

Beyond “Slicing and Dicing”

Incentives for Transmission Owners

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A Grid Owner Complements the Market But Doesn't Run It

FERC



Grid Owner

Functions:

- Operate its share of grid under RTO control (LMP-based incentive rates possible)
- Maintain grid (LMP incentives)
- Merchant-driven investments (non-exclusive role)
- Regulated builder of last resort if market fails
- Key RTO planning participant

Independent RTO Board

Key RTO Functions

- Independent system/market operator
- Ensure access to dispatch/spot market
 - Efficient balancing and redispatch
 - Efficient energy/transmission pricing
- Bilateral scheduling/settlement options
 - Allocate/auction and settle FTRs
 - Fair interconnection rules
 - Coordinate grid planning
 - Assure grid security/reliability
 - Independent Market Monitor

Buyers & Sellers

- Offers/bids to RTO dispatch/spot market
- Submit self and bilateral schedules
- Buy/sell spot energy
- Settle with RTO
- Market-driven investments and siting decisions
- Support RTO grid planning
- Stakeholder advice/input to market rules

Liberating the Grid Owner

- ◆ When the functions requiring independence rest squarely with the RTO as the ISO, the Transmission Owner can then take positions in the market to capture the full economic value of the assets it owns
- ◆ No need for *de minimis* ownership requirements for transmission
- ◆ Investment can be pursued aggressively by the grid owner

Capturing Economic Value

- ◆ Existing Assets
 - Capture value in existing facilities
 - “Operations Improvement”
- ◆ Expansion and Enhancement
 - Capture economic value to expand
 - “Planning Improvement”
- ◆ FTRs hold the key since they are a forward transportation product

FTRs Represent the Grid's Value

- ◆ FTRs represent the economic value of the grid
- ◆ Any practice or investment that enhances the grid availability or increases grid capacity can, in theory, create additional value for the market
- ◆ This value can be captured by the award of FTRs.

Operations Improvements

- ◆ Capture the benefits of asset management practices that have value to the market
 - Capture additional value created through operating and maintenance practices
 - Live-line during times of congestion
 - Off-peak maintenance – such as week-ends and holidays

Expansion and Enhancement

- ◆ Technology provides the means to carry more electricity on existing infrastructure
- ◆ Pricing permits key bottlenecks to be revealed and relieved
- ◆ Unlikely that huge expansion undertakings will occur in the short term
- ◆ Reliability backstop

Risk Management

- ◆ Transmission Owners can bid the \$/MW needed to increase system capability since FTRs provide a forward transportation product
 - Shorter term (weekly) value captured through maintenance and switching practices
 - Long term (annual or more) value captured through expansion or enhancement of the grid
- ◆ Clear tradable property rights are key to a viable transmission business
- ◆ Lends itself to PBR incentives based on FTR funding