RALPH M. HALL, TEXAS
CHAIRMAN

EDDIE BERNICE JOHNSON, TEXAS
RANKING MEMBER

U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

2321 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6301
(202) 225–6371
www.science.house.gov

July 22, 2011

The Honorable Howard Gruenspecht
Acting Administrator
Energy Information Administration
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Administrator Gruenspecht:

On March, 15, 2011, I wrote then-Administrator Newell requesting an Energy Information Administration (EIA) analysis of the economic impacts of a Clean Energy Standard (CES). The purpose of this letter is to more fully define the assumptions for that study and to recommend the specific analyses I would like you to undertake.

The attached document details this request, which was developed after consultation with your staff. In brief, I request that you estimate the impact of the proposed CES on seven different economic factors, beginning with the base policy scenario as defined by the Annual Energy Outlook 2011 (AEO2011) and then modified using nine additional scenarios as defined in the attachment.

Should you have any further questions, please contact Andy Zach, Professional Staff with the Energy and Environment Subcommittee. In advance, thank you for your assistance.

Sincerely,

Ralph M. Hall

Ralph M. Hall
Chairman

cc: Secretary Steven Chu

Attachment: Details of Chairman Hall CES Analysis Request

Because of the uncertainties associated with the structure and legislative details of a CES, we would like the following details incorporated into the "Best Estimate CES" scenario.

- Eligible resources to meet the target will include: hydroelectric, wind, solar, geothermal, biomass power, municipal solid waste, landfill gas, nuclear, coal-fired plants with carbon capture and sequestration, and natural gas-fired plants with either carbon capture and sequestration or utilizing combined cycle technology. Generation may derive from the electric power sector or from industrial, commercial, or residential generators using qualified resources. Qualifying generation will be determined solely by resource and technology, and not by vintage of the plant or by difference from historic generation at a plant.
- CES target would start from an initial share of 40 percent (qualified generation as a percent of sales), utilities will achieve 80 percent qualified generation by 2035. Because the 40 percent is specified from historical values (2010), and the target share is to increase linearly through the ramping period, EIA will assume that the policy has an initial target of 44.8 percent in 2013. The target will increase by 1.6 percentage points each year thereafter, achieving 80 percent by 2035.
- There will be no sunset in the CES requirement. The 80 percent target will remain constant from 2035 onward.
- The "Best Estimate CES" case will assume utilities may trade credits for generation. The CES target will apply to utilities in the aggregate, and some utilities may generate more electricity from eligible resources and may trade compliance credits to other utilities, who may then apply those credits to a compliance deficit.
- Compliance with CES targets will be based on accumulated credits. In general, and unless otherwise indicated, credits will be worth a "face value" of 1 MWh for each MWh of generation. Credits for natural gas fired in a combined cycle will count 50 percent toward compliance (a utility will earn 0.5 MWh of compliance credits for every 1 MWh of natural gas generation from a combined cycle plant.) Credits from coal or natural gas with carbon capture and sequestration will count 90 percent towards compliance.
- There will be no option to purchase compliance credits from the government. All credits must be backed by physical generation.
- All utilities are covered by the requirement, regardless of ownership status or size.
- Utilities would not be able to "bank" excess credits earned in one year to be used for compliance in a subsequent year. All credits must be used for compliance in the year that the underlying generation was produced.
- Generation targets are specified based on sales of all electricity, regardless of source. There is no provision for excluding any electricity sales from each utility's baseline based on resources used to produce the lectricity or type of customer purchasing the electricity.
- The model will assume a national CES does not interfere with any similar policies in effect at the state level. Utilities may use the same underlying generation to simultaneously comply with any State generation requirements, if otherwise allowed for by both Federal and State law.

Utilizing the parameters outlined above, please examine several scenarios. In addition to examining the base policy scenario, as defined by the Annual Energy Outlook 2011 (AEO2011), please outline the following scenarios:

1. Best Estimate CES, as defined above;
2. Low Cost Nuclear, same as Best Estimate CES, but incorporating the "Low Cost Nuclear" assumptions developed for an AEO2011 summary case;
3. High Cost Nuclear, same as Best Estimate CES, but incorporating the "High Cost Nuclear" scenario developed as an AEO2011 summary case;
4. Low Cost Renewable, same as Best Estimate CES, but incorporating the "Low Cost renewable" scenario developed as an AEO2011 summary case;
5. High Cost renewable, same as Best Estimate CES, but incorporating "High Cost Renewable" scenario developed as an AEO2011 summary case;
6. Low Shale Gas Recovery, same as Best Estimate CES, but incorporating the assumptions from the "Low Shale Estimated Ultimate Recovery" case in the AEO2011;
7. High Shale Gas Recovery, same as Best Estimate CES, but incorporating the assumptions from the "High Shale Estimated Ultimate Recovery" case in the AEO2011;
8. High Coal Cost, same as Best Estimate CES, but incorporating the assumptions from the "High Coal Cost" scenario in the AEO2011;
9. Low Coal Cost, same Best Estimate CES, but incorporating the assumptions from the "Low Coal Cost" scenario in the AEO2011.

For each of the scenarios outlined above, please calculate

- projected average cost of electricity generation per megawatt-hour;
- overall nationwide electricity generation costs;
- average cost of electricity per household;
- national gross domestic product;
- gross domestic product per capita; and
- national employment levels.