

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.