



DIVISION OF
CORPORATION FINANCE

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

March 31, 2011

Via Facsimile

Mr. Michael C. Crews
Executive Vice President
Peabody Energy Corporation
701 Market Street
St. Louis, Missouri 63101

**Re: Peabody Energy Corporation
Form 10-K for Fiscal Year Ended December 31, 2010
Filed February 28, 2011
File No. 1-16463**

Dear Mr. Crews:

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.

Form 10-K for Fiscal Year Ended December 31, 2010

Note 22- Segment Information, page F-58

1. We note that approximately 37% of your revenues for the year ended December 31, 2010 were generated by the Australian Mining segment. We also note that you continually adjust your business to focus on the highest-growth regions in the Asia-Pacific and U.S. markets. Please tell us how you considered providing the disclosures required by ASC 280-10-50-41 through 42.

Closing 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 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.

You may contact Tracie Towner at (202) 551-3744, or John Cannarella at (202) 551-3337, if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3299 with any other questions.

Sincerely,

/s/ Mark C. Shannon

Mark C. Shannon
Branch Chief