

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

April 28, 2014

Via E-mail
Mr. Charles Boynton
Executive Vice President and Chief Financial Officer
SunPower Corporation
77 Rio Robles
San Jose, CA 95134

Re: SunPower Corporation.

Form 10-K for the fiscal year ended December 29, 2013

Filed February 18, 2014 File No. 001-34166

Dear Mr. Boynton:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn Accounting Branch Chief