



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