

South Dakota Public Utilities Commission  
Docket EL15-026  
MidAmerican Energy Company  
Data Request No. 1-4

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- 1-4) Refer to page 3 of attachment 1. With all of the new wind projects placed in service recently and projected to be in place by the end of 2015, explain why coal, oil, and gas usages from page 1 have not seen any sort of significant decrease yet, in fact are projected as significant increases in the next 5 years.

**Response:**

MidAmerican's generating unit fuel requirements were estimated based on dispatching MidAmerican generating units against a market price simulating the MISO market. The MidAmerican generating units selected to run in the particular hour are summarized by fuel type and the corresponding production cost, and then stacked hourly from lowest incremental production cost to highest incremental production cost (wind, nuclear, coal and natural gas) up the dispatch quantity required to meet the MidAmerican hourly retail energy requirement. The marginal cost of the fuel type dispatched to meet the retail energy requirement for the hour is the avoided cost of energy and the resulting tariff rate for that hour. Wind unit production is the first resource assigned to retail customer requirements and more wind does lower the marginal cost of energy by replacing higher cost generation. MidAmerican responded to the question by providing the MISO market fuel requirements rather than the retail customer fuel requirements from the marginal unit.