



WHOLESALE ELECTRIC MARKET AND TRANSMISSION ISSUES

MARCH 2012

OVERVIEW

■ From the customer’s perspective, issues confronting electric utilities relative to wholesale electric markets and transmission are relatively unknown, yet the customer feels the impacts in the form of unnecessarily increased costs and potential reductions in system reliability.

TRANSMISSION ISSUES

■ The bulk electric transmission grid is comprised of large, high-voltage electric lines that often cross states or are connected to interstate lines. High-voltage transmission lines link electric generating facilities – often in more remote areas – with customer loads. The higher voltages allow the power to move more efficiently over long distances. The bulk transmission system is regulated at the federal level by the U.S. Department of Energy (DOE) and the Federal Energy Regulatory Commission (FERC), through the Federal Power Act (FPA).

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ACTION REQUESTED

AMP / OMEA note with appreciation that the House Energy and Commerce Committee has included a review of wholesale electric market and FERC issues as part of its oversight agenda for the 112th Congress. AMP / OMEA offer the following considerations to their U.S. Representatives and Senators for addressing problems confronting wholesale electric markets and enhancing the reliability of the transmission system.

❑ **FERC Wholesale Markets and Process Oversight:** AMP / OMEA support Congress playing a more active role in encouraging FERC to *refocus on its statutory mandate to ensure just and reasonable rates for customers in a meaningful way, and to examine whether net customer benefits exist for the multitude of RTO market mechanisms deployed, proposed and on the horizon in PJM and MISO.* This oversight could be in the form of targeted oversight hearings and inclusion of appropriate provisions in energy legislation. Enhanced congressional oversight is critical to ensure that FERC is responsive to the real needs of consumers. Congress can be helpful by:

- Insisting that keeping costs to consumers as low as possible be part of the RTO mission, in addition to promoting electric system reliability;
- Directing RTOs to provide improved and more timely data transparency and accountability to consumers;

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ACTION REQUESTED (CONTINUED)

- Ensuring that RTO governing boards are and remain accessible, truly representative (and open) stakeholder boards (i.e., meaning they reflect all load-serving entities);
 - Requiring RTOs to demonstrate that proposed market changes benefit consumers (i.e., stop the creation of new markets and products for the sake of creating markets and products);
 - Requiring the use of meaningful metrics, including: 1) transparent evidence as to the relationship between generator costs and generator bids (i.e., infra-marginal revenue from each source in the market) into energy markets, 2) an accurate portrayal of the long-run market outlook, 3) evidence of the effectiveness of market monitoring and mitigation, and 4) accurate measurement of RTO congestion over time;
 - Requiring FERC to take timely action on proposed tariff changes and disputes to mitigate the effects of the resettlement of the markets. FERC should be required to address fundamental legal issues raised by utility / RTO filings in a timely manner and separately from decisions on other substantive issues through the hearing and settlement process;
 - Requiring FERC to ensure that the RTOs follow their tariff timelines to complete required studies for transmission service and generator interconnections and grant the transmission and interconnection rights in a timely manner. Continuation of the current delays and study deadline overruns prevents LSEs from planning and building generation resources to meet their load service obligations, which increases the cost to customers and delays much-needed investment and economic development;
 - Requiring FERC to end the musical RTO shopping by utilities. If a utility decides to leave a RTO, it should be held responsible for the costs the move creates; and
 - Reiterating that LSEs through their obligation to serve their customers have a right to make generation resource decisions (for example, see previous reference to MOPR) that are not subject to oversight or rejection by the RTO or FERC.
- Measured Transmission Expansion:** AMP / OMEA support prudent transmission expansion necessary for electric grid reliability to enable the interconnection of new generation resources. The electric grid, however, should not be over-expanded as that would increase costs to consumers without benefit.
- Congressional consideration of cost-allocation decisions should be delayed until the Order 1000 rehearing process is complete.
 - Congress should not allow FERC to socialize costs for new transmission facilities on an interconnection-wide basis because such an allocation would force load to pay for transmission projects that do not benefit the load.
 - Congress also should not allow FERC to implement participant-funding mechanisms because such an allocation assigns the entire cost of upgrades to the last incremental portion of load to join the system, forcing a small portion of the load to pay the entire cost of system upgrades that benefit numerous loads in an area near the upgrades. Instead, costs should be allocated to load “roughly commensurate” with the benefit to load of any new transmission and be structured in a manner that is as legally sound as possible.
 - Congress should demand that FERC only grant enhanced financial incentives to developers when the developers take real non-reimbursed risk on new projects. For example, FERC should not grant return-on-equity (ROE) incentives to developers that are guaranteed cost recovery through other incentives such as construction work in progress (CWIP), formula rates, and abandoned plant cost recovery.

■ Closer to the end-use customer, the lower-voltage electric distribution system takes over. This system consists of hundreds of thousands of miles of distribution lines that provide power to homes and businesses. State and local governments generally regulate the electric distribution system and the utilities that own and operate these facilities.

■ In recent years, Congress and FERC have sought to encroach on some of this state and local authority. Under the Energy Policy Act of 2005, FERC was granted conditional “backstop siting authority” to speed the construction of needed transmission capacity in areas deemed to be “national interest electric transmission corridors” (NIETCs), thus bypassing certain state and local authorities. While FERC recently issued final rules (Order 1000, currently subject to rehearing) addressing the planning and construction of new power lines, the agency failed to follow the statutory requirement of planning for the long-term needs of load-serving entities (LSEs).

■ The resulting regulatory tension is expected to continue, especially as the federal government seeks to promote new energy technologies, such as smart grids and distributed generation.

WHOLESALE ELECTRIC MARKET ISSUES

■ Many of the public power systems in AMP’s membership still purchase a portion of the power used to serve their ultimate retail consumers from wholesale electric markets. Additionally, FERC requires entities to schedule their own resources through the wholesale markets operated by regional transmission organizations (RTOs), even to serve their own load. Thus, wholesale electric markets continue to play a significant role in the ability of municipal electric systems to continue to deliver cost-effective, reliable service to their customers.

■ Under the FPA, FERC is responsible for ensuring that wholesale electric rates are “just and reasonable.” Historically, FERC met this statutory requirement through active, cost-of-service rate regulation. In 1995, however, FERC embarked on a long, evolutionary path designed to introduce greater competition into the wholesale electric generation markets. In short, FERC believed that market forces (rather than pure regulation) could better serve the public interest and that customers would see lower prices, better service, and innovation.

■ This market evolution included the creation of RTOs, including the PJM Interconnection (PJM) and the Midwest Independent Transmission System Operator (MISO), which serve the geographical areas encompassing AMP’s member footprint, with the majority of AMP’s members being located in the PJM area.

■ RTOs were originally intended to provide more efficient and better coordinated transmission system operations and reliability functions. In addition, RTOs were to provide non-discriminatory, open-access transmission service for electric generation transactions — by requiring that owners of transmission lines not give preference or deny the use of their transmission lines to other sellers and purchasers of electricity. To carry out this responsibility, RTOs assumed functional control, but not ownership, of the high-voltage transmission system.

■ These original objectives have further evolved so that today, RTOs essentially determine which electric generation units operate, when they operate, and the price that the power from those units should command as a commodity in the wholesale power market.

■ RTOs have developed a variety of market products to essentially disaggregate the electricity commodity into its various components, including energy, capacity, and a variety of ancillary services. The sum value of the components, however, exceeds the value of the total electricity commodity in many instances, thus increasing costs to customers.

■ Wholesale electric markets are often described as dysfunctional, because the higher prices paid by customers have failed to incent specific desired behaviors – the building of needed new generation and trans-

mission resources. Under the current RTO market structure, there is little incentive for for-profit entities to add new generation or transmission resources to the grid, which would result in lower prices paid to existing transmission owners and generation providers for their products and services.

■ Ensuring electric system reliability rests with the North American Electric Reliability Corp. (NERC), which is not a federal agency, but a private entity that develops reliability guidelines for the electric industry. NERC has the obligation to register all entities that meet certain requirements for inclusion in its compliance registry; registered entities must meet approved reliability standards or face enforcement action. The system has generally been a success, although new concerns about cyber-security threats to the electric grid – and related national security concerns – are leading to calls for new FERC authority to enforce utility compliance with reliability standards.

PROBLEMS IDENTIFIED

■ RTOs / Wholesale Electric Markets

- The system provides opportunities for generation owners to earn excess profits without providing adequate protection for consumers.
- Incumbent generation and financial interests lobbied for – and FERC enacted – rules against LSEs receiving full capacity credit for building generation. FERC has decided that there is no right for a LSE to build generation to supply its customers and still receive full capacity credit, but instead must rely on generation purchased through the RTO capacity markets. The new rule – known as the Minimum Offer Pricing Rule (MOPR) – assumes that buyer or consumer market power is pervasive in the markets and is unjustly harming generation owners.
- The current market structure does not provide an incentive for long-term contracts for electricity, which not only provide price stability for consumers but also can provide a guaranteed revenue stream for generation assets, which has been essential to the financing of new generation assets in the past.
- The market rules are under a constant state of change.
- Significant participation of financial entities in the markets has resulted in the markets being redefined as primarily financial in nature instead of dedicated solely to the provision of wholesale electric supply. This has resulted in the threat of dual regulation of the RTO electric markets by FERC and the Commodity Futures Trading Commission.
- Rates are no longer based on costs. FERC has instead granted “market-based rate authority” to many sellers of wholesale electric power (i.e., based partially on the theoretical level of competition occurring in RTO markets) and subject only to reporting and limited oversight requirements.
- Markets utilize a single, uniform clearing-price auction, where the highest price offered is paid to all generators selling into the market – even those selling power from low-cost generation.
- There is only limited (if any) data on the actual costs of electricity generators, electric sale prices, and other essential information needed to determine if these markets bear any resemblance to truly competitive markets.
- The current interconnection process – whereby new generation facilities must be approved by their host RTO for “interconnection” to the grid – is highly inefficient and results in unnecessary delays to generation providers and their customers. AMP has seen studies take more than one year longer than is required under the FERC tariffs and produce results with estimates of upside costs that have ranges as wide as \$50 million. Additional oversight at a minimum is needed into this process.
- In order for their generation and marketing affiliates to take advantage of higher prices markets, two transmission-owning utilities have switched RTOs. The move from one RTO to another RTO has placed

load in the two transmission systems at risk of stranded costs from the RTO losing load. FERC should not encourage utilities to play musical RTOs based on where their affiliates can make the most money and allow stranded costs created by the decision to be passed through to consumers.

■ **Transmission Issues**

- **Siting:** Especially in recent years, the siting and construction of new transmission lines has become a very real problem for utilities trying to connect generation facilities to the grid, with local opponents often successfully invoking the “not in my backyard” (NIMBY) argument.
- **Cost Allocation:** The need for construction of new transmission also has raised the issue of “who pays” – also known as “cost allocation.” In its Order 1000 (currently subject to rehearing), FERC identified six reasonable cost allocation principles that delineate the cost allocation process and should minimize cost burdens that are not associated with benefits. Some in Congress want to legislate a way around FERC’s proposal, which could result in lengthy legal challenges.
- **Joint Ownership:** Transmission facilities in our region are generally owned by the very largest investor-owned electric utilities; smaller municipal electric and rural cooperative electric systems have not historically owned much transmission capacity. Joint ownership arrangements for transmission – including all LSEs in the transmission footprint – can bring new capital to the table, ease siting hurdles, and overall facilitate better planning processes.
- **Incentive Rates:** Through rates, FERC provides additional incentives to encourage the development of new transmission, including increases to the guaranteed return on equity (ROE) earned by transmission developers. When added with guarantees that transmission owners will recover their costs, thereby shifting project risk from the developer to consumers, these “adders” can customers by unnecessarily increasing the cost of new projects.

American Municipal Power, Inc. (AMP) is a public power leader in providing energy supply and services for member municipal electric systems. AMP has 129 member systems in seven states - Ohio (82), Pennsylvania (30), Michigan (6), Virginia (5), Kentucky (3) and West Virginia (2), and the Delaware Municipal Electric Corporation. These systems serve more than 600,000 customers. The Ohio Municipal Electric Association (OMEA) is the legislative liaison to AMP and 81 Ohio municipal electric communities, which serve approximately 370,000 customers. For more information on AMP or OMEA, please contact: Jolene Thompson, AMP senior vice president and OMEA executive director, at either 614.540.1111 or jthompson@amppartners.org. More information about AMP and OMEA can be found at www.amppartners.org.