

Department of Energy

Washington, DC 20585

August 8, 2011

The Honorable Carolyn Maloney U.S. House of Representatives Washington, DC 20515

Dear Congresswoman Maloney:

Thank you for your June 28, 2011, letter. After citing the June 27, 2011, New York Times (NYT) article, entitled "Behind Veneer, Doubt on Future of Natural Gas," you ask three questions regarding the steps taken by the Department to verify the data used in the shale gas estimates; the oversight conducted by the Department to ensure the accuracy of these data and the estimates; and how potential inaccuracies in the estimates could alter energy policy in the future.

EIA has carefully reviewed the NYT article and found nothing that causes us concern. A key guiding principle for EIA is to "look at the data." The data clearly shows that shale gas has rapidly become a significant source of domestic natural gas supply. Prior to 2005, shale gas constituted only four percent of natural gas production, but grew to 23 percent of production in 2010.

In developing each edition of EIA's *Annual Energy Outlook* (AEO), key assumptions and methodologies are reviewed and updated based on several independent sources of information. These include resource assessments from the U.S. Geological Survey (USGS) and the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). EIA updates prior resource estimates where development activities undertaken since the last available assessments from those agencies have added significant new knowledge. This is and has been EIA's standard practice, particularly with respect to emerging resources such as shale oil, tight gas, enhanced oil recovery, and shale gas. Furthermore, EIA conducts open and public workshops at which representatives of the USGS, the BOEMRE, and other experts are invited to critique both EIA resource assessment methodology and resource estimates. The last workshop was held April 27, 2011, after the conclusion of the EIA Energy Conference.

The assumptions regarding shale gas resources currently being used as the basis of EIA's Reference case projections are consistent with estimates of technically recoverable resources from a wide range of academic and industry experts. Drilling and well completion costs are based on data provided in the Joint Association Survey on Drilling Costs. Lease equipment and operating costs are based on lease equipment and operating cost estimates developed by EIA based on information collected from supply service and contracting companies. EIA and its contractors also use available State-reported well-

level production data to compare with industry data sources and to calibrate engineering-based production curves.

EIA fully recognizes the uncertainties surrounding its Reference case natural gas projections. In fact, *AEO2011* includes a special section, Issues in Focus: Prospects for Shale Gas, which highlights and examines some of the key uncertainties surrounding shale gas and presents the impact of higher and lower shale gas resource and cost assumptions for production, consumption, and prices. The Shale Gas cases in *AEO2011* illustrate how a wide variation in outlooks can occur due to the underlying uncertainty regarding this emerging resource. I refer you to this document to answer any questions you may have regarding the implications of alternative shale gas estimates for energy policy outcomes.

In closing, I am confident that EIA is effectively tracking the rapid emergence of shale gas in the U.S. energy system and will continue to scrupulously verify the accuracy of the data that form the basis of its projections.

If you need further information, please contact me or Ms. Shirley Neff, Senior Advisor to the Administrator, Energy Information Administration, at 202-586-7111.

Sincerely,

Howard K. Gruenspecht

Acting Administrator

U.S. Energy Information Administration