

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Technical Conference on Environmental Regulations)
and Electric Reliability, Wholesale Electricity Markets,) **Docket No. AD15-4-000**
and Energy Infrastructure)

Central Region Technical Conference
St. Louis, Missouri
March 31, 2015

**Prepared Statement of
Berkshire Hathaway Energy Company**

I. Introduction

Berkshire Hathaway Energy Company (BHE)¹ submits this written statement in conjunction with the Commission’s March 31, 2015 technical conference addressing the reliability, market, and infrastructure implications of the Environmental Protection Agency’s (“EPA”) proposed Clean Power Plan.

Four of BHE’s operating companies – MidAmerican Energy Company; BHE Renewables, LLC; NV Energy, Inc.; and PacifiCorp – filed comments with the EPA on the practical implementation of the Clean Power Plan within their states or regions. These

¹ Berkshire Hathaway Energy Company, based in Des Moines, Iowa, is a global energy services provider that serves more than 11.4 million electric and natural gas customers and end users worldwide. BHE’s comments reflect its relatively unique position and broad perspective as a diversified public utility holding company comprising three vertically-integrated public utilities, MidAmerican Energy Company, NV Energy, Inc., and PacifiCorp, which collectively serve more than 5 million electric customers in 11 Midwestern and Western states; two interstate natural gas pipeline companies, Northern Natural Gas Company and Kern River Gas Transmission Company, which operate extensive pipeline systems totaling approximately 17,000 miles and transporting nearly 8 percent of all the natural gas consumed in the United States; two natural gas local distribution companies, MidAmerican Energy Company and Sierra Pacific Power Company (a wholly-owned subsidiary of NV Energy, Inc.), which provide public utility natural gas service to more than 850,000 customers in five Midwestern and Western states; a transmission development company, BHE U.S. Transmission, LLC, which owns and operates transmission assets in several regions of the U.S.; and an independent power producer, BHE Renewables, LLC, which operates wind, solar, geothermal, hydro and natural gas combined cycle units in California, Arizona, Texas, New York, Illinois and Hawaii.

comments also contained suggestions to improve the rule to ensure that each company will be able to continue delivering safe, reliable, reasonably-priced, lower-carbon electricity to customers in a manner that achieves the goals of the Clean Power Plan. BHE supports the building block and flexible compliance concepts proposed in the Clean Power Plan and has urged the EPA to ensure that the intended flexibility is embodied in the final rule.

Rather than addressing BHE's suggested changes to the Clean Power Plan, this written statement offers suggestions for improving wholesale markets under the assumption that the Clean Power Plan will ultimately be adopted in some form.

The specific implications of the Clean Power Plan on wholesale markets cannot be known until the EPA issues its final rule, state plans are submitted and approved, and the plans are implemented. Nonetheless, given the goals of the Clean Power Plan to achieve reductions in CO₂ emissions 30% below 2005 levels by 2030, it is likely that there will be overarching impacts on wholesale markets, including:

- Resources having a high carbon intensity will generate less and will be at risk of retirement.
- Resources having a low carbon intensity will be available to generate more.
- Retiring resources will be replaced by resources having a low carbon intensity.

Based on these anticipated impacts, the Commission can foster certain broad policy outcomes that will be appropriate regardless of the specific elements of the Clean Power Plan final rule. The following comments focus on two broad areas: first, policy issues affecting wholesale electric markets; and second, policy issues affecting natural gas infrastructure.

II. Implications of EPA's Proposed Clean Power Plan on Wholesale Electric Markets

The Commission should facilitate compliance with the Clean Power Plan in various ways, including the following:

A. Generator Interconnections

First, the Commission should ensure that market rules foster the prompt processing of generator interconnection requests. A lengthy process is often required to process generator interconnection queues in wholesale markets. Interconnection queues frequently contain thousands (or tens of thousands) of megawatts of potential projects. The studies to determine the potential impact of these resources on the transmission system take extended periods of time and are often contentious. As potential projects enter and exit the queues, significant uncertainty is created for both transmission planners and for potential generator owners.

The Clean Power Plan is likely to exacerbate these problems. The existing transmission system is likely to become more stressed as utilization of existing resources changes, either through retirement or altered production, and as new resources are required to replace retired capacity. Not only does the Clean Power Plan contemplate a reduction in the generation of electricity from coal-fueled facilities, it contemplates a significant increase in the utilization of existing natural gas combined cycle facilities (which may or may not have sufficient transmission to accommodate these increases), as well as a marked increase in the amount of renewable generation. Generator interconnection queues are likely to become longer and the period required for transmission planning is likely to be extended at a time when the Clean Power Plan

compliance deadlines are looming. These issues will in turn factor into a state's ability to achieve the reductions under its state plan.

A number of organized markets have taken steps to improve and streamline interconnection queue processing. The Commission should remain open to continued process improvements as the Clean Power Plan is implemented. For example, the study process can be better streamlined by reducing the likelihood that entities in the queue will cancel their projects during the study process.

B. Integration of renewable resources

Second, the Commission should ensure that market rules foster the efficient integration of variable renewable resources. The last decade has seen a significant increase in renewable energy. BHE believes renewables will continue to play an important role in reducing emissions from the electricity sector, and implementation of the Clean Power Plan is likely to trigger a surge in new renewable projects.

Variable renewable resources pose unique challenges since they typically cannot be dispatched at will; rather, their output is dependent on current climate conditions. The existence of large Regional Transmission Organization ("RTO") markets has proved immensely beneficial in integrating these resources. There is frequently a diversity in renewable resources across large geographic markets, such that wind energy is increasing in one portion of the footprint while it is decreasing in another. Large market footprints typically allow for more economic provision of operating reserves than would be possible in smaller, balkanized markets. The Commission should continue to provide a strong signal for entities to form and/or join organized markets including incentives on return on equity.

The Clean Power Plan is likely to foster further development of renewable energy, and the Commission should encourage market rules that permit RTO markets to efficiently integrate these resources, such as streamlining the interconnection process and providing transmission cost allocation methodologies that include both jurisdictional and non-jurisdictional entities.

C. Transmission expansion

Third, the Commission should ensure that its rules foster transmission expansion when required for new resources that will help to improve efficient electric markets. Transmission expansion is often a slow process, with many years required between the initial identification of a transmission constraint or reliability concern and the ultimate construction of a project to alleviate that concern. As a result, transmission projects must be identified far in advance of their need. The time necessary to identify and address transmission needs is often complicated by controversies over transmission siting, cost allocation, resolution of inter-agency consultations, biological and cultural studies, and other aspects that lengthen the process.

Implementation of the Clean Power Plan will intensify these problems, since the retirement of existing resources and the construction of new resources can each necessitate new transmission projects. In that process, new transmission constraints will be identified that have not been concerns in the past.

The Commission should encourage processes that streamline the transmission planning process, provide the appropriate regulatory framework to allow for cost recovery of transmission investment, and provide appropriate returns to encourage transmission investment. Further, to the extent that new transmission facilities are

required to implement the Clean Power Plan, the Commission should ensure that transmission planning processes and tariffs contain the appropriate regulatory mechanisms to deem those facilities to be needed by “public policy requirements” as that term is used in Order No. 1000.²

D. Seams elimination

Fourth, the Commission should ensure that market rules foster the free flow of energy and capacity across market boundaries. Large RTO markets have generated significant savings by permitting the economic dispatch of generation across wide areas. However, seams between RTOs are often bottlenecks to the efficient flow of energy. Implementation of the Clean Power Plan may increase the differences in energy prices between regions with lower and higher carbon intensities. The Commission can help mitigate these price differences through attention to seams between RTO markets. The Commission should encourage through incentives and clear policy direction:

- Consistent market rules between RTOs;
- A clearer framework for cost allocation between RTOs, including the ability for an RTO to seek resolution when interregional or seams projects are vetoed by another region;
- The formation of regional transmission tariffs in areas where there are multiple transmission tariffs and balancing areas;
- Consistent interface pricing between RTOs;
- Optimization of energy transfers between RTO markets;
- Ease of transmission access between RTOs; and
- Cross-border transmission construction between RTO markets.

E. Unit commitment process

Finally, implementation of the Clean Power Plan will likely alter the resource mix in many RTO markets. Among other things, the Clean Power Plan will lead to a greater

² *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323 (2011), *order on reh’g*, Order No. 1000-A, 139 FERC ¶ 61,132, *order on reh’g and clarification*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff’d sub nom. S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41 (D.C. Cir. 2014).

reliance on natural gas as a fuel. Unlike coal, natural gas is typically not stored on site but is acquired on a day-to-day basis as resources are committed in each RTO's day-ahead market. To help ensure fuel availability, RTOs may find it prudent to institute financially-binding unit commitments more than one day in advance. This would provide generator operators with the assurance that they will be reimbursed for fuel purchased in advance to meet the reasonable needs of the RTO market. The Commission should remain open to RTO proposals for binding, multi-day unit commitments as the Clean Power Plan is implemented.

III. Implications of EPA's Proposed Clean Power Plan on Pipeline Infrastructure

The Commission can institute internal changes and regulatory reforms to ensure that adequate infrastructure is in place to meet the anticipated incremental capacity needs for expanded gas service in response to the Clean Power Plan.

Consistent with BHE's (then MidAmerican Energy Holdings Company) comments in Docket No. AD12-12, the Commission should reexamine, and where appropriate, revise its certificate review process for gas infrastructure projects in order to accelerate the permitting timeline and enhance cooperation among federal agencies.

First, the Commission should consider regulatory changes to expand use of the automatic blanket certificate to include the construction of mainline facilities. In 2006, the Commission enacted rule changes that allow for mainline facilities to be built under the Commission's prior-notice regulations. The Commission should consider allowing mainline facilities to be constructed under a pipeline company's automatic blanket authority, subject to the same cost-cap limits as those applied to non-mainline facilities.

BHE also supports proposals to increase the cost-cap limits for blanket projects. Regulations for construction of pipeline facilities under the automatic blanket provisions

of an operator's blanket certificate provide adequate protection for landowners and address environmental, historical and cultural concerns.

Second, BHE encourages the Commission to facilitate the project review process and shorten the time expended following the filing of a Section 7(c) application after the full engagement of the of the Commission's formal pre-filing process. Currently, the time between Commission approval of a company's request to use the pre-filing process and the pipeline company's filing of the Section 7(c) application is at least 180 days. Since the environmental review is substantially completed during the pre-filing process, the Commission should identify ways to expedite its final review of the Section 7(c) application (*e.g.*, via concurrent review of rate, tariff and other requirements during the pre-filing process).

The Commission staff has done a commendable job of balancing the various interests in reviewing and forwarding pipeline projects. To the extent possible, BHE encourages the Commission to allocate additional personnel resources to the pipeline project review process.

IV. Conclusion

BHE appreciates the Commission's interest in the issues raised by the EPA's Clean Power Plan and urges the Commission to consider these comments as it implements changes in conjunction with the Plan.