

Appendix A: Request Letters

JERRY BRADLEY, Nevada
JOHN BOGGS, Oklahoma
BOB BOYCE, South Carolina
TIM W. BROWN, Louisiana
MARK CANTWELL, Washington
CHRISTOPHER COONS, Oregon
DANIEL CONRAD, Michigan
MURK DOUGLAS, Oklahoma
JANIS DEAN, Nevada
AL FRANKEN, Minnesota
CHRISTOPHER GARDNER, Colorado
JON HAYES, Idaho
JIM INHOFE, Oklahoma
JAMES INHOFE, Oklahoma
MIKE LEE, Utah
RON LUKATEL, Kentucky
LARRY MANLY, Indiana
JOHN MCCAIN, Arizona
CHRIS MURPHY, Connecticut
ROBERT BYRD, West Virginia

ROBERT BYRD, CHIEF CLERK
KIM R. POWERS, CHIEF CLERK
MURK DOUGLAS, REPRODUCTION INFORMATION
KATHLEEN BULLOCK, REPRODUCTION INFORMATION

United States Senate

COMMITTEE ON
ENERGY AND NATURAL RESOURCES

Washington, DC 20510-6190

ENERGY.SENATE.GOV

August 16, 2011

Mr. Howard Gruenspecht
Acting Administrator
Energy Information Administration
1000 Independence Ave. SW
Washington, DC 20585

Dear Mr. Gruenspecht:

Over the past decade, Congress has considered many different legislative proposals to drive the development and deployment of clean generating technologies in the power sector and reduce the greenhouse gases resulting from the generation of electricity. During the current Congress I have focused my attention in this regard on a policy to establish a national Clean Energy Standard (CES) that would require an increasing percentage of electricity to be generated from clean sources. To this end, the Senate Committee on Energy and Natural Resources put forward a white paper seeking public input on the design of a CES. As the next step in the development of a legislative proposal, I am writing to request that you conduct an analysis of the effects of such a national Clean Energy Standard (CES) under a series of different scenarios.

The primary elements of the proposal to analyze should be as follows:

- The entities subject to the CES include all electric service providers that sell electricity to retail consumers. The base against which the clean requirement should be calculated is defined as all electric utility retail sales in a given calendar year.
- The yearly clean energy targets should ramp linearly from the current state of qualifying clean energy generation to an overall target of 80% clean energy in 2035 and holding at 80% indefinitely beyond 2035.
- Full or partial clean energy credits should be awarded to generators with a lower carbon-intensity (as measured on a carbon dioxide equivalency basis) than that of new supercritical coal generation ("new scrubbed coal plant" as defined in Table 8.2 of *Assumptions to the Annual Energy Outlook 2011*, <http://www.eia.gov/forecasts/aeo/assumptions/pdf/electricity.pdf>). Zero emission generation technologies should receive 1 credit for each MWh of retail electricity sold. Fossil generation with a carbon intensity equal to or greater than new supercritical coal should receive zero credits. Partial credits should be awarded to fossil-fuel utilities generating with a lower carbon-intensity than supercritical coal

proportional to their improvement over supercritical coal per MWh.

- Clean energy credits may be banked indefinitely.
- Generation from existing nuclear and hydroelectric utilities should be counted towards the overall target, but they should not be awarded credits. That is, the sum of all credited generation and generation from existing nuclear and hydroelectric plants should equal, by 2035, 80 percent of sales. The target for credited generation would therefore be reduced by the generation from existing nuclear and hydroelectric plants.

In addition, please also conduct the seven additional "sensitivity runs" identified below to consider the effects of changing certain important policy variables in the core policy:

Alternate crediting mechanisms

- 1) Award credits to all existing clean generation.
- 2) Deduct generation from existing hydroelectric and nuclear generation plants from the base against which a utility's requirement is calculated.
- 3) Credit technologies as follows:
 - New and updated nuclear generation, new and incremental hydroelectric generation, and renewable generation should receive 1 credit per MWh of retail electricity sold.
 - New and existing Natural Gas Combined Cycle (NGCC) generators should receive 0.5 credits per MWh of retail electricity sold.
 - Coal equipped with carbon capture and storage at greater than 90% capture efficiency should receive 0.9 credits per MWh of retail electricity sold.
 - Natural Gas equipped with carbon capture and storage at greater than 95% capture efficiency should receive 0.95 credits per MWh of retail electricity sold.
 - Existing nuclear and hydroelectric generators should receive 0.1 credits per MWh of retail electricity sold.

Exclusion of small utilities

- 4) Exempt all utilities selling less than 4 million MWh per year from compliance with the standard.

Alternative compliance payment:

- 5) Allow compliance alternately to be achieved through a payment that begins at 2.1 cents per kilowatt hour and rises at an inflation-adjusted rate of 5% per year.
- 6) Allow compliance alternately to be achieved through a payment that begins at 3.0 cents per kilowatt hour and rises at an inflation-adjusted rate of 5% per year.

JOHN BINGAMAN, New Mexico, Chairman
 ROBERTO CROTTI, Oregon
 BOB CROTTI, South Dakota
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 MARY L. HANCOCK, Nebraska
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 BOB CORNER, Tennessee

United States Senate

COMMITTEE ON
 ENERGY AND NATURAL RESOURCES

Washington, DC 20510-8130

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September 30, 2011

Dr. Howard Gruenspecht
 Acting Administrator and Deputy Administrator
 Energy Information Administration
 1000 Independence Ave. SW
 Washington, DC 20585

Dear Dr. Gruenspecht:

Upon further consideration of the design parameters for a Clean Energy Standard (CES), I would like to modify my original request for modeling dated August 16, 2011 as follows:

Please use the following set of overall targets for clean energy:

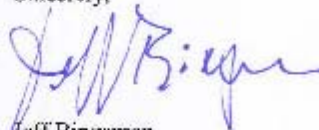
Year of compliance	Overall Clean Energy Target
2015	45%
2020	50%
2025	60%
2030	70%
2035	80%
2040	85%
2045	90%
2050	95%

The overall clean energy targets should be increased linearly between each interim target, and held constant after 2050.

The overall clean energy target for each of the modeling scenarios I have requested should equal the percentage of the total retail sales generated by clean energy as calculated using the methodology included in the original request. In each scenario the total clean energy required to be generated based on covered sales, plus any non-targeted clean energy (existing nuclear and hydro generation, if applicable), should be equal to the share of all electricity sales indicated in the table above. The sole exception is in model scenario #4, in which utilities with annual sales of less than 4,000,000 MWh are exempt from having a compliance obligation. For scenario #4, the overall clean energy targets should be applied only to the total retail sales from utilities with annual retail sales greater than 4,000,000 MWh.

Thank you for your attention to this request. I ask that my staff be briefed prior to the release of information. Should you or your staff have any questions, please contact Kevin Rennert with the Senate Committee on Energy and Natural Resources at (202) 224-7826.

Sincerely,



Jeff Bingaman
Chairman