

A wide-angle landscape photograph of the Aurora Reservoir. The water is calm and reflects the surrounding brown and green hills and the sky with scattered clouds. In the distance, snow-capped mountain peaks are visible under a bright sky. The foreground is dominated by a dark teal graphic overlay that contains the title text.

Aurora Modeling Overview: Dispatch

September 2024 (Updated: January 2025)

Additional Details

idahopower.com/irp

Our 20-Year Plan

Home > Energy and the Environment > Energy

Current Projects

Oregon Distribution System Plan

Our 20-Year Plan

IRP Questions and Responses

Educational Resources

Regional Electrical Plans

Huston to Gem

Idaho

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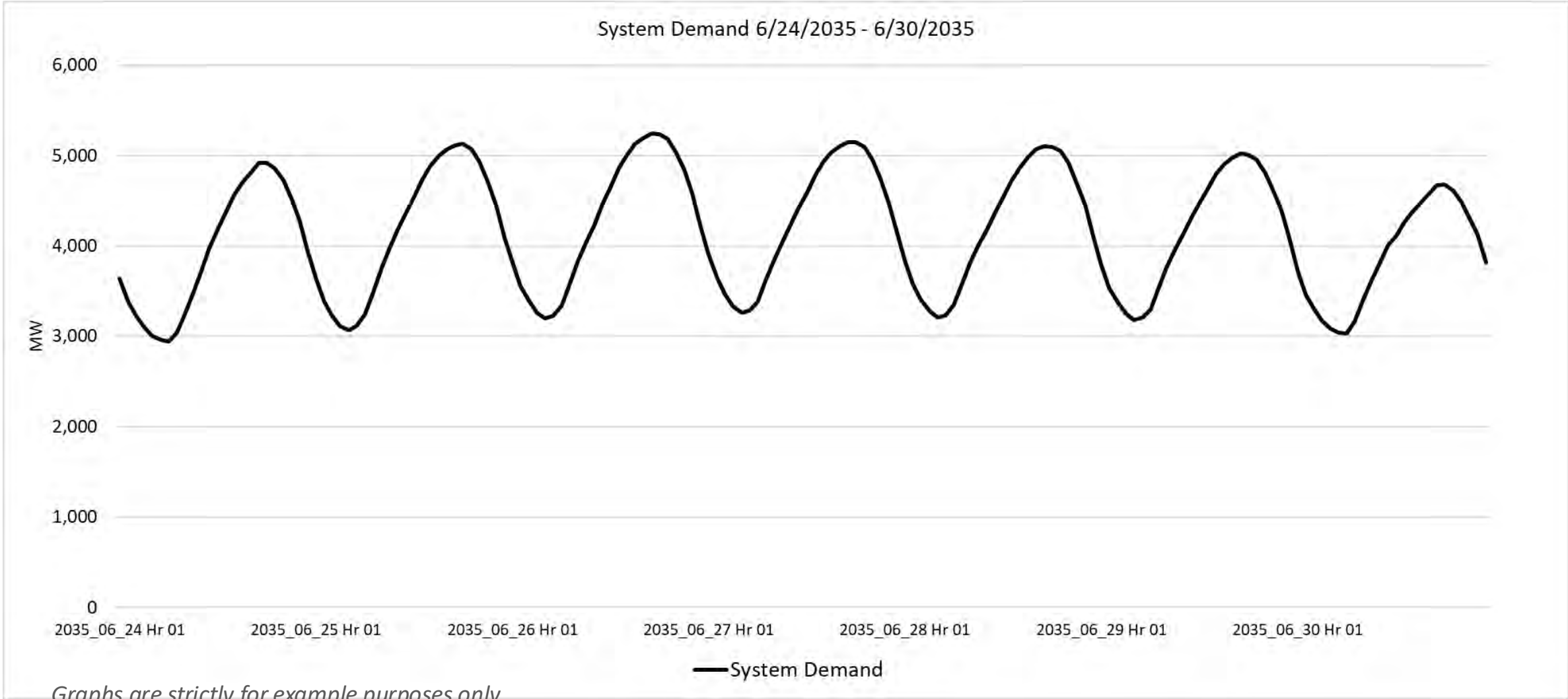
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[Video: AURORA Model Overview](#)

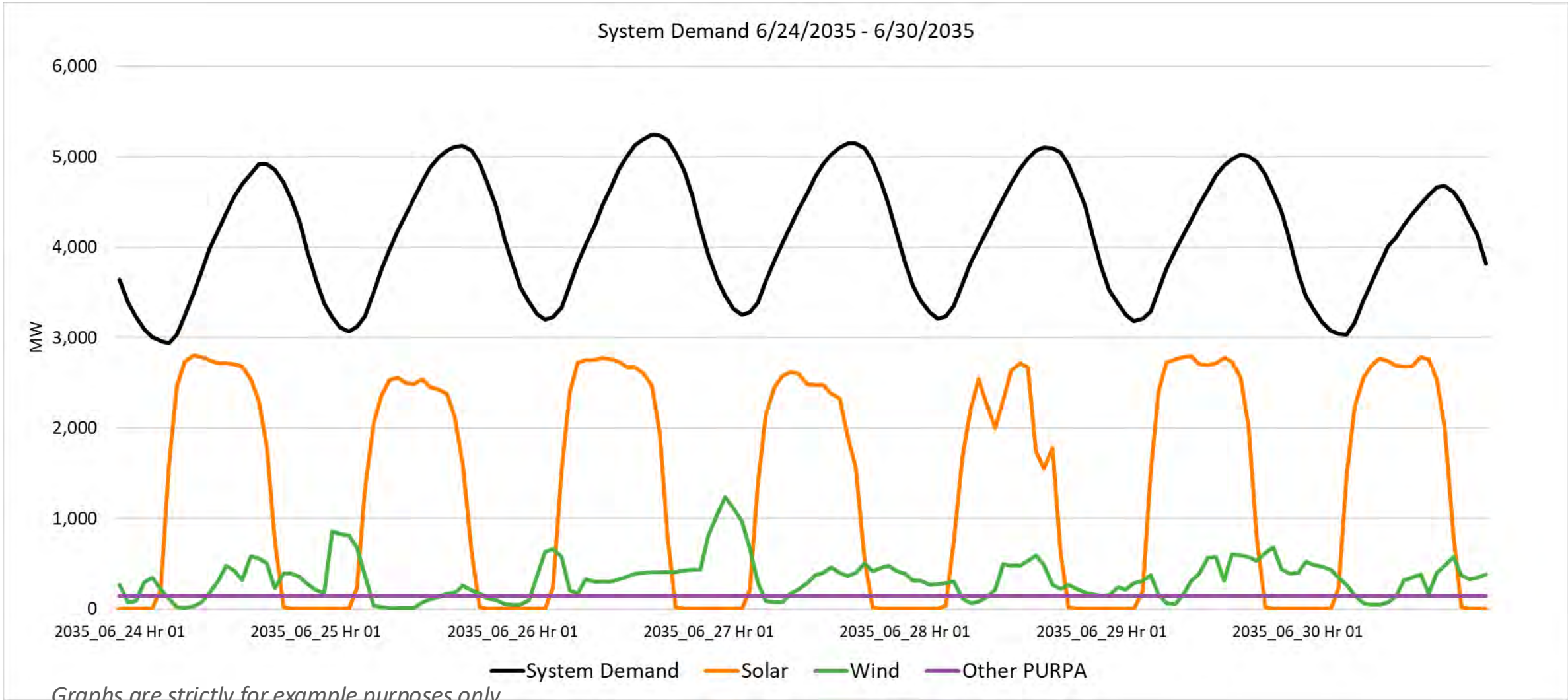
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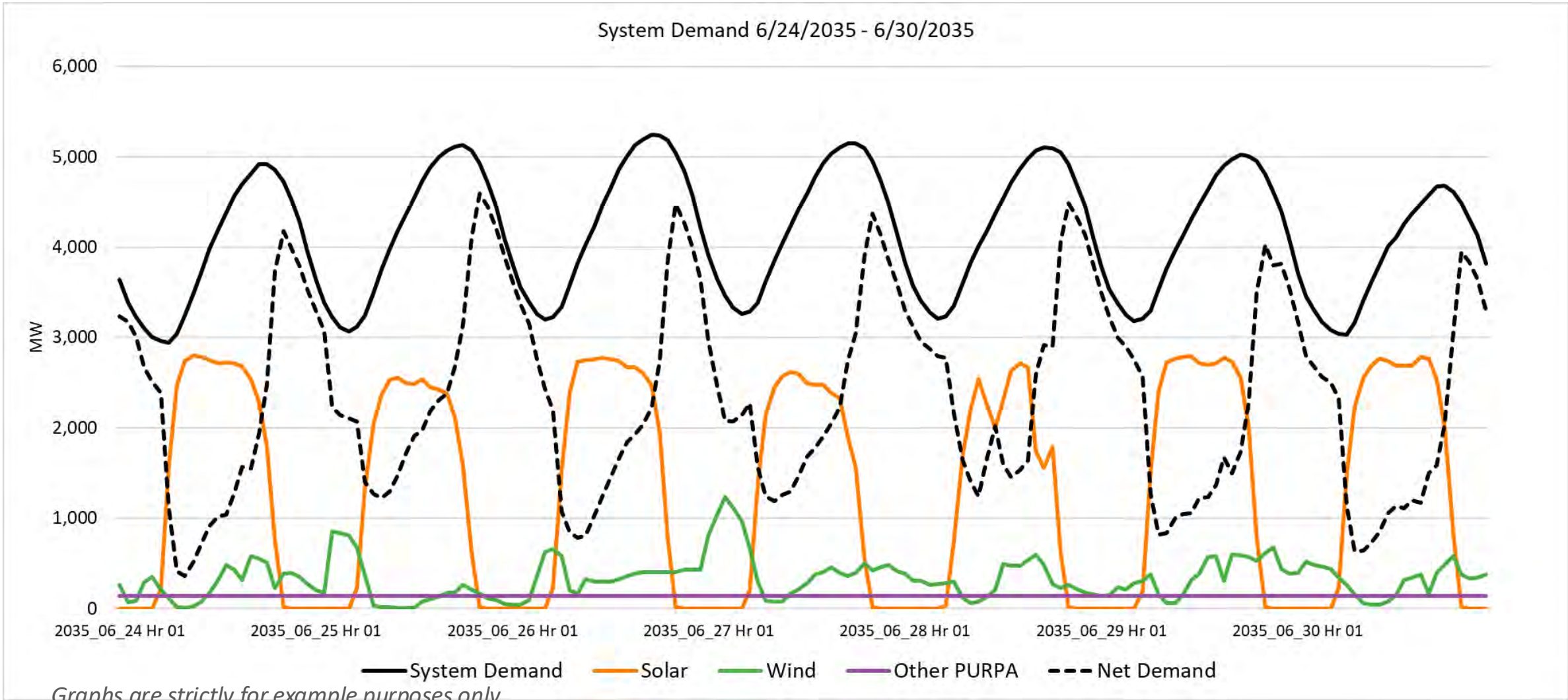
Dispatch Optimization Review



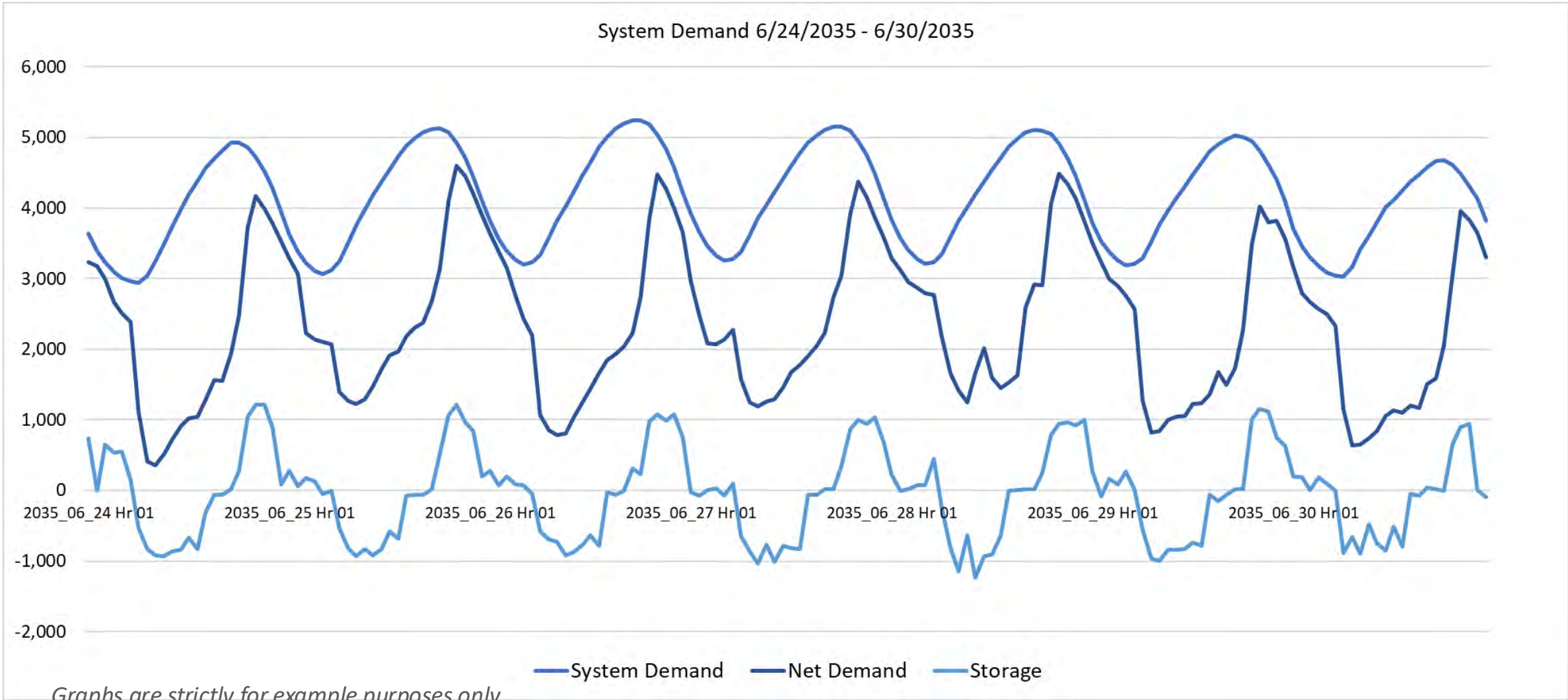
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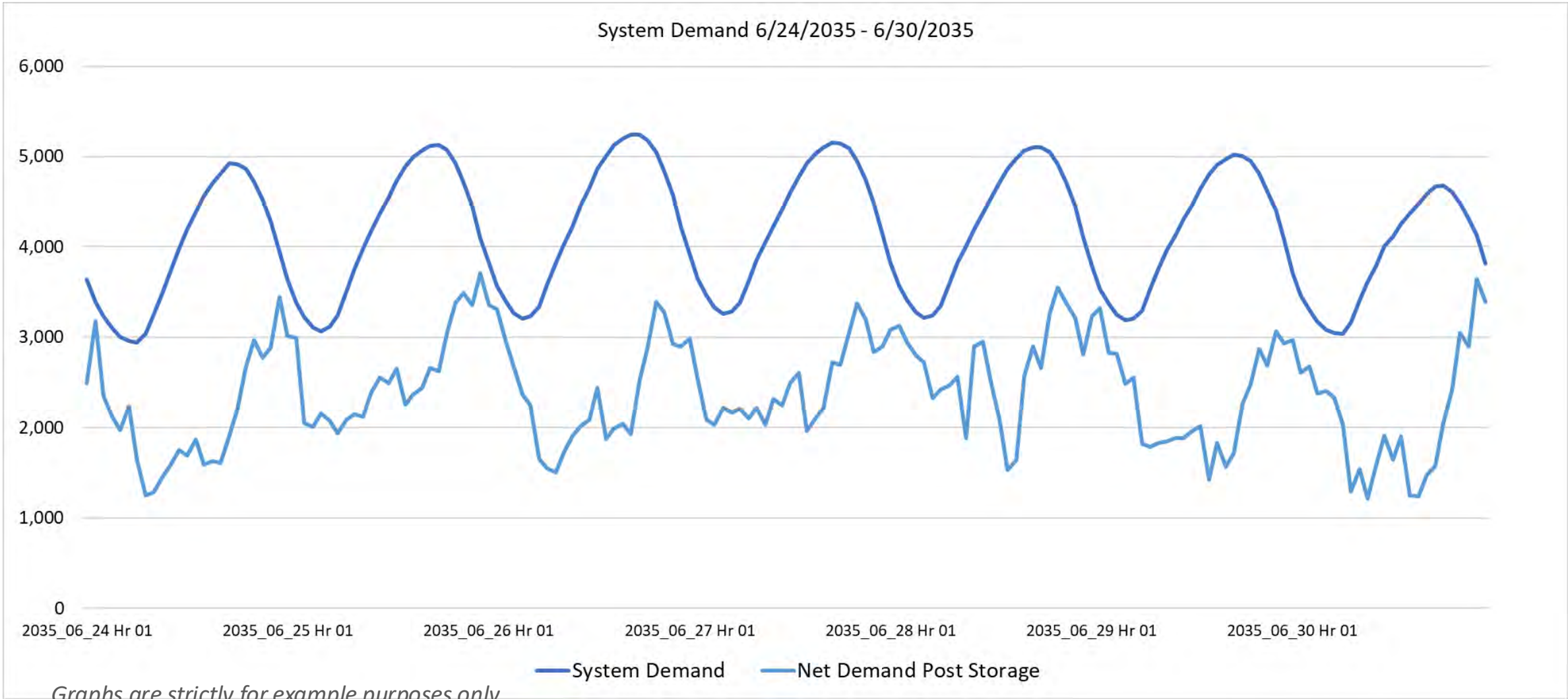
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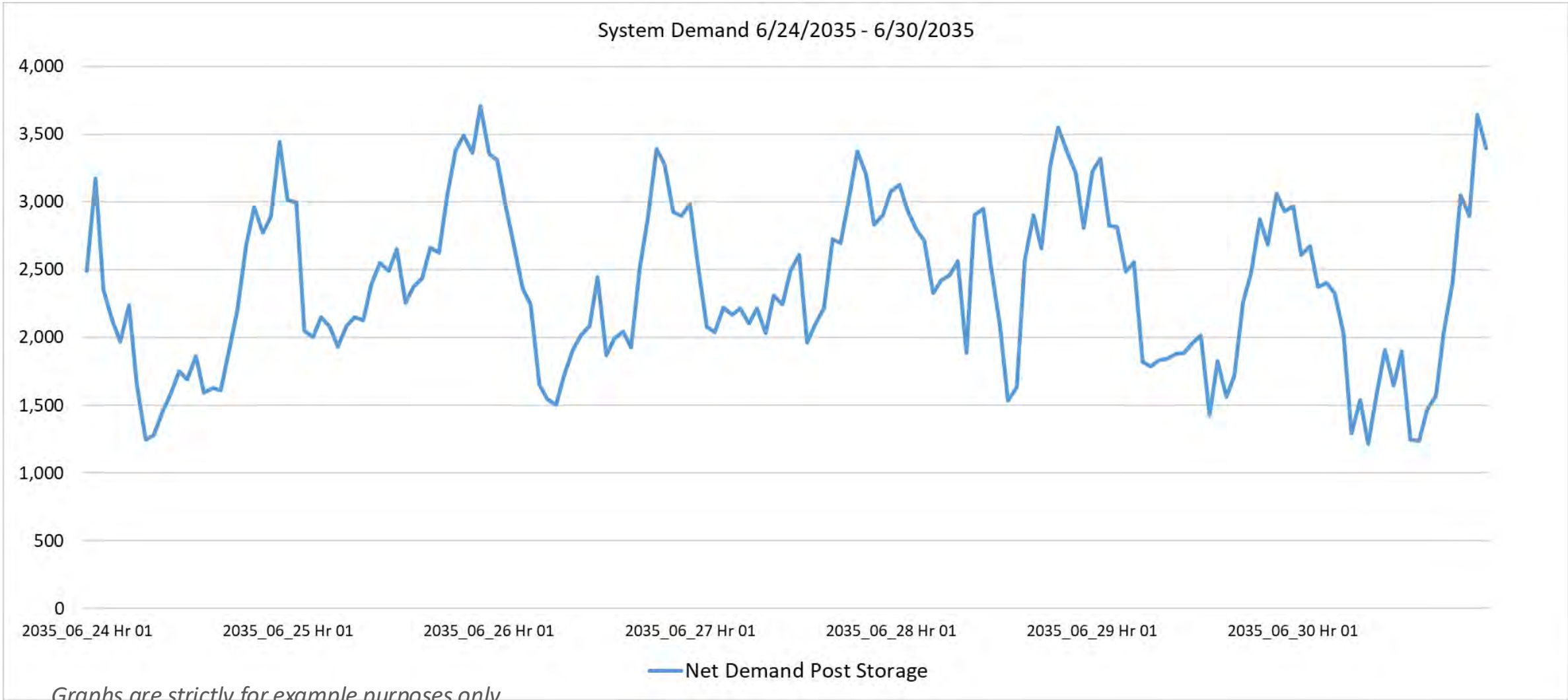
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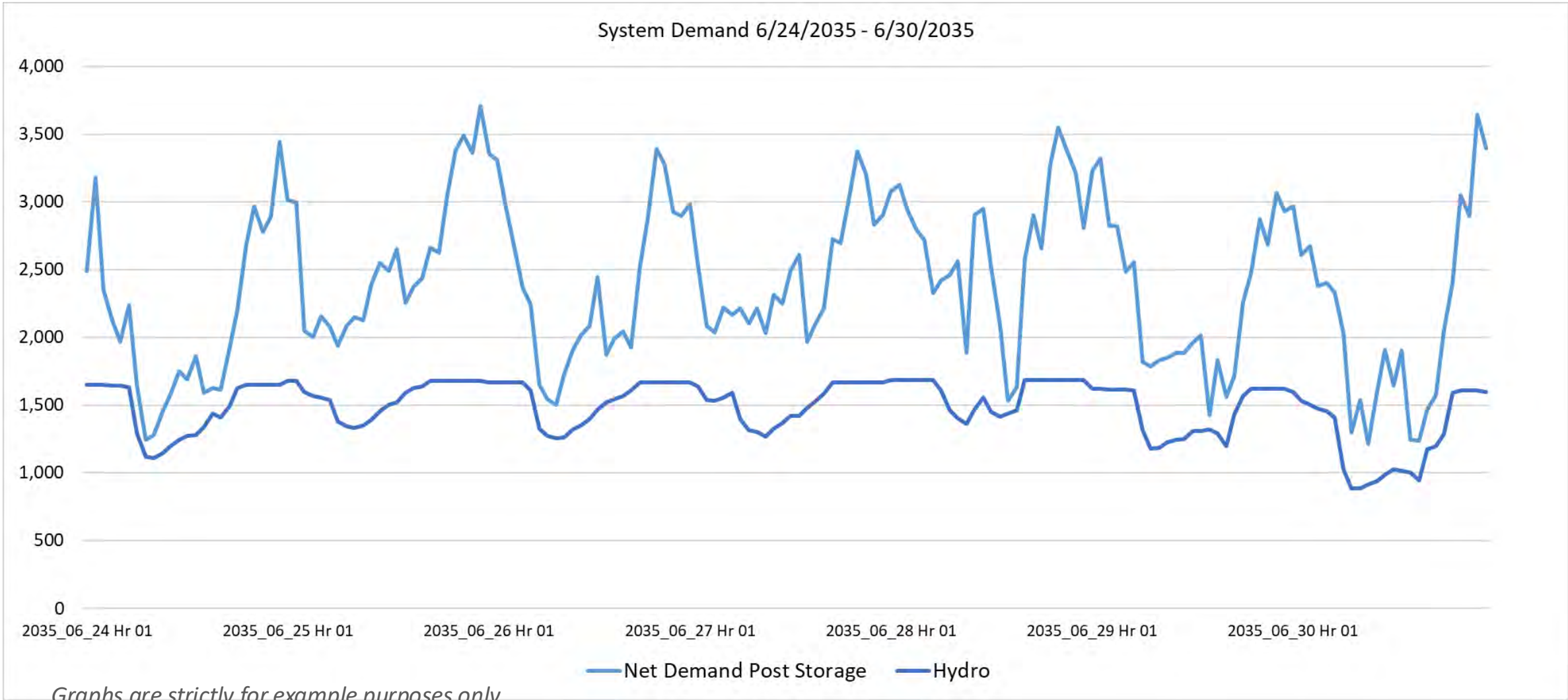
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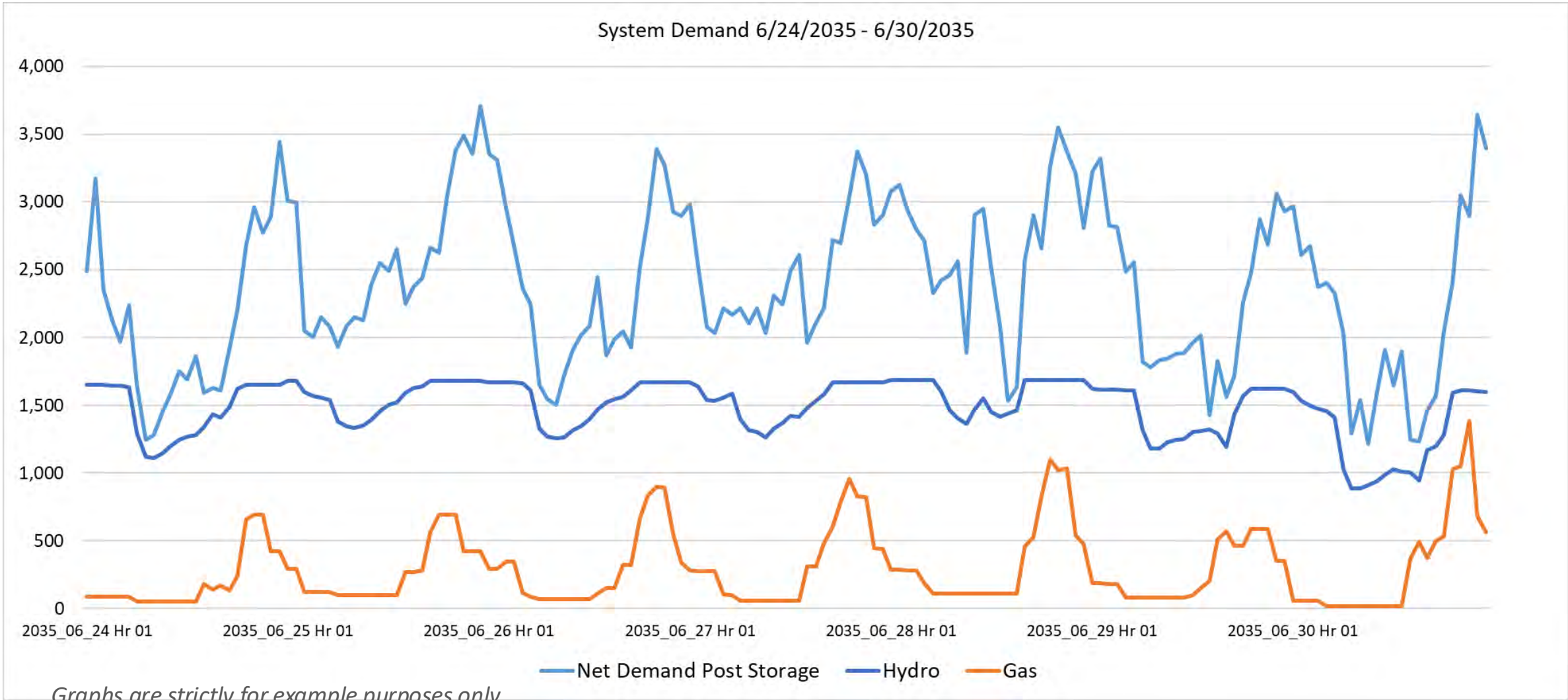
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Dispatch Optimization Review



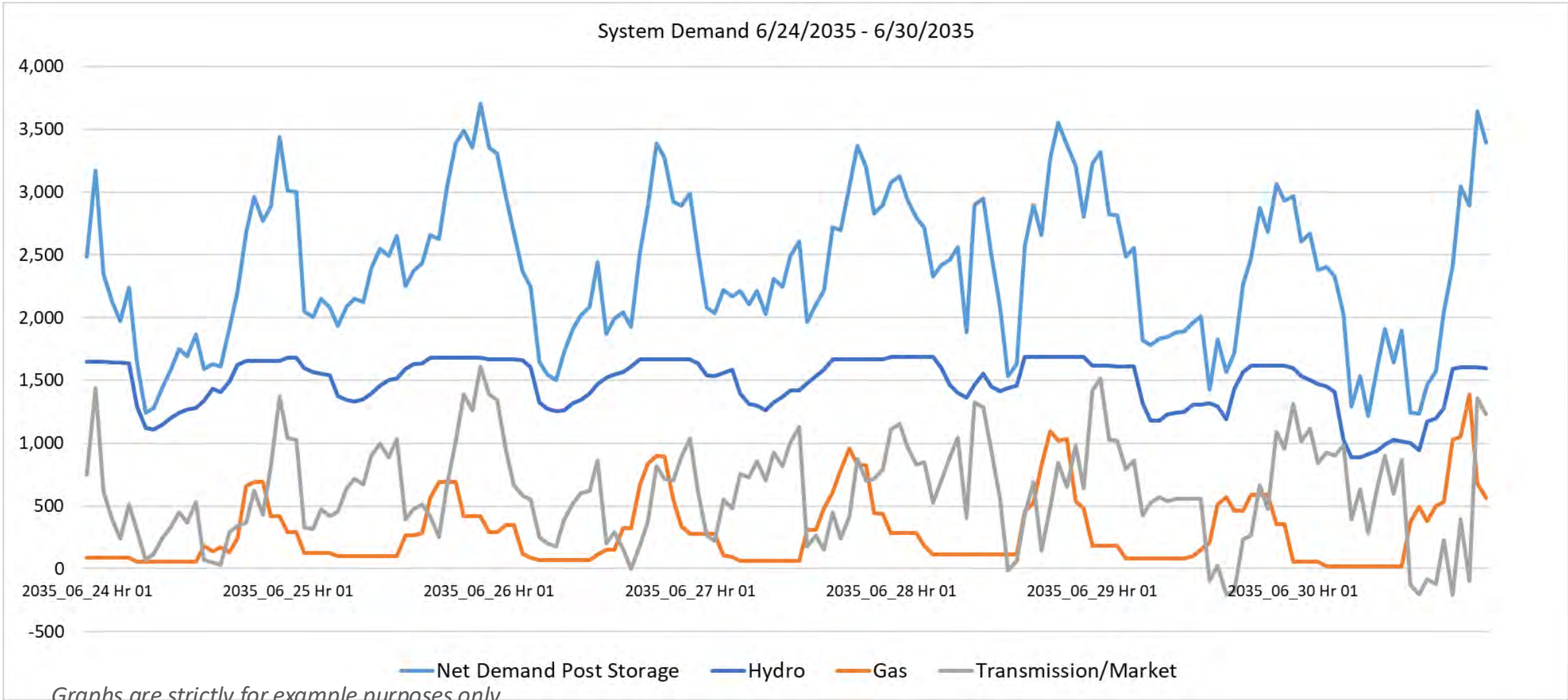
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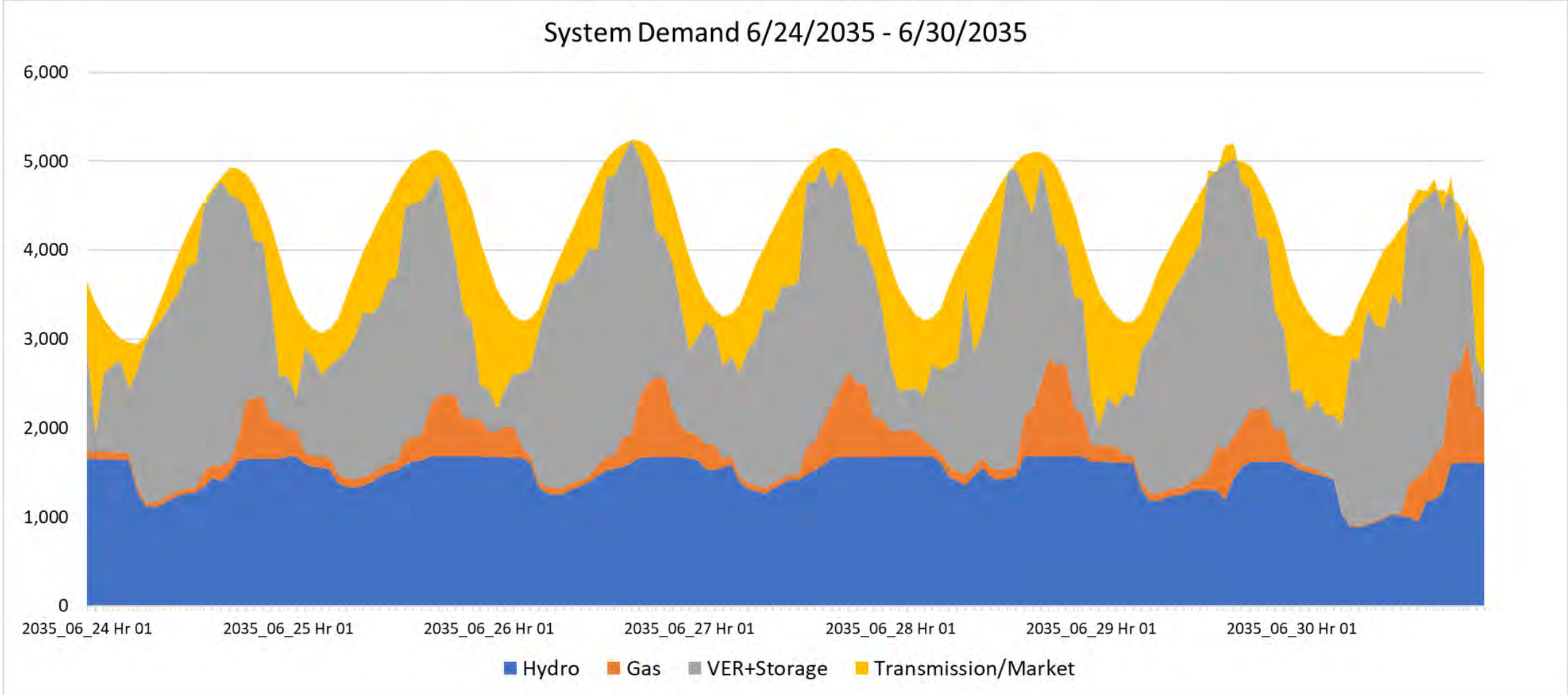
System Demand 6/24/2035 - 6/30/2035



Graphs are strictly for example purposes only

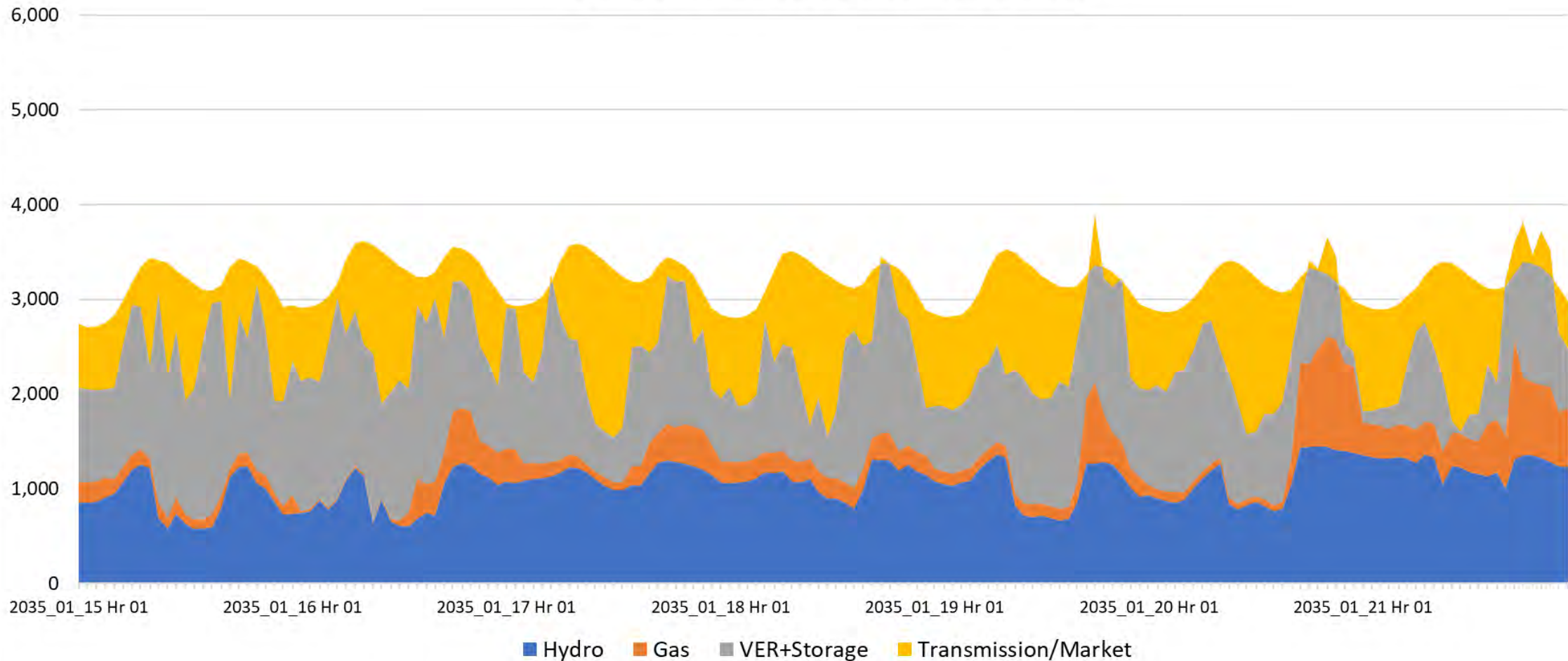
Dispatch Optimization Review

System Demand 6/24/2035 - 6/30/2035



Dispatch Optimization Review Winter

System Demand 1/15/2035 - 1/21/2035

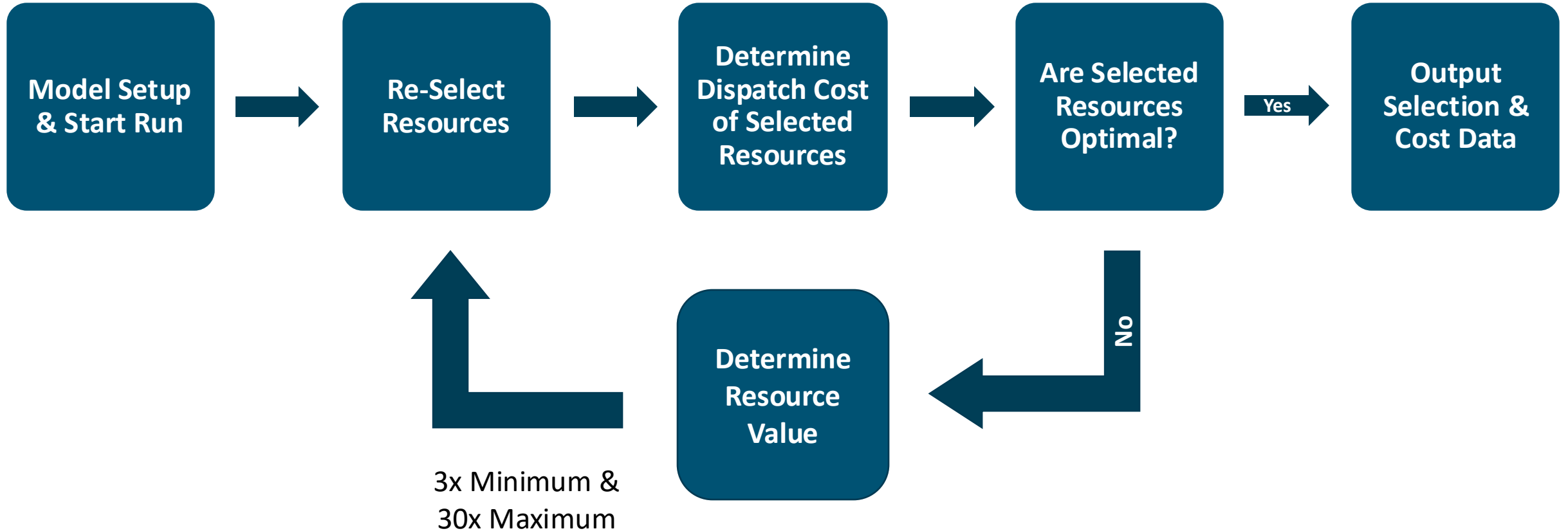


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Aurora Modeling Overview: Long Term Capacity Expansion (LTCE)

September 2024

Aurora LTCE Flow



What Does this Look Like in Practice?

Resource\Iteration
4hr
8hr
100hr
DR
EE
SCCT_NG
CCCT_NG
SCCT_H2
SMR
Pumped_Storage
Wind
Solar
Biomass
Geothermal

Numbers in table are strictly for example purposes only & not representative of any particular portfolio

What is Aurora Optimizing in English?

Minimizing System Cost on an NPV Basis

- Generation
 - Fixed Costs
 - Dispatch Cost
 - ✓ Variable O&M
 - ✓ Fuel
 - ✓ Starts
 - ✓ Storage Round Trip Losses
- Transmission
 - Wheeling & Losses
 - Fixed Costs

Subject to the Following Constraints

- Load = (Generation – Losses) in All Hours
- Generator Characteristics
 - Min/Max Capacity, Flexibility, Forced Outage, Fuel Limits, Emissions, etc.
- Transmission Capacities
- Reliability & Ancillary Services
- Resource Selection Limits