New York ISO
Independent System Operator

Market Purchase Hub Transactions Update

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Agenda

- Background
- Market Design
- Example Scenarios
- Next Steps

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Background

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Background

- Netting of Bilaterals (Trading Hubs) initiative was first proposed in 2008 but was limited to balanced transactions.
  - 6/10/2009 BIC Presentation
  - 7/29/2009 NYISO Filing Letter to FERC
- Market Purchase Hub Transactions is a stakeholder requested project which proposes that the NYISO expand on Trading Hub rules to allow unbalanced transactions.
  - LIPA Proposal Presentation
  - Market Purchase Hub Transactions Project Kick-off
- The 2024 deliverable for this project is Market Design Concept Proposed (MDCP).

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Project Objectives

- The market design concept will propose modifying zonal trading hubs by allowing unbalanced transactions in the Day-Ahead Market to provide additional flexibility in scheduling of hub transactions.
  - This market design would allow a Market Participant to establish unbalanced transactions to purchase power from the NYISO market for ultimate delivery to load.
- Purpose is to allow physical service to load, not virtual transactions.
- The market design concept proposed will identify potential tariff, system, and procedural changes necessary to allow these enhancements.

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Market Design

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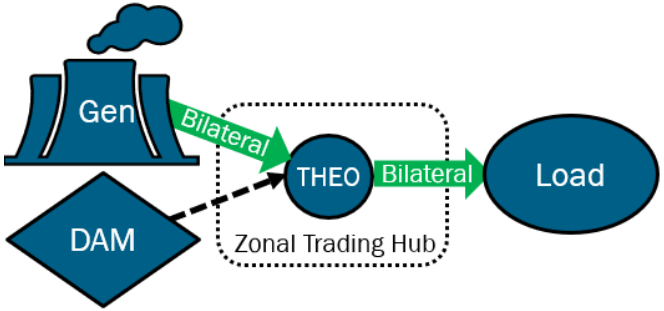
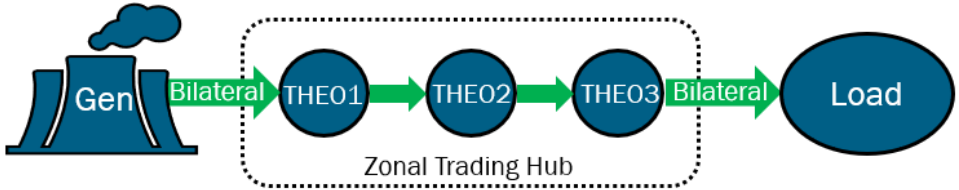
Market Design Overview

- The NYISO proposes that Trading Hub Energy Owners (THEOs) be able to transfer more MW via bilateral with other THEOs, LSEs, or Load Buses than they have procured via bilateral with a Generator.
- In scenarios where this is the case, the NYISO would settle the THEO's imbalance by scheduling a purchase by the THEO from the Day-Ahead Market.
  - DAM purchase = MW out – MW in
- The NYISO proposes to further add to the flexibility of Trading Hubs by allowing THEO-to-THEO bilateral transactions.





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Proposed Rules for Unbalanced Purchases

- **Unbalanced purchase functionality will be limited to the Day-Ahead Market (DAM).**
- **THEO positions will be balanced by the NYISO in the DAM.**
  - If the MW value sunk by a THEO via bilateral is greater than the MW value sourced by the THEO via bilateral, the NYISO will calculate the imbalance and administer a DAM purchase by the THEO of the missing MW.
  - THEO positions will be balanced by DAM close; they will not carry forward into RT.
- **Transfers between entities will be accounted for in DAM Settlements.**
- **Credit responsibility for wholesale market purchases will be borne by each buyer.**
  - Collateral Requirements will be determined as part of Market Design Complete.
- **Trading hub purchases will only be enabled at load zone locations and THEOs will pay the Zonal LBMP in the Load Zone where the Trading Hub is located.**
- **Transfers between entities will be able to cross zones.**
  - Gen-to-THEO, THEO-to-THEO (between Trading Hubs), THEO-to-Load

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Proposed Rules for Multiple-THEO Transaction Chains

- Market Participants who wish to be involved in a multiple-THEO Transaction Chain will be required to register with the NYISO and be assigned a Chain ID number.
- All participants involved in the daisy-chain (Generators, THEOs, LSEs/Load Buses) must submit the Chain ID number when scheduling their bilateral transactions.
- If any single transaction in a Chain fails (e.g. due to a participant failing its credit check), the entire Chain will fail.
  - All transactions involved will be rejected.
  - The impacted LSE will need to buy power in the Real-Time spot market to serve its load.

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Example Scenarios

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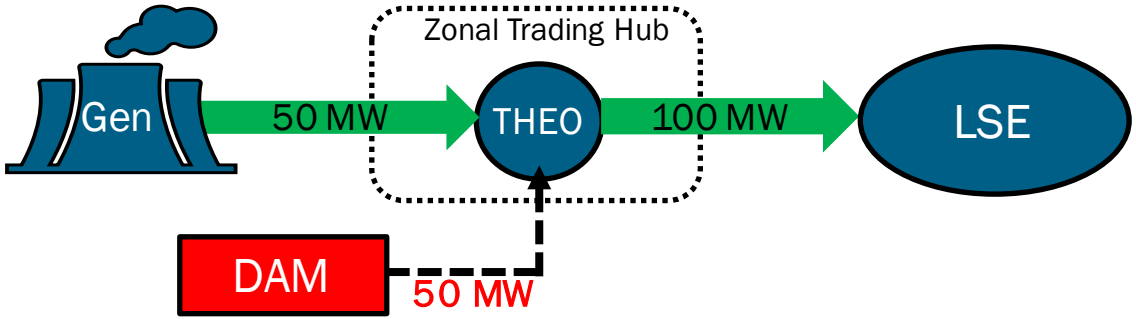
Scenario 1: Unbalanced, Single THEO



- THEO receives 50 MW via bilateral transaction with the Generator.
- THEO transfers 100 MW via bilateral transaction to the LSE.
- The NYISO calculates the THEO's unbalanced position to be 50 MW short, and therefore schedules the THEO to purchase 50 MW from the Day-Ahead Market to settle the imbalance.

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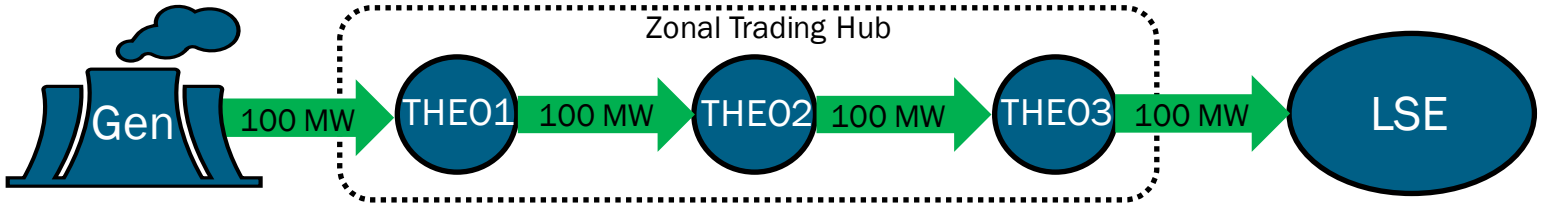
Scenario 2: Balanced, Multiple THEOs



- 100 MW is transferred via bilateral transaction from the Generator to THEO1.
- The 100 MW is then transferred via bilateral transactions from THEO1 to THEO2 and from THEO2 to THEO3.
- THEO3 ultimately sells the 100 MW via bilateral transaction to the Load Serving Entity.
- All THEOs are balanced, and therefore none purchase MW from the DAM.

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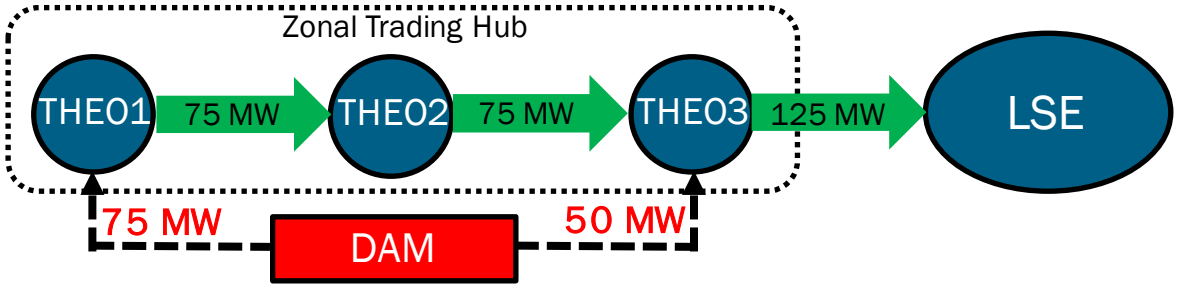
Scenario 3: Unbalanced (Short), Multiple THEOs



- **THEO1 transfers 75 MW via bilateral transaction to THEO2.**
  - The NYISO calculates THEO1's position to be 75 MW short, and therefore schedules THEO1 to purchase 75 MW from the Day-Ahead Market to settle the imbalance.
- **THEO2 has a 75 MW bilateral transaction with THEO3.**
  - THEO2 is balanced, and therefore is not scheduled for a Day-Ahead Market Purchase.
- **THEO3 has a 125 MW bilateral transaction with the Load Serving Entity.**
  - The NYISO calculates THEO3's position to be 50 MW short, and therefore schedules THEO3 to purchase 50 MW from the Day-Ahead Market to settle the imbalance.

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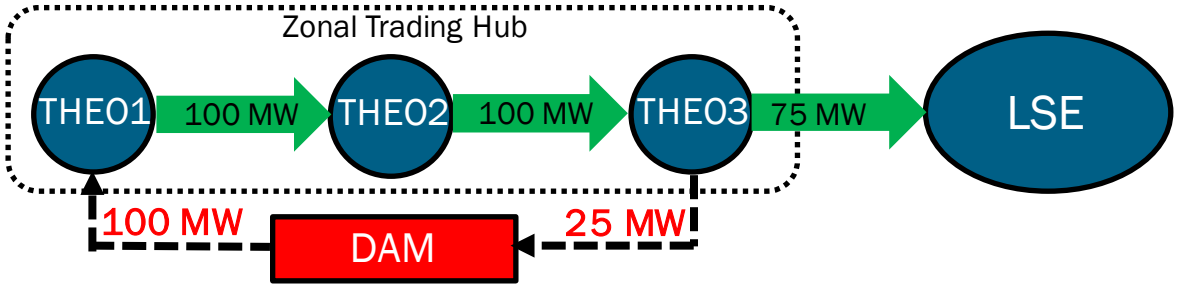
Scenario 4: Unbalanced (Short and Long), Multiple THEOs



- **THEO1 transfers 100 MW via bilateral transaction to THEO2.**
  - The NYISO calculates THEO1's position to be 100 MW short, and therefore schedules THEO1 to purchase 100 MW from the Day-Ahead Market to settle the imbalance.
- **THEO2 has a 100 MW bilateral transaction with THEO3.**
  - THEO2 is balanced, and therefore is not scheduled for a Day-Ahead Market Purchase.
- **THEO3 has a 75 MW bilateral transaction with the Load Serving Entity.**
  - The NYISO calculates THEO3's position to be 25 MW long, and therefore schedules THEO3 to sell 25 MW into the Day-Ahead Market to settle the imbalance.

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Next Steps

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Next Steps

- Return to MIWG based on stakeholder feedback
- 2024 Milestone: Market Design Concept Proposed

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Our Mission & Vision

Mission

Ensure power system reliability and competitive markets for New York in a clean energy future

Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

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