

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

Mail Stop 3010

November 10, 2015

J. Brendan Herron Chief Financial Officer Hannon Armstrong Sustainable Infrastructure Capital, Inc. 1906 Towne Centre Blvd., Suite 370 Annapolis, MD 21401

Re: Hannon Armstrong Sustainable Infrastructure Capital, Inc. Form 10-K for the Fiscal Year Ended December 31, 2014

Filed March 9, 2015 File No. 000-35877

Dear Mr. Herron:

We have limited our review of your filing to the financial statements and related disclosures and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2014

Financial Statements and Supplementary Data, page 91

Summary of Significant Accounting Policies, page 100

Securitizations of Receivables, page 103

- 1. We note that you use sale accounting for receivables transferred to your special purpose entities or securitizations trusts and that your disclosures state that your analysis of the structure of these entities under US GAAP have lead you to the conclusion that you are not the primary beneficiary for purposes of consolidation. Please address the following:
 - Please provide us your analysis under ASC 860-10-40 used in determining the appropriateness of sale accounting for these transfers, including the requirements of paragraph 40-5.

J. Brendan Herron Armstrong Hannon Sustainable Infrastructure Capital, Inc. November 10, 2015 Page 2

- Please tell us if a true-sale-at-law opinion and/or a non-consolidation opinion were obtained in connection with your analysis. If so, please revise future filings to disclose that fact.
- Please tell us the specific nature of your residual interests in securitized assets and discuss your rights to the associated cash flows.
- Please tell us what your rights as servicer of the assets are regarding decision making for the underlying assets and the day to day operations of the trusts. Please provide us an example of one of your servicing agreements with the relevant sections highlighted.

Variable Interest Entities and Equity Method Investments in Affiliate, page 105

2. Please tell us in greater detail how you determined the appropriateness of the equity method in recording your investment in Strong Upwind. Noting your 50% ownership, discuss how the entity is managed, who has the decision making authority and how disagreements are resolved.

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.

J. Brendan Herron Armstrong Hannon Sustainable Infrastructure Capital, Inc. November 10, 2015 Page 3

You may contact Paul Cline at (202) 551-3851 or me at (202) 551-3693 with any questions.

Sincerely,

/s/ Eric McPhee

Eric McPhee Staff Accountant Off ice of Real Estate and Commodities