The Honorable Pete V. Domenici Chairman Committee on Energy and Natural Resources United States Senate Washington, D.C. 20510

Dear Mr. Chairman:

Thank you for your letter dated June 10, 2003, requesting that the Energy Information Administration (EIA) conduct additional analyses of the potential costs of a proposed Renewable Portfolio Standard (RPS).

The enclosed supplement to the Service Report "Analysis of a 10-Percent Renewable Portfolio Standard" provides the key results of EIA's analysis. The principal conclusions are:

- Total cost to the power industry¹ of the RPS through 2030 is estimated at \$6.2 billion (2001 dollars, discounted at the Federal rate of 7 percent) if the credit price cap is adjusted for inflation or \$5.1 billion if the credit price cap is not inflationadjusted.
- In nominal dollars (dollars not adjusted for inflation and not accounting for the time value of money), these costs are \$36.3 billion with an inflation-adjusted credit price cap or \$30.7 billion if the credit price cap is not adjusted for inflation. These costs represent 0.28 and 0.24 percent, respectively, of the total value of electricity sales over the 2004 to 2030 period calculated on a comparable basis.
- If existing State-level mandates for new renewable generation do not result in additional renewable generation, industry costs through 2030 will be somewhat higher: \$7.6 billion (2001 dollars, discounted at 7 percent) with an inflationadjusted credit price cap or \$6.0 billion without an inflation-adjusted cap.
- If new biomass co-firing operations cannot contribute to meeting the RPS requirements, industry costs through 2030 will be significantly higher than if biomass co-firing can contribute: \$10.1 billion (2001 dollars, discounted at 7 percent) with an inflation-adjusted credit price cap or \$7.0 billion if the credit price cap is not adjusted for inflation.

¹ This represents the cost incurred by the power industry, including fuel suppliers, equipment manufacturers, and the Government for RPS allowances. It does not include transfer payments within the industry, such as the purchase of RPS credits from private entities.

- In the unlikely event that no new renewable generation was added despite the availability of an additional subsidy of up to 1.5 cent per kilowatt hour in inflation adjusted terms through the implementation of the RPS program and all credits were purchased from the Secretary of Energy, the total value of these purchases could be as much as \$37 billion (2001 dollars, discounted at 7 percent) over the 2008 to 2030 period.
- For an RPS where the credit price cap is not adjusted for inflation, the total value of credit purchases from the Government over the same period under the same assumption that no new renewable generation was added would be as much as \$26 billion (2001 dollars, discounted at 7 percent.)
- The 47 gigawatts of wind turbines that EIA projects would be constructed to meet the RPS with an inflation-adjusted price cap would utilize the wind resources from 1.8 million acres of land, although the units would physically occupy about 90 thousand acres. This utilization is less than 2 percent of the potential U.S. wind resource, and would eliminate 0.01 percent of U.S. farmland from agricultural use.

Should you have any questions, you may contact me on 202-586-4361 or your staff may contact Mary J. Hutzler, Director of the Office of Integrated Analysis and Forecasting on 202-586-2222.

Sincerely,

Guy F. Caruso Administrator Energy Information Administration

Enclosure

cc: The Honorable Jeff Bingaman Ranking Minority Member