

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

May 29, 2013

Via E-mail

Mr. Richard H. Fearon Vice Chairman and Chief Financial and Planning Officer Eaton Corporation plc 70 Sir John Rogerson's Quay Dublin 2, Ireland

RE: Eaton Corporation plc

Form 10-K for the Year ended December 31, 2012

Filed February 28, 2013

Form 10-Q for the Quarter ended March 31, 2013

Filed May 3, 2013 File No. 0-54863

Dear Mr. Fearon:

We have reviewed your filings 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 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, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

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

Consolidated Audited Financial Statements

Note 6. Retirement Benefits Plans, page 35

- 1. We note that the actual returns on plan assets for your pension plans located inside and outside of the United States have fluctuated significantly from fiscal 2010 to 2012. In light of these variations in actual returns on plan assets compared to the expected long-term return on plan asset assumptions used to calculate your pension expense, please address the following:
 - Tell us in detail how you determined your 2012 expected long-term return on plan assets rate of 8.5% for U.S. plans and 7.1% for non-U.S. plans.

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- Show us how your target pension plan allocations compare to your actual pension plan allocations for each period presented. Please provide this information separately for U.S. and non-U.S. plans;
- Help us understand how the actual asset mix for each of your significant pension plans and the historical performance of these assets support your 2012 assumptions for expected long-term rates of return; and
- Quantify for us any pension plan assets invested in European sovereign debt and the
 impact that these holdings had on your actual returns on pension plan assets during the
 periods presented.

Note 14. Business Segment Information, page 58

2. We note your disclosures on page 15 of your Form 10-Q for the period ended March 31, 2013 that certain reportable operating segments were re-segmented during the first quarter of 2013 due to a reorganization of your business. Additionally, it appears that you are incorporating your December 31, 2012 annual financial statements on Form 10-K into a registration statement on Form S-8. Please tell us how you considered the need to revise your segment reporting financial statement footnote, description of business, MD&A and other Form 10-K disclosures as necessary to reflect the new reportable segments. The revised annual financial statements and related disclosures could be included in the registration statement or in a Form 8-K incorporated by reference.

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.

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You may contact Jeffrey Gordon, Staff Accountant, at (202) 551-3866 or, in his absence, Lisa Etheredge, Staff Accountant, at (202) 551-3424 if you have questions regarding these comments.

Sincerely,

/s/ Rufus Decker

Rufus Decker Accounting Branch Chief