Appendix A

Analysis Request Letter

United States Senate

WASHINGTON, DC 20510

September 18, 2007

The Honorable Guy Caruso Administrator Energy Information Administration U.S. Department of Energy 1000 Independence Avenue, SW Washington, D.C. 20585

Dear Mr. Caruso:

As Congress considers policies to address global climate change, the need for robust, objective, and well-grounded technical analysis of the impacts those policies will have on the American economy is imperative. We applaud the Energy Information Administration (EIA) for providing credible historical analyses over the years. However, we are concerned that, in its current forecasts, EIA is not considering realistic scenarios of our nation's energy future, and as a result, is not providing an accurate picture of the potential consequences arising from mandatory greenhouse gas emission controls.

As you are well aware, concern about climate change has reinforced opposition in some quarters against certain types of energy production. This seems to be especially true of coal, as the prospects for building new coal-fired power plants look increasingly dire.

The same seems to be true of natural gas, particularly whether producers will have access to domestic supplies. Moreover, opposition to construction of new liquefied natural gas terminals and expansion of domestic production and pipelines, international greenhouse gas mandates, and geopolitical instability also present serious risks for U.S. natural gas supplies. For example, talks of additional carbon reductions beyond those required by the Kyoto Protocol could severely constrain the global natural gas market, while recent news of a possible natural gas cartel between Russia and Iran greatly complicates an already bleak future for U.S. natural gas imports.

In addition, concern about climate change has sparked a renewed interest in nuclear power as a viable alternative to fossil fuels. Yet despite greater acceptance of this important, emissions-free energy resource, nuclear power still faces a host of obstacles and uncertainties that, if unresolved, could inhibit its expansion and prevent the construction of new plants.

These issues raise serious questions as to whether and how this country will meet growing energy demand while complying with constraints on carbon emissions. As such, we are requesting that your agency reanalyze S. 280, "The Climate Stewardship and

Innovation Act of 2007," by taking these realities into account. Moreover, we are requesting that your agency factor these realities into all future analyses of mandatory climate change legislation you undertake.

More specifically, your reanalysis of S. 280 and all future analyses of climate legislation must include an assessment of the factors outlined in the three following scenarios:

An Alternative Policy Case assuming:

- Nuclear power does not exceed AEO 2007 Reference Case growth through 2030 (increase of 12.5 GWe);
- Biomass power does not exceed AEO 2007 Reference Case growth through 2030 (increase of 64 Billion kWhrs).

Please refer to this alternative policy case as: Reference Nuclear and Biomass Power.

An Alternative Policy Case assuming the Reference Nuclear and Biomass Power case above and assuming:

 Carbon capture and sequestration technology does not become commercially available until 2030;

Please refer to this alternative policy analysis as: Constrained CCS.

An Alternative Policy Case assuming all of the above (Reference Nuclear and Biomass Power and Constrained CCS) and assuming:

- That GHG caps are implemented for all Kyoto Protocol Annex 1 signatory countries and are reduced to 20% below 1990 levels in 2020 and to 80% below 1990 levels in 2050; and
- A functioning natural gas cartel, using the same basic modeling approach used in your assessments of the Organization of the Petroleum Exporting Countries (OPEC) operations.

Please refer to this alternative policy analysis as: Beyond Kyoto Plus Natural Gas Cartel.

In addition, since the costs of greenhouse gas controls grow over time, EIA's inability to accurately account for the impacts between 2030 and 2050 is a serious analytical shortcoming. The use of discounting further disguises the real impact because of the escalating impacts. Therefore, in your reanalysis of S. 280 and all future analyses, please identify detailed economic impacts beyond 2030, specifying the model you use.

Another important piece missing from your analysis is impacts at the local and regional level. In all of the cases you analyze, EIA should provide natural gas data and electricity data at the regional and local distribution level.

AEO 2008 Analysis

Finally, EIA's natural gas analysis needs to be reviewed. An article in the July 2007 *Public Utilities Fortnightly* ("Betting on Bad Numbers - Why predictions from the Energy Information Administration may contain systematic errors") outlined a devastating critique of the EIA NEMS model and its ability to predict the behavior of domestic natural gas markets. It is imperative that EIA assure that its models be continuously evaluated against data. The conditions in the natural gas markets (domestic supply, imports, prices) since 2001(AEO2002) have changed substantially, and EIA's model must be updated to reflect these changes. Therefore, we are requesting a reevaluation of the NEMS model so EIA can provide a more accurate forecast of natural gas markets in its upcoming AEO2008 report. Information related to this request should be provided when you release preliminary results in December.

Additionally, in your AEO 2008 assumptions for a natural gas side case you should assume the Alaska natural gas pipeline is delayed until 2025 (Low Supply Case) and that no new construction of liquefied natural gas terminals in the U.S. beyond those have permits and are scheduled to become operational in 2008 (Low LNG Case).

An expedited process would be greatly appreciated as a credible analysis is critical to a well-informed debate concerning climate change and related energy policy choices now before Congress. Either Todd Johnston (202-224-9325), or John Shanahan (202-224-8072), is available to work with you to clarify any issues. Thank you for your attention to this.

Sincerely,

James M. Inhofe

United States Senator

John Barrasso

United States Senator

George V. Voinovich

United States Senator