

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

August 3, 2007

## By Facsimile and U.S. Mail

Mr. Gregory H. Boyce Chief Executive Officer Peabody Energy Corporation 701 Market Street St. Louis, Missouri 63101

**Re:** Peabody Energy Corporation

Form 10-K for the Fiscal Year Ended December 31, 2006

Filed February 28, 2007

Response Letter Dated May 17, 2007 Response Letter Dated June 26, 2007

File No. 001-16463

Dear Mr. Boyce:

We reviewed your responses to our prior comments on the above referenced filing as set forth in your letter dated June 26, 2007 and have the following additional comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Form 10-K For the Year Ended December 31, 2006

Note 1 Summary of Significant Accounting Policies, page F-6

## Inventory, page F-8

- 1. We note your response regarding stripping costs incurred when multiple pits exist within a mine. Please expand your footnote disclosure to address the following:
  - Please disclose that diversity in practice exists within the mining industry regarding what represents production stage stripping and how a mine is defined under EITF 04-6.

Mr. Gregory H. Boyce Peabody Energy Corporation August 3, 2007 Page 2

- Please disclose that some industry participants expense initial stripping costs associated with subsequent pits within a mine.
- If applicable, please disclose the amounts of related costs that were capitalized as of the dates of each balance sheet presented. Also provide disclosure of the changes in the amounts capitalized for each financial statement period presented.

## Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact John Cannarella at (202) 551-3337 or Kevin Stertzel at (202) 551-3723 if you have questions regarding comments on the financial statements and related matters. You may contact Ken Schuler, Mining Engineer, at (202) 551-3718 with questions about engineering comments. Please contact me at (202) 551-3683 with any other questions.

Sincerely,

Jill Davis Branch Chief