



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

DIVISION OF
CORPORATION FINANCE

June 29, 2010

Mr. Malon Wilkus
President and Chief Executive Officer
American Capital Agency Corp.
2 Bethesda Metro Center, 14th Floor
Bethesda, MD 20814

**Re: American Capital Agency Corp.
Form 10-K for the year ended December 31, 2009
Filed February 24, 2010
Form 10-Q for the quarter ended March 31, 2010
Filed May 3, 2010
File No. 001-34057**

Dear Mr. Wilkus:

We have reviewed your above referenced filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Note 4. Repurchase Agreements, page 88

1. We understand that you have entered into repurchase transactions accounted for as collateralized borrowings. For each of the quarters in the last two years, please provide us with a table showing the average amount of repurchase transactions outstanding during the quarter and the amount of these repurchase transactions outstanding as of the end of each quarter. To the extent there are significant variations between the average level of these transactions and the amounts outstanding at each quarter end, please explain to us why. In future periodic filings we believe the inclusion of the information described above would be useful to investors and should be included.

Mr. Malon Wilkus
American Capital Agency Corp.
June 29, 2010
Page 2

Exhibit 31

2. We note that the certifications filed as Exhibit 31 to your Form 10-K are not in the proper form. Specifically, paragraph 4(b) has been omitted. The required certifications must be in the exact form prescribed; the wording of the required certifications may not be changed in any respect. Accordingly, please file an amendment to your Form 10-K that includes the entire filing together with the certification of your current CEO and CFO in the form currently set forth in Item 601(b)(31) of Regulation S-K. Please also amend the certifications in Form 10-Q filed for the first quarter of 2010, as necessary, in response to this comment.

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.

You may contact Kristi Marrone at (202) 551-3429 or me at (202) 551-3486 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Daniel L. Gordon
Branch Chief

cc: Samuel A. Flax, Esq. (*via facsimile*)