

Appendix A. Letters of Request for Analysis

- Letter from Senator Jeff Bingaman to Guy Caruso, EIA Administrator (December 17, 2004)
- Letter from Jennifer Michael, Minority staff, Senate Committee on Energy and Natural Resources, to Guy Caruso, Administrator (January 26, 2005)³³

³³Additional clarifications of two scenarios were made through telephone calls or email.

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United States Senate

COMMITTEE ON
ENERGY AND NATURAL RESOURCES

WASHINGTON, DC 20510-6150

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December 17, 2004

Mr. Guy F. Caruso
Administrator
Energy Information Administration
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Mr. Caruso:

On December 8, 2004, the National Commission on Energy Policy (NCEP), a bipartisan group of top energy experts from industry, government, labor, academia, and environmental and consumer groups, released a report to address major long-term U.S. energy challenges. The report, "Ending the Energy Stalemate: A Bipartisan Strategy to Meet America's Energy Challenges," contains a set of 28 key energy policy recommendations for addressing oil security, climate change, natural gas supply, the future of nuclear energy, and other long-term challenges. I would like to receive information on the impacts of the 28 key recommendations contained in the NCEP's report, and how these measure up to the current status quo, or base case scenario which EIA has forecast for the coming decades.

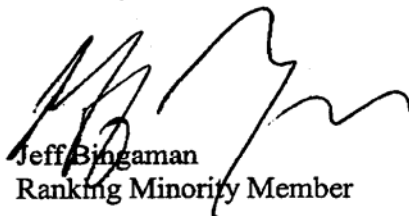
By means of this letter, I would ask that you and your staff provide a comprehensive analysis with estimates of the impacts of the NCEP Study compared to EIA's 2005 Annual Energy Outlook (AEO) Reference Case to be released in January 2005. This analysis should include supply estimates (by fuel), demand estimates (by sector) and import estimates (by fuel type) for the provisions of the Report that can be addressed using the National Energy Modeling System (NEMS) model. I recognize that some of the NCEP recommendations are only characterized in general terms. My staff will provide specific policy assumptions if necessary for modeling purposes.

Given the information from past EIA studies which outlines the constraints of EIA's NEMS model, I do recognize the fact that not all provisions may lend themselves to a precise modeling result in NEMS. I would appreciate your thoughts on how provisions that cannot be modeled in NEMS directly might otherwise be estimated.

I would like to make this analysis available to all Energy Committee members as we consider a path for US energy policy in the new 109th Congress, be it a comprehensive energy package such as the Commission outlines, or a set of individual provisions. This would dictate that a high priority be given to the study, such that its release may be realized as soon as possible. I would appreciate receiving your estimates by February 21, 2004, and look forward to hearing from you in this regard.

Please do not hesitate to contact Jennifer Michael, Energy Committee Staff, (202)-224-7143, if you have any questions regarding this request.

Sincerely,



Jeff Bingaman
Ranking Minority Member

PETE V. DOMENICI, New Mexico, *Chairman*
LARRY E. CRAIG, Idaho
CRAIG THOMAS, Wyoming
LAMAR ALEXANDER, Tennessee
LISA MURKOWSKI, Alaska
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January 26, 2005

Mr. Guy F. Caruso
Administrator
Energy Information Administration
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Mr. Caruso:

In a letter dated December 17, 2004, Senator Bingaman requested that the Energy Information Administration (EIA) analyze the recommendations contained in the newly released report by the National Commission on Energy Policy (the "Commission"), "Ending the Energy Stalemate: A Bipartisan Strategy to Meet America's Energy Challenges."

In response to our letter request, we have been asked by EIA staff to provide guidance on specific aspects of the analysis. To be clear, it is our understanding that in order for EIA analysts to complete our request, some additional guidance is required in order to formulate assumptions for input into the NEMS model. In accordance with your staff's request, we are submitting this letter. As regards specific assumptions, we would suggest that the following guidance be employed in the analysis:

In General:

1. All costs and incentives should be stated in constant \$ 2004 dollars unless otherwise stated.
2. Macro-economic feedback should be employed in all integrated policy analysis.
3. For the purpose of illustrating the impact of accelerated technological progress (for example, that which might be stimulated by increased research and development funding) use of the technology assumptions in the AEO2005 high technology case is suggested.

4. Please identify Commission recommendations which were not included in the modeling analysis. We would appreciate your thoughts on how provisions that cannot be modeled in NEMS directly might otherwise be estimated.

Enhancing Oil Security:

Fuel Economy: A CAFÉ standard increase of 10 mpg for both cars and light trucks. A 10 mpg increase represents a 36 percent increase for automobiles. A second analysis may be performed, time and resources permitting, using a 15 mpg increase in the CAFÉ standards for both cars and light trucks (which translates to a 54 percent increase in the current standard for cars). Consideration should also be given to the \$3 billion in incentives to be provided to manufacturers and consumers for domestic production and purchase of efficient vehicles.

Reducing Risks from Climate Change:

The greenhouse gas (GHG) policy scenario, as we understand, may be input into NEMS, exactly as described in the Commission report. In terms of scenario cases, (as outlined below), the GHG trading policy both with and without the proposed safety valve are requested.

Increasing Energy Efficiency:

While specific recommendations were not specified in the report, we would suggest that an efficiency standards case be constructed using the LBNL study (“Energy Efficiency Standards and Codes for Residential/Commercial Equipment and Buildings: Additional Opportunities”) provided in the technical appendix of the Commission’s report, in combination with EIA’s AEO high technology case.

Natural Gas:

Inputs for the Alaska Natural Gas Pipeline System should follow those put forth in the legislation introduced in the previous Congress. This includes a price guarantee of \$3.25 per million Btu (mmBtu) for delivered gas to Alberta and a ceiling price of \$4.80/mmBtu.

Advanced Coal Technologies:

1. To represent the \$4 billion program to stimulate the development of coal IGCC facilities, staff has suggested that the funds be programmed to be used to build 10 gigawatts of capacity over the 2009 to 2015 timeframe. We are in agreement.
2. The report outlines a \$3 billion program to stimulate carbon capture and sequestration technology. Again, staff has suggested that the funds be used to

sequester carbon from 4 gigawatts of the 10 gigawatts of new IGCC built as a result of the \$4 billion program. Carbon capture and sequestration technology would be added beginning in 2010 and are added a rate of 1 gigawatt per year. We are in agreement.

Nuclear Energy:

To represent the \$2 billion program to stimulate new nuclear facilities, the model may be programmed such that the funds are used to build one nuclear facility beginning in the first year that they are available.

Renewable Energy Sources:

1. The report indicates that the expanded production tax credit program (PTC) will be available to all non carbon-emitting technologies added between 2006 and 2009. A uniform investment tax credit of 1.8 cents per kilowatt-hour for all qualifying technologies is suggested. In modeling the \$ 4 billion overall credit limit, a first come first served basis should be used until it is expended.
2. To represent the program to stimulate non-petroleum renewable transportation fuels, the funds of \$750 million for R&D and the \$750 million in early deployment incentives are thought to jointly bring about an increase in cellulose ethanol yields and reductions in capital cost. For modeling, staff has suggested that the yield increase from the current 75 gallons per ton of biomass to 105.4 gallons per ton of biomass by 2015, reaching 90 percent of its estimated maximum using switch grass; and that capital cost falls from today's \$5 per annual gallon to \$2.15 per annual gallon by 2015. Biodiesel plants already achieve 98 percent of their maximum yield, hence no improvement in biodiesel yields going forward should be considered.

Energy Technologies for the Future:

To represent a doubling of the R&D funding for energy research and development, use of the AEO2005 high technology cases should illustrate the advances that might be stimulated by the additional R&D funding when analyzing the remaining Commission policies.

Selected Scenarios:

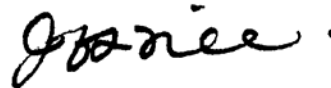
EIA Staff has also asked for specific feedback on the types of scenarios and policy combinations to be run in NEMS. We understand that the Base case will be the AEO2005 Reference Case. Additionally, we would suggest that the following eight scenarios be run initially.

1. Tax incentives and deployment policies
2. GHG - Cap and trade base case

3. GHG - with safety valve
4. Vehicle Efficiency max (CAFÉ/efficiency vehicle measures)
5. Energy Efficiency
6. Hitechdem plus all defined and implementable tax incentives and deployments plus 1 CAFÉ case for new light duty vehicle CAFÉ standard.
7. Hitechsup plus all defined and implementable tax incentives and deployments plus 1 CAFÉ case for new light duty vehicle CAFÉ standard.
8. GHG policy on Hitechdem plus all defined and implementable tax incentives and deployments plus 1 CAFÉ case for new light duty vehicle CAFÉ standard.

Please do not hesitate to contact us should you have questions regarding any of the above. I can be reached at 202-224-7143.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Michael". The signature is written in a cursive, flowing style.

Jennifer Michael

