



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

May 17, 2016

Charles Wheeler
Chief Executive Officer
Greenbacker Renewable Energy Company LLC
369 Lexington Avenue, Suite 312
New York, New York, 10017

**Re: Greenbacker Renewable Energy Company LLC
Registration Statement on Form 10-12G
Filed April 19, 2016
File No. 000-55610
Form 10-K for the Fiscal Year Ended December 31, 2015
Filed March 10, 2016
File No. 333-178786-01
Form 10-Q for the Quarterly Period Ended March 31, 2016
Filed May 13, 2016
File No. 000-55610**

Dear Mr. Wheeler:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response and any amendments you may file in response to these comments, we may have additional comments.

Registration Statement on Form 10-12G

General

1. We note that you are voluntarily registering your common stock under Section 12(g) of the Securities Exchange Act of 1934. Please note that the Form 10 goes effective automatically by lapse of time 60 days after the original filing date, pursuant to Section 12(g)(1) of the Securities Exchange Act of 1934. If our comments are not addressed within this 60-day time period, you should consider withdrawing the Form 10 prior to effectiveness and re-filing a new Form 10 including changes responsive to our comments.

Please note we will continue to review your filing until all of our comments have been addressed.

2. Please apply all comments issued below on your Form 10-K for the fiscal year ended December 31, 2015 to your registration statement on Form 10-12G, to the extent applicable.

Cover Page

3. We note from your cover page that you are registering common stock pursuant to Section 12(g) of the Securities Exchange Act of 1934, however, this appears to be inconsistent with your disclosure in Item 11, where you describe your Class A, Class C and Class I shares of stock. Please revise the cover page of your registration statement to identify the specific class(es) of stock you intend to register and ensure that your disclosure is consistent throughout your registration statement.

Form 10-K for the Fiscal Year Ended December 31, 2015

General

4. We note several references throughout your filing to your ongoing equity offering. Because the periodic reports you file pursuant to the Securities Exchange Act of 1934 are not offering securities, in future periodic reports please carefully review and revise your disclosure to clarify that your equity securities are being offered pursuant to a separate prospectus and direct readers to the file number related to your ongoing offering.

Item 1. Business

Overview of Our Business, page 3

5. We note your disclosure pertaining to prospective business developments and strategies, in future terms; however, we also note your reference to specific energy projects in your Management's Discussion and Analysis as well as at your website. Please revise this section in future filings to provide a discussion of the company's existing material investment activities, at least in tabular form, and the extent to which such activities have realized or contributed to the plans and strategies you describe here. Ensure that your disclosure conveys consistently throughout your document the status of your business activities. Refer to Item 101 of Regulation S-K. Please tell us what this disclosure will look like.

Advisory Agreement

Advisory Services, page 7

6. We note your disclosure that the GCM services are not exclusive and that the advisor and its members “are free to furnish similar services to other entities so long as its services to us are not impaired.” Please explain to us how you determine whether or not the company’s interests are impaired and to what extent your advisor and its members have allocated sufficient time and resources to the company.

Item 1.A Risk Factors

Risks Related to Our Advisor and its Affiliates

“Our success will be dependent on the performance of our advisor....,” page 17

7. In future filings, please enhance your disclosure to more specifically describe the risks to the company and potential impact on your business operations if you fail to maintain your exemption from registration under the Investment Company Act, including how your “ability to take advantage of attractive investment opportunities” would be hindered. Please tell us what this disclosure will look like.

“The time and resources that individuals associated with our advisor devote to us may be diverted....,” page 17

8. We note your disclosure that your advisor and its management may manage other funds. Please tell us what consideration you gave to enhancing your disclosure to clearly identify and discuss any other material commitments of your advisor and its management, other than to the company, if known. To the extent any funds or entities managed by your advisor or its management target the same investments as the company, please disclose how your advisor allocates investment opportunities amongst the entities it represents.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Overview, page 28

9. Here, elsewhere in your filing, and on your company website you highlight the ability of your energy projects to generate revenue primarily through selling generated electric power to utilities and other companies, and emphasize the creditworthiness of your contractual counterparties. We further note your disclosure on page 30 that credit risk is one of the most significant factors impacting your operating results. In view of the foregoing, in future filings, please disclose how you monitor the credit quality of your

counterparties and disclose more specific information regarding their credit profiles. Given the emphasis placed on your monthly distributions to shareholders, we believe that the foregoing would provide important information as a means to evaluating the reliability of your cash flow and overall liquidity. Please tell us what this disclosure will look like.

Portfolio and Investment Activity, page 34

10. Please explain to us why the disclosed purchase prices of the Magnolia Sun and Greenbacker Wind Portfolios on pages 34 and 37 differ from the related investments at cost line items in the last table on page 38.

Results of Operations, page 39

11. As you reported material increases in revenues, in future filings please provide a narrative discussion of the extent to which such increases are attributable to increases in commodity prices or the volume of generated electricity sold, the acquisition of new renewable energy projects, or otherwise, including the extent to which particular projects contributed to dividend income growth. Refer to Item 303(A)(3)(iii) of Regulation S-K.

Net Realized Gains or Losses and Net Change in Unrealized Appreciation or Depreciation on Investments and Translation of Assets and Liabilities in Foreign Currencies, page 40

12. Please disclose the underlying reasons for the net change in unrealized appreciation. Please refer to Item 303 of Regulation S-K and Commission Guidance Regarding Management's Discussion and Results of Operations, SEC Release No. 34-48960.

Distributions, page 42

13. We note that although distribution payments are in the board's discretion, you have paid monthly distributions since the date you commenced operations and intend to continue doing so. In future filings, please revise to discuss these distributions in more detail as part of your analysis of liquidity, including the expected level and source of funding for all distributions made during the fiscal year and whether you intend to continue paying dividends at historic levels. Please tell us what this disclosure will look like.

Item 8. Consolidated Financial Statements and Supplementary Data

Consolidated Statement of Changes in Net Assets, page 47

14. Please tell us your consideration of presenting dividends as a reduction of "Paid-in capital in excess of par value" given the absence of retained earnings.

Consolidated Notes to Consolidated Financial Statements

Note 2. Significant Accounting Policies

Organization and Offering Costs, page 53

15. Reference is made to the last paragraph under this subheading. Please tell us how you account for organization and offering costs due to an affiliate of the advisor when the public offering is complete and due to your dealer manager once offering proceeds reach a minimum of \$50,000,000 and the basis in GAAP for your accounting treatment citing authoritative literature applied. In addition, please tell us how organization and offering costs reimbursed to the advisor are classified in the financial statements for each year presented and how the payable to an affiliate of the advisor is classified in the consolidated statements of assets and liabilities.

Note 3. Investments, page 55

16. Please tell us whether these investments were acquisitions of businesses or assets and the basis for your determinations in detail referencing Rule 11-01(d) of Regulation S-X.

Note 5. Related Party Agreements and Transactions Agreements, page 57

17. Reference is made to your discussion of the expense reimbursement agreement in the first paragraph in Note 5. Please tell us how you account for deferred expenses to be repaid when your expenses are reduced below certain limits and the basis in GAAP for your accounting treatment citing authoritative literature applied.

Note 6. Members' Equity, page 60

18. Please disclose the value of shares sold and the value of shares issued in reinvestment of distributions for each class of shares. Refer to ASC 946-505-50-2a. and 2b.

Note 7. Distributions, page 61

19. Please disclose the tax-basis components of the distributions paid. Refer to ASC 946-505-50-5.

Note 8. Income Taxes, page 61

20. Please disclose the amounts and expiration dates of operating loss and tax credit carryforwards for tax purposes. Refer to ASC 740-10-50-3a.
21. Reference is made to the table on page 61 reconciling between the federal statutory rate and the effective tax rate. Please tell us the financial statement line item(s) used to

calculate the "Provision of income taxes, at federal tax rate" and why the use of such financial statement line item(s) is most appropriate. Also, please tell us your consideration of disclosing the financial statement line item(s) used. In addition, tell us and disclose the nature of each significant reconciling item. Refer to ASC 740-10-50-12.

22. Reference is made to the table of net deferred tax assets on page 62. Please tell us how you calculated the "Unrealized gains" deferred tax liability referencing authoritative literature that supports the calculation.

Note 10. Financial Highlights, page 62

23. Please tell us how you considered the Special Unitholder's capital gains incentive distribution in the per share data and explain why your calculations are appropriate. In doing so, contrast to how this incentive distribution is treated in the consolidated statements of operations.
24. Please disclose that the net investment income ratio does not reflect the effects the Special Unitholder's capital gains incentive distribution. Please also disclose the expenses that have not been annualized in the ratio calculations. Refer to ASC 946-205-50-13.

Exhibits 31.1 and 31.2

25. The certifications do not include the introductory language in paragraph 4 referring to internal control over financial reporting. Please revise in future filings. Refer to Item 601(b)(31) of Regulation S-K.

Form 10-Q for the Quarterly Period Ended March 31, 2016

General

26. Please address the above comments on your Form 10-K for the fiscal year ended December 31, 2015 in future quarterly reports, to the extent applicable.

Exhibits 31.1 and 31.2

27. The certifications do not include paragraph 4(b) as set forth in Item 601(b)(31)(i) of Regulation S-K or the introductory language in paragraph 4 referring to internal control over financial reporting. Please file an amendment to include certifications that comply with Item 601(b)(31)(i) of Regulation S-K. Please refer to Regulation S-K Compliance and Disclosure Interpretation 246.13.

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 Exchange 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 they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to 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.

You may contact Adam Phippen, Staff Accountant, at (202) 551-3336, or William Thompson, Accounting Branch Chief, at (202) 551-3344 if you have questions regarding comments on the financial statements and related matters. Please contact Courtney Haseley, Staff Attorney, at (202) 551-7689, or me at (202) 551-3720 with any other questions.

Sincerely,

/s/ Mara L. Ransom

Mara L. Ransom
Assistant Director
Office of Consumer Products

cc: Timothy P. Selby, Esq.
Blake E. Estes, Esq.
Alston & Bird LLP