Appendix D: Analysis of the Merlin Agreement

In this Appendix I discuss in detail my derivation of the per-play royalty rate for statutorily compensable performances of sound recordings from the Merlin Agreement benchmark, which I refer to as the "effective per-play rate." I also discuss my evaluation of the non-pecuniary terms in the Merlin Agreement and the implication of those terms for adjustments to the effective per-play royalty rate.

1. Calculation of Pandora's Effective Royalty Rate for [redacted] Under the Merlin Agreement

My calculation of the effective per-play rate from the Merlin Agreement is based on a careful reading and analysis of the agreement itself, on information provided to me by Pandora, and on information I have learned through interviews with Pandora employees. In this section I set out the calculations I perform to derive Pandora's aggregate royalty payments to the Merlin Labels under the Merlin Agreement using Pandora's [redacted] projections of its business. I calculate Pandora's royalty payments to the Merlin Labels then derive effective per-play rates.

A. Inputs for the Calculation of the Effective Royalty Rate

Pandora provided me with the following data for the 2013-2015 period that it maintains in the normal course of business, separately for its advertising-supported and subscription services:

- the actual and projected number of tracks performed
- the actual and projected number of listener hours
- actual and projected revenues
- the share of Pandora performances from tracks recorded before February 15, 1972 (which I refer to as pre-72 tracks),[1] and
- the share of tracks that are performed for 30 seconds or less ("skips").[2]

[1] Data for pre-72 tracks were based on actual data through August 2014 and forecast data thereafter, based on historical trends.

[2] Skip data were provided from measures taken over the period December 5, 2013 through February 22, 2014. Pandora does not monitor skip rates in the normal course of business.

Pandora also provided me with an estimate of the Natural Performance Rate (NPR) of Merlin tracks as a percent of all tracks performed.[3]

Table D.1 reports these variables for 2013, 2014 and 2015 along with several other parameters used in my analysis of the Merlin Agreement. I assume that Pandora will steer the requisite [redacted] toward each Merlin Label.[4] Furthermore, I assume that [redacted] of the Merlin tracks performed on Pandora will be Bullets,[5] and that Pandora will play these tracks with the minimum frequency required in the Merlin Agreement, [redacted].

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[3] Herring Testimony at ¶34.

[4] [redacted] Herring Testimony at ¶32.

[5] See "Pandora Inputs for Merlin Analysis 10.3.14.xlsx."

Table D.1
Parameters Underlying Calculated Payments to Merlin

[redacted]

Source:
Pandora data.

As shown in Table D.1, I assume that the SoundExchange administrative fee was 4.5 percent of SoundExchange's collections in 2013.[6] [redacted]. Pandora also provided me with its actual and projected quarterly non-GAAP gross operating margins. These gross margins enter into the Revenue Sharing component in the Merlin Agreement.

[6] SoundExchange reports an Operating Administrative Rate of 4.5% for 2013. See, SoundExchange Annual Report for 2013 Provided Pursuant to 37 C.F.R. § 370.5(c), p. 4.

B. *Calculating the Effective Royalty Rate*

Table D.2 shows the main elements of the calculations underlying my best estimate of the effective per-play rate for [redacted]. The underlying calculations were made separately for calendar years [redacted].[7] The final column in Table D.2 covers the portion of [redacted] when Pandora expects to engage in steering toward the Merlin Labels, namely the [redacted]. These calculations are made using the parameters in Table D.1.

[7] [redacted].

[redacted]

1. Pandora Payments to Merlin

To see how Table D.2 works, focus first on the 2014 column. The first three rows in Table D.2 report the number of Merlin Label performances by Pandora in 2014: [redacted] advertising-supported performances and [redacted] subscription performances, for a total of [redacted] performances. These figures include steering, bullets, and performances of pre-72 tracks. As shown in Table D.2, the Merlin tracks would account for [redacted] of all performances on Pandora. This is 14 percent greater than the Merlin NPR of [redacted].

The next several rows in Table D.2 calculate the resulting payments that Pandora would make to Merlin. [redacted][8] [redacted].

[redacted].

[redacted]

[redacted]

[8] Under the terms of the Merlin Agreement, the greater-of comparison of royalty payments between the percent of revenue prong and the per-play prong is to be made monthly. I understand from Pandora that it expects the per-play prong would be operative in every month of [redacted], so my calculations are performed on annual data.

[9] To calculate Merlin Label and artist receipts, I relied on data Pandora reported to me for total tracks performed on advertising- and subscription-supported services separately in 2013. I multiplied each figure by the fraction of performances of sound recordings fixed on or after February 15, 1972 (separately for advertising- and subscription-supported services) and by the NPR for Merlin Labels to derive the number of compensable performances of Merlin Label tracks in 2013. I then applied the royalty rates that Pandora was otherwise paying for performances on advertising- and subscription-supported services in 2013 and summed those two figures. Finally, I deducted a 4.5% share of Pandora's total payments to recognize that Sound Exchange withheld 4.5% for administrative expenses in 2013, such that Merlin Label and artist receipts would be 95.5% of Pandora's payments. I understand that this deduction of SoundExchange's 2013 administrative expenses was the mutual intent in Section 5(a) of the Merlin Agreement.

This analysis is then repeated for 2015, yielding total expected payments in 2015 of [redacted]

2. Effective Per-Play Rates in 2014 and 2015

The lower half of Table D.2 translates these total payments into effective per-play rates. The effective per-play rate in a given year is equal to Pandora's total payments in that year divided by the number of statutorily compensable performances in that year.

The next several rows report the number of Merlin statutorily compensable tracks that Pandora expects to perform. [redacted].

The next step is to divide Pandora's total payments to Merlin by the projected number of Merlin Label statutorily compensable performances. In [redacted], this produces effective per-play rates of [redacted] for advertising-supported performances and [redacted] for subscription performances.[10] The [redacted] "blended" effective per-play rate is [redacted]. The blended rate is defined as the single rate that, when applied to all statutorily compensable performances, generates the necessary level of total payments.

The final three rows in Table D.2 show the percent-of-revenue associated with these effective per-play rates. For [redacted], the blended effective per-play rate of [redacted] corresponds to [redacted] of Pandora's revenue.

The calculation for [redacted] is analogous to the calculation for [redacted]. The total payment of [redacted] translates into effective per-play royalty rates of [redacted] for advertising-

[10] I allocate the Guarantee shortfall according to the number of advertising-supported and subscription performances, including bullets but excluding skips.

supported performances and [redacted] for subscription performances. The blended effective per-play rate in [redacted] is [redacted], which corresponds to [redacted] of revenues.

3. Combined 2014-2015 Rates

Pandora and Merlin have been working together to identify Merlin Labels' music so that steering can begin. This process has taken longer than expected. As a result, Pandora does not expect to begin steering toward Merlin Label sound recordings until sometime during October 2014. For this reason, for the purpose of calculating combined rates that apply to the Merlin Agreement as a whole, I use only the [redacted]. These combined rates are shown in the final column in Table D.2. The combined blended effective per-play rate implied by the Merlin Agreement is 0.1293¢ per performance. This is composed of effective rates of 0.1177¢ for each advertising-supported performance and 0.2187¢ for each subscription performance. As shown in Table D.2, the blended effective per-play rate for the [redacted] generates payments that equal [redacted] of Pandora's Revenue.

C. The Effective Per-Play Royalty Rate is Lower if Pandora Steers More Toward Merlin Labels

Under the Merlin Agreement, Pandora has an economic incentive to steer toward Merlin Labels at a rate higher than the [redacted] that is required by the Merlin Agreement and indeed it plans to do so.[11] Table D.3. shows the effective per-play rates under the Merlin Agreement when Pandora increases plays of Merlin music by 30 percent above the NPR of Merlin Labels.

[11] Pandora anticipates that starting sometime in the fourth quarter of 2014 it will steer toward Merlin Labels by 20 to 30 percent. Herring Testimony at ¶32.

[redacted]

As shown in Table D.3, at 30 percent steering the combined blended effective per-play rate for the [redacted] is 0.1197¢ as compared with the 0.1293¢ rate with 12.5 percent steering shown in Table D.2.

Pandora has two economic incentives to steer toward Merlin music even more than [redacted]. First, greater steering lowers the per-play rate that Pandora pays under the Merlin Agreement if Pandora is making a Guarantee shortfall payment. Second, greater steering saves

Pandora money by replacing more costly music licensed from other record companies with less costly music licensed under the Merlin Agreement. The factor limiting Pandora's steering is the loss of revenue if the steering reduces listening on Pandora. These considerations are discussed in greater detail in Appendix F.

2. Non-Pecuniary Terms in the Merlin Agreement

The Merlin Agreement contains a number of additional provisions related to the promotion of the Merlin Labels' artists and music. I now consider whether the presence of these provisions in the Merlin Agreement necessitates making a further adjustment to the proposed statutory rates, since these provisions will not be present in the statutory license.

In performing this exercise, I consider the financial terms on which each additional provision would have been negotiated between Merlin and Pandora, had that provision been negotiated independently. More specifically, I look for evidence that would support a specific, quantitative adjustment to the per-play rate.

Comparable transactions between Pandora and other labels are relevant for this purpose. To illustrate, suppose that the Merlin Agreement obligates Pandora to provide a certain product or service to the Merlin Labels at $40 per unit. Suppose further that we estimate that over the [redacted] time period, the Merlin Labels will purchase 1,000 units of this product or service. If Pandora normally charges comparable labels $100 per unit for this service, this provision delivers $60,000 of extra value to the Merlin Labels, in comparison with a separate, arms-length negotiation: a $60 discount on 1,000 units. This $60,000 can then be translated into an adjustment in per-play rates. If Pandora were expected to perform Merlin songs 20 billion times over the same [redacted] time period, the $60,000 would correspond to 0.0003¢ per performance.

Where comparable transactions are lacking, or ambiguous, I make use of basic bargaining theory, which indicates that a willing buyer and willing seller will tend to negotiate terms that split the gains from trade, relative to each party's "threat point," which is also known as that party's Best Alternative to a Negotiated Agreement or BATNA. For example, if a provision is worth $1 million to the buyer and is costless to the seller, the gains from trade are $1 million, and basic bargaining theory suggests that the seller would charge $0.5 million for this provision.

Likewise, if a provision is worth $0.5 million to the seller and $0.5 million to the buyer, again the gains from trade are $1 million, and basic bargaining theory suggests that the two parties would agree to this provision without any payment.[12]

[redacted]

Under the Merlin Agreement, [redacted][13]

[redacted].[14] [redacted].[15]

[redacted].[16] [redacted]

[redacted]

[12] The Judges used this logic in *SDARS II* proceeding for the purpose of evaluating non-administrative differences between the negotiated benchmark licenses and the statutory license. The Judges determined that no adjustment was necessary under the third Section 801(b) factor because "it may well be that the benefits inure equally to both Sirius XM and the artists represented by the independent labels, many of whom may value broader exposure in lieu of statutory restrictions on the amount their works may be played." *SDARS II* at 23068-69 (footnote omitted).

[13] Merlin Agreement, Section 6. To understand how this provision will be implemented, and the associated net benefits to Pandora and to the Merlin Labels, I interviewed David Smith, Vice President for Pricing and Yield Management at Pandora, on September 22, 2014. I am relying here on information that I learned in that interview.

[14] Interview with David Smith.

[15] Interview with David Smith.

[16] See, "140930 Merlin Label Spend.xlsx."

[redacted]

[redacted]

[redacted][17]

[redacted].[18] [redacted][19]

[redacted].[20]

[17] Merlin Agreement, Section 7. I interviewed Michael Olson and John Donaldson of the Strategy Team on September 22, 2014 to understand the implementation of this term of the Merlin Agreement and the associated net benefits to Pandora and the Merlin Labels.

[18] Interview with Michael Olson and John Donaldson.

[19] Interview with Michael Olson and John Donaldson.

[20] Interview with Michael Olson and John Donaldson and Westergren Testimony at ¶38.

[redacted][21] [redacted].[23] In light of this, I have concluded that no adjustment to the effective royalty rate is necessary to account for the [redacted] provision in the Merlin Agreement.

[redacted]

[redacted]"[24] [redacted][25]

[redacted][26]

[redacted][27] [redacted]

[redacted]

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[21] Interview with Michael Olson and John Donaldson and Herring Testimony at ¶30.

[22] Herring Testimony at ¶30.

[23] Herring Testimony at ¶30.

[24] Merlin Agreement, Section 8. On September 22, 2014, I interviewed Michael Olson and John Donaldson of the Strategy Team regarding audio bumpers.

[25] Merlin Agreement, Section 8.

[26] Interview with Michael Olson and John Donaldson.

[27] Herring Testimony at ¶30.

[redacted].[28] [redacted].

[redacted]

[redacted].[29]

[redacted]

[redacted]

[redacted]

[redacted]

[28] Interview with Michael Olson and John Donaldson.

[29] Merlin Agreement, Section 9. I interviewed Mike Olson and John Donaldson of the Strategy Team and Mike Fink and Michael Addicot of Curation on September 22, 2014 regarding the metrics that Pandora will make available to Merlin Labels. See also, Herring Testimony, at ¶30.

[30] Herring Testimony at ¶30.

[redacted][31]

[redacted].[32] [redacted]

[redacted].[33] [redacted]

[redacted]

[31] Merlin Agreement, Section 10. I interviewed Michael Olson and John Donaldson of the Strategy Team on September 22, 2014 about Pandora's plans for label-branded stations.

[32] Interview with Michael Olson and John Donaldson.

[33] Pandora currently has 690 genre stations. See Fleming-Wood Testimony at ¶7. [redacted] See Herring Testimony at ¶30. [redacted] (Interview with Michael Olson and John Donaldson.)

[34] Interview with Michael Olson and John Donaldson and Herring Testimony at footnote 11.

[redacted]

F. Pandora Presents and Pandora Premieres Events

[redacted][35]

1. Pandora Presents

Pandora Presents is a program that was launched in December 2011 through which artists perform live before an audience of fans that Pandora identifies and invites.[36] Each of these events is designed for and sponsored by an advertiser. Pandora chooses artists to feature in Pandora Presents events that will best speak to the target audience of the sponsoring advertiser.

[redacted][37] [redacted].[38]

Pandora Presents generates promotional benefits for the featured artists, and marketing benefits for Pandora with respect to advertisers, listeners, artists, and labels.[39] [redacted].[40] [redacted]

[35] Merlin Agreement, Section 11. I interviewed Tommy Page, Vice President, Artist and Brand Partnerships, on September 24 and 25, 2014 to understand the implementation of this term of the Merlin Agreement and the associated net benefits to Pandora and the Merlin Labels.

[36] Pandora Presents events are described in the Written Direct Testimony of Simon Fleming-Wood ("Fleming-Wood Testimony") at ¶29.

[37] Fleming-Wood Testimony at ¶29.

[38] Fleming-Wood Testimony at ¶29

[39] Interview with Tommy Page and Fleming-Wood Testimony at ¶29.

[40] [redacted] Fleming-Wood Testimony at ¶29 and footnote 5. See also, Westergren Testimony at ¶38.

[redacted][41]

Pandora's role in coordinating Pandora Presents events is similar to that of a concert producer and promoter.[42] Pandora identifies and matches advertisers and artists that appeal to a particular demographic, then books a location for the event and markets the event to Pandora listeners with a demonstrated interest in the featured artist. [redacted][43] Because Pandora's role in coordinating Pandora Presents events is very similar to that of an independent concert producer and promoter, I conclude that the enhanced opportunities for Merlin Labels to participate in Pandora Presents events do not call for an adjustment to the effective royalty rate I have calculated.

2. Pandora Premieres

Pandora Premieres, launched in May 2013, is a program through which Pandora promotes albums in the week prior to their release.[44] Pandora sends an email to listeners who are, or are similar to, fans of the artist with a featured album, inviting them to listen to the new album during the week prior to its release date.[45] Pandora provides click-to-buy functionality for listeners to Pandora Premieres.[46] When selecting albums to feature on Pandora Premieres, Pandora reviews albums that are proposed by labels and chooses artists that are considered a good fit with the program and albums that will generate a high volume of listening.[47] Pandora requires the labels to waive royalties for the one-week period that an album is on Pandora

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[41] Westergren Testimony, at ¶38.

[42] Interview with Tommy Page and Fleming-Wood Testimony at ¶29.

[43] See, for example, LindseyStirling_Revlon_Barter_MediaPlan.xlsx and Matisyahu_Barter_MediaPlan.xlsx.

[44] Fleming-Wood Testimony at ¶30.

[45] Tommy Page interview and Fleming-Wood Testimony at ¶30.

[46] Tommy Page interview.

[47] Fleming-Wood Testimony at ¶30.

Premieres.[48] [redacted][49]

Pandora Premieres features two to five albums per week, about 150 albums annually.[50] Roughly 12 percent of these albums are by artists whose labels are members of Merlin.[51] [redacted][52] [redacted].[53]

Pandora Premieres generates promotional benefits for the featured artists and their labels. This is evident from the fact that labels waive royalties for the one-week period that an album is on Pandora Premieres. Pandora believes that Pandora Premieres can increase an album's sales during the first week after it is released.[54]

[redacted].[55] Pandora receives significant benefits when popular artists and albums are made available for Pandora Premieres, because it offers an attractive benefit to Pandora listeners, who receive an early opportunity to listen to entire new albums from artists they like and to buy the music.[56] [redacted]

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[48] Fleming-Wood Testimony at ¶30.

[49] Tommy Page interview.

[50] Fleming-Wood Testimony at ¶30 and Tommy Page interview.

[51] Tommy Page interview.

[52] Tommy Page interview.

[53] Tommy Page interview.

[54] Tommy Page interview.

[55] Herring Testimony, at footnote 12.

[56] Tommy Page interview and Fleming-Wood Testimony at ¶30.

[57] Herring Testimony at footnote 12.

Pandora Premieres generates significant benefits to the artists and labels and to Pandora. Because the program is mutually beneficial and Pandora does not charge for it, [redacted] do not call for an adjustment to the effective royalty rate I have calculated.

G. Total Adjustments to the Effective Per-Play Rate

Based on my evaluation of the miscellaneous terms in the Merlin Agreement, I have adjusted the effective per-play rate upward by 0.0002¢ per play.