



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 3720

April 26, 2010

David J. Frear
Executive Vice President and Chief Financial Officer
Sirius XM Radio Inc.
1221 Avenue of the Americas, 36th Floor
New York, NY 10020

RE: Sirius XM Radio Inc.
Form 10-K for the year ended December 31, 2009
Filed February 25, 2010
File No. 001-34295

Dear Mr. Frear:

We have reviewed your filing and have the following comments. We think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Management's Discussion and Analysis..., page 26

1. Please expand your management's discussion and analysis to provide, to the extent practicable, a more detailed and quantitative analysis of known material trends or uncertainties. For example, your discussion of future subscriber revenue on page 41 should address the impact of your agreement not to raise the retail price for or reduce the number of channels in your basic program, a la carte package or new programming until July 2011 (as noted on page seven). We also note your statement on page 42 that you expect programming expenses to decrease as you reduce duplicate programming and content costs. This disclosure

should also address the potential impact on your programming expenses of the expiration of several of your third-party content agreements in 2010 and 2011 as discussed on page 15. These are just examples. Please see the Commission's Interpretive Release No. 34-48960, "Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations" for guidance.

Unaudited Pro Forma and Actual Information, page 26

2. Please tell us why it is appropriate to present financial results that "exclude the impact of purchase price accounting adjustments and refinancing transactions related to the Merger." Since the acquisition is reported in the historical financial statements as of July 2008, tell us why it is appropriate to present pro forma information for the three months ended December 31, 2008 and 2009 and for the year ended December 31, 2009. We note your disclosures on pages 27, 29, 31, 33, 52-54, 57, and 58. In addition, tell us the nature of the "Purchase Price Accounting Adjustments."

Financings and Capital Requirements, page 46

3. We note your statement that you need the consent of Liberty Media for the incurrence of debt in amounts greater than "a stated threshold." Please disclose this threshold.

Liquidity and Capital Resources, page 45

4. We note your disclosure on page F-30 regarding the nature of the covenants associated with your debt arrangements. Revise your liquidity and capital resources disclosure to include a reference to the relevant disclosure about your debt arrangements in your financial statements. In addition, revise your disclosure to identify the material terms of your debt obligations, including financial covenants and ratios, restrictions on indebtedness, events of default and the consequences of default for each agreement. Note that Release No. 34-48960 recommends expanded disclosure of material covenants when they limit, or are reasonably likely to limit, a company's ability to undertake financing to a material extent or when they restrict the ability to pay dividends.

Future Liquidity and Capital Resource Requirements, page 46

5. We note your statement that you expect to incur significant capital expenditures to construct and launch your new satellites and improve your terrestrial repeater network. Please revise your disclosure to quantify, to the extent possible, these expected expenditures. Also include a detailed discussion of your plans and ability to meet both your short-term and long-term liquidity needs. See Item 3030 of Regulation S-K. Please note that we consider "long-term" to be the period in excess of the next twelve months. See Section III.C. of Release no. 34-26831 and footnote 43 of Release no. 34-48960.

Critical Accounting Policies and Estimates

Long-Lived Assets, page 48

6. If true, disclose that material goodwill does not exist at reporting units that are at risk of failing step one. Otherwise, identify your reporting units and provide the following disclosures for each reporting unit that is at risk of failing step one:

- Percentage by which fair value exceeded carrying value as of the date of the most recent test;
- Amount of goodwill allocated to the reporting unit;
- Description of the methods and key assumptions used and how the key assumptions were determined;
- Discussion of the degree of uncertainty associated with the key assumptions. The discussion regarding uncertainty should provide specifics to the extent possible (e.g., the valuation model assumes recovery from a business downturn within a defined period of time); and
- Description of potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions.

For further guidance, refer to Release No. 33-8350 "Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations."

7. We note that FCC licenses accounted for 28.7% of total assets as of December 31, 2009. In light of the significance of your FCC licenses balance, we expect robust and comprehensive disclosure in your critical accounting policies regarding your impairment testing policy. This disclosure should provide investors with sufficient information about management's insights and assumptions with regard to the recoverability of the FCC licenses. Please identify your accounting units and for each unit of accounting (with a material license balance) that faces impairment risk, please disclose:

- The percentage by which fair value exceeded (or equaled) carrying value as of the most recent impairment test date.
- Describe the nature of the valuation techniques you employed in performing the impairment test. If you used a discounted cash flow methodology, addressing ASC Topic 805-20-S99-3, describe the method you used to isolate the cash flows associated with the intangible asset. If you used a hypothetical build-up or start method, describe qualitatively and quantitatively the significant estimates and assumptions used in your valuation method to determine the fair value of each unit of accounting in your performance analysis.
- The uncertainty associated with the key assumptions and any potential events and/or circumstances that could have a negative effect.

For further guidance, refer to Release No. 33-8350 "Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations."

Note 3. Inventory, page F-16

8. Please tell us why a portion of your estimated allowance for inventory is "reported as component of Subscriber acquisition costs" in your consolidated statements of operations.

Note 6. Indefinite Life Intangible Assets, page F-19

9. We note that you did not recognize an impairment loss for your indefinite life intangible assets in 2008. Please tell us why you did not perform an impairment test for such assets in 2009.

Note 11. Amended and Restated Credit Agreement due 2011, page F-29

10. We note that you entered into three credit agreements with Liberty Media Corporation in February and March 2009 and extinguished these agreements in June and August 2009 for losses. Please tell us in detail how the losses were determined and provide us with a reconciliation of these extinguishments to your financial statements. We note your disclosure on page F-21 that 12.5 million shares of Series B Preferred Stock was issued in partial consideration for certain loan investments.

Exhibits

11. Please file as exhibits the agreements General Motors Company and American Honda. We note your disclosure on page F-23 that GM and Honda are considered related parties. Alternatively, please advise us why you believe it is appropriate not to include such related party contracts under Item 601(b)(10) of Regulation S-K.

* * * *

As appropriate, please amend your filing and respond to these comments through correspondence over EDGAR within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are

responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comment, please provide, in writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

You may contact Dean Suehiro, Staff Accountant, at (202) 551-3384 or Carlos Pacho, Senior Assistant Chief Accountant, at (202) 551-3810 if you have questions regarding comments on the financial statements and related matters. Please contact Jessica Plowgian, Attorney-Advisor, at (202) 551-3367 or me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spigel
Assistant Director