



American Capital Agency Corp.
Two Bethesda Metro Center,
14th Floor
Bethesda, MD 20814
(301) 968-9300
(301) 968-9301 Fax

April 15, 2015

VIA EDGAR AND EMAIL

Ms. Jaime G. John
Ms. Kristi Marrone
Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

RE: American Capital Agency Corp. Form 10-K for the year ended December 31, 2014 (File. No. 001-34057)

Dear Mses. John and Marrone:

American Capital Agency Corp. (the "Company") is in receipt of your comment letter dated March 17, 2015 (the "Comment Letter"), which sets forth the comments of the staff (the "Staff") of the Division of Corporate Finance (the "Division") of the Securities and Exchange Commission (the "Commission") regarding the above-mentioned filing. The numbered paragraphs below respond to each of the Staff's comments in the Comment Letter, by setting forth the Staff's comment followed by the Company's response thereto.

Note 7. Fair Value Measurements, page 99

1. We note your disclosure on page 84 that you estimate the fair value of your "non-centrally cleared" interest rate swaps using inputs from counterparty and third-party pricing models to estimate the net present value of the future cash flows. We further note that these assets and liabilities are classified within Level 2 of the fair value hierarchy. Please provide us with additional details to support your Level 2 classification.

As noted in Note 7 (page 99) of the filing, we classify assets and liabilities within Level 2 of the fair value hierarchy when the fair value of such instruments is derived from inputs based on quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.

We determine the fair value of our non-centrally cleared interest rate swaps based on valuations obtained from third-party pricing services and the swap counterparty (collectively "third-party valuations"). The third-party valuations are model-driven using observable inputs consisting

of LIBOR and the forward yield curve. We also consider the creditworthiness of both us and our counterparties and the impact of netting and credit enhancement provisions contained in each derivative agreement, such as collateral postings. All of our non-centrally cleared interest rate swaps are subject to bilateral collateral arrangements. Consequently, no credit valuation adjustment was made in determining the fair value of such instruments.

In response to the Staff's comment, in future filings we will clarify our disclosure pertaining to the classification of non-centrally cleared interest rate swaps within Level 2 of the fair value hierarchy as described above.

In submitting this letter, the Company acknowledges:

- 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.

We hope that this letter addresses the Staff's questions and comments. If we can be of assistance in facilitating the Staff's review of our responses to the Comment Letter, please contact Cydonii Fairfax at (301) 841-1384 or me at (301) 841-1405. Thank you in advance for your prompt attention to this matter.

Sincerely,

/s/ Samuel A. Flax

Samuel A. Flax
Executive Vice President and Secretary