Los Angeles, at 19 ("We presently file our Reports of Use within the 45-day window. The proposal to shorten that time period to 30 days seems unnecessary, burdensome, and potentially problematic. We currently report on 95 streaming channels, and one individual must go in after the conclusion of the month and generate the report, review it for conformance to the requirements, add or correct any information that requires attention, and complete and submit the report. While we are able to perform this exercise within the current time period allowed, we are uncomfortable with shortening the time period given the growing number of stations that we have and the amount of data we are reporting. Also, we have had instances in which there has been a temporary disconnect between our streaming provider and our automation system,

For the reasons stated above, Pandora respectfully requests that the CRJs reject SoundExchange's proposal to accelerate reporting and impose a late fee on late or noncompliant ROUs.

C. No Adjustments After 90 Days.

Pandora strongly supports the Joint Broadcasters in opposition to SoundExchange's proposal to bar licensees from claiming credit for a downward adjustment in royalty allocations after the date that is 90 days after submission of the original ROU or Statement of Account ("SOA").<sup>39</sup>

There are numerous reasons why a statutory licensee may need to make adjustments to previously delivered ROUs or SOAs. For example, a statutory licensee could enter into direct licenses with record labels<sup>40</sup> that may require adjustments for payments made to SoundExchange if the direct licensor owns the recordings for which payments were previously made to SoundExchange.

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and we must revisit the reports at the end of the month to address any impacted time periods for particular stations. Shortening the reporting period would unreasonably reduce the time to deal with unexpected problems and to ensure our report is accurate and complete."); Exhibit E, Declaration of Chris Moran, West Virginia Radio Corporation, at 5 ("We object to shortening any time period for filing our report of use or for any time period in which we are allowed to submit for overpayments. This is a complex, data driven process and there is potential for mistakes that cannot be avoided. Furthermore, our reports require the input from third parties, such as our streaming provider. While we typically do not experience problems meeting the 45 day reporting requirement, shortening it makes us uncomfortable for the reasons I have described above."); Exhibit M, Declaration of Michael Gay, Cumulus Media, Inc. ("We object to shortening the time period for submitting reports of use to 30 days (down from the current 45-day period). As stated, we have hundreds of stations, and our reports must be some of the largest received by SoundExchange. We need time to prepare and check the reports, and 45 days is currently working for us fairly well.").

<sup>39</sup> See *id.*, at 59-60.

<sup>40</sup> Pandora has recently entered into a direct license agreement with Merlin, the global rights agency for the independent label sector. See Press Release: Merlin and Pandora Partner to Help Independent Labels and Artists Grow Their Businesses, <http://press.pandora.com/phoenix.zhtml?c=251764&p=irol-newsArticle&ID=1955864&highlight>.

A licensee may also discover after making a royalty payment to SoundExchange that a sound recording for which a payment was previously made was a sound recording for which no payment is due under the Statutory Licenses, such as a pre-1972 sound recording.<sup>41</sup> In those instances, a statutory licensee should be able to make adjustments to their SOAs and ROUs regardless of whether 90 days has elapsed since payment. Otherwise, there would be an unjustifiable windfall for SoundExchange due to an overpayment of royalties.

As the Joint Broadcaster Comments note, existing regulations permit SoundExchange to verify the payments of a statutory licensee for up to three years following the year in which a payment was made.<sup>42</sup> If the purpose of the verification is to ensure the accuracy of payments, then statutory licensees should not only be subject to claims of underpayments but should be permitted to make adjustments in the event of overpayments to SoundExchange.

The Joint Broadcaster Comments have also noted that SoundExchange retains the “unlimited right to recoup its own erroneous overpayments from the copyright owners and performing artists it has paid, with no time restriction on that right whatsoever.”<sup>43</sup> If SoundExchange retains an unlimited right to correct incorrect payments for itself, then statutory licensees should be permitted to make corrections to SOAs whenever under- or overpayments of royalties are discovered.

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<sup>41</sup> See Notice of Inquiry of the Copyright Office, Library of Congress, Music Licensing Study: Second Request for Comments, Docket No. 2014-03, 79 Fed. Reg. 42833, 42834, n. 3 (July 23, 2014) (“[L]icenses for the digital performance of pre-1972 sound recordings, and for the reproductions to enable such performances, are not available under Section 112 or 114.”).

<sup>42</sup> See Joint Broadcaster Comments, at 60; see also 37 C.F.R. § 380.6(b).

<sup>43</sup> Joint Broadcaster Comments, at 59 (emphasis in original).

D. Character Encoding.

SoundExchange has recognized that ASCII reporting has significant limitations, and proposes that licensees be required to use the UTF-8 format where feasible.<sup>44</sup> Pandora currently reports to SoundExchange using UTF-8.

However, Pandora agrees with the position taken by the Joint Broadcasters.<sup>45</sup> Because the CRJs regulations are static in nature, we do not believe it is appropriate to enshrine in regulations a specific preference for any particular character encoding format so long as it is “feasible.” Each statutory licensee should be free to use any character encoding format that best suits that licensee’s particular needs. Just because Pandora uses UTF-8 today does not mean that Pandora will want to continue using UTF-8 in the future, and Pandora (and all statutory licensees) should be permitted to use ASCII or UTF-8 character encoding, or any different character encoding that the licensee determines is most efficient for its purposes, regardless of whether UTF-8 remains “feasible.”

E. Increased Reporting Obligations for Classical Recordings.

SoundExchange proposes that statutory licensees be required to submit significant, additional information to identify classical recordings transmitted pursuant to the statutory license.<sup>46</sup> Pandora supports the Comments of those parties that have opposed these new proposed requirements.<sup>47</sup>

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<sup>44</sup> See SoundExchange Petition, at 17-18.

<sup>45</sup> See Joint Broadcaster Comments, at 83-84.

<sup>46</sup> SoundExchange Petition, at 23-24.

<sup>47</sup> See Joint Broadcaster Comments, at 43-46; Comments of WJCU, Docket No. 4-CRB-0005 (RM), at 5 (May 21, 2014); Comments of KBCU-FM, Docket No. 4-CRB-0005 (RM), at 3 (May 22, 2014); Comments of SCAD Atlanta Radio, Docket No. 4-CRB-0005 (RM), at 3 (May 22, 2014); College Broadcasters, Inc.’s Comments in Response to the Copyright Royalty Board’s Notice of Proposed Rulemaking, Docket No. 4-CRB-0005 (RM), at 10 (June 30, 2014).

Even though “classical” recordings currently comprise only approximately 200,000 sound recordings in Pandora’s entire database, they present particular difficulties due to the significant amount of time it already takes to ingest such recordings (i.e., incorporate such music into our library and classify such music for use with our proprietary algorithms). We estimate that ingesting even a single classical album can take our music analysts up to forty-five minutes or more.

The reason why ingesting classical albums is so time consuming for Pandora is due to a process we refer to as “classical tagging.” Classical music albums often do not have all the metadata embedded in the sound recording source file, so Pandora employees must first locate (often by pulling the insert from the CD case and reading it) and then manually enter various metadata, including the conductor, the ensemble, and the performer.

We record the “classical tagging” metadata at the level of the musical work (e.g., Beethoven’s Fifth Symphony) rather than track-by-track (e.g., the individual movements within the work). This fulfills Pandora’s business needs, since our recommendation algorithms can process metadata at the level of a single work. However, SoundExchange now wishes to impose upon licensees the obligation of reporting the metadata for classical music on a track-by-track basis. This is more challenging because the metadata is not always the same for each track within the larger musical work. For example, a soloist might perform in the first movement of a symphony but not in the third movement. It is not clear to us why Pandora should have to report soloist information when such information is presumably already in the hands of sound recording copyright owners, who could provide such information to SoundExchange.

We already spend substantial resources acquiring classical metadata for the purposes of programming music but our systems are not designed to report such information in an output that

is compatible with ROUs. We would therefore need to undertake substantial new programming efforts at great expenses to comply with these new reporting obligations. We may also have to research the existing works in our library – including by going back to source materials for necessary information – if the existing regulations are amended to require such reporting. As with the case of the 600,000 sound recordings lacking ISRCs, we may simply be forced to pull classical music off of our service if we are required to provide new information that has not previously been identified by us in a manner that can be reported to SoundExchange if the cost of researching such information is too time consuming and expensive or the risk of being subject to late fees is too high.

We therefore respectfully request that the CRJs reject SoundExchange’s proposal to make such additional reporting for classical recordings mandatory.

F. Reporting of Non-Payable Tracks.

SoundExchange proposes that statutory licensees be required to report sound recordings transmitted by a service even if the licensee is not required to pay royalties for such sound recordings. SoundExchange claims that such reporting is necessary to ensure that there are not improper exclusions from royalty payments.<sup>48</sup> Pandora strongly opposes this proposed new regulation and endorses the position of the Joint Broadcasters.

As the Joint Broadcasters note, SoundExchange is only entitled to “reasonable notice of use of sound recordings under” the Statutory Licenses.<sup>49</sup> If a sound recording is transmitted by a licensee *without reliance* on the statutory license, then SoundExchange has no right under the Statutory Licenses to information regarding such transmission.

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<sup>48</sup> See SoundExchange Petition, at 24-26.

<sup>49</sup> See Joint Broadcaster Comments, at 48-49.

Furthermore, requiring services to report non-compensable uses of sound recordings does not further any purpose for which SoundExchange has been granted authority. Such information would not be used for SoundExchange's royalty distribution purposes or ensuring compliance with any other statutory condition (to the extent the reporting of information for such purposes is even appropriate).

SoundExchange's authorization under existing regulations runs only to the boundaries of the Statutory Licenses. For activities outside the scope of the statutory license, SoundExchange not only lacks any right to receive any notice of use, but also lacks antitrust immunity to act on behalf of multiple copyright owners.<sup>50</sup> Pandora respectfully requests that the CRJs reject SoundExchange's request to receive notification of uses of sound recordings when the Statutory Licenses have not been relied upon for such uses.

G. Retention of Raw Server Logs.

SoundExchange proposes that statutory licensees be required to retain and provide SoundExchange, or presumably its outside Qualified Auditor (as that term is defined in 37 C.F.R. § 380.2), with access to "unsummarized source records of usage in electronic form, such as server logs or other native data . . ." <sup>51</sup> Pandora strongly objects to this requested amendment to the existing regulations.

As the Joint Broadcaster Comments note, SoundExchange previously sought such a regulation in the Webcaster III proceeding, a request which was rejected by the CRJs.<sup>52</sup> SoundExchange should not be permitted to seek such information now in a rulemaking where the request for such information was previously rejected in a litigated proceeding.

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<sup>50</sup> See 17 U.S.C. § 114(e)(1).

<sup>51</sup> SoundExchange Petition, at 34.

<sup>52</sup> See Joint Broadcaster Comments, at 65.

Also, Pandora's raw server logs contain more than just a list of who listened to what song and when. The logs contain an immense amount of proprietary information, providing valuable insight into the algorithms that drive the Pandora service. Pandora should not be compelled to share this valuable trade secret information with third parties, and the Judges should reject any request to make us do so.

SoundExchange does not present a sufficient need for such raw server log information, and should therefore not be permitted to require licensees to retain or disclose such information. Furthermore, as Triton Digital, Inc. notes in its Comments, a better approach to ensure accuracy in reporting is for there to be an adoption of an accreditation process that would certify the accuracy of reporting systems utilized by licensees (or their third party service providers) rather than requiring licensees to turn over raw data.<sup>53</sup> SoundExchange should be required to work with third parties to establish industry standards that confirm the accuracy of reporting systems rather than requiring licensees to turn over raw server logs for verification purposes.

We therefore respectfully request that the CRJs reject SoundExchange's proposed amendment that would require licensees to retain and make available raw server logs.

### **III. NO OBJECTIONS TO CERTAIN SOUNDEXCHANGE PROPOSALS.**

SoundExchange petitions to amend several notice and recording regulations that Pandora generally does not find objectionable. Pandora supports the position of the Joint Broadcasters in not opposing the following amendments, subject to the caveats identified by the Joint Broadcasters in their Comments:

- Authorization for parties to vary the reporting requirements by agreement with SoundExchange;
- Use of electronic signatures;
- Consistent naming and use of account numbers;

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<sup>53</sup> See Comments of Triton Digital, Inc., Docket No. 14-CRB-0005 (RM), at 8 (June 30, 2014).



- Consistent scope of performance activity in SOAs and ROUs;
- Separate ROUs for separate services;
- Modification of SoundExchange's address;
- Deletion of requirement that SoundExchange maintain a Quattro Pro NOU template; and
- Conforming changes.

To avoid duplication in argument, Pandora incorporates Section VI.A of the Joint Broadcaster Comments into these Reply Comments in their entirety.<sup>54</sup>

#### **IV. PANDORA'S SUPPORT FOR MORE RIGOROUS DISCLOSURE OBLIGATIONS BY SOUNDEXCHANGE.**

The amount of money paid to SoundExchange by Pandora, Sirius XM, and other statutory licensees has reached staggering levels. Pandora alone will pay over \$400 million in royalties to SoundExchange in 2014. As noted above, SoundExchange has now distributed over \$2 billion in statutory royalties and presumably has collected sums in excess of that amount. Yet for all of this money flowing through the organization, there appears to be little public scrutiny and no government oversight.

The CRJs currently exercise no ongoing oversight over SoundExchange. Nor do the vast majority of the 24,000 copyright owner account holders or recording artists paid by SoundExchange. Instead, there is an unelected Board of Directors that answers only to itself. Of that Board, one-third of the seats are held by the three major record companies or their representatives from the RIAA.

So as to ensure that the hundreds of millions of dollars in royalties that Pandora is paying are fairly and accurately accounted for and subject to appropriate oversight and inspection, Pandora heartily endorses the suggestions of the Joint Broadcasters to impose new reporting

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<sup>54</sup> See Joint Broadcaster Comments, at 65-72.

obligations on SoundExchange. These include, but are not limited to, requiring SoundExchange to do the following:

- Publish an annual report within 90 days after the close of the company's fiscal year;<sup>55</sup>
- "Include more comprehensive and detailed information regarding SoundExchange's structure and operations;"<sup>56</sup>
- Disclose information about SoundExchange's expenses, especially expenses unrelated to collecting and distributing royalties;<sup>57</sup> and
- Disclose more information on distribution methodologies (e.g., uses of proxies) and dispute resolution mechanisms.<sup>58</sup>

As the Joint Broadcaster Comments note, "the lack of third party oversight and transparency into the workings of the organization should be deeply troubling to any party that pays money to SoundExchange, litigates against it, or is subject to its policies."<sup>59</sup> For example, the CRJs (as well as the thousands of copyright owners and artists who are entitled to statutory royalties) might be deeply troubled, both in terms of the organization's apparently excessive lobbying efforts and in its taking positions that would appear to benefit primarily the three major record companies to the detriment of the thousands of independent labels and recording artists whose music is heard largely only on Pandora, other webcasting services, and Sirius XM.

In order to improve overall reporting by and transparency of SoundExchange, Pandora endorses the amendments to 37 C.F.R. § 370.5(c) proposed in the Joint Broadcaster Comments.<sup>60</sup> Pandora believes that such amendments will ensure that there is greater accountability by an organization that may soon be collecting close to one billion dollars in royalties a year, a

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<sup>55</sup> *See id.*, at 84-85.

<sup>56</sup> *Id.*, at 85-86.

<sup>57</sup> *Id.*, at 88.

<sup>58</sup> *Id.*, at 89-90.

<sup>59</sup> *Id.*, at 86.

<sup>60</sup> *Id.*, at 87-89.

staggering sum of money to flow through a nonprofit organization that is not subject to CRJ – or for that matter, Congressional – oversight.

###

We thank the CRJs for the opportunity to provide these Reply Comments and are available to assist the CRJs in evaluating the appropriateness of any amendments to existing notice and recordkeeping regulations.

Respectfully submitted,

*/s/ Christopher S. Harrison*

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September 5, 2014

**PUBLIC VERSION**

**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
THE LIBRARY OF CONGRESS  
Washington, D.C.**

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**In re** )  
 )  
 )  
**DETERMINATION OF ROYALTY RATES** ) **Docket No. 14-CRB-0001-WR**  
**AND TERMS FOR EPHEMERAL** )  
**RECORDING AND DIGITAL** )  
**PERFORMANCE OF SOUND RECORDINGS** )  
**(WEB IV)** )

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**REBUTTAL TESTIMONY OF CARL SHAPIRO**  
**(On behalf of Pandora Media, Inc.)**

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## 1. Qualifications and Assignment

My name is Carl Shapiro. My qualifications are provided in my Written Direct Testimony (“Shapiro Direct Testimony”) submitted previously in this proceeding on behalf of Pandora.<sup>1</sup>

I have been asked by attorneys for Pandora to review and, where appropriate, respond to the testimony of certain of the witnesses put forth by SoundExchange in this proceeding, including Professor Rubinfeld, Dr. Blackburn, and certain fact witnesses. I also have been asked to respond to the fee proposal put forward by SoundExchange.

I have reviewed the Corrected Testimony of Professor Daniel Rubinfeld (“Rubinfeld Direct Testimony”), the deposition testimony of Professor Daniel Rubinfeld (“Rubinfeld Deposition Testimony”), the written direct testimony of Dr. David Blackburn (“Blackburn Direct Testimony”), the written direct testimony of industry representatives Dennis Kooker, Aaron Harrison, Simon Wheeler, and Darius Van Arman, the deposition testimony of industry representatives Dennis Kooker and Aaron Harrison, and the Proposed Rates and Terms of SoundExchange. I also considered the amended written direct testimony of Daniel Fischel and Douglas Lichtman (“Fischel and Lichtman Amended Direct Testimony”) and the written direct testimony of Professor Michael Katz (“Katz Direct Testimony”) as well as the materials cited in this rebuttal testimony and those listed in Appendix A.<sup>2</sup>

This rebuttal testimony contains my conclusions to date as to the appropriateness of the rates proposed by SoundExchange and my analysis of the arguments and analyses put forth by SoundExchange in support of its rate proposal. I understand that SoundExchange is expected to submit additional testimony – both written and live. I reserve the right to alter my analyses and conclusions based on the evidence and analyses that are contained in that forthcoming testimony.

## 2. The Central Question: Which Benchmark is Better?

SoundExchange bases its rate proposal on license agreements signed between interactive services and record companies. SoundExchange is using an *interactive benchmark*.

In my written direct testimony, I proposed using a license agreement signed between record companies and Pandora – a statutory webcaster – as the basis for Pandora’s fee proposal. iHeartMedia similarly bases its fee proposal on license agreements signed between a statutory webcaster and record companies. Pandora and iHeartMedia are using a *webcaster benchmark*.

The central focus of my rebuttal testimony is evaluating the interactive benchmark put forth by SoundExchange and assessing whether that benchmark is more or less informative for setting the

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<sup>1</sup> Written Direct Testimony of Carl Shapiro, October 6, 2014 (Shapiro Direct Testimony).

<sup>2</sup> Corrected Testimony of Daniel L. Rubinfeld, October 6, 2014 (Rubinfeld Direct Testimony). Deposition of Daniel Rubinfeld, December 11, 2014 (Rubinfeld Deposition Testimony), Report of David Blackburn, PH.D., October 6, 2014 (Blackburn Direct Testimony). Testimony of Dennis Kooker, October 6, 2014 (Kooker Direct Testimony). Testimony of Aaron Harrison, October 6, 2014 (Harrison Direct Testimony). Testimony of Simon Wheeler, October 6, 2014 (Wheeler Direct Testimony). Testimony of Darius Van Arman, October 6, 2014 (Direct Testimony of Arman). Amended Testimony of Daniel R. Fischel and Douglas G. Lichtman, January 12, 2015 (Fischel and Lichtman Amended Direct Testimony). Written Direct Testimony Michael L. Katz, October 7, 2014 (Katz Direct Testimony).

rates to be paid by statutory webcasters over the 2016-2020 period than the webcasting benchmark that I endorsed in my written direct testimony. As part of my analysis of the competing benchmarks, I specifically address Professor Rubinfeld's criticisms of the webcaster benchmark.

The thrust of my rebuttal testimony is that *the webcaster benchmark is far superior to the interactive benchmark for the purpose of setting the fees at issue in this proceeding*. In fact, as I demonstrate in greater detail below, the interactive benchmark is so thoroughly infected with the market power of the major labels – market power that stems from the fact that the three major labels, by their own admission, are “must have” suppliers to interactive services – that the interactive benchmark market involves rates that are even higher than those that would arise in a market monopolized by a single record company. Accordingly, the interactive benchmark tells us virtually nothing about the rates that would be negotiated in a workably competitive market. The interactive benchmark should be rejected out of hand for this reason alone.

It is well settled that statutory webcasting proceedings such as this require a determination of the rates that willing buyers would pay to willing sellers in “an *effectively* competitive market” as opposed to one that “approximated monopoly rates.”<sup>3</sup> In this regard, the Copyright Royalty Judges, citing the testimony of SoundExchange's then expert economist, recognized in the *Web III* proceeding the potential for the rates charged by multiple “must have” record companies to be even higher than the rates that would be charged by a single company controlling the supply of all recorded music:

As Dr. Ordover further explained, if the repertoires of all four major record companies were each required by webcasters (*i.e.*, if the repertoires were necessary complements) and webcasters were required to negotiate with each record company individually, then each record company would have an incentive to charge a monopoly price to maximize its profits without concern for the impact on the market writ large. ...

By contrast, SoundExchange, as a collective, would internalize the impact of the complementary nature of the repertoires on industry revenue and thus seek to maximize that overall revenue. This would result in lower overall rates compared to the situation in which the individual record companies negotiated separately.<sup>4</sup>

The Judges made clear that this conclusion “would be valid only if the repertoires of the several record companies were indeed complements rather than substitutes. ... The parties presented no evidence from which the Judges could conclude that the repertoires of the respective record companies were complements or substitutes, or, perhaps, complementary to some degree and substitutional to some degree.”<sup>5</sup>

That evidentiary void has now been filled. The record evidence in this proceeding clearly establishes that, insofar as their dealings with interactive services are concerned, the repertoires of the major record companies are indeed necessary complements rather than substitutes. This

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<sup>3</sup> *Web III Remand*, at 23114, footnote 37 (emphasis in original).

<sup>4</sup> *Web III Remand*, at 23114.

<sup>5</sup> *Web III Remand*, at 23114.

very point has been made by the record companies, by SoundExchange's current counsel, and by Professor Rubinfeld himself.

### ***A. Evaluating Potential Benchmarks***

In Section IV.A of Professor Rubinfeld's Direct Testimony, "Qualitative Tests for Evaluating Potential Benchmarks," he appears to adopt the Judges' analytical framework in which one attempts to approximate "a hypothetical negotiation between a willing buyer and willing seller for a blanket license for streaming copyrighted musical performances, without the possibility of a statutory license alternative to a negotiated license."<sup>6</sup>

Professor Rubinfeld employs a set of four economic "tests" drawn from that framework to evaluate potential benchmarks.<sup>7</sup> These are:

- a. *Willing buyer and seller test*: the rates are intended to be those that would have been negotiated in a hypothetical marketplace between a willing buyer and a willing seller.
- b. *Same parties test*: the buyers in this hypothetical marketplace are the statutory webcasting services and the sellers are record companies.
- c. *Statutory license test*: the hypothetical marketplace is one in which there is no statutory license.
- d. *Same rights test*: the products sold consist of a blanket license for the record companies' complete repertoire of sound recordings, to be used in compliance with the DMCA requirements.

Professor Rubinfeld's qualitative tests fail, however, to address a critical threshold question: whether or not the benchmark market is workably (or effectively) competitive.<sup>8</sup> My analysis, on the other hand, does address this critical question as it begins with a *workable competition test*.<sup>9</sup> As I explain below in Section 4, Professor Rubinfeld's failure to include the threshold workable competition test renders his analysis of the interactive benchmark invalid and unreliable for rate-setting purposes.

While Professor Rubinfeld's four tests cannot reliably be used without the workable competition test, they can be informative if used in conjunction with that test, so long as they are applied in a consistent fashion. If the benchmark market is workably competitive, these four qualitative tests

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<sup>6</sup> Rubinfeld Direct Testimony, ¶ 121. Professor Rubinfeld notes that this is the framework adopted by the Judges in *Web III Remand*.

<sup>7</sup> Rubinfeld Direct Testimony, ¶ 122.

<sup>8</sup> I use the terms "workable competition" and "effective competition" interchangeably.

<sup>9</sup> In my Written Direct Testimony at page 24, I stated: "The Merlin Agreement provides an excellent benchmark for several reasons. First, the Merlin Agreement involves the very rights that are at issue in this proceeding – both sound recording performance rights for a non-interactive service and the right to make ephemeral copies. Second, the Merlin Agreement involves the same sellers, record companies that are the 'willing sellers' in the statutory hypothetical market. Third, the Merlin Agreement involves the same buyer, a non-interactive service (in this case Pandora), which is a 'willing buyer' in the hypothetical market. Lastly, the agreement was negotiated under workably competitive conditions in which neither party had undue market power."

can help us identify the adjustments needed to correct for any differences between benchmark agreements and the hypothetical “target” marketplace.<sup>10</sup>

### ***B. The Interactive Benchmark***

The interactive benchmark fails the governing workable competition test in dramatic fashion. As Professor Rubinfeld himself has effectively conceded – both in this proceeding and before the Federal Trade Commission (“FTC”) – the interactive benchmark market is one dominated by multiple “must have” sellers. Basic economics tells us that such a market cannot be workably competitive. There is no ambiguity about this. Indeed, as the Copyright Royalty Judges recognized in the *Web III* proceeding, with multiple “must have” sellers, the interactive market involves even higher rates than would arise in a market monopolized by a single record company.<sup>11</sup> As I explain in Section 4, this finding alone renders the interactive benchmark unusable.

In addition to this crippling failure, the interactive benchmark also does relatively poorly on the tests that Professor Rubinfeld does include. Professor Rubinfeld applies his tests to the agreements reached between record companies and interactive services in Section V.A.1 of his Direct Testimony, “Economic tests applied to ‘interactive’ agreements.” There he states: “The agreements between recording companies and the major ‘interactive’ services ... are the most informative benchmarks.”<sup>12</sup> He then supports this claim by stating: “These agreements earn the best scores on the economic tests for appropriate benchmarks.”<sup>13</sup> With this, I disagree.

Regarding the “willing buyer and seller test” and the “statutory license test,” I agree with Professor Rubinfeld that the interactive services do not have the option of electing the statutory license, so the interactive licenses are less influenced by the statutory license than are the licenses signed with statutory webcasters. However, as I explain below, I strongly *disagree* with the implication that Professor Rubinfeld draws from this. When properly analyzed, it becomes clear that the “shadow” of the statutory license serves not to depress rates, as Professor Rubinfeld claims, but rather *pulls rates up* above the level that would otherwise emerge in a workably competitive marketplace that is free of the statutory license.

Regarding the “same rights test,” I agree with Professor Rubinfeld that the rights licensed to interactive services “exceed the functionality specified by the statutory DMCA requirements.”<sup>14</sup> But, as I describe in Section 6, the approach Professor Rubinfeld takes in an effort to account for the differences in functionality lacks any sound economic basis. His “interactivity adjustment” is deeply flawed.

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<sup>10</sup> So far as I can tell, Professor Rubinfeld’s “willing buyer and willing seller test” duplicates his “statutory license test.” This duplication gives undue prominence to the “shadow” of the statutory license.

<sup>11</sup> *Web III Remand*, at 23114.

<sup>12</sup> Rubinfeld Direct Testimony, ¶ 157.

<sup>13</sup> Rubinfeld Direct Testimony, ¶ 158.

<sup>14</sup> Rubinfeld Direct Testimony, ¶ 158.

Regarding the “same parties test,” I emphatically disagree with Professor Rubinfeld’s application of this test to the agreements between record companies and interactive services. On that point, Professor Rubinfeld states:

“b. *Same parties test*: The parties in these agreements are similar to those in the hypothetical marketplace: the buyers are webcasting services and the sellers are record companies.”<sup>15</sup>

Professor Rubinfeld’s testimony here is inaccurate and highly misleading.

First, his assertion that agreements reached by interactive services “earn the best scores” on the “same parties test” when compared with agreements reached by the statutory webcasters themselves is nonsensical. It cannot seriously be disputed that agreements reached between record companies and the statutory webcasters themselves (the webcaster benchmarks) do the very best on the “same parties test.”

Second, Professor Rubinfeld chooses here to refer to the interactive services as “webcasting services,” which is confusing and misleading.<sup>16</sup> Under his own “same parties test,” the question is whether interactive services are “similar” to statutory webcasters as buyers of the necessary rights to perform recorded music. His “answer” to this question hides the question itself by conflating the two types of buyers.

Third, and most important, Professor Rubinfeld papers over a gaping hole in his analysis by simply asserting – without any supporting empirical analysis – that the interactive services are “similar” to statutory webcasters as buyers of rights to perform recorded music. In Section 5, I explain why *interactive services are very different from statutory webcasters as buyers of rights to perform recorded music*. These differences, which Professor Rubinfeld entirely ignores, are critical to negotiated outcomes.

### ***C. The Webcasting Benchmark***

The webcasting benchmark scores far better than the interactive benchmark on the workable competition test. The webcasting benchmark agreements were negotiated under workably competitive conditions in which neither party had undue market power. These agreements all exhibit the hallmark of workable competition – sellers competing on price to induce buyers to use more of their goods.

Professor Rubinfeld applies his four economic tests to one agreement between a record company and a statutory webcaster: the license signed between iHeartMedia and Warner Music.<sup>17</sup>

Regarding the “same parties test,” Professor Rubinfeld states that “this agreement scores relatively poorly on the ‘same parties’ test.” This assertion is nonsensical, since iHeartMedia is a

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<sup>15</sup> Rubinfeld Direct Testimony, ¶ 158.

<sup>16</sup> Rubinfeld Direct Testimony, ¶ 158.

<sup>17</sup> Rubinfeld Direct Testimony, ¶ 186.

statutory webcaster and Warner is a record company, precisely the buyers and sellers in the hypothetical market.<sup>18</sup>

Regarding the “same rights test,” I agree with Professor Rubinfeld, when he states: “Compared to the interactive services, this agreement grants rights that are closer, but still not identical to the statutory license.”

Regarding the “willing buyer and seller test” and the “statutory license test,” I agree with Professor Rubinfeld that agreements signed by statutory webcasters are influenced more by the availability of the statutory license than are agreements signed by interactive services. However, this does not mean that such agreements should be discarded as uninformative. Rather, it means that one should properly account for the effect of the statutory license when evaluating these agreements. In Section 8 below, I explain how to properly account for the “shadow” of the statutory license when using the webcasting benchmark. I demonstrate, directly contrary to Professor Rubinfeld’s assertions, that the “shadow” has the effect of pulling rates up *above* the competitive level. This means that the webcasting benchmark will tend to overstate competitive rates.

#### ***D. Comparing the Two Benchmarks: Lines of Inquiry***

Applying the workable competition test and Professor Rubinfeld’s economic tests to the interactive benchmark and the webcaster benchmark leads to the following conclusions:

- The webcasting benchmark scores far better on the “workable competition” test.
- The webcasting benchmark scores far better on the “same parties” test.
- The webcasting benchmark scores far better on the “same rights” test.
- The interactive benchmark scores better on the “statutory license” test.<sup>19</sup>

In the end, Professor Rubinfeld’s tests alone cannot tell us which benchmark is the more informative one for the job at hand. Rather, these tests can help us identify the types of adjustments that would be needed to use each benchmark. Professor Rubinfeld’s own tests point to the following additional lines of inquiry:

1. *Different Buyers*: What are the differences between interactive services and statutory webcasters as buyers of rights to perform recorded music? What adjustments to the interactive benchmark are needed to account for those differences?
2. *Different Rights*: What are the differences between the rights licensed by interactive services and the rights included in the statutory license? What adjustments to the interactive benchmark are needed to account for these differences?<sup>20</sup>

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<sup>18</sup> Professor Rubinfeld argues here that the buyer, iHeartMedia, “is unique – both in the value provided to rights holders and the value it derives from offering a service.” (Rubinfeld Direct Testimony, ¶ 186.) Even if true, these are the types of factors that might warrant an adjustment to the benchmark, not a low score on the “same parties test.”

<sup>19</sup> As noted above, so far as I can determine, Professor Rubinfeld’s “willing buyer/willing seller” test duplicates his “statutory license” test. In any event, my point #3 immediately below is intended to address the results from both of these tests.

3. *Shadow of the Statutory License*: How does the shadow of the statutory license affect the rates negotiated in direct licenses between record companies and statutory webcasters? What adjustments to the webcasting benchmark are needed to account for the influence of the statutory license?

I address these lines of inquiry in Sections 5, 6, and 7 respectively.

But before we explore these lines of inquiry, we must first perform the threshold workable competition test. This test speaks directly to whether a benchmark is informative for the job at hand. A benchmark that dramatically fails this test – meaning that the benchmark market is rife with market power problems – should almost certainly be rejected. Thus, the workable competition test adds the following line of inquiry, which I explore in Section 4:

4. *Workable Competition*: Were the interactive service agreements reached in a workably competitive market? If not, can this lack of workable competition be remedied in a reliable fashion? If not, the benchmark should be rejected.

### **3. The Structure of the Recorded Music Industry**

In this Section I provide the economic framework necessary to respond to Professor Rubinfeld’s testimony and to properly pursue the four lines of inquiry identified above. I refer back to this framework throughout the remainder of this testimony.

#### ***A. The Downstream Market to Provide Music to Listeners***

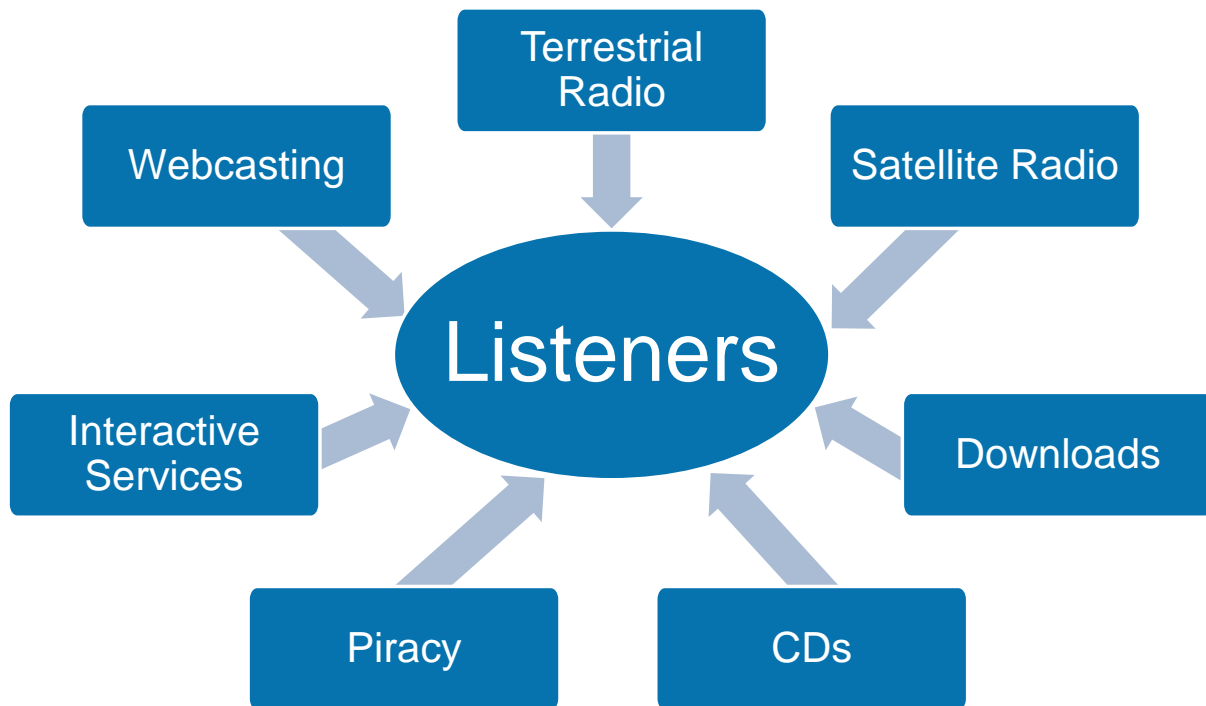
The starting point for any economic analysis of the recorded music industry is understanding the *market to provide music to listeners*. This is a “downstream” market to serve consumers, as distinct from “upstream” markets for the inputs used to make the final products consumers use.

Figure 1 depicts the downstream market to provide music to listeners and shows the primary methods by which consumers receive their music.

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<sup>20</sup> I address these issues as they relate to the benchmark that I endorse, the Merlin Agreement, in my Written Direct Testimony.

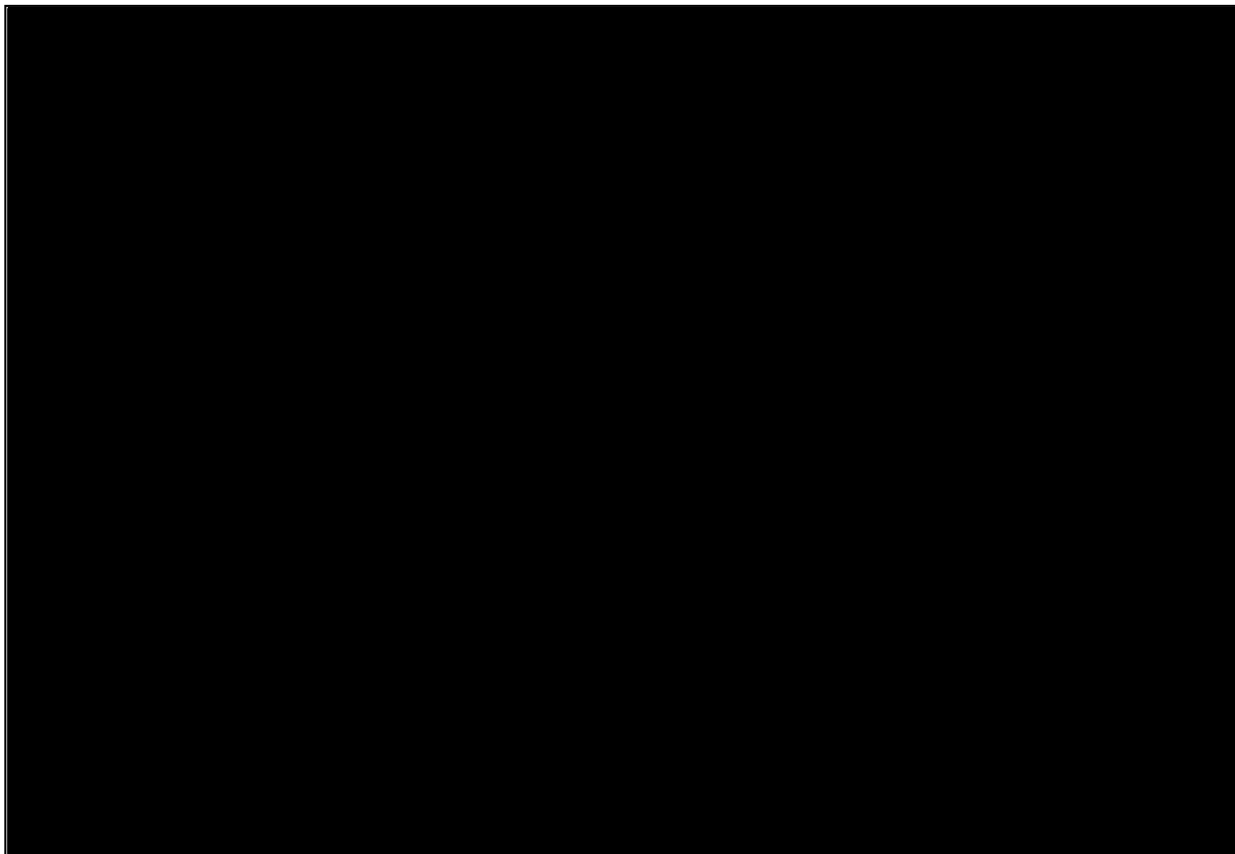
**Figure 1: The Market to Provide Music to Listeners**



Streaming services are shown on the left, broken into interactive services and webcasting. Music ownership is on the bottom, including CDs, downloads, and illegal “ownership” via piracy. The “lean-forward” methods of getting music, interactive services, CDs, downloads, and piracy, are arrayed along the bottom. The “lean-back” methods of getting music, webcasting, terrestrial radio, and satellite radio, are arrayed along the top.



Figure 2 shows one estimate of the market shares associated with the different methods by which listeners in the United States get their music.<sup>21</sup>

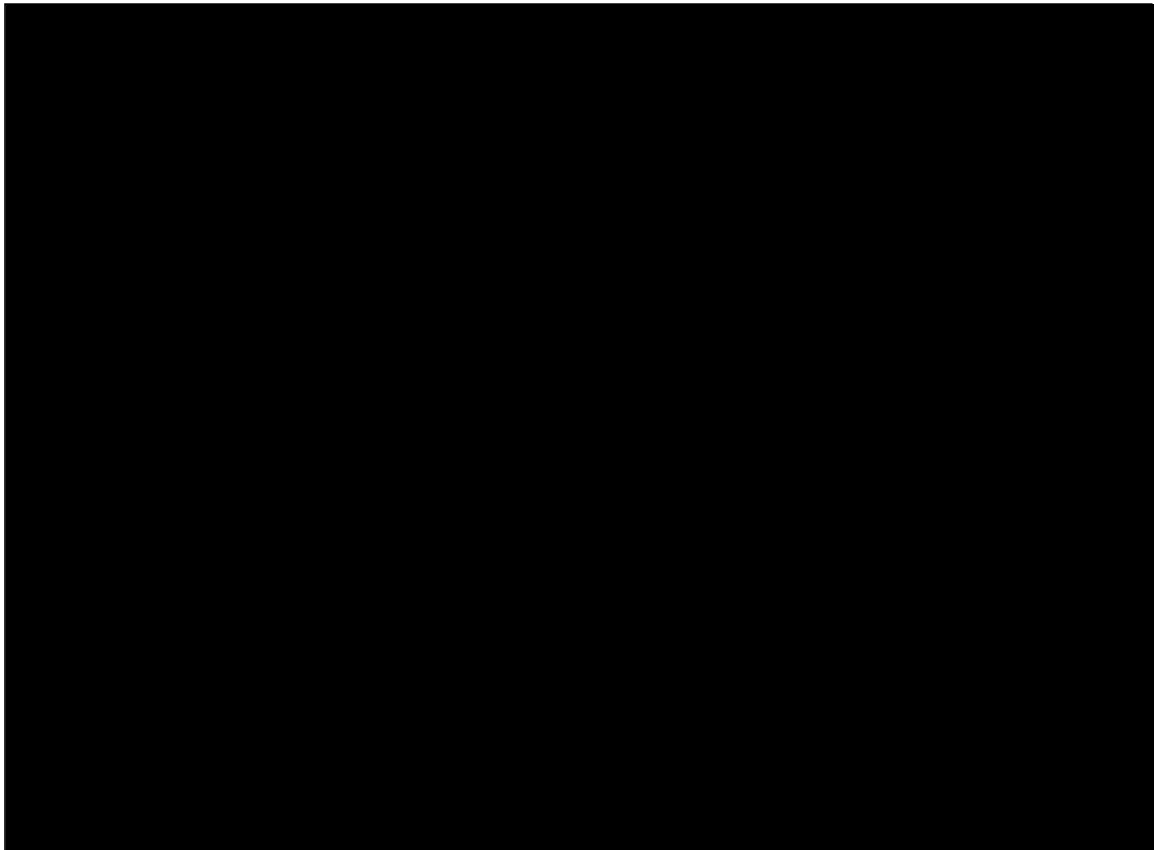


Primary Source: Edison Research, "Pandora: The Share of Ear Study."

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<sup>21</sup> Appendix B contains the notes to all of the Figures, which provide additional details on the data sources used.

Figure 3 shows the portion of the market that involves access to music, as distinct from the ownership of music.



Primary Source: Edison Research, "Pandora: The Share of Ear Study."

An important lesson from Figures 2 and 3 is that terrestrial radio is far and away the most popular source of music. This lesson is particularly relevant for assessing Professor Rubinfeld's "convergence" theory – the theory he posits in an effort to defend the use of his interactive benchmark despite the fact that, as he concedes, the "CRB in prior proceedings, including Web III Remand, has questioned the use of agreements with interactive services as benchmarks for statutory webcasting ('non-interactive') services."<sup>22</sup> This "convergence" theory essentially boils down to a claim that statutory webcasters and interactive services are "relatively close substitutes" for each other.<sup>23</sup> Oddly, in coming to this conclusion, Professor Rubinfeld performs no analysis of the type that an economist normally would: he fails to consider substitution patterns among the various modes of music consumption and he fails to consider market shares in the downstream market to provide music to listeners, the market depicted in Figures 1 – 3 above. As I discuss in greater detail in Section 9, when the downstream market is properly

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<sup>22</sup> Rubinfeld Direct Testimony, ¶ 21.

<sup>23</sup> Rubinfeld Direct Testimony, ¶ 21.

analyzed, with recognition of terrestrial radio’s dominant position in this marketplace, it becomes very clear that Professor Rubinfeld’s “convergence” theory is factually incorrect.

Figure 4 looks more closely at streaming music, showing the relative popularity of the types of streaming music services that Americans use, based on the number of performances.



Primary Sources: Rubinfeld, SoundExchange, and Pandora data.

As shown in Figure 4, statutory webcasters account for [REDACTED] of the performances streamed from June to December 2013; interactive services account for the remaining [REDACTED]. Furthermore, advertising-supported performances account for [REDACTED] of streaming performances, with subscription services accounting for the remaining [REDACTED].

Professor Rubinfeld’s interactive benchmark hinges on the prices paid by consumers for subscription interactive services. As shown in Figure 4, these services account for only [REDACTED] of streaming performances, which corresponds to less than [REDACTED] of the overall market to provide music to listeners.

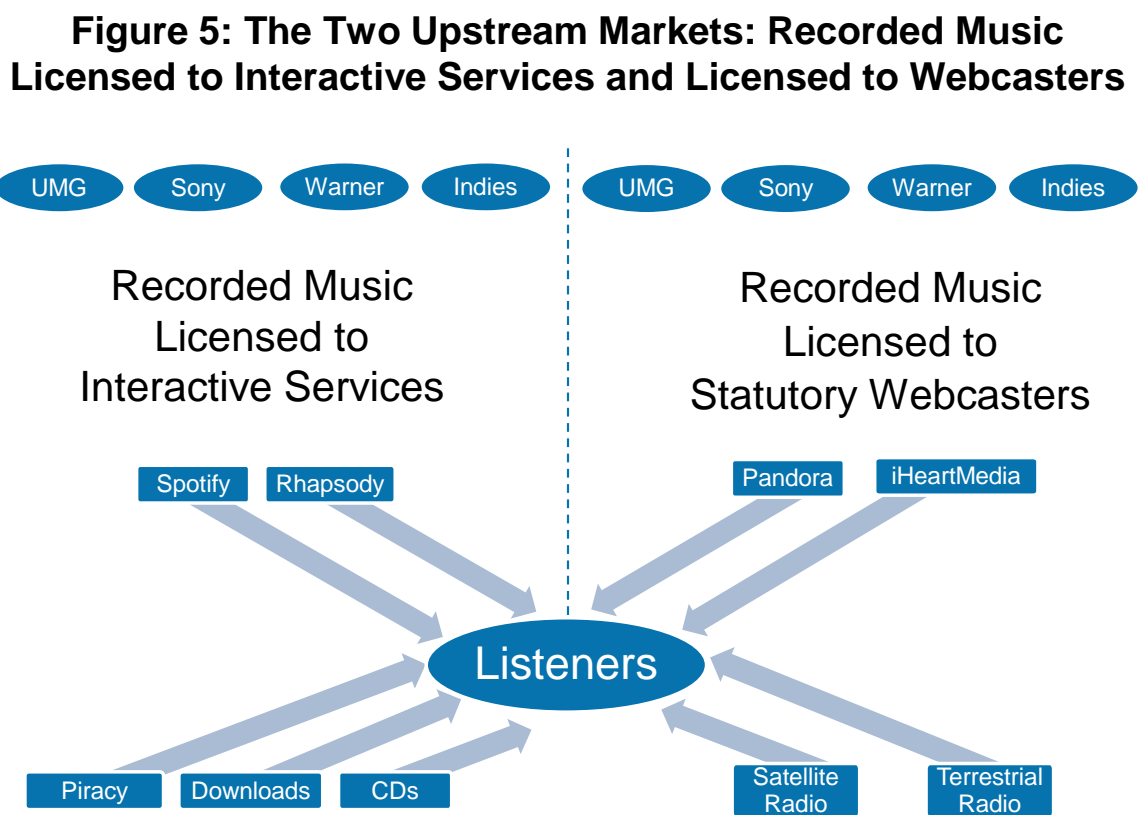
### ***B. The Upstream Markets for the Licensing of Recorded Music***

My discussion of the recorded music industry thus far has focused on the downstream market in which listeners get their music. While necessary for evaluating the interactive and webcaster benchmarks, studying this market alone is not sufficient. It is also necessary to study the relevant markets in which services acquire the necessary licenses to perform recorded music.

These are *upstream* (input) markets, as distinct from the *downstream* (final product) market discussed in the previous section. The distinction between upstream and downstream markets is fundamental in the field of industrial organization.

In fact, proper evaluation of Professor Rubinfeld’s assertion (made as part of his “same parties test”) that the interactive services are “similar” to statutory webcasters as buyers of rights to perform recorded music *requires comparing two distinct upstream markets*: one in which the interactive services are buyers of the necessary rights to perform recorded music, and a second in which statutory webcasters are the buyers of rights to perform recorded music.

Figure 5 depicts these two upstream markets, while also showing at the bottom the downstream market for the provision of music to listeners (as shown in Figure 1).<sup>24</sup>



Professor Rubinfeld never identifies, much less analyzes, these two distinct upstream markets.

In an effort to sidestep this essential part of the analysis, Professor Rubinfeld simply asserts that interactive services and statutory webcasters are “similar” as buyers of rights to perform

<sup>24</sup> For simplicity, Figure 5 only shows two interactive services, Spotify and Rhapsody, and two statutory webcasters, Pandora and iHeartMedia. Figure 5 also omits the upstream markets associated with satellite radio, CDs, and downloads. There are no upstream markets associated with piracy and terrestrial radio since these forms of listening do not pay any royalties to record companies.

recorded music because these two types of services are “converging,” meaning that they are “reasonably close substitutes” in the downstream market to provide music to listeners.<sup>25</sup> As I already alluded to, and as I discuss in greater detail in Section 9, Professor Rubinfeld’s theory of “convergence” is false as a factual matter. More relevant here, and as I also discuss in greater detail in Section 10, this “convergence” theory is entirely irrelevant under Professor Rubinfeld’s own “same parties” test. That test requires comparing the two upstream markets shown in Figure 5, which Professor Rubinfeld never does. “Convergence” is entirely about competition for listeners in the downstream market – it tells us nothing about the comparability of the two distinct upstream markets at issue. Professor Rubinfeld dwells on “convergence,” but in the end, it is a detour and a distraction from the benchmarking exercise, according to his own benchmarking tests.

In Sections 4 and 5, I analyze the two distinct upstream markets. In Section 4, I show that the upstream market for recorded music licensed to interactive services is not workably competitive. This corresponds to line of inquiry #4 in Section 2.D above. Then, in Section 5, I show that interactive services are very different as buyers of rights to perform recorded music than the statutory webcasters. This corresponds to line of inquiry #1 in Section 2.D above.

#### **4. The Market for Licensing Recorded Music to Interactive Services is Not Workably Competitive**

Professor Rubinfeld’s analysis starts off on the wrong foot, and never recovers. He never considers the threshold issue of whether his benchmark market – the market for licensing recorded music to interactive services – is workably competitive. Because this market is *not* workably competitive, as shown immediately below, the royalty rates determined in that market tell us virtually nothing about the rates that would be negotiated between willing buyers and willing sellers in a workably competitive market. Consequently, the rates in this benchmark market are far above competitive levels and provide little or no guidance for what rates would emerge in the target market at issue in this proceeding.

##### ***A. A Market with “Must Have” Suppliers is Not Workably Competitive***

I explained in my Direct Testimony what economists mean by the concept of “workable competition.” There I stated: “The hallmark of a workably competitive market is regular, significant competition among suppliers for the patronage of buyers.”<sup>26</sup>

The term “workable competition” has a long history in the field of industrial organization, as described by Professor Michael Katz in his Written Direct Testimony submitted on behalf of the

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<sup>25</sup> Specifically, Professor Rubinfeld offers two arguments in support of his proposition that “interactive agreements have become more appropriate benchmarks in the period since the last proceeding.” First, he relies on his theory of “convergence,” which asserts that listeners are likely to view interactive and statutory webcasting services as “relatively close substitutes for each other.” Second, he claims that statutory webcasting services will have limited promotional benefits in the future. Rubinfeld Direct Testimony, ¶¶ 160-161. Both of these statements refer only to the downstream market to provide music to listeners.

<sup>26</sup> Shapiro Direct Testimony, pp. 10-11.

National Association of Broadcasters.<sup>27</sup> Section IV of Professor Katz’s Direct Testimony is entitled “The Economics of Effective Competition.” He makes the key point in Section IV.D, which is entitled “Buyer Choice is the Essence of Competition.” There he states: “Specifically, competition arises only when buyers have the ability to substitute the offerings of one seller for those of another.”<sup>28</sup> He elaborates: “Indeed, the concept of buyer choice among several substitute suppliers plays a critical and central role in all of the definitions of workable or reasonable competition in the academic literature.”<sup>29</sup> I agree entirely with Professor Katz about the well-established concept of workable competition.

A market in which there are several “must have” suppliers – by definition – cannot be workably competitive because buyers in such markets have no choice but to deal with each of the “must have” suppliers. There is no buyer choice in such a market, and buyer choice among substitutes is the essence of competition. In the parlance of economics, the “must have” suppliers are complements, not substitutes, because buyers need each of them and cannot substitute one for another.

To see why a market with several “must have” suppliers is not workably competitive, consider a coal mine in Colorado seeking to ship its coal by rail to Chicago for sale there. Suppose there is no feasible way to get the coal to Chicago other than by rail. Suppose that Railroad A controls the only railroad tracks from the mine to Denver, and Railroad B controls the only railroad tracks from Denver to Chicago. Both Railroad A and Railroad B are “must have” transportation services for the mine seeking to get its coal to Chicago. No one would say that Railroad A and Railroad B compete with one another, or that the market for shipping coal from this mine to Chicago is workably competitive. In the railroad industry, this mine would be classified as a “captive shipper.”<sup>30</sup>

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<sup>27</sup> Katz Direct Testimony, pp. 20-22. I would add to Professor Katz’s citations the classic article by one of the founders of the field of modern industrial organization, Joe S. Bain (1950), “Workable Competition in Oligopoly: Theoretical Considerations and Some Empirical Evidence,” *American Economic Review*, 40(2), pp. 35-47. The first sentence of this article states: “Since Professor Clark presented a paper on ‘workable competition’ ten years ago at these meetings, the concept therein emphasized has deservedly received a good deal of attention.” (footnote omitted) For a discussion of how the concept of workable competition has been applied to rate regulation, see Richard C. Levin (1981), “Railroad Regulation, Deregulation, and Workable Competition,” *American Economic Review*, 71(2), pp. 394-398. Professor Rubinfeld, at his deposition, stated that “

\_\_\_\_\_ Rubinfeld Deposition  
Testimony, p. 35. I disagree.

<sup>28</sup> Katz Direct Testimony, ¶ 32.

<sup>29</sup> Katz Direct Testimony, ¶ 33.

<sup>30</sup> As I hope this example makes clear, Railroad A and Railroad B are not substitutes and do not compete against each other. This is necessarily the case when there are multiple suppliers of necessary complements. This concept is well known in economics. When two essential inputs must be used together, they are often referred to as “Cournot Complements.” The evidence below shows that the repertoires of the major record companies are Cournot Complements for interactive services.

***B. Interactive Services Must Have Licenses from Each of the Major Record Companies to be Commercially Viable***

In my Written Direct Testimony, I provided evidence that led me to state that “the market for recorded music used by *interactive* streaming services appears not to be workably competitive.”<sup>31</sup> I explained why this market could not be workably competitive if one accepts the closing statement of the Federal Trade Commission in its investigation of the merger between Universal Music Group (“UMG”) and EMI Recorded Music (“EMI”): “Commission staff found considerable evidence that each leading interactive streaming service must carry the music of each Major to be competitive.”<sup>32</sup>

Based on substantial additional information now available to me through the discovery process, I can now state with great confidence that the market for licensing recorded music to interactive services is not workably competitive. Indeed, the royalty rates established in this market are far above those that would arise in a workably competitive market. The evidence shows clearly that the major interactive services “must have” the music of each major record company to be commercially viable. The repertoires of the major record companies are not substitutes for each other in the eyes of either interactive services or the record companies themselves. This means that there is no true “buyer choice” in this market. Thus, the market for licensing recorded music to interactive services is not workably competitive; it is more accurately described as one in which each of the major record companies has monopoly power.<sup>33</sup>

UMG stated clearly to the FTC, during its investigation of the proposed merger of the recorded music businesses of UMG and EMI, [REDACTED]

[REDACTED]<sup>34</sup>

[REDACTED]

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<sup>31</sup> Shapiro Direct Testimony, p. 12 (emphasis in original).

<sup>32</sup> Shapiro Direct Testimony, p. 12.

<sup>33</sup> This is a market in which more than one supplier has monopoly power over the same customers at the same time. In my railroad example, both Railroad A and Railroad B have monopoly power over the coal mine in Colorado. This type of “stacked monopoly” often comes up when multiple patent owners control patents that a downstream device manufacturer must practice to make a commercially viable product. In that context, the stacking of multiple monopoly royalties on top of each other is commonly referred to as “royalty stacking.”

<sup>34</sup> In the FTC investigation of the UMG/EMI merger, the term “streaming services” was used to refer to interactive services. The term “online radio” was used to refer to statutory webcasters. This convention, which is different from the usage in the current proceeding, should be borne in mind when interpreting the documents from the merger review. I annotate some of the quotations from these documents to avoid confusion. UMG defines the term “streaming services” in its White Paper to the FTC this way: “[REDACTED]

[REDACTED] SNDEX0269104, at 108 (Universal Music Group, “White Paper Concerning Proposed Acquisition and Merger Guidelines,” July 23, 2012.) This White Paper is attached hereto as Pandora Exhibit 17.

[REDACTED]

Along similar lines, UMG noted:

[REDACTED]

Professor Rubinfeld himself made this same point to the FTC. He made a presentation to the FTC in which he stated that [REDACTED]

[REDACTED]<sup>37</sup> He also stated of the major record companies: [REDACTED]<sup>38</sup> He made the implications of this clear from a competition perspective: [REDACTED]

[REDACTED]

Similarly, Mr. Piibe of EMI testified:

[REDACTED]

UMG went a step further and explicitly stated that [REDACTED]

[REDACTED]

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<sup>35</sup> Pandora Exhibit 17, at 108-9.  
<sup>36</sup> SNDEX0268978, at 995 (Letter from Glenn D. Pomerantz to Robert Tovsky, June 22, 2012.) This letter is attached hereto as Pandora Exhibit 18.  
<sup>37</sup> SNDEX0268929, at 969 (Daniel L. Rubinfeld, “Proposed Acquisition by UMG of EMI’s Recorded Music Business,” Presentation to the Federal Trade Commission, May 10, 2012.) This presentation is attached hereto as Pandora Exhibit 19.  
<sup>38</sup> Pandora Exhibit 19, at 970.  
<sup>39</sup> Pandora Exhibit 19, at 970.  
<sup>40</sup> Pandora Exhibit 18, at 993-4 (footnote omitted).



[REDACTED]

Professor Rubinfeld agrees with this statement as well. At his deposition in the current proceeding, he testified that [REDACTED]

[REDACTED] Professor Rubinfeld also testified at his deposition in this proceeding that [REDACTED]

### ***C. Lack of Price Competition***

My conclusion that the market for licensing recorded music to interactive services is not workably competitive is further bolstered by additional evidence now available to me regarding the lack of price competition in that market.

In a workably competitive market, one normally sees suppliers offering discounts to win the patronage of customers. Here, if the market for licensing recorded music to interactive services were workably competitive, I would expect to see record companies attempting to undercut the rates offered by their competitors in an effort to gain a greater share of the music played by those interactive services.<sup>44</sup>

The testimony of record company executives indicates that this behavior is absent from the market. For example, [REDACTED]

[REDACTED]

### ***D. Implications for the Use of the Interactive Benchmark***

This evidence shows clearly that interactive services must have the repertoires of all the major record companies to be commercially viable and that there is a complete lack of price competition among the “must have” suppliers. As explained above, these facts alone imply that

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<sup>41</sup> Pandora Exhibit 18, at 998 (footnote omitted).

<sup>42</sup> Rubinfeld Deposition Testimony, p. 49.

<sup>43</sup> Rubinfeld Deposition Testimony, pp. 103-104.

<sup>44</sup> I describe workable competition in markets for recorded music in more detail in my direct testimony. Shapiro Direct Testimony, pp. 10-13.

<sup>45</sup> Harrison Deposition Testimony, p. 217.

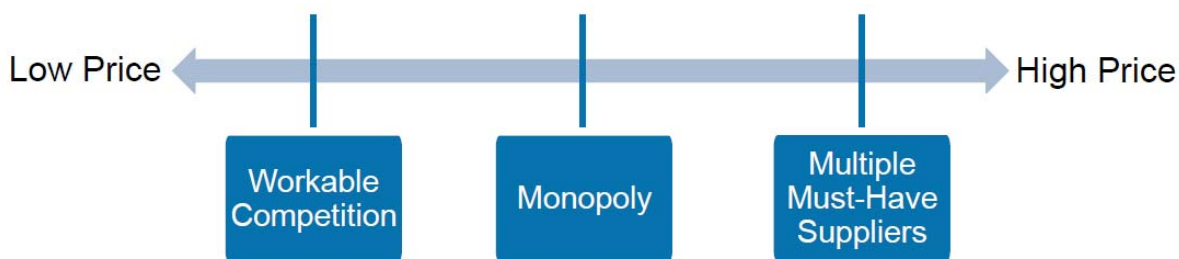
<sup>46</sup> Harrison Deposition Testimony, p. 218.

<sup>47</sup> Kooker Deposition Testimony, p. 64.

the market for the licensing of recorded music to interactive services is not workably competitive.

In fact, this evidence shows quite a bit more than that, when it comes to evaluating the usability of the interactive benchmark. As a general principle, markets with multiple “must have” suppliers not only fail to be workably competitive, *they are even worse for buyers than markets controlled by a single (monopoly) supplier*. Industrial organization economics tells us that we can rank the total price that a buyer will pay to purchase necessary inputs under different market structures as shown in Figure 6 below:<sup>48</sup>

**Figure 6: Total Price Charged to Buyer**



As noted above at the beginning of Section 2, the Copyright Royalty Judges in the *Web III* proceeding recognized this relationship.

The fact that the royalties charged by the major record companies to interactive services exceed the royalties that would be charged by a single firm controlling the supply of all recorded music is an exceedingly clear and strong indication that those royalty rates are very far above the rates that would arise under workable competition. This recognition makes the market for licensing recorded music to interactive services a very poor market to use as a source of benchmark agreements. Professor Rubinfeld’s rates, which are based on his interactive benchmark with no effort to account for this dramatic market power problem, should be rejected out of hand for this reason alone.

## **5. The Interactive Benchmark Buyers are Very Different from the Buyers at Issue in this Proceeding**

In the prior section, I demonstrated that the upstream market in which record companies license their content to interactive services is not workably competitive – a conclusion that strongly

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<sup>48</sup> See, e.g., Josh Lerner and Jean Tirole, “Efficient Patent Pools,” 94 *American Economic Review* 691 (2004). The size of the gap between the monopoly price and the price with multiple “must have” suppliers depends on how those suppliers interact. Coordination of pricing among suppliers of necessary complements, e.g., by forming patent pools or by employing automatic price-matching clauses, tends to lower price down toward the monopoly level. See Carl Shapiro, “Navigating the Patent Thicket,” 1 *Innovation Policy and the Economy* 119 (2000). Perfect coordination among the suppliers of necessary complements can lower the price down to the monopoly level, but not down to the level that would result from workable competition.

counsels against use of the interactive benchmark. Put differently, the interactive benchmark utterly fails the threshold workable competition test.

In this section, I work within Professor Rubinfeld’s framework and demonstrate that, even within his incomplete framework, the interactive benchmark still proves to be a poor benchmark. Specifically, I discuss the key differences between the buyers in Professor Rubinfeld’s proposed benchmark market and the buyers in the target market – the upstream market in which record companies license their content to statutory webcasters.

As I demonstrate, there are two fundamental differences between interactive services and webcasters as buyers – differences that must be accounted for according to Professor Rubinfeld’s own approach to benchmarking.

The first difference reflects the fact that webcasters have far greater ability and incentive to steer, i.e., to adjust the mix of the music they play in response to differences in the royalty rates charged by different record companies, than do interactive services. I discuss the downward adjustment that is necessary to account for this difference in Section 5.A.

The second difference reflects the fact that webcasters likely are more promotional of music sales, on net, than are interactive services. I discuss the downward adjustment that is necessary to account for this difference in Section 5.B.

Professor Rubinfeld did not make either of these adjustments, despite the fact that they are both indicated by his own “same parties test,” based on differences between interactive services and statutory webcasters as buyers of the rights to perform recorded music. This failure is striking, especially given that Professor Rubinfeld, when presenting to the FTC as part of the UMG/EMI merger review, [REDACTED]

## *A. Steering Adjustment*

### **1. Buyers With Greater Ability to Steer Can Negotiate Lower Royalty Rates**

In my Direct Testimony, I explained why “the ability or inability of a webcaster to steer listeners toward or away from the music of a given record company is fundamental to the licensing negotiations that would take place in the absence of a compulsory license. A record company facing a webcaster with considerable ability to steer customers away from its music has a strong incentive to discount its royalty rate to increase the number of performances of its music made by that webcaster.”<sup>50</sup> The model used by Professor Rubinfeld in his presentation to the FTC [REDACTED]

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<sup>49</sup> Pandora Exhibit 19, at 967.

<sup>50</sup> Shapiro Direct Testimony, pp. 9-10.

<sup>51</sup> Pandora Exhibit 19, at 967. [REDACTED]

To see why a buyer's ability to steer is so critical, consider the negotiations between a record company and a streaming music service with little or no ability to steer, in a hypothetical market with no statutory license. Since the service cannot steer, the record company knows that raising its royalty rate to this streaming music service will not reduce its share of the music played by this service. What limits the royalty rate charged by the record company in this situation? The downside to the record company from charging a higher royalty rate is that this higher royalty rate will be passed through, at least to some degree, to users in the form of a higher subscription price, leading to fewer subscribers.<sup>52</sup> This is a very weak force limiting the royalty rate charged by the record company.<sup>53</sup> The bottom line: a streaming service with little or no ability to steer users to or from the repertoire of a particular label will be forced to pay a high royalty rate.

All of this changes if we now consider the negotiations between a record company and a streaming service with considerable ability to steer, in a hypothetical market with no statutory license. Now the record company knows that raising its royalty rate to this streaming service can significantly reduce its share of the music played by this service. This is a far stronger force limiting the royalty rate charged by the record company. This is competition at work: the threat by the service to divert performances from one record company to another gives the service negotiating leverage. [REDACTED]

[REDACTED]<sup>54</sup> The bottom line: a streaming service with considerable ability to steer will have much more bargaining power and be able to negotiate a lower royalty rate.

In the *SDARS II* proceeding, SoundExchange's then economic expert Professor Janusz Ordover recognized that steering is important for the determination of prices. He used the term "demand diversion" for what I am calling steering. Professor Ordover stated:

First, to the extent the CRB sets the uniform 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.<sup>55</sup>

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[REDACTED]

<sup>52</sup> The extreme form of this arises if the service would exit the market as a result of the higher royalty rate. A different mechanism operates for free, advertising-supported services, but the same principle applies.

<sup>53</sup> This force is made even weaker if many of the subscribers lost by this service when it raises its subscription price merely shift to other services, with little or no resulting loss in revenue for the record company. In his presentation to the FTC, Professor Rubinfeld argued that [REDACTED]

[REDACTED] Pandora Exhibit 19, at 968-70.

<sup>54</sup> Pandora Exhibit 19, at 969.

<sup>55</sup> Amended Rebuttal Testimony of Janusz Ordover, *PSS/Satellite II*, August 8, 2012, ¶ 15.

Professor Ordover recognized specifically that the ability of the interactive services to steer their listeners toward or away from the music of a particular record company was highly relevant if agreements between interactive services and record companies are to be used as a benchmark.<sup>56</sup>

Professor Rubinfeld, in contrast, did not address steering at all in his Direct Testimony, despite his own recognition, when presenting to the FTC, [REDACTED]

[REDACTED] Nor, evidently, did Professor Rubinfeld even consider steering in developing his rate proposal.<sup>58</sup>

In fact, Professor Rubinfeld, in his Direct Testimony in this proceeding, improperly removed the role of steering entirely. Question #2 posed by the Judges in their *Web IV* Notice of Proceeding asked about possible price discrimination in the statutory hypothetical marketplace based on different price elasticities of demand for music by different services.<sup>59</sup> The Judges' question included the following quotation from the *Web II* decision: "Typically, the submarket characterized by lesser price elasticity will exhibit a higher price. All the economists who testified in this proceeding, for both the Services and the copyright owners generally agreed with this description."<sup>60</sup> I agree with this statement, which is precisely what the Lerner Equation teaches.<sup>61</sup> In response to this question, Professor Rubinfeld states: "services' elasticities of demand reflect the preferences of their listeners." He then adds, buried in a footnote, "that the elasticity in question is the demand for the blanket statutory license, rather than the elasticity of demand for a given subset of titles (e.g., an individual label's offerings)."<sup>62</sup>

This is a very serious error. Professor Rubinfeld has mixed up the *firm-specific* elasticity of demand, i.e., the elasticity of demand for the repertoire of one record company (which, as I discussed in detail in my Direct Testimony, is critical for the determination of rates in the hypothetical statutory marketplace) and the *market* elasticity of demand, i.e., the elasticity of demand for all music. The elasticity of demand for all music would only be relevant in this setting if one wanted to determine the rate that a *cartel* consisting of all of the record companies would set. The elasticity of demand for all music is not useful for determining the rate that

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<sup>56</sup> Professor Ordover went on to note that interactive services may have some limited ability to steer. Amended Rebuttal Testimony of Janusz Ordover, *PSS/Satellite II*, ¶ 15, footnote 14. As discussed below in Section 5.A.2, this ability to steer is far less than the ability of statutory webcasters to steer.

<sup>57</sup> Pandora Exhibit 19, at 967.

<sup>58</sup> Rubinfeld Deposition Testimony, pp. 42-46.

<sup>59</sup> *Web IV*, "Notice Announcing Commencement of Proceeding with Request for Petitions to Participate," December 20, 2013, ("*Web IV* Notice"), pp. 5-7.

<sup>60</sup> *Web IV* Notice, pp. 5-6.

<sup>61</sup> The Lerner Equation provides the basic relationship between a firm's price, the elasticity of demand faced by that firm, and the firm's marginal cost. A lower elasticity of demand leads to a higher price. I discussed the Lerner Equation in my Direct Testimony, especially at pages 5-7.

<sup>62</sup> Rubinfeld Direct Testimony, ¶ 110 and footnote 84.

would emerge in a workably competitive market.<sup>63</sup> The firm-specific elasticity of demand is needed for this purpose.

The difference between the firm-specific elasticity of demand and the market elasticity of demand is fundamental in the field of industrial organization, and is typically taught in undergraduate microeconomics and industrial organization classes. Indeed, Professor Rubinfeld's own undergraduate microeconomics textbook emphasizes the importance of distinguishing between the two types of elasticities.

Soft drinks provide a good example of the difference between a *market elasticity of demand* and a *firm's elasticity of demand*. ...

A recent review of several statistical studies found that the market elasticity of demand for soft drinks is between -0.8 and -1.0. That means that if *all* soft drink producers increased the prices of all of their brands by 1 percent, the quantity of soft drinks demanded would fall by 0.8 to 1.0 percent.

The demand for any individual soft drink, however, will be much more elastic, because consumers can readily substitute one drink for another. Although elasticities will differ across different brands, studies have shown that the elasticity of demand for, say, Coca Cola is around -5. In other words, if the price of Coke were increased by 1 percent but the prices of all other soft drinks remained unchanged, the quantity of Coke demanded would fall by about 5 percent.

Students – and business people – sometimes confuse the market elasticity of demand with the firm (or brand) elasticity of demand. Make sure you understand the difference.<sup>64</sup>

Professor Rubinfeld appears to have ignored his own advice: he failed to recognize the difference between the two types of elasticities. By framing the question at hand as one about the elasticity of demand for a blanket statutory license (analogous to the elasticity of demand for all soft drinks) rather than focusing on the elasticity of demand for a blanket license to an individual record company's repertoire (analogous to the elasticity of demand for Coca Cola), Professor Rubinfeld has effectively removed competition from the equation.

## **2. Statutory Webcasters Have Far Greater Ability to Steer Than Do Interactive Services**

Considerable evidence shows that webcasters have a far greater ability to adjust the mix of music they play in response to differences in the royalty rates charged by different record companies than do interactive services.

The Copyright Royalty Judges have previously considered how interactive services and webcasters differ in this respect, stating:

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<sup>63</sup> The market elasticity of demand is always lower than the firm-specific elasticity of demand (unless the firm in question is the sole supplier in the market). Since lower elasticities lead to higher prices, this corresponds to the fact that a cartel will charge higher prices than will emerge from competition.

<sup>64</sup> Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics*, 8th Ed., 2013, p. 370 (emphasis in original, footnotes omitted).

The major difference between the two markets is the role of the ultimate consumer in selecting the sound recordings for listening. In the interactive market (as the adjective connotes), the ultimate consumer essentially decides which sound recordings he or she will receive. By contrast, in the noninteractive market (as the adjective again connotes), the consumer plays a more passive role, and the webcaster offers the consumer music that the webcaster anticipates the listener might enjoy (much like radio).<sup>65</sup>

Common sense suggests that webcasting services have more control over the sound recordings that the consumer receives, and thus have a greater ability to steer, than interactive services. The evidence indeed supports this conclusion.

Regarding statutory webcasters, there is very strong empirical evidence that Pandora and iHeartMedia have a substantial ability to steer in response to differences in the royalty rates charged by different record companies. Indeed, both have done so. I understand that Pandora is currently boosting plays of labels that are party to the Merlin Agreement by ██████████<sup>66</sup> Furthermore, the steering experiments that Pandora ran under my direction demonstrated that Pandora would face no meaningful adverse commercial consequences from increasing or decreasing performances of each of the major record companies by ██████████<sup>67</sup> Likewise, for the 27 independent labels with which iHeartMedia has direct license agreements, iHeartMedia has increased performances on its standard and custom webcast stations by approximately ██████████ on average.<sup>68</sup>

In addition, Pandora has a much smaller library of music than do the interactive services. Pandora's library is about ██████████ songs, while Spotify's library is about ██████████ ██████████ This large difference reflects the fact that Pandora chooses which songs to serve to its users, while Spotify attracts listeners in significant part by offering them access to all the songs they might want to hear.

Regarding interactive services, no evidence that I have seen indicates that they have anywhere near the same ability to influence the mix of music that their listeners receive, or the same incentive to alter that mix in response to differences in the royalty rates charged by different record companies.

In fact, the available evidence is to the contrary. For example, when analyzing the UMG/EMI merger, Professor Rubinfeld ██████████ ██████████ He told the FTC that ██████████ ██████████ This would not be the case if the interactive services had any significant ability to steer. Professor Rubinfeld further explained that ██████████

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<sup>65</sup> *Web III Remand*, at 23115 (footnote omitted).

<sup>66</sup> Rebuttal Testimony of Michael Herring, February 20, 2015 (Herring Rebuttal Testimony), ¶ 50.

<sup>67</sup> Shapiro Direct Testimony, pp. 39-40 and Appendix F.

<sup>68</sup> Fischel and Lichtman Amended Direct Testimony, ¶ 64.

<sup>69</sup> Information from Pandora and SNDEX0004091, at 100 (SNL Kagan, "Economics of Mobile Music," 2014).

<sup>70</sup> Pandora Exhibit 19, at 970.

[REDACTED]

Mr. Harrison of Universal indicated that [REDACTED]

[REDACTED]

The terms of the agreements signed between the major record companies and the leading interactive services further limit the already modest ability of interactive services to steer. This is done through what I refer to as [REDACTED]

[REDACTED]

Furthermore, as part of my research to compare the ability of interactive services vs. statutory webcasters to steer, I interviewed a former executive from Google Play and Rhapsody who stated clearly that [REDACTED]

[REDACTED]

To further investigate the extent to which interactive services steer in response to price differences, I studied how Spotify responded during periods of time when the three major record labels were not all charging Spotify the same price for their music. To perform this study, I used Professor Rubinfeld's dataset containing monthly information on the royalty rate structure, royalty payments, and the label shares of Spotify performances from June 2013 through May 2014. I looked at Spotify because it is far larger than the other interactive services – it accounts

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<sup>71</sup> “Streaming services hold some bargaining power due to their ability to help win back or retain some customers who might otherwise use piracy.” Pandora Exhibit 19, at 970.

<sup>72</sup> Harrison Deposition Testimony, p. 99.

<sup>73</sup> See, e.g., SNDEX0055378 at 408-9 and 428 (Spotify-Sony Agreement, effective date July 1, 2013); SNDEX0056333 at 363, 370 and 382-6 (Spotify-UMG Agreement, commencement date September 1, 2013); SNDEX0056080 at 098-9 and 116-8 (Spotify-Warner Music Group (“WMG”) Agreement, effective date December 1, 2013); SNDEX0024401 at 421-2 and 437 (Rhapsody-Sony Agreement, effective date April 1, 2010); SNDEX0021721 at 761 and 771-2 (Microsoft-UMG Agreement, effective date September 19, 2012); SNDEX0018846 at 860 (Google-WMG Agreement, effective date November 8, 2013).

<sup>74</sup> When Professor Rubinfeld was asked at his deposition [REDACTED]

[REDACTED] Rubinfeld  
Deposition Testimony, p. 43.  
[REDACTED]

<sup>75</sup> [REDACTED]

[REDACTED]



for 79 percent of the performances that took place on products with interactive functionality, according to Professor Rubinfeld's data.<sup>76</sup>

I found [REDACTED]

[REDACTED] The results of this study are reported in Table 1.

The [REDACTED] stands in marked contrast to the demonstrated substantial ability and incentive of Pandora and iHeartMedia to steer in response to price differences.



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<sup>76</sup> SNDEX0051684\_RESTRICTED.XLSX (Rubinfeld Work Papers), "All Data" tab. Because of its size relative to the other interactive services, Spotify's price elasticity of demand will largely determine the overall elasticity of demand among interactive services.

<sup>77</sup> In fact, the data indicate that, [REDACTED]

### 3. Any Interactive Benchmark Requires a Large Downward Steering Adjustment

Since webcasters have a far greater ability to steer than do interactive services, webcasters would be able to negotiate significantly lower royalty rates in a workably competitive market. Therefore, a large downward steering adjustment to the rates implied by the interactive services benchmark is required if this benchmark is to be used as the basis for determining the statutory webcasting rates. Professor Rubinfeld failed to make this adjustment.

So far as I can determine, Professor Rubinfeld did not give any consideration to the ability of interactive services or statutory webcasters to steer, much less the *difference* in their ability to steer, which is essential if one is to make the required steering adjustment to Professor Rubinfeld's interactive benchmark.

This adjustment would be large in magnitude, since statutory webcasters have demonstrated a very significant ability and incentive to steer, and the ability of interactive services to steer is, based on the available evidence, much more limited.

#### *B. Net Promotion Adjustment*

The impact that a music service has on other revenue streams of the record company will affect the prices that would be negotiated in the hypothetical statutory market. The more promotional of other revenue streams the music service is, on net, the lower the rate that the music service will pay, all else equal. I discussed this in my written direct testimony, and explained how the Lerner Equation captures this relationship.<sup>78</sup>

This principle has important implications for the interactive benchmark approach used by Professor Rubinfeld. We may reasonably assume that the royalty rate negotiated between a record company and an interactive service fully reflects the role played by that interactive service in promoting or substituting for that record company's other revenue streams. But such an agreement tells us nothing about the role played by *statutory webcasters* in promoting or substituting for that record company's other revenue streams.

Before one uses the interactive benchmark to approximate the rates that would be negotiated in the target market at issue here, one must make an adjustment to account for the *difference* in promotion/substitution that the statutory webcasters provide to record companies as compared to that provided by the interactive services – indeed the statute *demand*s it.

[REDACTED]

In this proceeding, however, he fails to account for it and makes no

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<sup>78</sup> Shapiro Direct Testimony, pp. 6-7.

<sup>79</sup>

[REDACTED]

19, at 967.

adjustment to address the difference in net promotional impact as between interactive services and statutory webcasters.<sup>80</sup> In fact, so far as I can determine, Professor Rubinfeld has failed entirely to study how interactive services and statutory webcasters differ in terms of net promotion.<sup>81</sup>

Fortunately, several studies now available to me shed some light on how changes in music purchases differ as listeners adopt interactive vs. webcasting services.

One piece of evidence that is directly on point is a strategy presentation from [REDACTED]

NPD has also conducted a study that is directly on point. This study considers [REDACTED]

In summary, the available evidence, while not uniform, suggests overall that statutory webcasting services do more than interactive services, on net, to promote music sales by record companies. This difference calls for an additional downward adjustment to the interactive benchmark used by Professor Rubinfeld.<sup>87</sup> Professor Rubinfeld makes no such adjustment.

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<sup>80</sup> Rubinfeld Deposition Testimony, pp. 53-54 (“[REDACTED]

<sup>81</sup> Rubinfeld Deposition Testimony, pp. 55-56.

<sup>82</sup> SNDEX0214793, at 802 (Sony Music, “GDB Strategy, SME Curated Music,” undated). This strategy presentation is attached hereto as Pandora Exhibit 20.

<sup>83</sup> Pandora Exhibit 20, at 796 and 802.

<sup>84</sup> SNDEX0079801, at 815-27 (NPD, “RIAA: Streaming Music Study,” March 2013).

<sup>85</sup> SNDEX0079801, at 826-27 (NPD, “RIAA: Streaming Music Study,” March 2013). This study reports [REDACTED]

<sup>86</sup> SNDEX0099057, at 066 (Bain & Company, “UMG Global Forecast,” Draft, October, 2014).

<sup>87</sup> Professor Rubinfeld states: “Any supposed promotional benefits to CD or download sales from statutory services will be increasingly limited ...” Rubinfeld Direct Testimony, ¶ 21. Even if this is true, it does not address the

## 6. Professor Rubinfeld’s “Interactivity Adjustment” is Circular, Lacks Economic Basis, and Contains Major Errors

Professor Rubinfeld offers an “interactivity adjustment” that purportedly adjusts the per-play rates found in interactive service agreements for the fact that the rights licensed to interactive services go beyond the rights associated with the statutory license.<sup>88</sup> This relates to Professor Rubinfeld’s “same rights test.” This adjustment is flawed for several reasons: it is based on circular logic, it lacks any underlying economic basis, and it contains major errors.

### A. *The Interactivity Adjustment is Circular*

The only potential advantage of the agreements with interactive services, over agreements with statutory webcasters, is that they may be less affected by the “shadow” of the statutory license. Professor Rubinfeld, however, makes a claim that, if true, would largely or entirely negate this advantage. According to Professor Rubinfeld:

Any service – including currently “on-demand” services – has the option of electing the statutory license (albeit by possibly reconfiguring service offerings) and emulating services such as Pandora by streaming playlists customized to individual listeners’ tastes. *Given the shadow of the statutory license, it follows that statutory rates affect directly negotiated agreements for services which plan to offer more or different functionality than that which is provided by the statutory license.*<sup>89</sup>

Professor Rubinfeld later clarifies this point and asserts that “[d]irectly licensed rates can be expected to reflect the incremental value of the granted functionality over-and-above what can be achieved with the statutory rights.”<sup>90</sup> In other words, even the direct licenses with interactive services are, in Professor Rubinfeld’s view, tightly linked to the statutory rate.

In Section 9.B, I demonstrate that these assertions are not consistent with the evidence, which shows clearly that the rates charged by record companies to interactive services

But let us suppose, for a moment, that these claims of Professor Rubinfeld were true. That would imply that the interactive rates are negotiated in the “shadow” of the statutory rate, and therefore “score poorly” on Professor Rubinfeld’s own “statutory license test.” If the directly licensed rates really did “reflect the incremental value of the granted functionality over-and-above what can be achieved with the statutory rights,” then backing out that incremental value – making an “interactivity adjustment” – would just get us back to the *statutory* rate. We would be

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*difference* in net promotion between interactive services and statutory webcasters, which is the relevant question for determining the magnitude of a net promotion adjustment to the interactive benchmark. Professor Rubinfeld does not appear to have considered the possibility that statutory webcasting substitutes less for music sales than do interactive services.

<sup>88</sup> Rubinfeld Direct Testimony, ¶ 168.

<sup>89</sup> Rubinfeld Direct Testimony, ¶ 91 (emphasis added).

<sup>90</sup> Rubinfeld Direct Testimony, ¶ 145.

left with no new information. Put differently, if Professor Rubinfeld were correct, after making his “interactivity adjustment” we would be left with the statutory rate, plus some noise reflecting imperfections in the adjustment process. We would not learn anything at all about competitive rates.

If we credit these claims of Professor Rubinfeld, then the very exercise that Professor Rubinfeld purports to undertake with his “interactivity adjustment” would be completely uninformative regarding the competitive rate. Professor Rubinfeld’s approach would be circular.

### ***B. The Interactivity Adjustment Lacks Any Economic Basis***

In an effort to justify his interactivity adjustment, Professor Rubinfeld notes that he has “used the ratio of the market prices of the interactive and non-interactive subscription services as an appropriate interactivity discount.”<sup>91</sup> He then goes on to note that he has “*assumed* that the ratio of the average retail subscription price to the per-subscriber royalty paid by the licensee to the record label is approximately the same in both interactive and non-interactive markets, i.e., if an interactive service pays 55% of its retail price in royalty payments to the labels, so should a non-interactive service.”<sup>92</sup>

Professor Rubinfeld, however, offers no economic basis whatsoever for this assumption. He is not following his own four economic tests. Instead, he is effectively assuming his conclusion.

In fact,

[REDACTED] Yet Professor Rubinfeld conceded that [REDACTED]

This concession (and Professor Rubinfeld’s need to assume his conclusion) are not surprising, as there is simply no plausible economic rationale that would support the use of Professor Rubinfeld’s “interactivity adjustment.” To point out just one fatal flaw, this adjustment ignores all of the critical differences between the interactive services and the statutory webcasters as buyers in their respective *upstream* markets for the licensing of recorded music. Professor Rubinfeld skipped the lines of inquiry explored above in Sections 4 and 5.

Furthermore,

[REDACTED] Yet in this proceeding, by

looking at retail prices, Professor Rubinfeld mistakenly uses revenue. I understand that this point and others demonstrating the lack of an economic basis for Professor Rubinfeld’s interactivity

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<sup>91</sup> Rubinfeld Direct Testimony, ¶ 168.

<sup>92</sup> Rubinfeld Direct Testimony, ¶ 169 (emphasis added).

<sup>93</sup> Rubinfeld Deposition Testimony, p. 194.

<sup>94</sup> Rubinfeld Deposition Testimony, pp. 193-194.

<sup>95</sup> Pandora Exhibit 19, at 967.

adjustment are discussed in greater detail in the Written Rebuttal Testimony of Professor Michael Katz.

### ***C. The Percent-of-Revenue Prong Also Lacks Economic Basis***

The discussion in the previous sub-section applies to Professor Rubinfeld's proposed per-play rates. But the same fundamental problem applies to his percent-of-revenue prong.

Professor Rubinfeld proposes that the statutory rates be at least 55 percent of revenue. This figure is taken directly from the interactive services agreements that Professor Rubinfeld uses as benchmarks. In applying this figure, with no adjustment, Professor Rubinfeld is simply repeating his bald assumption that the ratio of royalties to subscription price for statutory webcasters should be the same as for interactive services.<sup>96</sup>

As discussed above, this assumption is entirely unjustified. Making this assumption does not substitute for actually analyzing the two upstream markets for the licensing of recorded music, which Professor Rubinfeld has not done.

### ***D. The Interactivity Adjustment Contains Major Errors***

Even taking Professor Rubinfeld's "interactivity adjustment" on its own terms, he made several critical and significant errors in performing the calculations. It is my understanding that these critical errors are discussed in detail in the Written Rebuttal Testimony of Professor Michael Katz. Correcting these errors leads to a much *larger* interactivity adjustment and thus a much *lower* implied statutory rate.

One significant flaw in Professor Rubinfeld's "interactivity adjustment" is his failure to account for the costs incurred by streaming music services. Accounting for these costs would lead to a significantly larger "interactivity adjustment" and thus significantly lower proposed rates.<sup>97</sup>

Another large and rather obvious flaw in Professor Rubinfeld's "interactivity adjustment" is his failure to account for advertising-supported listeners: his adjustment is entirely based on subscription retail prices. This is a major omission. As shown in Figure 4 above, free, advertising-supported services are far more popular than paid subscriptions, accounting for five times as many streaming performances as subscription performances.

Professor Rubinfeld acknowledges this omission, claiming that the data necessary to account for advertising-supported listeners are not available.<sup>98</sup> First, that does not justify using subscription prices without some correction. Second, this is simply not the case. I understand that Professor Katz, in his Written Rebuttal Testimony, corrects for this omission, as well as a number of others, and recalculates Professor Rubinfeld's "interactivity adjustment," deriving a much larger "interactivity adjustment" and thus a much lower implied royalty rate for statutory webcasters.

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<sup>96</sup> Rubinfeld Direct Testimony, ¶ 169.

<sup>97</sup> This flaw impacts both the per-play and percentage-of-revenue rates that Professor Rubinfeld proposes.

<sup>98</sup> Rubinfeld Direct Testimony, ¶ 170.

## 7. Professor Rubinfeld Offers No Justification for the Rate Increases He Proposes from 2016 to 2020

Professor Rubinfeld proposes that the rates he calculates from his interactive benchmark be used as a starting point, with rates going up each year during the license period. The annual rate increase that Professor Rubinfeld adopts is taken from the annual percentage increase found in the *Web III* rates. Professor Rubinfeld offers no explanation or justification for why these rate increases – which are well in excess of the expected inflation rate – should be adopted.

Perhaps even more glaring is that Professor Rubinfeld proposes increasing statutory rates over time when, as he acknowledges, the rates in the very benchmark market from which these proposed statutory rates are derived have been *falling* over time. Given this, one should conclude that, if anything, Professor Rubinfeld’s interactive benchmark suggests that statutory rates should *fall* over time, not rise.

Professor Rubinfeld attempts to defend this counter-intuitive result by claiming that it is only because of increasing competition from statutory webcasters that the rates paid by interactive services have declined. In Section 9.B, I show that this assertion is simply incorrect as a factual matter: the rates paid by interactive services have been falling as a result of competition from piracy, together with the fact that the demand for subscription music services drops off rapidly as the monthly subscription fee rises.<sup>99</sup>

Nevertheless, even if the interactive rates *were* being pulled down by the statutory rates (either due to downstream competition or upstream arbitrage), as Professor Rubinfeld claims, that would simply not imply that the statutory rate should rise over the 2016-2020 time period. All it would tell us is that the statutory rate serves as a magnet, pulling the interactive rates toward it. That would not tell us whether the statutory rate is too high or too low, or whether the statutory rate should rise or fall over time. In the end, Professor Rubinfeld has provided no coherent reason for the statutory rates to rise over the 2016-2020 period in the manner he proposes.

## 8. Licenses with Statutory Webcasters: Accounting for the Presence of the Statutory License

Professor Rubinfeld considered one license agreement between a record company and a statutory webcaster, the license agreement between Warner and iHeartMedia. Professor Rubinfeld states: “Although informative, ultimately the Warner-iHeartMedia agreement is a less appropriate benchmark than the Category A [interactive services] set for several reasons.”<sup>100</sup> He then lists these three reasons.

“First, [REDACTED]

“Second, [REDACTED]

<sup>99</sup> Written Rebuttal Testimony of Larry Rosin, pp. 9-10 and Figures 3, 4, and 5, showing how consumer interest in a paid on-demand music service falls as the price rises from \$2.99 per month to \$4.99 per month and \$9.99 per month.

<sup>100</sup> Rubinfeld Direct Testimony, ¶ 24.

“Third, [REDACTED]

In Section 8.A, I address Professor Rubinfeld’s first point, which concerns the shadow of the statutory license. I show that Professor Rubinfeld has made a critical error in his interpretation of the rates charged by record companies to statutory webcasters. This error *inverts* his results. Based on this error, Professor Rubinfeld concludes that the webcaster benchmark rates are *below* the appropriate market rate. Correcting Professor Rubinfeld’s error leads to the opposite result: the webcaster benchmark rates are *above* the appropriate market rate. This correction is of profound importance for this proceeding: it eliminates SoundExchange’s primary objection to using the webcaster benchmark.

In Section 8.B I discuss obstacles to direct licensing to statutory webcasters. These obstacles explain why we have not yet seen more direct licenses, even though the statutory rate is above the competitive rate.

In Section 8.C I present additional evidence showing that the competitive rate is lower than the current statutory rates and very likely lower than the webcaster benchmark rates as well. This additional evidence rebuts Professor Rubinfeld’s assertion that the statutory rate is at or above the competitive rate.

In Section 8.D I address Professor Rubinfeld’s second point, which concerns [REDACTED]. I explain that [REDACTED]. In dismissing this competitive behavior as a “first mover advantage” that makes the agreement between Warner and iHeartMedia “a less appropriate benchmark,” Professor Rubinfeld reveals a hostility to accounting for competition that is directly contrary to the requirement that the hypothetical statutory market be workably competitive.

In Section 8.E I address Professor Rubinfeld’s third point regarding [REDACTED]. I agree with the principle that [REDACTED] can provide additional value to the record company, but accounting for this additional value is not difficult.

***A. Direct Licenses Negotiated at Rates Below the Statutory Rate Indicate that the Webcaster Benchmark Rate is Above the Competitive Rate***

Professor Rubinfeld and I agree that the statutory license places a ceiling on what statutory webcasters will pay to record companies.<sup>102</sup> Therefore, whenever we see a direct license signed in the shadow of the statutory license, the effective rate will be no higher than the statutory rate. On this much we agree.

But now let us consider how to *interpret* the rate we see in a direct license signed in the shadow of the statutory license. To illustrate, suppose the statutory rate is \$0.0014 per play and we see a direct license with a statutory webcaster negotiated at the lower rate of \$0.0012 per play.

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<sup>101</sup> Rubinfeld Direct Testimony, ¶ 24.

<sup>102</sup> Professor Rubinfeld notes this explicitly in paragraph 98 of his Direct Testimony.



What, if anything, does this direct license tell us about the competitive rate, i.e., the rate that these two parties would have negotiated in the *absence* of the statutory rate in a workably competitive market?<sup>103</sup> Professor Rubinfeld urges us to give little weight to the \$0.0012 rate, since it was negotiated in the shadow of the \$0.0014 statutory rate. This is incorrect.

We know that both the record company and the webcaster prefer the \$0.0012 rate to the \$0.0014 statutory rate. After all, both had to agree to the \$0.0012 rate, otherwise the \$0.0014 rate would have prevailed. The webcaster naturally likes the lower rate, since buyers always like lower prices. Why does the record company also like the lower rate? The only possible reason is that the lower rate induces the webcaster to play more of this record company's music, e.g., by steering toward this record company's music.

Now let us ask what rate these same two parties would have negotiated in the *absence* of any statutory license. In a workably competitive market with normal demand conditions and with no obstacles to direct contracting, we can conclude that these two parties would negotiate a rate of *less* than \$0.0014 per play in the absence of any statutory license.<sup>104</sup> In other words, we can conclude that the statutory rate is above the competitive rate, i.e., the rate that these two parties would negotiate in the hypothetical statutory market.<sup>105</sup>

Professor Rubinfeld comes close to recognizing this critically important principle. He states:

If existing statutory rates were “too high” – i.e., above the level which would maximize the joint profits of rights holders and webcasting services qualifying for the statutory license – both rights holders and services would have an incentive to voluntarily agree to lower rates. However, if [statutory] rates were “too low,” no such negotiation would be expected to occur, since buyers could exploit the compulsory nature of the statutory license.<sup>106</sup>

However, when he actually sees rights holders and webcasting services negotiating rates below the statutory rate, he fails to draw the proper inference: that the *statutory rate is too high, i.e., above the competitive rate.*

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<sup>103</sup> I use the term “competitive rates” to refer to the royalty rates that would arise in the hypothetical statutory market in which there is no statutory license. Professor Rubinfeld uses the term “market rates” to refer to these same rates.

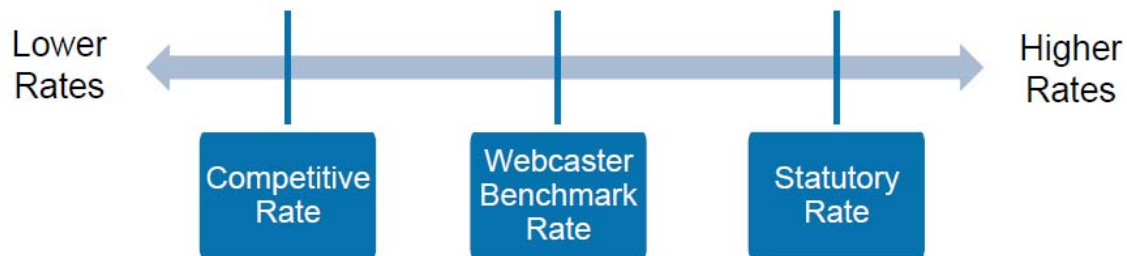
<sup>104</sup> A sufficient condition on demand is that the webcaster's demand for music from this record company exhibit declining marginal revenue. This is a standard condition used by economists when estimating demand functions. An even more easily satisfied, but still sufficient, condition on demand is that the record company's revenue function be single-peaked. I prove this proposition in Appendix C.

<sup>105</sup> Professor Rubinfeld emphasizes that the presence of the statutory rate makes a bargaining impasse less painful for the webcaster, since it can still play the record company's music by paying the statutory rate. He neglects to point out that the presence of the statutory license also makes a bargaining impasse less painful for the *record company*, because the record company's music will still be played by the webcaster and generate licensing revenue. In terms of Nash Bargaining, the presence of the statutory license makes each party's “threat point” less painful. My analysis here shows that the presence of the statutory license cannot cause the record company to offer a rate below the statutory rate unless the record company would also offer a rate below the statutory rate in an unregulated market.

<sup>106</sup> Rubinfeld Direct Testimony, ¶ 166. Professor Rubinfeld makes the same point at paragraph 90: “I note also that if the statutory rate is too high – i.e., exceeds the ‘market rates’ that would be voluntarily negotiated between willing parties in the absence of the statutory license – then licensees and licensors have a joint incentive to renegotiate.”

What does all of this tell us about the webcaster benchmark? Professor Rubinfeld and I agree that licenses negotiated in the shadow of the statutory license are pulled toward the statutory rate, since that is the rate that would prevail in the event of a bargaining impasse. Therefore, since the statutory rate has been set too high, i.e., above the competitive rate, it will *pull up* the negotiated rates from the competitive rate toward the statutory rate.<sup>107</sup> As a consequence, the webcaster benchmark will be somewhere in between the competitive rate and the statutory rate. This relationship is shown in Figure 7.

**Figure 7: Webcaster Benchmark Rates**



### ***B. Obstacles to Direct Licenses with Statutory Webcasters***

The previous section discussed the proper interpretation of the rates negotiated in an agreement between a record company and a statutory webcaster. I now discuss how to interpret the fact that while a good number of such agreements have been reached, most music played by statutory webcasters is still licensed using the statutory license.

Professor Rubinfeld appears to acknowledge that, if we observe “widespread” licensing at rates below the statutory rates, we can conclude that the statutory rates are too high. He states:

Because we do not see widespread renegotiation of the statutory rate, one can infer (other things being the same) that the rate is not too high; rather it is an appropriate market rate or it is too low.<sup>108</sup>

I disagree. In making this statement, Professor Rubinfeld appears to be ignoring two powerful obstacles to direct licensing by statutory webcasters: the precedential effect of the direct licenses and their role as what economists refer to as “focal points.”<sup>109</sup> I now address these in turn.

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<sup>107</sup> Normally, when one firm discounts to gain market share, the price it offers is higher if the prices charged by its competitors are higher. As a result, the initial competitive offerings made in the presence of a statutory rate that has been set above the competitive rate will themselves be pulled up, above the competitive rate, by the statutory rate.

<sup>108</sup> Rubinfeld Direct Testimony, ¶ 90.

<sup>109</sup> I pointed out precisely these two obstacles in my Direct Testimony at pages 14-15.

## 1. The Precedential Effect of Direct Licenses

Any record company that discounts its rate below the statutory rate to gain market share will naturally consider the precedential effect of these rates at the next rate-setting proceeding.

The available evidence clearly demonstrates [REDACTED]

For example, [REDACTED]

Similarly, [REDACTED]

Mr. Harrison of UMG confirmed tha [REDACTED]

”

Similar concerns regarding the precedential effect of direct licensing at rates below the applicable statutory rates were also expressed by record labels and their trade organizations in response to SiriusXM’s efforts to directly license record labels. By way of example, the CEO of the Recording Academy warned members: “It is in your interest to refrain from direct licensing. While Sirius may be offering positive terms, the long-term effect of accepting a rate lower than the compulsory rate could be to reduce rates overall in the future. Creating downward pressure on the value of music may be good for Sirius/XM, but it’s bad for artists and labels.”<sup>113</sup>

## 2. The Statutory Rate Serves as an Oligopoly Focal Point

The second obstacle to direct licensing arises because the statutory license serves as a convenient “focal point” for the royalty rates negotiated by the record companies.<sup>114</sup> The record companies collectively are better off if none of them starts a price war by “defecting” from the statutory rate and offering discounts in exchange for steering.

Oligopoly theory tells us that in the presence of the statutory rate, the three major record companies will be reluctant to offer discounts below the statutory rate in exchange for additional plays (steering) because these discounts are very likely to be detected by the other major record

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<sup>110</sup> SNDEX0210992, at 994-5 (Sony Music, “Radio Discussion, November 2012).

<sup>111</sup> SNDEX0072002, at 002 (Email chain between Jack Isquith and Bryan Stone with subject heading “Private/Confidential...Ramp Up Proposal,” October 2011).

<sup>112</sup> Harrison Deposition Testimony, p. 80.

<sup>113</sup> Roger G. Noll, Amended Written Direct Testimony, *PSS/Satellite II*, May 17, 2012, p. 52, citing source in footnote 43 (“Noll Amended Direct Testimony”).

<sup>114</sup> Shapiro Direct Testimony, pp. 14-15.

companies, who will then respond in kind.<sup>115</sup> After a few rounds of such discounting, the net result will be lower rates, and lower profits, for all three of the major record companies. The statutory rate, as a common rate known to all, facilitates this type of coordinated behavior.<sup>116</sup>

Oligopoly theory also tells us that the smaller record companies will be more tempted than the majors to defect from this type of coordinated behavior by offering discounts in exchange for the possibility of increasing their share of plays. We do indeed see some discounting below the statutory rate by independent record companies. But that discounting, too, is discouraged by the presence of SoundExchange and the statutory rate (especially when SoundExchange and other industry groups take steps explicitly to discourage direct licensing because of the effect it could have on the statutory rate, as I discussed above).

The Direct Testimony of Darius Van Arman of Secretly Group is quite illuminating in this respect. Mr. Van Arman argues forcefully that a “strong” statutory license, which I take to mean a high statutory rate, will discourage record companies from offering discounts in exchange for steering.

When I was last before this Board, I explained that I am opposed in principle to a system in which the decision of what recordings are played is not based on the quality of or consumer interest in the recordings, but rather on the deal terms of a direct license. Unfortunately, this has increasingly become the direct licensing world we live in, as services seem to be offering additional plays or promotion within the service to particular rights holders to increase the rights holder’s pro-rata share of plays – what I call “play-share incentives” – in exchange for lower consideration or rate relief. *Without a strong statutory rate that allows record companies, whether major or independent, to reject play-share incentives, I am afraid this will become an inevitability.*<sup>117</sup>

This is precisely the type of speech I would expect one supplier to make to discourage his rivals from engaging in price competition and encourage them instead to rally around a focal point price that is well above the competitive level.

Messaging along these lines was also expressed in response to SiriusXM’s efforts to secure direct licenses from record companies. For example, The Future of Music Coalition issued a statement warning that “[i]f you are a label, we urge you to look closely at [Sirius XM direct licensing] deals, and remember that the statutory rate-setting process represents an opportunity for labels to work together to get the best rate possible.”<sup>118</sup> This messaging is similarly clear – by rallying around a focal point, and not competing, the labels as a group will do better.

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<sup>115</sup> The seminal paper working out these elements of oligopoly theory is George Stigler, “A Theory of Oligopoly,” *Journal of Political Economy*, 72:1 (1964). See also my widely cited review of this literature, Carl Shapiro, “Theories of Oligopoly Behavior,” in *The Handbook of Industrial Organization*, Volume 1, R. Schmalensee and R.D. Willig (eds.), 1989.

<sup>116</sup> As in my Direct Testimony, I am not suggesting that this type of coordinated behavior necessarily constitutes collusion of the type that would violate the antitrust laws. Shapiro Direct Testimony, p. 14, footnote 21.

<sup>117</sup> Direct Testimony of Darius Van Arman, p. 14 (emphasis added).

<sup>118</sup> Noll Amended Direct Testimony, p. 53, citing source in footnote 45.

### *C. The Direct Licenses Signed by Pandora and by iHeartMedia*

As noted above, Professor Rubinfeld is of the view that because “we do not see widespread renegotiation of the statutory rate, one can infer (other things being the same) that the rate is not too high; rather it is an appropriate market rate or it is too low.”<sup>119</sup> Professor Rubinfeld goes on to assert that the lack of widespread renegotiation of the statutory rate “supports relying on the directly licensed interactive agreements.”<sup>120</sup> I have already addressed the logical flaws in this conclusion. There is one additional flaw worth noting.

In his Direct Testimony, Professor Rubinfeld studied only one direct license between a record company and a statutory webcaster, namely, the license between Warner and iHeartMedia.

But there in fact exist many more direct license agreements between record companies and statutory webcasters. These agreements further undermine Professor Rubinfeld’s conclusion that the statutory rate “is an appropriate market rate or it is too low.” Therefore, they directly undermine the primary basis on which Professor Rubinfeld argues in favor of the interactive benchmark over the webcasting benchmark. These agreements also make the webcaster benchmark more reliable because they involve more willing buyers and sellers than Professor Rubinfeld considered in his Direct Testimony.

In addition to relying on the iHeart/Warner agreement, Professors Fischel and Lichtman have put forward as benchmarks 27 licenses signed between iHeartMedia and independent record companies.<sup>121</sup> They report that the average effective royalty rate associated with these agreements is [REDACTED] per play.

Pandora, for its part, has negotiated the Merlin Agreement that I discuss at great length in my Written Direct Testimony. Thousands of record labels, including some of the most prominent independent record labels, individually made the decision to opt-in to this agreement.<sup>122</sup> Included among the labels that opted-in to the Merlin agreement are those co-owned by SoundExchange witness Darius Van Arman, and Beggars Group, the label for which SoundExchange witness Simon Wheeler is the Director of Digital. As discussed in my written direct testimony, the Merlin Agreement calls for an effective royalty rate of [REDACTED] per play.

More recently, Pandora signed another direct license – with classical music label Naxos. Applying the same approach to Pandora’s agreement with Naxos as I used for Pandora’s agreement with the Merlin Labels, and assuming that Pandora increases performances of Naxos music by [REDACTED] I have calculated that the statutory rate corresponding to the Naxos Agreement is [REDACTED] for each advertising-supported performance and [REDACTED] for each subscription performance. The “blended” rate for all performances is [REDACTED] per performance. The Naxos Agreement, and thus these rates, [REDACTED] If Pandora steers [REDACTED] toward Naxos, the effective statutory rates are [REDACTED] for each advertising-

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<sup>119</sup> Rubinfeld Direct Testimony, ¶ 90.

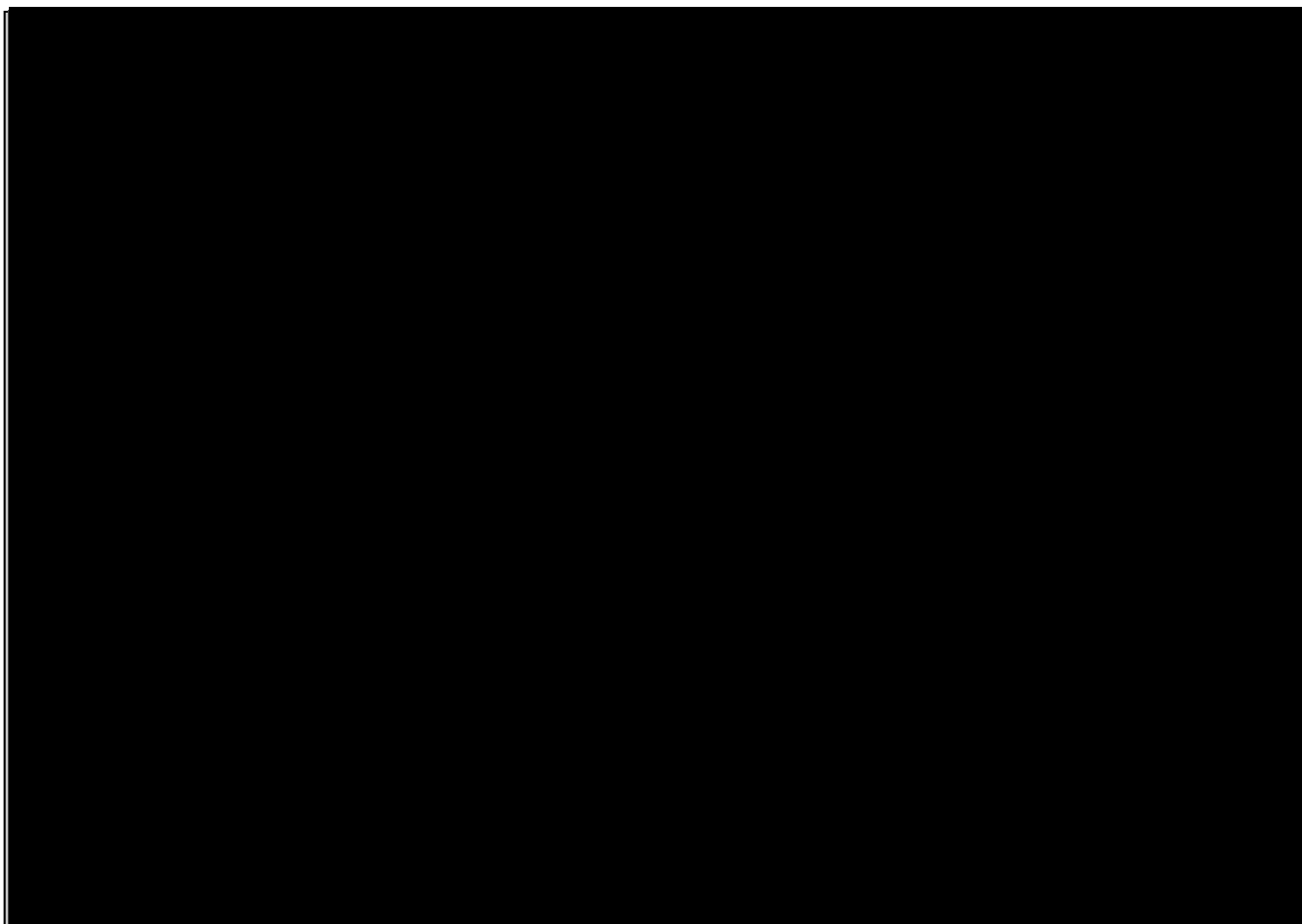
<sup>120</sup> Rubinfeld Direct Testimony, ¶ 166.

<sup>121</sup> Fischel and Lichtman Amended Direct Testimony, ¶¶ 18 and 26-31.

<sup>122</sup> Written Direct Testimony of Michael Herring, October 6, 2014 (Herring Direct Testimony), ¶¶ 34-35.

supported performance and [REDACTED] for each subscription performance. The “blended” rate for all performances is [REDACTED] per performance.

Figure 8 shows how the royalty rates from the Merlin Agreement, the Naxos Agreement, the 27 licenses signed between iHeartMedia and independent record companies, and the Warner/iHeartMedia agreement compare to the statutory rates that would otherwise apply.<sup>123</sup>



As shown in Figure 8, these agreements all fit the pattern that I described above in Section 8.A:

[REDACTED]

Just as economic theory would predict, because the otherwise applicable statutory rate is higher for iHeartMedia than it is for Pandora, the rates negotiated by iHeartMedia are higher than those negotiated by Pandora. This demonstrates that the rates negotiated in the “shadow” are pulled up from the competitive rate toward the applicable statutory rate, since the statutory rate would

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<sup>123</sup> Professors Fischel and Lichtman calculate the effective royalty rate associated with the agreement between Warner and iHeartMedia at [REDACTED] per play. Fischel and Lichtman Amended Direct Testimony, ¶ 43. Professor Rubinfeld calculates a much higher effective royalty rate associated with the agreement between Warner and iHeartMedia, [REDACTED] per play. Rubinfeld Direct Testimony, Appendix 1b. This makes no sense, since it is above iHeartMedia’s statutory royalty rate, the WSA NAB rate, which is \$0.0025 in 2015. As Professor Rubinfeld recognizes, the statutory rate serves a ceiling on any negotiated rate. Rubinfeld Direct Testimony, ¶ 98 and footnote 76.

apply in the event of a bargaining impasse. The correct conclusion from these benchmark agreements is therefore that the competitive rate is no higher than the Pandora/Merlin rate.

I recognize that these direct licenses cover only a relatively small fraction of the recorded music played by statutory webcasters. Professor Rubinfeld infers from the lack of “widespread renegotiation of the statutory rate” that “the rate is not too high.”<sup>124</sup> I disagree, for three main reasons.

First, as discussed above, there are powerful obstacles to such direct licenses, namely, their precedential impact and the lure of the statutory rate as a focal point.

Second, we are now seeing a good number of direct licenses with statutory webcasters, even if they are not yet “widespread,” in large part because Universal and Sony have not yet signed any such direct licenses and Warner has not yet signed one with Pandora.

Third, we are only now seeing the emergence of some competition in the upstream market to license recorded music to statutory webcasters, which in the past relied almost entirely on the statutory license. I discussed this in detail in Section 2.C.4 of my Direct Testimony, which is entitled “Emerging Competition in the Relevant Market.” In the past two years alone, iHeartMedia has engaged in an extensive direct licensing campaign, with the steering that necessarily goes along with discounting below the statutory rate. Likewise, in the past year Pandora signed its license with Merlin and, more recently, with Naxos. Only in the past year has Pandora tested and confirmed its ability to steer without negative effects on listenership and developed all of the infrastructure necessary to engage in steering on a commercial basis.

These are major developments in the statutory market. Together, Pandora and iHeartMedia account for ██████████ of the performances by statutory webcasters during the period from June through December 2013. Pandora and iHeartMedia are beginning to find ways to overcome the obstacles to direct licensing that I identified above. Mr. Van Arman also sees (unwelcome) competition emerging in the statutory market.<sup>125</sup> Given all of this, the proper conclusion to be drawn from the direct licenses that have been negotiated is not to reject them out of hand as Professor Rubinfeld urges. Rather, these licenses should be embraced as the first fruits of competition that is starting to emerge in the upstream market to license recorded music to statutory webcasters.

#### ***D. The Proper Interpretation of Discounts in Exchange for Steering***

I now address Professor Rubinfeld’s second criticism of the direct license between Warner and iHeartMedia. ██████████

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<sup>124</sup> Rubinfeld Direct Testimony, ¶ 90.

<sup>125</sup> He states: “Just three years since my last testimony, it feels like we are now cascading down that slippery slope I described and the bottom of the hill is one where access to the online world requires us to further de-value our music to overcome real, non-meritocratic obstacles. ... Given what I have described above, it has never been more important to the independent record community to have a strong statutory license, particularly with a strong royalty rate.” Direct Testimony of Darien Van Arman, pp. 14-15.

[REDACTED]

### 1. Steering Goes Hand in Hand with Price Competition

What Professor Rubinfeld calls a [REDACTED] is nothing more than the normal workings of competition. The fact that the agreement between Warner and iHeartMedia [REDACTED] is a *plus*, not a minus, when it comes to using this agreement as a benchmark.

Let us go back and ask ourselves: why would a record company such as Warner [REDACTED]

[REDACTED]

128

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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<sup>126</sup> Rubinfeld Direct Testimony, ¶ 24.

<sup>127</sup> [REDACTED]

<sup>128</sup> Direct Testimony of Darien Van Arman, pp. 10-14.



[REDACTED]

[REDACTED]

The analysis is slightly more complex when the benchmark agreement contains [REDACTED]. When looking at the agreement between Warner and iHeartMedia, Professor Rubinfeld takes the position that a direct license containing [REDACTED].

I agree that some adjustment is appropriate, *but only to the extent that* [REDACTED].

Let me use the Merlin Agreement to illustrate this point. In the Merlin Agreement, Pandora promises to steer at least [REDACTED] toward the Merlin Labels. In fact, Pandora is currently steering approximately [REDACTED] toward Merlin, simply because the Merlin music is less expensive than the music that Pandora licenses from other record companies at the applicable statutory rates.<sup>131</sup>

Since Pandora is steering toward Merlin far more than [REDACTED], we can be confident that Pandora's actual steering behavior is caused by price differences, not by [REDACTED]. Therefore, when it comes to using the Merlin Agreement as benchmark, we can and should treat the Merlin Agreement just the same as an agreement that induces steering based on price differences alone. As I showed in the previous subsection, discounts that induce steering should be embraced, not shunned, for the benchmarking exercise.

Pandora's demonstrated ability and incentive to steer is directly relevant here. Pandora's demonstrated steering toward the Merlin Labels shows that Pandora has both the ability and the incentive to steer substantially in response to moderate price differences, [REDACTED]. Plus, the steering experiments conducted at Pandora show that Pandora has an incentive to engage in substantial steering toward or away from the major record companies as well in response to relatively small price differences.

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<sup>129</sup> Rubinfeld Deposition Testimony, p. 53.

<sup>130</sup> See, e.g., Rubinfeld Direct Testimony, ¶ 150 [REDACTED]

<sup>131</sup> Herring Rebuttal Testimony, ¶ 50.

Furthermore, Pandora’s agreement with Naxos [REDACTED]

In sum, [REDACTED]

*E.* [REDACTED]

Addressing Professor Rubinfeld’s third criticism of the direct license between Warner and iHeartMedia – that [REDACTED]

[REDACTED] – Professor Rubinfeld’s concern here is not entirely clear to me, since [REDACTED] are easily accounted for as part of the benchmarking exercise. My analysis of the Merlin Agreement accounted for the [REDACTED]. In some scenarios, [REDACTED]

## 9. Professor Rubinfeld’s “Convergence” Theory is Factually Incorrect

Having completed my analysis of the interactive benchmark used by Professor Rubinfeld, and having responded to his criticisms of the webcaster benchmark, I now turn to two additional assertions raised by SoundExchange in an effort to support its fee proposal.

In Sections 9 and 10, I address SoundExchange’s assertion that statutory webcasters and interactive services are “converging.” Professor Rubinfeld relies heavily on this assertion to defend his use of the interactive benchmark. In Section 9, I demonstrate that this “convergence” theory is factually incorrect. In Section 10, I demonstrate that even if there were some merit to the “convergence” theory, it is entirely disconnected from the benchmarking approach to approximating license fees that both Professor Rubinfeld and I embrace. Accordingly, the “convergence” theory does nothing to salvage Professor Rubinfeld’s use of the thoroughly flawed interactive service benchmark.

In Sections 11 and 12, I address SoundExchange’s argument, made primarily through its fact witnesses, that high royalty rates are necessary to make up for the decline in record company revenues – a decline that SoundExchange asserts is caused by the statutory webcasters. I refer to this as SoundExchange’s “preservation of revenues” argument. In Section 11, I explain why the “preservation of revenues” theme is disconnected from the willing buyer/willing seller standard that both Professor Rubinfeld and I embrace, rendering it irrelevant to the task at hand. Finally, in Section 12, I analyze the causes of the decline in record company revenues and demonstrate that the decline is unrelated to statutory webcasters. In fact, as I demonstrate, it is likely that statutory webcasters on net contribute positively to the revenues earned by record companies.

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<sup>132</sup> Herring Rebuttal Testimony, ¶ 51.

<sup>133</sup> Rubinfeld Direct Testimony, ¶ 24.

## ***A. Interactive Services and Statutory Webcasters are Not Especially Close Substitutes***

Professor Rubinfeld argues that “there has been a substantial convergence in functionality and the ways in which consumers engage with non-interactive and interactive services. As a result, consumers are likely to view alternative services as relatively close substitutes for each other.”<sup>134</sup> He then relies on this asserted “convergence” to justify his use of the interactive benchmark.<sup>135</sup>

Professor Rubinfeld’s “convergence” theory essentially boils down to a claim that interactive services and webcasting services are “relatively close substitutes” within the downstream market to provide music to listeners – the market that is depicted in my Figure 1.

However, Professor Rubinfeld has not offered even the most rudimentary analysis of the downstream market to provide music to listeners to support his conclusion about “convergence.” Nowhere in his Direct Testimony is there anything like my Figures 2 and 3, showing market shares in the downstream market to provide music to listeners. Nor does Professor Rubinfeld provide any empirical evidence of the type that economists would normally rely on to show that interactive services and webcasters are “reasonably close substitutes,” namely, evidence that significant numbers of listeners substitute between these two ways of getting music in response to small changes in their relative price or quality. As I discuss below, the evidence is to the contrary.

### **1. Professor Rubinfeld’s “Convergence” Claim is Unconvincing**

Professor Rubinfeld develops his “convergence” claim in paragraphs 52-74 of his Direct Testimony in a subsection entitled “Interactive and non-interactive services are converging.” Rather than look at market shares and actual substitution patterns, as an economist normally would, Professor Rubinfeld bases his “convergence” claim on four points – that interactive and non-interactive services have increasingly similar functionality, that both service types are ubiquitous, that consumer pricing for these services has become increasingly similar over time, and that both service types offer subscription and ad-supported products.<sup>136</sup>

While comparing the characteristics of interactive services and webcasting services is of some interest and relevance, it is not a reliable or accepted method for evaluating consumer substitution patterns in markets for differentiated products. The most glaring error in Professor Rubinfeld’s analysis is his complete failure to account for the wide variety of other sources of music that are found in the downstream market to provide music to listeners.

In fact, Professor Rubinfeld’s own tests, if applied to other sources of music that compete in the downstream market to provide music to listeners, would identify a type of music consumption that is a closer substitute to statutory webcasters than are the interactive services – namely,

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<sup>134</sup> Rubinfeld Direct Testimony, ¶ 21.

<sup>135</sup> Rubinfeld Direct Testimony, ¶ 21. He relies on “convergence” to support his statement here that “when compared to the alternatives, the interactive agreements offer the most comparable set of benchmarks for this proceeding.” He states that “convergence” is an “important factor” that he considered in selected his proposed rate. Rubinfeld Direct Testimony, ¶¶ 142, 145.

<sup>136</sup> Rubinfeld Direct Testimony, ¶¶ 53-73.

*terrestrial radio*. Regarding functionality, both terrestrial radio and statutory webcasters are lean-back, while interactive services are lean-forward. Both terrestrial radio and statutory webcasters have made efforts to be ubiquitous and are indeed very widely available – both are far more popular than are the interactive services. The pricing of webcasting services and terrestrial radio is very similar: both are free for the vast majority of listeners. Despite these similarities, Professor Rubinfeld gave little to no consideration to terrestrial radio, and instead limited his analysis to a narrow and artificial comparison of statutory webcasters to interactive services.

## 2. Webcasting and Terrestrial Radio are Close Substitutes

When one looks at the relevant evidence, it becomes clear that terrestrial radio is a far closer substitute for statutory webcasters than are interactive services. Consumer surveys indicate that far more of the time consumers spend listening to webcasting displaces terrestrial radio listening than displaces listening to interactive services. Some 23 percent of consumers report that the time they spend listening to Pandora is mostly replacing time they used to spend listening to terrestrial radio, compared with *only 1 percent* who say they have mostly shifted their time from an on-demand service like Spotify or Rhapsody.<sup>137</sup> Likewise, 26 percent of consumers report that the time they spend listening to other non-interactive services is mostly replacing time they used to spend listening to terrestrial radio, compared with only 2 percent who say they have mostly shifted their time from an on-demand service like Spotify or Rhapsody.<sup>138</sup>

These powerful findings reflect two critical facts that Professor Rubinfeld overlooks or downplays: (a) terrestrial radio is the dominant form of listening, as shown in Figures 2 and 3, and (b) webcasting and terrestrial radio are both forms of “lean-back” listening, meaning that the listener does not select the individual songs to be played and can take a far more passive role in the music experience. In contrast, interactive services offer more of a “lean-forward” experience.

There are, of course, some similarities between interactive services and webcasting, and they compete against each other to some degree, but not nearly to the extent that SoundExchange and Professor Rubinfeld claim. The evidence indicates, as I discuss in detail in Section 12.D.2, that terrestrial radio is a closer substitute for webcasting than are interactive services, using the normal metric employed by economists, i.e., the number of listener hours that would shift to each alternative if webcasting became slightly more expensive or less attractive.<sup>139</sup>

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<sup>137</sup> Written Rebuttal Testimony of Larry Rosin, p. 12 and Figure 11. The base for this question was respondents who had listened to Pandora during the last month. Among these Pandora listeners, 46 percent reported that their listening time on Pandora was mostly new listening time not taken from other sources of audio listening.

<sup>138</sup> Written Rebuttal Testimony of Larry Rosin, pp. 12-13 and Figure 12. The base for this question was respondents who had listened to online music services other than Pandora in the last week. Among these respondents, 46 percent reported that their listening time on other non-interactive services was mostly new listening time not taken from other sources of audio listening.

<sup>139</sup> To assess the proximity of competition between one product and another, economists typically look at the diversion ratio: the share of the unit sales lost by one product, when its price goes up, that shifts to the other product. The *Horizontal Merger Guidelines* issue by the U.S. Department of Justice and the Federal Trade Commission place considerable weight on diversion ratios. “In some cases, the Agencies may seek to quantify the extent of direct competition between a product sold by one merging firm and a second product sold by the other merging firm by estimating the diversion ratio from the first product to the second product. The diversion ratio is the fraction of unit

Professor Rubinfeld virtually ignores terrestrial radio as a source of music. This is a glaring omission, given the dominant position of terrestrial in the market to provide music to listeners. As shown in Figures 2 and 3, terrestrial radio is far and away the most popular way for Americans to get their music, overall and when they access rather than own the music. No discussion of consumer substitution patterns regarding recorded music that ignores terrestrial radio can be reliable.

### **3. Interactive Subscription Services Have Limited Appeal**

Another reason why interactive services are not an especially close substitute for statutory webcasting services is that relatively few people are willing to pay \$9.99 per month for an on-demand music service. As reported in the Rebuttal Testimony of Larry Rosin, among users of Pandora and other non-interactive services who do not subscribe to Spotify Premium, 88 percent report that they are not at all likely, or not very likely, to pay \$9.99 per month for an on-demand service. Even at \$4.99 per month, 70 percent give these responses, and only 9 percent say that it is very likely that they would subscribe.<sup>140</sup> These results are very consistent with Pandora's own plans to continue to grow its free, advertising-supported service by displacing terrestrial radio and expanding total listening hours.

#### ***B. SoundExchange's Claim that the Rates Paid by Interactive Services Are Driven by the Statutory Rate is Factually False***

In a further effort to demonstrate that interactive services and statutory webcasters are "relatively close substitutes," Professor Rubinfeld asserts that "the decline in interactive [royalty] rates can be attributed to the increasing competition posed by non-interactive services."<sup>141</sup> He further notes that a "decline in rates for interactive services is expected and consistent with the increasing convergence between interactive and non-interactive services."

Professor Rubinfeld cites no evidence in support of these propositions. He simply infers this relationship based on his theory of "convergence." I now show that his inference here is factually false. This is further evidence demonstrating the factual inaccuracy of his "convergence" theory.

UMG documents directly contradict Professor Rubinfeld's assertion on this point. These documents clearly indicate that [REDACTED]

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sales lost by the first product due to an increase in its price that would be diverted to the second product." U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, August 2010, p. 21, available at <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf>. Economists also use the cross-elasticity of demand to measure the proximity of two differentiated products; there is a simple arithmetic relationship between the two concepts. See Gregory J. Werden, "Demand Elasticities in Antitrust Analysis," Table 5, "Alternative Measures for Ranking Substitutes,  $j$ , of Base Product  $i$ ," 66 *Antitrust Law Journal* 363 at 405. For free products, the analogous concept to the diversion ratio is the share of units lost by one product, when its quality goes down, that shifts to the other product.

<sup>140</sup> Written Rebuttal Testimony of Larry Rosin, p. 10 and Figures 6 and 7.

<sup>141</sup> Rubinfeld Direct Testimony, ¶ 140.

<sup>142</sup> Notably, in filings in relation to the UMG-EMI merger, [REDACTED]

[REDACTED] Nowhere do these documents suggest that the reduction in interactive service royalty rates had anything to do with competition from statutory webcasters.

## **10. SoundExchange’s “Convergence” Claim, Even if True, Would Not Justify Use of the Interactive Benchmark**

As noted above, Professor Rubinfeld’s theory of convergence is wholly unsupported and is belied by the record evidence. That said, even if there were some merit to this theory of “convergence,” it would be unhelpful since it is disconnected from the relevant benchmarking exercise. Professor Rubinfeld’s notion of “convergence” is a statement about consumer substitution patterns in the *downstream* market to provide music to listeners. Even if interactive services and webcasting services were close substitutes downstream, that would not imply that they are “similar buyers” in their respective upstream markets for the licensing of recorded music, or that the royalty rates as a percentage of retail price should be equivalent.

As best I can tell, Professor Rubinfeld is suggesting, or perhaps assuming, just that: that if two services are close substitutes downstream, then they should pay the same rates for the rights to perform recorded music, even though they acquire those rights in two separate upstream markets.<sup>145</sup>

This argument is without merit. In fact, we need look no farther than this very industry to see that this argument is flawed. If close downstream competition implied equal input prices, then the royalty rates for webcasters should be zero, since webcasters compete far more closely with terrestrial radio than they do with interactive services, and terrestrial radio pays nothing for recorded music. That is to say, the webcaster royalty rate would be pulled towards zero in the same way that Professor Rubinfeld suggests interactive rates are pulled toward the statutory rate.

Professor Rubinfeld’s “convergence” argument is not only flawed; it is dangerous. As I discussed at some length above, the upstream market for the licensing of recorded music to interactive services is not workably competitive. The prices in that market are above the monopoly level, which in turn is above the competitive level, as shown in Figure 6.

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<sup>142</sup> Since interactive services have very little ability to steer, the primary economic force controlling a major record company’s royalty rate to interactive services comes from the fear that higher royalty rates will be passed through in the form of higher subscription prices, which will reduce demand for the service and hence the number of performances of this record company’s music. Competition from piracy increases the elasticity of demand for interactive services and thus puts some downward pressure on the royalty rates charged to interactive services. None of this, however, alters the fact that royalty rates arising with multiple “must have” record companies are higher than the monopoly level.

<sup>143</sup> Pandora Exhibit 18, at 982-3.

<sup>144</sup> Pandora Exhibit 18, at 987.

<sup>145</sup> Mr. Wheeler’s Direct Testimony suffers from this fallacy. He states at paragraph 36: “Many people do not understand the difference between say, Pandora and Spotify, they are just listening to music. With this in mind, I would expect that a negotiating framework for webcasting would largely approximate the on-demand service framework I identified above.”

Professor Rubinfeld invokes “convergence” to justify using those inflated prices as a benchmark for the statutory market. Under the banner of “convergence,” Professor Rubinfeld is effectively asking the Copyright Royalty Judges to replicate and extend the excessive royalty rates from the interactive services market – where competition is manifestly not working – into the market for the licensing of recorded music to statutory webcasters. Doing so would make a mockery of the requirement that the statutory rates reflect market outcomes that would emerge under conditions of effective competition.

## **11.SoundExchange’s “Preservation of Revenues” Argument is Disconnected from the Willing Buyer/Willing Seller Standard**

In a final effort to support its proposal to further increase rates, SoundExchange has portrayed the statutory webcasters as the primary reason for the decline in physical and digital album sales – a decline that has resulted in reduced record label revenues.<sup>146</sup> As a result, SoundExchange, through its industry witnesses, emphasizes the “need” for record companies to secure higher royalty rates from statutory webcasters in order to make up for these lost revenues.<sup>147</sup> I refer to this theme as SoundExchange’s “preservation of revenues” argument.

In the next Section, I show that SoundExchange’s “preservation of revenues” argument is based on a false factual premise. In this Section, I explain why, even if it were the case that statutory webcasters were causing a net decline in record label revenues, there is no sound economic rationale supporting the notion that the statutory rates should be set at a level to make the record companies whole.<sup>148</sup>

The record company witnesses make clear that their goal is to prevent their revenue from falling, and that they are seeking higher statutory rates to achieve this goal. While such aspirations may be understandable in an industry that has experienced a large decline in revenue as a result of piracy, technological change, and shifting consumer tastes, these aspirations are entirely disconnected from the willing buyer/willing seller standard that all parties agree should be used

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<sup>146</sup> See, e.g., Rubinfeld ¶ 46 (“As technology has evolved, consumers have changed their music consumption behavior. Physical sales of music through CDs have dramatically fallen, being replaced to a significant degree by digital downloads and even more so by streaming.”); Harrison Written Direct Testimony ¶ 11 (“[T]he widespread access to such streaming music services has helped to accelerate the decline in purchases of permanent downloads.”).

<sup>147</sup> See, e.g., Harrison Direct Testimony, ¶ 12 (“Going forward, we will not be able to rely on revenues from the sale of permanent downloads or CDs. Thus, revenues obtained from streaming services will need to increase to ensure Universal receives a fair return on its investment in the creation of music. This is not only fair, it is sound economics.”); Kooker Direct Testimony, p. 10 (“At the same time that our revenues have been shrinking, music consumption has been expanding dramatically. More people are listening to more music now than ever before. But the people who invest in finding talent and bringing new musical works to market are not realizing the benefits of this increased consumption. The challenge, to which I return below, is to remedy this extreme imbalance in the digital world.”); Wheeler Direct Testimony, ¶ 39 (“there is a need for an escalating rate [paid by statutory webcasters] because increasingly, webcasting revenue will represent core revenue to our business and therefore have to support the core costs of our business as other streams of revenue decline.”).

<sup>148</sup> The Copyright Royalty Judges have stated previously that the statutory rates should be set using the willing buyer/willing seller approach, not to provide a pre-specified rate of return to market participants. *Web III Remand*, at 23107.

to set the statutory rates. Technological change and shifting consumer tastes, combined with competition, often cause the revenue of individual companies, and even entire industries, to decline. This is simply a result of normal economic forces at work.

The implicit assumption behind SoundExchange’s “preservation of revenues” argument is that record company revenues would not decline in a workably competitive and unregulated market. But there is no economic basis for making such an assumption. For starters, revenues normally decline in a competitive market when costs decline, as low-cost methods of production expand and competition drives down prices. As UMG has observed, [REDACTED]

[REDACTED]<sup>149</sup>

In addition, there is no economic principle indicating that the revenues of sellers are protected, especially in a market experiencing technological change and shifting consumer tastes. To the contrary, in a workably competitive market, as technology shifts and as the preference of buyers evolve, competition often drives down industry revenues. This frequently happens, for example, if the new technology sharpens competition among the suppliers. The Internet is famous for this. Amazon exemplifies how online distribution can shake up entire industries and squeeze margins, but this phenomenon is far larger than Amazon. Suppliers in such industries understandably may *hope* to prevent their revenue from falling, but the market very often has other ideas.

In fact, as demonstrated in Sections 12.A and 12.B, *in this very industry*, record company revenues declined sharply after 1999 due to market forces driven by changes in technology and consumer tastes.

In any event, SoundExchange’s “preservation of revenue” argument is entirely divorced from the benchmarking exercise that Professor Rubinfeld and I agree should be used to determine the statutory rates for 2016-2020 under the willing buyer/willing seller standard. The rates that the labels would *like* to charge (whether to preserve some historical revenue level or otherwise) is irrelevant to the rate-setting exercise. The proper question is what rates would emerge in a workably competitive market, with the record companies competing against each other for market share among webcasters. The whole point of competition is that it forces suppliers to set prices lower than they would *like* to charge if they could dictate price, i.e., lower than the monopoly (or cartel) price.

In Section 5.A.1, I explained how competition among record companies to have their music played by statutory webcasters, who can and will steer in response to price differences, forces royalty rates down to competitive levels. As in many other industries, competition leads to lower prices, and this can reduce the revenues of suppliers. Falling prices are especially likely if competition is intensifying. In Section 8.C, I observed that competition is beginning to emerge in the statutory market.

In the end, the best way to determine the rates that the record companies would charge webcasters in a workably competitive market is not to look at the rates that the record companies would *like* to charge to preserve any particular level of revenue. Rather, one should look at the rates that they actually *do* charge webcasters when they compete for market share. Fortunately, we have direct evidence on precisely that point, namely, the royalty rates associated with the licenses signed by Pandora and iHeartMedia, i.e., the webcasting benchmark licenses.

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<sup>149</sup> Pandora Exhibit 17, at 117-118.



## **12.SoundExchange’s Portrayal of the Impact of Webcasting on Record Company Revenues is Deeply Flawed**

### ***A. The Large Decline in Record Company Revenues Preceded the Rise of Streaming***

As a starting point, there is no dispute that record company revenues declined sharply from their peak in 1999 until 2010. Exhibit 1 to Professor Rubinfeld’s Direct Testimony shows that record company revenues peaked in 1999 at \$20.4 billion then fell sharply to \$7.5 billion by 2010.

From their peak in 1999 through 2010, music revenues, as measured by Professor Rubinfeld’s Exhibit 1, declined by an average of \$1.2 billion per year. Since 2010, the point at which streaming services began to take off, record industry revenues have largely stabilized. From 2010 to 2013, revenues fell from \$7.5 billion to \$7.0 billion, a rate of \$166 million per year, roughly one-seventh as fast as during the previous time period.

We can see this another way. Professor Rubinfeld’s Exhibit 1 highlights: “52% Decline in Music Revenue from 2005 to 2013.” Of the decline in music revenue measured by Professor Rubinfeld from 2005 to 2013, fully 94% took place between 2005 and 2010.

In contrast to the period 2005-2010, in a recent presentation to UMG, [REDACTED]

While one must be cautious drawing inferences from high-level trends like these, it is notable that music revenues stabilized around the same time that streaming really started to become popular. The industry-level data provided by Professor Rubinfeld simply do not support the view that streaming has caused a decline in industry revenues. If anything, the high-level trends suggest that streaming has helped the record companies beat back piracy and prevent revenues from continuing to fall as they did before streaming gained in popularity. And in fact, we see evidence supporting this hypothesis when we look more closely at what is driving record company revenues.

### ***B. Piracy is the Primary Cause of the Decline in Music Revenues***

While barely mentioned by SoundExchange’s witnesses, the primary culprit in the decline of music industry revenues from 1999 to 2010 was piracy fueled by the Internet and peer-to-peer networks that enabled file sharing. [REDACTED]

[REDACTED] Here are but a few examples:

- [REDACTED]

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<sup>150</sup> SNDEX0122040, at 041 (Bain & Company, “U.S. Music Industry Insights – Summary,” Draft, October 2014).

- [REDACTED]
- In testimony before the Copyright Royalty Judges in 2007 a senior EMI Music executive stated that [REDACTED]

- Warner Music Group’s 10-K filing in 2012 noted that [REDACTED]

Similarly, during the FTC review of UMG’s proposed acquisition of EMI, UMG emphasized repeatedly that [REDACTED] UMG made these, among other, statements to the FTC:

- [REDACTED]
- [REDACTED]

Not only has piracy reduced the number of CDs sold by the record companies; piracy also has forced the record companies to reduce the prices they charge for CDs, further eroding revenues.

[REDACTED]

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<sup>151</sup> SNDEX0268347, at 376 (Universal Music Group, “Preliminary Observations on the Commission’s Article 6.1(C) Decision Dated 23 March 2012,” undated).

<sup>152</sup> SNDEX0268347, at 382 (Universal Music Group, “Case No Comp/M.6458–Universal Music Group/EMI Music: Preliminary Observations on the Commission’s Article 6.1(C) Decision Dated 23 March 2012,” undated).

<sup>153</sup> SNDEX0268347, at 384 (Universal Music Group, “Case No Comp/M.6458–Universal Music Group/EMI Music: Preliminary Observations on the Commission’s Article 6.1(C) Decision Dated 23 March 2012,” undated).

<sup>154</sup> Pandora Exhibit 17, at 141-2.

<sup>155</sup> Pandora Exhibit 17, at 142 (note omitted).

Professor Rubinfeld, when presenting to the FTC on behalf of UMG, [REDACTED]

There, he argued that [REDACTED]

He argued that [REDACTED]

This stands in stark contrast to the picture Professor Rubinfeld presents in his Direct Testimony in this proceeding – in which he has but one passing reference to piracy.

Piracy had an additional impact on the record labels – it was the primary force that led to the unbundling of albums, which further reduced record label revenues. As UMG explained to the FTC, [REDACTED]

While the record labels have unquestionably taken many steps to combat piracy, including the unbundling of albums, and embracing subscription interactive services, piracy remains a major force impacting record company revenues today. As UMG succinctly put it, [REDACTED]

This sentiment remains true today. In September 2014, Warner Music Group (“WMG”) reported that [REDACTED]

WMG

concluded that [REDACTED]

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Along the same lines, the record companies’ current annual reports reflect that piracy is an ongoing concern. Vivendi (the owner of Universal), in its most recent annual report stated that “[p]iracy materially harms the music industry and impedes the development of new business models.”<sup>162</sup> Similarly, Warner Music Group’s 2014 10-K states that “[c]ontaining piracy is a major focus of the music industry and we, along with the rest of the industry, continue to take multiple measures ...to combat piracy ....”<sup>163</sup>

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<sup>156</sup> Pandora Exhibit 19, at 952-61.

<sup>157</sup> Pandora Exhibit 19, at 953-956.

<sup>158</sup> Pandora Exhibit 17, at 145 (note omitted).

<sup>159</sup> Pandora Exhibit 18, at 991 (note omitted).

<sup>160</sup> SNDEX0140482, at 484 (Warner Music Group, “Ad-Supported Streaming – The Freemium Funnel,” September 2014). Also, SNDEX0125974, at 980 (Warner Music Group Digital Strategy, “Anti-Piracy Summary,” May 2014).

<sup>161</sup> SNDEX0125974, at 975 (Warner Music Group Digital Strategy, “Anti-Piracy Summary,” May 2014).

<sup>162</sup> NAB00001519, at 543 (Vivendi, “2013 Annual Report,” undated).

<sup>163</sup> Warner Music Group, “2014 Form 10-K,” December 11, 2014, p. 5.

### ***C. SoundExchange's Assertion that Webcasting Has Caused a Decline in Record Company Revenue is Unsupported***

Given the realities discussed above, it is not surprising that SoundExchange has failed to offer any empirical analysis demonstrating that webcasting has caused a decline in record company revenues.<sup>164</sup> The closest SoundExchange has come is Professor Rubinfeld's Exhibit 3 in which he plots percentage changes in total record industry revenues alongside the percentage changes in revenues generated for the record industry by interactive and non-interactive streaming services over the 2005-2013 period.

Professor Rubinfeld's Exhibit 3 is highly misleading. One of the cardinal rules in properly presenting data is to avoid insinuating causation by setting side-by-side the percentage changes of variables with very different magnitudes. Yet this is exactly what Professor Rubinfeld has done in Exhibit 3.

For example, Professor Rubinfeld's Exhibit 3 shows that streaming revenues increased 36.5% from 2005 to 2006, while total music revenues declined by 7.3%. From this, one naturally would infer that the rapid growth in streaming revenues, 36.5%, is causally linked to a meaningful decline in overall revenues, 7.5%. This linkage quickly evaporates when we look at the actual data underlying Professor Rubinfeld's Exhibit 3. The underlying data show that streaming revenues increased by \$74 million from 2005 to 2006, while total music revenues declined by \$1,071 million, nearly *fifteen times as much*. The natural inference from Professor Rubinfeld's Exhibit 3 – that rapid growth in streaming caused the significant decline in total revenues – is false.

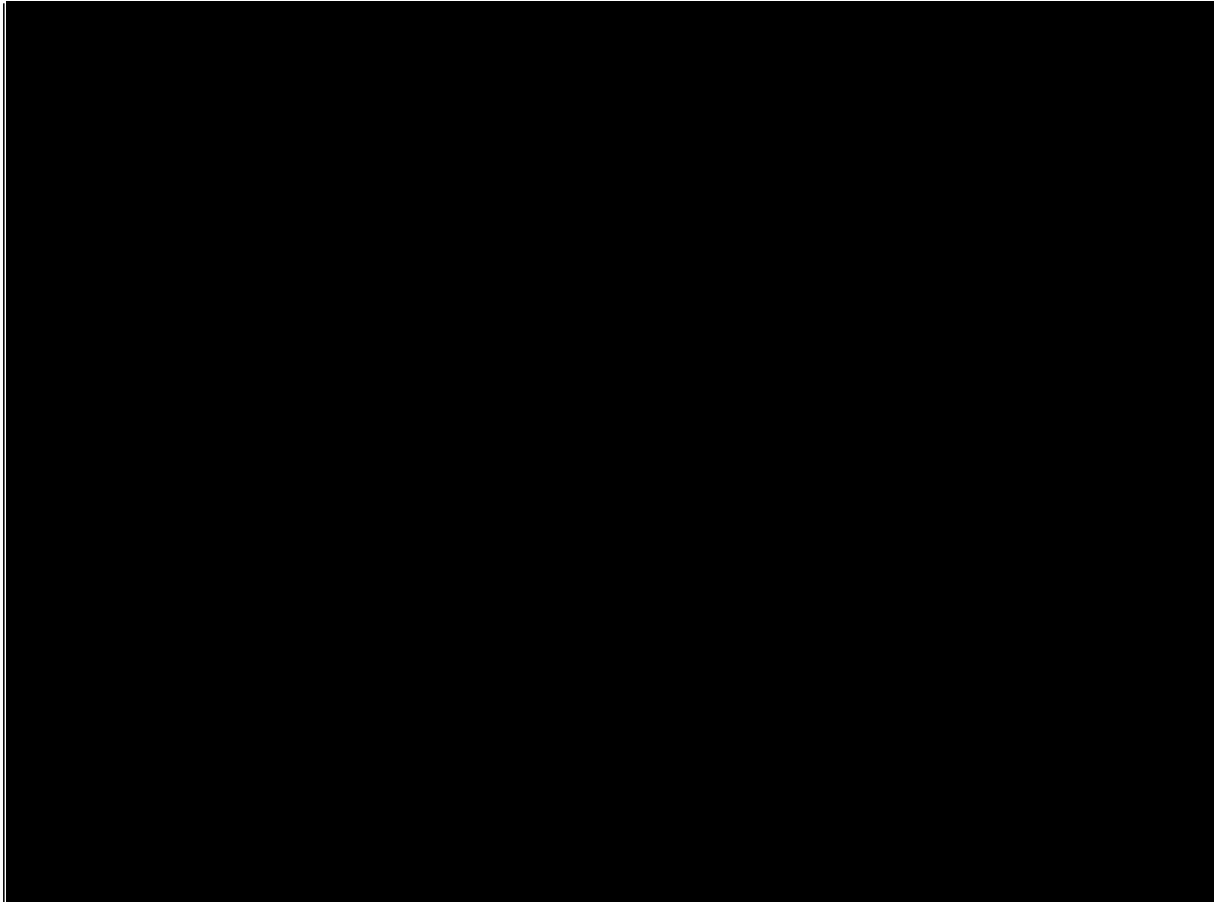
Likewise, Professor Rubinfeld's Exhibit 3 shows that streaming revenues increased 14.6% from 2007 to 2008, while total music revenues declined by 20.6%. The underlying data show that streaming revenues increased by \$44 million from 2007 to 2008, while total music revenues declined by \$2,470 million, roughly *fifty-five times as much*. Again, the natural inference from Professor Rubinfeld's Exhibit 3 – that rapid growth in streaming caused the significant decline in total revenues – is clearly false.

Figure 9 shows what these data look like, when properly presented. Figure 9 uses the same data that Professor Rubinfeld used to construct his Exhibit 3, but Figure 9 reports the *actual dollar changes* in revenue rather than the misleading percentage changes used by Professor Rubinfeld. Figure 9 makes it clear that increases in streaming are not associated with declines in total music

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<sup>164</sup> See, e.g., Harrison Deposition Testimony, p.11

revenue.<sup>165</sup> Streaming was *not* the cause of the significant decline in total music revenue that took place from 2005 through 2010.

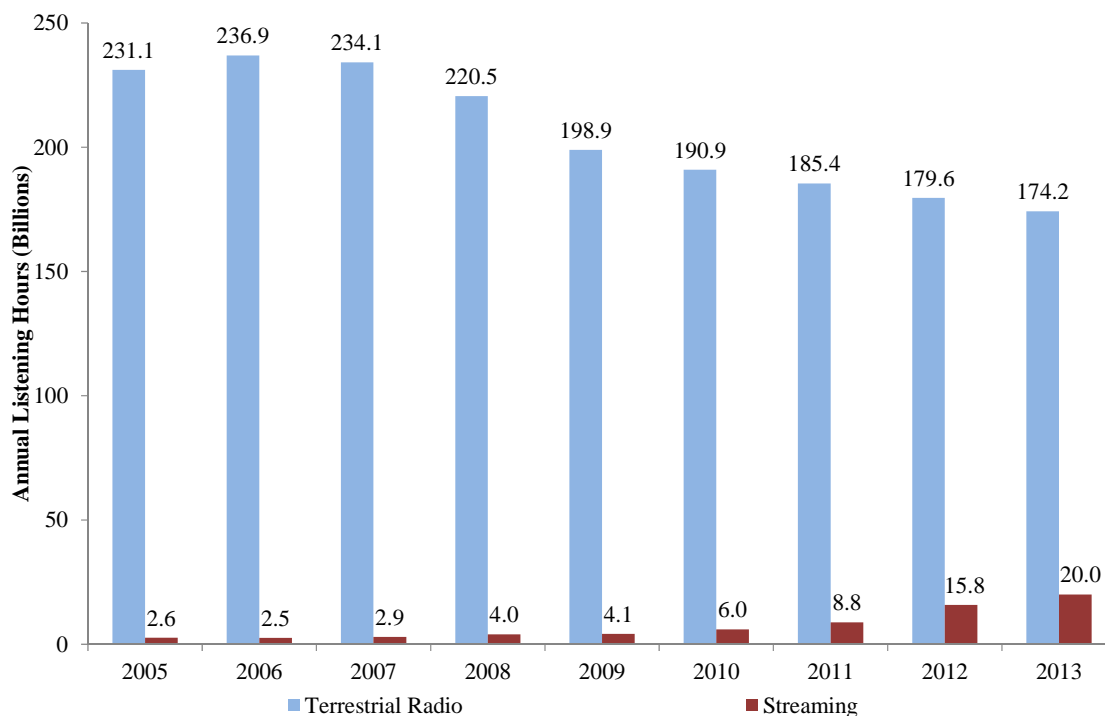


This should not be a surprising conclusion. Streaming comprised a very small share of listening hours during the period when record company revenues declined sharply. Figure 10 shows just how small webcasting was during those years compared to terrestrial radio.

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<sup>165</sup> More formally, there is a strong *negative* correlation between the decline in music revenues and the gains in streaming revenues. This can be seen visually in Figure 9. During the 2005-2010 time period when total revenues were falling rapidly, streaming revenues were growing slowly; then, during the 2010-2013 time period when total revenues fell much more slowly, streaming revenues were rising faster.

**Figure 10: Terrestrial Radio and Streaming Listening Hours 2005-2013**



Primary Source: SNL Kagan, “Economics of Internet Music & Radio: 2014 Edition.”

As for the 2010-2013 period, when total music revenues stabilized and webcasting really began to get established, we can see from Professor Rubinfeld’s data that the \$934 million increase in streaming revenue from 2010 to 2013 served to offset about two-thirds of the \$1,470 million decline in sales from physical products, with download revenue nearly constant, going up by \$40 million.

These aggregate data alone are insufficient to make a determination as to whether streaming did or did not cause a decline in record company revenues over the 2010-2013 period. In the next section, I take a closer look at the impact of streaming on record company revenue during the 2010-2013 period. Overall, the evidence supports the conclusion that statutory webcasters have added to record company revenue during the 2010 to 2013 time period – a conclusion directly at odds with SoundExchange’s basic factual assertion regarding the evolution of music industry revenue.

***D. Statutory Webcasting Adds to Record Company Revenue by Displacing Listening on Terrestrial Radio***

To understand the impact that streaming services in general, and statutory webcasters in particular, have had on record label revenues, it is necessary to understand how different sources of music substitute for one another. Professor Rubinfeld, as part of his work for UMG in connection with the EMI acquisition, agreed with as much. There, in sharp contrast to the

analysis he has put forward in this proceeding, he [REDACTED]

As I discuss in the following section, and as I highlighted in Section 9.A.2, the dominant substitution pattern that we see is statutory webcasters replacing time that consumers would otherwise spend listening to terrestrial radio. Put differently, statutory webcasters displace royalty-free listening with royalty-bearing listening – thereby increasing record label revenues. In addition, we see that statutory webcasters have led to an increase in the total amount of time consumers listen to music, again increasing revenues earned by the record labels. I discuss each of these phenomena in turn.

### **1. Terrestrial Radio is Far and Away the Leading Method by Which Listeners Get Music**

As a starting point, it is important to remember that terrestrial radio remains by far the largest medium used by Americans to listen to music.

Figure 2 above shows how listeners in the United States get their music. Among Americans aged 13 and older, 48 percent of their time spent listening to music was spent listening to terrestrial radio.

Figure 3 above shows how listeners in the United States get their music among the various “access” alternatives. Focusing on “access” to music rather than ownership of music, terrestrial radio’s share of listening rises to 63%. Terrestrial radio may be a 20<sup>th</sup> century technology, but it remains dominant in terms of listening hours some 15 years into the 21<sup>st</sup> century.<sup>167</sup>

Given that dominance, any serious analysis of consumer listening patterns needs to pay close attention to terrestrial radio. Yet Professor Rubinfeld effectively ignores terrestrial radio as a source of music, *never* discussing substitution between terrestrial radio and other types of listening.<sup>168</sup> This is highly peculiar and problematic, since terrestrial radio accounts for about three times as much listening as webcasting.

### **2. Webcasting Substantially Substitutes for Terrestrial Radio Listening**

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<sup>166</sup> Pandora Exhibit 19, at 932.

<sup>167</sup> [REDACTED]

[REDACTED] SNDEX0210992, at 993 (Sony Music, “Radio Discussion, November 2012).

<sup>168</sup> Professor Rubinfeld notes terrestrial radio in passing as one of a variety of sources of music, but he says nothing about the importance of terrestrial radio in the market to provide music to listeners. *See*, Rubinfeld Direct Testimony, ¶¶ 34 and 41. Professor Rubinfeld compares streaming music favorably to AM/FM radio in paragraph 73 but does not address substitution between these two formats. Reading Professor Rubinfeld’s testimony, one might think that terrestrial radio is a niche technology rather than the leading method by which people get their music.

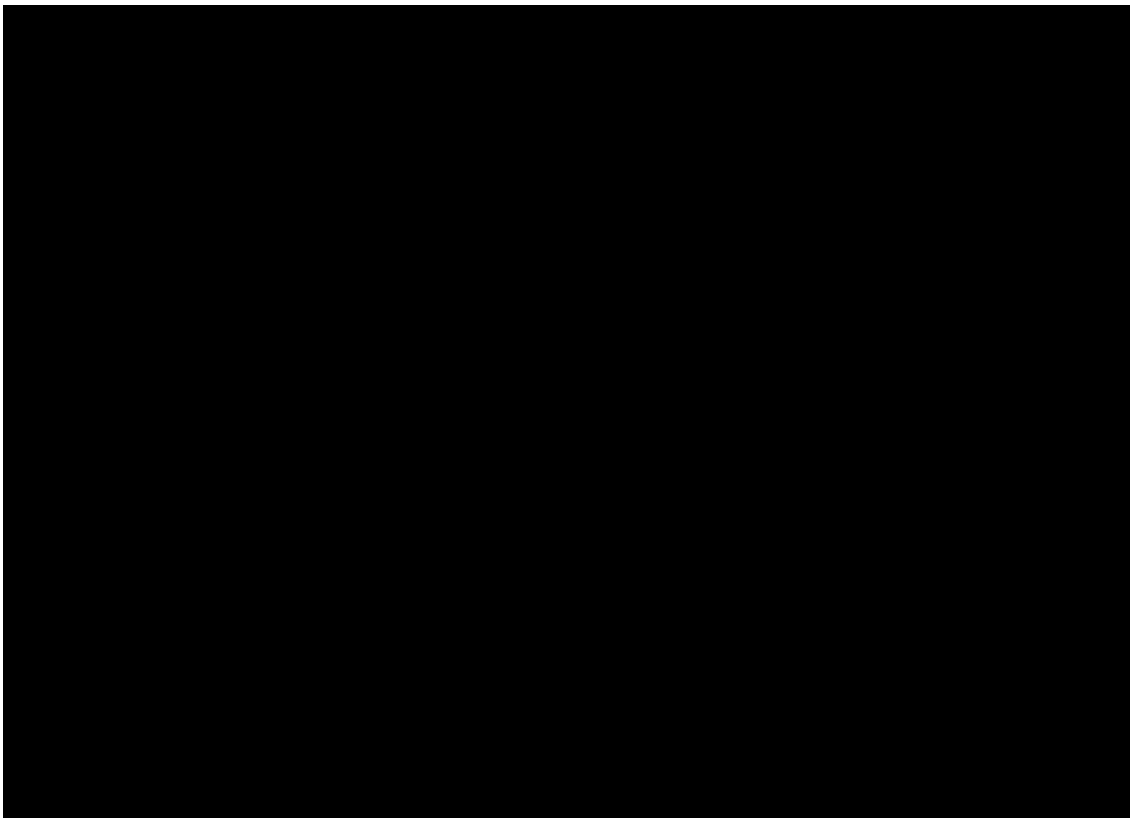
<sup>169</sup> Rubinfeld Deposition Testimony, p. 89.

[REDACTED]

Professor Rubinfeld is mistaken. The available evidence plainly demonstrates that a significant portion of the listening on statutory webcasting services is coming from terrestrial radio listening – far more than is coming from listening to interactive services.

A study performed recently by [REDACTED]

Here is the key page from that Bain & Company study:



According to this study, [REDACTED]

[REDACTED] This same study also states [REDACTED]

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<sup>170</sup> SNDEX0099057, at 100 (Bain & Company, “UMG Global Forecast,” Draft, October, 2014).

<sup>171</sup> SNDEX0099057, at 100 (Bain & Company, “UMG Global Forecast,” Draft, October, 2014).

<sup>172</sup> SNDEX0099057, at 067 (Bain & Company, “UMG Global Forecast,” Draft, October, 2014).



[REDACTED]<sup>173</sup> Likewise, an Edison Research study released in September 2013 found that [REDACTED]

The Rebuttal Testimony of Larry Rosin is highly relevant here. His survey results show that listening on Pandora displaces terrestrial radio listening more than any other type of listening.<sup>175</sup> The same was true of listening on non-interactive services other than Pandora.<sup>176</sup>

This shift from terrestrial radio to Internet radio is also evidenced in internal record label documents. For example, [REDACTED]

[REDACTED] This same document indicated that [REDACTED]

[REDACTED] In 2013, [REDACTED]

[REDACTED] And in 2014, [REDACTED]

### **3. Competition Between Terrestrial Radio and Statutory Webcasters is Likely to Increase in the Coming Years**

Not only is it clear that statutory webcasters compete much more heavily with terrestrial radio than they do with interactive services, the evidence suggests that the competition between terrestrial radio and statutory webcasters is likely to increase throughout the period for which license fees are being set. This is primarily because statutory webcasters are increasingly making their way into the car – an area traditionally dominated by terrestrial radio. Professor Rubinfeld does not appear to appreciate the significance of automobiles when it comes to the listening habits of Americans. His Direct Testimony does not even acknowledge that webcasting is displacing terrestrial radio listening in the car, much less consider the magnitude of this substitution.

As a starting point, it is worth noting just how important the car is when it comes to music listening in the United States. Sixty percent of adults do most of their radio listening in the

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<sup>173</sup> SNDEX0122040, at 047 (Bain & Company, “U.S. Music Industry Insights – Summary,” Draft, October 2014).

<sup>174</sup> PAN\_CRB\_00092025, at 082 (Edison Research, “The New Mainstream,” survey conducted in July 2013).

<sup>175</sup> Written Rebuttal Testimony of Larry Rosin, p. 12 and Figure 11.

<sup>176</sup> Written Rebuttal Testimony of Larry Rosin, pp. 12-13 and Figure 12.

<sup>177</sup> SNDEX0186708, at 732 (Warner Music Group, “Digital Strategy, November 15, 2012).

<sup>178</sup> SNDEX0186708, at 733 (Warner Music Group, “Digital Strategy, November 15, 2012).

<sup>179</sup> SNDEX0133604, at 617 (Warner Music Group, “Agenda,” October 2013).

<sup>180</sup> SNDEX0003242, at 262 (IFPI, “IFPI Digital Music Report 2014,” undated).

car.<sup>181</sup> Pandora estimates that roughly [REDACTED] hours, [REDACTED] of Pandora's total annual listening hours, currently take place in the car.

The importance of in-car listening can be seen in other metrics as well. [REDACTED] And fully [REDACTED] of people surveyed by Edison Research listen to terrestrial radio or online music in the car, according to an Edison Research study conducted in September 2013.<sup>184</sup>

In contrast to Professor Rubinfeld, Dr. Blackburn does recognize the significance of listening in the automobile. He points out that streaming music services are expected to grow by capturing more listening hours in automobiles. He states: "The growth of mobile music is expected to continue as a result of penetration into automobiles, i.e., the 'connected car.'"<sup>185</sup> He also quotes a report stating: "Technology has changed the delivery for in-car entertainment once dominated by AM/FM radio."<sup>186</sup> Dr. Blackburn devotes paragraphs 37-39 of his Direct Testimony to this point, emphasizing Pandora's strategy and goal of substantially growing the number of in-car listening hours on the Pandora service. This analysis by Dr. Blackburn only serves to reinforce that statutory webcasters, such as Pandora, are competing heavily with terrestrial radio and should be expected to increasingly do so over the coming years.

Dr. Blackburn also recognizes that Pandora and other statutory webcasters are especially attractive in the car, where terrestrial radio has historically dominated listening. He states: "For example, while driving a car, users may not have the freedom to be able to 'lean forward' and actively choose track after track. Even if they could do so, the nature of the auto environment undermines the convenience of that functionality."<sup>187</sup> With this I agree. The proper inference from this observation is that Pandora's growth in the car will largely displace terrestrial radio listening, for two reasons: terrestrial radio dominates in-car listening, and lean-back services are especially well suited for listening in the car.<sup>188</sup>

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<sup>181</sup> Herring Direct Testimony, Exhibit 10, p. 6 (Pandora, "Investor Presentation," Q2 CY2014).

<sup>182</sup> PAN\_CRB\_00003489, at 491 (Pandora, "Auto Update," August 2014).

<sup>183</sup> SNDEX0079662, at 720 (NPD Group, "2013 NPD Annual Music Study," Prepared for Sony Music Entertainment, undated, Field Dates: December 13, 2013 - January 8, 2014).

<sup>184</sup> PAN\_CRB\_00092025, at 032 (Edison Research, "The New Mainstream," survey conducted in July 2013).

<sup>185</sup> Blackburn Direct Testimony, ¶ 37.

<sup>186</sup> Blackburn Direct Testimony, ¶ 37 and footnote 30, quoting SNL Kagan Internet Music 2014 Report.

<sup>187</sup> Blackburn Direct Testimony, ¶ 16. Professor Rubinfeld makes the same point at paragraph 56 of his Direct Testimony, where he states: "'Lean-back' functionality also has become increasingly important as mobile applications (including automotive) have grown, given that in such contexts, the user may not be able to actively engage with the service and select particular songs."

<sup>188</sup> Dr. Blackburn does not draw this inference. Instead, he follows this statement with a factually incorrect claim: "In those situations in particular – environments in which streaming in general and statutory webcasting are expanding – there is relatively little difference between non-interactive streaming and interactive streaming." Blackburn Direct Testimony, ¶ 16. This claim assumes, incorrectly, that Pandora's playlist algorithm offers no significant additional value to listeners. Furthermore, since terrestrial radio dwarfs interactive streaming, as statutory webcasters attract more listeners in the car, they would largely displace terrestrial radio listening, even if Dr. Blackburn's assertion here were true.

In addition, there is overwhelming documentary evidence showing that Pandora and other statutory webcasters will be competing directly with terrestrial radio for in-vehicle listening in the years ahead.

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

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<sup>189</sup> SNDEX0099057, at 069 (Bain & Company, “UMG Global Forecast,” Draft, October, 2014).

<sup>190</sup> SNDEX0099057, at 068 (Bain & Company, “UMG Global Forecast,” Draft, October, 2014).

<sup>191</sup> SNDEX0004091, at 132 (SNL Kagan, “Economics of Internet Music & Radio: 2014 Edition,” April 2014).

<sup>192</sup> SNDEX0004091, at 131 (SNL Kagan, “Economics of Internet Music & Radio: 2014 Edition,” April 2014).

<sup>193</sup> SNDEX0002860, at 869 (Edison Research and Triton Digital, “The Infinite Dial, 2014”). The base of people asked this question was all those who own a cell phone.

<sup>194</sup> SNDEX0002860, at 919 (Edison Research and Triton Digital, “The Infinite Dial, 2014”).

<sup>195</sup> SNDEX0004091, at 131 (SNL Kagan, “Economics of Internet Music & Radio: 2014 Edition,” April 2014).

<sup>196</sup> PAN\_CRB\_00066566, at 570 (NPD Group, “NPD’s Music Acquisition Monitor, Q4’13”).

<sup>197</sup> PAN\_CRB\_00066566 at 599 (NPD Group, “NPD’s Music Acquisition Monitor, Q4’13”).

<sup>198</sup> PAN\_CRB\_00066566, at 633 (NPD Group, “NPD’s Music Acquisition Monitor, Q4’13”).

- [REDACTED]

The importance of competition between statutory webcasters and terrestrial radio for in-vehicle listening is further confirmed by Pandora’s own strategy to grow in-vehicle listening on the Pandora service. As I discussed in my Direct Testimony, and as is discussed in the Written Direct Testimony of Simon Fleming-Wood, Pandora is looking increasingly to compete with terrestrial radio for listening in vehicles over the statutory time period.<sup>200</sup>

Pandora’s goal is to establish its service as the dominant in-car entertainment source.<sup>201</sup> Pandora recognizes in-car listening as a [REDACTED] and estimates that today only about [REDACTED] of Pandora listening hours are in cars. Pandora functionality now comes pre-installed in more than 150 car and truck models across more than 26 brands; it also is being integrated into numerous car stereo receivers produced by aftermarket manufactures such as Sony, JVC, Pioneer, and Kenwood.<sup>203</sup> Through these various integrations, Pandora is currently installed in approximately 20 million cars, out of a total of 250 million cars on the road.<sup>204</sup> Pandora estimates that more than one-third of all new cars sold in 2014 will have Pandora integrated, and even more automakers have announced plans to offer Pandora integration in future vehicles.<sup>205</sup>

### ***E. Statutory Webcasting Adds to Record Company Revenue by Increasing Total Listening Hours***

In addition to generating revenues for the record labels by displacing royalty-free listening (terrestrial radio) with royalty-bearing listening, statutory webcasters also are adding to record company revenues by increasing total listening hours.

Dr. Blackburn appears to agree with as much, as he recognizes that webcasters such as Pandora offer significant advantages to listeners that were not previously available. He states:

- “Relative to historical distribution channels, online streaming services – including those employed by webcasters – allow greater delivery convenience at lower cost.”<sup>206</sup>
- “Taken together, music streaming services have created not just new distribution channels for traditional consumption of music but new products that create new forms of music consumption.”<sup>207</sup>

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<sup>199</sup> SNDEX0004091, at 129 (SNL Kagan, “Economics of Internet Music & Radio: 2014 Edition,” April 2014).

<sup>200</sup> Shapiro Direct Testimony, pp. 33-34; Fleming-Wood Direct Testimony, ¶¶ 24-27.

<sup>201</sup> PAN\_CRB\_00003489 at 490 (Pandora, “Auto Update,” August 2014).

<sup>202</sup> PAN\_CRB\_00003489 at 491 (Pandora, “Auto Update,” August 2014).

<sup>203</sup> Fleming-Wood Direct Testimony, ¶ 26.

<sup>204</sup> Fleming-Wood Direct Testimony, ¶ 26.

<sup>205</sup> Fleming-Wood Direct Testimony, ¶ 26.

<sup>206</sup> Blackburn Direct Testimony, ¶ 11.

- “Webcasters are also delivering music to new locations or with new levels of convenience and access.”<sup>208</sup>

Basic economics predicts that an increase in product quality, with no corresponding increase in cost, will lead to an increase in quantity. Here, the attractive features offered by webcasters can be expected to lead to an increase in total listener hours. This is precisely what the evidence shows: as new technology makes it more convenient for users to listen to music, and improves the listening experience in other ways, total listening hours increase.

This pattern is not new to the music industry. Historically, advances in the technology by which music is delivered lead to increases in listening hours.

[REDACTED]

[REDACTED]

[REDACTED] the time period during which streaming has become popular and mobile has come to dominate streaming. As noted by Dr. Blackburn, the percentage of listener hours on the Pandora service that were on mobile and other connected devices grew from just 5% in 2009 to 77% in 2013.<sup>211</sup>

[REDACTED]

[REDACTED] <sup>212</sup>

The Rebuttal Testimony of Larry Rosin again is highly relevant. He reports survey results in which Pandora listeners were asked how they used to spend the time they now spend listening to Pandora. Some 46 percent of respondents said that their Pandora listening time is mostly new listening time not taken from other sources of audio listening.<sup>213</sup> Consumers who listen to non-interactive services other than Pandora gave the same response.<sup>214</sup>

## *F. Summary*

SoundExchange’s unsupported assertion that the growth of statutory webcasting has had a substantial negative impact on record company revenues is contradicted by the evidence presented in this section. The lion’s share of the decline in record company revenues over the past 15 years took place before streaming became popular, and record company revenues have largely stabilized since 2010 when streaming really started taking off.

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<sup>207</sup> Blackburn Direct Testimony, ¶ 12.

<sup>208</sup> Blackburn Direct Testimony, ¶ 14.

<sup>209</sup> SNDEX0099057 at 099 (Bain & Company, “UMG Global Forecast,” Draft, October, 2014).

<sup>210</sup> SNDEX0122040, at 047 (Bain & Company, “U.S. Music Industry Insights – Summary,” Draft, October 2014).

<sup>211</sup> Blackburn Direct Testimony, ¶ 34.

<sup>212</sup> SNDEX0099057 at 066 (Bain & Company, “UMG Global Forecast,” Draft, October, 2014).

<sup>213</sup> Written Rebuttal Testimony of Larry Rosin, at p. 12 and Figure 11.

<sup>214</sup> Written Rebuttal Testimony of Larry Rosin, at pp. 12-13 and Figure 12.

Since 2010, statutory webcasters have added to record company revenues by displacing terrestrial radio and by adding to the total number of listener hours. While it is certainly possible that the increasing popularity of statutory webcasters has led to some declines in certain record label revenue streams, the evidence overall indicates that on net, statutory webcasters have added to record company revenues, not taken away from them.

I acknowledge that, as a matter of arithmetic, if statutory webcasters *only* displaced listening that would otherwise involve the purchase of CDs or the download of albums or individual tracks, they would have a negative impact on record company revenues, but that is not what is happening in the real world. In the real world, statutory webcasters substitute substantially for terrestrial radio, thereby generating record company revenues where there would otherwise be none. They also generate incremental revenue for record companies by adding to total listening hours.

In addition to the above empirical evidence, we have another powerful piece of evidence further supporting the conclusion that statutory webcasters generate positive incremental revenues for record companies: the direct license agreements between record labels and Pandora and iHeartMedia. These agreements involve Pandora and iHeartMedia playing the licensed music more in exchange for little or no additional royalty payments.<sup>215</sup> Such arrangements would make little sense for the record companies who signed them unless those record companies believe that the incremental performances on Pandora and iHeartMedia generate a net increase in their other revenue streams, notably from the sale of their music.<sup>216</sup>

In sum, there is a great deal of evidence supporting the conclusion that statutory webcasters are generating net positive incremental revenues for the record companies and will continue to do so in the coming years. This is directly contrary to SoundExchange's unsupported assertion that statutory webcasters are causing a decline in record company revenues.

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<sup>215</sup> Shapiro Direct Testimony, p. 27. Fischel and Lichtman Amended Direct Testimony, ¶ 51 and ¶ 68.


<sup>216</sup> This is also the conclusion reached by Dr. McBride based on his music sales experiments. Written Direct Testimony of Stephan McBride, October 7, 2014, ¶ 49.

Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
THE LIBRARY OF CONGRESS  
Washington, D.C.

In re	)	
	)	
DETERMINATION OF ROYALTY	)	Docket No. 14-CRB-0001-WR (2016-2020)
RATES AND TERMS FOR	)	
EPHEMERAL RECORDING AND	)	
DIGITAL PERFORMANCE OF	)	
SOUND RECORDINGS ( <i>WEB IV</i> )	)	
	)	

DECLARATION OF CARL SHAPIRO

I, Carl Shapiro, declare under penalty of perjury that the statements contained in my Written Rebuttal Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information, and belief. Executed this 23 day of February 2015 in Oakland, California.

  
\_\_\_\_\_  
Carl Shapiro

PANDORA EX 17

RESTRICTED DOCUMENT

Subject to Protective Order in Docket No. 14-CRB-0001-WR  
(2016-2020) (*Web IV*)



PANDORA EX 18

RESTRICTED DOCUMENT

Subject to Protective Order in Docket No. 14-CRB-0001-WR  
(2016-2020) (*Web IV*)

PANDORA EX 19

RESTRICTED DOCUMENT

Subject to Protective Order in Docket No. 14-CRB-0001-WR  
(2016-2020) (*Web IV*)

PANDORA EX 20

RESTRICTED DOCUMENT

Subject to Protective Order in Docket No. 14-CRB-0001-WR  
(2016-2020) (*Web IV*)

# Appendix A: Documents Considered

<b><i>Academic Articles &amp; Books</i></b>
Joe S. Bain, "Workable Competition in Oligopoly: Theoretical Considerations and Some Empirical Evidence," <i>The American Economic Review</i> , 40:2, pp. 35-47 (1950).
Carl Shapiro, "Theories of Oligopoly Behavior," in <i>The Handbook of Industrial Organization</i> , R. Schmalensee and R.D. Willig (eds.), 1989.
George Stigler, "A Theory of Oligopoly," <i>Journal of Political Economy</i> , 72:1 (1964).
Richard C. Levin, "Railroad Regulation, Deregulation, and Workable Competition," <i>The American Economic Review</i> , 71:2, pp. 394-398 (1981).
Robert S. Pindyck and Daniel L. Rubinfeld, <i>Microeconomics</i> , Pearson Education, Inc. (eds.), 2013.
Gregory J. Werden, "Demand Elasticities in Antitrust Analysis," <i>Antitrust Law Journal</i> , 66:2, pp. 363-414 (1998).
Josh Lerner and Jean Tirole, "Efficient Patent Pools," <i>American Economic Review</i> , 94:3, pp. 691-711 (2004).
Carl Shapiro, "Navigating the Patent Thicket," in <i>Innovation Policy and the Economy</i> , Adam B. Jaffe, Josh Lerner and Scott Stern (eds.), pp. 119-150, 2000.
<b><i>CRB Hearing Documents</i></b>
SDARS II, Amended Rebuttal Testimony of Janusz Ordoover.
SDARS II, Revised Amended Direct Testimony of Roger G. Noll.
Web II Decision.
Web III Remand Decision.
Web IV, Amended Direct Testimony of Daniel R. Fischel & Douglas G. Lichtman.
Web IV, Corrected Direct Testimony of Daniel L. Rubinfeld.
Web IV, Deposition of Aaron Harrison.
Web IV, Deposition of Daniel L. Rubinfeld.
Web IV, Deposition of Dennis Kooker.
Web IV, Direct Testimony of Aaron Harrison.
Web IV, Direct Testimony of Carl Shapiro.
Web IV, Direct Testimony of Darius Van Arman.
Web IV, Direct Testimony of David Blackburn.
Web IV, Direct Testimony of Dennis Kooker.
Web IV, Direct Testimony of Michael Herring.
Web IV, Direct Testimony of Michael L. Katz.
Web IV, Direct Testimony of Simon Fleming-Wood.
Web IV, Direct Testimony of Simon Wheeler.
Web IV, Direct Testimony of Stephan McBride.
Web IV, Direct Testimony of Steven Cutler.
Web IV, Notice Announcing Commencement of Proceeding with Request for Petitions to Participate, December 20, 2013.
SX EX, 001-1-DR.
<b><i>Pandora Documents</i></b>
Naxos Model.xlsx, "Summary" tab.
Pandora Exhibit 15.
Track request.xlsx.
<b><i>Studies &amp; Reports (Other Studies Listed by Bates Number Only)</i></b>
Arbitron Inc. and Edison Research, "The Infinite Dial 2011: Navigating Digital Platforms," 2011.
Clearvoice Research, "US Music Streaming Services Market Profile," April 2014.
Edison Research, The Infinite Dial Studies, 2006-2010.
IBISWorld, "51511 Radio Broadcasting in the US Industry Report," December 2014.
IBISWorld, "OD5987 Internet Radio Broadcasting Industry Report," December 2014.
Nielsen, "State of the Media: Audio Today 2014," February 2014.
RIAA, "Labels at Work - The Music Business in the Digital Age," Undated.

# Appendix A: Documents Considered

<b>Webcaster Information Webpages</b>
<a href="http://bigpondmusic.com/mog/plans">http://bigpondmusic.com/mog/plans</a>
<a href="http://content.time.com/time/business/article/0,8599,1844966,00.html">http://content.time.com/time/business/article/0,8599,1844966,00.html</a>
<a href="http://espn.go.com/espnradio/affiliate">http://espn.go.com/espnradio/affiliate</a>
<a href="http://idobi.com/about/">http://idobi.com/about/</a>
<a href="http://musica.univision.com/radio/">http://musica.univision.com/radio/</a>
<a href="http://news.ihheart.com/articles/about-ihheartradio-390884/welcome-to-ihheartradio-6906244/">http://news.ihheart.com/articles/about-ihheartradio-390884/welcome-to-ihheartradio-6906244/</a>
<a href="http://www.beatsmusic.com/pricing">http://www.beatsmusic.com/pricing</a>
<a href="http://www.billboard.com/biz/articles/news/1084097/business-matters-streaming-is-growing-is-vevo">http://www.billboard.com/biz/articles/news/1084097/business-matters-streaming-is-growing-is-vevo</a>
<a href="http://www.cbsradio.com/market">http://www.cbsradio.com/market</a>
<a href="http://www.classicalarchives.com/play_music.html?navID=1">http://www.classicalarchives.com/play_music.html?navID=1</a>
<a href="http://www.cnet.com/news/rhapsody-keeping-up-growth-reaches-2-5m-paid-users/">http://www.cnet.com/news/rhapsody-keeping-up-growth-reaches-2-5m-paid-users/</a>
<a href="http://www.coxmediagroup.com/atlanta/">http://www.coxmediagroup.com/atlanta/</a>
<a href="http://www.cumulus.com/local-radio-2/">http://www.cumulus.com/local-radio-2/</a>
<a href="http://www.entercom.com/radio-stations">http://www.entercom.com/radio-stations</a>
<a href="http://www.klove.com/about/leadership/">http://www.klove.com/about/leadership/</a>
<a href="http://www.klove.com/music/radio-stations/">http://www.klove.com/music/radio-stations/</a>
<a href="http://www.npr.org/stations/">http://www.npr.org/stations/</a>
<a href="http://www.pandora.com/about">http://www.pandora.com/about</a>
<a href="http://www.pcmag.com/article2/0,2817,2421119,00.asp">http://www.pcmag.com/article2/0,2817,2421119,00.asp</a>
<a href="http://www.rdio.com/home/en-us/">http://www.rdio.com/home/en-us/</a>
<a href="http://www.slacker.com/about">http://www.slacker.com/about</a>
<a href="http://www.soundexchange.com/">http://www.soundexchange.com/</a>
<a href="http://www.thedigitalshift.com/2013/11/media/hoopla-announces-agreements-universal-pictures-mgm-national-geographic-bbc-america/">http://www.thedigitalshift.com/2013/11/media/hoopla-announces-agreements-universal-pictures-mgm-national-geographic-bbc-america/</a>
<a href="http://www.theverge.com/2014/10/22/7043901/microsoft-is-ending-free-xbox-music-streaming">http://www.theverge.com/2014/10/22/7043901/microsoft-is-ending-free-xbox-music-streaming</a>
<a href="http://www.wsj.com/articles/youtube-considers-paid-ad-free-subscriptions-141447316">http://www.wsj.com/articles/youtube-considers-paid-ad-free-subscriptions-141447316</a>
<a href="https://play.google.com/about/music/allaccess/#/">https://play.google.com/about/music/allaccess/#/</a>
<a href="https://www.rara.com/">https://www.rara.com/</a>
<a href="https://www.spotify.com/us/">https://www.spotify.com/us/</a>
<b>Other</b>
Department of Justice and Federal Trade Commission, “Horizontal Merger Guidelines,” August 2010.
Warner Music Group 2014 10-K.

## Appendix A: Documents Considered

<i>Bates-Numbered Documents</i>	<i>Bates-Numbered Documents (cont.)</i>	<i>Bates-Numbered Documents (cont.)</i>
IHM_0048124.	SNDEX0024312.	SNDEX0054645.
IHM_0077330.	SNDEX0024401.	SNDEX0055058.
IHM_0077335.	SNDEX0024553.	SNDEX0056333.
IHM_0077339.	SNDEX0024615.	SNDEX0056735.
IHM_0077340.	SNDEX0024623.	SNDEX0058412.
NAB00001519.	SNDEX0025231.	SNDEX0058811.
PAN_CRB_00000880.	SNDEX0043246.	SNDEX0058814.
PAN_CRB_00002496.	SNDEX0043327.	SNDEX0059329.
PAN_CRB_00003489.	SNDEX0045180.	SNDEX0060122.
PAN_CRB_00003962.	SNDEX0045181.	SNDEX0072002.
PAN_CRB_00034571.	SNDEX0045182.	SNDEX0079259.
PAN_CRB_00043199.	SNDEX0045183.	SNDEX0079311.
PAN_CRB_00066565.	SNDEX0045184.	SNDEX0079376.
PAN_CRB_00066566.	SNDEX0045185.	SNDEX0079496.
PAN_CRB_00068171.	SNDEX0045275.	SNDEX0079573.
PAN_CRB_00079564.	SNDEX0045974.	SNDEX0079662.
PAN_CRB_00090020.	SNDEX0047595.	SNDEX0079752.
PAN_CRB_00092025.	SNDEX0047632.	SNDEX0079801.
PAN_CRB_00150888.	SNDEX0049457.	SNDEX0079926.
SNDEX0002860.	SNDEX0049474.	SNDEX0080021.
SNDEX0003242.	SNDEX0049479.	SNDEX0096712.
SNDEX0004091.	SNDEX0049480.	SNDEX0096716.
SNDEX0004133.	SNDEX0050611.	SNDEX0099032.
SNDEX0019271.	SNDEX0050622.	SNDEX0099057.
SNDEX0019287.	SNDEX0050636.	SNDEX0099104.
SNDEX0019376.	SNDEX0051230.	SNDEX0100373.
SNDEX0019600.	SNDEX0051247.	SNDEX0104106.
SNDEX0019603.	SNDEX0051549.	SNDEX0109413.
SNDEX0019934.	SNDEX0051563.	SNDEX0110041.
SNDEX0020038.	SNDEX0051574.	SNDEX0110223.
SNDEX0020102.	SNDEX0051575.	SNDEX0111851.
SNDEX0020207.	SNDEX0051588.	SNDEX0112000.
SNDEX0020840.	SNDEX0051593.	SNDEX0112116.
SNDEX0021686.	SNDEX0051594.	SNDEX0114986.
SNDEX0021989.	SNDEX0051618.	SNDEX0118989.
SNDEX0022398.	SNDEX0051636.	SNDEX0119012.
SNDEX0022412.	SNDEX0051655.	SNDEX0119032.
SNDEX0023841.	SNDEX0051656.	SNDEX0119035.
SNDEX0023880.	SNDEX0051657.	SNDEX0119037.
SNDEX0023895.	SNDEX0051678.	SNDEX0119056.
SNDEX0023904.	SNDEX0051679.	SNDEX0119099.
SNDEX0024210.	SNDEX0051684.	SNDEX0119102.
SNDEX0024222.	SNDEX0052617.	SNDEX0119103.

## Appendix A: Documents Considered

<i>Bates-Numbered Documents (cont.)</i>	<i>Bates-Numbered Documents (cont.)</i>	<i>Bates-Numbered Documents (cont.)</i>
SNDEX0119104.	SNDEX0142172.	SNDEX0266436.
SNDEX0119105.	SNDEX0143042.	SNDEX0266529.
SNDEX0119106.	SNDEX0145150.	SNDEX0266541.
SNDEX0119107.	SNDEX0146188.	SNDEX0266585.
SNDEX0119108.	SNDEX0182063.	SNDEX0266588.
SNDEX0119109.	SNDEX0186523.	SNDEX0266666.
SNDEX0119110.	SNDEX0186688.	SNDEX0266703.
SNDEX0119111.	SNDEX0186708.	SNDEX0266746.
SNDEX0119112.	SNDEX0198039.	SNDEX0268335.
SNDEX0119113.	SNDEX0198073.	SNDEX0268347.
SNDEX0119130.	SNDEX0198131.	SNDEX0268412.
SNDEX0119131.	SNDEX0198165.	SNDEX0268421.
SNDEX0119386.	SNDEX0200087.	SNDEX0268432.
SNDEX0119434.	SNDEX0210969.	SNDEX0268455.
SNDEX0119457.	SNDEX0210982.	SNDEX0268460.
SNDEX0119485.	SNDEX0210992.	SNDEX0268472.
SNDEX0122040.	SNDEX0214793.	SNDEX0268540.
SNDEX0122068.	SNDEX0227901.	SNDEX0268616.
SNDEX0125704.	SNDEX0233056.	SNDEX0268618.
SNDEX0125788.	SNDEX0245167.	SNDEX0268623.
SNDEX0125819.	SNDEX0248177.	SNDEX0268632.
SNDEX0125974.	SNDEX0250756.	SNDEX0268645.
SNDEX0126205.	SNDEX0255782.	SNDEX0268712.
SNDEX0126340.	SNDEX0255825.	SNDEX0268732.
SNDEX0126367.	SNDEX0256211.	SNDEX0268929.
SNDEX0126460.	SNDEX0256521.	SNDEX0268973.
SNDEX0126538.	SNDEX0256782.	SNDEX0268978.
SNDEX0126548.	SNDEX0257065.	SNDEX0269007.
SNDEX0126572.	SNDEX0258590.	SNDEX0269040.
SNDEX0126602.	SNDEX0259978.	SNDEX0269065.
SNDEX0126626.	SNDEX0263639.	SNDEX0269079.
SNDEX0127318.	SNDEX0265093.	SNDEX0269084.
SNDEX0127347.	SNDEX0265178.	SNDEX0269104.
SNDEX0128868.	SNDEX0266063.	SNDEX0269154.
SNDEX0128880.	SNDEX0266312.	SNDEX0269178.
SNDEX0133604.	SNDEX0266327.	SNDEX0269184.
SNDEX0137704.	SNDEX0266331.	SNDEX0269668.
SNDEX0137846.	SNDEX0266345.	SNDEX0271754.
SNDEX0138071.	SNDEX0266367.	SNDEX0271838.
SNDEX0138098.	SNDEX0266383.	
SNDEX0139299.	SNDEX0266399.	
SNDEX0139484.	SNDEX0266415.	
SNDEX0140482.	SNDEX0266426.	

All other documents and sources cited in the Report and the Appendices.

## **Appendix B: Notes to Selected Figures**

### **Figure 2: Time Spent Listening to Music by Audio Type**

**Sources:**

PAN\_CRB\_00067355, at 358 and 374 (Edison Research, “Pandora: Share of Ear Study,” May, 2014).

SNDEX0051684\_RESTRICTED.XLSX (Rubinfeld Work Papers), “All Data” tab.

Data from Pandora: Track request.xlsx.

Herring Direct Testimony, Exhibit 10, p. 11, presenting data from Triton Digital (Pandora, “Investor Presentation,” Q2 CY2014).

**Time Period:**

The Share of Ear study is from May 2014.

**Notes:**

The primary data source is the “Share of Ear” study by Edison Research.

Interactive listening includes the sum of listening shares for interactive webcasting services, online video services (YouTube and Vevo), other streaming, and podcasts.

The share of listening to music on YouTube and Vevo is estimated from Pandora’s share of ear (from the Share of Ear study) and the ratio of YouTube and Vevo performances (from Rubinfeld workpapers) to Pandora performances (from Pandora).<sup>1</sup>

The AM/FM Radio category from the Share of Ear study includes over-the-air broadcasts and simulcasting. The share of listening to simulcasts is estimated from Pandora’s share of ear (from the Share of Ear study) and the ratio of listening to broadcaster-owned non-interactive services and listening to Pandora (from Triton Digital data).<sup>2</sup> The estimated share of listening to simulcasts was moved from AM/FM Radio listening to webcasting listening.

Estimated non-music listening is excluded for terrestrial radio, simulcasts, podcasts, and satellite radio. The share of listening to non-music content on terrestrial radio, simulcast services, and podcasts is estimated based on the relative shares of listening to terrestrial radio talk and music formats, as reported by Nielsen.<sup>3</sup> Listening to music is assumed to account for 50% of listening

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<sup>1</sup> Total YouTube and Vevo performances are calculated by an adjustment that accounts for the share of independent labels: Total Performances = Total Majors’ Performances x (1/ Majors’ Share of Total Performances)

<sup>2</sup> Relative shares of listening are from Herring Direct Testimony, Exhibit 10, p. 11, presenting data from Triton Digital (Pandora, “Investor Presentation,” Q2 CY2014). Webcasters with shares below 1 percent are excluded.

<sup>3</sup> Nielsen, “Nielsen State of the Media: Audio Today 2014,” February 2014, p. 12.



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to satellite radio.<sup>4</sup> The share of listening to “Other” audio types reported by Edison Research is excluded, because it is primarily non-music content (e.g., audio books and sermons).

After these adjustments, shares were re-scaled to sum to 100 percent.

### **Figure 3: Time Spent Listening to Music by Audio Type, Access Mode**

See notes for Figure 2. Figure 3 is Figure 2 without owned and pirated music and with shares re-scaled to sum to 100 percent.

### **Figure 4: Share of Performances Streamed, June-December 2013**

#### ***Sources:***

SNDEX0051684\_RESTRICTED.XLSX (Rubinfeld Work Papers), “All Data” tab.

SNDEX0049480.xlsx, “2013” Tab.

Data from Pandora: Track request.xlsx.

iTunes Radio royalty reports produced in discovery.

Webcasting service websites and news articles.

#### ***Time Period:***

June-December 2013, the period for which the data sets for interactive and webcasting services overlap.

#### ***Notes:***

Performances for interactive audio streaming services and for YouTube and Vevo (also interactive services) are from the Rubinfeld workpapers. These data report label performances for each of the major record companies and allow calculation of each label’s share of total performances. Total interactive service performances are calculated by an adjustment that accounts for the share of independent labels:

Total Performances = Total Majors’ Performances x (1/ Majors’ Share of Total Performances).

Information from interactive service websites and from news articles was used to establish whether the performances are through advertising-supported or subscription streaming.

Performances for webcasters other than Pandora are from a report of SoundExchange collections in 2013.<sup>5</sup> These data indicate the webcaster, the rate structure under which the webcaster pays royalties (“License Subtype”), and whether the product is advertising- or subscription-

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<sup>4</sup> In *SDARS II*, evidence was put forward by SoundExchange’s economic expert, Professor Janusz Ordovery, that approximately half of the value of Sirius XM’s content was derived from non-music programming. *SDARS II* at 23063.

<sup>5</sup> We also included performances for additional non-interactive products from the Rubinfeld workpapers.

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supported.<sup>6</sup> Payments reported for each licensee and product are divided by the relevant royalty rate to obtain the number of performances. The table below sets out the rate information used to calculate the number of performances.<sup>7</sup> Performances by webcasters paying a minimum fee are unknown and so excluded.

**2013 Per-Play Royalty Rates for Webcasters**

SoundExchange License Subtype	Description	Ad-Supported Rate	Subscription-Supported Rate (if different)
BRD	Commercial Broadcast Webcaster	0.0022	
CW-CRB	Commercial Webcaster (CRB Rate)	0.0021	
CW-WSA	Commercial Webcaster (WSA Rate)	0.0021	
PPWC	Pureplay Webcaster	0.0012	0.0022
SMPPWC	Small Pureplay Webcaster	0.0012	0.0022
SMW	Small Webcaster	0.0021	

Total performances for non-Pandora webcasters are adjusted to account for performances of sound recordings made before February 15, 1972 (“pre-72 works”) using Pandora’s shares of performances that are pre-72 works on its advertising-supported and subscription services.<sup>8</sup>

Pandora performances, including performances of sound recordings made before February 15, 1972, are from Pandora.

iTunes Radio performances, including performances of sound recordings made before February 15, 1972, are from royalty reports produced in discovery.

### **Table 1: Event Study Evidence on Spotify Response to Price Differences**

#### **Sources:**

SNDEX0051684\_RESTRICTED.XLSX (Rubinfeld Work Papers), “All Data” tab.

#### **Time Period:**

June 2013 through May 2014.

#### **Notes:**

<sup>6</sup> For some statutory webcasting products, the designation as advertising- or subscription-supported is “Undeclared.” Of these, Spotify is re-classified as advertising-supported, and the remaining services, which account for a small proportion of payments to SoundExchange, are excluded.

<sup>7</sup> Small pureplay webcasters do not pay a per-play rate on advertising-supported services. Using the per-play rate paid by pureplay webcasters for advertising-supported services gives a conservatively low number of performances. Similarly, small webcasters do not have a per-play rate; for these services, the CRB rate was used to calculate performances.

<sup>8</sup> Shapiro Direct Testimony, Appendix D, p. D-1 and Table D.1.

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The dataset covers products that account for 90 percent of Spotify royalty payments to the major record companies for products with on-demand functionality. The remaining Spotify products with on-demand functionality have small royalty payments and are described under a wide range of product names.

UMG and EMI performances are summed and reported as UMG's share of total performances.

### **Figure 8: Webcasting Benchmark Rates are Below the Applicable Statutory Rates**

#### ***Sources:***

Fischel and Lichtman Amended Direct Testimony, ¶¶ 43 and 67.

Shapiro Direct Testimony, Appendix D, Table D.3 and p. D-19.

Pandora Exhibit 15 (License Agreement between Pandora and Naxos of America, Inc., effective date January 1, 2015) and Pandora data in Naxos model.xlsx ("Summary" tab).

#### ***Time Period:***

All three rates for Pandora are for 2015.

The statutory rate for iHeart is for 2015.

The iHeart-Warner effective rate was reported by Professors Fischel and Lichtman for three years beginning October 1, 2013.<sup>9</sup>

The iHeart-Indies rate was calculated by Professors Fischel and Lichtman from the effective date of each agreement with an independent label (as early as June 1, 2012), through July 2014.<sup>10</sup>

#### ***Notes:***

All rates are for advertising-supported services.

The rates reported for Merlin and Naxos are calculated on the assumption that Pandora steers toward those labels by ██████████

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<sup>9</sup> Fischel and Lichtman Amended Direct Testimony, ¶¶ 41 and 43, footnote 43, and SX EX. 001-1-DR ("Trial and Experimental Internet Simulcast and Webcasting Agreement," effective date October 1, 2013).

<sup>10</sup> Fischel and Lichtman Amended Direct Testimony, ¶ 63 and Exhibit C.

## Appendix C: Proof of Proposition

*Proposition: If we observe a record company and a statutory webcaster negotiate a direct license at a rate below the statutory rate, that supports the conclusion that the statutory rate has been set above the competitive rate.*

*Proof:* Suppose the statutory rate has been set at  $S$ . Suppose we observe a direct license between the Seller and the Buyer at a rate  $D < S$ . What does this tell us about the unobserved rate  $X$  that the Seller and the Buyer would have negotiated in the absence of the statutory license?

If  $X > S$ , the Seller must prefer the rate of  $X$  to the rate of  $S$ . If the Seller preferred the lower rate of  $S$ , then *both* parties would prefer the rate of  $S$  to the rate of  $X$  rate, since the Buyer always prefers lower rates. If that were the case, the two parties would not negotiate a rate of  $X$  in the absence of the statutory license, since they would both gain by agreeing to the lower rate of  $S$ .

Therefore, under the assumption that  $X > S$ , we have established that Seller must prefer the rate of  $X$  to the rate of  $S$ . Assuming that the Seller's revenues are single-peaked, this tells us that the peak in the Seller's revenues occurs at a rate higher than  $S$ . This implies that the Seller also prefers the statutory rate  $S$  to the lower rate  $D$ . But that is inconsistent with the observation that the Seller agreed to a direct license with the Buyer at a rate of  $D$  rather than just let the Buyer invoke the statutory license at the rate  $S$ . This contradiction proves that  $X \leq S$ , i.e., the statutory rate is set at or above the competitive rate  $X$ . Q.E.D.

Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
THE LIBRARY OF CONGRESS  
Washington, D.C.

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In re	)	
	)	
	)	
<b>DETERMINATION OF ROYALTY</b>	)	<b>Docket No. 14-CRB-0001-WR (2016-2020)</b>
<b>RATES AND TERMS FOR</b>	)	
<b>EPHEMERAL RECORDING AND</b>	)	
<b>DIGITAL PERFORMANCE OF</b>	)	
<b>SOUND RECORDINGS (<i>WEB IV</i>)</b>	)	
	)	

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**WRITTEN REBUTTAL TESTIMONY OF LARRY ROSIN**

(On behalf of Pandora Media, Inc.)

## **I. Introduction**

### **A. Qualifications**

My name is Larry Rosin. I am president and co-founder of Edison Research (“Edison”), a survey research company based in Somerville, New Jersey. I have worked at Edison since its founding in 1994. Prior to founding Edison, I worked for a number of years for Bolton Research, a media research firm. I received my undergraduate degree from Princeton University in 1984. I obtained an MBA from the Wharton School at the University of Pennsylvania in 1986.

At Edison, we perform a variety of survey research, market research, and polling services for clients all over the world. Edison is best known as the company that performs the Exit Polls on Election Day for the members of the National Election Pool (ABC News, CBS News, CNN, Fox News, NBC News and the Associated Press). Since 2003, Edison has performed these surveys to assist these major news organizations in projecting the winners of elections and otherwise analyzing the results.

Edison also has a particular specialization in media research, including research concerning the radio and music industries. We have been retained by a broad array of prominent music, broadcast and Internet industry entities, among others, to perform timely market research and analysis. Clients have included: recording companies Atlantic Records, Columbia House, EMI, Epic Records, Island Records, London Records, Disney/Lyric Street, Maverick Records, Sony Records, Time Life Music and Warner Music; broadcast radio entities spanning the globe, including Global Radio UK, SCA in Australia, and Clear Channel (now iHeartMedia) and ESPN Radio in the United States; and Internet-based music services such as Pandora, Spotify, and TuneIn Radio. We also provide music research and strategic information to the United States

government's international broadcasting services in a number of countries. I have been personally involved in each of these engagements.

In the media research sector, Edison is best known for its annual survey entitled "The Infinite Dial" which, to my knowledge, is the largest and longest running study of consumer behaviors around media and technology in the U.S. The Infinite Dial is prepared by conducting a national telephone survey using best-in-class sampling and data-collection techniques. This survey, which we have been conducting at least annually since 1998, is widely quoted and provides insights into changes in the audio industry over the years. I have co-authored the Infinite Dial surveys.

In 2014, Edison pioneered a new research initiative called "Share of Ear<sup>SM</sup>." This survey, conducted twice in 2014 (and to be conducted four times in 2015), measures listening across the spectrum of audio platforms, allowing subscribers to the survey to understand the relative size of different platforms of audio listening (for example, AM/FM Radio vs. Owned Music vs. Streaming Audio vs. SiriusXM vs. TV Music Channels vs. Podcasts). The Share of Ear<sup>SM</sup> information has been utilized broadly by participants in the audio market, is quoted regularly by a wide variety of publications, and is considered to be the best available measurement of its kind. I am the principal author of Share of Ear<sup>SM</sup>.

I am frequently invited to present at conferences around the world on the topic of Internet Radio. In the last several years, I have been a featured speaker at the primary radio/audio conferences in Australia, South Africa, United Kingdom, Israel, France, and Russia. In addition I have been a primary speaker at a wide variety of domestic conferences, including the NAB/RAB "Radio Show," the Country Radio Seminar, the RAIN conference, Public Radio Program Directors, and others. I have spoken about Internet Radio development at each of the

last several “Radio Days Europe” conferences and have been invited to speak again at this year’s meeting in Milan, Italy in March.

Edison has also performed survey research for entities involved in litigation. In 2000, Edison was hired by the law firm of Paul, Weiss, Rifkind, Wharton & Garrison LLP to perform survey research in connection with its representation of the American Society of Composers, Authors and Publishers (“ASCAP”) in a rate-setting proceeding against the commercial broadcast radio industry. I submitted an expert report and was deposed in that proceeding.

**B. Assignment**

I have been asked by counsel to Pandora to review and, where appropriate, respond to certain assertions made by certain SoundExchange witnesses in testimony provided as part of SoundExchange’s direct case in this proceeding. In particular, I have been asked to respond to assertions made by SoundExchange witnesses concerning a purported “convergence” between on-demand music services, such as Spotify, and non-interactive Internet radio services, such as Pandora.

At my direction and under my supervision, Edison performed a survey in connection with this assignment in January 2015 (the “2015 Music Survey”). The 2015 Music Survey gathered data on usage of various kinds of music services, on whether on-demand services and non-interactive services are substitutes or complementary products, and on consumers’ willingness to pay for access to music from different types of digital music services. The survey methodology we used is described in Section III below.

A list of documents I considered in connection with this assignment is attached as Appendix A. Our firm was paid \$114,000 for the conduct of the 2015 Music Survey and the preparation of this written rebuttal testimony. I will be compensated at the rate of \$750 per hour



for any additional time hereafter spent in connection with this testimony. Neither form of compensation is contingent in any way on the survey results, my interpretations of them, or the outcome of this proceeding.

## **II. Summary of Conclusions**

Based on my analysis to date, I have reached the following conclusions:<sup>1</sup>

- There is only a limited market for paid, on-demand music services.
- Contrary to the assertions of SoundExchange’s principal economist Professor Daniel Rubinfeld (Rubinfeld CWDT ¶¶ 21, 160), non-interactive radio-type services like Pandora and iHeartRadio and on-demand services like Spotify and Rhapsody are not close substitutes for each other.
- The overwhelming majority of consumers (77% of respondents to the 2015 Music Survey who are not already subscribers to an on-demand music service) are “not at all likely” to pay \$9.99 monthly for an on-demand music service. 91% of such respondents to the survey are either “not at all likely” or “not very likely” to do so. Even at substantially reduced prices, the market for such on-demand services remains quite limited.
- Most consumers are also unwilling to pay for subscriptions to non-interactive online music services.
- Almost none of the time that consumers spend listening to non-interactive music services is replacing time those consumers previously were spending listening to an on-demand service. Most of the time consumers spend listening to non-interactive services is either time they would have spent listening to broadcast radio or it is new time that would not have been spent listening to any music at all.
- The majority of subscribers to on-demand services also use non-interactive services.

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<sup>1</sup> I reserve the right to supplement my opinions and conclusions should I receive additional information or testimony.

- I disagree with the assertion of SoundExchange’s expert Dr. David Blackburn that, in the absence of statutory webcasting, users for whom selecting a specific song is not of critical importance would be more likely to sign up for subscription-based interactive services where users can select the song that they will hear next (Blackburn WDT ¶ 96). The 2015 Music Survey demonstrates that if free online music services were no longer available, most consumers would revert to listening to free, over-the-air broadcast radio stations, listen to music for free on YouTube or Vevo, or simply listen to less music. Only 9% of users of free online music services would choose to pay a fee to subscribe to an on-demand online service in those circumstances.

### **III. Survey Methodology**

The study that Edison conducted was a national telephone survey of Americans ages 13 years and older. The survey was designed to represent the national population using a random probability sample in which every member of the population has a known, non-zero chance of being selected to participate in the survey. This survey methodology is widely recognized as the most reliable form of survey research and is used by most major polling organizations for their national surveys.<sup>2</sup> Edison also uses this survey methodology for its national telephone surveys of absentee and early voters provided for the National Election Pool (consisting of ABC News, CBS News, CNN, FOX News, NBC News and the Associated Press), as well as for Edison’s “Infinite Dial” surveys, conducted at least annually since 1998.

A total of 2,006 respondents were interviewed, with 1,002 interviews conducted via a landline telephone and 1,004 interviews conducted via a cell phone. We conduct some of our

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<sup>2</sup> The sampling methodology that Edison used is noted to be the most reliable by the leading association of the survey research community, the American Association for Public Opinion Research (“AAPOR”). See “Best Practices for Research,” *American Association for Public Opinion Research*, <http://www.aapor.org/AAPORKentico/Standards-Ethics/Best-Practices.aspx#best3>. Gallup, among other organizations, uses Random Digit Dialing telephone sampling for its Daily Tracking Poll. See “How Does the Gallup U.S. Daily Work?,” *Gallup*, <http://www.gallup.com/174146/gallup-daily-methodology.aspx>.

interviews via cell phone to ensure that our survey includes the proper proportion of coverage of households in the United States that do not have a landline phone. This sample is twice the size of a typical national telephone survey, including those conducted by The Wall Street Journal/NBC News Poll and the ABC News Poll.<sup>3</sup>

The landline and cell phone sample of phone numbers were provided by Survey Sampling International (SSI), one of the leading providers of telephone samples for market research in the United States. The telephone interviews were conducted by Universal Survey, one of the leading telephone interviewing companies in the United States.

During the telephone interviews, respondents were asked up to 40 questions. The average length of the telephone interviews was ten minutes. The questionnaire was administered in English or in Spanish depending upon the preference of the respondent. The survey questionnaire script with the exact wording of each question in English and in Spanish is attached as Appendix B. The telephone interviews were conducted from January 2nd to 14th, 2015.

Within each household contacted, a single respondent was selected. For the first 600 interviews, we asked to speak with the person whose birthday was the most recent. For the remaining interviews, we alternated between selecting the person with the most recent birthday and the youngest person. Overall, we used the most recent birthday for two-thirds of respondent selections and youngest member of household for one-third of respondent selections. At least four attempts were made to complete an interview for each phone number in the sample. In

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<sup>3</sup> See, e.g., “ABC News’ Polling Methodology and Standards,” *ABC News*, <http://abcnews.go.com/US/PollVault/abc-news-polling-methodology-standards/story?id=145373&singlePage=true>; “Economy Gives Obama Slight Lift Ahead of Sixth State of the Union,” *NBC News*, <http://www.nbcnews.com/storyline/2015-state-of-the-union/economy-gives-obama-slight-lift-ahead-sixth-state-union-n289201>.

cases where the selected respondent was not home or not available to complete the interview, a callback was scheduled to complete the interview.

For the 2015 Music Survey, and for all survey results that Edison publicly distributes, Edison follows the AAPOR's Standards and Code of Ethics. The response rate for this telephone survey was 7%. This is within the range of 5% to 10% which is standard for most random digit dialing (RDD) telephone surveys,<sup>4</sup> and it is comfortably within the range I consider reasonable. The response rate was computed using the AAPOR Response Rate 3 (RR3) method, which can be obtained from the AAPOR web site, and AAPOR's Standard Definitions. The Contact Rate for this survey was 14%, which means that we were able to reach a potential respondent for 14% of the phone numbers in our sample. The Cooperation Rate was 58%, which means that of the potential respondents that we contacted, 58% agreed to complete the interview. These Contact Rates and Cooperation Rates are also in line with standard rates for RDD telephone surveys.

The data were weighted to match the most recent United States population estimates from the U.S. Census Bureau for age, gender, race and region of the country. In addition, the data were weighted to match the most recent U.S. government estimates (2014 National Health Interview Survey estimates January-June 2014) for the proportion of "cell phone only" population by age group.

With a total sample size of 2,006 respondents, the margin of error with a 95% confidence interval for results among the entire sample is +/- 2%. Of course, the margins of error for results among smaller sub-groups are higher.

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<sup>4</sup> See, e.g., "Our Survey Methodology in Detail," *Pew Research Center*, <http://www.people-press.org/methodology/our-survey-methodology-in-detail/>.

#### **IV. Analysis of 2015 Music Survey Results**

##### **A. Less than 20% of consumers spend more than \$5 per month on average to purchase recorded music or consider it very important to keep up-to-date with music**

The market for music acquisition has long experienced the same dynamics as those for most non-staple goods, especially for entertainment options. There is a small core of heavy purchasers, often called “auids,” a much larger group that engages in occasional purchase, and finally a group that that does not purchase at all. This is true, for instance, in the movie market, the book market, and certainly the music market. Often this is referred to in marketing circles as an “80/20” rule – 80% of sales comes from 20% of the customers.<sup>5</sup>

To measure interest in music, we asked our national 2015 Music Survey sample: “How important is it to you to keep up-to-date with music?” The choices were “very important,” “somewhat important” or “not at all important.” As Figure 1 shows,<sup>6</sup> only 17% of the US population ages 13 and older said keeping up-to-date with music is “very important” to them. Even an overwhelming majority of younger respondents answered that keeping up-to-date with music is either “somewhat” or “not at all” important. The reality is that while many presume virtually everyone enjoys listening to music on some level, only a small fraction of people view keeping up-to-date with music as especially important.

To assess music spending as well as interest, we asked respondents how much they spent on “purchasing physical CDs or digital songs and albums” in 2014. As Figure 2 shows, nearly

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<sup>5</sup> This principle is also referred to as the Pareto principle. *See, e.g.,* Dave Lavinsky, “Pareto Principle: How To Use It To Dramatically Grow Your Business,” *Forbes*, <http://www.forbes.com/sites/davelavinsky/2014/01/20/pareto-principle-how-to-use-it-to-dramatically-grow-your-business/>.

<sup>6</sup> The sum of the percentages displayed in the Figures annexed hereto may not always equal 100% because of rounding.

half of respondents said they did not spend anything on music in the previous year. Another 34% of respondents said they spent \$60 or less per year (i.e., \$5 per month or less), and only 18% of our respondents told us they spent more than \$60 on recorded music in 2014.

**B. Most consumers are not willing to pay monthly subscription fees for access to online music services.**

Only a tiny portion of the population is currently subscribing to a service like Spotify Premium, which offers on-demand, commercial free access to music for \$9.99 per month (\$119.88 per year). Only 3.8% of respondents to the 2015 Music Survey reported paying for a subscription to Spotify Premium.

The results of the 2015 Music Survey show that most consumers are not willing to spend more than they are currently spending on purchases of recorded music for a subscription to an on-demand online service. To assess consumer willingness to pay for such a service, we presented respondents with the following description of an on-demand online music service: “There are paid online music services that give you on-demand access to a music library. These services allow you to stream entire albums or individual songs that you choose. You do not own this music but would have access for as long as you are paying for that service.” We then asked respondents how likely they would be to spend \$9.99 for that service.<sup>7</sup> As Figure 3 shows, 77% of respondents were “not at all likely” to subscribe to an on-demand service at a monthly subscription rate of \$9.99. An additional 14% of respondents said that they were “not very likely” to subscribe. Less than 10% of respondents said that they were even “somewhat likely” to subscribe, and only 3% said that they were “very likely” to do so.

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<sup>7</sup> The question was not asked to the 3.8% of our sample who told us they already subscribe to Spotify Premium.

Next, we tested lower price points for an on-demand online music service to assess whether and to what extent the price of a monthly subscription was limiting the interest. We asked all those who did not say “very likely” at the \$9.99 level how interested they would be if the price were \$4.99. Figure 4 shows the results while combining those who already said they were “very likely” at \$9.99 into the “very likely” category at \$4.99. We see that 64% of respondents still were “not at all likely” to subscribe to a subscription music service, even at \$4.99 per month. If we include the number of respondents who said that they were “not very likely” to subscribe at this price point, the percentage expands to 79% of respondents.

We then dropped the proposed price to \$2.99 per month. Figure 5 shows that even at this level a majority of respondents are “not at all likely” to subscribe to a paid on-demand online music service, and more than two-thirds of respondents are not even “somewhat likely” to subscribe at that price point. These findings demonstrate that most consumers are simply not willing to pay for an on-demand subscription service, even at prices substantially reduced from the rate currently charged by Spotify and other on-demand services.

If we isolate active users of Pandora and other non-interactive online radio services – those who told us they had listened to Pandora or another such service in the week prior to being called for our survey – interest in paying for an on-demand online music service remains quite limited. As Figures 6-8 show, consumers who use a non-interactive service are only marginally more likely than consumers generally to express interest in paying for such an on-demand subscription service at the \$9.99, \$4.99, and \$2.99 per month price points. Pandora is not capturing users who otherwise would be paying to subscribe to Spotify or other interactive services.

The 2015 Music Survey also confirms that most consumers are unlikely to pay for a subscription to an online music service of any kind. We asked those respondents in our sample who told us they have listened to Pandora in the last month but who said they do not subscribe to Pandora One about their interest in subscribing to Pandora One. We specifically asked: “Suppose the free version of Pandora no longer existed. How likely would you be to pay \$4.99 every month to subscribe to Pandora One, the paid service from Pandora that does not have any advertisements?” As Figure 9 shows, over three-quarters of Pandora users indicated that they are not likely (54% “not at all likely” and 25% “not very likely”) to pay the current price of \$4.99 per month. Only 22% of respondents indicated that they were even “somewhat likely” to pay for Pandora One.

**C. Non-interactive services are not inhibiting the growth in the number of subscriptions to paid on-demand online music services.**

Contrary to the assertion of Dr. Blackburn (Blackburn WDT ¶ 96), there is little indication that Pandora and other similar “non-interactive” services inhibit the growth in the number of subscriptions to paid, interactive services. To test the proposition that ad-supported audio services are inhibiting the growth in the number of subscribers to paid, on-demand Internet music services, we asked anyone in our sample who has ever listened to Internet audio to suppose that all free Internet radio or music services no longer existed and then tell us which of a series of options they would be most likely to do instead of listening to free online audio. We offered our respondents five possibilities:

- Listen to free FM radio on a traditional radio
- Listen to your CDs and music downloads
- Watch music videos or listen to music on YouTube or Vevo



- Pay a subscription fee every month to use an on-demand Internet music service like Spotify or Rhapsody
- Listen to less music<sup>8</sup>

As is shown in Figure 10, only 9% of Internet audio users said they would pay for a subscription to an on-demand Internet music service if they could not use free Internet audio-only music services. Half of respondents said they would revert to broadcast radio or watch music videos or listen to music on YouTube or Vevo. Less than one-quarter say they would listen more to their owned music.<sup>9</sup> Fifteen percent said they would simply listen to less music if free online music services were to disappear.

The 2015 Music Survey results show that time spent listening to non-interactive services such as Pandora is mostly either new listening time or is replacing listening to traditional AM/FM radio. Only a small percentage of users of non-interactive services reported that the time they spend listening to such services is replacing listening to interactive services. We asked anyone who reported listening to Pandora in the month prior to their interview about what the time they spent listening to Pandora was mostly replacing. As Figure 11 shows, the clear majority of responses are either “new time” (46%)<sup>10</sup> or time taken from “AM/FM radio stations” (23%). Only 1% of Pandora’s monthly users said the time they spend listening to Pandora is replacing time spent listening to an on-demand service like Spotify or Rhapsody. As Figure 12 shows, the results are similar for users of other non-interactive services, with only 1.6% of

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<sup>8</sup> The order of the presentation of the first four options was randomized. “Listen to less music” was presented as the last option.

<sup>9</sup> The 2015 Music Survey did not assess whether these respondents acquire personal copies of such music via lawful means.

<sup>10</sup> This result is consistent with my expectation: increasing use of smartphones is providing for new listening opportunities.

respondents indicating that time spent listening to the non-interactive service is replacing time spent listening to on-demand services. Additionally, the results of the 2015 Music Survey indicate that many users of on-demand services are also users of non-interactive services. Fifty-nine percent of the Spotify users in our sample (both users of the ad-supported service and Spotify Premium) also used a non-interactive service like Pandora (either free or paid). These results undermine Professor Rubinfeld's assertion that consumers likely view non-interactive and interactive services as relatively close substitutes for each other (Rubinfeld CWDT ¶¶ 21, 160). If changes in functionality were leading consumers to view on-demand services and non-interactive services as substitutes for one another, one would expect to see use of non-interactive services replacing use of interactive services at substantially higher rates, nor would expect to see users of interactive services also using non-interactive services at the levels they do. Use of both types of services demonstrates that such services are not substitutes, but serve different roles for consumers.

## **V. Conclusion**

The overwhelming majority of the public continues to prefer free lean-back services, and only a small group of avid music fans rely primarily on on-demand options. Our research contradicts the suggestion from SoundExchange and its witnesses that Pandora and other non-interactive services are significantly inhibiting uptake of on-demand services.

Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
THE LIBRARY OF CONGRESS  
Washington, D.C.

In re	)	
	)	
DETERMINATION OF ROYALTY	)	Docket No. 14-CRB-0001-WR (2016-2020)
RATES AND TERMS FOR	)	
EPHEMERAL RECORDING AND	)	
DIGITAL PERFORMANCE OF	)	
SOUND RECORDINGS ( <i>WEB IV</i> )	)	
	)	

**DECLARATION OF LARRY ROSIN**

I, Larry Rosin, declare under penalty of perjury that the statements contained in my Written Rebuttal Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information, and belief. Executed this 23 day of February, 2015 in Somerville, New Jersey.



\_\_\_\_\_  
Larry Rosin

# Figure 1: “How important is it to you to keep up-to-date with music?”

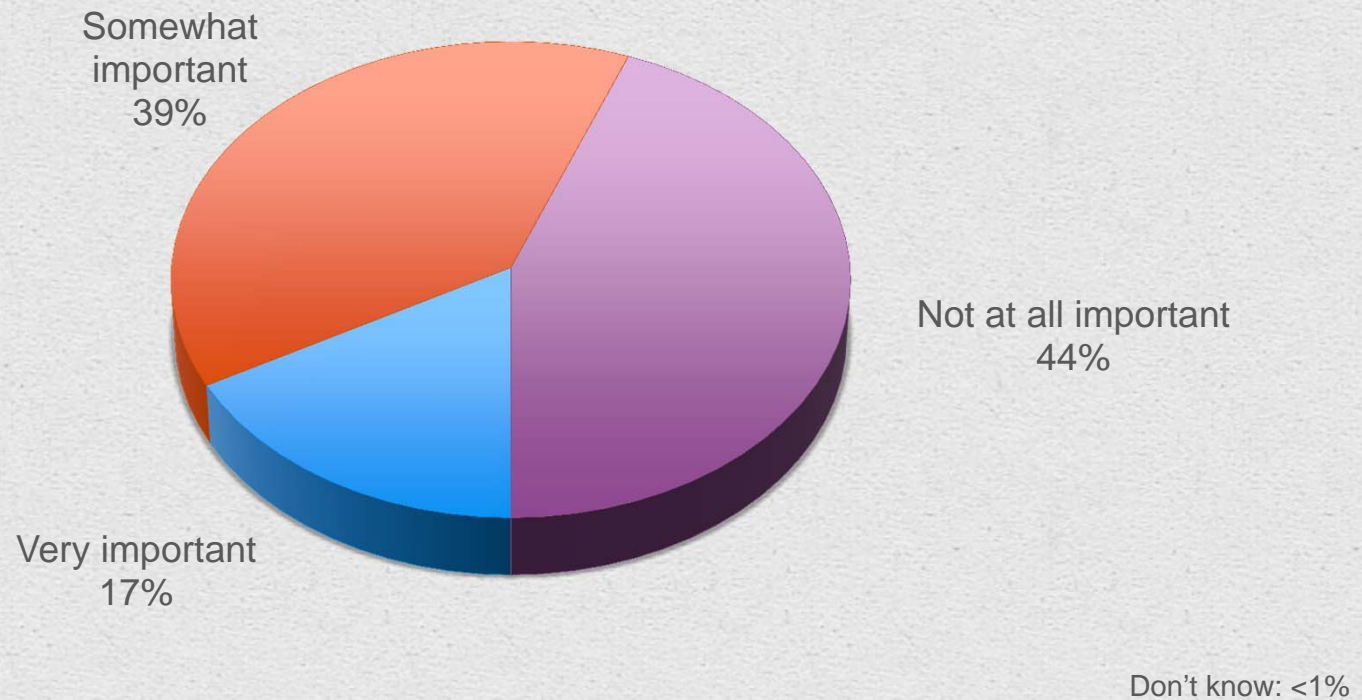


Figure 2: “In the past year, approximately how much money have you spent purchasing physical CDs or digital songs and albums?”

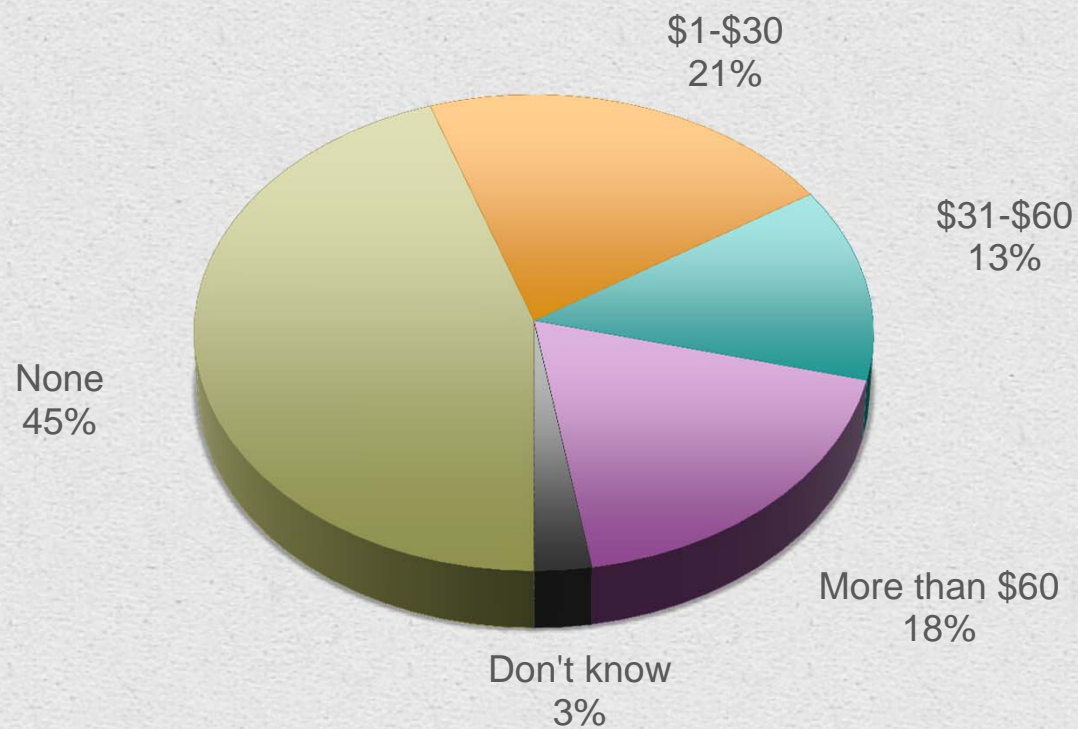
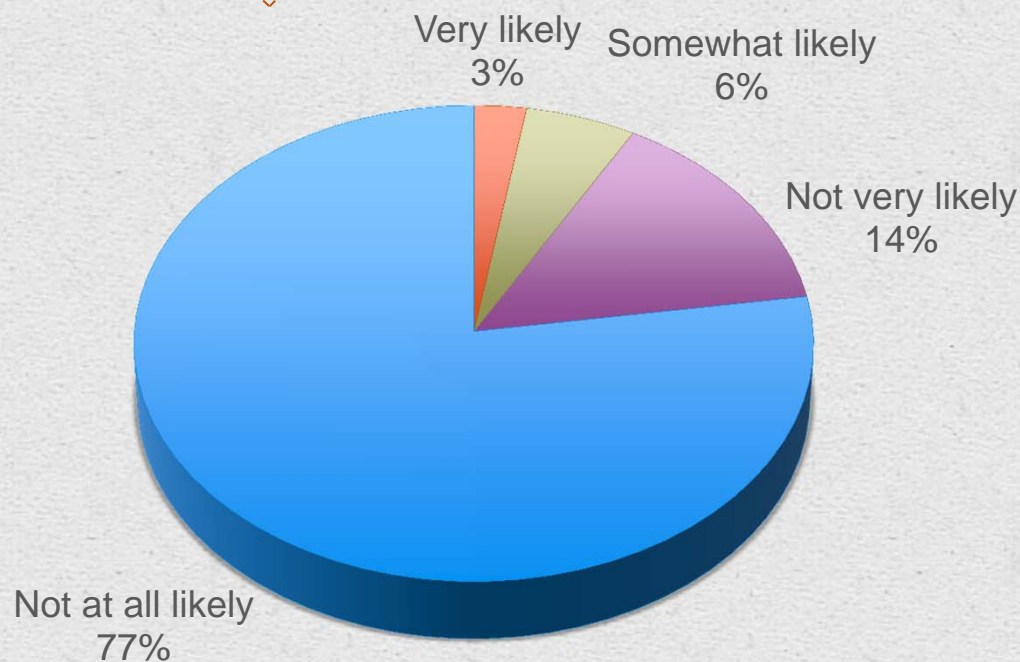


Figure 3: “There are paid online music services that give you on-demand access to a music library. These services allow you to stream entire albums or individual songs that you choose. You do not own this music but would have access for as long as you are paying for that service.”

*“How likely would you be to pay **\$9.99** every month for such an Internet audio service?”*

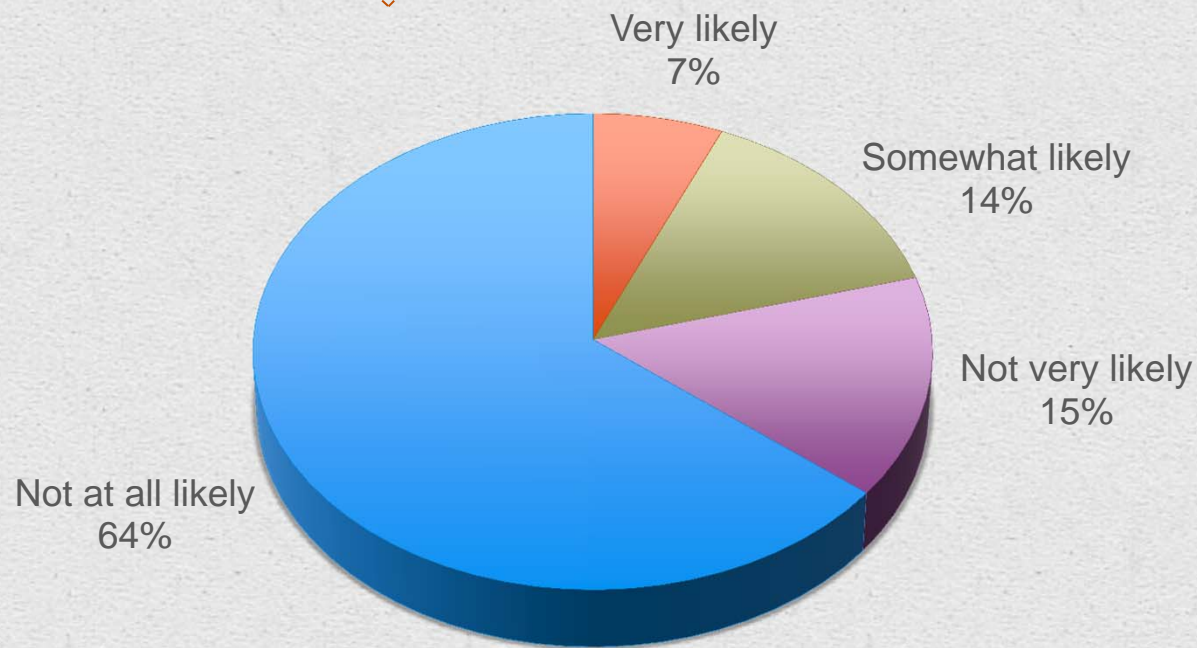


Base: Do not subscribe to Spotify Premium

Don't know: <1%

Figure 4: “Suppose the paid online music service I just described that gives you on-demand access to a music library cost \$4.99 every month.”

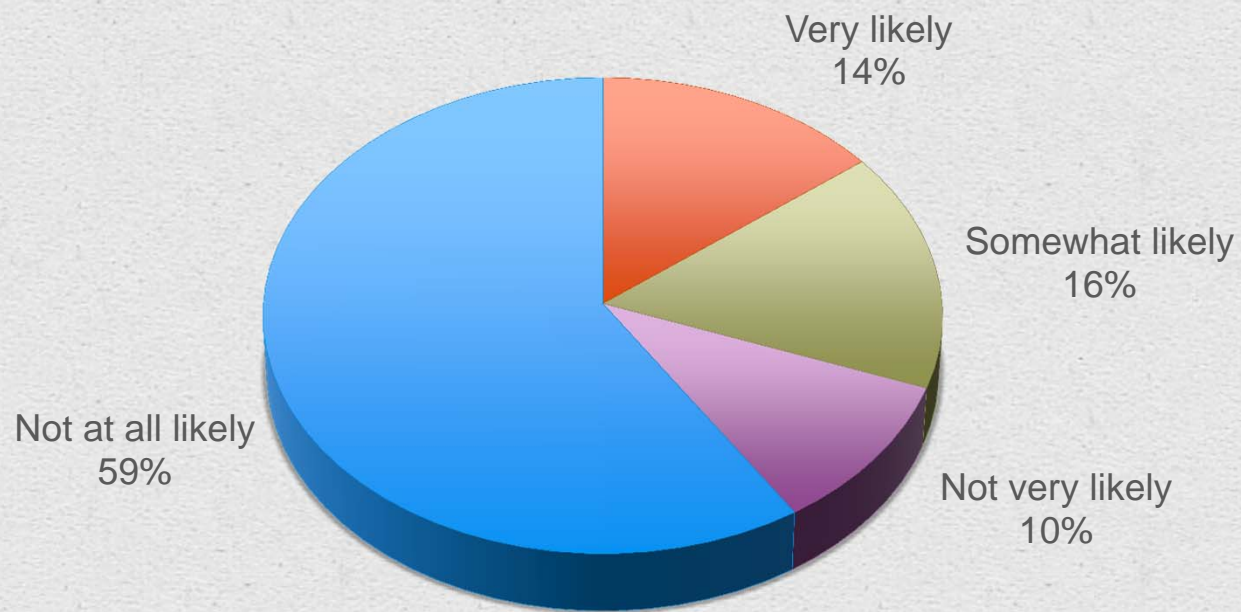
*“How likely would you be to pay **\$4.99** every month for such an Internet audio service?”*



Base: Do not subscribe to Spotify Premium

Don't know: <1%

Figure 5: “How likely would you be to pay **\$2.99** every month for such an Internet audio service?”



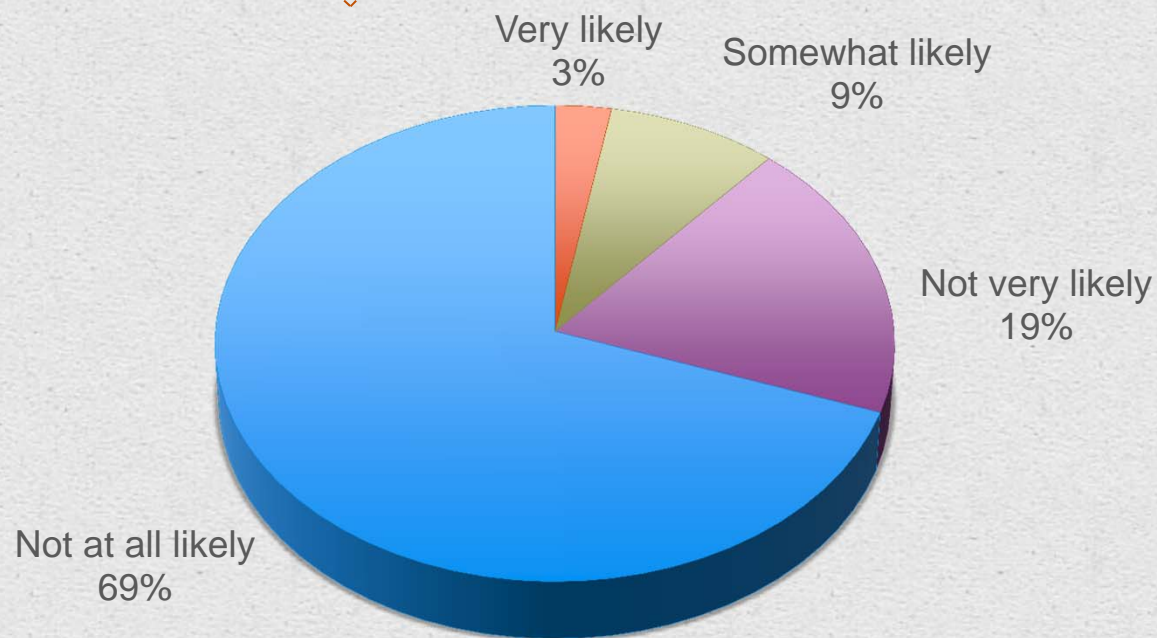
Base: Do not subscribe to Spotify Premium

Don't know: <1%



Figure 6: “There are paid online music services that give you on-demand access to a music library. These services allow you to stream entire albums or individual songs that you choose. You do not own this music but would have access for as long as you are paying for that service.”

*“How likely would you be to pay **\$9.99** every month for such an Internet audio service?”*

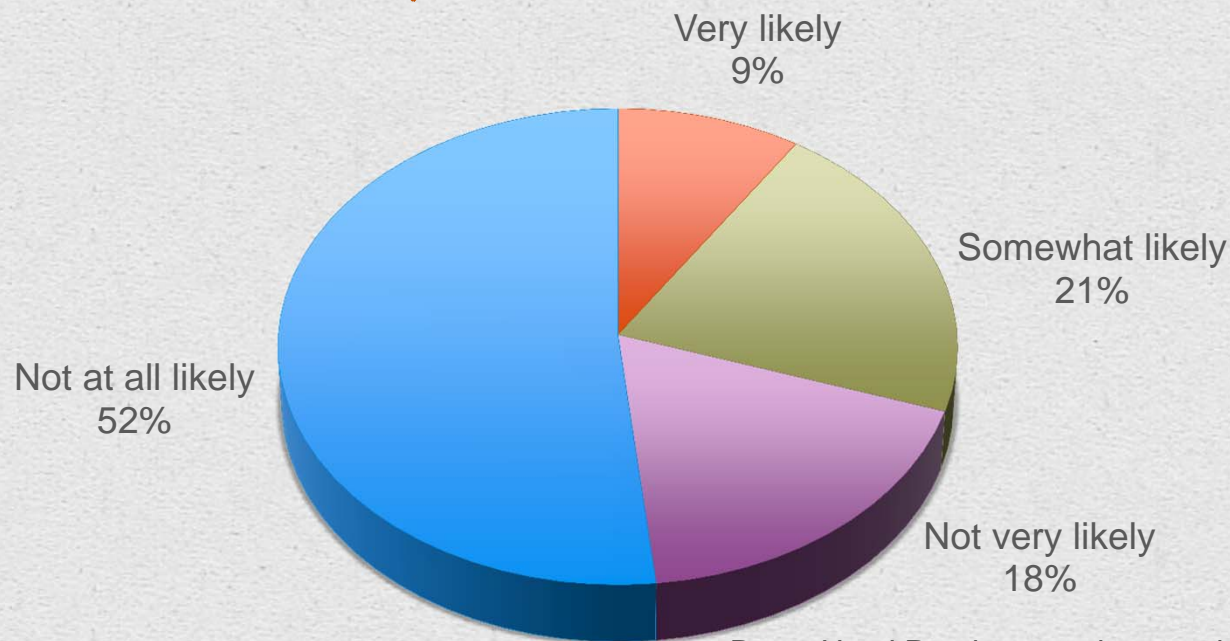


Base: Used Pandora or other non-interactive online service in the past week and do not subscribe to Spotify Premium

Don't know: <1%

Figure 7: “Suppose the paid online music service I just described that gives you on-demand access to a music library cost \$4.99 every month.”

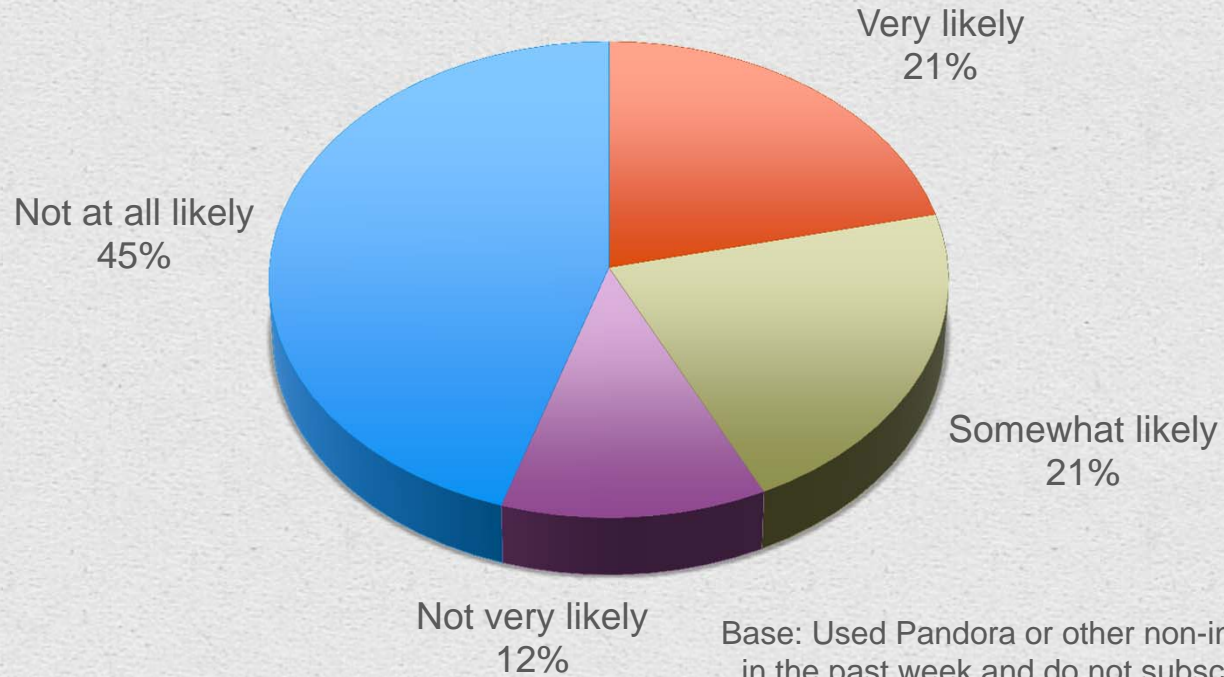
*“How likely would you be to pay **\$4.99** every month for such an Internet audio service?”*



Base: Used Pandora or other non-interactive online service in the past week and do not subscribe to Spotify Premium

Don't know: <1%

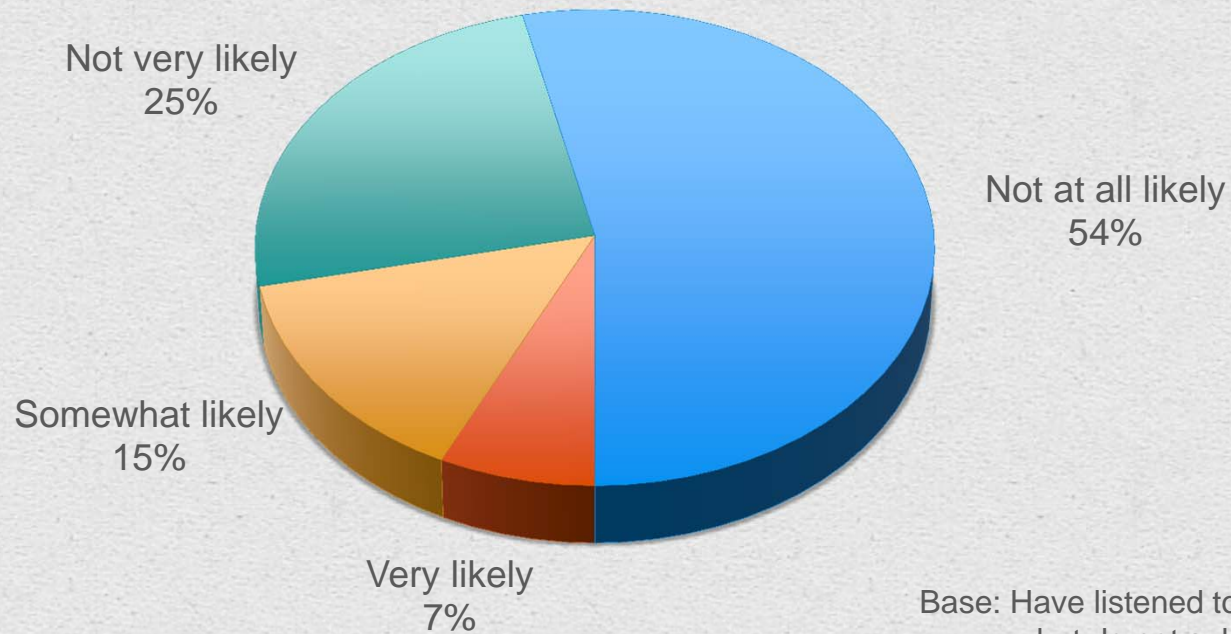
Figure 8: “How likely would you be to pay **\$2.99** every month for such an Internet audio service?”



Base: Used Pandora or other non-interactive online service in the past week and do not subscribe to Spotify Premium

Don't know: <1%

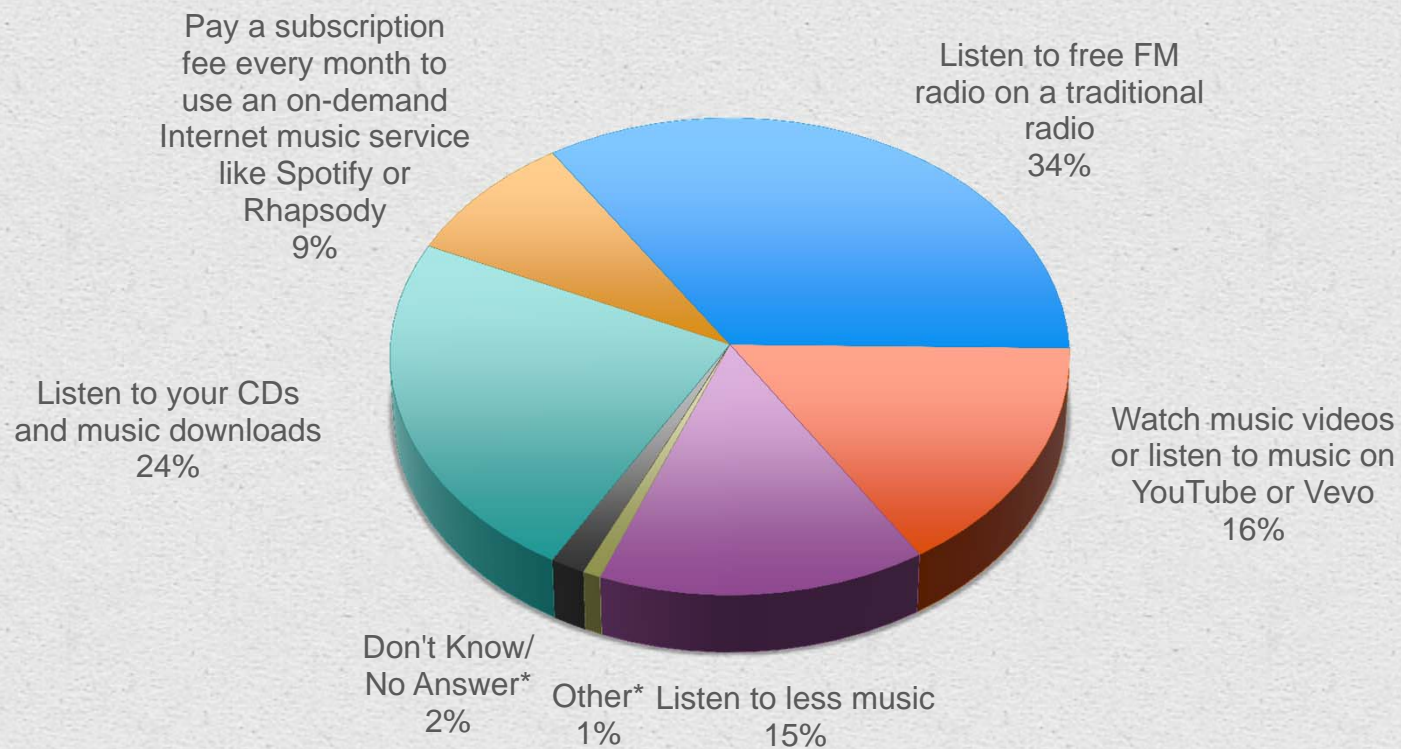
Figure 9: “Suppose the free version of Pandora no longer existed. How likely would you be to pay \$4.99 every month to subscribe to Pandora One, the paid service from Pandora that does not have any advertisements?”



Base: Have listened to Pandora in last month but do not subscribe to Pandora One

Don't know: <1%

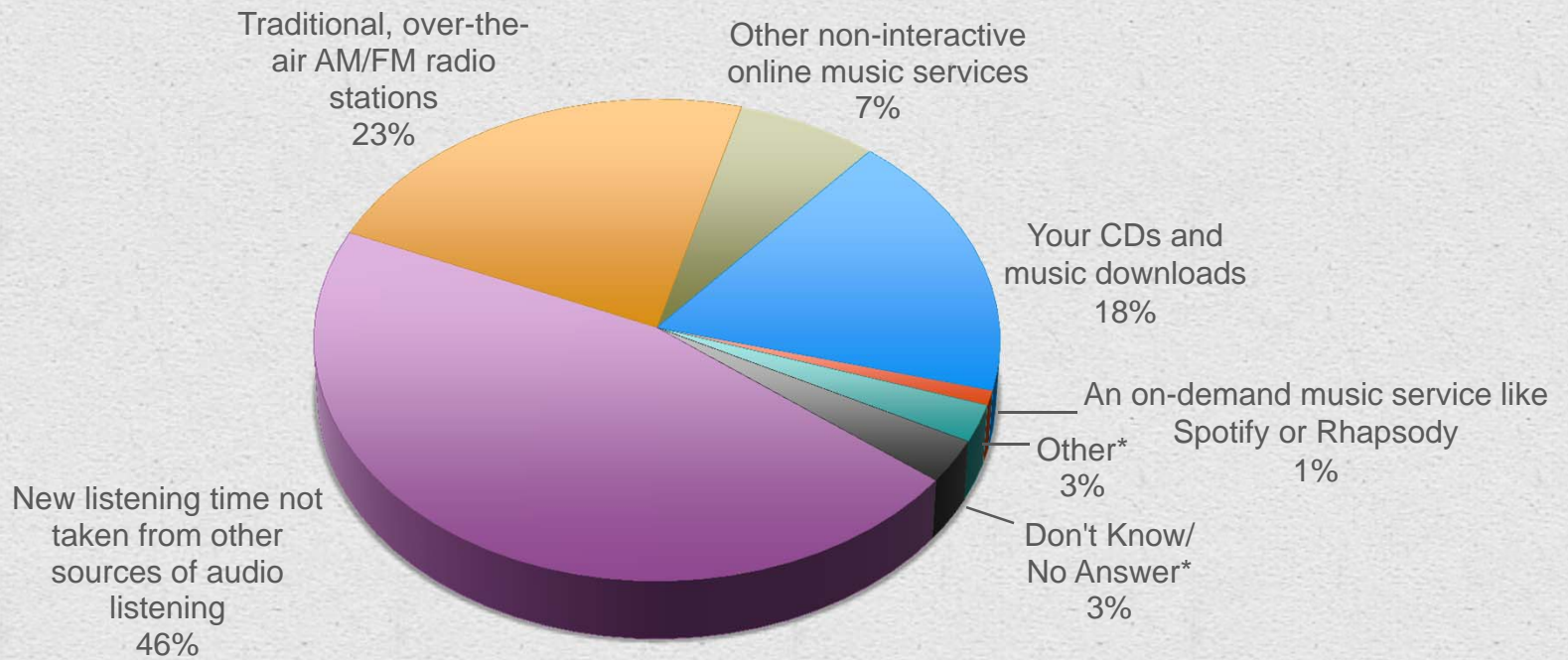
Figure 10: “Suppose all free Internet radio or music services no longer existed...Which of the following would you be most likely to do instead?”



\*Volunteered response

Base: Ever listened to Internet audio

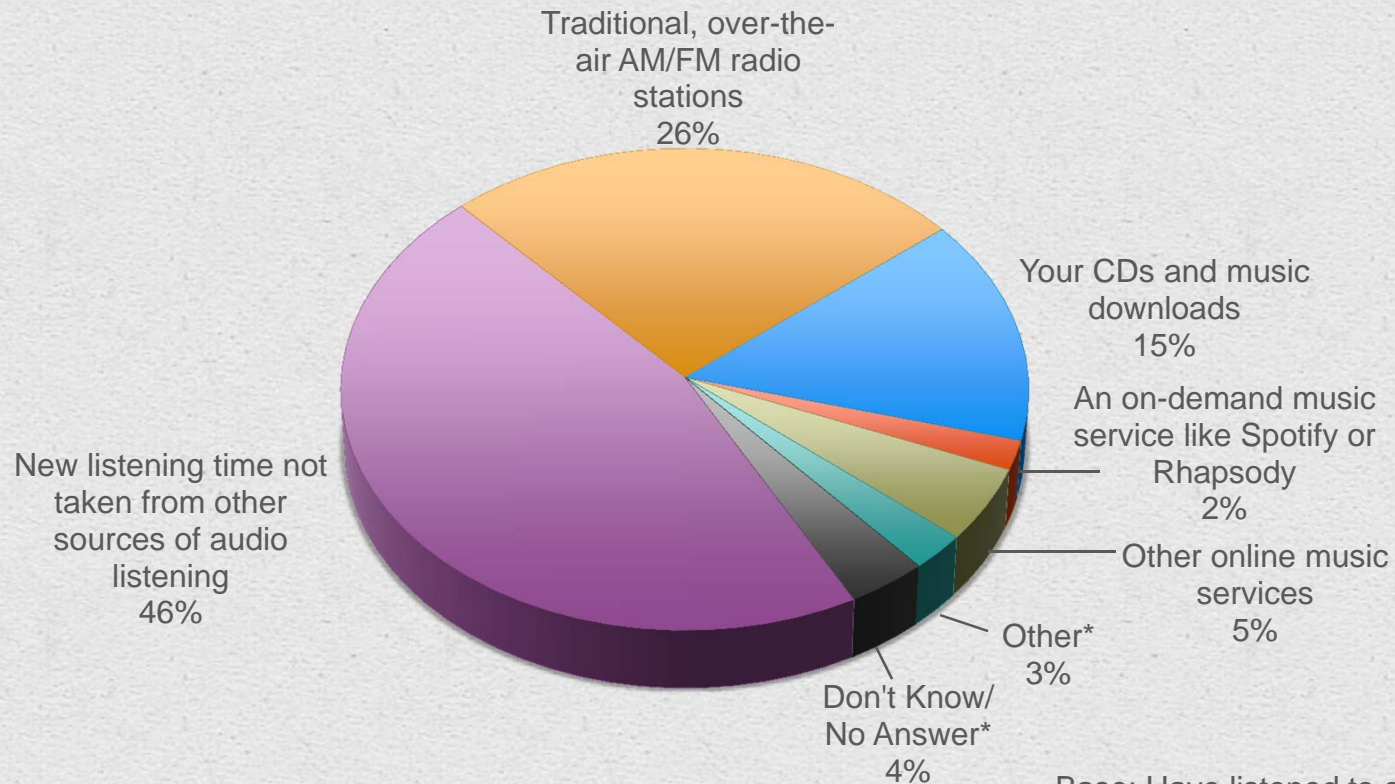
Figure 11: “Is the time you spend listening to Pandora mostly replacing the time you used to spend listening to...?”



\*Volunteered response

Base: Have listened to Pandora in last month

Figure 12: “Is the time you spend listening to [other non-interactive services] mostly replacing the time you used to spend listening to...?”



\*Volunteered response

Base: Have listened to other online music services in last week

## Appendix A: Documents Considered

### CRB Hearing Documents

Web IV, Written Direct Testimony of David Blackburn, Ph.D.

Web IV, Written Direct Testimony of Aaron Harrison

Web IV, Written Direct Testimony of Dennis Kooker

Web IV, Corrected Written Direct Testimony of Daniel L. Rubinfeld

Web IV, Written Direct Testimony of Ron Wilcox

### Other Documents

“ABC News’ Polling Methodology and Standards,” *ABC News*, <http://abcnews.go.com/US/PollVault/abc-news-polling-methodology-standards/story?id=145373&singlePage=true>.

“Best Practices for Research,” *American Association for Public Opinion Research*, <http://www.aapor.org/AAPORKentico/Standards-Ethics/Best-Practices.aspx#best3>.

Dave Lavinsky, “Pareto Principle: How To Use It To Dramatically Grow Your Business,” *Forbes*, <http://www.forbes.com/sites/davelavinsky/2014/01/20/pareto-principle-how-to-use-it-to-dramatically-grow-your-business/>.

“Economy Gives Obama Slight Lift Ahead of Sixth State of the Union,” *NBC News*, <http://www.nbcnews.com/storyline/2015-state-of-the-union/economy-gives-obama-slight-lift-ahead-sixth-state-union-n289201>.

“How Does the Gallup U.S. Daily Work?,” *Gallup*, <http://www.gallup.com/174146/gallup-daily-methodology.aspx>.

“Our Survey Methodology in Detail,” *Pew Research Center*, <http://www.people-press.org/methodology/our-survey-methodology-in-detail/>.

“Pareto principle,” *Wikipedia*, [http://en.wikipedia.org/wiki/Pareto\\_principle](http://en.wikipedia.org/wiki/Pareto_principle).



**Appendix B: English and Spanish Versions of 2015 Music Survey**

**EMR 21058**

**FINAL DRAFT – CONFIDENTIAL**

**Edison Research**

**2015 Music Survey**

**January 2015**

“Hello, my name is \_\_\_\_\_ and I’m calling from Edison Research. Today we are conducting a brief national opinion survey. This is NOT a contest, sales pitch or promotion. We are only asking your opinions, and your answers will be held strictly confidential. Can I please speak to the person at this phone number, who is 13 years of age or older, and had the most recent birthday? Is that you?”

Yes 1 **(CONTINUE)**

No 2 **(ASK IF THAT PERSON IS AVAILABLE OR SET UP CALL BACK TIME)**

**If cell phone sample, read: “If you are driving or involved in an activity that requires your full attention, I’ll need to call you back.” SCHEDULE CALLBACK IF NECESSARY**

A1. First, it is important for this survey to represent people of all age groups. For that reason, may I please have your age? **(RECORD EXACT AGE)**

\_\_\_\_\_

Refused 99

A2. **(IF EXACT AGE REFUSED, ASK)** I just need an age range. Are you...? **(READ LIST)**

Under 13 1 **THANK AND TERMINATE**

13-17 2

18-20 3

21-24 4

25-34 5

35-44 6

45-54 7

55-64 8

65-74 9

75+ 10

Refused 99 **(DO NOT READ) (If person still refuses, thank the person for their time and end interview)**

B. **(DO NOT ASK RESPONDENT THIS QUESTION. DETERMINE BY VOICE)**

Male 1

Female 2

1. Do you currently have access to the Internet, either through a broadband or dial-up connection or by accessing the Internet using a cell phone or other mobile device?

- YES 1
- NO 2
- DK/NA 9

2A. How much time in hours or minutes do you spend listening to music in a typical day? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ hours \_\_\_\_\_ minutes **(MAXIMUM HOURS=24)**

DK/NA X

2B. And how important is it to you to keep up-to-date with music? Is it... **(READ LIST)**

- Very important 1
- Somewhat important 2
- OR Not at all important 3
- DK/NA 9

3A. Think about the amount of money you spent purchasing physical CDs and purchasing digital songs and albums in the past year – that is in 2014. In the past year, approximately how much money have you spent purchasing physical CDs or digital songs and albums? **(RECORD EXACT NUMBER. DO NOT ACCEPT A RANGE, IF RESPONDENT CANNOT GIVE EXACT AMOUNT, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ **(RECORD #)**

DK/NA X

3B. Now think about how much money you expect to spend purchasing physical CDs or digital songs and albums in this coming year. In 2015, do you expect to spend more on music, less on music, or about the same amount as you did in 2014?

- More 1
- Less 2
- About the same 3
- DK/NA 9

4A. Some FM radio music stations are also available to listen to online on a computer, cell phone or other mobile device. Have you ever listened to the online stream of an FM radio station over the Internet on any of these devices?

YES	1	<b>CONTINUE</b>
NO	2	<b>SKIP TO Q.5A</b>
DK/NA	9	<b>SKIP TO Q.5A</b>

4B. And have you listened to the online stream of an FM radio music station over the Internet in the last month?

YES	1
NO	2
DK/NA	9

5A. Now think about music services you can listen to over the Internet that are NOT the stream of an AM or FM radio station. Have you ever listened to an online radio or digital music service such as Pandora, Spotify, or another similar service?

YES	1	<b>CONTINUE</b>
NO	2	<b>SKIP TO NOTE ABOVE Q.6A</b>
DK/NA	9	<b>SKIP TO NOTE ABOVE Q.6A</b>

5B. And have you listened to an online radio or digital music service such as Pandora, Spotify or other similar services in the last month?

YES	1
NO	2
DK/NA	9

**ROTATE Q.6A-I AND Q.7A-I SERIES**

6A. Now think specifically about the Internet Radio service called Pandora. Have you listened to Pandora in the last month?

- |       |   |                     |
|-------|---|---------------------|
| YES   | 1 | <b>CONTINUE</b>     |
| NO    | 2 | <b>SKIP TO Q.6G</b> |
| DK/NA | 9 | <b>SKIP TO Q.6G</b> |

6B. And have you listened to Pandora in the last WEEK?

- |       |   |                     |
|-------|---|---------------------|
| YES   | 1 | <b>CONTINUE</b>     |
| NO    | 2 | <b>SKIP TO Q.6D</b> |
| DK/NA | 9 | <b>SKIP TO Q.6D</b> |

6C. How much total time, in hours or minutes, would you say you have spent listening to Pandora in the last WEEK? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ hours                      \_\_\_\_\_ minutes **(MAXIMUM HOURS=168)**

DK/NA                      X

6D. Think specifically about the time you spend listening to Pandora. Is the time that you spend listening to Pandora mostly replacing time you used to spend listening to...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; SHUFFLE CODES 1, 2 AND 3)**

- |   |   |
|---|---|
| Traditional, over-the-air AM/FM radio stations  | 1 |
| Your CDs and music downloads  | 2 |
| Other Online Music Services   | 3 |
| OR is it new listening time that is not time taken from other sources of audio listening? | 4 |
| Other <b>(volunteered)</b> _____(specify)   | 8 |
| DK/NA <b>(volunteered)</b>  | 9 |

**IF 6D CODED "3" (OTHER ONLINE MUSIC SERVICES) CONTINUE; OTHERWISE SKIP TO Q.6E**

6D1. And what kind of online music service is Pandora mostly replacing? Is it... **(READ LIST; SHUFFLE ORDER)**

- |   |   |
|---|---|
| The online stream of an FM radio station            | 1 |
| Another Internet Radio Service                      | 2 |
| An on-demand music service like Spotify or Rhapsody | 3 |
| OR YouTube or Vevo                                  | 4 |
| Other <b>(volunteered)</b> _____(specify)           | 8 |
| DK/NA <b>(volunteered)</b>                          | 9 |

6E. In addition to the free Pandora service, Pandora also offers a paid subscriber service called Pandora One that does not include any advertisements. Again, this is a paid service that has a subscription fee that is charged to you each month. Do you currently pay this monthly fee to subscribe to Pandora One?

- |                            |   |
|----------------------------|---|
| Yes                        | 1 |
| No                         | 2 |
| DK/NA <b>(volunteered)</b> | 9 |

6F. Now I want to propose a hypothetical situation. Suppose the free version of Pandora no longer existed. How likely would you be to pay four dollars and ninety-nine cents every month to subscribe to Pandora One, the paid service from Pandora that does not include any advertisements? **(READ LIST)**

- Very Likely 1
- Somewhat Likely 2
- Not Very Likely 3
- OR Not At All Likely 4
- DK/NA 9

6G. I'm going to list some other music radio services. For each, please tell me if you've listened to this service in the last week. **(SHUFFLE ORDER OF BRANDS)**

"In the last week have you listened to..."

		<u>Yes</u>	<u>No</u>	<u>DK/NA</u>
6G.1	I Heart Radio	1	2	9
6G.2	iTunes Radio -- the personalized online radio service from Apple	1	2	9
6G.3	LastFM	1	2	9
6G.4	Slacker	1	2	9
6G.5	Songza	1	2	9
6G.6	8 Tracks	1	2	9

**IF ONE ITEM IN Q.6G CODED "1" (LISTENED TO SERVICE IN LAST WEEK) ASK Q.6H.1, IF MORE THAN ONE ITEM IN Q.6G CODED "1" (LISTENED TO SERVICES IN LAST WEEK ASK Q.6H.2; OTHERWISE SKIP TO Q.7A**

6H.1 How much total time, in hours or minutes, would you say you have spent listening to **(INSERT ITEM FROM Q.6G)** in the last WEEK? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ hours \_\_\_\_\_ minutes **(MAXIMUM HOURS=168)**

**SKIP TO Q.6I**

6H.2 How much total time, in hours or minutes, would you say you have spent listening to **(INSERT ITEMS FROM Q.6G)** in total in the last WEEK? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ hours \_\_\_\_\_ minutes **(MAXIMUM HOURS=168)**

6I. Think specifically about the time you spend listening to **(INSERT ITEMS FROM Q.6G)**. Is the time that you spend listening to **(INSERT ITEMS FROM Q.6G)** mostly replacing time you used to spend listening to...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; SHUFFLE CODES 1, 2 and 3)**

- Traditional, over-the-air AM/FM radio stations 1
- Your CDs and music downloads 2
- Other Online Music Services 3
- OR is it new listening time that is not time taken from other sources of audio listening? 4
- Other **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

**IF 6I CODED “3” (OTHER ONLINE MUSIC SERVICES) CONTINUE; OTHERWISE SKIP TO Q.7A**

6I1. And what kind of online music service is that time mostly replacing? Is it... **(READ LIST; SHUFFLE ORDER)**

- The online stream of an FM radio station 1
- Another Internet Radio Service 2
- An on-demand music service like Spotify or Rhapsody 3
- OR YouTube or Vevo 4
- Other **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

7A. Now think specifically about Spotify. Have you listened to the Internet music service called Spotify in the last month?

- YES 1 **CONTINUE**
- NO 2 **SKIP TO Q.7F**
- DK/NA 9 **SKIP TO Q.7F**

7B. And have you listened to Spotify in the last WEEK?

- YES 1 **CONTINUE**
- NO 2 **SKIP TO Q.7D**
- DK/NA 9 **SKIP TO Q.7D**

7C. How much total time, in hours or minutes, would you say you have spent listening to Spotify in the last WEEK? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ hours \_\_\_\_\_ minutes **(MAXIMUM HOURS=168)**

DK/NA X

7D. Think specifically about the time you spend listening to Spotify. Is the time that you spend listening to Spotify mostly replacing time you used to spend listening to...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; SHUFFLE CODES 1, 2 AND 3)**

- Traditional, over-the-air AM/FM radio stations 1
- Your CDs and music downloads 2
- Other Online Music Services 3
- OR is it new listening time that is not time taken from other sources of audio listening? 4
- Other **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

**IF 7D CODED “3” (OTHER ONLINE MUSIC SERVICES), CONTINUE; OTHERWISE SKIP TO Q.7E**

7D1. And what kind of online music service is Spotify mostly replacing? Is it... **(READ LIST; SHUFFLE ORDER)**

- The online stream of an FM radio station 1
- An Internet radio service like Pandora 2
- Another on-demand music service like Rhapsody or Rdio (**pronounced “R-dee-oh”**) 3
- OR YouTube or Vevo 4
- Other (**volunteered**) \_\_\_\_\_(specify) 8
- DK/NA (**volunteered**) 9

7E. In addition to the free Spotify service, Spotify also offers a paid subscriber service called Spotify Premium that allows you to use Spotify on any device and does not include any advertisements. Again, this is a paid service that has a subscription fee that is charged to you each month. Do you currently pay this monthly fee to subscribe to Spotify Premium?

- Yes 1
- No 2
- DK/NA (**volunteered**) 9

7F. Now I’d like you to think about other online music services. I’m going to list some other online music services. For each, please tell me if you’ve listened to this service in the last week. **(SHUFFLE ORDER OF BRANDS)**

“In the last week have you listened to...”

		<u>Yes</u>	<u>No</u>	<u>DK/NA</u>
7F.1	Rhapsody	1	2	9
7F.2	Beats Music	1	2	9
7F.3	Rdio ( <b>pronounced “R-dee-oh”</b> )	1	2	9

**IF ONE ITEM IN Q.7F CODED “1” (LISTENED TO SERVICE IN LAST WEEK) ASK Q.7G.1, IF MORE THAN ONE ITEM IN Q.7F CODED “1” (LISTENED TO SERVICES IN LAST WEEK ASK Q.7G.2; OTHERWISE SKIP TO Q.8A**

7G.1 How much total time, in hours or minutes, would you say you have spent listening to **(INSERT ITEM FROM Q.7F)** in the last WEEK? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ hours \_\_\_\_\_ minutes **(MAXIMUM HOURS=168)**

**SKIP TO Q.7H**

7G.2 How much total time, in hours or minutes, would you say you have spent listening to **(INSERT ITEMS FROM Q.7F)** in total in the last WEEK? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ hours \_\_\_\_\_ minutes **(MAXIMUM HOURS=168)**

7H. Think specifically about the time you spend listening to **(INSERT ITEMS FROM Q.7F)**. Is the time that you spend listening to **(INSERT ITEMS FROM Q.7F)** mostly replacing time you used to spend listening to...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; ROTATE CODES 1, 2 AND 3)**

- Traditional, over-the-air AM/FM radio stations 1
- Your CDs and digital music files 2
- Other Online Music Services 3
- Or is it new listening time that is not time taken from other sources of audio listening? 4
- Other **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

**IF 7H CODED “3” (OTHER ONLINE MUSIC SERVICES) CONTINUE; OTHERWISE SKIP TO Q.8A**

7H1. And what kind of online music service is that time mostly replacing? Is it... **(READ LIST; SHUFFLE ORDER)**

- The online stream of an FM radio station 1
- An Internet radio service like Pandora 2
- Another on-demand music service 3
- OR YouTube or Vevo 4
- Other **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

8A. Now think specifically about YouTube and Vevo. In the last WEEK, have you used YouTube or Vevo specifically to watch music videos or to listen to music?

- YES 1 **CONTINUE**
- NO 2 **SKIP TO NOTE ABOVE Q.9A**
- DK/NA 9 **SKIP TO NOTE ABOVE Q.9A**

8B. How much total time, in hours or minutes, would you say you have used YouTube or Vevo to watch music videos or listen to music in the last WEEK? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ hours \_\_\_\_\_ minutes **(MAXIMUM HOURS=168)**

DK/NA X

8C. Is the time that you spend using YouTube or Vevo to watch music videos or listen to music mostly replacing time that you used to spend listening to...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; SHUFFLE CODES 1, 2 AND 3)**

- Traditional, over-the-air AM/FM radio stations 1
- Your CDs and music downloads 2
- Internet radio 3
- OR is it new listening time that is not time taken from other sources of audio listening? 4
- Other **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)**



**IF Q.7E IS “1” (SUBSCRIBE TO SPOTIFY PREMIUM) SKIP TO NOTE ABOVE Q.10; OTHERWISE CONTINUE**

9A. There are paid online music services that give you on-demand access to a music library. These services allow you to stream entire albums or individual songs that you choose. You do not own this music but would have access for as long as you are paying for that service. Some examples of these services are Spotify, Rhapsody, and Rdio (**pronounced “R-dee-oh”**). How likely would you be to pay nine dollars and 99 cents every month for such an Internet audio service? (**READ LIST**)

- |    |                   |   |                                |
|----|-------------------|---|--------------------------------|
|    | Very Likely       | 1 | <b>SKIP TO NOTE ABOVE Q.10</b> |
|    | Somewhat Likely   | 2 | <b>CONTINUE</b>                |
|    | Not Very Likely   | 3 | <b>CONTINUE</b>                |
| OR | Not At All Likely | 4 | <b>CONTINUE</b>                |
|    | DK/NA             | 9 | <b>CONTINUE</b>                |

9B. Suppose the paid online music service I just described that gives you on-demand access to a music library cost four dollars and 99 cents every month. How likely would you be to pay four dollars and 99 cents every month for such an Internet audio service? (**READ LIST**)

- |    |                   |   |                                |
|----|-------------------|---|--------------------------------|
|    | Very Likely       | 1 | <b>SKIP TO NOTE ABOVE Q.10</b> |
|    | Somewhat Likely   | 2 | <b>CONTINUE</b>                |
|    | Not Very Likely   | 3 | <b>CONTINUE</b>                |
| OR | Not At All Likely | 4 | <b>CONTINUE</b>                |
|    | DK/NA             | 9 | <b>CONTINUE</b>                |

9C. How likely would you be to pay two dollars and 99 cents every month for such an Internet audio service? (**READ LIST**)

- |    |                   |   |  |
|----|-------------------|---|--|
|    | Very Likely       | 1 |  |
|    | Somewhat Likely   | 2 |  |
|    | Not Very Likely   | 3 |  |
| OR | Not At All Likely | 4 |  |
|    | DK/NA             | 9 |  |

**IF EITHER Q.4A OR Q.5A IS “1” (YES TO LISTENING TO MUSIC ON THE INTERNET) CONTINUE, OTHERWISE SKIP TO Q.11A**

10. Now I want to propose a hypothetical situation. Suppose ALL FREE Internet radio or music services no longer existed. This means there would not be a free version of Pandora or Spotify or any other similar free services, and there would not be FM radio stations available via streaming. I’m going to read four possible ways you might replace your listening to free Internet radio and music services. Which of the following would you be most likely to do instead? **(READ LIST; SHUFFLE CODES 1, 2, 3, and 4; REPEAT ANSWER CODES IF NEEDED. ACCEPT ONLY ONE RESPONSE)**

- Pay a subscription fee every month to use an on-demand Internet music service like Spotify or Rhapsody 1
- Listen to free FM radio on a traditional radio 2
- Listen to your CDs and music downloads 3
- Watching music videos or listening to music on YouTube or Vevo 4
- (ALWAYS READ LAST)** Or would you just listen to less music 5
  
- Other **(volunteered)** \_\_\_\_\_ 8
- DK/NA **(volunteered)** 9

11A. Do you currently pay a monthly fee to subscribe to SiriusXM Radio?

- Yes 1 **CONTINUE**
- No 2 **SKIP TO STATEMENT ABOVE Q.12**
- DK/NA **(volunteered)** 9 **SKIP TO STATEMENT ABOVE Q.12**

11B. How do you listen to SiriusXM? Do you listen...? **(READ LIST; ACCEPT ONLY ONE RESPONSE)**

- On a satellite radio 1
- On the Internet 2
- OR Both 3
- DK/NA **(volunteered)** 9

**“These last few questions will be used for classification purposes only.”**

12. Think about the telephone service you can be reached on at home. What type of telephone service can you be reached on in your home? **(READ LIST. NOTE: IF RESPONDENT MENTIONS THEY HAVE PHONE SERVICE THROUGH THE INTERNET, SUCH AS VONAGE OR THROUGH THEIR CABLE TELEVISION PROVIDER, USE APPLICABLE “REGULAR LAND-LINE SERVICE” CODE)**

- Only cell phone service 1
- OR Both regular land-line AND cell phone service 2
- Only regular land-line service 3
- Don’t know/refused 9

13A. Are you of Hispanic or Latino descent?

- |                   |   |                                |
|-------------------|---|--------------------------------|
| Yes               | 1 | <b>SKIP TO NOTE ABOVE Q.14</b> |
| No                | 2 | <b>CONTINUE</b>                |
| Refused/No Answer | 9 | <b>CONTINUE</b>                |

13B. Which of the following best describes you? Are you...? **(READ LIST.)**

- |                                      |   |
|--------------------------------------|---|
| White                                | 1 |
| African-American                     | 2 |
| Asian                                | 3 |
| OR Are you of some other background? | 4 |
| Refused                              | 8 |
| No Answer                            | 9 |

**IF AGES 13 TO 17, SKIP TO Q.15**

14. Approximately what was your total household income in 2014 from all sources before taxes -- was it... **(READ LIST)**

- |                                 |   |
|---------------------------------|---|
| Under \$25,000                  | 1 |
| Between \$25,000 and \$50,000   | 2 |
| Between \$50,000 and \$75,000   | 3 |
| Between \$75,000 and \$100,000  | 4 |
| Between \$100,000 and \$150,000 | 5 |
| OR Over \$150,000               | 6 |
| DK/NA                           | 9 |

15. And lastly can you please tell me your zip code. \_\_\_\_\_ **(RECORD)**

**“Thank you very much for your time and cooperation. Good-bye!”**

16. Phone number: \_\_\_\_\_ **(RECORD)**  
17. TIME: (MINUTES): \_\_\_\_\_ **(RECORD)**

**EMR 21058  
FINAL DRAFT – CONFIDENTIAL  
Edison Research  
2015 Music Survey  
January 2015**

“Hola, mi nombre es \_\_\_\_\_ y estoy llamando de parte de la compañía Edison Research. Hoy estamos haciendo una encuesta nacional breve. Esto NO tiene nada que ver con un concurso, o una promoción y no estamos vendiendo nada. Solo necesitamos sus opiniones y sus respuestas serán completamente confidenciales. Puedo hablar con la persona en este número de teléfono, que tiene por lo menos 13 años de edad o más, y que tuvo el cumpleaños más reciente. Es usted esa persona?”

- Si 1 (CONTINUE)  
No 2 (ASK IF THAT PERSON IS AVAILABLE OR SET UP CALL BACK TIME)

**If cell phone sample, read: “Si usted está conduciendo o involucrado en una actividad que requiere su atención completa, voy a tener que llamarle en otro momento” SCHEDULE CALLBACK IF NECESSARY**

A1. En primer lugar, es importante que esta encuesta represente a individuos de todas las edades. Por esa razón, me puede decir su edad? (RECORD EXACT AGE)

\_\_\_\_\_

Refused 99

A2. (IF EXACT AGE REFUSED, ASK) Solo dígame en que grupo cae usted. Es usted...? (READ LIST)

- |             |    |   |
|-------------|----|---|
| Menor de 13 | 1  | <b>THANK AND TERMINATE</b>  |
| 13-17       | 2  |   |
| 18-20       | 3  |   |
| 21-24       | 4  |   |
| 25-34       | 5  |   |
| 35-44       | 6  |   |
| 45-54       | 7  |   |
| 55-64       | 8  |   |
| 65-74       | 9  |   |
| 75+         | 10 |   |
| Refused     | 99 | <b>(DO NOT READ) (If person still refuses, thank the person for their time and end interview)</b> |

B. (DO NOT ASK RESPONDENT THIS QUESTION. DETERMINE BY VOICE)

- |        |   |
|--------|---|
| Male   | 1 |
| Female | 2 |

1. ¿Actualmente tiene acceso a Internet, ya sea a través de un broadband o conexión de acceso telefónico o mediante el acceso a Internet a través de un teléfono celular u otro aparato móvil?

SI	1
NO	2
DK/NA	9

2A. ¿Cuánto tiempo en horas o minutos pasa usted escuchando música en un día típico? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ horas                      \_\_\_\_\_ minutos **(MAXIMUM HOURS=24)**

DK/NA	X
-------	---

2B. ¿Y que importante es para usted para mantenerse al día con la música? ¿Es ...? **(READ LIST)**

	Muy importantante	1
	Algo importante	2
O	Nada importante	3
	DK/NA	9

3A. Piense en la cantidad de dinero que gastó comprando CDs físicos y comprando canciones y álbumes digitales en el último año - es decir, en 2014. En el último año, aproximadamente cuánto dinero ha gastado comprando CDs físicos o canciones digitales y álbumes? **(RECORD EXACT NUMBER. DO NOT ACCEPT A RANGE, IF RESPONDENT CANNOT GIVE EXACT AMOUNT, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ **(RECORD #)**

DK/NA	X
-------	---

3B. Ahora piense en la cantidad de dinero que usted espera gastar comprando CDs físicos o canciones y álbumes digitales en este año que viene. En 2015, espera gastar más en la música, menos en la música, o la misma cantidad que gastó en 2014?

	Mas	1
	Menos	2
	La misma cantidad	3
	DK/NA	9

4A. Algunas estaciones de radio de música FM también se pueden escuchar en línea en una computadora, teléfono móvil u otro aparato móvil. ¿Alguna vez ha escuchado a la transmisión de audio en línea de una estación de radio FM a través del Internet en cualquiera de estos aparatos?

SI	1	<b>CONTINUE</b>
NO	2	<b>SKIP TO Q.5A</b>
DK/NA	9	<b>SKIP TO Q.5A</b>

4B. ¿Y ha escuchado a la transmisión de audio en línea de una estación de radio FM a través del Internet en el mes pasado?

SI	1
NO	2
DK/NA	9

5A. Ahora piense en los servicios de música que se puede escuchar a través del Internet que NO son la transmisión de una estación de radio AM o FM. ¿Alguna vez ha escuchado un radio en línea o servicio de música digital, tales como Pandora, Spotify, u otro servicio similar?

SI	1	<b>CONTINUE</b>
NO	2	<b>SKIP TO NOTE ABOVE Q.6A</b>
DK/NA	9	<b>SKIP TO NOTE ABOVE Q.6A</b>

5B. ¿Y ha escuchado un radio en línea o servicio de música digital, tales como Pandora, Spotify, u otro servicio similar en el mes pasado?

SI	1
NO	2
DK/NA	9

**ROTATE Q.6A-I AND Q.7A-I SERIES**

6A. Ahora piense específicamente sobre el servicio de radio de Internet llamado Pandora. ¿Ha escuchado a Pandora en el mes pasado?

- |       |   |                     |
|-------|---|---------------------|
| SI    | 1 | <b>CONTINUE</b>     |
| NO    | 2 | <b>SKIP TO Q.6G</b> |
| DK/NA | 9 | <b>SKIP TO Q.6G</b> |

6B. ¿Y ha escuchado a Pandora en la SEMANA pasada?

- |       |   |                     |
|-------|---|---------------------|
| SI    | 1 | <b>CONTINUE</b>     |
| NO    | 2 | <b>SKIP TO Q.6D</b> |
| DK/NA | 9 | <b>SKIP TO Q.6D</b> |

6C. ¿Cuánto tiempo total, en horas o minutos, diría usted que ha pasado escuchando Pandora en la SEMANA pasada? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ horas                      \_\_\_\_\_ minutos **(MAXIMUM HOURS=168)**

DK/NA                      X

6D. Piense específicamente en el tiempo que pasa escuchando a Pandora. ¿El tiempo que usted pasa escuchando a Pandora es tiempo, en su mayoría, que reemplaza tiempo que solía pasar escuchando ...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; SHUFFLE CODES 1, 2 AND 3)**

- |  |   |
|--|---|
| Estaciones tradicionales de radio AM / FM que transmiten por el aire                                 | 1 |
| Sus CDs y descargas de música  | 2 |
| Otros servicios de música en línea   | 3 |
| O ¿es tiempo nuevo que dedica a escuchar que no es tiempo tomado de otras fuentes de escuchar audio? |   |

4

- |  |   |
|--|---|
| Otro <b>(volunteered)</b> _____(specify) | 8 |
| DK/NA <b>(volunteered)</b>               | 9 |

**IF 6D CODED “3” (OTHER ONLINE MUSIC SERVICES) CONTINUE; OTHERWISE SKIP TO Q.6E**

6D1. ¿Y qué tipo de servicio de música en línea ha sido reemplazando principalmente por Pandora? ¿Es ... **(READ LIST; SHUFFLE ORDER)**

- |  |   |
|--|---|
| La transmisión en línea de una estación de radio FM      | 1 |
| Otra Servicio de Radio Internet                          | 2 |
| Un servicio de música a petición como Spotify o Rhapsody | 3 |
| O YouTube o Vevo   | 4 |
| Otro <b>(volunteered)</b> _____(specify)                 | 8 |
| DK/NA <b>(volunteered)</b>                               | 9 |

6E. Además del servicio de Pandora gratuita, Pandora también ofrece un servicio de suscripción pagada llamado Pandora Uno que no incluye ningunos anuncios. Una vez más, este es un servicio de pago que tiene un pago fijo de suscripción que se cobra cada mes. ¿Usted actualmente paga el precio fijo mensual para suscribirse a Pandora Uno?

Si    1

No 2  
 DK/NA (volunteered) 9

6F. Ahora quiero proponer una situación hipotética. Supongamos que la versión gratuita de Pandora ya no existiera. ¿Qué tan probable sería que usted pagara cuatro dólares con noventa y nueve centavos cada mes para suscribirse a Pandora One, el servicio de pago de Pandora que no incluye ningunos anuncios? **(READ LIST)**

Muy Probable 1  
 Algo Probable 2  
 No Muy Probable 3  
 O Nada Probable 4  
 DK/NA 9

6G. Voy a leerle una lista de algunos otros servicios de radio de música. Para cada uno, por favor dígame si usted ha escuchado a este servicio en la semana pasada. **(SHUFFLE ORDER OF BRANDS)**

“En la última semana ha escuchado ...”

		<u>Si</u>	<u>No</u>	<u>DK/NA</u>
6G.1	I Heart Radio	1	2	9
6G.2	iTunes Radio -- el servicio personalizado de radio en línea de Apple	1	2	9
6G.3	LastFM	1	2	9
6G.4	Slacker	1	2	9
6G.5	Songza	1	2	9
6G.6	8 Tracks	1	2	9

**IF ONE ITEM IN Q.6G CODED “1” (LISTENED TO SERVICE IN LAST WEEK) ASK Q.6H.1, IF MORE THAN ONE ITEM IN Q.6G CODED “1” (LISTENED TO SERVICES IN LAST WEEK ASK Q.6H.2; OTHERWISE SKIP TO Q.7A**

6H.1 ¿Cuánto tiempo total, en horas o minutos, diría usted que ha pasado escuchando **(INSERT ITEM FROM Q.6G)** en la SEMANA pasada? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ horas \_\_\_\_\_ minutos **(MAXIMUM HOURS=168)**

**SKIP TO Q.6I**

6H.2 ¿Cuánto tiempo total, en horas o minutos, diría usted que ha pasado escuchando a **(INSERT ITEMS FROM Q.6G)** en total en la SEMANA pasada? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ horas \_\_\_\_\_ minutos **(MAXIMUM HOURS=168)**

6I. Piense específicamente en el tiempo que pasa escuchando a **(INSERT ITEMS FROM Q.6G)**. Es el tiempo que pasa escuchando a **(INSERT ITEMS FROM Q.6G)** tiempo que principalmente reemplaza tiempo que solía pasar escuchando a ...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; SHUFFLE CODES 1, 2 and 3)**

Estaciones tradicionales de radio AM / FM que transmiten por el aire 1  
 Sus CDs y descargas de música 2  
 Otros servicios de música en línea 3  
 O ¿es tiempo nuevo que dedica a escuchar que no es tiempo tomado de otras fuentes de escuchar audio? 4



Otro (**volunteered**) \_\_\_\_\_(specify)  
DK/NA (**volunteered**)

8  
9

**IF 6I CODED “3” (OTHER ONLINE MUSIC SERVICES) CONTINUE; OTHERWISE SKIP TO Q.7A**

6I1. ¿Y qué tipo de servicio de música en línea es el que esta reemplazando principalmente? ¿Es ...  
**(READ LIST; SHUFFLE ORDER)**

- La transmisión en línea de una estación de radio FM 1
- Otra Servicio de Radio Internet 2
- Un servicio de música a petición como Spotify o Rhapsody 3
- O YouTube o Vevo 4
- Otro **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

7A. Ahora piense específicamente sobre Spotify. ¿Ha escuchado el servicio de música en Internet llamado Spotify en el mes pasado?

- SI 1 **CONTINUE**
- NO 2 **SKIP TO Q.7F**
- DK/NA 9 **SKIP TO Q.7F**

7B. ¿Y ha escuchado el servicio de música en Internet llamado Spotify en la SEMANA pasada?

- SI 1 **CONTINUE**
- NO 2 **SKIP TO Q.7D**
- DK/NA 9 **SKIP TO Q.7D**

7C. ¿Cuánto tiempo total, en horas o minutos, diría usted que ha pasado escuchando Spotify en la SEMANA pasada? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ horas \_\_\_\_\_ minutos **(MAXIMUM HOURS=168)**

DK/NA X

7D. Piense específicamente en el tiempo que pasa escuchando a Spotify. Es el tiempo que pasa escuchando a Spotify tiempo que principalmente reemplaza tiempo que solía pasar escuchando a ...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; SHUFFLE CODES 1, 2 AND 3)**

- Estaciones tradicionales de radio AM / FM que transmiten por el aire 1
- Sus CDs y descargas de música 2
- Otros servicios de música en línea 3
- O ¿es tiempo nuevo que dedica a escuchar que no es tiempo tomado de otras fuentes de escuchar audio? 4
- Otro **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

**IF 7D CODED “3” (OTHER ONLINE MUSIC SERVICES), CONTINUE; OTHERWISE SKIP TO Q.7E**

7D1. ¿Y qué tipo de servicio de música en línea es el que esta reemplazando Spotify principalmente? ¿Es ...  
(**READ LIST; SHUFFLE ORDER**)

- La transmisión en línea de una estación de radio FM 1
- Un Servicio de Radio Internet como Pandora 2
- Otro servicio de música a petición como Rhapsody o Rdio (**pronounced “R-dee-oh”**) 3
- O YouTube o Vevo 4
- Otro (**volunteered**) \_\_\_\_\_(specify) 8
- DK/NA (**volunteered**) 9

7E. Además del servicio de Spotify gratuito, Spotify también ofrece un servicio de suscripción pagada llamado Spotify Premium que no incluye ningunos anuncios y que le permite usar Spotify en cualquier aparato. Una vez más, este es un servicio de pago que tiene un pago fijo de suscripción que se cobra cada mes. ¿Usted actualmente paga el precio fijo mensual para suscribirse a Spotify Premium?

- Si 1
- No 2
- DK/NA (**volunteered**) 9

7F. Ahora me gustaría que usted piense acerca de otros servicios de música en línea. Voy a leerle una lista de algunos otros servicios de música en línea. Por cada uno, por favor dígame si usted ha escuchado a este servicio en la semana pasada. (**SHUFFLE ORDER OF BRANDS**)

“En la semana pasada ha escuchado a...”

		<u>Si</u>	<u>No</u>	<u>DK/NA</u>
7F.1	Rhapsody	1	2	9
7F.2	Beats Music	1	2	9
7F.3	Rdio ( <b>pronounced “R-dee-oh”</b> )	1	2	9

**IF ONE ITEM IN Q.7F CODED “1” (LISTENED TO SERVICE IN LAST WEEK) ASK Q.7G.1, IF MORE THAN ONE ITEM IN Q.7F CODED “1” (LISTENED TO SERVICES IN LAST WEEK ASK Q.7G.2; OTHERWISE SKIP TO Q.8A**

7G.1 ¿Cuánto tiempo total, en horas o minutos, diría usted que ha pasado escuchando a (**INSERT ITEM FROM Q.7F**) en la SEMANA pasada? (**IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE**)

\_\_\_\_\_ horas \_\_\_\_\_ minutos (**MAXIMUM HOURS=168**)

**SKIP TO Q.7H**

7G.2 ¿Cuánto tiempo total, en horas o minutos, diría usted que ha pasado escuchando a (**INSERT ITEMS FROM Q.7F**) en total en la SEMANA pasada? (**IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE**)

\_\_\_\_\_ horas \_\_\_\_\_ minutos (**MAXIMUM HOURS=168**)

7H. Piense específicamente en el tiempo que pasa escuchando a Spotify. Es el tiempo que pasa escuchando a Spotify tiempo que principalmente reemplaza tiempo que solía pasar escuchando a ...?

Piense específicamente en el tiempo que pasa escuchando a **(INSERT ITEMS FROM Q.7F)**. Es el tiempo que pasa escuchando a **(INSERT ITEMS FROM Q.7F)** tiempo que principalmente reemplaza tiempo que solía pasar escuchando a ...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; ROTATE CODES 1, 2 AND 3)**

- Estaciones tradicionales de radio AM / FM que transmiten por el aire 1
- Sus CDs y descargas de música 2
- Otros servicios de música en línea 3
- O ¿es tiempo nuevo que dedica a escuchar que no es tiempo tomado de otras fuentes de escuchar audio? 4
- Otro **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

**IF 7H CODED “3” (OTHER ONLINE MUSIC SERVICES) CONTINUE; OTHERWISE SKIP TO Q.8A**

7H1. ¿Y qué tipo de servicio de música en línea es el que esta reemplazando principalmente? ¿Es ...**(READ LIST; SHUFFLE ORDER)**

- La transmisión en línea de una estación de radio FM 1
- Un Servicio de Radio Internet como Pandora 2
- Otro servicio de música a petición 3
- O YouTube o Vevo 4
- Otro **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

8A. Ahora piense específicamente sobre YouTube y Vevo. En la semana pasada, ¿ha utilizado YouTube o Vevo específicamente para ver videos musicales o para escuchar música?

- SI 1 **CONTINUE**
- NO 2 **SKIP TO NOTE ABOVE Q.9A**
- DK/NA 9 **SKIP TO NOTE ABOVE Q.9A**

8B. ¿Cuánto tiempo total, en horas o minutos, diría usted que ha usado YouTube o Vevo para ver videos musicales o para escuchar música en la semana pasada? **(IF RESPONDENT CANNOT GIVE AN EXACT AMOUNT OF TIME, ENCOURAGE BEST ESTIMATE)**

\_\_\_\_\_ horas \_\_\_\_\_ minutos **(MAXIMUM HOURS=168)**

DK/NA X

8C. Es el tiempo que pasa usando YouTube o Vevo para ver videos musicales o para escuchar música tiempo que principalmente reemplaza tiempo que solía pasar escuchando a ...? **(READ LIST; ACCEPT ONLY ONE RESPONSE; SHUFFLE CODES 1, 2 AND 3)**

- Estaciones tradicionales de radio AM / FM que transmiten por el aire 1
- Sus CDs y descargas de música 2
- Radio Internet 3
- O ¿es tiempo nuevo que dedica a escuchar que no es tiempo tomado de otras fuentes de escuchar audio? 4
- Otro **(volunteered)** \_\_\_\_\_(specify) 8
- DK/NA **(volunteered)** 9

**IF Q.7E IS “1” (SUBSCRIBE TO SPOTIFY PREMIUM) SKIP TO NOTE ABOVE Q.10;  
OTHERWISE CONTINUE**

9A. Hay servicios de música en línea de pago que le dan acceso a petición a una biblioteca de música. Estos servicios permiten que usted pueda escuchar a través de streaming de audio a álbumes completos o canciones individuales que usted elija. Usted no es dueño de esta música, pero tendrá acceso durante el tiempo que usted este pagando por ese servicio. Algunos ejemplos de estos servicios son Spotify, Rhapsody y Rdio (**pronounced “R-dee-oh”**). ¿Qué tan probable sería que usted pagaría nueve dólares y 99 centavos cada mes por un servicio de audio, Internet? **(READ LIST)**

- |   |                 |   |                                |
|---|-----------------|---|--------------------------------|
|   | Muy Probable    | 1 | <b>SKIP TO NOTE ABOVE Q.10</b> |
|   | Algo Probable   | 2 | <b>CONTINUE</b>                |
|   | No Muy Probable | 3 | <b>CONTINUE</b>                |
| O | Nada Probable   | 4 | <b>CONTINUE</b>                |
|   | DK/NA           | 9 | <b>CONTINUE</b>                |

9B. Supongamos que el servicio de música en línea de pago que acabo de describir que le proporciona acceso a petición a una biblioteca de música costaría cuatro dólares y 99 centavos cada mes. ¿Qué tan probable sería que usted pagaría cuatro dólares y 99 centavos cada mes por un servicio de audio, Internet? **(READ LIST)**

- |   |                 |   |                                |
|---|-----------------|---|--------------------------------|
|   | Muy Probable    | 1 | <b>SKIP TO NOTE ABOVE Q.10</b> |
|   | Algo Probable   | 2 | <b>CONTINUE</b>                |
|   | No Muy Probable | 3 | <b>CONTINUE</b>                |
| O | Nada Probable   | 4 | <b>CONTINUE</b>                |
|   | DK/NA           | 9 | <b>CONTINUE</b>                |

9C. ¿Qué tan probable sería que usted pagaría dos dólares y 99 centavos cada mes por tal servicio de audio, Internet? **(READ LIST)**

- |   |                 |   |  |
|---|-----------------|---|--|
|   | Muy Probable    | 1 |  |
|   | Algo Probable   | 2 |  |
|   | No Muy Probable | 3 |  |
| O | Nada Probable   | 4 |  |
|   | DK/NA           | 9 |  |

**IF EITHER Q.4A OR Q.5A IS “1” (YES TO LISTENING TO MUSIC ON THE INTERNET) CONTINUE, OTHERWISE SKIP TO Q.11A**

10. Ahora quiero proponer una situación hipotética. Supongamos que **TODOS LOS SERVICIOS GRATIS** de radio por Internet o música ya no existirían. Esto significa que no habría una versión gratuita de Pandora o Spotify o cualquier otros servicios gratuitos similares, y no habría estaciones de radio FM disponibles a través de streaming. Voy a leer cuatro maneras posibles que podrían reemplazar como escucha a los servicios de radio por Internet y de música gratis. ¿Cuál de las siguientes maneras sería la más probable que usted escogiera en su lugar? **(READ LIST; SHUFFLE CODES 1, 2, 3, and 4; REPEAT ANSWER CODES IF NEEDED. ACCEPT ONLY ONE RESPONSE)**

Pagar por una suscripción mensual para utilizar un servicio de música en Internet a petición como Spotify o Rhapsody	1
Escuchar radio FM gratis en un radio tradicional	2
Escuchar sus CDs y descargas de música	3
Ver vídeos musicales o escuchar música en YouTube o Vevo	4
<b>(ALWAYS READ LAST)</b> O simplemente escucharía menos música	5
Otro <b>(volunteered)</b> _____	8
DK/NA <b>(volunteered)</b>	9

- 11A. ¿Usted actualmente paga una suscripción mensual para suscribirse a SiriusXM Radio?

Si	1	<b>CONTINUE</b>
No	2	<b>SKIP TO STATEMENT ABOVE Q.12</b>
DK/NA <b>(volunteered)</b>	9	<b>SKIP TO STATEMENT ABOVE Q.12</b>

- 11B. ¿Cómo escucha a SiriusXM? ¿Escucha ...? **(READ LIST; ACCEPT ONLY ONE RESPONSE)**

En un radio de satélite	1
En el Internet	2
O En ambos	3
DK/NA <b>(volunteered)</b>	9

**“Estas últimas preguntas serán utilizados sólo con fines de clasificación.”**

12. Piense en el servicio telefónico a través del cual uno se puede poner en contacto con usted en su casa. ¿Con cual tipo de servicio telefónico uno se puede poner en contacto con usted en su casa? **(READ LIST. NOTE: IF RESPONDENT MENTIONS THEY HAVE PHONE SERVICE THROUGH THE INTERNET, SUCH AS VONAGE OR THROUGH THEIR CABLE TELEVISION PROVIDER, USE APPLICABLE “REGULAR LAND-LINE SERVICE” CODE)**

Servicio de telefono celular sólo	1
O Ambos línea fija telefonica regular y servicio celular	2
Sólo el servicio de línea fija telefónica regular	3
Don't know/refused	9

13A. ¿Es usted de origen hispano o latino?

- |                   |   |                                |
|-------------------|---|--------------------------------|
| Si                | 1 | <b>SKIP TO NOTE ABOVE Q.14</b> |
| No                | 2 | <b>CONTINUE</b>                |
| Refused/No Answer | 9 | <b>CONTINUE</b>                |

13B. ¿Cuáles de los siguientes mejor le describe? ¿Es usted ...? **(READ LIST.)**

- |                                     |   |
|-------------------------------------|---|
| Blanco                              | 1 |
| Africano-Americano                  | 2 |
| Asiático                            | 3 |
| O ¿Está usted de algún otro origen? | 4 |
| Refused                             | 8 |
| No Answer                           | 9 |

**IF AGES 13 TO 17, SKIP TO Q.15**

14. Aproximadamente cual fue el ingreso total de su hogar en 2014 de todas las fuentes antes de impuestos - fue ... **(READ LIST)**

- |                             |   |
|-----------------------------|---|
| Menos de \$25,000           | 1 |
| Entre \$25,000 y \$50,000   | 2 |
| Entre \$50,000 y \$75,000   | 3 |
| Entre \$75,000 y \$100,000  | 4 |
| Entre \$100,000 y \$150,000 | 5 |
| O Mas de \$150,000          | 6 |
| DK/NA                       | 9 |

15. Y finalmente por favor dígame su código postal. \_\_\_\_\_ **(RECORD)**

**“Muchas gracias por su tiempo y cooperación. Adiós!”**

16. Phone number: \_\_\_\_\_ **(RECORD)**

17. TIME: (MINUTES): \_\_\_\_\_ **(RECORD)**