

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

May 9, 2011

U.S. Mail and Fax (646-313-2170)

Mr. David 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 fiscal year ended December 31, 2010

Filed February 16, 2011

Form 10-Q for the quarterly period ended March 31, 2011

Filed May 3, 2011 File No. 001-34295

Dear Mr. Frear:

We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Please provide us with the requested information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2010

<u>Management's Discussion and Analysis of Financial Condition and Results of Operations Subscribers, page 34</u>

Free Cash Flow, page 37

- 1. We note that your Chief Executive Officer stated on an earnings call on February 15, 2011 that free cash flow is "the most important measure of a business' success." Please expand to discuss the following:
 - the manner in which you use free cash flow to conduct or evaluate your business;
 - the economic substance behind your decision to use it;

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- the material limitations associated with the use of the free cash flow as compared to the use of the most directly comparable GAAP measure, net cash provided by operating activities; and
- the manner in which you compensate for these limitations when using free cash flow.

Please provide us with the proposed discussion that you will include in future filings to provide the details above.

Form 10-Q for the Quarterly Period Ended March 31, 2011

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 24

Subscriber Data, page 30

2. We note that you have deleted the subscriber information based on retail, OEM and rental in your most recent Form 10-Q. We also note that that your satellite radios are primarily distributed through OEMs, retail locations and your website. Further, you discuss the impact of the OEM and retail businesses on your results of operations in the MD&A and/or in your earnings calls. Please tell us why such information was deleted and your conclusion as to why such information is not considered meaningful to your investors to understand your business and results of operations.

Please file all correspondence over EDGAR. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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.

You may contact Dean Suehiro, Senior Staff Accountant, at (202) 551-3384 or Robert Littlepage, Accountant Branch Chief, at (202) 551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810

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with any other questions.

Sincerely,

Larry Spirgel Assistant Director