

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

Mail Stop 4561

January 10, 2017

Michael Bell President and Chief Executive Officer Silver Spring Networks, Inc. 230 W. Tasman Drive San Jose, California 95134

Re: Silver Spring Networks, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2015

Filed March 9, 2016

Form 10-Q for the Quarterly Period Ended September 30, 2016

Filed November 9, 2016

Form 8-K filed November 3, 2016

File No. 001-35828

Dear Mr. Bell:

We have reviewed your December 22, 2016 response to our comment letter and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our December 8, 2016 letter.

Form 10-Q for the Quarterly Period Ended September 30, 2016

Management's Discussion and Analysis of Financial Condition and Results of Operations

Key Non-GAAP and Other Financial Metrics, page 24

1. We note from your response to prior comment 3 that your non-GAAP performance measures address the unique circumstances of your customer deployments. However, your presentations of non-GAAP gross profit and gross margin on billings (including gross profit and gross margin on product billings and gross profit and gross margin on

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services billings), non-GAAP operating income (loss), non-GAAP operating margin, non-GAAP net income (loss), non-GAAP income (loss) per share, and adjusted EBITDA cannot reflect any changes in management decisions associated with the non-GAAP billings and non-GAAP cost of billings. These non-GAAP measures are inconsistent with the guidance in Question 100.04 of the Compliance and Disclosure Interpretations on Non-GAAP Financial Measures. Please revise your future presentation of these non-GAAP measures.

You may contact Melissa Walsh, Staff Accountant, at (202) 551-3224 if you have questions regarding comments on the financial statements and related matters. If you require further assistance, do not hesitate to contact me at (202) 551-3488.

Sincerely,

/s/ Stephen Krikorian

Stephen Krikorian Accounting Branch Chief Office of Information Technologies and Services