

July 25, 2007

Mail Stop 6010

Richard M. Weinroth, Esq.
Secretary
Renegy Holdings, Inc.
301 West Warner Road, Suite 132
Tempe, AZ 85284-2961

**Re: Renegy Holdings, Inc.
Registration Statement on Form S-4
Filed June 28, 2007
File No. 333-144110**

Dear Mr. Weinroth:

We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Summary of the Proxy Statement/Prospectus, page 1

1. Here and elsewhere, as appropriate, revise your disclosure to explain the possible effects on the consideration shareholders will receive if the merger exchange ratio is adjusted in order to, among other things, increase the initial trading price of your stock. For example, explain how fractional shares will be treated if the ratio changes, and clarify whether the total percentage of shares that Catalytica shareholders will receive is subject to fluctuation. If so, please explain how it may change and what the minimum percentage of shares that Catalytica shareholders could receive would be.

Unaudited Pro Forma Financial Statements, page 103

Note 2 – Additional Notes Related to Pro Forma Adjustments, page 108

2. We see your reference in note (i) to an independent appraisal in determining the fair value of warrants issued to Mr. Worsley. Please revise your note to disclose the methodology and significant assumptions used in valuing the warrants. Additionally please note that if you choose to continue to refer to an expert in any capacity, you will need to revise the filing to name the independent appraiser and include its consent as an exhibit. Refer to Rule 436 and Item 601(b)(23) of Regulation S-B.

Catalytica Energy Systems, Inc. Financial Statements, page F-1

Report of Independent Registered Accounting Firm, page F-2

3. Please have Ernst & Young revise their report to reference the city and state of the office that issued the audit report. Refer to Rule 2-02(a) of Regulation S-X.

Consolidated Statements of Cash Flows, page F-6

4. We note that you begin the statement of cash flows with net loss from continuing operations. Please revise to begin the reconciliation with net loss. Refer to paragraph 28 of SFAS 95.

Note 2. Significant Accounting Policies, page F-8

Deferred Revenues, page F-11

5. We note that you defer 10% of revenue earned for each contract until receipt of successful final test results and the issuance of a final report to the customer. Please address the following:
 - Tell us how the reserve percentage of ten percent was determined.
 - Quantify any losses incurred during the last two years that were due to the fact you were not able to obtain successful final test results
 - Tell us how you have considered SAB Topic 13.A.3(b) in your revenue recognition policy.

Note 3. Purchase of SCR-Tech, page F-15

6. We note that in connection with the acquisition of SCR-Tech, you initially recorded \$2,894,000 as the present value of estimated future acquisition payments. In 2005, you negotiated a settlement of and release from all remaining liabilities related to this acquisition and recognized a gain of \$2,105,000 on the statement of operations. Please address the following:
- Describe to us the material terms of the original transaction that resulted in the original amount representing “estimated future acquisition payments.” Discuss whether the amounts recorded represented contingent payments and, if so, how your accounting complies with paragraphs 25-31 of SFAS 141.
 - Tell us why you believe it was appropriate to record a gain on the statement of operations in 2005 relating to the settlement of this acquisition liability.

Catalytica Energy Systems Unaudited Consolidated Financial Statements, page F-28

Note 1. Description of Business and Significant Accounting Policies, page F-31

Accrued Warranty Liability, page F-34

7. We note your disclosures here regarding the reversal of the accrued warranty liability. Please tell us and revise the filing to more clearly describe the events that occurred during the first quarter that caused you to conclude that a warranty liability was no longer necessary at March 31, 2007. In this regard, discuss why you concluded that the likelihood of the existence of a warranty claim was probable at December 31, 2006 but was not probable at March 31, 2007.

Snowflake White Mountain Power, LLC; Renegy, LLC; and Renegy Trucking, LLC
Financial Statements, page F-46

Note 2. Significant Accounting Policies, page F-51

Inventories, page F-53

8. We note your disclosure here that abnormal amounts of idle facility expense, inefficiencies incurred in inventory procurement, freight, and handling costs are

recognized as current-period charges and were approximately \$3.2 million and \$2.0 million during fiscal 2006 and 2005. We note similar disclosure on page F-57 which states that these costs were \$.7 million and \$1.1 million for the quarters ended March 31, 2007 and 2006, respectively. Please revise to clearly indicate where these costs are recorded. In this regard, it appears that the expenses disclosed here represent the majority of your costs of sales for fiscal 2006, fiscal 2005 and the three months ended March 31, 2007. Further, the costs disclosed here exceed your total costs of sales for the three months ended March 31, 2006. Please revise to clarify this activity.

Capitalized Interest, page F-53

9. It appears that you have capitalized interest relating to a portion of the Solid Waste Disposal Revenue Bonds and that interest was capitalized at a rate of approximately 4.7% during 2006. We also note disclosure in Note 5 on page F-55 of an approximately \$1.5 million term loan that appears to also relate to the construction of the biomass generating facility. Tell us how you have considered the guidance of SFAS 34 in relation to interest incurred on this term loan.

Revenue Recognition, page F-53

10. We note that you derive revenues from the sale of wood-related products and from forest thinning services. Your revenue recognition policy should be specific to each of your significant products and services. Please address the following:
 - Revise to describe the material terms of your sales transactions for both of your revenue streams.
 - Specifically address any post shipment obligations and / or customer acceptance provisions.
 - Describe any sales arrangements in which revenue is not recognized upon shipment.

Note 10 – Related Party Transactions, page F-58

11. We note from your disclosures that you used assets and services of related parties at no charge. If the use of these assets and services were material, the value of these services should be valued and recorded in your financial statements. Refer to SAB Topic 1B. Please revise or advise.

Fairness Opinion

12. Since Catalytica investors are entitled to rely on the fairness opinion, the opinion should be revised to remove the language that the opinion “was undertaken ... *for the sole benefit of* the Board of Directors of Catalytica....”

As appropriate, please amend your registration statement in response to these comments. 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.

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 all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, 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; and
- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

Richard M. Weinroth
Renegy Holdings, Inc.
July 25, 2007
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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 respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Please contact Eduardo Aleman at (202) 551-3646 or me at (202) 551-3805 with any other questions.

Sincerely,

Peggy Fisher
Assistant Director

cc(via facsimile): Donna Petkanics, Esq.
Wilson Sonsini Goodrich & Rosati
(650) 493-6811