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# FEDERAL ENERGY REGULATORY COMMISSION



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## NEWS RELEASE

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### FOR IMMEDIATE RELEASE

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## COMMISSION PROPOSES NEW FOUNDATION FOR BULK POWER MARKETS WITH CLEAR, STANDARDIZED RULES AND VIGILANT OVERSIGHT

Finding that the absence of a single set of clear rules governing the wholesale electric industry and other impediments is preventing markets from realizing their full potential, the Federal Energy Regulatory Commission today announced wide-ranging proposals to remedy undue discrimination in the use of the interstate transmission system and give the nation the benefits of a truly competitive bulk power system.

In a landmark Notice of Proposing Rulemaking (NOPR), FERC proposes a series of sweeping changes to bring to fruition the kinds of markets envisioned—and advanced—in key Commission orders Nos. 888 and 2000 but not yet realized. The blueprint for change is designed to create genuine wholesale competition, efficient transmission systems, the right pricing signals for investment in transmission, generation facilities and demand reduction, and more customer options. Market monitoring and market power mitigation proposals are also critical parts of today's proposals for standardized power market rules.

Chairman Pat Wood, III commented: "Our goal is to promote economic efficiency in electricity for the benefit of all Americans. Standard market design and standard transmission service lets sellers transact easily across geographic boundaries, cuts costs to customers and improves reliability. We want solid infrastructure, just and reasonable rates, and balanced market rules so investors and competitors see some stability and opportunity in all aspects of the bulk power business. These clear rules and vigilant oversight under a uniform system will replace the obsolete patchwork that we have today."

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The Commission undertakes standard market design (SMD) because of persistent and costly problems in the nation's wholesale electric power markets. These include a decade of under-investment in needed transmission, generation siting in locations far from customers, unduly discriminatory behavior by transmission providers against independent generators, and fundamental design flaws in certain existing electricity markets. These problems have reduced efficiency of grid operations, occasionally compromised the reliability of the grid and raised costs for all customers. Sound market rules and fair and open transmission access, as implemented under these rules, should cure many of these problems.

To provide a level playing field, enhance competition, remove economic inefficiencies and ensure just and reasonable rates, the Commission proposes to modify its pro forma transmission tariff to include, among other things, a single flexible transmission service—Network Access Service. This service would apply consistent transmission rules for all customers—wholesale, unbundled retail and bundled retail—as well as a standard market design for wholesale markets. The current pro forma tariff allows different types of customers to be treated differently in part, because conflicting state and federal rules govern the use of interstate transmission facilities.

The Commission proposes to work closely with the states on all transmission services to customers, over which it proposes to exercise jurisdiction, to achieve non-discriminatory transmission services over the entire interstate grid.

Central to the standard market design concept is its reliance on bilateral contracts entered into between buyers and sellers. The proposal would require transmission service providers to be independent of market participants and to establish short-term electricity markets to complement bilateral contracts. To handle generation imbalances and the procurement of ancillary services, the Commission proposes to require that independent transmission providers operate voluntary short-term markets for energy and operating reserves in conjunction with markets for transmission service. These markets would be bid-based, security-constrained, spot markets operated in two time frames—a day-ahead of real-time operations and in real time. The adoption of a market-based locational marginal pricing (LMP) transmission congestion management system is designed to provide a mechanism for allocating transmission capacity to those who value it most. The system would encourage efficient provision of transmission service and encourage the development of needed transmission, generation and demand response infrastructure.

LMP reveals the value of power at each location on a grid and reduces

transmission system congestion between locations. This in turn reveals the value of locating generation at different points and upgrading transmission. It also suggests the value of reducing electricity consumption.

To guard against overreliance on spot markets, the Commission is proposing a resource adequacy requirement to ensure that future regional needs are addressed through self-supply or bilateral contracting. To further encourage transmission investments, the Commission proposes to require industry stakeholders to participate in a regional process administered by an independent transmission provider to identify the most efficient and effective means to maintain reliability and eliminate critical transmission constraints.

Efficient market design can eliminate opportunities for market manipulation and market power, and the Commission proposes measures to protect customers against the exercise of market power when conditions do not support a competitive market. Market monitoring at all times, and market power mitigation when needed, are critical aspects of today's initiative.

The proposed mitigation would rely on a combination of methods to protect against market power by preventing sellers from withholding economical supplies but permitting prices to reflect true scarcity. The mitigation would be more flexible where the market is sufficiently competitive.

At the same time, because market power mitigation may suppress scarcity prices, a companion mechanism besides spot prices is needed. The proposed resource adequacy requirement would ensure adequate generating, transmission and demand response infrastructure that is determined on a regional basis. The Commission proposes a resource adequacy requirement that will complement state programs. In particular, the Commission proposes that each independent transmission provider must forecast its future needs, facilitate regional determination of an adequate level of resources and assess the adequacy of the plans of utilities to meet regional needs. Each load-serving entity would be required to meet its share of the future regional needs through a mix of generation and demand reduction. If the load-serving entity fails to submit a satisfactory plan for adequate future resources, the independent transmission provider will inform the appropriate state regulatory authority that the customers of that load-serving entity may be denied spot market energy in the event of a shortage.

The NOPR requirements would be mandatory for all public utilities that own, operate or control transmission facilities in interstate commerce. The Commission

expects that the requirements of the NOPR will be met through regional transmission organizations (RTOs), but if a public utility chooses not to join an RTO, it will have to contract with an independent entity to perform certain requirements. Regional flexibility in certain areas would be allowed. This will ensure the continuation of a strong role by state regulatory authorities in helping to assure resource adequacy.

Under today's proposals, all public utilities that own, control or operate interstate transmission facilities must file at certain dates following the final rule interim open access transmission tariffs that include bundled retail customers as eligible to receive service. Further, all independent transmission providers must file SMD tariff. The Commission intends to rely on these filings to ensure that all public utilities that own, control or operate interstate transmission facilities will be operating under SMD unless otherwise directed by the Commission.

In making today's proposals, the Commission noted that its existing pro forma tariff allows undue discrimination in the provision of transmission services, with vertically integrated public utilities that own, operate or control transmission facilities and also participate in power markets still able to exercise market power and discriminate in providing service and spot market energy services. The Commission also noted that lack of standard market design allows undue discrimination within and across regions, can result in unjust and unreasonable pricing and transmission allocation, and permits the exercise of market power in short-term power markets. In addition, proper price signals are not being sent to the marketplace, with the result that market-based rates in many places are distorted and appropriate infrastructure additions are not being built.

The Commission notes that several of these proposed changes promise greater customer access to low cost power. It points out that customers in low cost regions can ensure that low cost power "stays home" by contracting for that power. This way, only excess power will leave the region.

## **Summary of Key Proposals**

The Commission proposes to:

- \* establish a single flexible transmission service, Network Access Service, with a single open access transmission tariff that applies to all transmission customers—wholesale, unbundled retail and bundled retail—as well as standard market design for wholesale electric markets;

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- \* require transmission to be operated by an independent entity;
- \* adopt location marginal pricing (LMP), a market-based method for congestion management and provide tradable financial rights—Congestion Revenue Rights—as a means to lock in a fixed price for transmission;
- \* establish procedures to monitor and mitigate market power;
- \* establish procedures to assure, on a long-term regional basis, that there are adequate transmission, generation and demand-side resources;
- \* establish an access charge to recover embedded transmission costs that would be a demand charge billed on a customer's load ratio share of the transmission provider's cost, and would be paid by any entity taking power off the grid;
- \* establish a preference for the auction of Congestion Revenue Rights, but initially allow regional flexibility for a four-year transition period in determining whether to allocate Congestion Revenue Rights to existing customers or auction such rights with all auction revenues going back to customers paying an access charge;
- \* require public utilities that operate imbalance energy markets and transmission systems to be independent of market participants;
- \* permit customers under existing contracts, including bundled retail customers, to receive that same level and quality of service under standard market design that they receive under their current contracts, to the greatest extent feasible;
- \* facilitate real-time and day-ahead markets;
- \* adopt a new transmission pricing policy;
- \* provide for fair treatment of transmission capacity reserved for reliability;
- \* create a formal role for state representatives to participate in the decision-making processes of regional transmission organizations or other regional security and reliability entities; and

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- \* more explicitly state in the pro forma tariff the obligations of transmission

providers to comply with all appropriate standards for ensuring system security and reliability.

Together, these proposals will give the nation truly competitive markets and with much-needed energy infrastructure, including transmission planning and expansion, investor price signals, and protection against market manipulation.

### ***Network Access Service***

The Commission proposes to exercise jurisdiction over the transmission component of bundled retail transactions in order to remedy the undue discrimination that results from having that part of the interstate transmission service treated differently from all other interstate transmission service. The proposed service combines the best features of both the existing open access transmission services—network and point-to-point services. Congestion Revenue Rights enable the development of a secondary market in conjunction with the bulk power market. The Commission is proposing to eliminate the distinction between these two types of service by having one service, Network Access Service, that contains the best elements of both types of service—the flexibility of network service and the tradability of point-to-point transmission service.

The service allows customers to have the transmission provider integrate, dispatch and regulate its current and planned resources to serve its load as is currently done under the pro forma tariff.

Customers may be able to acquire transmission rights from a particular receipt point to a particular delivery point directly from the transmission provider, through a formal auction, or through secondary markets. All resales of congestion revenue rights will be conducted through the Open Access Same-time Information System (OASIS). Once a customer has specific congestion revenue rights, the customer may sell them at any time to another entity, whether or not that entity intends to transmit power.

### ***Locational Marginal Pricing***

Under the LMP proposal, the transmission provider establishes separate energy prices at each node on the transmission grid and separate prices to transmit energy between any two nodes on the grid. These prices reflect the cost of congestion and losses. Management of transmission grid congestion is difficult to do through bilateral transactions; a spot market is required to manage congestion efficiently.

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The use of this congestion management system ensures that all transmission

constraints are considered in developing day-ahead schedules and any congestion is reflected in the prices for energy and transmission services. The transmission provider will not accept physically infeasible schedules in the day-ahead market that ignore known transmission constraints, as occurred in California.

### ***Monitor and Mitigate Markets***

The market power mitigation measures proposed will mitigate market power in spot markets, and rely on a resource requirement and a safety-net cap to provide revenues to support long-term generation adequacy. Mitigation would only apply to products traded in the spot markets operated by the transmission provider, not to products traded under bilateral contracts outside the spot markets.

Consistent with current practice, the market monitor will identify units that under certain conditions must run to support the reliable operation of the grid. At those times, competitive alternatives will be unavailable and those units will have localized market power so that when they are required to provide their power to the grid their bids into the market should be capped.

A \$1,000 bid cap is proposed for the day-ahead and real-time spot markets.

A resource adequacy requirement will help ensure development of the infrastructure needed for reliable transmission system operation.

During occasional or unpredictable times where opportunities to exercise market power exist, a mechanism would trigger an examination of generator bids to determine whether the high prices were the result of generators attempting to withhold. This mechanism would be triggered by predetermined conditions, such as extremely high prices, high load or specified reserve conditions. This mechanism is similar in concept to the Automatic Mitigation Procedure (AMP) used by the New York ISO. The Commission will allow the market monitor to propose with this mitigation measure, if needed.

### ***Transmission, Generation and Demand-side Resources***

The Commission proposes to require independent transmission provider to forecast the region's future demand and assess whether the resource plans of load serving entities in its service area are adequate to meet the projected future peak need with allowance for adequate reserves. Those that do not satisfy the requirement would be subject to a penalty

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price if they take electricity from the spot market during a power shortage.

This approach to resource adequacy is intended to assure the development of both new supply and demand response resources.

This proposal is designed to complement, not replace, existing state resource adequacy programs.

### ***Existing Contracts***

The Commission proposes not to abrogate existing pre-Order No. 888 contracts. These contracts should be accommodated within the standard market design. The Commission proposes to give customers with these contracts an opportunity to convert these existing contracts to the new Network Access Service upon implementation of standard market design consistent with their contract terms. If customers do not convert to the new service, the transmission owner would be required to take service under the new tariff in order to meet its contractual obligations to serve the pre-Order No. 888 contract customers.

### ***Real-time and Day-ahead Markets***

The Commission proposes to require that the independent transmission provider operate both a day-ahead and a real-time energy market to manage congestion. Real-time markets would resolve energy imbalances. In addition, the Commission is proposing that the transmission provider operate a security-constrained, financially binding day-ahead market for energy that is operated together with a day-ahead scheduling process for transmission service. The day-ahead market would allow the transmission provider to manage congestion that arises in the day-ahead scheduling process.

### ***Transmission Pricing***

Under Network Access Service, the revenue requirement of a transmission owner would be recovered through an access charge. The access charge could be either a license plate rate (with the charge depending on the zone of delivery) or a postage stamp rate (same rate applies within the independent transmission provider's system) and would be paid by the customer. The Commission proposes to change its policy on pricing of transactions that start and end in different transmission systems to facilitate trading across regions. It also proposes to refine its policy on price of transmission expansions.

### ***Access Charge***

Historically, the Commission has permitted transmission providers to assess an

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access charge on all transactions taking place on the transmission provider's system. The Commission proposes changes to this method to reflect the new Network Access Service.

The Commission proposes to recover embedded costs in an access charge assessed mainly to load-serving entities, based on their respective shares of the system's peak load.

All "rate pancaking," which involves charging separate embedded cost charges for moving power over separate transmission provider service areas, would be eliminated both within a transmission provider's service area and between service areas.

Participants paying access charges would receive Congestion Revenue Rights (or alternatively, revenue from the auction of Congestion Revenue Rights.)

The Commission is seeking comment on the treatment of existing customers taking firm point-to-point service that are not load serving entities and on whether new load-serving entities should receive an allocation of Congestion Revenue Rights.

If the system is congested, it collects more money than it has to pay out. Those holding Congestion Revenue Rights will receive a share of the difference.

### ***Congestion Revenue Rights***

The Commission proposes to require that transmission providers offer Congestion Revenue Rights of several types, one that the Commission will mandate now and others that should be offered upon customer request when technically feasible, that allow transmission customers to obtain protection against uncertain future congestions charges.

The transmission provider would be required to offer rights for all of the transmission transfer capability on the grid, but would not be allowed to sell more rights than can be simultaneously accommodated on the system.

Eventually, the Commission proposes to have Congestion Revenue Rights available in several forms, including receipt point-to-delivery point obligation rights, which the Commission proposes to mandate now, receipt point-to-delivery point option rights and flowgate rights. Offering different types of rights would make the system more flexible and better able to adapt to the needs of specific customers.

The Commission expects an active secondary market for Congestion Revenue Rights. Market participants would be allowed to resell any transmission rights that they

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have been awarded for the full term of the rights or for a part of the term. Resales could be transacted bilaterally between willing buyers and sellers; all resales would be conducted

over the transmission provider's OASIS, its public website.

Auctions would also be conducted to resell Congestion Revenue Rights in an organized market. The auctions would provide the ability to reconfigure the rights into different receipt and delivery points, or into different types of rights.

### ***Independence***

The Commission is proposing to require that independent transmission providers satisfy specific governance requirements.

The proposal includes more clearly defined responsibilities of the Board of Directors, defines the role of stakeholders in selection of the board and in the management of the regional organization, establishes a process to be used for selecting the Board of Directors.

### ***State Participation in RTOs***

The Commission proposes a formal role for state regulators in RTOs. Each RTO or other independent entity that operates the grid would have an advisory committee of state representatives called the Regional State Advisory Committee. The Commission believes the advisory committees can bring a valuable regional perspective to rate design and planning issues. Once the advisory committees are set up, the Commission will work with them to establish protocols for deciding regional rate issues. Additionally, the advisory committees can provide valuable advice to independent transmission providers that develop regional plans for transmission planning and expansion.

### ***Transmission Security and Reliability***

The Commission proposes to require compliance with developing North American Electric Reliability Council (NERC) standards on system security.

### ***Environmental Statement***

In furtherance of the National Environmental Policy Act, the Commission will prepare an environmental assessment (EA) that will consider the environmental impact of the proposed rule. A notice of intent to prepare the EA was issued on July 26. Parties have until September 8 to file comments with the Commission on the scope of issues to be addressed in the environmental document. A scoping meeting is scheduled for FERC's Washington DC headquarters, 888 First Street, NE on August 12.

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Attachments

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## **SMD: QUESTIONS AND ANSWERS**

### **1. Why is standard market design being implemented now?**

Standard market design is the third order in a series of initiatives by the Federal Energy Regulatory Commission to harness the benefits of competitive markets. In 1996, the Commission issued Order No. 888, which required that all public utilities provide open access transmission as a remedy for undue discrimination. In 1999, the Commission issued Order No. 2000 to establish regional transmission management, but the industry response was slow and the resulting efficiencies occurred in limited regions of the country. Significant impediments to competitive markets remain. Recent events such as the collapse of Enron and the California electricity crisis indicate that clear, stable market rules and overdue infrastructure investment are desperately needed for America's wholesale electric market. Standard market design offers those rules and incentives for new investment, and is required now for stability and cost reduction in this critical economic sector.

### **2. What does standard market design encompass?**

Standard market design provides a framework for wholesale electric markets, to remedy remaining undue discrimination in transmission service and establish a more level playing field between competing generators, loads, and technologies. SMD only addresses wholesale electric competition; while improved competition under SMD should help end-use customers in every state, individual states retain the authority to determine whether or not to provide competition for customers at the retail level.

Under SMD, a majority of the nation's power will continue to be purchased under long-term bilateral contracts, while the rest will be exchanged in organized spot markets for energy and ancillary services. SMD lays out the rules for how those markets will operate, with day-ahead and real-time markets for energy and ancillary services that are linked to the feasibility of actual grid operational capabilities and security.

SMD also defines a new, flexible transmission service, establishes a congestion management system to assure that the grid is managed effectively and that users recognize the true value of their energy use, lays out new rules to assure that all transmission owners and operators recover their costs, establishes new market mitigation and monitoring requirements, and sets out long-term planning and resource adequacy requirements to assure that infrastructure needs are recognized and met without wasteful, dangerous "boom and bust" cycles.

### **3. How did you develop this notice of proposed rulemaking?**

FERC organized an unprecedented stakeholder process to develop the ideas within this proposed rulemaking. This process included a number of conferences and private meetings with stakeholders from the electric generation, transmission, and load-serving communities, state and federal regulators, customer groups, renewable energy and energy efficiency advocates, demand response practitioners, and environmental groups. We aired our developing ideas about SMD by distributing working papers and options papers, public speeches and conference presentations, and private meetings. We solicited comments on these papers and reviewed over 500 formally filed comments on standard market design, representing thousands of pages of text. Many of the ideas in this notice of proposed rulemaking reflect the good comments, feedback and advice we received from this

exhaustive process and diverse constituency. We have learned from mistakes in California and successes in places such as PJM and New York.

#### **4. How will SMD lower prices for customers?**

Standard market design will reduce inefficiencies in the electric power industry. These inefficiencies are caused by barriers to transmission access and inconsistent administration of short-term energy markets. Standardized wholesale electric market rules should allow all market participants to compete on a more level playing field, with clear, consistent rules for all players and regions. This will reduce some of the costs and obstacles that keep new generators from entering new markets and let them operate more efficiently. Entry of new, efficient generators with low production costs and lower transactions costs will foster price competition and force existing generators to become more cost-efficient or close down. On the demand-side, SMD establishes an important role for customers through demand response, so customers can see when wholesale energy costs rise and react to high prices by consuming less electricity. This too will force suppliers to hold their prices down. Over the longer term, and more importantly, as SMD's stable rules encourage new investment in generation, transmission, and demand response, these new facilities will improve all customers' access to efficient, low-cost generation and lower average delivered energy costs.

#### **5. How will SMD affect energy prices in areas that are already inexpensive?**

Standard market design will give all load-serving entities greater access to low-cost power. Most energy sales will still be conducted through long-term bilateral contracts. So if a region with cheap electricity costs wishes to ensure that its local customers continue to enjoy the benefits of that low-cost power, its load-serving entities should sign long-term contracts with the power producers to "keep that power at home", rather than losing it through exports. Additionally, the resource adequacy requirement will help prevent regions with low-cost power from subsidizing regions with higher costs, by requiring each region to develop more local resources to assure its local grid stability and long-term reliability.

#### **6. How does SMD treat cost-shifting?**

One type of cost-shifting occurs when cheap power leaves one region for sale in another higher-priced region. This can only happen with generation that is not already under contract for purchase. SMD encourages customers in low-cost regions to ensure that low-cost power "stays at home" by contracting for that power.

Cost-shifting can also occur when individual transmission providers begin to offer a single tariff for a region. Standard market design prevents this by allowing license plates rates when existing transmission is turned over to an independent transmission provider.

Cost-shifting can occur for new transmission facilities, as when a utility builds new transmission so that generation in its service area can export power to serve customers in another utility area; while the importing customers enjoy the benefits, the host utility's customers could pay the bill. SMD establishes a new policy where cost responsibility follows cost causation. This new policy, which the Commission will adopt in regions with an RTO or other independent entity, eliminates cost shifting due to new facilities.

#### **7. How will SMD ensure truly competitive markets?**

Workable competitive markets require three things – adequate infrastructure, balanced market rules, and customer protection through vigilant oversight and mitigation when necessary. Standard

market design aims to further all three elements. SMD features like transmission cost recovery, resource adequacy requirements and locational marginal pricing will encourage new investments in generation, transmission and demand response, in the locations where they have the most value. Uniform, balanced rules for transmission and energy markets will reduce barriers to entry, expand trade opportunities and competition among existing firms, and facilitate the efficient flow of power. And the strong role of demand response will limit supplier market power by holding peak energy prices in check, while SMD's strong market monitoring and mitigation measures will detect, prevent or correct market power abuses.

But truly competitive markets are not feasible in many areas over the short term because they lack sufficient infrastructure -- generation, transmission and demand response -- relative to customer demand, and thus face high levels of potential supplier market power. It may be years before this infrastructure deficit can be remedied in some parts of the country. Until that occurs, SMD will put independent transmission providers in place to manage the grid for all loads and resources, to establish more balanced conditions for competition between market participants. And SMD's market oversight and mitigation provisions should prevent conditions in these market areas from becoming dysfunctional and help the market produce outcomes that are more efficient and beneficial for customers and suppliers alike.

#### **8. How will SMD prevent use of market power?**

Standard market design will change the way that business is conducted in the energy marketplace. It will reduce barriers to entry for new generators, make it easier for market participants to secure both bilateral contracts and short-term purchases, and make it easier for customers and load-serving entities to use demand response to check supplier market power. These changes will eliminate many of the conditions that allow the exercise of market power. Where market power still arises because of industry structure, standard market design implements a comprehensive market power mitigation plan. A variety of entities including market monitors, regional transmission organizations, and state advisory committees will assist the Federal Energy Regulatory Commission in monitoring and mitigating market power.

#### **9. How will SMD minimize the risk of market manipulation?**

Standard market design will reduce opportunities for market manipulation because the market rules and design — particularly with locational marginal pricing — eliminate many of the opportunities and loopholes that can be used to manipulate the wholesale market, and help to prevent Enron-type gaming. Greater demand response and increased transparency will make it easier for individual market players to monitor and respond to each other's behavior. Market monitoring and market power mitigation will serve as regulatory backstops to protect customers. Standard market design provides for a market monitor that is independent of all market participants. The market monitor will work together with the Federal Energy Regulatory Commission to enforce market rules, with advice from state regulators. FERC recently created an Office of Market Oversight and Investigations to monitor energy markets and protect customers.

#### **10. How will SMD ensure adequate electric supplies?**

Standard market design establishes procedures to assure, on a long-term regional basis, that there are adequate transmission, generation, and demand-side resources. Most resources take years to develop and spot market prices alone may not signal the need for new resources in a timely fashion. A resource adequacy requirement will ensure sufficient electric generating, transmission, and demand-response infrastructure by requiring that load-serving entities secure resources in advance of their need,

smoothing out the “boom-and-bust” cycle that has traditionally affected this industry. With a more certain need for new generation and demand resources, investors and developers will face lower risks and a higher likelihood of cost recovery. Over time, this should produce a more stable investment climate and a sustained level of resource adequacy that reduces price volatility and reliability threats due to resource scarcity.

#### **11. How will SMD ensure reliability?**

Standard market design implements procedures for planning and oversight in addition to market rules that support reliability. To promote long-run reliability, market participants will participate in a regional process administered by independent transmission providers, with the help of a regional state advisory committee of state officials, to identify needed new infrastructure investments and see which investments market participants want to make. The planning process will coordinate and integrate infrastructure needs and options and encourage market solutions and projects where possible. As standard market design promotes new infrastructure investment, this will help improve regional reliability.

To assure short-run operational reliability, public utilities that own, operate, or control transmission facilities must comply with North American Electric Reliability Council standards on system security. The board of directors of the regional transmission organization will be responsible for ensuring system reliability. The regional transmission organization’s operation of day-ahead and real-time security-constrained markets will also assure day-to-day grid reliability.

#### **12. How will SMD increase demand response?**

Only customers can provide demand response, but SMD will encourage demand response through a variety of market and institutional measures. Locational marginal pricing will promote demand response by sending proper price signals for the value of energy at different locations and times; as these prices rise, customers can decide whether they’d like to reduce their energy usage to save money. Demand response can be instrumental to meet resource adequacy through biddable demand reductions, interruptible load, real-time pricing, or other load management programs. The market monitor can provide direction for demand response capability in a regional planning process, and demand response and energy efficiency programs will be able to meet load-serving entities’ resource adequacy obligations.

State regulators will have an important role to play in offering retail customers demand-response options so they can affect and improve the wholesale electric market.

#### **13. Doesn’t SMD expand federal authority? Won’t the states object?**

The Commission proposes to exercise jurisdiction over the transmission component of bundled retail transactions in interstate commerce. To remedy discrimination in transmission services, it is critical to apply the same terms and conditions to all transmission uses. We intend to work closely with the states on the transition of bundled retail transmission rates, regional planning, and market monitoring. Our state colleagues are charged with representing the public interest, as is FERC, so we must work together to assure that SMD and wholesale markets serve the public at many levels in a coordinated fashion. Standard market design provides a formal role for state representatives to participate in the decision-making of regional transmission organizations or other regional entities. These responsibilities will give the states with a greater role than ever in the functioning of healthy, sustainable wholesale markets.

#### **14. How does SMD address the “seams” issue?**

“Seams” exist where different regions have differing rules and pricing systems that conflict.

These inconsistencies create barriers to trade and increase transaction costs for transactions that flow across the seams. A single tariff and market design operating with the same set of rules throughout the entire interconnection resolves many of these problems. Standard market design will eliminate or resolve many seams issues. As use of the SMD standard tariff spreads across all utilities and regions, many seams problems will go away. This is being leveraged by cooperation between regional transmission organizations and independent system operators, and work by industry groups to develop standards for electric wholesale business practices and communications protocols.

**15. Why will SMD appeal to investors?**

Standard market design will attract investment in energy infrastructure by stabilizing and standardizing electric market rules across the nation. Thus it will provide clear rules of conduct for industry activity and increase transparency and information in the market, so investors and developers can better gauge the risk and rewards they face. By increasing the role and opportunities for market investors, SMD should reward those who bring efficiency and innovation to the marketplace. SMD will allow participation for transcos and merchant transmission as well as classic utility wires companies; open doors for demand-response providers and other energy service companies; lower energy costs for load-serving entities; and enhance opportunities for new technologies such as generation, renewables, efficiency and grid measures. By bringing certainty and stability to a fundamental sector of the American economy, with over \$200 billion in annual revenues and one of the largest capital asset bases in the country, SMD offers significant opportunity for many different types of investors.

**16. Will the push for RTOs proceed?**

The formation of regional transmission organizations will proceed on FERC's current pace. Regional transmission organizations and independent transmission providers will provide the foundation necessary for effective, competitive wholesale energy markets. Without these independent transmission providers performing critical, unbiased grid and market functions, regional wholesale markets are more inefficient and discriminatory and impose millions of dollars of additional costs on electric end-users each year. But once RTOs and other independent transmission providers are in place, industry groups can standardize business practice and reliability standards, transmission can be regionally planned, and demand-side participation in energy markets will grow. Areas without regional transmission organizations will not achieve the economic efficiencies generated from this regionalized form of management. FERC is continuing to process pending RTO cases and expects RTOs and independent transmission providers to be operating across most of the nation by 2003.

**17. When will we see the benefits of standard market design?**

The benefits of standard market design will be reaped as soon as the regional markets implement the conditions necessary for fair competition. This will occur faster in some regions than others. Although this transformation will not happen overnight, the most valuable achievements require time and effort. Consequently, FERC proposes a phased implementation of standardized transmission service and standard market design. This implementation could take up to two years. Although the transition will contain some change and inconvenience, the end result will be great long-term benefits for all.

**STANDARD MARKET DESIGN**  
**Notice of Proposed Rulemaking**

## **Electricity Market Design and Structure**

### **Key Dates**

**Comments due no later than seventy-five days after the issuance of this Notice of Proposed Rulemaking**

**Phased compliance process:**

- ✓ **Within thirty days after the effective date of the Final Rule.** Public utilities that own, operate or control interstate transmission must discuss transition to and compliance with standard market design with stakeholders and state representatives.
  
- ✓ **By July 31, 2003**
  - All public utilities that own, operate, or control interstate transmission facilities must file an implementation plan for compliance with the regulations. They must file status reports on the implementation plan on a quarterly process.
  - Public utilities that own, operate, or control interstate transmission facilities must file to place bundled retail customers under their open access transmission tariffs.
  - Transmission providers must make the tariff changes to section 2.2 of the existing pro forma tariff.
  
- ✓ **Within six months of the effective date of the Final Rule.** A regional planning process must be instituted with a regional transmission plan within twelve months.
  
- ✓ **By September 30, 2003.** Public utilities that own, operate or control interstate transmission facilities must have revised open access transmission tariffs (interim tariffs) in effect. These revisions will reflect the inclusion of bundled retail customers as eligible customers.
  
- ✓ **Within one year after the effective date of the Final Rule.** The independent transmission provider must have a regional transmission planning process in effect.
  - ✓ **December 1, 2003**
    - # The independent transmission provider must file the proposed SMD tariff, including language for market mitigation, long-term resource adequacy, transmission planning and expansion, transmission pricing, and regional accommodations.
    - # The independent transmission provider must file the proposed SMD tariff, including language for market mitigation, long-term resource adequacy, transmission planning and expansion, transmission pricing, and regional accommodations.

- # **January 31, 2004.** First due date for cyber-security standards compliance filing. This filing must be made annually.
  - # **At least sixty days prior to the implementation of standard market design.** Transmission owners and independent transmission providers should file changes needed in their transmission rates for jurisdictional service.
  - # **By September 30, 2004.** Public utilities owning, operating or controlling interstate transmission facilities must have in effect revised SMD Tariffs reflecting remaining revisions and be operating under standard market design.
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## **SMD: PREVENTING UNFAIR BUSINESS PRACTICES**

**THE FEDERAL POWER ACT** establishes a mandate for the U.S. Federal Energy Regulatory Commission to prevent “undue discrimination,” and often that discrimination causes unjust and unreasonable rates which the Commission is charged with preventing. The Commission’s Standard Market Design identifies examples of transmission market power that serve as impediments to competition. The SMD is designed to reform and prevent such practices.

Much of this problem is directly attributable to the continued ability of vertically integrated transmission providers to exercise some degree of market power to advantage its own or affiliated generation. The SMD expands upon Order 2000’s encouragement that all transmission facilities be operated independently, whether by a Regional Transmission Organization or an independent transmission operator under contract.

The SMD is designed to prevent these and other forms of discrimination observed in wholesale electric markets today:

**PREFERENCE FOR NATIVE LOAD GROWTH.** Transmission providers have recalled transmission capacity to serve projected growth in their retail customer base. By apportioning Congestion Revenue Rights according to historical use, or through an auction, the Commission expects to eliminate this preference.

**DELAYS IN REQUESTS FOR SERVICE.** Power providers competing with generation affiliates of transmission providers experience delays obtaining requested transmission service, causing them to lose the sale. The SMD will address this conflict by having an independent entity calculate Available Transfer Capacity and Total Transfer Capacity, and allocating transmission service first to those who hold Congestion Revenue Rights for specific source-to-sink combinations.

**SCHEDULING ADVANTAGES.** A transmission-owning utility can schedule power flows across its system with more flexibility than a competing power provider seeking point-to-point transmission service. In some cases, the transmission provider's generation affiliate has sold power to the point-to-point competitor's customer after denying the competitor's transmission capacity request. The SMD establishes a single transmission service for all users and allows competitors to use the transmission system as flexibly as the transmission owner.

**IMBALANCE RESOLUTION.** Transmission owners enjoy greater flexibility and lower costs in resolving energy imbalances on the transmission system. Transmission providers with generation and customers can resolve imbalances through in-kind exchanges with neighboring transmission systems, while transmission customers face higher costs in purchasing balancing services from other providers. The SMD will require all suppliers to use the same procedure for imbalance resolution.

**POSTING OF AVAILABLE CAPACITY.** Transmission providers can discriminate against competing power providers by giving their generation affiliates proprietary access to calculations of Available Transfer Capacity (ATC) on the transmission system. The Commission has often found inaccurate ATC postings on Open-Access Same-Time Information Systems (OASIS) Internet sites. The SMD will eliminate this advantage by having an independent, unbiased entity calculate and post ATC.

**OASIS POSTINGS.** Transmission providers can discriminate against competitors by engaging in prohibited off-OASIS communications between transmission and generation affiliates. Inconsistent design and function of OASIS sites from one transmission provider to the next also harms independent generators. The SMD will have OASIS sites operated by the independent transmission provider on a regional, rather than company-specific, basis.

**CAPACITY BENEFIT MARGIN MANIPULATION.** Transmission providers have discriminated against competitors by reserving more transmission system import capacity than is needed to serve their retail customers, often charging the cost to other wholesale transmission customers rather than to the customers for whom it is reserved. The more capacity reserved to serve native load, the less is available to the competing transmission customers. The SMD will end this preference by requiring Load-Serving Entities to pay for all capacity reservations.

**DISCRETIONARY TRANSMISSION LOADING RELIEF.** In the face of growing grid congestion, transmission owners can dispatch generation and flows across the grid in a way that curtails transmission service curtailments for competing power providers but favors their own generation and deals. These curtailments, known as Transmission Loading Relief (TLR) procedures, have increased sharply in certain regions, suggesting that transmission providers are relying on TLRs for more than just emergency transmission overloads. By using locational marginal pricing as the root of its congestion management system, the SMD establishes clear signals and procedures for which plants to dispatch and which transactions to flow, and removes the transmission owner's financial incentives to use TLRs. It will also require transmission systems to be operated by an independent transmission provider that is unaffiliated with any generation or other market participant.

**ENRON-TYPE TRADING STRATEGIES.** Enron and other power traders developed a set of trading strategies to exploit and profit from the flaws in California and other market designs. Many of these flaws arose from the lack of a nodal pricing system such as Location Marginal Pricing, the use of real-time payments for assumed congestion relief, and the incentive for loads to under-schedule their electricity demands. The SMD will make these strategies ineffective in future wholesale markets because it uses Locational Marginal Pricing to identify and manage transmission congestion costs, and imbalance markets to handle load scheduling and acquisition. Appendix E of the SMD Notice of Proposed Rulemaking outlines the Enron strategies and explains how the proposed market design eliminates the opportunity to exploit congestion management.