

## FERC'S STANDARD MARKET DESIGN— Notice of Proposed Rulemaking (NOPR)

### INTRODUCTION

*This edition of ENERGY reports on a significant and controversial new proposed rule issued this summer by the U.S. Federal Energy Regulatory Commission (FERC). If implemented, this rule would greatly accelerate the evolution to competitive wholesale power markets and substantially change the nature of transmission service in much of the country. The proposed rule also would implement a standard market design for generation and transmission service throughout the U.S.*

*This article summarizes the proposed rule and identifies potentially difficult and contentious implementation issues and other ramifications for industry participants.*

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On July 31, 2002, the Federal Energy Regulatory Commission (FERC) issued a Notice of Proposed Rulemaking (NOPR) that, if enacted, will create a nationwide Standard Market Design (SMD) for wholesale electric power markets. The proposed SMD rule would be a third major rulemaking in a series of initiatives by the FERC to provide open access to the transmission network to realize the benefits of competitive wholesale power markets. In 1996, the FERC issued Order No. 888, which required that all public utilities provide open access transmission as a remedy for undue discrimination. In 1999, the FERC issued Order No. 2000, which encouraged public utilities to place their transmission facilities under the control of a regional transmission organization (RTO) in a timely manner.

Orders 888 and 2000 established Independent System Operators (ISOs) and Open Access Transmission Tariffs (OATTs) as the foundation upon which to build regional transmission institutions and competitive electricity markets. However, the FERC's view is that unduly discriminatory transmission practices continue to occur. In addition, inconsistent design and administration of short-term energy markets has resulted in pricing inefficiencies that can cause rates to be unjust and unreasonable. Recent events, such as the collapse of Enron and the California electricity crisis, indicate that clear, stable market rules, greater infrastructure investment, and sound market monitoring are desperately needed for America's wholesale electricity market.

The FERC's objectives in this third rulemaking, therefore, are to remedy remaining undue discrimination and establish a standardized transmission service and wholesale power market design that will provide a more uniform and level playing field for all entities that seek to participate in these markets. The FERC also seeks in this rulemaking to establish sufficient regulatory backstops to protect customers against the exercise of market power when the market's structure does not support workable competition.

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Specifically, the SMD rule proposes the following:

### *NETWORK ACCESS SERVICE*

Replace Network Integration Transmission Service and Point-to-Point Transmission Service with a single flexible transmission service, Network Access Service, that applies to all users of the interstate transmission grid: wholesale, unbundled retail, and bundled retail customers. The NOPR indicates that the FERC will consider whether all customers should be charged the same transmission rate at implementation or after a four-year transition period.

### *INDEPENDENT TRANSMISSION PROVIDERS*

Require all public utilities that own, control, or operate interstate transmission facilities to either: 1) become an Independent Transmission Provider (ITP); or 2) turn over their facilities to an ITP; or 3) contract with an ITP to operate their facilities. An ITP cannot have a financial interest, either directly or through an affiliate, in any market participant in the region in which it provides transmission service or in neighboring regions.

### *DAY-AHEAD AND REAL-TIME MARKETS*

Require that an ITP provide transmission services and administer a day-ahead and real-time market for energy and certain ancillary services.

### *IMBALANCE ENERGY AND ANCILLARY SERVICES MARKETS*

Establish open imbalance energy and ancillary services markets to allow all market participants to buy or sell their imbalances and ancillary services in a fair, efficient, and non-discriminatory manner.

### *LOCATIONAL MARGINAL PRICING / CONGESTION REVENUE RIGHTS*

Require all ITPs to implement locational marginal pricing (LMP), a market-based method for congestion management, and provide tradable financial rights—Congestion Revenue Rights (CRRs)—as a means to lock in a fixed price for transmission and hedge against uncertainty arising from transmission congestion.

### *CRR AUCTIONS*

Establish a preference for the auction of CRRs, but initially allow regional flexibility for a four-year transition period in determining whether to allocate CRRs to existing customers or auction such rights. All auction revenues would be credited back to customers paying an access charge.



### *TRANSMISSION ACCESS CHARGE*

Establish an access charge to recover embedded transmission costs. This would be designed as a demand charge billed on a customer's load-ratio share of the transmission provider's cost, and would be paid by any customer taking power off the grid.

### *RESOURCE ADEQUACY REQUIREMENTS*

Establish multi-constituent, macro-regional procedures intended to assure, on a long-term regional basis, that there are adequate generation, transmission, and demand-side resources. The planning regions are the areas covered by 1) Western Electric Coordinating Council (WECC); 2) PJM, the Midwest ISO (MISO), and Southern Power Pool (SPP); 3) New York ISO (NYISO) and ISO-New England (ISO-NE); 4) Southeastern Electric Reliability Council (SERC) and Florida Reliability Coordinating Council (FRCC). The NOPR also sets a 12% planning reserve requirement for load serving entities (LSEs). The time horizon in this requirement will be determined separately by each planning region.

### *MARKET POWER MITIGATION AND MONITORING*

Establish procedures to mitigate market power in the day-ahead and real-time markets required by the SMD. Establish Market Monitoring Units (MMU) within each ITP to implement these procedures.

### *STATE REPRESENTATION*

Provide a role for state representatives to participate in the decision-making processes of ITPs through Regional State Advisory Committees (RSACs).

### *SYSTEM SECURITY AND RELIABILITY*

Clarify the obligations of all users of the transmission system in complying with all appropriate standards for ensuring system security and reliability.

The NOPR, in short, proposes to establish a single, standardized transmission service and a single, standardized wholesale market design, although the recent FERC order regarding RTO West suggests that there may be more flexibility than the NOPR implies. The FERC NOPR asserts that the SMD will permit customers under existing contracts to receive the same level and quality of service under the SMD that they receive under their current contracts and, if not completely so, then to the greatest extent feasible. Initial comments on the rule must be filed at FERC by November 15, 2002. Full implementation of the rule is proposed to occur by September 30, 2004.

## STAKEHOLDER REACTION

Stakeholder reaction to the proposed SMD tariff has been decidedly mixed. Entities favoring a more competitive electric power market—merchant generators, brokers, power marketers, and large retail buyers—generally support the SMD tariff. The SMD NOPR also has received a generally favorable reaction from investor-owned electric utilities, although there is concern that the proposed rule may be insufficiently flexible to account for regional differences.

The strongest opposition to the proposed SMD tariff comes from state commissioners and other public officials in the South and West and public power entities in the Pacific Northwest. State regulators are concerned about their potential loss of jurisdiction over

- 1) retail rates (since all transmission service would be purchased under FERC-set rates); and
- 2) the planning and operation of local transmission grids.

Some public power entities also argue that LMP and other aspects of the proposed market design won't work well in the Pacific Northwest's hydro-based system.

The dispute over the merits of the SMD NOPR has become something of a surrogate for a dispute about the merits of competition. The SMD NOPR does not mandate retail competition, but it is feared that this would ultimately cause most generation to be "unbundled" and sold at market-based prices. This concerns some state regulators in the South and West, who see no reason to abandon the traditional regime of bundled, cost-based electricity service provided by monopoly suppliers with an obligation to serve. These regulators contrast the recent California crisis, citing it as an example of the risk and potential harm inherent in the market-based model favored by the FERC, with the relatively low rates and low risk in their traditional utility franchises. Similarly, public power entities in the Northwest believe that the existing transmission arrangements and wholesale market design serve their customers' interests quite well. They see no reason to jettison the status quo for the theoretical benefits of the SMD.

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It is unclear how strong a role regional economics and political considerations will play in the evolution of the rulemaking. Given the California crisis, Enron's collapse, and other recent corporate scandals, this is not the best time to appear to be promoting the "deregulation" of an essential service like electricity. However, some regions of the U.S.—the Northeast in particular—have already implemented a wholesale market design very similar to that required by the SMD NOPR. Moreover, there is broad support among state regulators in the Northeast for the LMP model and the SMD NOPR. Given these regional differences, it is quite likely that the SMD will be implemented much sooner in some regions than in others. However, unless there are additional crises in deregulated wholesale power markets, it is likely that something close to the proposed SMD ultimately will be implemented throughout the U.S. In the end, certain SMD rules and procedures will probably be modified to fit the specific circumstances of each region.

## RAMIFICATIONS FOR INDUSTRY PARTICIPANTS

The transition from today's wholesale market structure to that called for by the SMD NOPR will be challenging for a variety of reasons. Perhaps the most contentious issue will be ensuring that both the allocation of costs across different customer classes and the service advantages for native load customers are not altered beyond politically acceptable limits. This means that financial transmission rights, CRRs, will have to be properly identified and allocated among transmission users. It also means that rules will have to be developed to convert existing contracts for wholesale transmission service (typically between investor-owned utilities and public power entities) to SMD tariff service.

The SMD will also expand the geographic scope of requirements planning for both transmission and generation. It is ironic that a rule designed to complete the transition to competitive wholesale generation markets will at the same time engender the creation of something akin to regional integrated resource planning. This arises because the NOPR contemplates the ITPs and the regional planning boards

making many comparisons between price-responsive demand, new transmission, and altered generation company (genco) practices. Broad cooperation among all stakeholders and state regulators in particular will be needed to establish the regional planning processes and ensure that they are effective. Establishing regional planning processes that are both inclusive (*i.e.*, provide a forum for all interested stakeholders) and effective will not be easy.

There are many issues associated with the establishment of LMP and spot markets for energy and ancillary services, particularly in regions of the country that have had bilateral markets rather than central dispatch. To date, LMP only has been implemented in the U.S. in regions (*i.e.*, the Northeast and mid Atlantic) with centrally dispatched power pools. The experience of the Midwest ISO, which plans to implement LMP in a historically bilateral market, may prove especially instructive. Also, the advent of ancillary service markets may be a boon to some utilities, particularly those with flexible generation resources such as hydroelectric, who may find as a result that their generation assets are worth more.

The experience of California has taught the FERC that electricity markets can diverge significantly from the competitive ideal. As a result, it proposes that each ITP must establish broadly empowered, independent Market Monitoring Units (MMUs) to keep tabs on the market's competitiveness. The MMU will be empowered to not only review the competitive behavior of market participants and take whatever actions are necessary to bring them back into line, but can also to suggest rule changes to enhance the market's operation. The FERC also proposes to put into place "safety net" ceilings on spot electricity prices generally and empower the MMU to impose emergency price ceilings when it finds, for whatever reason, that the market is not operating competitively. Unfortunately, the proposed rule provides little guidance as to when the FERC believes a market participant is acting anti-competitively or when a market is not operating competitively and interventions are needed. The NOPR was much praised for "defining" a market power criterion that is

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consistent with traditional Justice Department guidelines (*viz.*, “the ability to sustain and profit from a price increase prices above competitive levels”), but this definition, by itself, has no operational content and may prove to be a source of controversy. Difficult issues arise about the frequency, extent, and duration of price excursions that can occur before they become abuses, as well as whether to call the benchmark (fair) price the long-run or short-run cost of power as well as what costs should be included in the calculation. This ambiguity raises the specter of regulatory uncertainty, and the potential for (and risk of) opportunism, for many market participants.

## CONCLUSIONS

The SMD rulemaking is a bold, albeit incomplete, attempt to bring about orderly competitive electricity markets. The NOPR may prove to be too prescriptive in some instances, such as in electricity spot market design, and in other instances too skeletal, such as in the regional resource adequacy planning process. Some of the issues that the NOPR engenders will be resolved through bare-knuckle politics, as regions attempt to modify the proposed rule to something that better accommodates their perceived needs. The complexity and scope of the rule will also probably yield more than a few protracted legal battles, as companies flesh out the business implications of the rule. Given the complexity of this effort, we should probably expect unintended consequences that will force the continued modification of market rules—all of which implies that U.S. power markets will continue to be works in progress for some time.

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DR. DANIEL MCFADDEN, RECIPIENT OF 2000 NOBEL PRIZE IN ECONOMICS, AND THREE OTHER PRINCIPALS OPEN *THE BRATTLE GROUP'S* NEW WEST COAST OFFICE

*The Brattle Group* has opened a new West Coast office in the San Francisco Bay area. The office will be staffed initially by four Principals of *The Brattle Group*, including Dr. Kenneth Wise, the office's director and an expert in the application of economics and statistical techniques to analyzing damages issues in business and environmental litigation, and Dr. Daniel McFadden, the E. Morris Cox Professor of Economics at the University of California at Berkeley and recipient of the 2000 Nobel Prize in Economics.

The office, located in Emeryville, California, will offer the full range of *Brattle's* consulting services and expert testimony, with a particular focus on commercial damages, intellectual property, and energy issues. *The Brattle Group* also operates offices in Washington, D.C., London, and its headquarters in Cambridge, Massachusetts. "We have experienced a rapid growth in our litigation and energy consulting on the West Coast," said Peter Fox-Penner, chairman of *The Brattle Group*. "This new office gives us the opportunity to continue that growth and provide increased support to our clients."

EUROPEAN COMMISSION REPORT  
ON REGULATION OF NATURAL GAS  
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