



DIVISION OF
CORPORATION FINANCE

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

January 24, 2012

Via Facsimile

Kim R. Cocklin
President and Chief Executive Officer
Atmos Energy Corporation
Three Lincoln Centre, Suite 1800
5430 LBJ Freeway
Dallas, TX 75240

**Re: Atmos Energy Corporation
Form 10-K for Fiscal Year Ended September 30, 2011
Filed November 22, 2011
File No. 1-10042**

Dear Mr. Cocklin:

We have reviewed your filing 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 this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 34

Results of Operations, page 39
Consolidated Results, page 41

1. We note your disclosure that historically your regulated operations contributed 65 to 85 percent to your consolidated net income, with 81 and 83 percent for fiscal years 2010 and 2009, respectively. We also note that regulated operations contributed 104 percent to your consolidated net income for fiscal 2011 due in large part to the decline in asset optimization in your nonregulated segment. In the table on page 50, you disclose that asset optimization was (\$3,424), \$43,805 and \$52,507 and total realized margins were \$75,401, \$121,881 and \$149,997, in each case for fiscal years 2011, 2010 and 2009,

respectively. If you expect asset optimization revenues to contribute much less significantly to earnings and revenues going forward and for total nonregulated margins to be significantly less than they have been historically, please revise your disclosure to discuss these trends, to the extent material. Refer to Item 303(a)(3)(ii) of Regulation S-K and SEC Interpretive Release No. 33-8350 available on our website at <http://www.sec.gov/rules/interp/33-8350.htm>.

Nonregulated Segment, page 48

2. We note your disclosure that the decrease in realized asset optimization margins is attributable to the unfavorable impact of weak natural gas market fundamentals. Given the significance of the decrease in gross profit of the segment, please revise to describe the weak fundamentals in detail and the specific factors that caused the decrease.

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.

Kim R. Cocklin
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You may contact Yolanda Guobadia, Staff Accountant, at (202) 551-3562 or me at (202) 551-3344 if you have questions regarding comments on the financial statements and related matters. Please contact Catherine Brown, Staff Attorney, at (202) 551-3513 with any other questions.

Sincerely,

/s/ William H. Thompson

William H. Thompson
Accounting Branch Chief