New York State Energy Planning Board

Electricity System Modeling Update: Preliminary Reference Cases

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Electricity System Model Structure

Input

- Load forecast for energy and peak
- Local reliability requirements
- Reserve margin
- Fuel prices
- Existing generation units and known additions/retirements
- Transmission limits
- Emission caps and regulations
- RPS requirements
- Cost and performance of potential new units

Integrated Planning Model (IPM)

Optimizes system dispatch, capacity builds and retirements, given specified load, transmission limits and reserve margin

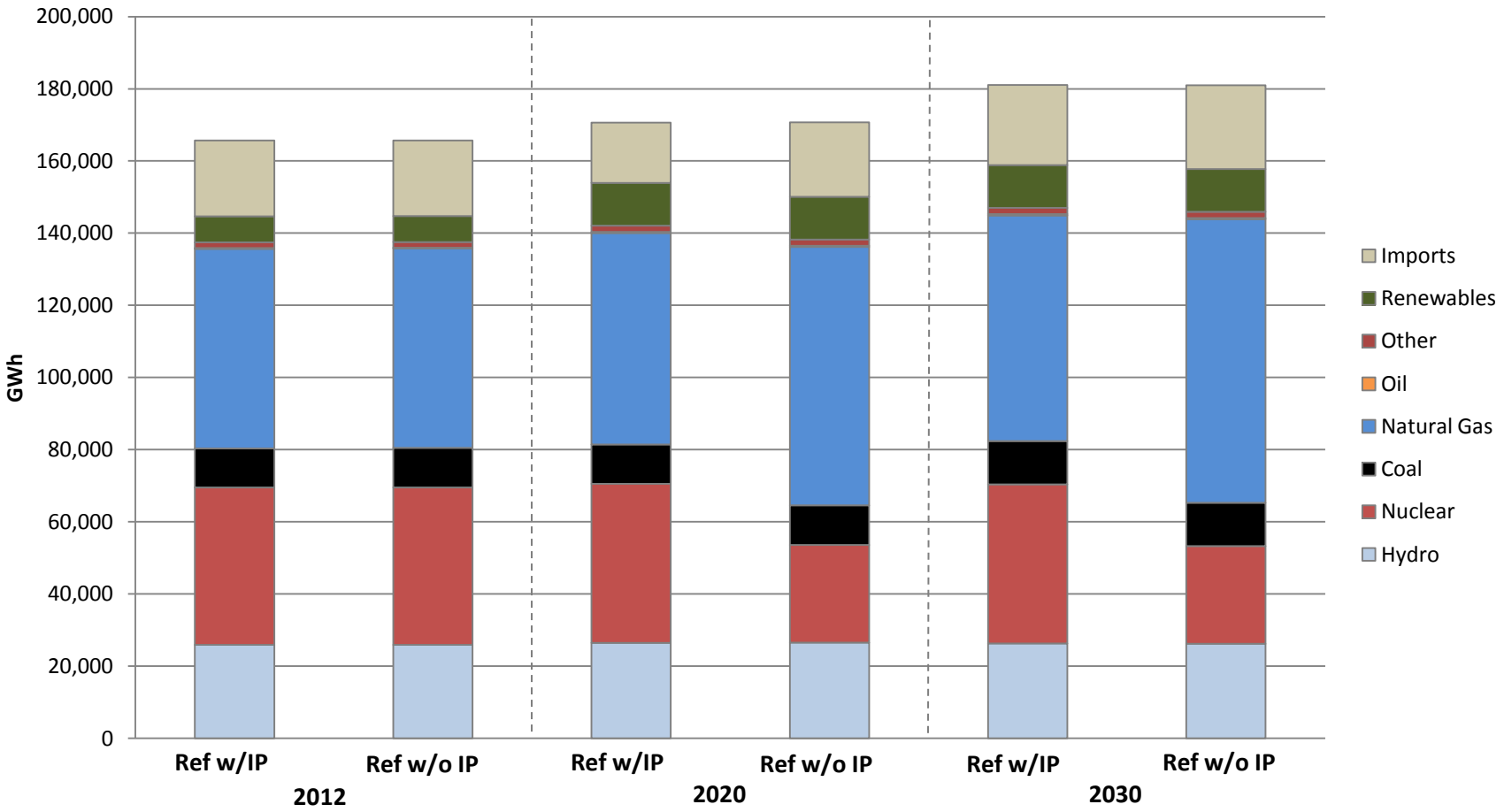
Output

- Generation mix
- New capacity builds
- Retirements
- Emissions
- Wholesale energy and capacity prices
- Allowance prices

Preliminary Reference Cases

Generation Mix (GWh)

Based on NYISO Planning Assumptions for Load, Capacity, and Transfer Limits

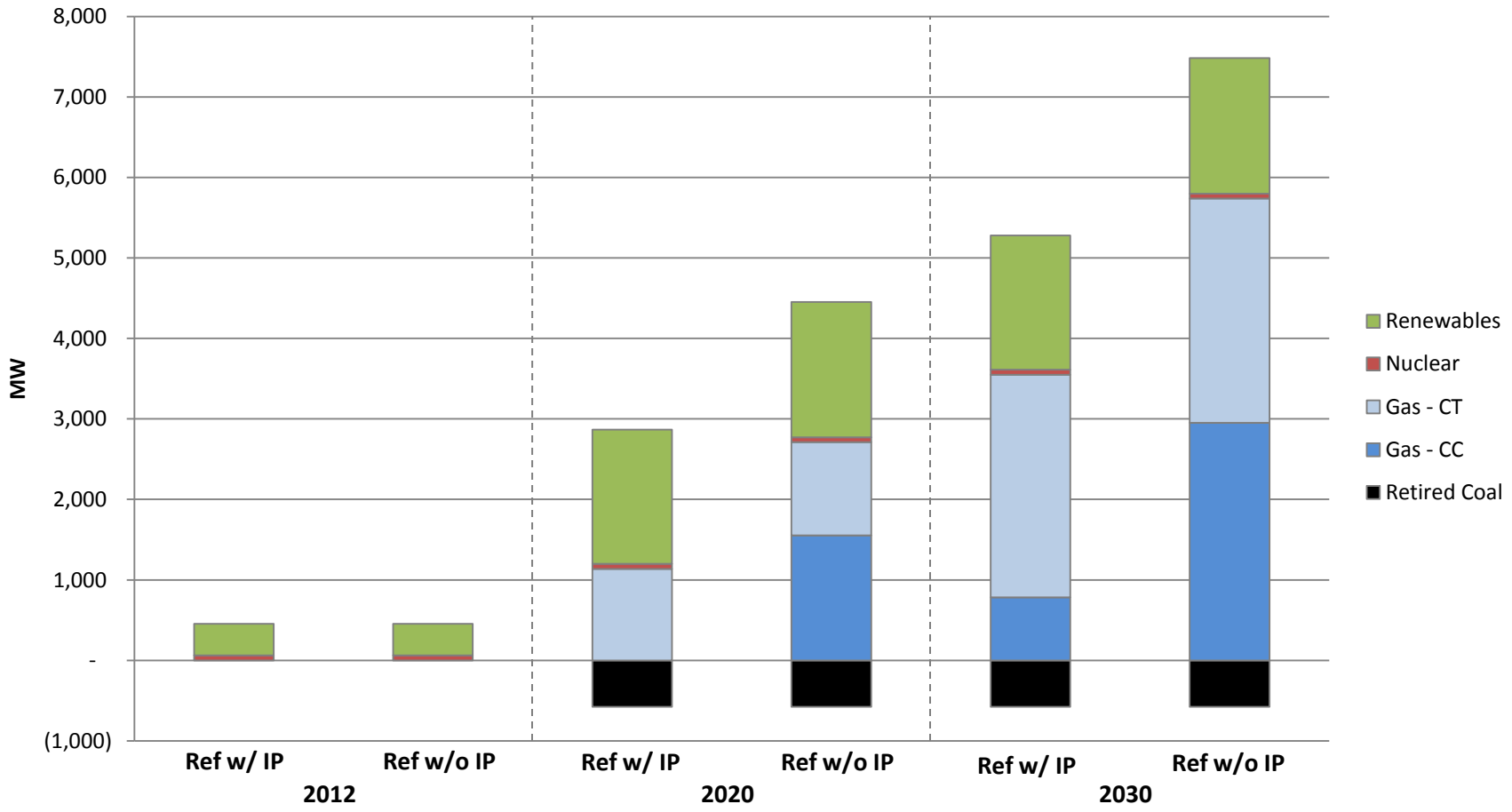


* Based on IPM Output dated 02.22.12

Preliminary Reference Cases

Cumulative MW Capacity Additions (Economic-Based)

Based on NYISO Planning Assumptions for Load, Capacity, and Transfer Limits



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