



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

January 9, 2014

Via E-Mail

Mr. Alain J. Castro
Chief Executive Officer and Director
Ener-Core, Inc.
9400 Toledo Way
Irvine, CA 92618

**Re: Ener-Core, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed December 31, 2013
File No. 333-192612**

Dear Mr. Castro:

We reviewed your filing and have the comment below.

Executive Compensation, page 43

1. Please update your executive compensation disclosure to provide the information called for by Item 402 of Regulation S-K for your fiscal year ended December 31, 2013. For guidance, please refer to Question 117.05 of our Regulation S-K Compliance and Disclosure Interpretations.

As appropriate, please amend your filing in response to this comment. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

Mr. Alain J. Castro
Ener-Core, Inc.
January 9, 2014
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You may direct questions to Edward M. Kelly, Senior Counsel, at 202-551-3728 or Erin K. Jaskot, Staff Attorney, at (202) 551-3442.

Sincerely,

/s/ Erin K Jaskot, *for*

Pamela A. Long
Assistant Director

cc: Via E-Mail
Kevin K. Leung, Esq.
LKP Global Law, LLP