



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 3030

August 17, 2017

Michael Hunkapiller, Ph.D.  
Chief Executive Officer  
Pacific Biosciences of California, Inc.  
1305 O'Brien Drive  
Menlo Park, California 94025

**Re: Pacific Biosciences of California, Inc.  
Registration Statement on Form S-3  
Filed August 2, 2017  
File No. 333-219642**

Dear Dr. Hunkapiller:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Tim Buchmiller at (202) 551-3635 with any questions.

Sincerely,

/s/ Tim Buchmiller for

Amanda Ravitz  
Assistant Director  
Office of Electronics and Machinery

cc: Donna M. Petkanics, Esq.  
Wilson Sonsini Goodrich & Rosati, P.C.