Characteristics of the Standard Market Design - “SMD”

- RTO provides all transmission service and takes on many if not all control area functions.
- RTO operates an energy market via a centralized, bid-based, security constrained economic dispatch with Locational Marginal Prices (LMP) - calculated at each node.
- Financial transmission rights replace traditional transmission service and provide a hedge against the cost of congestion.
Energy Markets

- SMD features a two settlement system which consists of a Day Ahead Market and a Real Time Market
  - the Day Ahead Market or DAM is voluntary, bid-based and security constrained
  - DAM is financially binding. It provides the opportunity to lock in an energy price for the next day from both a load and generation perspective.
  - the Real-Time Market is also bid-based and security constrained. The Real Time Market is used to settle energy imbalances from the DAM and it determines the real time cost of congestion for those that did not fully hedge themselves in the DAM.
Transmission Service

- Transmission service is redefined to fully integrate the concept of transmission and energy. This is accomplished by defining the cost of transmission through the cost of congestion via LMP.

- The Financial Transmission Right of “FTR” operates as a financial hedge against congestion.

- An FTR is a point to point right that provides the holder with a payment equal to the difference in the LMP between the point of injection and the point of withdrawal.
Additional Market Features

- Ancillary Services Market will be operated by the RTO
- Unbalanced schedules will be allowed
- Virtual bidding is permitted (no physical resource or load is required)
- Bilateral transactions and self-scheduling permitted
- SMD may incorporate an installed capacity requirement and market - similar to the ICAP market in PJM
Market Mitigation

- FERC’s view is that market rules should enhance competition
- Mitigation measures should be prospective and built into market rules
- Bid Caps and restrictions on bidding behavior may be considered necessary to address perceived market power abuses
- Market Monitoring Unit should be independent of RTO management
Decoupling Transmission from Congestion Rights

- Currently, the cost of Firm Transmission has the cost of congestion rights embedded (except PJM, NYISO, ERCOT, and CAISO that have separate congestion hedges)
  - Today, Non-Firm carries no congestion rights
- Transmission in the future world:
  - Revenue requirement recovered through access fees
  - LMP for real-time balancing energy market and clearing real-time congestion
  - Forward market will provide financial hedges against congestion charges (cost of congestion)
Financial Transmission Rights Characteristics

- Initially, transmission rights or FTRs will be offered in specific source sink combinations. Current FTRs are configured as financial obligations. When the FTR has a negative value, the holder must inject energy in order to net out the obligation.

- FTRs can be allocated to existing customers or auctioned into the market, or a combination of the two.

- Eventually, FTRs will be configured as options when technologically feasible.
What is a Flowgate Right (FGR)?

- A financial contract that entitles the holder to a stream of revenues (or charges) based on the price difference across the Flowgate.
  - Can be either financial or physical instrument
  - Can be either an option (single direction) or an obligation
  - Allows hedging from multiple sources (partial hedging)
  - More fungible on secondary market
  - Midwest ISO plans on offering FGRs as part of its straw proposal
Why FTRs and FGRs?

- The uncertainty of locational charges for transmission use under a market-based system creates a demand for congestion hedges or transmission rights.

- Financial transmission rights enable market participants to obtain long-term transmission price certainty without undermining open access or economic dispatch.

- Financial rights also provide the mechanism for disposing of congestion rents collected by the ISO under locational pricing.
Dynegy Cornerstones

- Open Access to ALL the RTO products & Markets for ALL Market Participants
  - Existing rights *must* be converted to RTO market products
  - Transmission rights should be made available through an auction on Day One
  - If transmission rights are allocated, the transition to a full auction should be swift
  - Revenues should go back to the Retail Load (pass through), NOT the LSE (revenue stream)
  - Transmission Rights must be tradable and traded in Secondary Market
Dynegy Cornerstones

◆ Capacity Markets
  ■ Necessary to ensure “Reliability” (Resource Adequacy)
  ■ Someone must pay to have iron on ground, especially if energy prices are capped
  ■ Should be able to buy / sell Capacity across RTOs
  ■ NO anti-competitive Capacity business practice

◆ Ancillary Services Markets
  ■ Create standard products that can be hedged and more actively traded across regions
Dynegy Cornerstones

- **Central Dispatch / Spot Market Access**
  - Should have access to a spot market run by an RTO or independent 3rd party without a market interest

- **Balanced vs. Unbalanced Schedules / Day Ahead Market**
  - Customers should have the option of balanced or unbalanced schedules (more markets)
  - Load or Generation should be able to choose either Day Ahead or Real Time prices
  - Should have option of bilateral, broker, 3rd party, or RTO administered Day Ahead Market
  - Should have ability to self schedule load or generation, including ancillary services