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 April 15, 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 April 11, 2013 (the "April 11 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 April 4, 2013. The responses are set out in the order in which the comments were set out in the April 11 Letter and are numbered accordingly.

We have enclosed with this letter a marked copy of Pre-Effective Amendment No. 4 to the Registration Statement, which the Company will file via EDGAR on Monday, April 15, 2013, reflecting all changes to the Registration Statement in response to the comments of the Staff contained in the April 11 Letter as well as changes arising from the passage of time since April 4, 2013. All page references in the responses below are to the pages of the marked copy of Pre-Effective Amendment No. 4 to the Registration Statement.

Form S-11/A Amendment 2

Use of Proceeds, page 57

1. Throughout your filing, you disclose that you will use \$110.0 million of net proceeds to complete eight financing transactions. This \$110.0 million does not appear to be consistent with the information from adjustment 4 to your Unaudited Pro Forma Condensed Consolidated Balance Sheet. Additionally, throughout your filing you disclose the estimated net proceeds remaining after certain uses will be \$75M. Please reconcile the \$75 million amount of net proceeds (after adjusting for the \$7 million in assumed financings that are not reflected in your pro forma financial information) with the \$73.1 million change in cash on your Unaudited Pro Forma Condensed Consolidated Balance Sheet.

In response to the Staff's comment, the Company supplementally advises the Staff that in the Use of Proceeds section on page 57, the Company included the expected net proceeds based on information at or near the closing of the offering in April 2013. However, the Unaudited Pro Forma Condensed Consolidated Financial Statements are as of the most recent interim balance sheet date, December 31, 2012. The primary reconciling item between the net proceeds in the Use of Proceeds section and the Unaudited Pro Forma Condensed Consolidated Financial Statements is the scheduled repayments that have been made on the notes that the Company plans to retire with proceeds from the offering. Both the Use of Proceeds section and the Unaudited Pro Forma Condensed Consolidated Financial Statements were prepared assuming that \$7 million of the assumed financings would be through a securitization.

As shown on the attachment to this letter, the Company is prepared to add language to Note 4 on page F-6 to disclose that because the Company makes periodic payments on the notes, the ultimate payment required to retire the notes with the proceeds from the offering will be less than the amount presented in the Unaudited Pro Forma Condensed Consolidated Financial Statements.

2. You disclose that you may fund \$7 million of the eight financing transactions through a securitization. Please provide to us management's analysis of the probability of this securitization transaction and whether or not management has reflected that amount in your pro forma financial statements. If management determined that this securitization is not probable, please revise your disclosure to specifically state this assessment.

In response to the Staff's comment, the Company supplementally advises the Staff that the Company believes that it is probable that it will fund one of the expected transactions through a securitization. The terms of the financing are consistent with the expectations of the intended securitization partner. The Company's securitization partner has closed at least one transaction with the Company in 10 of the last 12 quarters leading up to and through the quarter ended December 31, 2012. The Company has considered the expected securitization in developing its proforma financial statements.

Business, page 90

Our Pipeline, page 103

3. We note that you have agreements to provide syndication services to finance approximately \$2.4 billion projects and you have entered into a letter of intent to finance a series of clean energy projects. Please provide to us management's analysis of the probability of these financings including management's historical rate of closing such financings. If management determined that these financings are not probable, please revise your disclosure to specifically state this assessment.

We have been informed by the Company that historically a very high percentage of agreements to provide syndication support services have in fact resulted in completed transactions for which the Company has received fees. We therefore do not believe the disclosure should be revised. We also note that the Registration Statement in this section already states that "There can, however, be no assurance that transactions in our pipeline will be completed." This sentence clearly communicates to investors the uncertainty of converting pipeline opportunities.

Financial Statements

Unaudited Pro Forma Condensed Consolidated Financial Statements, page F-2

Unaudited Pro Forma Condensed Consolidated Balance Sheet, page F-3

- 4. Please disaggregate the adjustments for each financial statement line item. For example, you have three adjustments for Cash and cash equivalents; please present the amounts for each of these three adjustments separately on the face of the Unaudited Pro Forma Condensed Consolidated Balance Sheet.
 - In response to the Staff's comment, the Company is prepared to revise the Pro Forma Condensed Consolidated Balance Sheet on page F-3 to disaggregate the adjustments for each financial statement line item, as shown on the attachment to this letter.
- 5. Please disclose the number of share authorized and shares issued and outstanding on a historical basis and pro forma basis. Further, please tell us why you expect to provide the number of shares authorized and shares issued and outstanding on a pro forma as adjusted basis.

In response to the Staff's comment, the Company is prepared to update its Unaudited Pro Forma Condensed Consolidated Balance Sheet on page F-3 to show the number of shares authorized and shares issued and outstanding on a historical and pro forma basis, as shown on the attachment to this letter. Additionally, the Company is prepared to remove the references to shares authorized and shares issued and outstanding on a pro forma as adjusted basis, as shown on the attachment to this letter, as such amounts are not applicable.

Notes to Unaudited Pro Forma Condensed Consolidated Financial Statements, page F-6

6. We note your adjustment 2. Please tell us why you removed your adjustment to reflect the \$3.4 million accrued capital contribution payment.

As disclosed on page 13 under the heading "Prospectus Summary—The Structure and Formation of Our Company," the Company concluded that its interest in HA EnergySource Holdings, LLC was not suitable for inclusion as part of the Company's

plan to continue its business as a real estate investment trust and would be distributed to the current owners of Hannon Armstrong Capital, LLC prior the closing of the offering. Such distribution occurred prior to December 31, 2012. In preparing the Unaudited Pro Forma Condensed Consolidated Balance Sheet, the Company concluded that the \$3.4 million accrued capital contribution to HA EnergySource Holdings, LLC remained an obligation of the Company as of December 31, 2012, the date of the pro forma. Accordingly, the Company determined that a pro forma adjustment was not appropriate, and the Company removed the discussion related to such pro forma adjustment from the Notes to the Unaudited Pro Forma Condensed Consolidated Financial Statements.

Hudson Ranch I Holdings, LLC Financial Statements, page F-78

7. Please tell us how you determined it was not necessary to provide Rule 3-09 financial statements for Hudson Ranch TE Holdings LLC.

As described in more detail in Note 1 of EnergySource LLC's December 31, 2012 audited financial statements on page F-66, Hudson Ranch TE Holdings LLC was formed in connection with a significant equity contribution made by Chevron in September 2012. As a result of the transaction, Hannon Armstrong Capital, LLC's net economic interest in Hudson Ranch TE Holdings was reduced to less than 3% and its effect on earnings was only for the period from September 26, 2012 to September 30, 2012. In assessing significance, the Company followed guidance in Section 2405.6 in the Division of Corporation Finance Reporting Manual in applying the significant subsidiary test to lower tier equity method investees. Based on the application of the test, the Company determined that it was not necessary to provide Rule 3-09 financial statements for Hudson Ranch TE Holdings LLC.

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 Jennifer Monick

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