



DIVISION OF
CORPORATION FINANCE
Mail Stop 7010

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

October 23, 2006

Edward E. Cohen
Chairman and Chief Executive Officer
Atlas Energy Resources, LLC
311 Rouser Road
Moon Township, PA 15108

**Re: Atlas Energy Resources, LLC
Registration Statement on Form S-1, Amendment 1
Filed October 4, 2006
File No. 333-136094**

Dear Mr. Cohen:

We have reviewed your filing and have the following 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 S-1/A, Filed October 4, 2006

Selected Historical Financial Data, page 74

1. We note that you present certain operating costs under the heading "Other income (expense)" within your selected financial data table. Generally, costs classified as "Other" are non-operating in nature. Please rename this heading so that it accurately reflects the characteristics of the costs it includes.

Financial Statements, page F-1

Unaudited Pro Form Combined Financial Statements, page F-2

2. We note that you have included an adjustment to reflect incremental general and administrative expenses for estimated costs you expect to incur for the preparation and distribution of Schedule Ks. Tell us how you determined that this adjustment amount is factually supportable and compliant with Rule 11-02(b)(6) of Regulation S-X.
3. We note your pro forma financial statements include an adjustment to reflect \$5 million of borrowings under your new credit facility as indicated at Note 2(f). However, in the fifth bullet under Note 1 you state that the pro forma financial statements reflect the net proceeds received from borrowings of \$5.5 million under the new credit facility. Please revise your pro forma financial statements as necessary to reflect the correct amount you intend to borrow under your new credit facility.

Atlas America E & P Operations Combined Financial Statements, page F-8

Combined Statements of Income, page F-10

4. We have read the disclosures you added on page F-18 in response to prior comment 32 in our letter dated August 25, 2006; and understand your basis for not presenting a provision for income taxes in your financial statements. Since the operations were historically a component of a taxable entity, we believe you should revise your statements of operations to indicate that you are presenting income before taxes rather than net income. In addition, please expand your disclosure to include a schedule that reconciles the GAAP net income to taxable income.

Engineering comments

Summary Reserve and Operating Data, page 19

5. In footnote 2 you state that the Standardized Measure includes your physical hedges, although it is unclear whether you have specified the particular properties associated with those hedges. Our position is that you should only include hedged prices in this calculation when the hedges are specific to individual properties. You may discuss the possible effects of hedges that do not meet this criteria. However, the value that you present in the table described under paragraph 30 of SFAS 19 should not include the hedged prices unless they are specific to individual properties. If necessary, please revise your document here and elsewhere as necessary.

6. In footnote 4 you state the average production costs do not include charges for gathering fees. This appears to be inconsistent with the requirements set forth in paragraphs 23 and 24 of SFAS 19. Please revise your document here and elsewhere as necessary.

Notes to Combined Financial Statements

Supplemental Oil and Gas Information (Unaudited), page F-29

7. Please tell us if your reserve determination and Standardized Measure calculations include gathering fees. If not, it appears you should present a revised proved reserve estimate and Standardized Measure to include these fees.

Exhibit

8. Obtain and file as an exhibit a new short form opinion of counsel that makes clear that the discussion that appears in the section of the prospectus captioned "Material Tax Consequences" constitutes counsel's legal opinion. The statement that "the discussion ... to the extent that it summarizes material federal income tax considerations (and ERISA considerations) of the Offering ... is correct in all material respects" is insufficient in that regard. In the alternative, obtain and file as an exhibit a long form opinion of counsel.

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.

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.

You may contact Jenifer Gallagher, Staff Accountant, at (202) 551-3706 or Karl Hiller, Branch Chief, at (202) 551-3686 if you have questions regarding comments on the financial statements and related matters. Please contact Jim Murphy, Petroleum Engineer, at (202) 551-3704 if you have any questions about comments on engineering matters. Please contact Lisa Beth Lentini, Attorney-Advisor, at (202) 551-3334, or in her absence, me at (202) 551-3745 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director

Edward E. Cohen
Atlas Energy Resources, LLC
October 23, 2006
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cc: J. Baur Whittlesey

H. Schwall
L. Lentini
J. Gallagher
K. Hiller