FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426

August 30, 2016

OFFICE OF THE CHAIRMAN

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Upton:

Thank you for your June 10, 2016, letter asking about my perspective on the current and future state of the organized electricity markets. As you know, my first priority is to focus on the fundamentals in the competitive markets, to continue to look for ways to improve the efficiency of the markets, and to deliver greater value to consumers. To meet these goals, the Federal Energy Regulatory Commission (FERC or Commission) continues to work to promote greater efficiency, competition, and transparency in the wholesale markets.

While I answer your specific questions below, I want to first highlight some work the Commission has done with respect to the organized markets. The Commission continues to rule on proposals by each regional transmission organization (RTO) and independent system operator (ISO) to promote greater efficiency, competition, and transparency in the markets when and as such proposals are filed. In addition, the Commission initiated a generic effort aimed at improving the functioning of the organized wholesale markets by taking steps to identify any rules for pricing, settlements, and operator actions that may be causing prices in markets to not reflect the underlying market fundamentals. This effort has been referred to generally as price formation. Specifically, the Commission initiated its price formation efforts in the organized markets to pursue the following goals: (1) maximize market surplus for consumer and suppliers; (2) provide correct incentives for market participants to follow commitment and dispatch instructions, make efficient investments in facilities and equipment, and maintain reliability; (3) provide transparency so that market participants understand how prices reflect the actual marginal cost of serving load and the operational constraints of reliably operating the system; and, (4) ensure that all suppliers have an opportunity to recover their costs. As an example of recent actions in price formation, the Commission issued a final rule this June to ensure that resources are compensated for the value they provide when they provide it to the system (press release is attached). This energy market reform should reduce uplift charges, which are charges from an RTO/ISO collected outside of the market-clearing commodity price; these charges can include payments to reliability must run units, other out-of-merit-order power purchases, administrative costs of the RTO/ISO, or other cost categories. It should also improve efficiency, promote the more efficient use of resources, and encourage greater price transparency, which informs decisions to build or maintain resources, especially flexible resources. The Commission has also signaled that it expects to address other issues affecting price formation, including mitigation, uplift transparency, uplift drivers, and a recently issued notice of proposed rulemaking on offer price caps.

As the Commission explores additional reforms, we must ensure that we have thought through and addressed the numerous policy and technical details that are affected by any market reforms we adopt. I am committed to being thoughtful and judicious in prioritizing and pursuing solutions to address price formation issues. I think this is an example of the way in which the Commission continually seeks to achieve incremental progress, improving its markets and building upon what it has done in the past.

Turning to your questions:

1. Have the competitive markets fared as expected since restructuring began over 20 years ago, particularly in terms of market efficiency, capital investment, reliability, electricity rates, and consumer impacts?

Response: The markets have delivered some unquestioned successes since their launch more than twenty years ago. Wholesale energy prices are at historically low levels. While the development of new low-cost technologies and the decline in fuel prices have played a role in lower electricity costs, this trend is also a product of the efficiency and transparency of a competitive market design that rewards efficiency and conveys pricing signals to the marketplace. In addition, competitive markets have clearly led to the substantially more efficient use of the transmission system, in the form of priority use for the lowest cost resources and greater utilization of the transmission system overall.

In addition, the markets have adapted well to rapid changes in the generation fleet. Although it is unlikely that considerable thought was given to the possibility of such turnover when restructuring was first contemplated, robust market design has enabled this ongoing transition to unfold with relatively little manual intervention at the wholesale level and without significant impact to overall reliability. While there have been challenges along the way, such as the polar vortex of January 2014, the markets have largely addressed such obstacles with a "bend but not break" approach in which market prices indicate the need for additional infrastructure or services.

Of course, the driving force behind pursuing competitive market design is the consumer. Due to the complexity of the system, there are always improvements that can be made to the markets. The Commission remains focused on evaluating the markets on an ongoing basis, seeking opportunities to improve efficiency and transparency wherever possible. One example of this is the Commission's price formation effort described above. In addition to the final rule regarding settlement intervals and shortage pricing, last

November, the Commission also directed RTOs/ISOs to file reports on five price formation issues: (1) pricing of fast-start resources; (2) commitments to manage multiple contingencies; (3) look-ahead modeling; (4) uplift allocation; and (5) transparency on a range of price formation issues. Interested parties were invited to submit comments in response to those reports. Commission staff is currently reviewing this information. The Commission also issued a proposed rule on offer caps this January, and Commission staff is currently reviewing the comments submitted in that docket.

2. Are the competitive markets equipped to promote, integrate, and adapt to new technologies, new products and services, and state and federal policy changes?

Response: Yes, the competitive markets are well-equipped to adapt to new technologies, new products and services, and state and federal policy changes. In fact, developers of new technologies largely have chosen to concentrate their development activities in regions with competitive markets. However, to ensure that adaptation is timely and efficient, the Commission must continually assess whether there are barriers to interconnecting with the grid or to the ability to participate in those markets in a non-discriminatory manner. We must also make sure that the markets value resources correctly. The Commission is currently taking action to evaluate each of these issues. For example, in May 2016, the Commission held a technical conference on generator interconnection issues, including interconnection of electric storage resources. The Commission will carefully consider the information gained during the conference, as well as post-technical conference comments on specific questions, which are due June 30, 2016.

The Commission also continually reviews the markets it oversees for barriers to entry for new technology. For example, in April 2016, Commission staff issued a data request to each RTO/ISO and a request for public comments to examine whether barriers exist to the participation of electric storage resources in the capacity, energy, and ancillary service markets in the RTOs and ISOs. If it is determined that potential barriers exist, Commission staff will examine whether any tariff changes are warranted. The RTOs/ISOs submitted responses May 16, 2016, and the public was invited to submit comments on those responses by June 6, 2016. We continue to evaluate these comments.

Finally, with respect to valuing resources correctly, as noted above, the Commission has already taken some actions to address appropriate compensation and continues to pursue additional reforms. For instance, in October 2011, the Commission required reforms to the rules for frequency regulation compensation to ensure that resources that are fast and accurate receive compensation that reflects the quality of service they provide. The Commission is currently examining price formation in the organized markets to further the goals as described above.

The Commission will continue to assess the competitive markets it oversees and take action to ensure that they are equipped to promote, integrate, and adapt to new technologies, new products and services, and state and federal policy changes.

3. What is the Commission's view as to how non-FERC jurisdictional federal and state actions, such as the federal production tax credit or state renewable energy mandates, impact the operation of wholesale markets generally, and, specifically, in terms of impacts on reliability, resource and technology neutrality, and wholesale power prices?

Response: There is a wide range of federal and state actions that can impact wholesale power markets. These actions often take the form of public policy choices at the state level. As you note, one such example is compliance with state renewable portfolio standards. The Commission needs to carefully consider a state's desire to promote generation resources with certain attributes when exercising our responsibility to ensure that wholesale power rates remain just and reasonable. These issues have arisen in a variety of situations, and the Commission has considered them on several occasions, such as during its September 2013 technical conference on capacity markets. The Commission has also addressed these issues on a case-specific basis, allowing limited exemptions for such resources from certain minimum offer price rules in both New England and New York, and limiting the types of resources that face such minimum pricing rules in the PJM Interconnection market. In those decisions, the Commission sought to carefully consider the interests of the states in carrying out our obligation to ensure that rates remain just and reasonable. This remains an important issue for the Commission and one which we continue to monitor.

In response to the changing generation resource mix, the Commission has taken or proposed several technology-neutral actions related to reliability, such as a final rule in July requiring new small generating facilities to ride-through minor changes in grid voltage or frequency, comparable to an existing requirement for large generating facilities. Also, in June, the Commission issued a final rule requiring new non-synchronous generators such as wind turbines to provide reactive power, similar to an existing requirement for other generators. Finally, the Commission has opened a proceeding, and received public comment, on the obligations of generators for an essential reliability service referred to as "primary frequency response," and I am hopeful that the Commission can propose specific action on that issue soon. Actions such as these can help maintain grid reliability while accommodating the policy preferences adopted under other federal or state laws.

4. How do new technologies, programs, incentives, and policy changes at the state and federal levels affect the jurisdictional "bright line"? Is that line becoming increasingly blurred as a result of such changes?

Response: The question of the jurisdictional line between the Commission and the states is not a new one and dates back to the passage of the Federal Power Act. More recent changes in the electric industry have brought additional focus to that issue. There are several major trends or developments driving these changes. First, the shale gas revolution has resulted in an abundant and historically low-priced natural gas supply. Second, organized markets are expanding, and the Nation is seeing a period of low load growth and increased energy efficiency, which impact the markets the Commission oversees. Third, more renewables and distributed generation are being integrated into the energy system. Fourth, state and federal public policies are affecting the energy industry. Finally, the energy industry is seeing a period of increased technological innovation. These trends may raise new or different questions about the relative areas of state and federal jurisdiction, as they already have in the proceedings that led to the recent *FERC v. Electric Power Supply Assn.* and *Hughes v. Talen Energy Marketing* Supreme Court decisions. However, as has been the case in the past, I believe that future questions can be resolved effectively through the collaborative efforts of state and federal regulators and, when necessary, judicial action.

5. Does the Federal Power Act continue to be well-suited for today's electricity sector? Is it well-suited for the electricity system of the future?

Response: Yes, on both counts. I believe that the responses to questions 1 through 4 above show how the Federal Power Act is flexible and thus well-suited to respond to changing circumstances and how the Commission continually assesses its markets to ensure that they can adapt to the challenges presented by changes happening in the energy space.

Again, thank you for your interest in the current and future state of the organized electricity markets. I look forward to discussing these issues with your office and providing any technical assistance you might require.

Sincerely,

[redacted]

Norman C. Bay
Chairman

FEDERAL ENERGY REGULATORY COMMISSION
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OFFICE OF THE CHAIRMAN

The Honorable Ed Whitfield
Chairman
Committee on Energy and Commerce
Subcommittee on Energy and Power
U.S. House of Representatives
Washington, D.C. 20515

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Chairman