

2022 Long Term Forecast Load Shape Projections

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Summary

■ Summer Load Shape Projections

- 2022, 2032, 2042, and 2052 – including the impacts of behind-the-meter solar, electric vehicles (EV), and building electrification (e.g., cooking and water heating end uses). Represents a high load day in late July for the New York Control Area (NYCA).

■ Winter Load Shape Projections

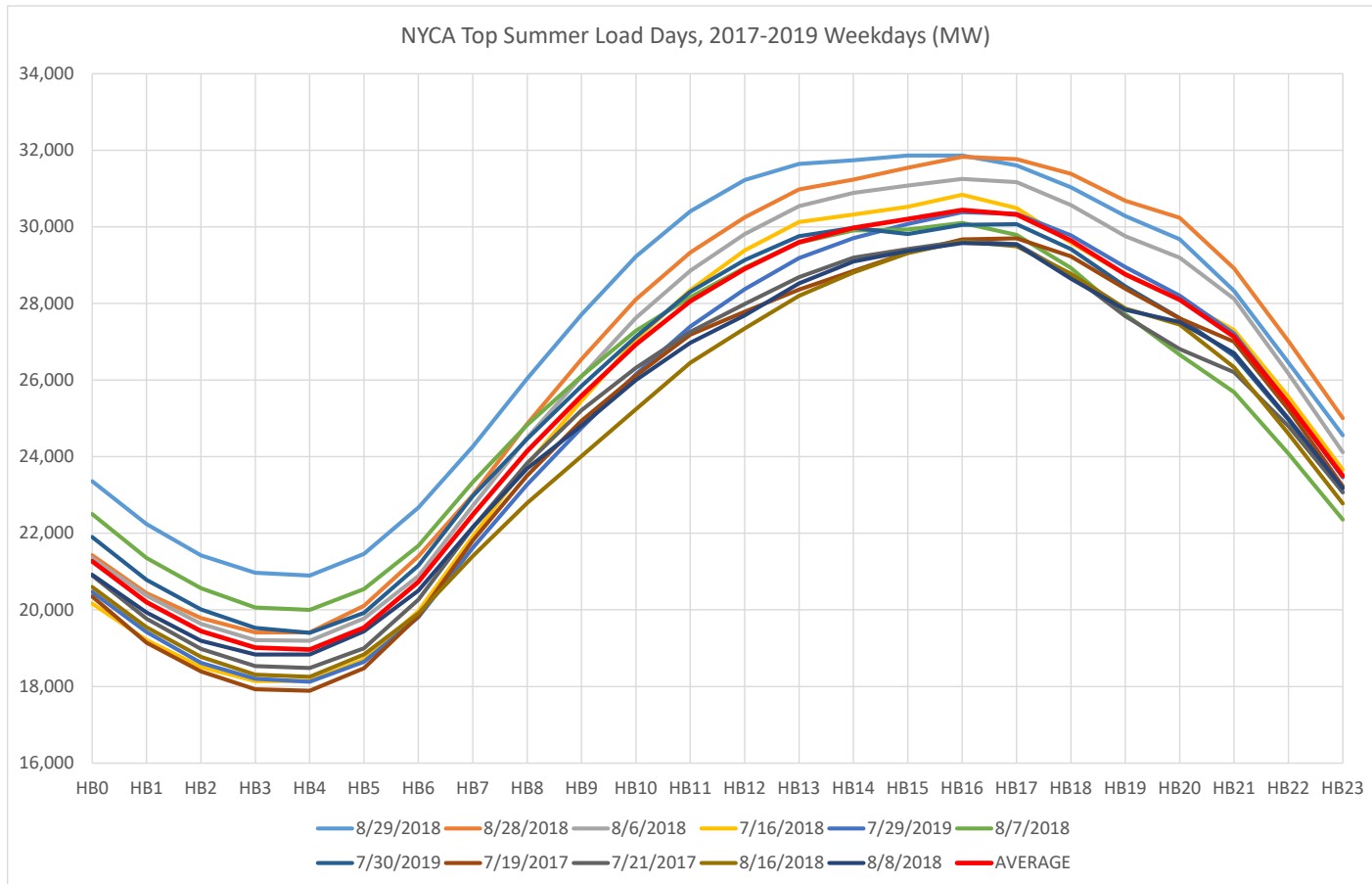
- 2022-23, 2032-33, 2042-43, and 2052-53 – including the impacts of behind-the-meter solar, electric vehicles, and building electrification (e.g., space heating, cooking, and water heating end uses). Represents a high load day in early January for the NYCA.

Note that these load shapes do not reflect hourly information directly underlying the 2022 Gold Book peak forecast. They reflect projections of what future high load day profiles may look like given the 2022 Gold Book peak forecast values and assumptions.

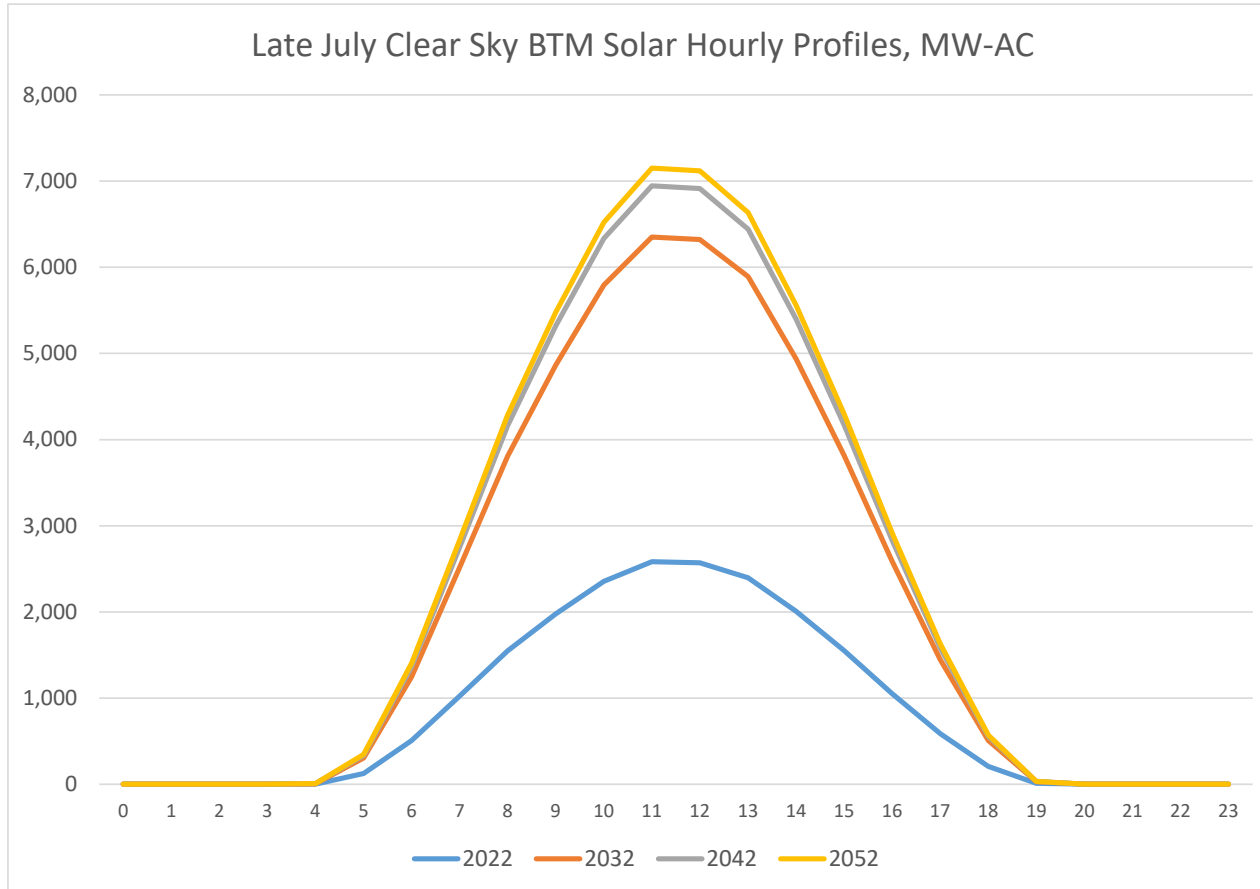
■ Other Load Modifying Impacts

Summer Load Shape Projections

Base Summer Load Shape



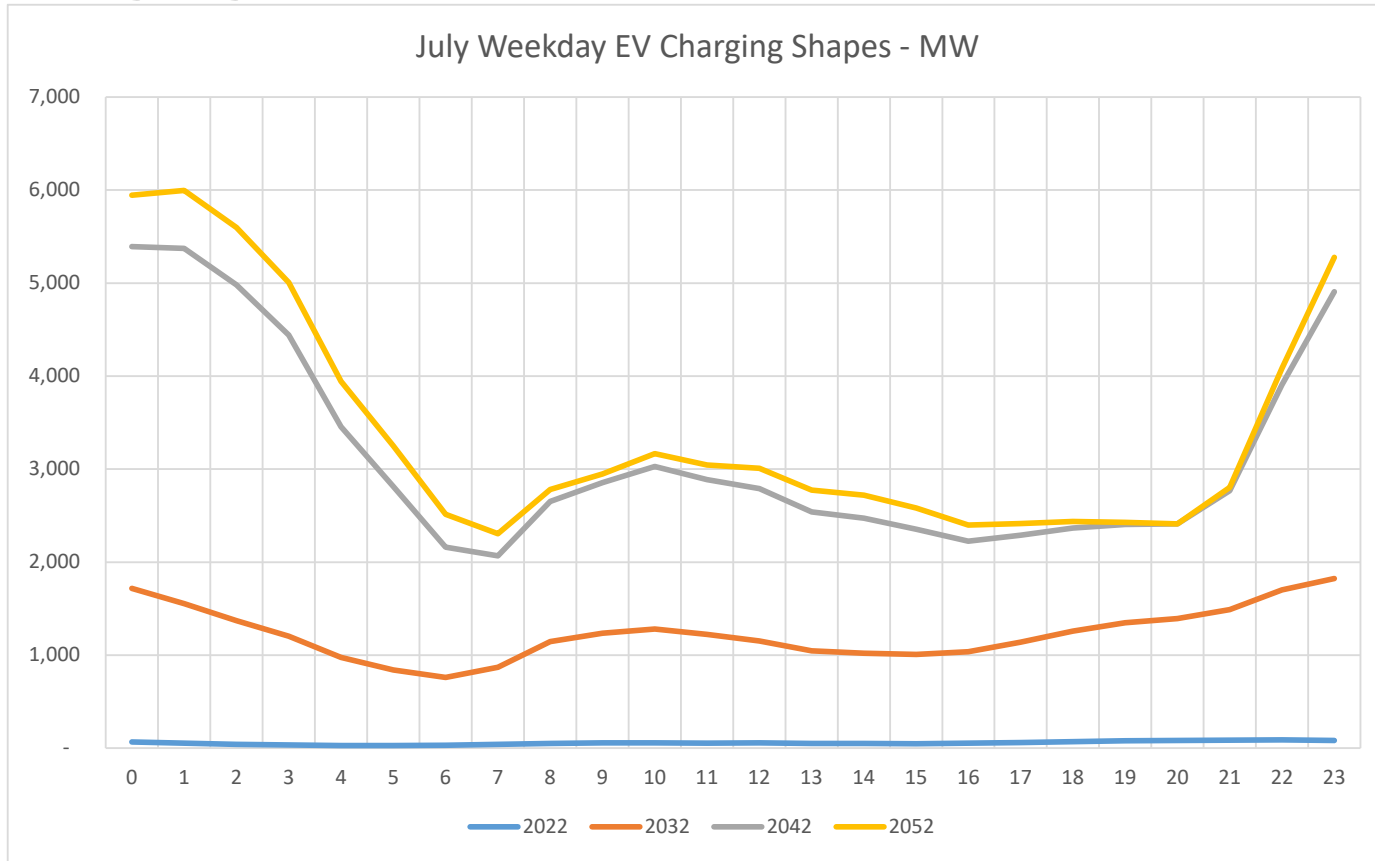
Behind-the-Meter Solar Shape - Summer



BTM Solar Capacity (MW-DC)*	
2022	4,269
2032	10,484
2042	11,467
2052	11,836

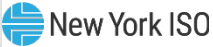
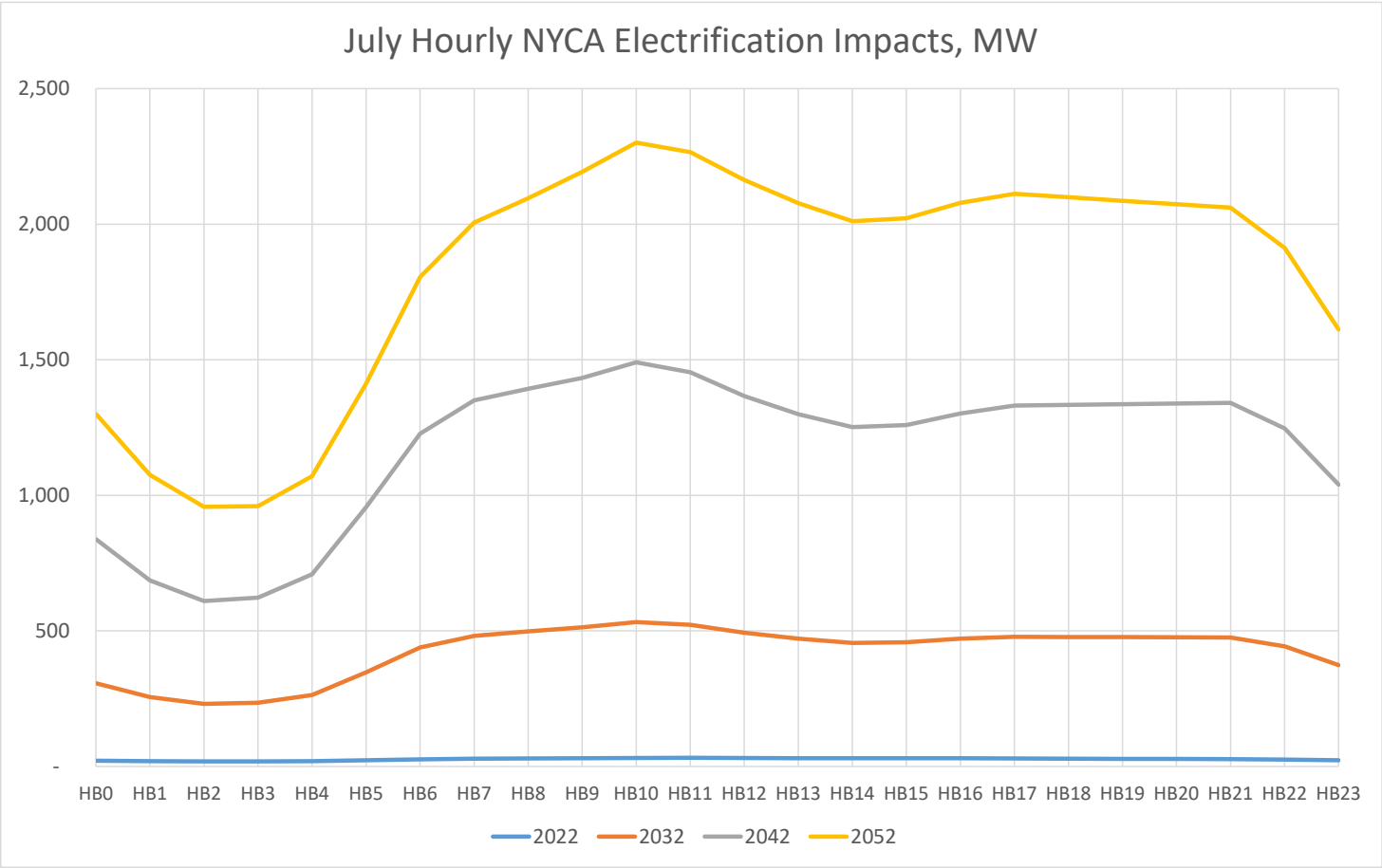
*End-of-year capacity

EV Charging Shape - Summer

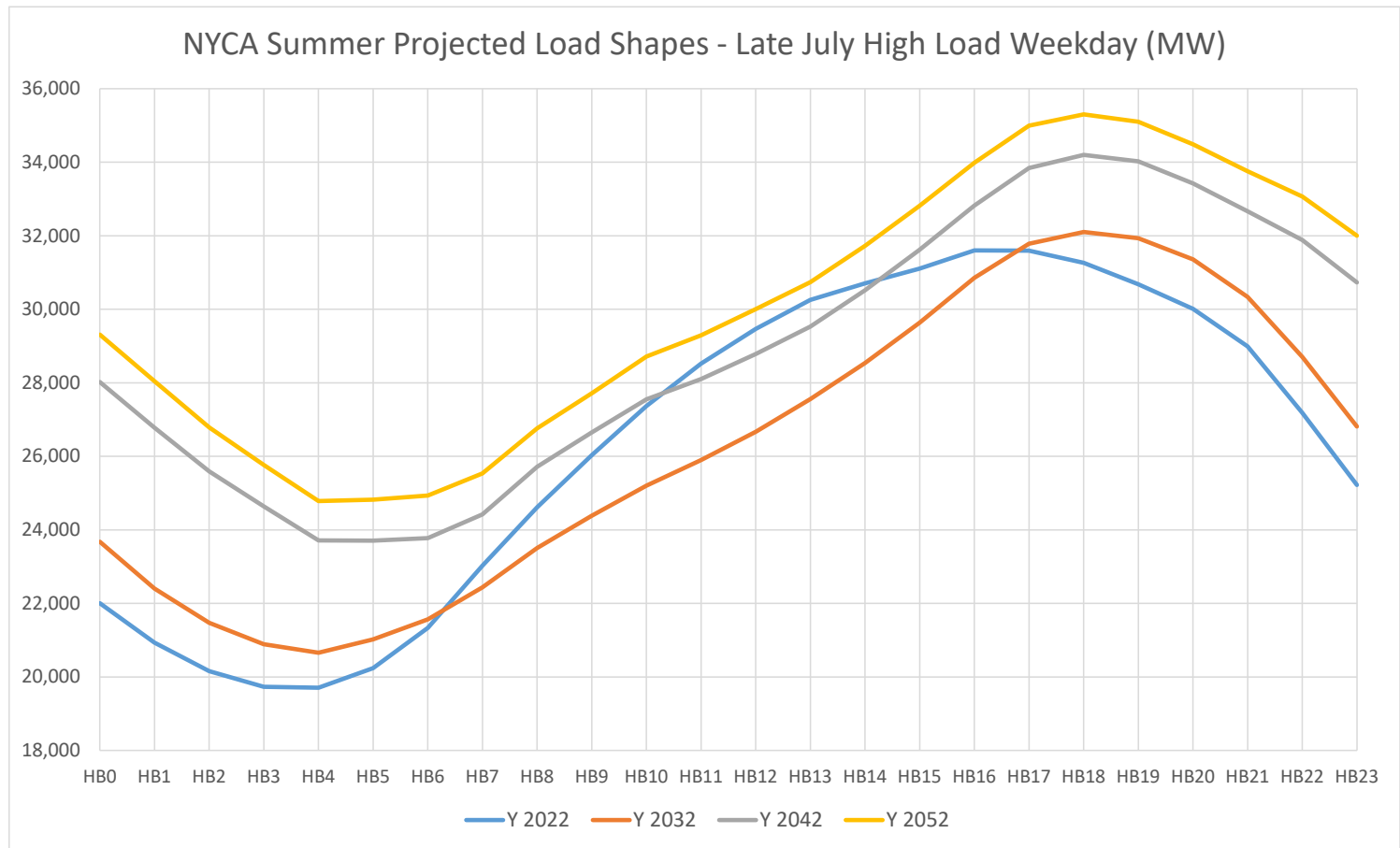


Note: These profiles reflect an increasing share of managed LDV charging over the forecast horizon.

Building Electrification Shape - Summer

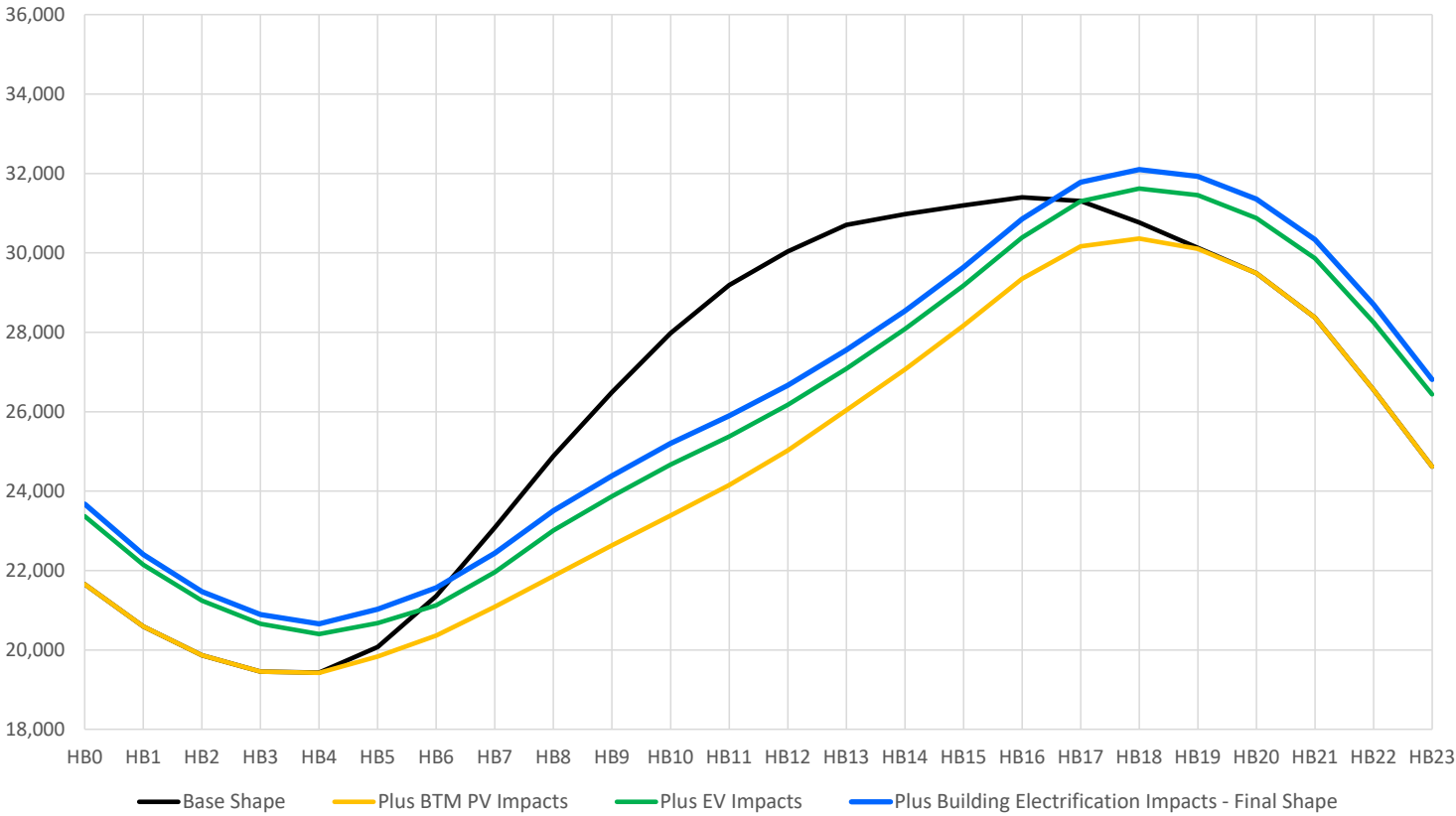


Projected Summer Load Shapes



2032 Summer Load Shape Impacts

NYCA 2032 Summer Load Shape Impacts - Late July High Load Weekday (MW)



Black line shows projected base load shape.

Yellow line shows base load shape plus BTM solar reductions.

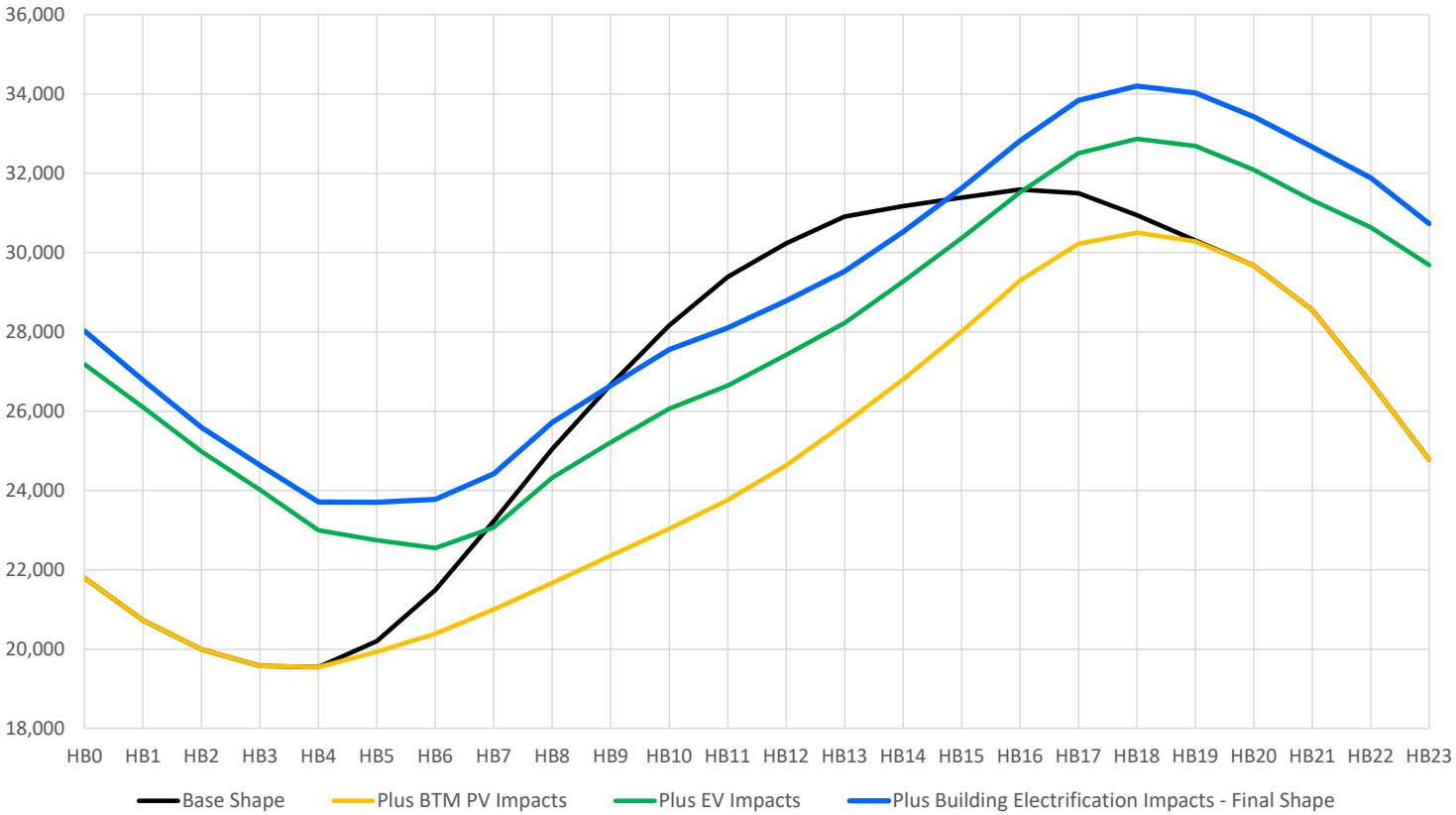
Green line shows base load shape plus BTM solar reductions and EV charging impacts.

Blue line shows final projected load shape – base shape plus BTM PV, EV, and building electrification impacts.



2042 Summer Load Shape Impacts

NYCA 2042 Summer Load Shape Impacts - Late July High Load Weekday (MW)



Black line shows projected base load shape.

Yellow line shows base load shape plus BTM solar reductions.

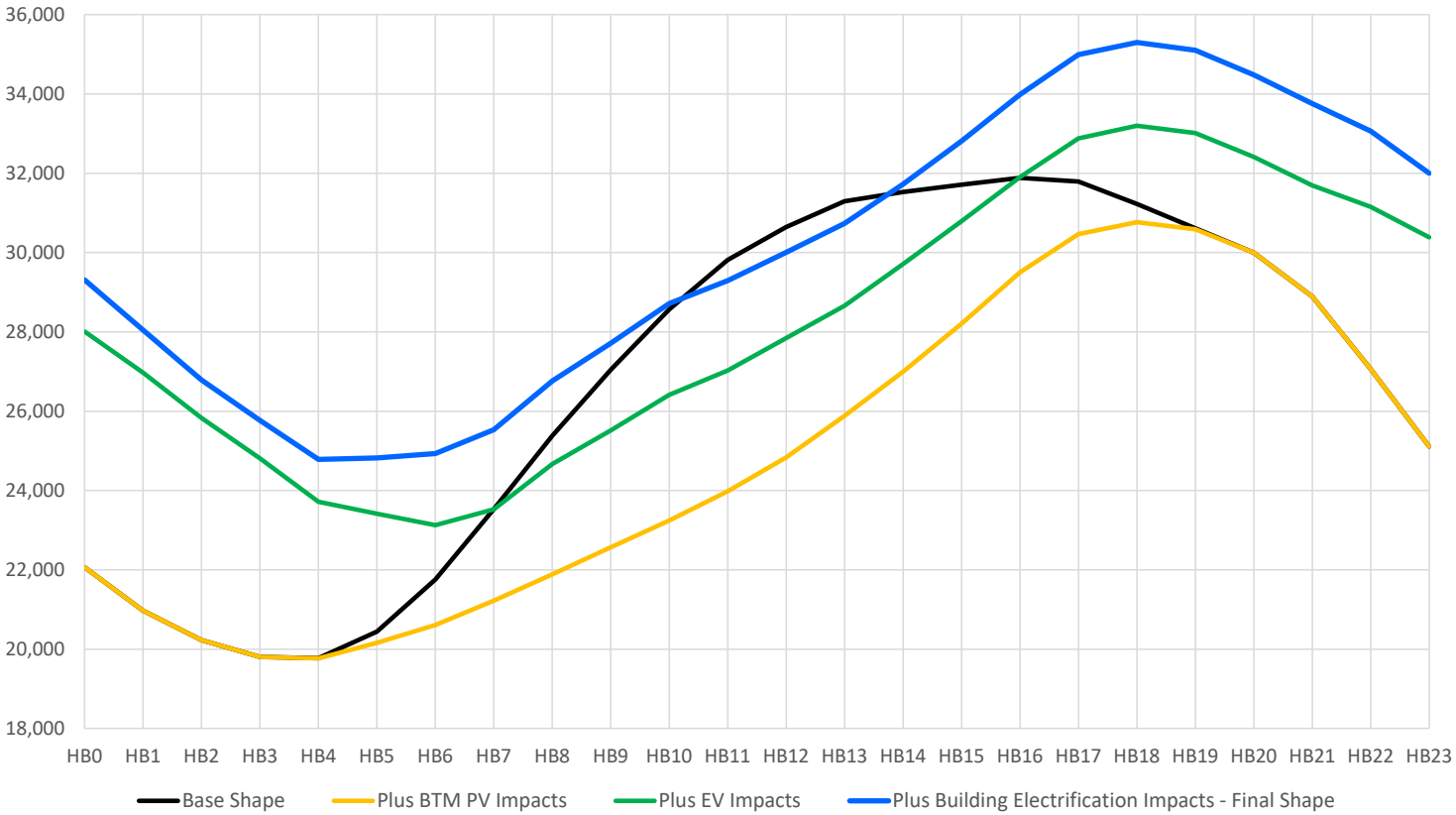
Green line shows base load shape plus BTM solar reductions and EV charging impacts.

Blue line shows final projected load shape – base shape plus BTM PV, EV, and building electrification impacts.



2052 Summer Load Shape Impacts

NYCA 2052 Summer Load Shape Impacts - Late July High Load Weekday (MW)



Black line shows projected base load shape.

Yellow line shows base load shape plus BTM solar reductions.

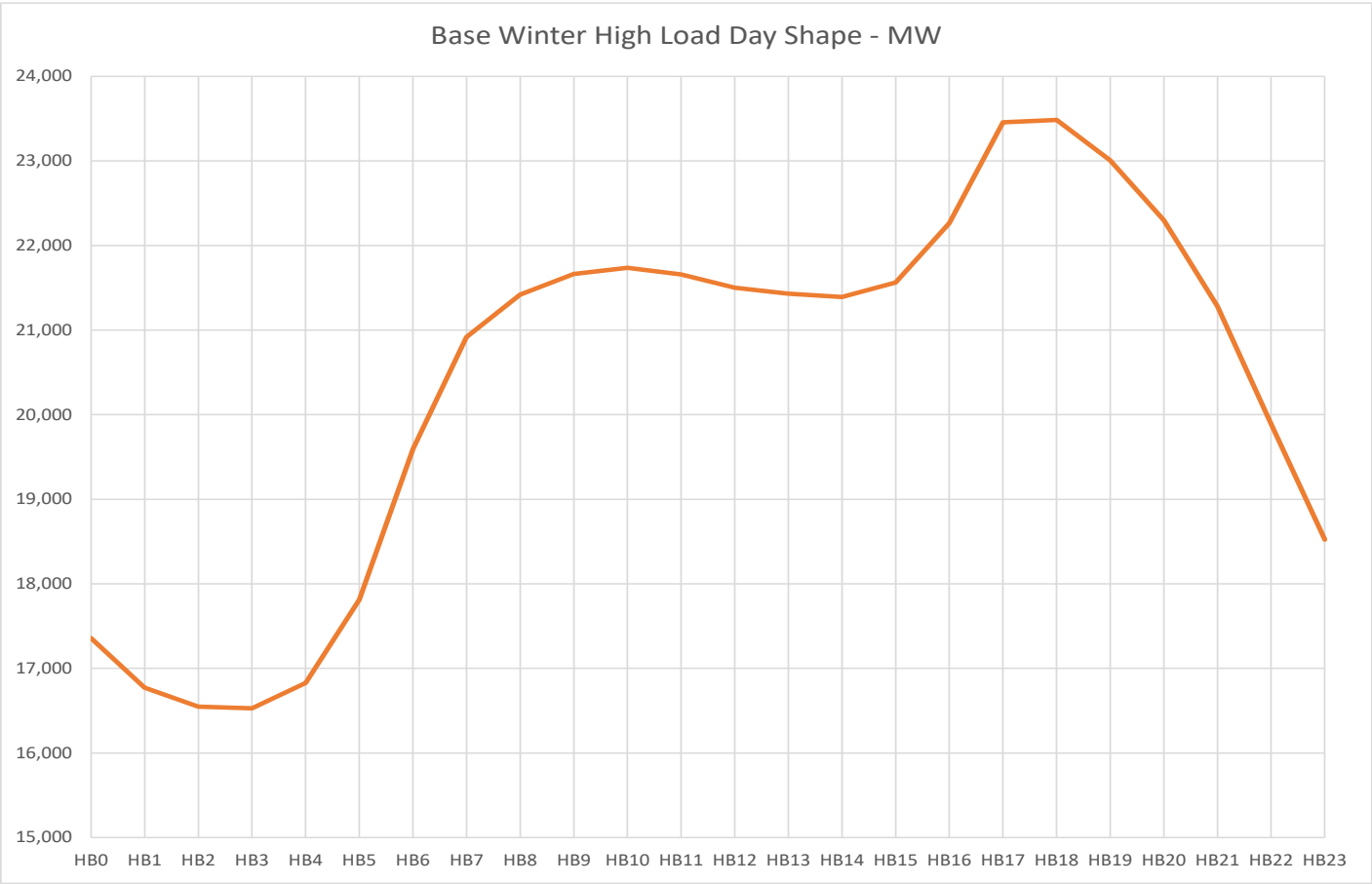
Green line shows base load shape plus BTM solar reductions and EV charging impacts.

Blue line shows final projected load shape – base shape plus BTM PV, EV, and building electrification impacts.

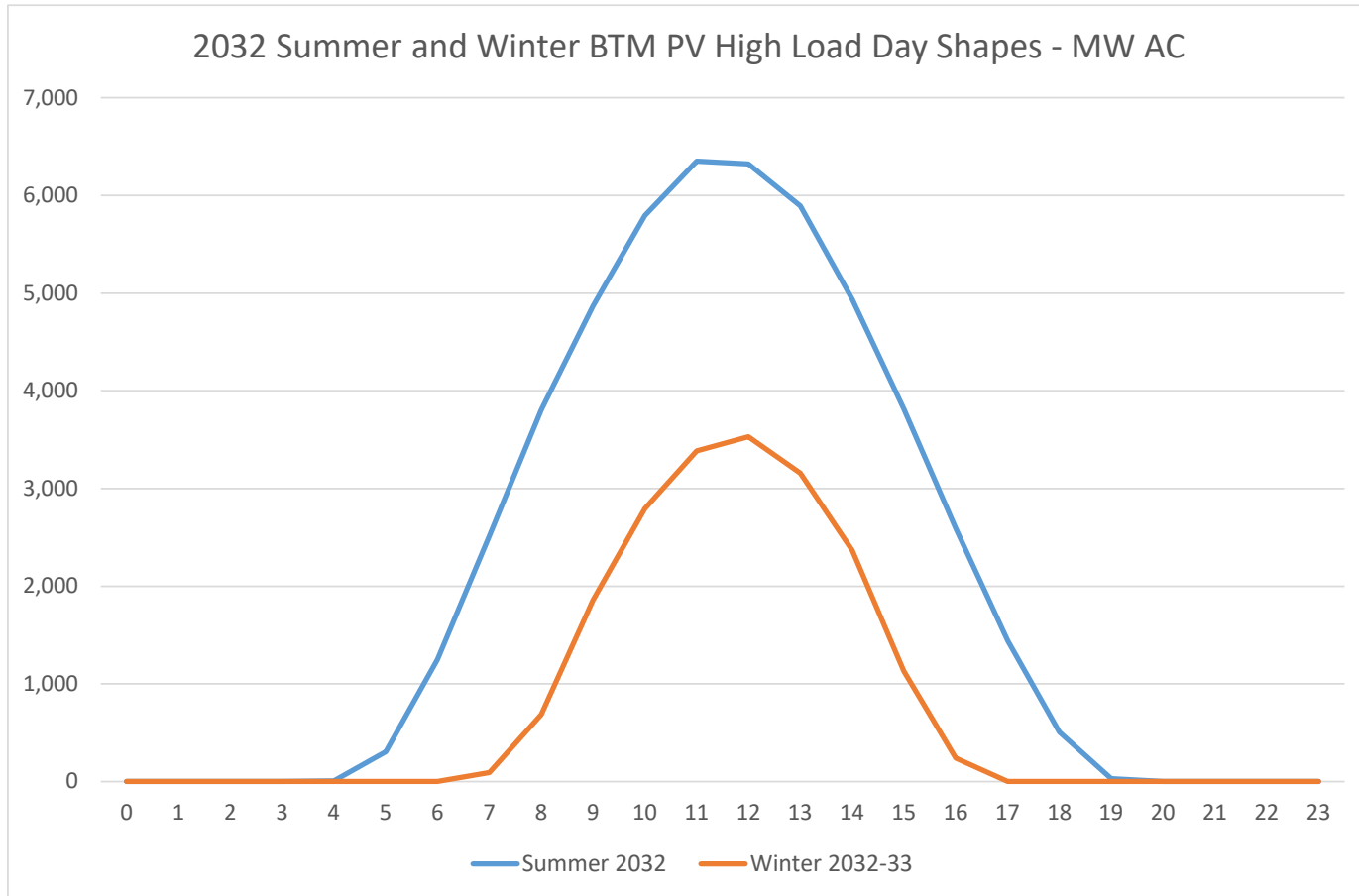


Winter Load Shape Projections

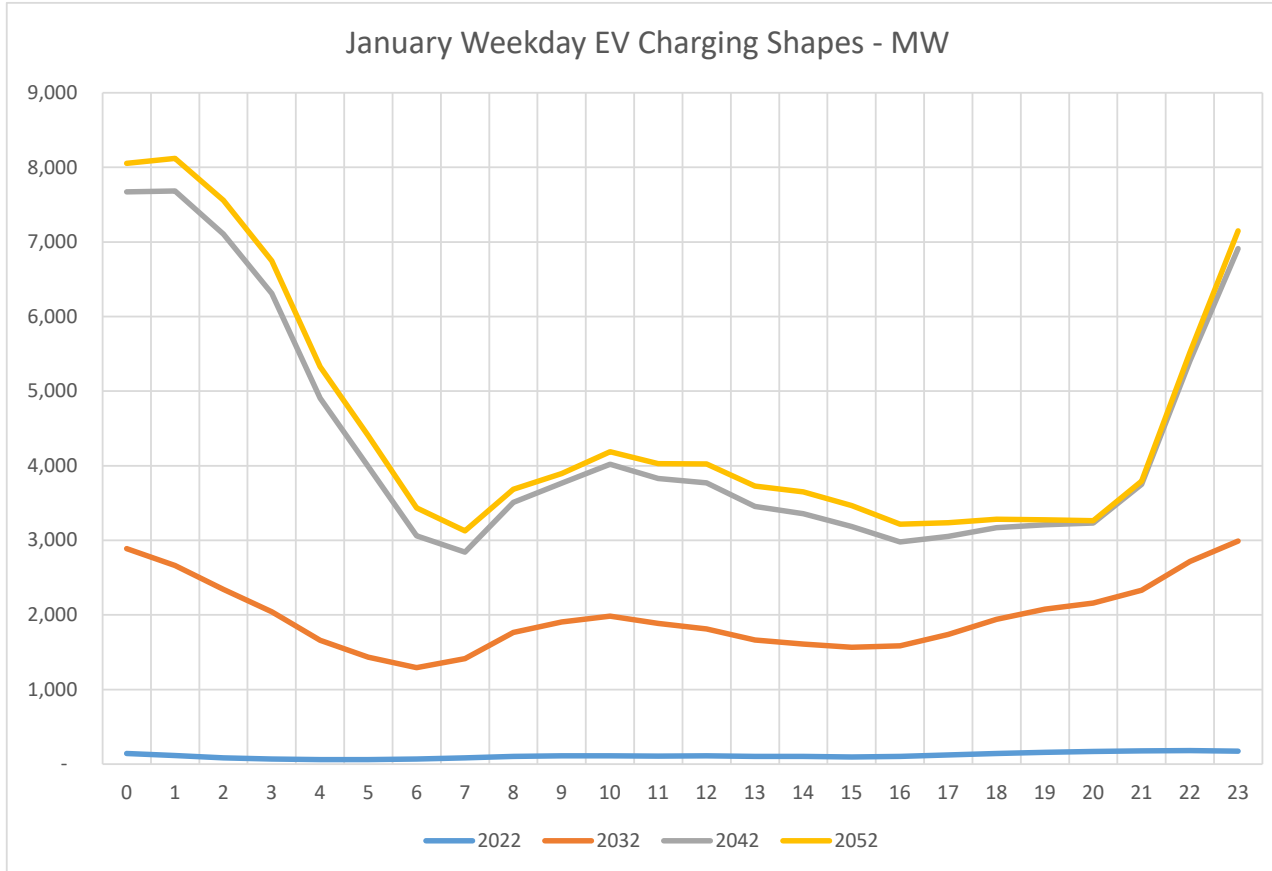
Base Winter Load Shape



Behind-the-Meter Solar Shape Comparison

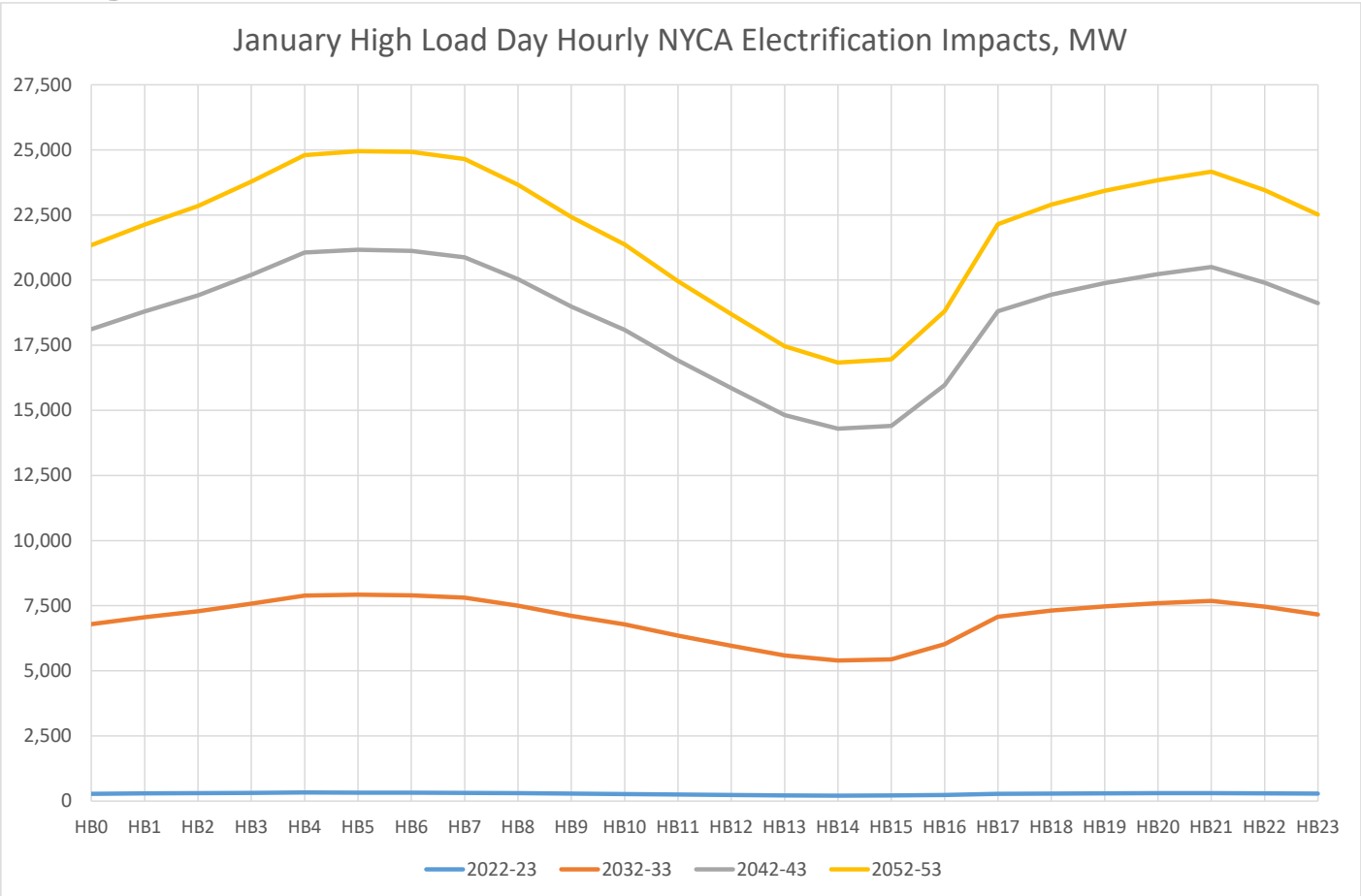


EV Charging Shape - Winter

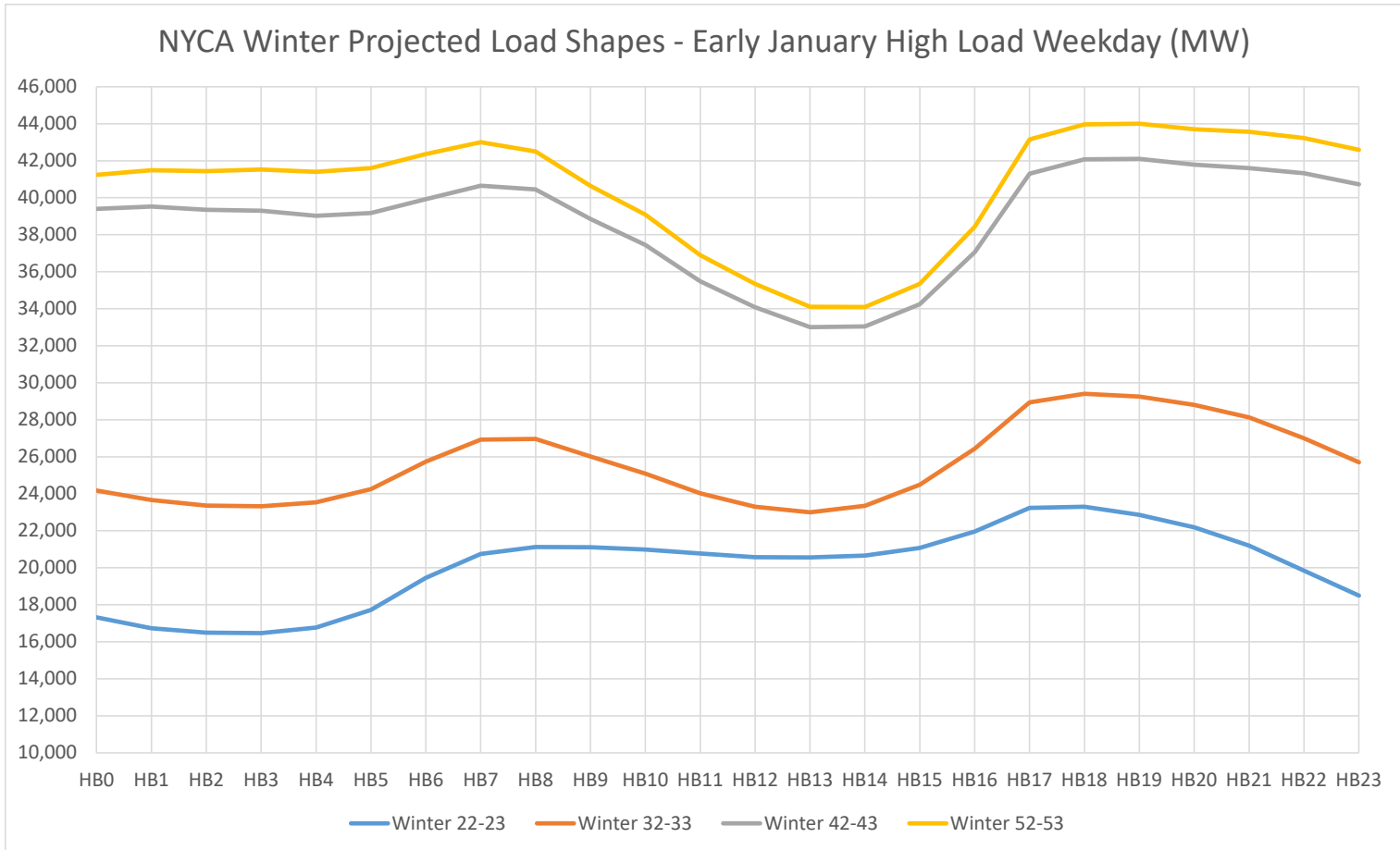


Note: These profiles reflect an increasing share of managed LDV charging over the forecast horizon.

Building Electrification Shape - Winter

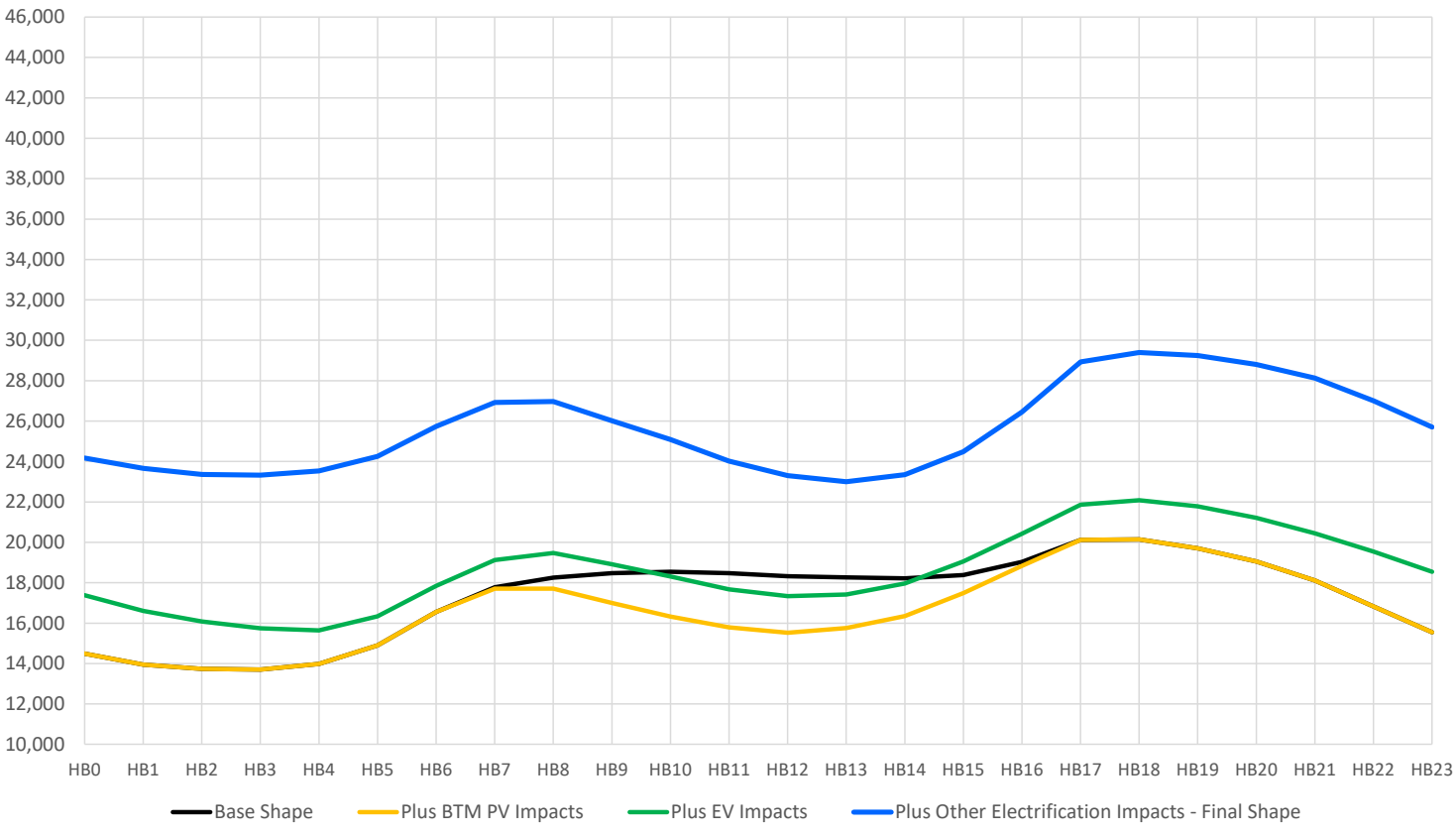


Projected Winter Load Shapes



2032-33 Winter Load Shape Impacts

NYCA Winter 2032-33 Winter Load Shape Impacts - Early January High Load Weekday (MW)



Black line shows projected base load shape.

Yellow line shows base load shape plus BTM solar reductions.

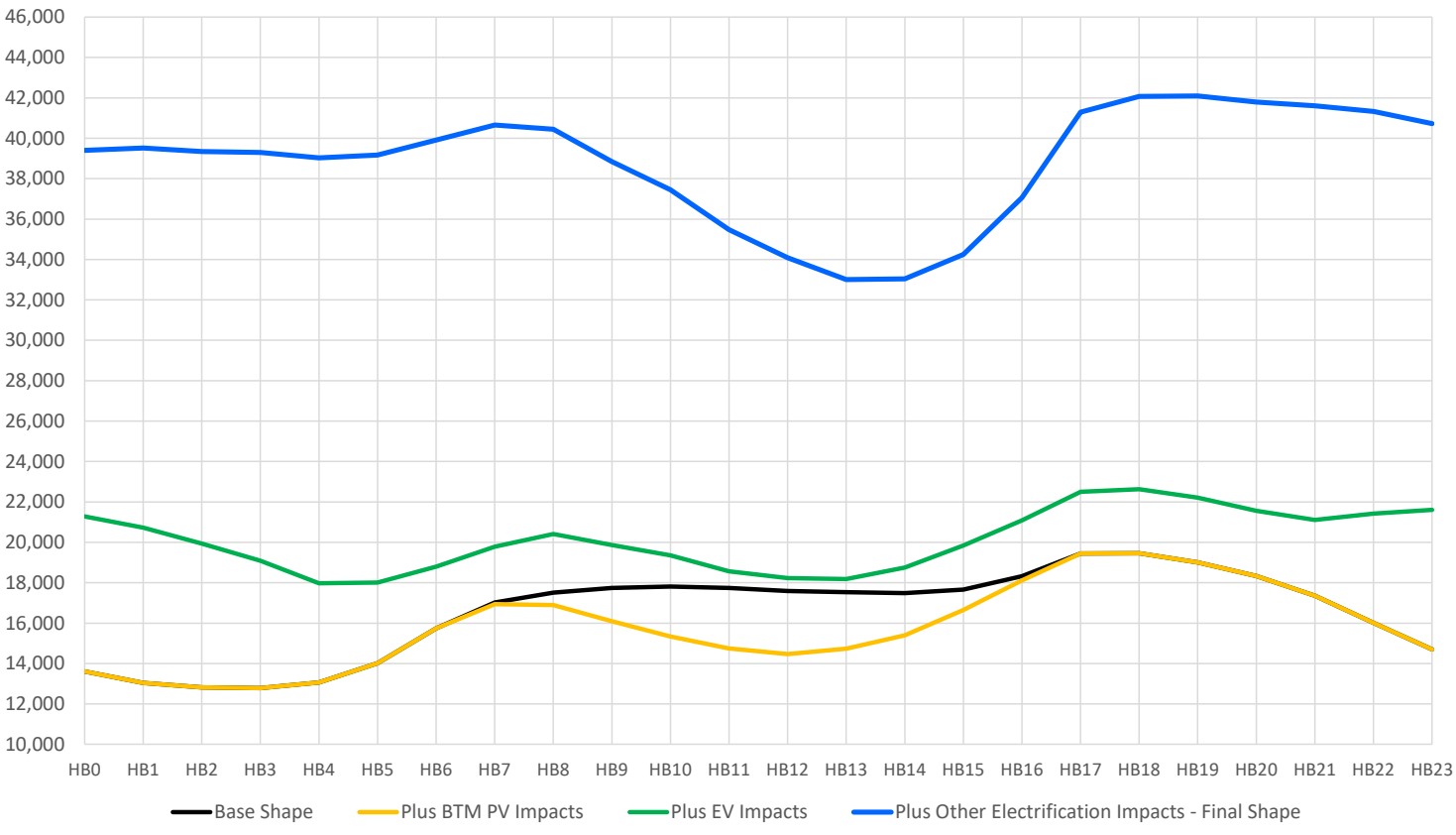
Green line shows base load shape plus BTM solar reductions and EV charging impacts.

Blue line shows final projected load shape - base shape plus BTM PV, EV, and building electrification impacts.



2042-43 Winter Load Shape Impacts

NYCA Winter 2042-43 Winter Load Shape Impacts - Early January High Load Weekday (MW)



Black line shows projected base load shape.

Yellow line shows base load shape plus BTM solar reductions.

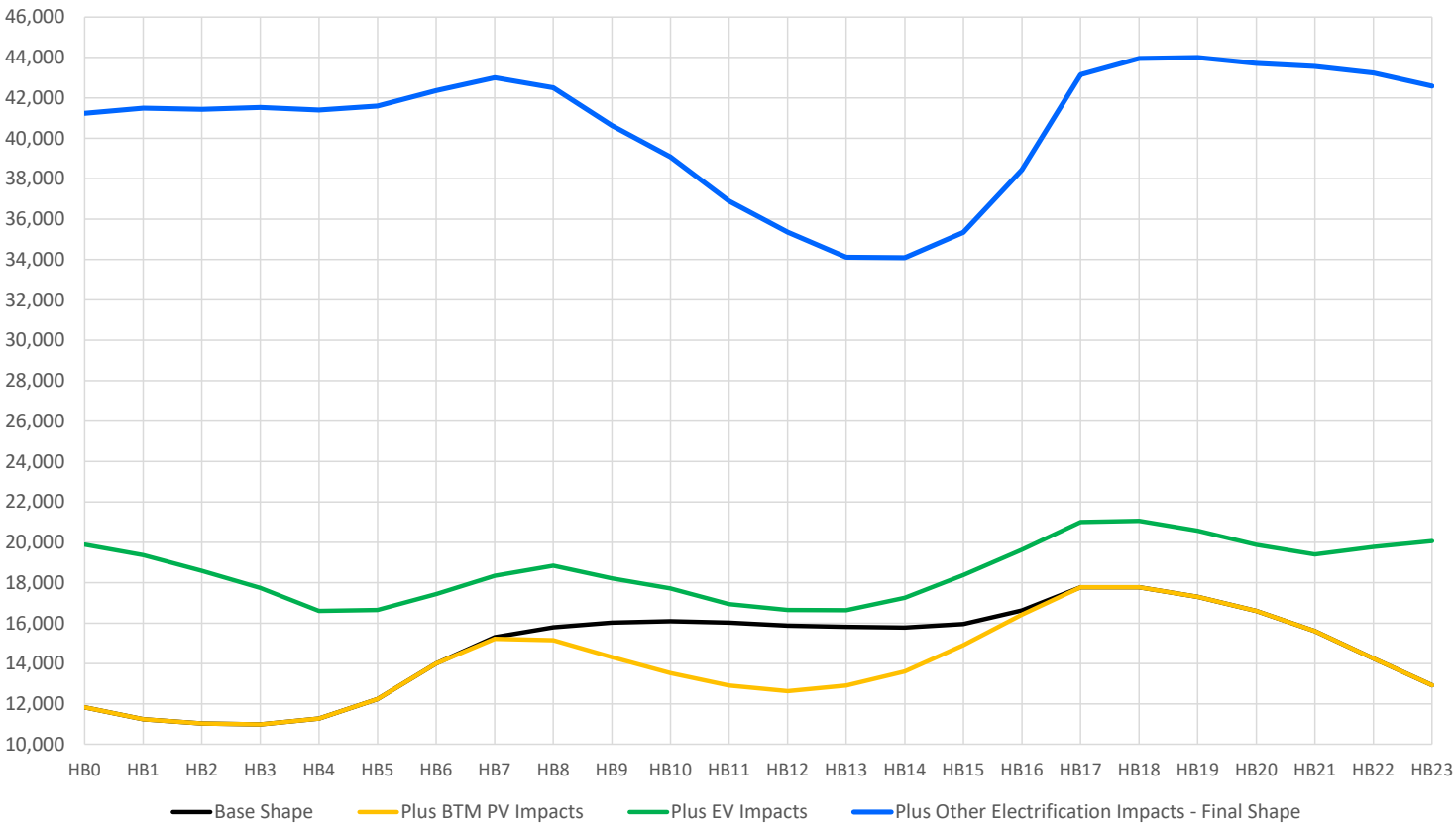
Green line shows base load shape plus BTM solar reductions and EV charging impacts.

Blue line shows final projected load shape – base shape plus BTM PV, EV, and building electrification impacts.



2052-53 Winter Load Shape Impacts

NYCA Winter 2052-53 Winter Load Shape Impacts - Early January High Load Weekday (MW)



Black line shows projected base load shape.

Yellow line shows base load shape plus BTM solar reductions.

Green line shows base load shape plus BTM solar reductions and EV charging impacts.

Blue line shows final projected load shape – base shape plus BTM PV, EV, and building electrification impacts.



Other Load Modifying Impacts

- **Behind-the-meter (BTM) energy storage will impact peak load day shapes in future years. The impacts of BTM storage were not incorporated into this analysis.**
- **The impacts of energy efficiency (EE) and codes & standards (i.e., building and appliance) were not incorporated into this analysis. Since energy efficiency gains are projected across most end uses, and since the load factor of energy efficiency is generally high, energy efficiency is not expected to have proportionally large impacts on the assumed load shape in future years.**

Questions?

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