Gambling with the Grid: The Cost of Doing Nothing

STUDY FINDS COST TO CONSUMERS OF PREMATURE COAL PLANT RETIREMENTS IS 15 TIMES MORE THAN THE COST OF CONTINUED OPERATIONS

In July 2018, Energy Ventures Analysis (EVA) studied actual at-risk coal plants to assess the impact of plant closures on U.S. power markets. It found the cost to consumers of premature retirements vastly outweighs the cost of supporting continued operations. In addition, these plants play a critical role in maintaining the reliability of the grid. During periods of extreme cold, coal is the only source of resilience for the grid.

- Cost to keep at-risk plants running: $130 million / yr.
- Increased costs to consumers to close three at-risk coal plants: $2.0 billion / yr.
- Capital cost to replace three coal plants with the same amount of natural gas plant capacity: $5.7 billion.

What's wrong with the status quo? As we continue to lose more coal power plants, our power system becomes more expensive and less reliable. The power plants currently at-risk of closing prematurely keep the lights on and power prices lower.

Shouldn't the market be allowed to self-correct? Far from being a competitive market, the electricity marketplace has been distorted by unbalanced regulation and enormous subsidies for renewable energy sources. Renewable portfolio standards paid for by consumers and federal tax credits paid for by taxpayers have pumped tens of billions of dollars into energy sources that simply would not have been built without government intervention.

Policy support and market reforms are necessary to offset these market distortions and properly compensate coal plants for the reliability, fuel security and resilience they provide the country's bulk power system.

What does coal offer the grid that is unique? As this study shows, the cost to consumers of shutting down coal plants is vastly more than keeping them running.

In addition, coal provides unrivaled reliability by offering unmatched fuel security. Specifically, during the cold snap in January 2018, coal plants, which typically store more than a month's fuel supply on site, provided 57 percent of the increased generation across the entire eastern U.S., while wind and solar provided none and natural gas only met 16 percent of increased power demand.

How is this study different? This is the first study that quantifies the costs to consumers from higher power prices by allowing at-risk coal plants to close prematurely. Other recent publicly available studies only examined the potential costs of hypothetical policies for supporting continued operations of these at-risk plants. This study is based on actual costs of real plants as opposed to generic plant costs. By examining the costs of both closing and supporting continued operations of these plants, this study shows that it will be vastly cheaper to support their continued operation.

In addition, this study reviews the additional benefits provided by coal plants through irreplaceable reliability and fuel security, which are not available from natural gas, wind or solar.