



3rd Party Clearing of FTRs

NEPOOL Budget & Finance Subcommittee

Cheryl Arnold

DIRECTOR, FINANCE & ACCOUNTING



Outline

- Project Objective
- Project Schedule
- Overview of Design Concept
- ISO Billing and Collections Overview
- Market Development
- Market Operations
- Risk Management
- Finance
- Market Monitoring
- Legal and Regulatory

Project Objectives

A Financial Transmission Right (FTR) is a financial instrument that entitles the holder to receive compensation for congestion costs. It can be used to hedge the Day-Ahead LMP congestion component difference between receipt and delivery points in the New England energy market.

- Replace ISO-NE Financial Assurance requirements for holding FTRs with margining by the third party clearing entity
- Shift FTR default risk from ISO New England's FTR Market Participants to a third party
- Allow for the implementation of Long Term and BoPP FTRs
- Facilitate secondary market trading

Project Schedule

- Budget & Finance Subcommittee review of Billing and Financial Assurance Policy Changes Required
 - October 2014 – High Level Review of Changes Required to the Policies
 - November 2014 – Review Specific Policy Language Changes and Make Recommendation
- Markets Committee
 - November 2014 Introduce Project
 - December 2014 Discuss Redlines
 - January 2015 Further Discussion & Vote
- Participants Committee Vote
 - February/March 2015
- FERC Filing
 - February/March 2015
- Implementation and Go Live
 - October 2015

Note: This schedule will be adjusted as required in case of the need for additional meetings with Stakeholders

Overview of Design Concept

- ISO New England runs the FTR auction to create the initial positions.
- The FTRs are processed by the Exchange and novated to the Clearinghouse; i.e., converted from ISO-NE market path-based positions into Exchange/Clearinghouse defined NODAL-based contracts at source and sink.
- The Clearinghouse establishes and maintains initial and variation margins.
- Nodal Exchange operates the trading platform and provides price transparency.

Overview of Design Concept *(cont'd)*

- The ISO is a counterparty to the ISO cleared contracts.
- The ISO collects congestion revenues in the Energy Market.
- Collected congestion revenues will be used to fund ISO-NE variation margin and to pay ARR holders.
- Rather than directly pay FTR holders congestion revenues, ISO-NE will pay variation margin on the contracts to which it is counterparty.

What is Central Counterparty Clearing?

- When contracts are to be settled in the future there is risk regarding the counterparty being able to meet payment obligations at that future time
- To manage this risk, parties transact through a central counterparty clearing house. The clearing house as the ***buyer to every seller and the seller to every buyer***, taking no market position risks, only default risk
- These clearing organizations for commodities such as energy are regulated by the Commodity Futures Trading Commission (CFTC) and referred to as **Derivatives Clearing Organizations (DCOs)**
- To protect themselves in the case of a default, DCOs hold margin which is called at least daily
 - **Variation margin:** covers actual movements in the expected settlement price of the contract (mark to market)
 - **Initial margin:** covers the potential price movements that could occur after a potential default and are determined to cover a set number of days to liquidate with a certain degree of confidence

What does it mean to 3rd party clear FTRs?

- FTRs are converted from RTO market path-based definitions into Exchange/Clearinghouse defined NODAL-based contracts (one contract at source, another at sink)*
 - *ISO New England has developed the design in collaboration with Nodal Exchange and LCH.Clearnet; the design is not exclusive and another or additional exchange/clearing partner(s) are possible
- RTO market obligations to pay FTR holders congestion revenues are replaced with fulfilling variation margin payments in the futures market
- RTO acts as a counterparty to the contracts submitted for clearing
- Retained congestion revenues will be used to pay ARR holders and fund ISO-NE variation margin

Diagram of the Conversion from FTR to Future/Swap

FTR

50 MW Hub A to Zone X,
Peak, April 2013



*Cleared via Nodal
Exchange/LCH.Clearnet*

FTR Auction Price:
\$2,112/MW-Period
(\$6.00/MWh)

Futures/Swaps

Participant:

Long 50MW Zone X, Peak, April 2013
Short 50MW Hub A, Peak, April 2013

ISO/RTO:

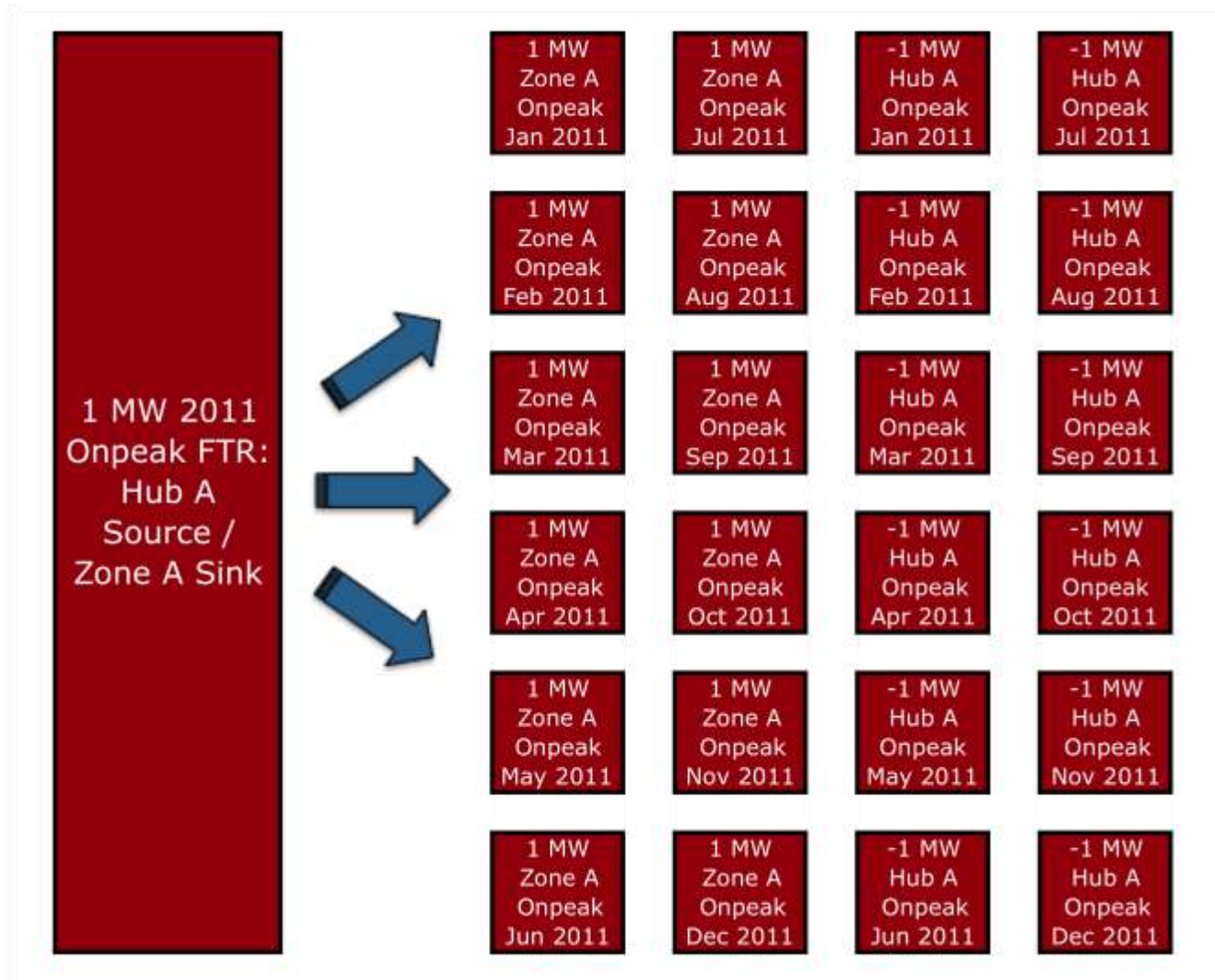
Short 50MW Zone X, Peak, April 2013
Long 50MW Hub A, Peak, April 2013

*Commodity for all contracts is energy +
congestion (but energy drops out on spreads as it
is always the same across any given ISO)*

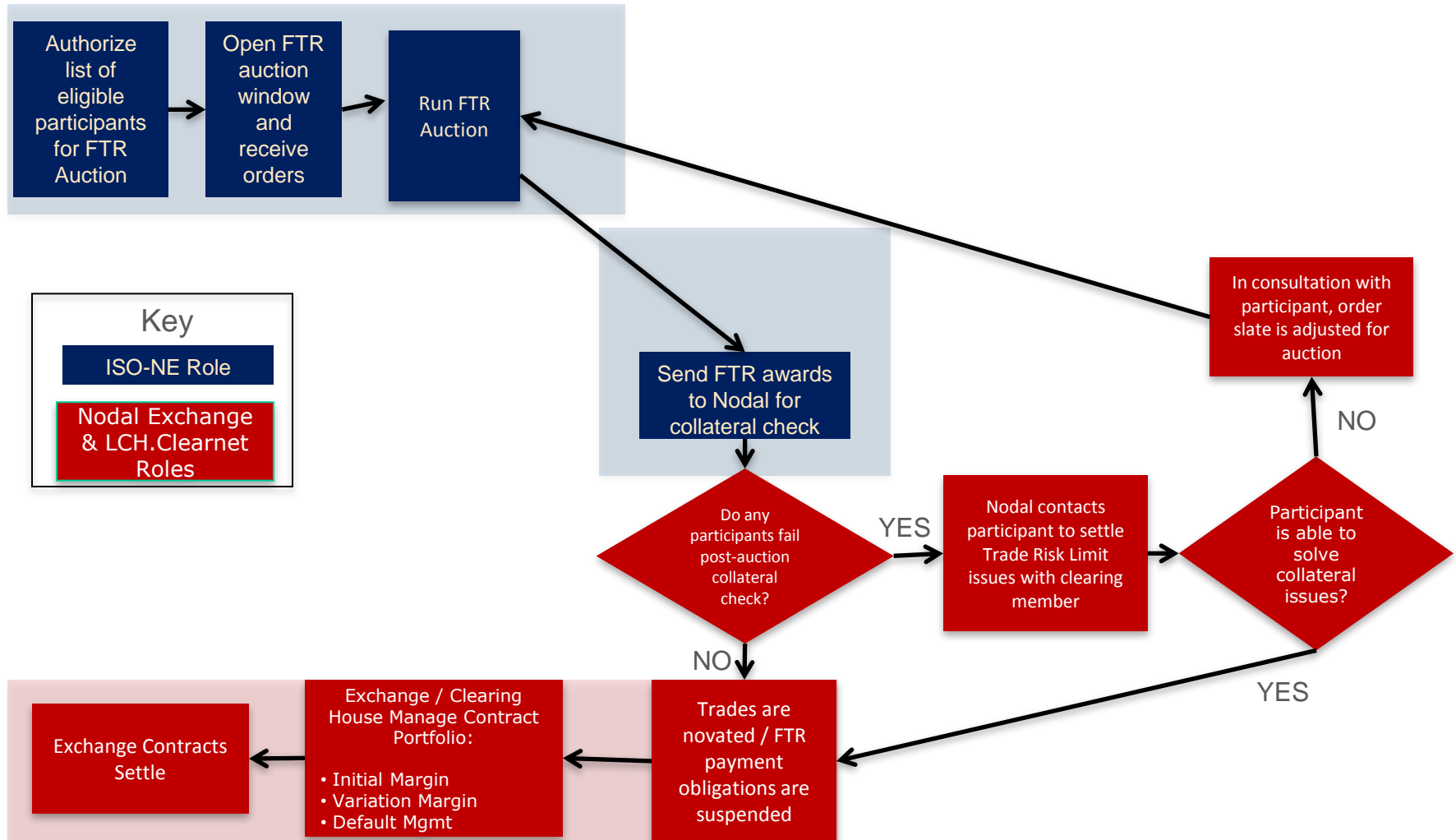
Price: Novated at FTR price

Zone X:	\$52/MWh
Hub A:	\$46/MWh
(difference= \$6.00/MWh= FTR price)	

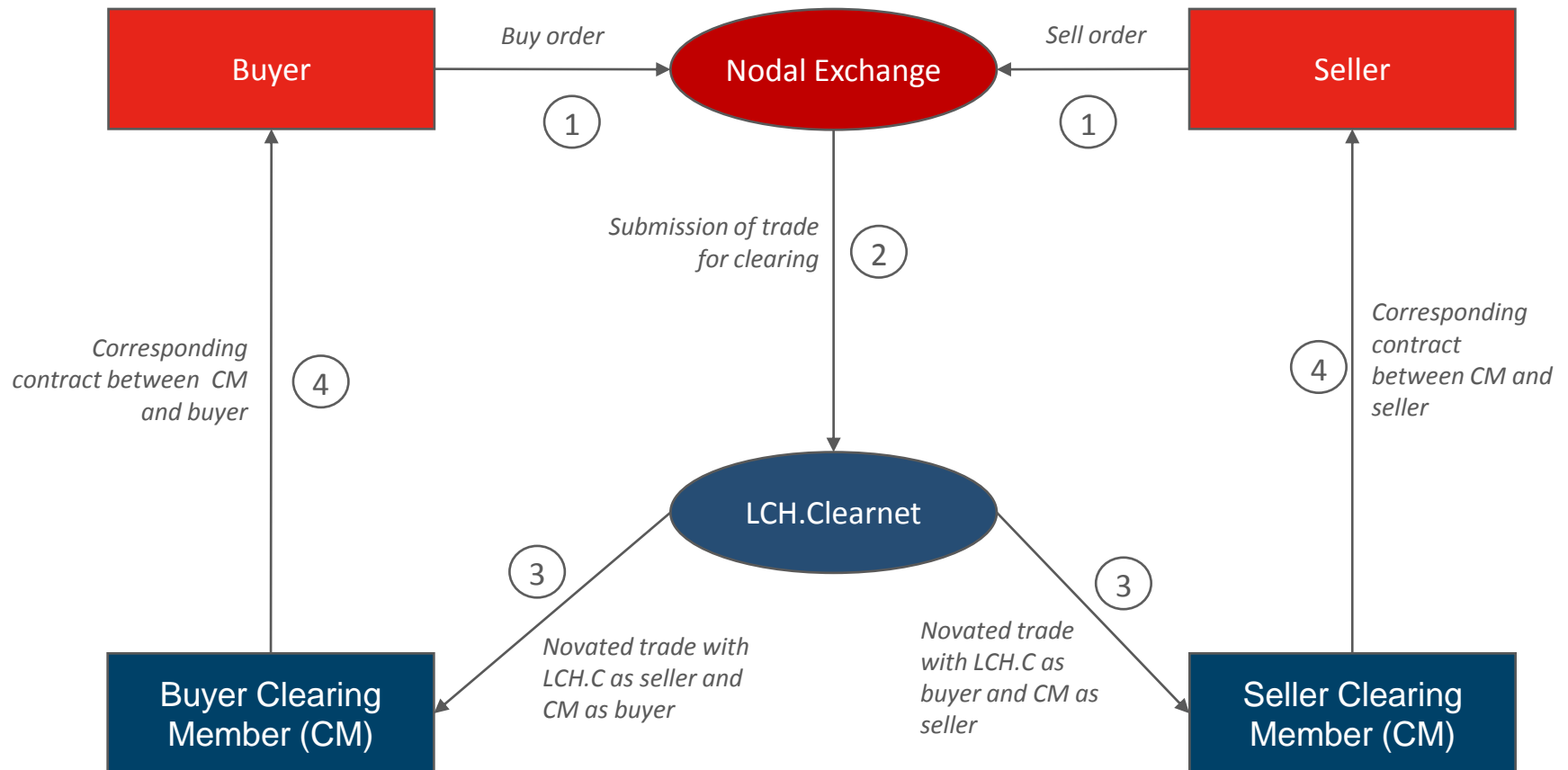
Conversion of an Annual FTR to Nodal Exchange Contracts



Schematic of FTR Clearing Process



Schematic of “Novation” Process



Margining Overview

- In place of the financial assurance currently held on FTRs per the FAP, this design would require parties to post margin with the clearinghouse. The amount of margin held depends on the features of the market and regulatory requirements
- The clearinghouse maintains both initial and variation margin
 - Initial margin covers liquidation risk. For Nodal Exchange, it is structured to cover the portfolio loss, to a 99.7% certainty, assuming two days to liquidate the defaulting portfolio
 - Variation margin, based on daily price marks, prevents losses from accumulating
- Variation margin is required to cover potential market exposure

FTR Billing and Collections Overview

Current ISO Process

Auction Revenue Process

- Annual FTR Auction Awards (Fixed Costs)
- Determination/Collection of Financial Assurance
- Collection/Distribution of Annual Auction Revenue

Energy Market Process

- Energy Congestion Revenue (Day-Ahead and Real-Time Markets)
- Settled hourly
- Billed twice a week
- Resettled

FTR Process

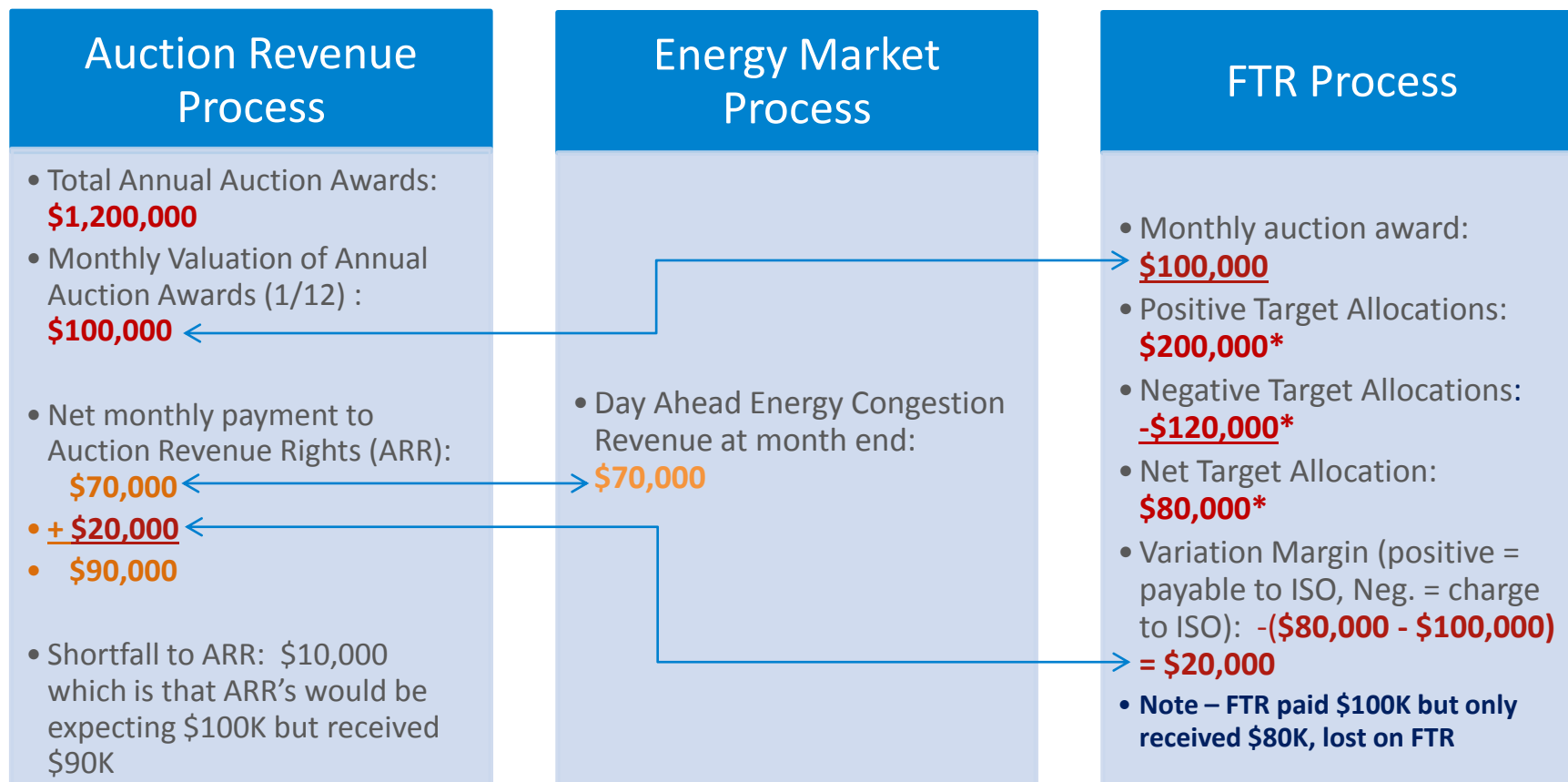
- Settled and billed monthly
- Positive Target Allocations
- Negative Target Allocations
- Energy Congestion Revenue
- Market Monitoring Review
- Proration of Positive Target Allocations if Congestion Revenue Fund Shortfall (Not Fully Funded)

Billing and Collection of FTR Market

Proposed Future State

- ISO will no longer bill market participants for the cost of awarded FTRs
 - FTR holders will be required to have appropriate margin amounts in their account with the clearing member
 - Bill line items: FTR Long-term /monthly off /on Peak Auction
- ISO will no longer collect negative target allocations
 - FTR holders will be required to have appropriate margin amounts in their account with the clearing member
 - Bill line item: FTR Transmission Cong Alloc
- ISO will no longer pay out Energy Congestion Revenue to FTR Holders
 - FTR holders will be paid/credited into their account with their clearing member by Nodal for the positive target allocations – and will be kept whole
- ISO **WILL** pay ARR holders net, of any shortfall adjustments or surplus (FTR Holders will be FULLY funded per the Long Term Transmission Rights (LTTR) methodology)
 - Bill line items: ARR Long-term /monthly off /on Peak Alloc

Example of Proposed Annual FTR Auction Revenue Distribution



Cash settled at Nodal

Cash settled at ISO NE

* Cash Processed via Nodal/ISO Variation Margin Account

Market Development

- All FTRs must be fully funded; FTR funding shortfalls will be addressed per the FERC approved LTTR methodology
- Excess congestion revenue will be distributed monthly (LTTR methodology)
- Discontinue collection and allocation of RT congestion revenues to FTRs
- ISO will review next steps for the project of implementing LTTR and BoPP after 3rd party clearing has been successfully put in service

Market Operations

- The ISO will make all external interfaces, load zones, unit nodes and load nodes available for bidding in the monthly and annual auction
- The set of available nodes will be modified in a similar way as today; new p-nodes will be available in the next FTR auction after activation, p-node retirements will result in LT FTR reassignments
- The ISO will determine the node to receive the reassignments and will coordinate the reassignment with Nodal Exchange
- The set of p-nodes used in the annual auction will then be used in all subsequent monthly FTR auctions, with minor adjustments for p-node activations/retirements



Risk Management

- All parties trading FTRs will have to participate through the Exchange/Clearinghouse.
- Participants will interact with the Clearinghouse via clearing member institutions. These institutions are competitive commercial businesses so “shopping” may be required
- The ISO proposes to share information with the Exchange regarding the default status of FTR participants. Whether that information will result in exclusion from the FTR market or special margin requirements being imposed will depend on the rules of the Exchange
- The Order 741 requirements around FTR market participation assume that the ISO is administering the market and collateralizing against the risk. The ISO will modify the Order 741 sections of the FAP as part of the 3rd party clearing rules package

Finance

- The ISO will secure a line of credit to fund margin requirements in support of being the counterparty to all ISO cleared FTRs
- The ISO is exploring a carve out from SOC 1 SSAE 16 requirements for FTR market activity under 3rd party clearing

Market Monitoring

- Governance
 - The 3rd Party will ensure that any information related to FTR positions remains confidential
 - The 3rd Party administrator or its affiliate will not have a proprietary interest in the market trades
- Data Access
 - IMM will have access to information on participant FTR positions and trades
 - The IMM will no longer perform FTR capping as it does today.
 - The IMM will continue to monitor buying and selling transactions that cause congestion to identify potentially manipulative behavior; and will refer the participant to the Commission if warranted.

Legal and Regulatory

- ISO is working on agreements with NODAL/LCH - expected completion - Q1 2015
- ISO will make a 204 filing in 2015 for the Line of Credit needed to fund the variation margin
 - Currently analyzing the amount required
- FERC filings for rule changes – February/March 2015

Tariff Documents Requiring Review and Modification

- Market Rule
- Appendix A
- Appendix C
- Manual 6
- Financial Assurance Policy
- Billing Policy
- Information Policy

Questions

