



DIVISION OF
CORPORATION FINANCE

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

Mr. Michael Bielonko
Chief Executive Officer
Cyalume Technologies Holdings, Inc.
96 Windsor Street
West Springfield, Massachusetts 01089

January 25, 2011

Re: Cyalume Technologies Holdings, Inc.
Form 10-K for the fiscal year ended December 31, 2009
Filed March 22, 2010
File No. 0-52247

Dear Mr. Bielonko:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Larry Spigel
Assistant Director