



DIVISION OF
CORPORATION FINANCE

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

October 23, 2013

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 Current Report on Form 8-K
Filed October 7, 2013
File No. 333-173040

Dear Mr. Castro:

We have reviewed your response letter and the above-referenced filing, and have the following comments.

Explanatory Note

1. We note your statement that the second amendment to your Form 8-K speaks as of the date of the original filing and does not reflect events that may have occurred after the date of the original filing. Each amendment to your Form 8-K should be updated to present the legal disclosure as of the date of the amendment. Please revise the Form 8-K accordingly.

Related Party Transactions, page 32

2. Please revise your disclosure in this section to provide all of the information required by Item 404(d) of Regulation S-K. For example, you should provide the name of the individuals or entities from which you borrowed funds and disclose the basis on which the individual or entity is a related person. Please also ensure that you include all transactions which are required to be disclosed by Item 404(d) of Regulation S-K. We note, for example, various transactions listed in Note 8 to your financial statements filed with your Form 10-Q for the quarter ended June 30, 2013 that are not disclosed in the related party transactions section of your Form 8-K.

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Recent Sales of Unregistered Securities, page 40

3. Please revise your disclosure in this section to provide all of the information required by Item 701 of Regulation S-K, including the date of sale, title and amount of securities sold, the name of the person or class of persons to whom the securities were sold, and the consideration paid for the securities. Please also include all transactions required to be disclosed during the time period covered by Item 701. We note, for example, the issuance of shares to certain shareholders in connection with notes payable and advances to the company that are not disclosed in this section.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested supplemental information. Detailed response letters greatly facilitate our review. Please file your response letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

You may direct questions on accounting comments to Kevin W. Stertzel, Staff Accountant, at (202) 551-3723 or W. John Cash, Accounting Branch Chief, at (202) 551-3768. You may direct questions on other comments and disclosure issues 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