



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

October 2, 2013

Via E-Mail

Mr. Kamyar Mofid
Chief Executive Officer and Director
Real Goods Solar, Inc.
833 West South Boulder Road
Louisville, CO 80027

**Re: Real Goods Solar, Inc.
Registration Statement on Form S-4
Filed September 5, 2013
File No. 333-191065**

Dear Mr. Mofid:

We have limited our review of your registration statement to those issues that we have addressed in our comments. In some of our comments, we may ask you to provide us information so that we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. Where you do not believe that our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information that you provide in response to these comments, we may have additional comments.

Letter to Shareholders

1. We note that the letter to shareholders is to serve also as the outside front cover page of the joint proxy statement/prospectus on Form S-4. Limit the letter to one page as required by Item 501(b) of Regulation S-K.
2. Please state the number of shares of Real Goods Solar common stock that holders of Mercury preferred stock will receive on a per share basis, based on your stated assumptions regarding the average closing price of Real Goods Solar shares and the amounts that will be placed in escrow at closing.

Questions and Answers about the Merger, page 1

3. You repeat information about the special meetings and the merger in the summary section and the questions and answers or Q&A section. The Q&A should not repeat information that appears in the summary and vice versa. For purposes of eliminating redundancies and grouping together like information, view the summary and Q&A as one section. For example, discuss procedural questions such as voting and appraisal procedures specific to the merger in the Q&A, and place disclosure of the substantive aspects of the merger in the summary.

Summary, page 11

4. A summary term sheet beginning on the first or second page of the disclosure document provided to shareholders is required by Item 1001 of Regulation M-A. See Item 14(b)(1) of Schedule 14A and instruction 2 to Item 1001 of Regulation M-A. If you intend for the summary section to serve as the summary term sheet, move it forward to begin on the first or second page of the disclosure document.
5. Balance the disclosure in this section with a brief description of the risks of engaging in the merger. We note the cross reference to the risk factors section on page 16.
6. Please include disclosure that explains what will happen to Mercury common shares in the merger. Please also briefly explain how the number of shares of Real Goods Solar that are issued in the merger may be adjusted based on their market price and the working capital of Mercury. Include the range of Real Goods Solar's market share price that will trigger an adjustment. Please also explain, if true, that Mercury shareholders will receive cash in lieu of any fractional shares of Real Goods Solar. Please include similar disclosures on your cover page.

Material U.S. Federal Income Tax Consequences of the Merger, page 14; Material U.S. Federal Income Tax Consequences of the Merger, page 70

7. We note the "Assuming" language on pages 14 and 70. Revise to remove any uncertainty about the merger's federal income tax consequences.
8. Delete the word "generally" here and wherever it appears on page 70, as this may imply that shareholders cannot rely on the disclosure. Please also delete the word "certain" in the first sentence on page 70 for the same reason. It should be clear that you are describing the material federal income tax consequences of the transaction.
9. We note your statement that Mercury shareholders "should not" recognize any gain or loss in the transaction in the second paragraph on page 70. Please revise to provide a more definitive statement.

10. File a tax opinion as an exhibit to the registration statement. For guidance you may wish to refer to Section III.A.2. of our Staff Legal Bulletin No. 19 (CF) which is available on the Commission's website. Allow us sufficient time to review the tax opinion before requesting acceleration of the registration statement's effectiveness.
11. Note that if you elect to file a short form tax opinion, the opinion and the joint proxy statement/prospectus both must state clearly that the discussion in the joint proxy statement/prospectus is the opinion. Neither the joint proxy statement/prospectus nor the opinion should state merely that the discussion in the joint proxy statement/prospectus is a complete and accurate summary of the U.S. federal tax consequences of the merger transaction.

Interests of Mercury's Directors and Executive Officers in the Merger, page 21; Interests of Mercury's Directors and Executive Officers in the Merger, page 66; Material Contracts between Real Goods Solar and Mercury, page 86

12. Please file the transition consulting agreements and employment offer letters to which Mercury's directors and officers are parties or recipients as exhibits to the joint proxy statement/prospectus on Form S-4.
13. File a form of escrow agreement as an exhibit to the joint proxy statement/prospectus on Form S-4.

Financial Advisors, page 21; Real Goods Solar's Financial Advisor, page 65; Mercury's Financial Advisor, page 65

14. Identify the investment bank from which Real Goods Solar received preliminary advice regarding the merger. Clarify whether Real Goods Solar received any report, opinion, or appraisal from the investment bank.
15. Please explain why neither Real Goods Solar nor Mercury engaged an independent financial advisor to consult on the relative advantages and disadvantages of the merger. Additionally, explain why Mercury did not engage an independent financial advisor to deliver a fairness opinion on the merger.

Notes to the Unaudited Pro Forma Condensed Combined Financial Statements, page 45

3. Estimate of Consideration Expected to be Transferred, page 45

16. Please revise your purchase accounting disclosures and adjustments to use the most recent share price at the time of your filing to determine the value of the stock to be issued in this transaction. Please also provide a sensitivity analysis for the range of possible outcomes based upon percentage increases and decreases in the recent stock price. Refer to FRM 3250.1.

4. Estimate of Assets to be Acquired and Liabilities to be Assumed, page 45

17. Please explain why the goodwill shown here does not agree to the goodwill in your pro forma balance sheet on page 44.
18. Please provide disclosure here to explain the reason why such a substantial portion of your purchase price relates to goodwill.

5. Pro Forma Adjustments, page 46

19. Please provide a more detailed explanation for your pro forma adjustments. In this regard, we note that you have adjusted for incentive compensation, loss on sale of fixed assets, dividends payable, and elimination of deferred tax assets and liabilities. In addition, please explain how these adjustments are appropriate and comply with Article 11 of Regulation S-X.

The Merger, page 58; The Merger Agreement, page 73

20. Please elaborate on how the increase or decrease in the merger consideration will be calculated for average closing prices below \$2.56 or above \$3.00. Please also consider what additional risk factor disclosures may be appropriate in connection with the potential for the consideration to increase or decrease, and in connection with the parties' ability to waive termination of the transaction if the average closing price is below \$2.15.
21. Please elaborate on how the increase or decrease in merger consideration will be calculated if the amount of Mercury's working capital is higher or lower than \$9.3 million.

Background to the Merger, page 59

22. We note that Mercury held discussions with investment banking firms and analysts regarding strategic alternatives. Please clarify whether Mercury engaged any firms or analysts to assist it in this transaction. Please also clarify the role of the solar integrators and suppliers with whom Mercury opened up dialogues regarding a sale process.
23. Confirm that Mercury received no offer from a buyer other than Real Goods Solar. Alternatively, disclose any other offer received by Mercury, the amount and form of consideration of any other offer received by Mercury, and Mercury's reasons for rejecting any other offer received.

24. We note the disclosure that Mercury gave its management team the opportunity to present an offer to acquire the company. Elaborate on why Mercury's management declined to make an offer to acquire the company.
25. Please clarify whether Real Goods Solar retained the investment bank that you refer to on page 60 to assist or advise it in connection with the transaction with Mercury. We note that the investment bank "retained" by Real Goods Solar "proposed" that it conduct a private placement of its securities in May 2013.

Determination of Amount of Merger Consideration, page 61

26. We note the disclosure on page 62 that Real Goods Solar reviewed a discounted cash flow model provided by Mercury's management. Please disclose the projected financial information that Mercury's management provided to Real Goods Solar that underlies this analysis.

Recommendation of Real Goods Solar's Board of Directors and Real Goods Solar's Reasons for the Merger, page 63

27. Quantify the known or estimated cost savings resulting from the merger considered by Real Goods Solar's board of directors in the fifth bullet point on page 63.
28. Elaborate on the range of strategic alternatives to the merger "carefully considered" by Real Goods Solar's board of directors and the reasons for not pursuing those alternatives in the first bullet point on page 64.
29. Quantify the known or estimated "substantial costs" to be incurred in connection with the merger considered by Real Goods Solar's board of directors in the last bullet point on page 64.

The Merger Agreement, page 72

30. Notwithstanding the inclusion of disclaimers in the second paragraph on page 72, Real Goods Solar and Mercury are responsible for considering whether additional specific disclosures of material information about material contractual provisions are required to make the statements included in the joint proxy statement/prospectus not misleading. Please include disclosure acknowledging that if specific material facts exist that contradict the representations and warranties contained in the merger agreement, you have provided corrective disclosure. Additionally, address these items:
- Statements suggest that shareholders should not rely on the representations and warranties contained in the merger agreement or any descriptions of them as characterizations of the actual state of facts or condition of Real Goods

Solar or any of its subsidiaries or affiliates or that the merger agreement disclosures may not be materially complete. Revise to make clear that the description of the merger agreement in the joint proxy statement/prospectus contains all of the material terms and provisions of the merger agreement. Additionally, remove any implication that the merger agreement does not constitute public disclosure under the federal securities laws of the United States.

- Language that the representations and warranties contained in the merger agreement were made “solely” for the benefit of parties to the merger agreement suggests that the merger agreement does not constitute public disclosure under the federal securities laws of the United States and that shareholders cannot rely on the information in the merger agreement. Revise to remove any implication that the merger agreement does not constitute public disclosure under the federal securities laws of the United States and that shareholders cannot rely on the information in the merger agreement.
- Where you state that the representations and warranties contained in the merger agreement have been qualified by confidential disclosures made to the other parties to the merger agreement, clarify that shareholders should read the merger agreement in the context of Real Goods Solar’s other public disclosures in order to have a materially complete understanding of the merger agreement disclosures.
- Where you state that information about the subject matter of the representations and warranties contained in the merger agreement may change after the date of the merger agreement and that subsequent information may or may not be fully reflected in Real Goods Solar’s public disclosures, clarify that Real Goods Solar’s public disclosures will include any material information necessary to provide shareholders a materially complete understanding of the merger agreement disclosures.

Letter of Transmittal, page 75

31. Please file a form of letter of transmittal as an exhibit to the joint proxy statement/prospectus on Form S-4.

Description of Real Goods Solar Capital Stock, page 123

32. We note that the summary is qualified by reference to the provisions of applicable law. You may not qualify information in the joint proxy statement/prospectus on Form S-4 by reference to information outside the joint proxy statement/prospectus unless incorporation by reference or a summary of a document filed as an exhibit is

required by the form. See Rule 411(A) of Regulation C under the Securities Act, and revise.

Exhibit 5.1

33. We note that you intend to file by amendment the legal opinion. Please allow us sufficient time to review the opinion before requesting acceleration of the registration statement's effectiveness.

Closing

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 Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures that they have made.

Notwithstanding our comments, if you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- Should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing.
- The action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing.
- The company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their responsibilities under the Securities Act and the Securities Exchange Act as they relate to the proposed public offering of the securities specified in the registration statement. Please allow adequate time for us to review any amendment before the requested effective date of the registration statement.

You may direct questions on comments on the financial statements and related matters to Melinda J. Hooker, Staff Accountant, at (202) 551-3732 or W. John Cash,

Mr. Kamyar Mofid
Real Goods Solar, Inc.
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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 me at (202) 551-3765.

Very truly yours,

/s/ Pamela A. Long

Pamela A. Long
Assistant Director

cc: Via E-Mail
Rikard D. Lundberg, Esq.
Brownstein Hyatt Farber Schreck, LLP
410 17th Street, Suite 2200
Denver, CO 80202