

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

DIVISION OF CORPORATION FINANCE

May 4, 2012

<u>Via E-mail</u> Jean Bua, Chief Financial Officer NetScout Systems, Inc. 310 Littleton Road Westford, MA 01886

> Re: NetScout Systems, Inc. Form 10-K for the Fiscal Year Ended March 31, 2011 Filed May 27, 2011 File No. 000-26251

Dear Ms. Bua:

We have reviewed your response letter dated April 6, 2012 and have the following comments. Unless otherwise noted, references to our prior comment refer to our letter dated March 27, 2012.

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 the Fiscal Year Ended March 31, 2011

Part III (Incorporated by Reference from Schedule 14A Filed on July 26, 2011)

Compensation and Other Information Concerning Directors and Executive Officers, page 36

1. We have reviewed your response to prior comment 1. Please confirm that your Form 10-K for the fiscal year ended March 31, 2012, or the 2012 annual meeting proxy statement if Part III information will be incorporated by reference, will provide a summary compensation table and a director compensation table that include corrected compensation information for the fiscal year ended March 31, 2011. Include in your future filings, as applicable, an explanation of any discrepancies between the compensation information as reported in your 2011 proxy statement and the corrected information for the same year as reported in future filings. Additionally, please confirm that you will include in future filings, as applicable, clarifying disclosure describing your

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incentive-based compensation and equity awards that is consistent with your responses to prior comments 4 through 6 of your response letter dated February 16, 2012.

You may contact Edwin Kim, Staff Attorney, at (202) 551-3297 or me at (202) 551-3457 with any questions or concerns. If you require further assistance, you may contact Barbara C. Jacobs, Assistant Director, at (202) 551-3735.

Sincerely,

/s/ Maryse Mills-Apenteng

Maryse Mills-Apenteng Special Counsel