



DIVISION OF  
CORPORATION FINANCE  
MAIL STOP 7010

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-7010

September 14, 2006

Mr. Terrance N. Fern  
Chairman, Managing Director and Chief Executive Officer  
Petsec Energy Ltd  
Level 12, Alfred Street  
Sydney, NSW 2000 Australia

**Re: Petsec Energy Ltd.  
Form 20-F for the Fiscal Year Ended December 31, 2005  
Filed May 22, 2006  
File No. 1-14101**

Dear Mr. Fern:

We have reviewed your Form 20-F for the fiscal year 2005 and have the following comments. 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.

Form 20-F for the Fiscal Year Ended December 31, 2005

Risk Factors, page 8

1. If you do not operate a material portion of your wells or are dependent on facilities owned by others, please amend your filing to include this as a risk factor, explaining how it has affected you in the past and how it may affect your operations and results in the future.

The loss of key personnel could adversely affect our ability to operate..., page 8

2. Please amend your filing to remove the mitigating language in this risk factor.

Our operations are exposed to the additional risks of hurricanes..., page 10

3. Please expand this risk factor to describe damages that have been incurred in the past due to weather, and to disclose the related effects it had on your oil and gas production, lost revenues and derivative losses.

Information on the Company

China, page 14

4. Please amend your filing to remove the reference, here and elsewhere in the filing, to the recoverable oil volumes, net and gross for the 12.8 West and East fields. As these do not represent proved reserves, disclosure is precluded under Instruction 1(b)(ii) to Item 4.D of the Form 20-F guidance.
5. Please amend your filing to remove the reference, here and elsewhere in the filing, to the gross and net recoverable oil and potential volumes attributed to the 6.12 South prospect.

Oil and Natural Gas Reserves, page 16

6. We note the 48 percent increase in net oil and gas reserves from 2004 to 2005. Please provide us with the justification for this increase.
7. Please expand your disclosure to include the U.S. definition of proved reserves, as found in Appendix A to Form 20-F.

Operating and Financial Review and Prospects, page 22

8. Please tell us if production taxes are included in your average production cost per Mcfe.

Results of Operations

Hedging Transactions, page 26

9. Please tell us the percentages of your current and future production you have hedged.

Trend Information, page 29

10. Please expand your disclosure to explain the basis for the amount of future production forecasted in your reserve report, and how these quantities compare to production levels achieved in past periods. Disclose how much of the anticipated change is dependent on the drilling of additional wells, estimated costs to be incurred, and any implications of this uncertainty.

Financial Statements

Supplemental Oil and Gas Disclosures, page F-26

Estimated Net Quantities of Oil and Natural Gas Reserves, page F-26

11. Please expand your disclosure to fully explain your significant year to year reserve changes.

The Standardized Measure of Discounted Future Net Cash Flows, page F-28

12. If future development costs are material, please revise your document to include them as a separate line item to comply with the guidance in paragraph 30(b) of SFAS 69. If you believe such costs are not significant, tell us the amounts and the manner by which you have formulated this view.

### Closing Comments

As appropriate, please amend your filings and respond to these comments within 10 business days or tell us when you will provide us with a response. 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 Exchange Act of 1934 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.

In connection with responding to our comments, please provide, in writing, a 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.

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 our review of your filing or in response to our comments on your filing.

Mr. Terrance N. Fern  
Petsec Energy Ltd.  
September 14, 2006  
Page 5

You may contact James Murphy, Petroleum Engineer, at (202) 551-3703 if you have questions related to engineering issues and related disclosures. Please contact me at (202) 551-3686 with any other questions.

Sincerely,

Karl Hiller  
Branch Chief