



DIVISION OF
CORPORATION FINANCE
Mail Stop 7010

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

June 15, 2007

Via U.S. Mail

Mr. Freddie Kotek, Chief Executive Officer
Atlas America Series 27-2006 L.P.
311 Rouser Road
Moon Township, Pennsylvania 15108

**Re: Atlas America Series 27-2006
Registration Statement on Form 10
Filed April 30, 2007
File No. 0-52615**

Dear Mr. Kotek:

We have reviewed your filing and have the following engineering comment. 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 or may not 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.

Engineering Comments

Properties, page 29

Natural Gas and Oil Reserve Information, page 31

1. We note your statement “The information on our proved natural gas and oil reserves was *prepared* by Wright & Company, Inc., independent energy consultants.” On page 76, you state “The estimates of the Partnership’s proved gas reserves are based upon evaluations made by management and *verified* by Wright & Company, Inc., an independent petroleum-engineering firm, as of December 31, 2006.” Please amend your document to remove this inconsistency. If you retain the latter, please include a detailed discussion of the procedures used by Wright to “verify” your proved reserves.

Closing Information

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 amendments to expedite our review. Please furnish a cover letter with your amendments 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 amendments and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

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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.

You may contact Tracie Towner at (202) 551-3744 or Jenifer Gallagher at (202) 551-3706 if you have questions regarding the financial statements and related issues. Direct any questions regarding the engineering comments to Ronald Winfrey at (202) 551-3704. Please contact Carmen Moncada-Terry at (202) 551-3687 or in her absence, Timothy Levenberg, Special Counsel, at (202) 551-3707 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director

Cc: T. Towner
J. Gallagher
R. Winfrey
T. Levenberg
C. Moncada-Terry