

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-4631

July 19, 2013

<u>Via Facsimile</u>
Mr. William F. Oplinger
Chief Financial Officer
Alcoa Inc.
390 Park Avenue
New York, NY 10022-4608

Re: Alcoa Inc.

Form 10-K for Fiscal Year Ended December 31, 2012

Filed February 15, 2013

Response Letter Dated July 5, 2013

File No. 1-03610

Dear Mr. Oplinger,

We have reviewed your response 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 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.

Form 10-K for Fiscal Year Ended December 31, 2012

Critical Accounting Policies

Goodwill, page 74

1. We note your response to prior comment number two in our letter dated June 7, 2013. Please enhance your proposed disclosures in future filings to quantify the specific key assumptions that drive your fair value estimates and provide sensitivity analyses that demonstrate how changes in each assumption would impact your estimates. Also, please provide disclosure of any changes to your key assumptions from period to period.

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Closing Comments

You may contact Kevin Stertzel at (202) 551-3723, or Anne McConnell at (202) 551-3709 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3768 with any other questions.

Sincerely,

/s/ W. John Cash

W. John Cash Branch Chief