

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

April 20, 2012

Via E-mail

Mr. Daniel W. Fairfax Chief Financial Officer Brocade Communications Systems, Inc. 130 Holger Way San Jose, CA 95134

Re: Brocade Communications Systems, Inc.

Form 10-K for the fiscal year ended October 29, 2011

Filed December 20, 2011 File No. 000-25601

Dear Mr. Fairfax:

We have reviewed your letter dated March 30, 2012 in connection with the above-referenced filing and have the following comments. In 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. Unless otherwise noted, where prior comments are referred to they refer to our letter dated March 20, 2012.

Notes to Consolidated Financial Statements

Note 1. Basis of Presentation

Reclassification, page 68

1. Your response to prior comment 1 indicates that the role of the system engineer was evolving throughout 2010 and that by the end of 2010 the majority of their time was spent on pre-sales activity. However, we note that your response to prior comment 3 in your letter dated February 23, 2012 indicates that by the end of 2009 the system engineers were no longer necessary for post-sales support and therefore as fiscal 2010 began the primary role of the system engineer was pre-sales. Please reconcile these two

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responses to clearly indicate when the role of the system engineer was primarily changed. Please describe the nature of the system engineers' activity in the beginning of fiscal 2010 and describe any activities that were not related to pre-sales activity. Indicate whether another employee group provided post-sale support starting in 2010.

- 2. Your response indicates that during the second half of fiscal 2010 you performed a survey of your system engineers to determine where they spend the majority of their time. Please tell us when exactly in 2010 you completed this survey and provide us with a summary of the results of the survey. As part of your response, please tell us what you mean by the "majority" of their time.
- 3. Your response to prior comment 3 in your letter dated February 23, 2012 indicates that during fiscal 2009 you began to build up your Global Services organization so that they could take on the post-sales support that the system engineers were providing and that this build up was substantially completed at the end of 2009 such that the system engineers were no longer necessary to provide post-sales support. Considering that you knew by the end of 2009 that the system engineers role was in the process of changing and had substantially changed by the end of 2009 please explain to us why you did not establish procedures or controls to monitor the system engineers time such that you could allocate their time between pre- and post-sales support as well as determine when the transition was complete. Tell us whether the system engineers were directed to stop providing post-sales activity at a certain point in time. Please advise.
- 4. Your response indicates that you elected to reclass the full year rather than try to identify a specific, subjective transition point. Explain why the full year was an appropriate basis for classifying the system engineer's expense in 2010. Please explain whether you believe that the post-sales support activity during the transition period was not material to your income statement presentation.

You may contact Ryan Rohn, Staff Accountant, at (202) 551-3739 or Christine Davis, Assistant Chief Accountant, at (202) 551-3408 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3730 with any other questions.

Sincerely,

/s/ Stephen Krikorian

Stephen Krikorian Accounting Branch Chief