

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

Mail Stop 3720

August 5, 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 Definitive Proxy Statement Filed April 15, 2010

Form 10-Q for the fiscal year ended March 31, 2010

Filed May 7, 2010 File No. 001-34295

Dear Mr. Frear:

We have reviewed your response letters dated May 10, May 21, and July 15, 2010 and have the following comments.

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.

Unaudited Pro Forma and Actual Information, page 26

1. We note your responses dated May 10, May 21, and July 15, 2010 to comment two from our letter dated April 26, 2010. We understand that you will revise the presentations in future filings.

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Critical Accounting Policies and Estimates

Long-Lived Assets, page 48

- 2. We note your response dated May 10, 2010 to comment six from our letter dated April 26, 2010. Please revise your proposed disclosures to state that your "single reporting unit is not at risk of failing step one."
- 3. We note your response dated May 10, 2010 to comment seven from our letter dated April 26, 2010. As previously requested, please revise your proposed disclosures to state that you have one unit of accounting.

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Please respond to these comments through correspondence over EDGAR within 10 business days or tell us when you will provide us with a response. You may contact Dean Suehiro, Senior Staff Accountant, at (202) 551-3384 or Carlos Pacho, Senior Assistance Accountant, at (202) 551-3858 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 if you have any other questions.

Sincerely,

Larry Spirgel Assistant Director