

The Bare Essentials

Wholesale Market Design

The Electric Power Supply Association¹ supports the development of a seamless group of regional wholesale markets for the sale and delivery of electricity. EPSA supports the Federal Energy Regulatory Commission's initiative to complete development of Regional Transmission Organizations (RTOs), whose boundaries encompass natural markets and flows of power. EPSA also supports the Commission's proposal to establish a wholesale power market platform for the regions with appropriate latitude for regional flexibility, and that allows for the development of a new pro forma tariff to replace the Order No. 888 Open Access Transmission Tariff.

The wholesale market design is concerned with open access transmission service and organized spot (day-ahead and real-time), ancillary services and capacity markets, which are operated by RTOs. These markets, which are governed by RTO tariffs, normally constitute 10-20% of the total transactions in wholesale markets. The majority of transactions in the wholesale power market are done through bilateral contracts between buyers and sellers. The following is an outline of the "bare essentials" on the critical issues of a wholesale market design.

Fundamentals

- The primary responsibility of RTOs is to ensure reliable, non-discriminatory open-access transmission service for all users of the transmission grid.
- The primary goal of RTOs is to create a framework for robust, transparent and competitive electric markets that will provide consumer benefits.
- Regardless of ownership structure, transmission should be operated as a business that assures that existing transmission capability is utilized in the most efficient manner possible and offers products and services designed to maximize the choices available to transmission customers.
- RTOs should not be market participants.
- Regional wholesale market design should provide a sufficiently high degree of consistency between RTOs to allow robust interregional energy trading.

Congestion Management

- Energy market prices should be based on locational marginal prices.
- Transmission rights should be structured as financial rights.
- Transmission rights should be based on a system of point-to-point financial transmission rights (FTRs), which can be aggregated into trading zones and hubs. Other products, such as financial flowgate rights and FTR options, should be offered as the market requires, based on this foundation.
- RTOs should support the development of trading hubs that aggregate nodes and facilitate liquid secondary markets in financial transmission rights and price hedges.
- Standard protocols for managing congestion and scheduling transactions at RTO borders must be developed in the context of both day-ahead and real-time energy markets.
- All transactions should be treated as network load at RTO borders.
- All transmission access rules need to be compatible across RTOs.

Conversion of Existing Transmission Rights

- Current transmission service needs to be converted to financial transmission rights, preferably through an auction process, as quickly as possible.
- Rapid conversion to financial transmission rights, followed by a full auction, is necessary to create a liquid market for FTRs.
- If financial transmission rights are initially allocated to existing customers for an interim period, that interim period needs to be clearly defined and as short as technically feasible.
- FTR auction revenues should be allocated to transmission customers.



Electric Power Supply Association
Advocating the power of competition

¹EPSA is the national trade association representing competitive power suppliers, including generators and marketers. These suppliers, who account for nearly 40 percent of the installed generating capacity in the United States, provide reliable and competitively priced electricity from environmentally responsible facilities serving global power markets. EPSA seeks to bring the benefits of competition to all power customers.

TheBareEssentials

Wholesale Market Design

RTO Markets

- A well-functioning energy market should include robust bilateral, forward and spot markets.
- Bilateral markets are contract-based transactions entered into between willing buyers and willing sellers, who are generally large, sophisticated market participants such as utilities who serve their native load and generators and marketers who supply power to these load-serving entities. Bilateral transactions can be for a wide variety of time periods (days, weeks, months, or years); they are distinct from spot markets in that they are executed by the contracting parties in advance of the 24 hours prior to real time, i.e. “forward” markets.
- Spot markets are tariff-based, and deal with transactions in the 24 hours immediately prior to real-time (the day-ahead market) and in real time (the real-time market). Spot markets generally encompass energy and ancillary services, and are administered by RTOs.
- RTOs, and the energy markets they operate, must be independent of market participants, including transmission owners.
- RTOs should administer a financially binding, centralized day-ahead market that clears to submitted supply offers and demand bids.
- The day-ahead market should be optimized over the day, not the hour.
- The day-ahead market needs to recognize inter-temporal constraints and transmission constraints.
- The RTO should be permitted to purchase and schedule additional capacity if the day-ahead energy market clears at levels that do not provide sufficient generation response capability, in order to assure reliability in support of the RTO’s load forecast.
- RTO markets should not require submission of balanced schedules.
- RTOs should accept multi-part bids, which include start-up, no-load and energy.
- The energy component of multi-part bids should be permitted to vary across hours.
- Parties must be permitted to self-schedule generation into the RTO markets.
- RTO markets should include demand-side participation.
- RTOs should operate a real-time spot market.
- RTOs should operate ancillary services markets.
- RTOs should facilitate the development and operation of liquid trading hubs.
- RTOs should be the Security Coordinator for its

region, with full operational control of the transmission system.

- To ensure market confidence, market participants should have access to RTO data, including congestion management algorithms, planning data, transmission outage information.

Capacity Markets

- There should be a binding long-term obligation for load-serving entities to procure, through bilateral contracts or otherwise, adequate capacity resources.
- Capacity obligations should not create unwarranted advantages to incumbents or create barriers to new entry in wholesale or retail markets.
- Parties need flexibility in determining how capacity obligations can be met, pursuant to established standards for both generation and load.
- Suppliers need to be compensated for providing capacity-related services, such as call options and recall options, required by the RTO to sustain reliability.

Comparability

- Under the current regime, transmission-owning utilities have an inherent conflict of interest that often leads to preferential treatment for their own or their affiliate’s customers, to the detriment of third-party transmission customers. Policing these abuses is difficult and expensive.
- The prospect of real competition continues to be threatened by the manifest lack of comparability between certain wholesale and retail transmission pricing and access policies, including unequal requirements regarding the use of the transmission system – resulting from, among other things, the discriminatory exemption of all native load from open access rules.
- To remedy this problem, as part of a wholesale power market platform for regional market design, the Commission must require that all transmission service be reserved and provided pursuant to the same, system-wide tariff.
- All power transactions – including those for native load – must take transmission service pursuant to the same tariff terms and conditions.
- Standard market design must eliminate the native load priority accorded by Order No. 888.
- All network customers should have the same level of access to any generator on the system as any other network customer has to any other generator. Since all network customers pay the same average rate, they should receive the same value of service of service across the system.

November 2003