

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

Mail Stop 3010

January 6, 2016

Via E-mail
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 Filed March 9, 2015 Response dated November 18, 2015

File No. 000-35877

Dear Mr. Herron:

We have reviewed your response to our comment letter dated November 6, 2015 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 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. Please refer to your response to comment 1 and address the following:
- Please provide us with an expanded description of the certain financing receivables and other debt investments that are included in the securitization trusts including the

J. Brendan Herron Armstrong Hannon Sustainable Infrastructure Capital, Inc. January 1, 2016 Page 2

characteristics that make them primarily due from the federal government, as referenced in your response, and clarify your disclosure in future filings.

- We note from your response that you have legal opinions in support of your use of sale
 accounting and that they include true-sale-at-law opinions and/or non-consolidation
 opinions. Please tell us and revise future filings to disclose, if true, that you have both a
 true-sale-at-law legal opinion and a non-consolidation legal opinion for each trust.
 Otherwise, provide a more detailed discussion of how you met the requirements of sale
 accounting.
- 2. Please tell us if and under what circumstances the company is obligated to repurchase financing receivables and other debt instruments from the securitization trusts.

General

3. Please file the information referenced in Exhibit A on EDGAR. If you wish, you may file a request for confidential treatment, subject to the applicable rules.

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