

VIA EDGAR AND BY FEDERAL EXPRESS

Sonia Gupta Barros, Esq.
Angela McHale, Esq.
United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-0404

**Re: Hannon Armstrong Sustainable Infrastructure Capital, Inc.
Registration Statement on Form S-11
Filed on March 14, 2013
File No. 333-186711**

Dear Ms. Gupta Barros and Ms. McHale:

On behalf of our client, Hannon Armstrong Sustainable Infrastructure Capital, Inc., a Maryland corporation (the “Company”), set forth below are the responses of the Company to the comments of the Staff of the Division of Corporation Finance (the “Staff”) of the Securities and Exchange Commission contained in the Staff’s letter dated February 28, 2013 (the “February 28 Letter”), with respect to the Registration Statement on Form S-11 (File No. 333-186711)(the “Registration Statement”), filed with the Securities and Exchange Commission on February 15, 2013. The responses are set out in the order in which the comments were set out in the February 28 Letter and are numbered accordingly.

We have enclosed with this letter a marked copy of Pre-Effective Amendment No. 1 to the Registration Statement, which was filed today by the Company via EDGAR, reflecting all changes to the Registration Statement in response to the comments of the Staff contained in the February 28 Letter as well as changes arising from the passage of time since February 15, 2013. All page references in the responses below are to the pages of the marked copy of Pre-Effective Amendment No. 1 to the Registration Statement.

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 62

Results of Operations, page 72

- 1. We note your response to prior comment 7 and your revisions to your filing. Please further revise your filing to disaggregate the financing receivables information for (1) after five years through ten years and (2) after ten years. In addition, state the weighted average yield for each range of maturities. Further, please tell us how you determined that you did not need to provide disclosures from Item II of Guide 3 for your securitization assets.**

In response to the Staff’s comment, the Company has revised the disclosure on page 74 under the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Investment in Financing Receivables” to include the requested after five years through ten years and after ten year columns and to add an analysis by similar periods of the anticipated maturity date of its investment in financing receivables and the associated weighted average yield. The Company has also added the Item II of Guide 3 disclosure on page 74 under the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Other Investments” related to the residual assets from the Company’s securitization trusts.

Financial Statements of Hannon Armstrong Capital, LLC for the interim period ended December 31, 2012

Notes to Condensed Consolidated Financial Statements, page F-14

2. Summary of Significant Accounting Policies, page F-14

Modifications to Investments in Financing Receivables and Debt, page F-16

2. We note your response to prior comment 6 and your revisions to your filing. Please tell us and revise your filing to disclose whether or not the modification resulted in the modified financing receivable having an effective yield that is at least equal to the effective yield for the original financing receivable. Please refer to paragraph 9 of ASC 310-20-35.

In response to the Staff's comment, the Company has revised its disclosure on pages F-17 and F-35 under the captions "Notes to Condensed Consolidated Financial Statements (Unaudited) for Hannon Armstrong Capital, LLC" and "Notes to Consolidated Financial Statements for Hannon Armstrong Capital, LLC," respectively, to make clear that the modified receivable had an effective yield equivalent to the effective yield of the original financing receivable and that the terms of the modified receivable are as favorable to the Company as other loans with similar risks.

Financial Statements of Hannon Armstrong Capital, LLC for the year ended September 30, 2012, page F-27

Consolidated Statements of Operations, page F-29

3. We note your response to prior comment 8 and your revisions to your filing. Your revisions did not address our comment, as such, our comment will be reissued. Please further revise your filing to present "(Loss) income from equity method investments in affiliate" within other expenses, net. Please refer to Rule 9-04 of Regulation S-X.

In response to the Staff's comment, the Company has revised the disclosure on page 20 under the caption "Prospectus Summary—Summary Financial Data," page 62 under the heading "Selected Pro Forma and Historical Financial and Operating Data," pages 75, 76, 77 and 78 under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations," and pages F-4, F-5, F-11 and F-29 of the financial statements to present "(Loss) income from equity method investments in affiliate" within other expenses, net.

We thank the Staff for its attention to the Company's filing and we look forward to hearing from you regarding the Registration Statement. If you have any questions or comments regarding the foregoing, or have additional questions or comments, please contact the undersigned at 212-878-8527 or Andrew S. Epstein at 212-878-8332.

Very truly yours,

/s/ Jay L. Bernstein
Jay L. Bernstein

Enclosures

cc: Securities and Exchange Commission
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