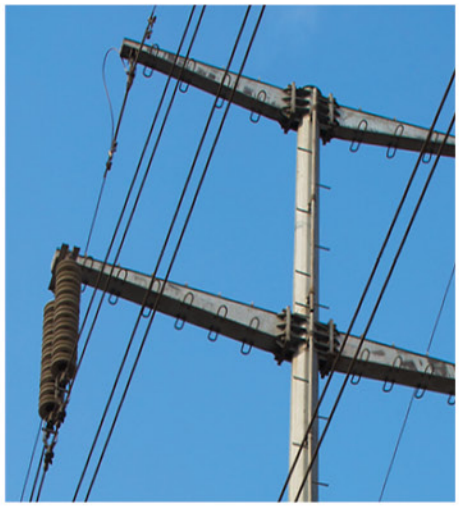
New York ISO
Independent System Operator

2022 Load & Capacity Data






A report by
The New York
Independent System
Operator, Inc.

Gold Book




2022 Load & Capacity Data Report

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2022 Load & Capacity Data Report

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Overview

This report presents the New York Independent System Operator, Inc. ("NYISO") load and capacity data for 2022 and future years. Energy and peak forecasts are provided through 2052 by NYISO Load Zone (referenced in the rest of this document as "Zone") and for the New York Control Area ("NYCA").[1] Generating capacity is projected through 2032. The information reported in this document is current as of March 15, 2022 unless otherwise noted. The seven sections of this *Load and Capacity Data* report ("*Gold Book"*) address the following topics:

- Historical and forecast seasonal peak demand and energy usage, and energy efficiency, electrification, and other distributed energy resources and load-modifying impacts;
- Existing and proposed generation and other capacity resources; and
- Existing and proposed transmission facilities.

Historical and Forecast Energy Usage and Seasonal Peak Demand

Section I of this report presents the baseline forecast, the high load scenario forecast, the low load scenario forecast, and historical data on annual energy and seasonal peak demand in the New York Control Area. The baseline and scenario forecasts are based on information obtained from the New York State Department of Public Service ("DPS"), the New York State Energy Research and Development Authority ("NYSERDA"), state power authorities, Transmission Owners, the U.S. Census Bureau, the U.S. Energy Information Administration, Moody's Analytics, and Itron. The baseline and scenario forecasts reflect a combination of information provided by Transmission Owners for their respective territories and forecasts prepared by the NYISO.

The baseline forecasts, which report the expected NYCA load, include the projected impacts of energy efficiency programs, building codes and appliance standards, distributed energy resources, behind-the-meter energy storage, behind-the-meter ("BTM") solar photovoltaic ("PV") power, electric vehicle usage, and electrification of space heating and other end uses. The baseline forecasts also incorporate projected load increases from interconnecting large load projects. Zonal forecasts extend through 2052 for studies that use longer time horizons.

Over a 30-year horizon, the NYCA baseline energy and summer peak demand forecast growth rates

[1] Capitalized terms not otherwise defined herein have the meaning set forth in the NYISO's Tariffs – NYISO's Market Administration and Control Area Services Tariff ("Services Tariff") and NYISO's Open Access Transmission Tariff ("OATT").

have both increased compared to last year, as exhibited in the following table:

	Average Annual Growth Rates							
	Baseline Energy Usage				Baseline Summer Peak Demand			
	Years 1-30	Years 1-10	Years 11-20	Years 21-30	Years 1-30	Years 1-10	Years 11-20	Years 21-30
2021 Gold Book (2021-51)	0.96%	-0.28%	1.15%	1.88%	0.20%	-0.24%	0.44%	0.39%
2022 Gold Book (2022-52)	1.04%	0.22%	2.25%	0.49%	0.39%	0.14%	0.68%	0.32%

The increasing summer peak during the outer years of the forecast is primarily attributed to electric vehicle charging during the system peak hour and electrification of non-weather sensitive appliances. The higher forecasted growth in energy usage can be attributed primarily to the increasing impacts of electric vehicle usage, space heating electrification, and electrification of other end uses. The 30-year winter peak forecast has also increased compared to the 2021 *Gold Book* for these same reasons.

Over the course of the forecast horizon, significant load-reducing impacts occur due to energy efficiency initiatives and the growth of distributed behind-the-meter energy resources, such as solar PV. These impacts result primarily from New York State's energy policies and programs, including the 2019 Climate Leadership and Community Protection Act ("CLCPA"), the 2020 Accelerated Renewable Energy Growth and Community Benefit Act ("AREA"), the Clean Energy Standard ("CES"), the Clean Energy Fund ("CEF"), the NY-SUN initiative, the energy storage initiative, and other PSC programs.

The NYISO employs a multi-stage process to develop load forecasts for each of the eleven zones within the NYCA. In the first stage, baseline energy and peak models are built based on projections of end-use intensities and economic variables. End-use intensities modeled include those for lighting, refrigeration, cooking, heating, cooling, and miscellaneous plug loads. Appliance end-use intensities are generally defined as the product of saturation levels (average number of units per household or commercial square foot) and efficiency levels (energy usage per unit or a similar measure). End-use intensities specific to New York are estimated from appliance saturation and efficiency levels in both the residential and commercial sectors. These intensities include the projected impacts of energy efficiency programs and improved building codes & appliance standards. Economic variables considered include Gross Domestic Product ("GDP"), number of households, population, and commercial and industrial employment. Projected long-term weather trends from the NYISO *Climate Change Impact Study Phase I* [2] are included in

[2] NYISO *Climate Change Impact Study Phase I:* https://www.nyiso.com/documents/20142/10773574/NYISO-Climate-Impact-Study-Phase1-Report.pdf

the end-use models. In the second stage, the incremental impacts of additional policy-based energy efficiency, behind-the-meter solar PV and distributed generation are deducted from the forecast; and the incremental impacts of electric vehicle usage and building electrification are added to the forecast. The impacts of net electricity consumption of energy storage resources due to charging and discharging are added to the energy forecasts, while the peak-reducing impacts of behind-the-meter energy storage resources are deducted from the peak forecasts. In the final stage, the NYISO aggregates load forecasts by zone.

Following the 2019 NYISO *Climate Change Impact Study Phase I*, scenario forecasts have been included to reflect the increasing uncertainty in forecasting future energy usage across the state. The high load scenario forecast reflects faster adoption of electric vehicles and building electrification, and slower adoption of behind-the-meter solar PV and energy efficiency measures. The low load scenario forecast reflects greater load reductions from behind-the-meter solar PV and energy efficiency programs, and slower adoption of electric vehicles and other electrification. The baseline forecast reflects the expected implementation rates of these programs and technologies.

The baseline and scenario energy and peak forecasts also differ in their economic assumptions. The high load scenario forecast assumes slightly higher than baseline expected economic growth over the forecast horizon. The low load scenario forecast assumes an economic disturbance in the near future due to current risks on the economy, followed by slightly lower than baseline expected economic growth over the remainder of the forecast horizon. The baseline and low load scenario forecasts assume population and household decline in New York state during the later forecast years, while the high scenario econometric and building electrification forecasts assume a slightly increasing number of households over the duration of the forecast horizon.

The load recovery from the COVID-19 pandemic is largely complete throughout the state, with the exception of New York City (Zone J), which continues to see somewhat lower than expected energy and peak levels. The baseline and high scenario forecasts both assume a small degree of continued recovery in New York City energy and peak demand levels over the next two years. Additional summary information about the load impacts of the COVID-19 recession is discussed in Section I.

At this time, the baseline and scenario forecasts do not include any potential future load increases from low carbon fuel production (e.g., hydrogen production via electrolysis). The potential load growth from hydrogen production in future decades could be significant. For example, the Climate Action Council

Integration Analysis scenarios [3] assume that large-scale hydrogen production may be needed in order to meet state decarbonization goals.

The baseline and low load scenario peak forecasts assume an increasing share of managed electric vehicle charging over the course of the forecast horizon, limiting the potential EV impact on system peak demand. The baseline and scenario forecasts do not assume further peak demand reductions from potential end-use load flexibility.

Generation and Other Capacity Resources

The Total Resource Capability in the NYCA for the summer of 2022 is projected to be 41,060 MW, which is a decrease of 11 MW compared to the information provided for summer 2021 in the 2021 *Gold Book*. This decrease is due to the aggregate changes in existing NYCA generating capability, changes in Special Case Resources ("SCR"), and changes in net purchases of capacity from other control areas. The projected total resource capability for summer 2022 includes:

- NYCA generating capability (37,431 MW);
- SCR (1,164 MW); and
- Net of long-term purchases and sales with neighboring control areas (2,465 MW).

The existing NYCA generating capability includes renewable resources totaling 6,470 MW. This total includes wind generation (1,818 MW), hydro (4,274 MW), large-scale solar PV (52 MW), and other renewable resources (326 MW).

Table III-2 reports the summer and winter Dependable Maximum Net Capability ("DMNC")[4] for applicable generators, along with the nameplate rating, Capacity Resource Interconnection Service ("CRIS") rating, and annual energy generated in the year 2021, where applicable. Table III-2a reports this information for generators that participate in the NYISO's markets, while Table III-2b reports applicable information for generators that do not participate in the NYISO 's markets, such as generators that operate solely as load modifiers. Section III contains additional information on the generation resources by zone, fuel type and generation type.

Since the publication of the 2021 *Gold Book* in April 2021, there has been a reduction of 1,091

[3] Climate Act Resources: https://climate.ny.gov/Climate-Resources. Integration Analysis Scenario 2 assumes over 40,000 GWh of annual electricity usage in 2050 for in-state hydrogen production.

[4] The NYISO does not specify the fuel to be used in DMNC testing.

megawatts (MW) of summer capability that has been deactivated. Over the same period, there has been an increase of 33 MW in summer capability due to new additions and uprates, and a decrease of 92 MW of summer capability due to ratings changes. As a result, net summer capability as of March 15, 2022 is 37,520 MW, a decrease of 1,150 MW. These changes are summarized in Section II.

These changes are based on information received from certain generation owners that provided status changes since the 2021 *Gold Book.* These changes may include new generators, generators returning to service, generator outages and deactivations, the withdrawal of a notice of intent to deactivate, generator uprates, and restoration to full capacity operation. The NYCA generating capability for summer 2022 is projected to be 359 MW lower than the capability reported for summer 2021 in the 2021 *Gold Book*.

Beyond 2022, the resource capability in the NYCA will be affected by additions of new generation, re-rates of currently operating units, and the deactivation of existing generators. Table IV-1 shows the proposed facilities that have completed, are enrolled in, or are candidates to enter a Class Year Interconnection Facilities Study, or have met other comparable milestones. Of the total reported, the proposed summer capability of these resources is:

- 10,158 MW of wind turbine projects;
- 7,109 MW of grid-connected solar projects;
- 4,302 MW of energy storage; and
- 3,262 MW of natural gas or dual-fuel projects.

Table IV-1 also identifies completed CRIS-only requests (not already reflected in Table III-2) totaling 220 MW.

Tables IV-2 through IV-4 report on units that have planned uprates in capability and units that are no longer in operation. Table IV-5 lists existing generators with 929 MW of summer capability that have provided deactivation notices.

In December 2019, the New York State Department of Environmental Conservation ("DEC") adopted a final rule regulating emissions from simple-cycle combustion turbine generators ("Peaker Rule").[5] The regulations will phase in additional air emission compliance requirements in 2023 and 2025. Table IV-6 shows proposed status changes of units affected by the Peaker Rule that have submitted a compliance plan to the DEC indicating a change in their availability. Table IV-6 does not include those units that are listed elsewhere in Section IV.

[5] DEC Peaker Rule (Subpart 227-3): https://www.dec.ny.gov/regs/2492.html

Section V provides a summary of NYCA load and capacity from 2021 through 2032. Information for Tables V-2a and V-2b is obtained from Tables I-1, III-2, IV-1 through IV-6, and V-1.

Transmission Facilities

Section VI lists existing transmission facilities (constructed for 115 kV and larger) in the NYCA, including new transmission facilities that came into service since the publication of the 2021 *Gold Book*.

Section VII reports proposed transmission facilities that include merchant projects as well as firm and non-firm projects submitted by each Transmission Owner. Table VII includes the Smart Path Connect Project ("SPCP"), a priority transmission project approved by the NYPSC under New York's Accelerated Renewable Energy Growth and Community Benefit Act. This project is co-owned by National Grid and NYPA.

Section VII also lists public policy transmission projects that were selected by the NYISO Board of Directors. Three public policy transmission projects have been selected to date: Western New York (Empire State Line by NextEra Energy Transmission New York, Inc.), AC Transmission Segment A (Segment A Double Circuit by LS Power Grid New York Corporation I ("LSP") and NYPA), and AC Transmission Segment B (Segment B Knickerbocker-PV by National Grid and New York Transco). The selected developers have received siting approval of their transmission facilities from the NYPSC under Article VII of the Public Service Law, and all selected projects have commenced construction. The NYISO will continue to track the progress of these projects.

Section I

Annual Energy & Peak Demand – Historical & Forecast

New York ISO

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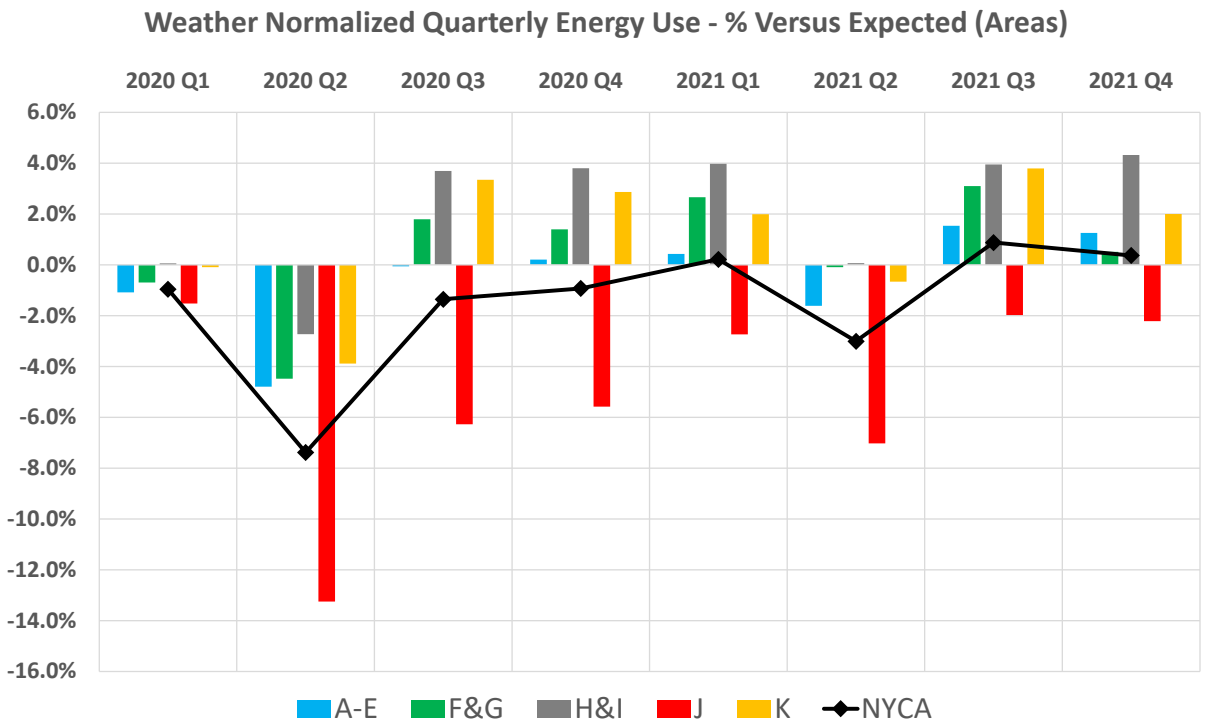
Section I

COVID-19 Impacts

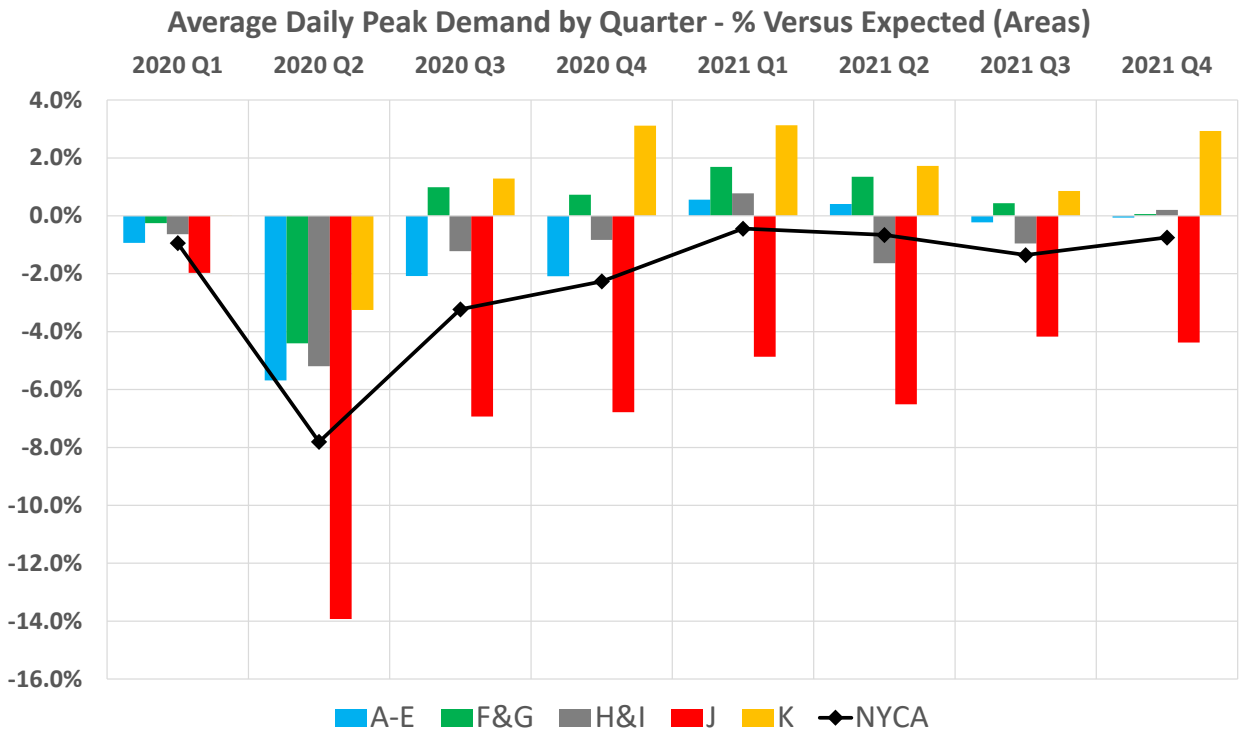
The economic and behavioral changes stemming from the COVID-19 pandemic changed 2020 and 2021 load levels and load shapes relative to a typical year. The impact on total energy consumption in 2020 was significant. Weather normalized annual energy usage across the state in 2020 was more than 4,000 GWh (2.6%) below the pre-COVID baseline forecast developed in early 2020. The largest impacts were seen in 2020 Q2 during the height of the initial lockdown period, with usage across the NYCA more than 7% below expected. These effects tapered off into the summer and fall, with smaller deviations relative to expected. In 2021, impacts on total load were much smaller. Weather normalized energy usage in 2021 was about 600 GWh (0.4%) below the pre-COVID baseline. Throughout the pandemic, the largest load reductions have consistently been in New York City (Zone J), being an urban area with a large share of commercial load. The figure below shows estimated quarterly weather normalized load differences relative to expected levels through 2021 Q4.



This chart shows the estimated differences of weather normalized load levels relative to expected. The five bar sets show the difference between the actual weather normalized load and the expected monthly load from the pre-COVID long term forecast across five regions of the state, while the black line shows the aggregate NYCA departure from expected. In 2021, remaining load reductions due to the

pandemic were concentrated in New York City (Zone J). The remainder of the state has largely recovered to or exceeded pre-pandemic expected load levels.

Daily peak load levels were also impacted by COVID-19, as shown in the chart below. The area bars and NYCA line show the differences in actual peak loads relative to the predicted peak loads from the pre-COVID day ahead forecast models last estimated in February 2020 prior to COVID-related impacts (the 'backcast'). As with total energy, daily peak loads were most impacted in New York City.



The diurnal load profile has also deviated from the typical shape observed in recent years. The NYISO has observed that the reduction in electric demand from commercial customers is a leading driver of overall reduced electricity consumption during the pandemic. Throughout this time, the NYISO has also observed an increase in residential usage, especially during the midday. These usage patterns reflect lower economic activity, and a shift in usage from New York City to suburban areas of Long Island and the Lower Hudson Valley during the pandemic. The chart below shows the NYCA hourly load differences relative to expected levels by quarter, based on the backcast analysis. Loads have been most reduced during the morning ramp hours. These impacts were strongest during the spring of 2020, with lingering effects persisting through late 2021.

NYCA Weekday Hourly Load Levels Relative to Expected								
Hour	**2020 Q1**	**2020 Q2**	**2020 Q3**	**2020 Q4**	**2021 Q1**	**2021 Q2**	**2021 Q3**	**2021 Q4**
0:00	-1%	-3%	-1%	-1%	0%	1%	0%	0%
1:00	-1%	-3%	-1%	-2%	0%	1%	0%	0%
2:00	-1%	-4%	-1%	-2%	0%	1%	-1%	-1%
3:00	-1%	-4%	-2%	-2%	0%	0%	-1%	-1%
4:00	-1%	-5%	-3%	-2%	0%	0%	-1%	-1%
5:00	-2%	-7%	-4%	-4%	-1%	-1%	-2%	-2%
6:00	-2%	-10%	-6%	-5%	-3%	-3%	-3%	-3%
7:00	-2%	-12%	-6%	-5%	-3%	-2%	-3%	-2%
8:00	-2%	-12%	-6%	-4%	-2%	-2%	-3%	-1%
9:00	-2%	-11%	-6%	-3%	-1%	-1%	-2%	-1%
10:00	-2%	-11%	-5%	-2%	-1%	0%	-2%	0%
11:00	-1%	-10%	-5%	-2%	0%	0%	-1%	0%
12:00	-1%	-10%	-4%	-1%	0%	0%	-1%	0%
13:00	-1%	-9%	-4%	-2%	0%	0%	-1%	0%
14:00	-1%	-10%	-4%	-2%	0%	0%	-1%	0%
15:00	-1%	-10%	-4%	-2%	-1%	-1%	-1%	-1%
16:00	-1%	-10%	-4%	-3%	-1%	-1%	-1%	-1%
17:00	-1%	-9%	-3%	-2%	0%	-1%	-1%	-1%
18:00	-1%	-7%	-2%	-2%	0%	-1%	-1%	0%
19:00	-1%	-7%	-3%	-2%	0%	-1%	-2%	-1%
20:00	-1%	-7%	-3%	-2%	-1%	-1%	-2%	-1%
21:00	-1%	-6%	-2%	-2%	0%	-1%	-1%	0%
22:00	-1%	-5%	-1%	-2%	0%	0%	-1%	0%
23:00	-1%	-3%	-1%	-1%	0%	0%	0%	0%

The load recovery from the COVID-19 pandemic is largely complete throughout the state, with the exception of New York City, which continues to see somewhat lower than expected energy and peak demand levels. The baseline and high scenario forecasts both assume a small degree of continued recovery in Zone J energy and peak demand levels over the next two years.

Forecast Tables

This section reports historical and forecast energy and seasonal peak demand for the NYCA and by zone. Zonal and system-level summary forecasts are provided for 30 years. Historical load values reflect the actual weather conditions experienced, while forecasted load values assume either expected or extreme weather conditions. Projected long-term weather trends from the NYISO *Climate Change Impact Study Phase I* are included in the baseline and scenario forecasts. The baseline forecasts project the NYCA and zonal loads under expected future weather conditions, which include increasing temperature trends over the forecast horizon. The baseline forecasts account for the load-reducing impacts of energy efficiency programs, building codes, and appliance efficiency standards (Table I-8); behind-the-meter Solar PV (Table I-9); and behind-the-meter non-solar distributed energy generation (Table I-10). The baseline forecasts also include the expected impacts of electric vehicle usage (Table I-11), and building electrification (Table I-13). The impacts of net electricity consumption of all energy storage resources are added to the baseline energy forecast, while the peak-reducing impacts of behind-the-meter energy storage resources are deducted from the baseline peak forecasts (Table I-12). The baseline forecasts also include projected load increases from interconnecting large load projects (Table I-14).

Table I-1a reports the NYCA baseline energy and peak demand forecasts. The low and high forecast bounds show the low load and high load scenario forecasts to reflect the increasing uncertainty in energy usage over time. System-level summary tables for annual baseline energy, summer peak, and winter peak are shown in Tables I-1b, I-1c, and I-1d respectively. These tables show the progression of the load forecast from the econometric forecast without expected efficiency gains, first to the end-use consumption forecast incorporating end-use efficiency gains relative to the current and future end-use mix, and finally to the baseline forecast incorporating all other load-modifying components. The impacts due to electric vehicles, other electrification, behind-the-meter solar PV, behind-the-meter distributed generation, energy storage units, and energy efficiency and codes & standards are listed in this progression.

Figures I-1, I-2, and I-3 show the baseline forecast, high load scenario forecast, and low load scenario forecast for NYCA annual energy, summer peak, and winter peak, respectively. Figure I-4 compares the baseline summer and winter peak forecasts. The NYISO may become a winter peaking system in future decades due to electrification primarily via space heating and electric vehicles. The low load scenario and high load scenario forecasts are summarized in Tables I-15 and I-16 respectively.

Historical and baseline forecast data for annual energy and seasonal peak demand are reported in Tables I-2 through I-5. The baseline peak forecasts are designed by the Transmission Owners at 67th percentile weather conditions for the Con Edison and Orange and Rockland service territories, and at the

50th percentile in the remaining transmission districts.

Table I-6 shows the 90th and 10th percentile forecasts of annual energy due to weather variability. The 90th and 10th percentile energy forecasts are based on the historical distribution of weather-related impacts on annual energy usage. Table I-7 shows the 90th, 10th, and 99th percentile baseline seasonal coincident peak demand forecasts due to weather variation. The 90th, 10th, and 99th percentile peak forecasts are based on the historical variation in peak day weather coupled with projected temperature trends. The 90th percentile summer peak forecast represents a warmer than expected summer peak day; while the 99th percentile forecast represents an extremely hot and humid, well above expected temperature summer peak day. The 90th percentile winter peak forecast represents a colder than expected winter peak day; while the 99th percentile winter peak forecast represents an extremely cold, well below expected temperature winter peak day. The 10th percentile forecasts represent milder than expected seasonal peak days, with cooler weather during the summer peak and warmer weather during the winter peak. All baseline and percentile forecasts include increasing temperature trends throughout the forecast horizon from the NYISO *Climate Change Impact Study Phase I* report. On average, the increasing temperature trend throughout the state is 0.7 degrees F per decade; and the trend differs by location, time of year, and time of day.

The energy efficiency and codes & standards annual energy reductions listed in Table I-8a are separated into estimated historical impacts, and forecasted impacts from programs and activities expected to occur from 2022 onwards. Tables I-8b and I-8c report the projected peak reductions due to the impacts of codes & standards and energy efficiency programs.

Table I-9a reports the forecast of behind-the-meter ("BTM") solar PV installed nameplate capacity. Table I-9b lists the expected annual GWh energy reductions due to BTM solar. Table I-9c shows the expected reductions in the NYCA summer coincident peak by zone due to behind-the-meter solar. The actual impact of solar PV varies considerably by hour of day. The hour of the actual NYCA peak varies annually. Currently, the NYCA summer peak typically occurs in late afternoon. The NYCA summer peak will likely shift into the evening as additional BTM solar is added to the system, and as electric vehicle charging impacts increase during the evening hours. Because the hour of the summer peak shifts into the evening over the course of the forecast horizon, BTM solar generation becomes less coincident with the NYCA peak hour, and BTM solar coincident peak reductions are forecast to decrease in later years. The forecast of solar PV-related reductions to the winter peak is zero because the system typically peaks after sunset. Table I-9d lists the expected maximum hourly NYCA behind-the-meter solar generation by year.

Table I-10a reports the forecast of behind-the-meter distributed generation installed nameplate

capacity. These resources include combined heat and power, anaerobic digesters, fuel cell facilities, small wind, and others. Table I-10a makes no projection of future participation of behind-the-meter distributed generation resources in the wholesale distributed energy resources market. Tables I-10b and I-10c list the projected annual energy and coincident peak reductions of these behind-the-meter resources.

Table I-11 lists the forecast of electric vehicle ("EV") impacts, including EV annual energy usage (Table I-11b), EV summer coincident peak demand (Table I-11c), and EV winter coincident peak demand (Table I-11d). The baseline forecast assumes a stock of over two million EVs by 2030, and reaching eight million EVs by 2042, including passenger vehicles, trucks, and buses. Table I-11a lists the assumed annual electric vehicle stock by type at the NYCA level. The baseline and low load scenario forecasts assume an increasing share of managed EV charging over the course of the forecast horizon (e.g., via smart metering or time of use rates). The high load scenario forecast assumes unmanaged charging. At this time, the NYISO does not assume potential supply by vehicle storage systems to the power system, known as Vehicle to Grid ("V2G"). Future policies for managing EVs could have beneficial impacts for the grid.

Table I-12 shows the forecast of nameplate capacity of energy storage resources (Table I-12a), net annual electricity consumption of energy storage (Table I-12b), and the peak-reducing impacts of behind-the-meter energy storage (Tables I-12c and I-12d). These tables do not include existing pumped storage units (see Table 3-2 for current resources). Energy storage resources are split between transmission system, distribution system, and customer-sited storage. Customer-sited resources and certain distribution system resources are assumed to be behind-the-meter. Transmission system and most distribution system resources are assumed to participate in the wholesale market. Both wholesale and behind-the-meter energy storage resources have relatively small positive net annual electricity consumption due to charging and discharging cycles (approximately 1% relative to the forecasted total load across the NYCA system in the outer forecast years).

Behind-the-meter energy storage resources reduce peak demand on the system when they are injecting energy into the grid or supplying electricity to the customer's facility during the peak hour. Only a portion of installed resources are expected to be injecting energy into the grid or supplying electricity to customers during the NYCA summer and winter peak hours. Behind-the-meter storage injecting during the peak hour reduces the measured NYISO demand. Wholesale market storage is dispatched by the NYISO similar to other generation in order to meet the load. Thus, while wholesale storage does not act to reduce the measured NYISO peak demand, when dispatched it does lessen the requirements of other wholesale generation during the peak hour. Peak demand reductions would be offset by increased demand in other hours during which energy storage resources are charging, resulting in a shifting of load

across hours.

Table I-13 shows the impact of future building electrification, which includes projected load increases due to electrification of residential households and commercial and industrial buildings. The building electrification energy and winter peak forecasts (Tables I-13a and I-13c) are largely driven by conversion of space heating from fossil fuel sources to electric heat pumps and other electric heating systems including electric resistance heating; along with electrification of non-weather sensitive end-uses such as cooking and water heating. The baseline forecast assumes that roughly 80% of residential homes use electric heating by 2050, with similar large-scale adoption in the commercial sector. Of the 80% of homes with electric heating systems, approximately three quarters of future installations are assumed to be heat pumps, with the remainder being electric resistance and other heating systems. The building electrification summer peak forecast (Table I-13b) is largely driven by electrification of non-weather sensitive appliance energy use coincident with the peak load hour. Increases in electric cooling from heat pumps are largely offset by decreasing saturations of central and room air conditioning. The building electrification tables do not include the impacts of EV charging, which are accounted for separately in Table I-11. Table I-13d compares the total NYCA annual energy electrification impacts by scenario, including the impacts of both EV and building electrification.

Table I-14 shows projected increases in annual energy and seasonal peak demand due to existing and future interconnecting large projects.

Table I-15 shows a state-level summary of the low load scenario forecast, which reflects increased load reductions from behind-the-meter solar PV and energy efficiency programs, and slower adoption of electric vehicles and other electrification. Table I-16 summarizes the high load scenario forecast, which reflects faster adoption of electric vehicles and other electrification, and slower adoption of behind-the-meter solar PV and energy efficiency measures. Zonal forecasts for the low load and high load scenarios are posted as Excel files on the NYISO website. [6]

At this time, the baseline and scenario forecasts do not include any potential future load increases from low carbon fuel production (e.g., hydrogen production via electrolysis). The potential load growth from hydrogen production in future decades could be significant. For example, the Climate Action Council Integration Analysis scenarios assume that large-scale hydrogen production may be needed in order to meet state decarbonization goals. The CAC Integration Analysis Scenario 2 assumes over 40,000 GWh of annual electricity usage in 2050 for in-state hydrogen production.

[6] Low load scenario and high load scenario forecast tables: https://www.nyiso.com/library

Beyond managed EV charging, the baseline and scenario forecasts do not assume further peak demand reductions from potential end-use load flexibility.

Table I-17 shows the projected SCR and Emergency Demand Response Program ("EDRP") enrollment. Table I-18 reports the date and hour of the NYCA system peak for the Summer and Winter Capability Periods from 1997 forward.

Load Scenario Summary

Forecast Component	Baseline Forecast	Low Load Scenario	High Load Scenario
Weather Trends	Trended weather from NYISO Climate Change Impact Study - average NYCA temperature gain of approximately 0.7 degrees Fahrenheit per decade	Same as Baseline Forecast	Same as Baseline Forecast
Economic Assumptions	Baseline economic forecast - expected economic growth in the long run. Declining population and households in later forecast years	Lower than baseline economic growth in the long run. Declining population and households in later forecast years	Higher than baseline economic growth in the long run. Slight increase in number of households throughout the forecast horizon
Energy Efficiency (Table I-8)	Significant energy savings and peak reductions due to energy efficiency programs, codes & standards improvements, and builging shell upgrades	Very significant energy savings and peak reductions due to energy efficiency programs, codes & standards improvements, and builging shell upgrades	Moderate energy savings and peak reductions due to energy efficiency programs, codes & standards improvements, and builging shell upgrades
BTM Solar PV (Table I-9)	Baseline BTM solar - 6,000 MW DC installed nameplate capacity by 2024, and 10,000 MW DC installed by 2030	High BTM solar - slightly quicker capacity growth than the baseline forecast	Lower BTM solar - 6,000 MW DC installed nameplate capacity by 2025, and 10,000 MW DC installed by 2032
BTM Non-Solar DG (Table I-10)	Over 500 MW installed non-solar BTM DG nameplate capacity by 2035. No assumption of future entry of resources into the wholesale DER market	Same as Baseline Forecast	Same as Baseline Forecast
Electric Vehicles (Table I-11)	Approximately 5.3 million EVs (passenger vehicles, trucks and buses) in 2035. Increasing share of managed charging over time	Approximately 3.8 million EVs in 2035. Increasing share of managed charging over time	Approximately 6.8 million EVs in 2035. Unmanaged charging profile
Energy Storage (Table I-12)	Over 5,000 MW installed nameplate capacity in 2030, with over 12,000 MW installed by 2050 (total behind-the-meter plus wholesale)	6,000 MW installed nameplate capacity by 2030, and nearly 18,000 MW installed in 2052, with a larger proportion of storage behind-the-meter	3,000 MW installed nameplate capacity by 2030, and over 9,000 MW installed in 2052
Building Electrification (Table I-13)	High electrification of space heating and other end uses. 80% saturation of residential electric heating by 2050	Substantial electrification of space heating and other end uses. 50% saturation of residential electric heating by 2050	Very high saturation of electric space heating and other end uses. 90% saturation of residential electric heating by 2050

Table I-1a: NYCA Baseline Energy and Demand Forecasts

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

2022 Long Term Forecast[1] - 2022 to 2052

Energy - GWh

Year	Low[3]	Baseline[4]	High[3]
2021		152,147	
2022	150,150	151,260	153,660
2023	149,560	152,120	156,420
2024	148,070	151,040	156,570
2025	145,800	148,760	156,430
2026	143,780	147,550	156,780
2027	142,040	146,970	157,780
2028	140,780	146,790	159,150
2029	140,030	147,540	161,500
2030	140,060	149,020	164,570
2031	140,700	151,590	168,770
2032	141,970	154,520	173,410
2033	143,490	157,910	178,540
2034	145,400	161,400	183,840
2035	147,500	165,390	189,590
2036	149,900	169,330	195,330
2037	152,250	173,240	201,000
2038	154,740	176,880	206,360
2039	157,130	180,640	211,710
2040	159,540	183,980	216,580
2041	161,600	186,920	220,750
2042	163,580	189,290	224,170
2043	165,200	191,620	227,530
2044	166,690	193,470	230,450
2045	167,650	194,980	232,950
2046	168,480	195,990	234,980
2047	168,960	197,030	237,010
2048	169,370	197,580	238,540
2049	169,380	197,960	239,790
2050	169,480	198,050	240,720
2051	169,510	198,460	241,900
2052	169,390	198,640	242,890

Summer Peak Demand - MW

Year	Low[3]	Baseline[4, 5]	High[3]
2021		31,528	
2022	31,562	31,765	32,179
2023	31,438	32,018	32,780
2024	31,252	31,778	32,849
2025	30,999	31,505	32,854
2026	30,747	31,339	32,946
2027	30,554	31,292	33,133
2028	30,433	31,317	33,464
2029	30,381	31,468	33,915
2030	30,379	31,684	34,475
2031	30,411	31,946	35,080
2032	30,448	32,214	35,698
2033	30,495	32,474	36,316
2034	30,551	32,737	36,961
2035	30,618	33,005	37,615
2036	30,700	33,258	38,267
2037	30,787	33,487	38,884
2038	30,887	33,696	39,496
2039	30,983	33,906	40,096
2040	31,117	34,097	40,637
2041	31,228	34,262	41,077
2042	31,349	34,396	41,437
2043	31,441	34,520	41,741
2044	31,520	34,646	42,018
2045	31,581	34,774	42,291
2046	31,635	34,896	42,549
2047	31,679	35,011	42,799
2048	31,716	35,107	43,024
2049	31,741	35,209	43,246
2050	31,767	35,316	43,463
2051	31,763	35,431	43,597
2052	31,774	35,486	43,676

Winter Peak Demand - MW

Year	Low[3]	Baseline[4]	High[3]
2021-22		23,708	
2022-23	23,605	23,893	24,225
2023-24	23,684	24,287	24,865
2024-25	23,744	24,481	25,315
2025-26	23,784	24,735	25,845
2026-27	23,877	25,098	26,480
2027-28	24,047	25,575	27,276
2028-29	24,288	26,171	28,250
2029-30	24,593	26,884	29,406
2030-31	25,012	27,719	30,750
2031-32	25,536	28,756	32,291
2032-33	26,200	29,954	34,023
2033-34	26,925	31,287	35,844
2034-35	27,707	32,637	37,723
2035-36	28,487	33,993	39,662
2036-37	29,679	35,478	41,442
2037-38	30,827	37,094	43,473
2038-39	31,998	38,661	45,889
2039-40	33,003	40,000	47,582
2040-41	33,695	41,054	49,221
2041-42	34,189	41,932	50,670
2042-43	34,561	42,643	51,951
2043-44	34,834	43,244	53,053
2044-45	35,069	43,764	53,989
2045-46	35,167	44,171	54,767
2046-47	35,181	44,429	55,356
2047-48	35,086	44,549	55,731
2048-49	34,953	44,593	55,975
2049-50	34,802	44,602	56,220
2050-51	34,642	44,588	56,393
2051-52	34,447	44,569	56,488
2052-53	34,279	44,547	56,491

Average Annual Growth - Percent

Period	Low	Baseline	High
2022-27	-1.08%	-0.57%	0.54%
2027-32	-0.01%	1.03%	1.98%
2032-37	1.45%	2.42%	3.18%
2037-42	1.49%	1.85%	2.31%
2022-32	-0.54%	0.22%	1.29%
2032-42	1.52%	2.25%	2.93%
2042-52	0.36%	0.49%	0.84%
2022-42	0.45%	1.26%	2.29%
2022-52	0.43%	1.04%	1.94%

Period	Low	Baseline	High
2022-27	-0.64%	-0.30%	0.59%
2027-32	-0.07%	0.59%	1.55%
2032-37	0.22%	0.79%	1.78%
2037-42	0.37%	0.54%	1.31%
2022-32	-0.35%	0.14%	1.09%
2032-42	0.30%	0.68%	1.61%
2042-52	0.14%	0.32%	0.54%
2022-42	-0.03%	0.41%	1.44%
2022-52	0.02%	0.39%	1.19%

Period	Low	Baseline	High
2022-27	0.37%	1.41%	2.52%
2027-32	1.79%	3.42%	4.95%
2032-37	3.53%	4.77%	5.56%
2037-42	2.42%	2.99%	3.90%
2022-32	1.10%	2.54%	4.04%
2032-42	3.19%	4.24%	5.27%
2042-52	-0.08%	0.45%	0.87%
2022-42	2.32%	3.92%	5.72%
2022-52	1.51%	2.88%	4.44%

Notes

1. All results in the Section I tables include transmission & distribution losses.
2. Summer Capability period is from May 1 to October 31. Winter Capability period is from November 1 of the current year to April 30 of the next year.
3. The low and high columns reflect the low load scenario forecast and high load scenario forecast under expected weather conditions, which are summarized in Tables I-15 and I-16. These do not reflect the 90th and 10th percentile forecasts due to weather, which are found in Tables I-6 and I-7.
4. Energy and Peak figures for 2021 are weather-normalized. The values for the actual annual energy, summer peak, and winter peak are reported in Tables I-2, I-3a, and I-3b respectively.
5. The 2022 NYCA summer peak forecast is the same as the 2022 ICAP forecast.

Figure I-1: NYCA Energy Forecasts – Annual Energy, GWh

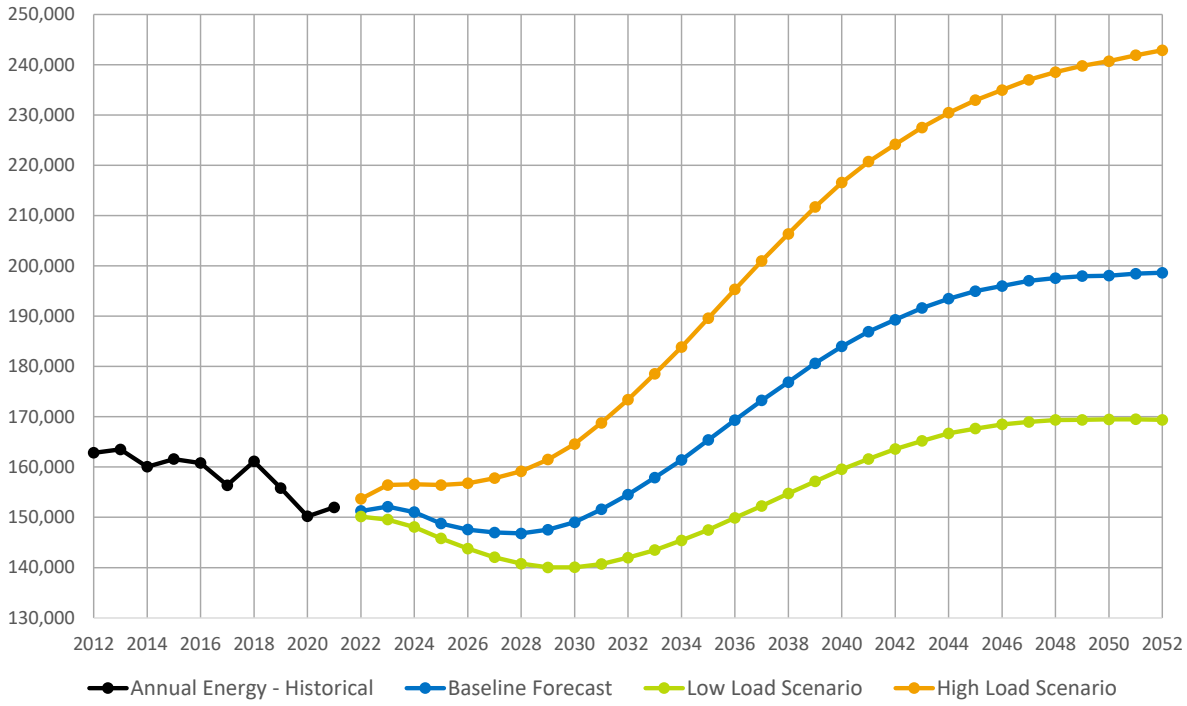


Figure I-2: NYCA Summer Peak Forecasts – Coincident Peak, MW

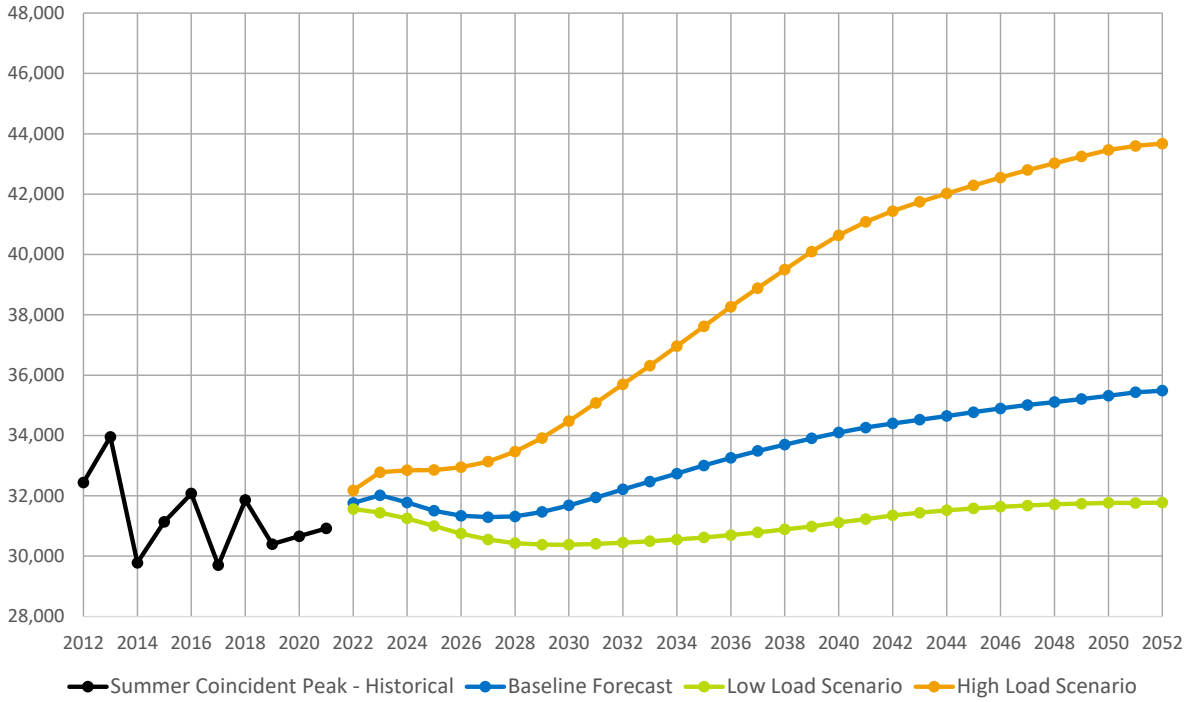


Figure I-3: NYCA Winter Peak Forecasts – Coincident Peak, MW

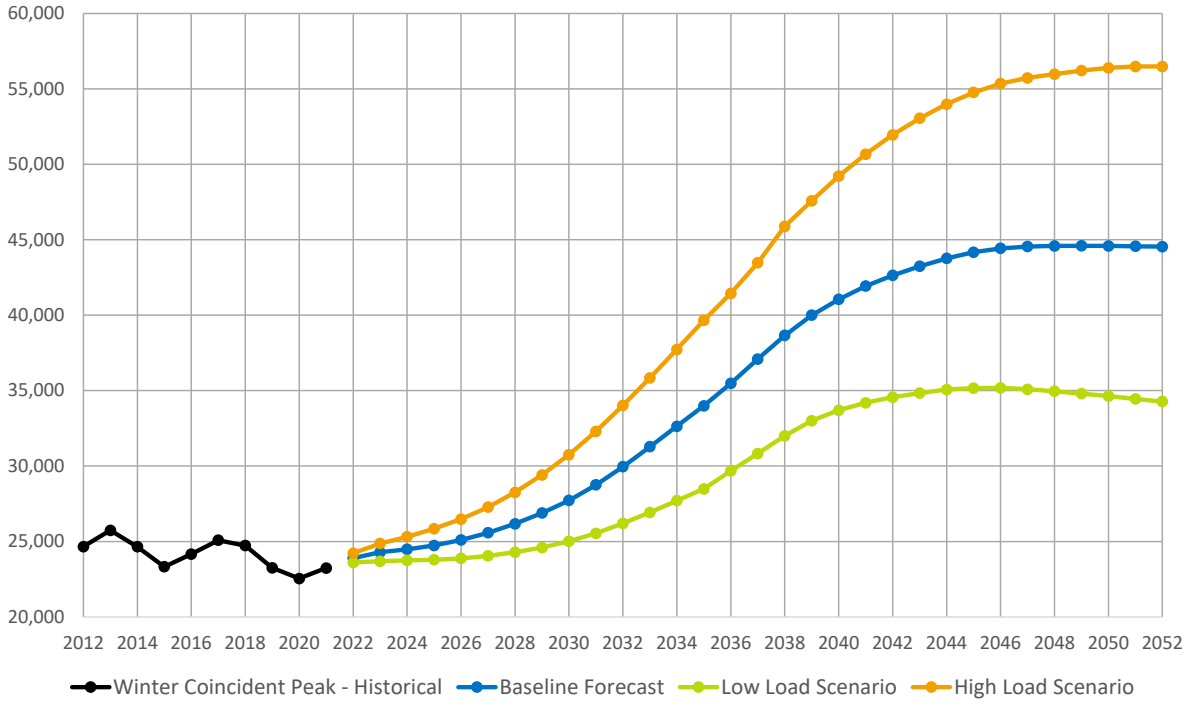


Figure I-4: NYCA Baseline Peak Forecast Comparison – Coincident Peak, MW

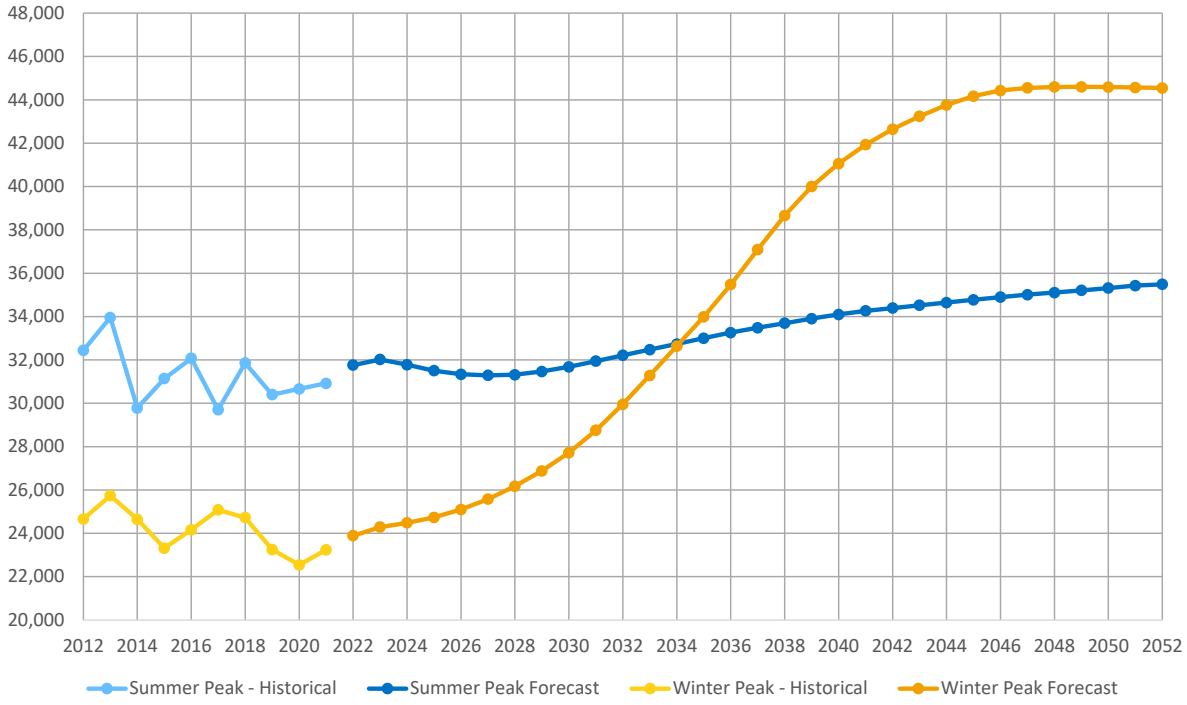


Table I-1b: Summary of NYCA Baseline Annual Energy Forecasts – GWh

Year	(a) Econometric Energy	(b) (-) EE and C&S	(c) = a - b End-Use Energy	(d) (-) Solar PV, BTM	(e) (-) Non-Solar DG, BTM	(f) (+) Storage Net Energy Consumption	(g) (+) EV Energy	(h) (+) Building Electrification	(i) = c-d-e+f+g+h Baseline Annual Energy Forecast
2022	159,065	2,616	156,449	4,635	1,656	47	567	488	151,260
2023	162,750	5,458	157,292	5,605	1,739	70	868	1,234	152,120
2024	164,563	8,557	156,006	6,616	1,840	117	1,263	2,110	151,040
2025	165,064	11,862	153,202	7,559	1,900	184	1,795	3,038	148,760
2026	166,282	15,218	151,064	8,532	1,964	275	2,523	4,184	147,550
2027	167,490	18,466	149,024	9,462	2,019	383	3,503	5,541	146,970
2028	168,320	21,545	146,775	10,298	2,068	510	4,762	7,109	146,790
2029	169,296	24,447	144,849	11,016	2,118	645	6,313	8,867	147,540
2030	170,130	27,186	142,944	11,538	2,171	786	8,151	10,848	149,020
2031	171,242	29,735	141,507	11,853	2,224	891	10,240	13,029	151,590
2032	171,863	31,883	139,980	12,108	2,263	980	12,518	15,413	154,520
2033	172,502	33,894	138,608	12,330	2,302	1,062	14,912	17,960	157,910
2034	172,883	35,770	137,113	12,535	2,344	1,143	17,350	20,673	161,400
2035	173,530	37,527	136,003	12,724	2,385	1,222	19,775	23,499	165,390
2036	174,010	39,182	134,828	12,900	2,417	1,295	22,131	26,393	169,330
2037	174,597	40,736	133,861	13,063	2,453	1,366	24,372	29,157	173,240
2038	174,982	42,205	132,777	13,220	2,478	1,436	26,460	31,905	176,880
2039	175,689	43,590	132,099	13,363	2,519	1,499	28,359	34,565	180,640
2040	176,199	44,906	131,293	13,500	2,547	1,560	30,037	37,137	183,980
2041	176,913	46,163	130,750	13,604	2,568	1,622	31,318	39,402	186,920
2042	177,492	47,360	130,132	13,701	2,606	1,673	32,254	41,538	189,290
2043	178,315	48,497	129,818	13,788	2,633	1,728	33,045	43,450	191,620
2044	178,883	49,578	129,305	13,870	2,649	1,779	33,695	45,210	193,470
2045	179,641	50,627	129,014	13,949	2,678	1,829	34,215	46,549	194,980
2046	180,129	51,641	128,488	14,019	2,705	1,874	34,606	47,746	195,990
2047	180,922	52,642	128,280	14,087	2,728	1,917	34,880	48,768	197,030
2048	181,407	53,614	127,793	14,152	2,757	1,958	35,054	49,684	197,580
2049	182,145	54,556	127,589	14,218	2,776	1,999	35,150	50,216	197,960
2050	182,656	55,451	127,205	14,272	2,798	2,036	35,200	50,679	198,050
2051	183,577	56,348	127,229	14,329	2,826	2,069	35,207	51,110	198,460
2052	184,230	57,200	127,030	14,381	2,840	2,103	35,181	51,547	198,640

(a) - Econometric Energy Forecast - Reflects impacts of projected weather trends, economic growth, and interconnecting large loads

(b) - Table I-8a: Energy Efficiency and Codes & Standards Energy Impacts, Relative to 2021

(c) - End-Use Energy Consumption - Reflects projected end use energy consumption

(d) - Table I-9b: Solar PV Impacts, Behind-the-Meter - Total Reductions in Annual Energy

(e) - Table I-10b: Non-Solar Distributed Generation Impacts, Behind-the-Meter - Total Reductions in Annual Energy

(f) - Table I-12b: Storage Annual Net Energy Consumption, both wholesale and behind-the-meter (pumped storage is not included - see Table III-2 for current resources)

(g) - Table I-11b: Electric Vehicle Energy Usage

(h) - Table I-13a: Building Electrification Energy Usage - future end-use electrification including heat pumps, water heating, cooking, and other end-uses

(i) - Table I-2: Baseline Annual Energy Forecast

Table I-1c: Summary of NYCA Baseline Summer Coincident Peak Demand Forecasts – MW

Year	(a) Econometric Peak Demand	(b) (-) EE and C&S	(c) = a - b End-Use Peak Demand	(d) (-) Solar PV, BTM	(e) (-) Non-Solar DG, BTM	(f) (-) BTM Storage Peak Reductions	(g) (+) EV Peak Demand	(h) (+) Building Electrification	(i) = c-d-e-f+g+h Baseline Summer Peak Forecast
2022	33,461	365	33,096	985	288	148	58	32	31,765
2023	34,295	769	33,526	1,113	304	244	96	57	32,018
2024	34,669	1,213	33,456	1,216	319	365	139	83	31,778
2025	34,946	1,696	33,250	1,314	330	416	193	122	31,505
2026	35,308	2,197	33,111	1,386	342	469	269	156	31,339
2027	35,715	2,687	33,028	1,421	352	528	359	206	31,292
2028	36,115	3,160	32,955	1,423	359	583	471	256	31,317
2029	36,577	3,610	32,967	1,416	369	640	610	316	31,468
2030	36,997	4,044	32,953	1,379	376	697	801	382	31,684
2031	37,377	4,451	32,926	1,315	386	755	1,025	451	31,946
2032	37,691	4,786	32,905	1,261	394	812	1,246	530	32,214
2033	37,961	5,101	32,860	1,205	401	868	1,468	620	32,474
2034	38,216	5,397	32,819	1,142	406	923	1,675	714	32,737
2035	38,469	5,672	32,797	1,079	413	980	1,867	813	33,005
2036	38,727	5,937	32,790	1,026	419	1,034	2,033	914	33,258
2037	38,962	6,185	32,777	970	426	1,085	2,175	1,016	33,487
2038	39,178	6,415	32,763	917	431	1,125	2,288	1,118	33,696
2039	39,405	6,634	32,771	866	438	1,164	2,385	1,218	33,906
2040	39,607	6,835	32,772	815	442	1,201	2,471	1,312	34,097
2041	39,776	7,027	32,749	759	446	1,233	2,545	1,406	34,262
2042	39,938	7,203	32,735	708	453	1,264	2,591	1,495	34,396
2043	40,073	7,369	32,704	654	457	1,295	2,627	1,595	34,520
2044	40,197	7,523	32,674	602	460	1,324	2,653	1,705	34,646
2045	40,334	7,662	32,672	555	466	1,351	2,672	1,802	34,774
2046	40,475	7,801	32,674	509	470	1,378	2,685	1,894	34,896
2047	40,628	7,931	32,697	474	474	1,404	2,694	1,972	35,011
2048	40,768	8,057	32,711	443	479	1,429	2,698	2,049	35,107
2049	40,924	8,176	32,748	418	484	1,451	2,701	2,113	35,209
2050	41,089	8,284	32,805	395	487	1,474	2,703	2,164	35,316
2051	41,224	8,389	32,835	375	492	1,495	2,703	2,255	35,431
2052	41,329	8,487	32,842	357	495	1,512	2,704	2,304	35,486

(a) - Econometric Summer Peak Demand - Reflects impacts of projected weather trends, economic growth, and interconnecting large loads

(b) - Table I-8b: Energy Efficiency and Codes & Standards Summer Coincident Peak Demand Reductions, Relative to 2021

(c) - End-Use Summer Peak Demand - Reflects projected end use summer coincident peak demand

(d) - Table I-9c: Solar PV Impacts, Behind-the-Meter, Total Reductions in Summer Coincident Peak Demand

(e) - Table I-10c: Non-Solar Distributed Generation Impacts, Behind-the-Meter, Total Reductions in Coincident Peak Demand

(f) - Table I-12c: Storage Impacts, Behind-the-Meter, Reductions in Summer Coincident Peak Demand (pumped storage is not included - see Table III-2 for current resources)

(g) - Table I-11c: Electric Vehicle Summer Coincident Peak Demand

(h) - Table I-13b: Building Electrification Summer Coincident Peak Demand - future end-use electrification including heat pumps, water heating, cooking, and other end-uses

(i) - Table I-3a: Baseline Summer Coincident Peak Demand Forecast

Table I-1d: Summary of NYCA Baseline Winter Coincident Peak Demand Forecasts – MW

Year	(a) Econometric Peak Demand	(b) (-) EE and C&S	(c) = a - b End-Use Peak Demand	(d) (-) Solar PV, BTM	(e) (-) Non-Solar DG, BTM	(f) (-) BTM Storage Peak Reductions	(g) (+) EV Peak Demand	(h) (+) Building Electrification	(i) = c-d-e-f+g+h Baseline Winter Peak Forecast
2022-23	24,118	227	23,891	0	288	117	78	329	23,893
2023-24	24,425	483	23,942	0	304	196	118	727	24,287
2024-25	24,510	763	23,747	0	319	299	173	1,179	24,481
2025-26	24,544	1,074	23,470	0	330	347	244	1,698	24,735
2026-27	24,594	1,393	23,201	0	342	399	343	2,295	25,098
2027-28	24,647	1,715	22,932	0	352	457	457	2,995	25,575
2028-29	24,673	2,031	22,642	0	359	512	597	3,803	26,171
2029-30	24,698	2,338	22,360	0	369	573	760	4,706	26,884
2030-31	24,725	2,645	22,080	0	376	635	947	5,703	27,719
2031-32	24,802	2,947	21,855	0	386	699	1,238	6,748	28,756
2032-33	24,872	3,212	21,660	0	394	762	1,501	7,949	29,954
2033-34	25,005	3,481	21,524	0	401	825	1,760	9,229	31,287
2034-35	25,102	3,744	21,358	0	406	890	2,008	10,567	32,637
2035-36	25,263	4,007	21,256	0	413	956	2,234	11,872	33,993
2036-37	25,334	4,279	21,055	0	419	1,020	2,431	13,431	35,478
2037-38	25,420	4,559	20,861	0	426	1,085	2,582	15,162	37,094
2038-39	25,594	4,835	20,759	0	431	1,125	2,721	16,737	38,661
2039-40	25,770	5,123	20,647	0	438	1,164	2,828	18,127	40,000
2040-41	25,837	5,409	20,428	0	442	1,201	2,926	19,343	41,054
2041-42	25,913	5,693	20,220	0	446	1,233	3,004	20,387	41,932
2042-43	26,037	5,979	20,058	0	453	1,264	3,057	21,245	42,643
2043-44	26,145	6,258	19,887	0	457	1,295	3,097	22,012	43,244
2044-45	26,205	6,542	19,663	0	460	1,324	3,124	22,761	43,764
2045-46	26,280	6,823	19,457	0	466	1,351	3,142	23,389	44,171
2046-47	26,399	7,107	19,292	0	470	1,378	3,155	23,830	44,429
2047-48	26,527	7,404	19,123	0	474	1,404	3,186	24,118	44,549
2048-49	26,681	7,702	18,979	0	479	1,429	3,196	24,326	44,593
2049-50	26,769	7,998	18,771	0	484	1,451	3,201	24,565	44,602
2050-51	26,877	8,276	18,601	0	487	1,474	3,206	24,742	44,588
2051-52	27,051	8,554	18,497	0	492	1,495	3,210	24,849	44,569
2052-53	27,170	8,829	18,341	0	495	1,512	3,209	25,004	44,547

(a) - Econometric Winter Peak Demand - Reflects impacts of projected weather trends, economic growth, and interconnecting large loads

(b) - Table I-8c: Energy Efficiency and Codes & Standards Winter Coincident Peak Demand Reductions, Relative to 2021-22

(c) - End-Use Winter Peak Demand - Reflects projected end use winter coincident peak demand

(d) - The forecast of solar PV-related reductions to the winter peak is zero because the system typically peaks after sunset

(e) - Table I-10c: Non-Solar Distributed Generation Impacts, Behind-the-Meter, Total Reductions in Coincident Peak Demand

(f) - Table I-12d: Storage Impacts, Behind-the-Meter, Reductions in Winter Coincident Peak Demand (pumped storage is not included - see Table III-2 for current resources)

(g) - Table I-11d: Electric Vehicle Winter Coincident Peak Demand

(h) - Table I-13c: Building Electrification Winter Coincident Peak Demand - future end-use electrification including heat pumps, water heating, cooking, and other end-uses

(i) - Table I-3b: Baseline Winter Coincident Peak Demand Forecast

Table I-2: Baseline Annual Energy, Historical & Forecast

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

Annual Energy by Zone - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2012	15,595	10,009	16,117	6,574	7,943	11,846	9,938	2,930	6,099	53,487	22,302	162,840
2013	15,790	9,981	16,368	6,448	8,312	12,030	9,965	2,986	6,204	53,316	22,114	163,514
2014	15,885	9,899	16,345	4,835	8,155	12,008	9,832	2,694	6,281	52,529	21,563	160,026
2015	15,761	9,906	16,299	4,441	8,141	12,422	10,065	2,847	6,299	53,485	21,906	161,572
2016	15,803	9,995	16,205	4,389	7,894	12,298	9,975	2,856	6,139	53,653	21,591	160,798
2017	15,261	9,775	15,819	4,322	7,761	11,823	9,669	2,883	5,976	52,266	20,815	156,370
2018	15,894	10,090	16,561	4,670	7,995	12,375	9,965	2,807	6,071	53,360	21,326	161,114
2019	14,872	9,715	15,809	4,825	7,868	11,829	9,574	2,816	5,976	52,003	20,545	155,832
2020	14,514	9,698	15,450	5,047	7,626	11,827	9,217	2,849	5,729	48,060	20,181	150,198
2021	14,731	9,797	15,560	5,415	7,616	11,827	9,262	2,884	5,781	48,832	20,273	151,978
2022	14,766	10,013	15,490	5,593	7,608	11,860	9,135	2,881	5,791	48,439	19,684	151,260
2023	15,141	10,915	15,819	5,944	7,397	11,597	9,010	2,885	5,766	48,240	19,406	152,120
2024	14,923	10,883	15,832	5,936	7,185	11,354	8,912	2,876	5,742	48,169	19,228	151,040
2025	14,751	10,816	15,458	5,911	6,934	11,050	8,751	2,841	5,672	47,626	18,950	148,760
2026	14,678	10,801	15,159	5,869	6,745	10,839	8,663	2,820	5,639	47,442	18,895	147,550
2027	14,623	10,826	14,937	5,849	6,603	10,703	8,650	2,821	5,616	47,317	19,025	146,970
2028	14,545	10,852	14,738	5,828	6,484	10,600	8,673	2,828	5,615	47,374	19,253	146,790
2029	14,532	10,870	14,612	5,813	6,421	10,578	8,771	2,847	5,658	47,795	19,643	147,540
2030	14,582	10,915	14,558	5,802	6,410	10,628	8,921	2,873	5,732	48,460	20,139	149,020
2031	14,763	11,046	14,651	5,805	6,483	10,784	9,150	2,920	5,839	49,407	20,742	151,590
2032	15,008	11,214	14,821	5,813	6,601	10,980	9,409	2,973	5,947	50,420	21,334	154,520
2033	15,316	11,411	15,068	5,831	6,761	11,218	9,707	3,035	6,063	51,572	21,928	157,910
2034	15,642	11,613	15,324	5,849	6,935	11,470	10,023	3,094	6,178	52,784	22,488	161,400
2035	16,029	11,851	15,635	5,872	7,140	11,772	10,374	3,161	6,311	54,142	23,103	165,390
2036	16,419	12,089	15,952	5,895	7,347	12,078	10,725	3,228	6,444	55,468	23,685	169,330
2037	16,808	12,329	16,268	5,918	7,557	12,389	11,073	3,297	6,585	56,790	24,226	173,240
2038	17,163	12,551	16,564	5,939	7,750	12,679	11,398	3,363	6,724	58,040	24,709	176,880
2039	17,526	12,783	16,868	5,961	7,947	12,984	11,729	3,432	6,876	59,344	25,190	180,640
2040	17,839	12,984	17,131	5,979	8,118	13,250	12,024	3,494	7,020	60,519	25,622	183,980
2041	18,116	13,159	17,355	5,995	8,269	13,488	12,289	3,548	7,149	61,549	26,003	186,920
2042	18,335	13,298	17,525	6,006	8,390	13,677	12,504	3,593	7,257	62,373	26,332	189,290
2043	18,551	13,436	17,704	6,018	8,508	13,864	12,708	3,638	7,363	63,155	26,675	191,620
2044	18,724	13,546	17,843	6,027	8,603	14,019	12,876	3,675	7,453	63,749	26,955	193,470
2045	18,866	13,637	17,957	6,033	8,679	14,148	13,016	3,707	7,532	64,212	27,193	194,980
2046	18,963	13,699	18,026	6,036	8,731	14,240	13,121	3,731	7,589	64,478	27,376	195,990
2047	19,057	13,761	18,095	6,041	8,779	14,329	13,219	3,754	7,649	64,772	27,574	197,030
2048	19,098	13,789	18,115	6,040	8,801	14,376	13,278	3,768	7,689	64,911	27,715	197,580
2049	19,116	13,804	18,120	6,037	8,806	14,403	13,315	3,777	7,724	65,020	27,838	197,960
2050	19,105	13,799	18,089	6,032	8,797	14,404	13,323	3,783	7,745	65,048	27,925	198,050
2051	19,124	13,813	18,094	6,031	8,800	14,429	13,349	3,793	7,778	65,195	28,054	198,460
2052	19,131	13,819	18,088	6,031	8,800	14,439	13,359	3,799	7,793	65,264	28,117	198,640

Note: Historical values reflect actual experienced weather conditions. Forecasted values reflect expected trended weather conditions.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-3a: Baseline Summer Coincident Peak Demand, Historical & Forecast

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

Coincident Summer Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2012	2,743	2,107	2,888	774	1,420	2,388	2,242	653	1,393	10,722	5,109	32,439
2013	2,549	2,030	2,921	819	1,540	2,392	2,358	721	1,517	11,456	5,653	33,956
2014	2,227	1,617	2,574	527	1,267	2,033	2,036	584	1,333	10,567	5,017	29,782
2015	2,632	1,926	2,705	557	1,376	2,294	2,151	617	1,345	10,410	5,126	31,139
2016	2,672	2,008	2,812	561	1,384	2,328	2,123	636	1,392	10,990	5,169	32,075
2017	2,439	1,800	2,557	502	1,152	2,032	2,063	607	1,334	10,241	4,972	29,699
2018	2,391	1,947	2,747	600	1,300	2,378	2,190	631	1,393	10,890	5,394	31,861
2019	2,367	1,841	2,592	603	1,305	2,224	2,180	652	1,313	10,015	5,305	30,397
2020	2,405	1,804	2,752	661	1,345	2,374	2,177	666	1,352	9,798	5,326	30,660
2021	2,611	1,918	2,705	588	1,366	2,352	2,236	686	1,353	10,108	4,996	30,919
2022	2,661	1,985	2,700	643	1,331	2,424	2,207	626	1,372	10,760	5,056	31,765
2023	2,726	2,125	2,775	687	1,303	2,390	2,199	630	1,379	10,853	4,951	32,018
2024	2,706	2,124	2,733	687	1,272	2,360	2,191	626	1,372	10,837	4,870	31,778
2025	2,691	2,122	2,691	686	1,244	2,332	2,183	623	1,365	10,786	4,782	31,505
2026	2,679	2,118	2,648	684	1,220	2,308	2,177	621	1,360	10,778	4,746	31,339
2027	2,669	2,116	2,609	681	1,200	2,290	2,174	621	1,360	10,804	4,768	31,292
2028	2,655	2,114	2,574	678	1,184	2,279	2,176	623	1,364	10,864	4,806	31,317
2029	2,653	2,108	2,549	675	1,175	2,278	2,185	627	1,375	10,986	4,857	31,468
2030	2,653	2,106	2,531	673	1,170	2,284	2,198	634	1,388	11,140	4,907	31,684
2031	2,660	2,110	2,524	670	1,172	2,294	2,213	641	1,403	11,303	4,956	31,946
2032	2,673	2,117	2,528	668	1,177	2,309	2,230	647	1,417	11,441	5,007	32,214
2033	2,694	2,129	2,541	668	1,187	2,327	2,251	652	1,430	11,537	5,058	32,474
2034	2,721	2,145	2,562	669	1,201	2,351	2,275	656	1,438	11,610	5,109	32,737
2035	2,751	2,162	2,586	672	1,215	2,375	2,301	660	1,445	11,678	5,160	33,005
2036	2,777	2,176	2,606	673	1,228	2,398	2,323	663	1,452	11,747	5,215	33,258
2037	2,797	2,186	2,622	673	1,238	2,415	2,339	666	1,460	11,823	5,268	33,487
2038	2,813	2,194	2,635	673	1,248	2,430	2,352	670	1,468	11,894	5,319	33,696
2039	2,829	2,203	2,647	673	1,257	2,445	2,364	674	1,476	11,971	5,367	33,906
2040	2,843	2,212	2,660	673	1,266	2,459	2,375	677	1,483	12,041	5,408	34,097
2041	2,855	2,219	2,671	673	1,274	2,471	2,385	680	1,489	12,105	5,440	34,262
2042	2,861	2,222	2,678	672	1,281	2,479	2,391	683	1,496	12,164	5,469	34,396
2043	2,865	2,223	2,682	670	1,286	2,485	2,395	686	1,503	12,227	5,498	34,520
2044	2,869	2,225	2,686	668	1,292	2,493	2,399	689	1,511	12,289	5,525	34,646
2045	2,875	2,228	2,693	667	1,298	2,502	2,404	693	1,517	12,348	5,549	34,774
2046	2,882	2,233	2,700	666	1,303	2,511	2,410	695	1,524	12,399	5,573	34,896
2047	2,888	2,236	2,705	665	1,308	2,518	2,415	698	1,529	12,449	5,600	35,011
2048	2,892	2,239	2,708	664	1,311	2,524	2,419	700	1,534	12,488	5,628	35,107
2049	2,897	2,242	2,711	662	1,314	2,530	2,423	703	1,540	12,532	5,655	35,209
2050	2,902	2,245	2,715	661	1,317	2,537	2,427	705	1,546	12,577	5,684	35,316
2051	2,907	2,249	2,720	660	1,321	2,542	2,431	708	1,550	12,628	5,715	35,431
2052	2,909	2,251	2,722	660	1,322	2,545	2,432	709	1,553	12,653	5,730	35,486

Note: Historical values include demand response reductions when called. Forecast values assume no demand response reductions.

Note: Historical values reflect actual experienced weather conditions. Forecasted values reflect expected trended weather conditions.

Note: Con Edison and Orange & Rockland design their forecasts at the 67th percentile. Other Transmission Owners design their forecasts at the 50th percentile. The aggregate NYCA baseline forecast design condition is 57th percentile summer peak day weather.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-3b: Baseline Winter Coincident Peak Demand, Historical & Forecast

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

Coincident Winter Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2012-13	2,343	1,568	2,672	954	1,348	1,923	1,539	510	947	7,456	3,399	24,659
2013-14	2,358	1,645	2,781	848	1,415	1,989	1,700	625	974	7,810	3,594	25,739
2014-15	2,419	1,617	2,689	725	1,339	1,925	1,556	537	954	7,481	3,406	24,648
2015-16	2,253	1,486	2,469	667	1,307	1,861	1,496	453	889	7,274	3,164	23,319
2016-17	2,295	1,600	2,573	671	1,395	1,867	1,549	530	917	7,482	3,285	24,164
2017-18	2,313	1,533	2,766	735	1,398	2,012	1,638	506	933	7,822	3,425	25,081
2018-19	2,107	1,566	2,668	747	1,416	2,066	1,618	534	941	7,674	3,390	24,727
2019-20	2,100	1,460	2,482	741	1,305	1,854	1,468	479	842	7,398	3,124	23,253
2020-21	2,095	1,505	2,418	750	1,251	1,856	1,481	485	869	6,689	3,143	22,542
2021-22	2,120	1,507	2,512	846	1,283	1,894	1,506	491	860	7,116	3,100	23,235
2022-23	2,228	1,644	2,540	875	1,270	1,957	1,522	483	851	7,356	3,167	23,893
2023-24	2,264	1,669	2,674	880	1,282	1,972	1,545	487	859	7,442	3,213	24,287
2024-25	2,308	1,694	2,685	880	1,288	1,985	1,568	489	860	7,495	3,229	24,481
2025-26	2,353	1,720	2,694	880	1,296	2,003	1,595	490	864	7,578	3,262	24,735
2026-27	2,398	1,748	2,705	880	1,306	2,026	1,626	491	874	7,725	3,319	25,098
2027-28	2,443	1,781	2,720	880	1,320	2,056	1,662	495	888	7,934	3,396	25,575
2028-29	2,492	1,814	2,742	880	1,338	2,094	1,706	499	907	8,208	3,491	26,171
2029-30	2,550	1,848	2,772	882	1,362	2,140	1,759	506	929	8,532	3,604	26,884
2030-31	2,619	1,891	2,811	884	1,394	2,197	1,822	514	956	8,894	3,737	27,719
2031-32	2,703	1,944	2,868	887	1,433	2,266	1,896	526	992	9,350	3,891	28,756
2032-33	2,800	2,006	2,936	891	1,480	2,342	1,979	539	1,035	9,897	4,049	29,954
2033-34	2,905	2,071	3,017	896	1,532	2,424	2,066	554	1,083	10,536	4,203	31,287
2034-35	3,013	2,137	3,098	901	1,586	2,508	2,155	568	1,131	11,189	4,351	32,637
2035-36	3,123	2,205	3,180	907	1,641	2,594	2,244	583	1,180	11,834	4,502	33,993
2036-37	3,245	2,281	3,273	913	1,703	2,691	2,343	600	1,234	12,526	4,669	35,478
2037-38	3,379	2,365	3,375	919	1,772	2,799	2,451	620	1,293	13,266	4,855	37,094
2038-39	3,510	2,447	3,475	925	1,839	2,906	2,558	640	1,351	13,975	5,035	38,661
2039-40	3,622	2,518	3,559	929	1,898	3,000	2,653	658	1,402	14,565	5,196	40,000
2040-41	3,714	2,577	3,628	933	1,946	3,077	2,733	672	1,445	15,005	5,324	41,054
2041-42	3,794	2,630	3,686	936	1,988	3,146	2,805	684	1,482	15,347	5,434	41,932
2042-43	3,862	2,674	3,734	938	2,022	3,205	2,867	695	1,515	15,602	5,529	42,643
2043-44	3,920	2,711	3,775	940	2,051	3,257	2,923	705	1,544	15,803	5,615	43,244
2044-45	3,973	2,745	3,810	941	2,077	3,305	2,972	714	1,571	15,960	5,696	43,764
2045-46	4,016	2,773	3,837	941	2,098	3,345	3,014	722	1,595	16,064	5,766	44,171
2046-47	4,045	2,792	3,852	941	2,111	3,374	3,046	727	1,614	16,109	5,818	44,429
2047-48	4,059	2,801	3,855	940	2,116	3,390	3,066	729	1,628	16,112	5,853	44,549
2048-49	4,065	2,805	3,850	939	2,116	3,400	3,078	730	1,638	16,092	5,880	44,593
2049-50	4,065	2,805	3,841	937	2,113	3,407	3,088	730	1,648	16,066	5,902	44,602
2050-51	4,063	2,803	3,829	934	2,109	3,410	3,093	731	1,656	16,039	5,921	44,588
2051-52	4,058	2,799	3,816	933	2,104	3,412	3,098	730	1,663	16,017	5,939	44,569
2052-53	4,054	2,796	3,808	932	2,100	3,412	3,098	729	1,666	16,006	5,946	44,547

Note: Historical values reflect actual experienced weather conditions. Forecasted values reflect expected trended weather conditions.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-4a: Baseline Summer Non-Coincident Peak Demand, Historical & Forecast

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

Non-Coincident Summer Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K
2012	2,746	2,113	2,889	809	1,433	2,388	2,273	681	1,414	11,112	5,516
2013	2,821	2,103	2,998	822	1,559	2,423	2,367	721	1,517	11,456	5,747
2014	2,620	1,898	2,832	552	1,410	2,300	2,052	590	1,348	10,572	5,035
2015	2,728	1,954	2,815	595	1,403	2,306	2,204	632	1,398	10,586	5,236
2016	2,800	2,023	2,830	642	1,397	2,342	2,198	652	1,392	10,990	5,394
2017	2,494	1,828	2,649	543	1,343	2,192	2,125	633	1,395	10,671	5,121
2018	2,769	2,073	3,021	620	1,409	2,424	2,251	642	1,399	11,070	5,394
2019	2,620	1,926	2,705	609	1,396	2,301	2,243	659	1,392	10,802	5,438
2020	2,660	2,022	2,781	668	1,355	2,386	2,178	669	1,368	10,150	5,405
2021	2,650	2,002	2,803	694	1,395	2,392	2,274	686	1,417	10,352	5,120
2022	2,817	2,048	2,765	658	1,388	2,463	2,244	635	1,391	10,906	5,137
2023	2,886	2,192	2,842	703	1,359	2,428	2,236	639	1,398	11,001	5,031
2024	2,865	2,191	2,799	703	1,327	2,398	2,227	635	1,391	10,984	4,948
2025	2,849	2,189	2,756	702	1,298	2,369	2,219	631	1,384	10,933	4,859
2026	2,836	2,185	2,712	700	1,273	2,345	2,213	629	1,378	10,925	4,822
2027	2,826	2,183	2,672	697	1,252	2,327	2,210	629	1,378	10,951	4,845
2028	2,811	2,181	2,636	694	1,235	2,315	2,212	631	1,383	11,012	4,883
2029	2,809	2,175	2,610	691	1,226	2,314	2,221	636	1,394	11,135	4,935
2030	2,809	2,173	2,592	689	1,221	2,321	2,234	643	1,407	11,292	4,986
2031	2,816	2,177	2,585	686	1,223	2,331	2,250	650	1,422	11,457	5,036
2032	2,830	2,184	2,589	684	1,228	2,346	2,267	656	1,436	11,597	5,088
2033	2,852	2,196	2,602	684	1,238	2,364	2,288	661	1,449	11,694	5,139
2034	2,881	2,213	2,623	685	1,253	2,389	2,313	665	1,458	11,768	5,191
2035	2,912	2,231	2,648	688	1,267	2,413	2,339	669	1,465	11,837	5,243
2036	2,940	2,245	2,669	689	1,281	2,436	2,362	672	1,472	11,907	5,299
2037	2,961	2,255	2,685	689	1,291	2,454	2,378	675	1,480	11,984	5,353
2038	2,978	2,264	2,698	689	1,302	2,469	2,391	679	1,488	12,056	5,405
2039	2,995	2,273	2,711	689	1,311	2,484	2,403	683	1,496	12,134	5,453
2040	3,010	2,282	2,724	689	1,321	2,498	2,414	686	1,503	12,205	5,495
2041	3,023	2,289	2,735	689	1,329	2,511	2,425	689	1,509	12,270	5,528
2042	3,029	2,292	2,742	688	1,336	2,519	2,431	692	1,516	12,329	5,557
2043	3,033	2,293	2,746	686	1,342	2,525	2,435	695	1,523	12,393	5,587
2044	3,037	2,296	2,750	684	1,348	2,533	2,439	698	1,532	12,456	5,614
2045	3,044	2,299	2,758	683	1,354	2,542	2,444	702	1,538	12,516	5,638
2046	3,051	2,304	2,765	682	1,359	2,551	2,450	704	1,545	12,568	5,663
2047	3,058	2,307	2,770	681	1,365	2,558	2,455	707	1,550	12,618	5,690
2048	3,062	2,310	2,773	680	1,368	2,564	2,459	710	1,555	12,658	5,719
2049	3,067	2,313	2,776	677	1,371	2,570	2,463	713	1,561	12,702	5,746
2050	3,072	2,316	2,780	676	1,374	2,578	2,467	715	1,567	12,748	5,776
2051	3,078	2,320	2,785	675	1,378	2,583	2,471	718	1,571	12,800	5,807
2052	3,080	2,322	2,787	675	1,379	2,586	2,472	719	1,574	12,825	5,822

Note: Historical values include demand response reductions when called. Forecast values assume no demand response reductions.

Note: Historical values reflect actual experienced weather conditions. Forecasted values reflect expected trended weather conditions.

Note: Con Edison and Orange & Rockland design their forecasts at the 67th percentile.
Other Transmission Owners design their forecasts at the 50th percentile.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-4b: Baseline Winter Non-Coincident Peak Demand, Historical & Forecast

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

Non-Coincident Winter Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K
2012-13	2,381	1,594	2,672	965	1,356	1,923	1,539	525	965	7,535	3,399
2013-14	2,430	1,654	2,781	899	1,424	1,998	1,700	625	978	7,896	3,594
2014-15	2,419	1,629	2,689	725	1,423	1,949	1,583	537	954	7,632	3,406
2015-16	2,285	1,530	2,540	704	1,314	1,895	1,546	514	907	7,362	3,189
2016-17	2,295	1,600	2,573	688	1,395	1,867	1,553	554	921	7,506	3,320
2017-18	2,333	1,579	2,766	736	1,411	2,025	1,645	550	952	7,822	3,441
2018-19	2,193	1,603	2,712	775	1,419	2,066	1,618	534	941	7,756	3,390
2019-20	2,137	1,478	2,482	746	1,317	1,859	1,473	497	850	7,398	3,157
2020-21	2,121	1,505	2,426	819	1,315	1,866	1,481	533	869	6,853	3,143
2021-22	2,122	1,507	2,522	864	1,326	1,894	1,514	513	860	7,116	3,112
2022-23	2,253	1,657	2,545	893	1,293	1,969	1,533	493	860	7,422	3,180
2023-24	2,289	1,682	2,679	898	1,305	1,984	1,556	497	868	7,509	3,226
2024-25	2,333	1,708	2,690	898	1,311	1,997	1,579	499	869	7,562	3,242
2025-26	2,379	1,734	2,699	898	1,319	2,015	1,606	500	874	7,646	3,275
2026-27	2,424	1,762	2,710	898	1,330	2,038	1,637	501	884	7,795	3,332
2027-28	2,470	1,795	2,725	898	1,344	2,068	1,674	505	898	8,005	3,410
2028-29	2,519	1,829	2,747	898	1,362	2,107	1,718	509	917	8,282	3,505
2029-30	2,578	1,863	2,778	901	1,387	2,153	1,771	517	939	8,609	3,618
2030-31	2,648	1,906	2,817	903	1,419	2,210	1,835	525	967	8,974	3,752
2031-32	2,733	1,960	2,874	906	1,459	2,280	1,909	537	1,003	9,434	3,907
2032-33	2,831	2,022	2,942	910	1,507	2,356	1,993	550	1,046	9,986	4,065
2033-34	2,937	2,088	3,023	915	1,560	2,439	2,080	566	1,095	10,631	4,220
2034-35	3,046	2,154	3,104	920	1,615	2,523	2,170	580	1,143	11,290	4,368
2035-36	3,157	2,223	3,186	926	1,671	2,610	2,260	595	1,193	11,941	4,520
2036-37	3,281	2,299	3,280	932	1,734	2,707	2,359	613	1,248	12,639	4,688
2037-38	3,416	2,384	3,382	938	1,804	2,816	2,468	633	1,307	13,385	4,874
2038-39	3,549	2,467	3,482	944	1,872	2,923	2,576	653	1,366	14,101	5,055
2039-40	3,662	2,538	3,566	949	1,932	3,018	2,672	672	1,417	14,696	5,217
2040-41	3,755	2,598	3,635	953	1,981	3,095	2,752	686	1,461	15,140	5,345
2041-42	3,836	2,651	3,693	956	2,024	3,165	2,825	698	1,498	15,485	5,456
2042-43	3,904	2,695	3,741	958	2,058	3,224	2,887	710	1,532	15,742	5,551
2043-44	3,963	2,733	3,783	960	2,088	3,277	2,943	720	1,561	15,945	5,637
2044-45	4,017	2,767	3,818	961	2,114	3,325	2,993	729	1,588	16,104	5,719
2045-46	4,060	2,795	3,845	961	2,136	3,365	3,035	737	1,613	16,209	5,789
2046-47	4,089	2,814	3,860	961	2,149	3,394	3,067	742	1,632	16,254	5,841
2047-48	4,104	2,823	3,863	960	2,154	3,410	3,087	744	1,646	16,257	5,876
2048-49	4,110	2,827	3,858	959	2,154	3,420	3,100	745	1,656	16,237	5,904
2049-50	4,110	2,827	3,849	957	2,151	3,427	3,110	745	1,666	16,211	5,926
2050-51	4,108	2,825	3,837	954	2,147	3,430	3,115	746	1,674	16,183	5,945
2051-52	4,103	2,821	3,824	953	2,142	3,432	3,120	745	1,681	16,161	5,963
2052-53	4,099	2,818	3,816	952	2,138	3,432	3,120	744	1,684	16,150	5,970

Note: Historical values reflect actual experienced weather conditions. Forecasted values reflect expected trended weather conditions.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-5: Baseline Peak Demand in G-to-J Locality, Historical & Forecast

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

G-to-J Locality Summer Peak Demand by Zone - MW

Year	G	H	I	J	G-J
2012	2,273	657	1,414	11,098	15,442
2013	2,358	721	1,517	11,456	16,052
2014	2,046	585	1,348	10,572	14,551
2015	2,168	629	1,398	10,583	14,778
2016	2,123	636	1,392	10,990	15,141
2017	2,125	611	1,367	10,671	14,774
2018	2,130	642	1,379	10,979	15,130
2019	1,992	582	1,336	10,767	14,677
2020	1,992	648	1,368	10,139	14,147
2021	2,197	673	1,407	10,352	14,629
2022	2,231	633	1,387	10,875	15,126
2023	2,223	637	1,394	10,969	15,223
2024	2,214	633	1,387	10,953	15,187
2025	2,206	630	1,380	10,901	15,117
2026	2,200	628	1,375	10,893	15,096
2027	2,197	628	1,375	10,920	15,120
2028	2,199	630	1,379	10,980	15,188
2029	2,208	634	1,390	11,104	15,336
2030	2,222	641	1,403	11,259	15,525
2031	2,237	648	1,418	11,424	15,727
2032	2,254	654	1,432	11,563	15,903
2033	2,275	659	1,445	11,660	16,039
2034	2,299	663	1,453	11,734	16,149
2035	2,326	667	1,460	11,803	16,256
2036	2,348	670	1,468	11,873	16,359
2037	2,364	673	1,476	11,950	16,463
2038	2,377	677	1,484	12,021	16,559
2039	2,389	681	1,492	12,099	16,661
2040	2,400	684	1,499	12,170	16,753
2041	2,411	687	1,505	12,235	16,838
2042	2,417	690	1,512	12,294	16,913
2043	2,421	693	1,519	12,358	16,991
2044	2,425	696	1,527	12,420	17,068
2045	2,430	700	1,533	12,480	17,143
2046	2,436	702	1,540	12,532	17,210
2047	2,441	705	1,545	12,582	17,273
2048	2,445	707	1,550	12,622	17,324
2049	2,449	711	1,556	12,666	17,382
2050	2,453	713	1,563	12,712	17,441
2051	2,457	716	1,567	12,763	17,503
2052	2,458	717	1,570	12,788	17,533

G-to-J Locality Winter Peak Demand by Zone - MW

Year	G	H	I	J	G-J
2012-13	1,539	510	947	7,456	10,452
2013-14	1,683	601	965	7,896	11,145
2014-15	1,500	515	941	7,632	10,588
2015-16	1,524	442	896	7,297	10,159
2016-17	1,549	530	917	7,483	10,479
2017-18	1,638	506	933	7,822	10,899
2018-19	1,593	521	941	7,727	10,782
2019-20	1,468	479	842	7,398	10,187
2020-21	1,465	533	841	6,829	9,668
2021-22	1,506	491	860	7,116	9,973
2022-23	1,519	481	851	7,400	10,251
2023-24	1,542	485	859	7,487	10,373
2024-25	1,565	487	860	7,540	10,452
2025-26	1,592	488	864	7,623	10,567
2026-27	1,623	489	874	7,771	10,757
2027-28	1,659	493	888	7,982	11,022
2028-29	1,703	497	907	8,257	11,364
2029-30	1,755	504	929	8,583	11,771
2030-31	1,818	512	956	8,947	12,233
2031-32	1,892	524	992	9,406	12,814
2032-33	1,975	537	1,035	9,956	13,503
2033-34	2,062	552	1,083	10,599	14,296
2034-35	2,151	566	1,131	11,256	15,104
2035-36	2,240	581	1,180	11,905	15,906
2036-37	2,338	598	1,234	12,601	16,771
2037-38	2,446	618	1,293	13,346	17,703
2038-39	2,553	637	1,351	14,059	18,600
2039-40	2,648	655	1,402	14,652	19,357
2040-41	2,728	669	1,445	15,095	19,937
2041-42	2,799	681	1,482	15,439	20,401
2042-43	2,861	692	1,515	15,696	20,764
2043-44	2,917	702	1,544	15,898	21,061
2044-45	2,966	711	1,571	16,056	21,304
2045-46	3,008	719	1,595	16,160	21,482
2046-47	3,040	724	1,614	16,206	21,584
2047-48	3,060	726	1,628	16,209	21,623
2048-49	3,072	727	1,638	16,189	21,626
2049-50	3,082	727	1,648	16,162	21,619
2050-51	3,087	728	1,656	16,135	21,606
2051-52	3,092	727	1,663	16,113	21,595
2052-53	3,092	726	1,666	16,102	21,586

Note: Historical values include demand response reductions when called. Forecast values assume no demand response reductions.

Note: Historical values reflect actual experienced weather conditions. Forecasted values reflect expected trended weather conditions.

Note: Con Edison and Orange & Rockland design their forecasts at the 67th percentile. Other Transmission Owners design their forecasts at the 50th percentile. The aggregate NYCA baseline forecast design condition is 57th percentile summer peak day weather.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-6a: 90th Percentile Forecast of Baseline Energy due to Weather

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

90th Percentile of Annual Energy due to Weather - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	14,902	10,132	15,631	5,617	7,680	11,993	9,260	2,932	5,871	49,093	19,979	153,090
2023	15,280	11,045	15,963	5,970	7,467	11,727	9,133	2,936	5,846	48,891	19,697	153,955
2024	15,060	11,013	15,976	5,962	7,253	11,481	9,034	2,927	5,821	48,819	19,516	152,862
2025	14,887	10,945	15,599	5,936	7,000	11,174	8,871	2,891	5,750	48,269	19,234	150,556
2026	14,813	10,930	15,297	5,894	6,809	10,960	8,782	2,870	5,717	48,082	19,178	149,332
2027	14,758	10,955	15,073	5,874	6,666	10,823	8,769	2,871	5,694	47,956	19,310	148,749
2028	14,679	10,981	14,872	5,853	6,546	10,719	8,792	2,878	5,692	48,014	19,542	148,568
2029	14,666	10,999	14,745	5,838	6,482	10,696	8,891	2,897	5,736	48,440	19,938	149,328
2030	14,716	11,045	14,690	5,827	6,471	10,747	9,043	2,924	5,811	49,114	20,441	150,829
2031	14,899	11,177	14,784	5,830	6,545	10,905	9,275	2,972	5,920	50,074	21,053	153,434
2032	15,146	11,347	14,956	5,838	6,664	11,103	9,538	3,026	6,029	51,101	21,654	156,402
2033	15,457	11,547	15,205	5,856	6,825	11,344	9,840	3,089	6,147	52,268	22,257	159,835
2034	15,786	11,751	15,463	5,874	7,001	11,598	10,160	3,149	6,263	53,497	22,825	163,367
2035	16,176	11,992	15,777	5,897	7,208	11,904	10,516	3,217	6,398	54,873	23,450	167,408
2036	16,570	12,233	16,097	5,920	7,417	12,213	10,872	3,285	6,533	56,217	24,040	171,397
2037	16,963	12,476	16,416	5,943	7,629	12,528	11,225	3,355	6,676	57,557	24,589	175,357
2038	17,321	12,700	16,715	5,965	7,824	12,821	11,554	3,423	6,817	58,824	25,080	179,044
2039	17,687	12,935	17,021	5,987	8,022	13,129	11,890	3,493	6,971	60,145	25,568	182,848
2040	18,003	13,139	17,287	6,005	8,195	13,398	12,189	3,556	7,117	61,336	26,006	186,231
2041	18,283	13,316	17,513	6,021	8,348	13,639	12,457	3,611	7,248	62,380	26,393	189,209
2042	18,504	13,456	17,684	6,032	8,470	13,830	12,675	3,657	7,357	63,215	26,727	191,607
2043	18,722	13,596	17,865	6,044	8,589	14,019	12,882	3,702	7,465	64,008	27,075	193,967
2044	18,896	13,707	18,005	6,053	8,685	14,176	13,052	3,740	7,556	64,610	27,359	195,839
2045	19,040	13,799	18,120	6,059	8,761	14,306	13,194	3,773	7,636	65,079	27,601	197,368
2046	19,137	13,862	18,190	6,062	8,814	14,399	13,301	3,797	7,694	65,348	27,787	198,391
2047	19,232	13,925	18,260	6,067	8,862	14,489	13,400	3,820	7,755	65,646	27,988	199,444
2048	19,274	13,953	18,280	6,066	8,885	14,537	13,460	3,835	7,795	65,787	28,131	200,003
2049	19,292	13,968	18,285	6,063	8,890	14,564	13,497	3,844	7,831	65,898	28,256	200,388
2050	19,281	13,963	18,254	6,058	8,881	14,565	13,506	3,850	7,852	65,926	28,344	200,480
2051	19,300	13,977	18,259	6,057	8,884	14,591	13,532	3,860	7,885	66,075	28,475	200,895
2052	19,307	13,983	18,253	6,057	8,884	14,601	13,542	3,866	7,901	66,145	28,539	201,078

Note: 90th percentile energy forecast is representative of warmer than expected trended weather conditions in summer and colder than expected trended weather conditions in winter.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-6b: 10th Percentile Forecast of Baseline Energy due to Weather

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

10th Percentile of Annual Energy due to Weather - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	14,630	9,894	15,349	5,569	7,536	11,727	9,010	2,830	5,711	47,785	19,389	149,430
2023	15,002	10,785	15,675	5,918	7,327	11,467	8,887	2,834	5,686	47,589	19,115	150,285
2024	14,786	10,753	15,688	5,910	7,117	11,227	8,790	2,825	5,663	47,519	18,940	149,218
2025	14,615	10,687	15,317	5,886	6,868	10,926	8,631	2,791	5,594	46,983	18,666	146,964
2026	14,543	10,672	15,021	5,844	6,681	10,718	8,544	2,770	5,561	46,802	18,612	145,768
2027	14,488	10,697	14,801	5,824	6,540	10,583	8,531	2,771	5,538	46,678	18,740	145,191
2028	14,411	10,723	14,604	5,803	6,422	10,481	8,554	2,778	5,538	46,734	18,964	145,012
2029	14,398	10,741	14,479	5,788	6,360	10,460	8,651	2,797	5,580	47,150	19,348	145,752
2030	14,448	10,785	14,426	5,777	6,349	10,509	8,799	2,822	5,653	47,806	19,837	147,211
2031	14,627	10,915	14,518	5,780	6,421	10,663	9,025	2,868	5,758	48,740	20,431	149,746
2032	14,870	11,081	14,686	5,788	6,538	10,857	9,280	2,920	5,865	49,739	21,014	152,638
2033	15,175	11,275	14,931	5,806	6,697	11,092	9,574	2,981	5,979	50,876	21,599	155,985
2034	15,498	11,475	15,185	5,824	6,869	11,342	9,886	3,039	6,093	52,071	22,151	159,433
2035	15,882	11,710	15,493	5,847	7,072	11,640	10,232	3,105	6,224	53,411	22,756	163,372
2036	16,268	11,945	15,807	5,870	7,277	11,943	10,578	3,171	6,355	54,719	23,330	167,263
2037	16,653	12,182	16,120	5,893	7,485	12,250	10,921	3,239	6,494	56,023	23,863	171,123
2038	17,005	12,402	16,413	5,913	7,676	12,537	11,242	3,303	6,631	57,256	24,338	174,716
2039	17,365	12,631	16,715	5,935	7,872	12,839	11,568	3,371	6,781	58,543	24,812	178,432
2040	17,675	12,829	16,975	5,953	8,041	13,102	11,859	3,432	6,923	59,702	25,238	181,729
2041	17,949	13,002	17,197	5,969	8,190	13,337	12,121	3,485	7,050	60,718	25,613	184,631
2042	18,166	13,140	17,366	5,980	8,310	13,524	12,333	3,529	7,157	61,531	25,937	186,973
2043	18,380	13,276	17,543	5,992	8,427	13,709	12,534	3,574	7,261	62,302	26,275	189,273
2044	18,552	13,385	17,681	6,001	8,521	13,862	12,700	3,610	7,350	62,888	26,551	191,101
2045	18,692	13,475	17,794	6,007	8,597	13,990	12,838	3,641	7,428	63,345	26,785	192,592
2046	18,789	13,536	17,862	6,010	8,648	14,081	12,941	3,665	7,484	63,608	26,965	193,589
2047	18,882	13,597	17,930	6,015	8,696	14,169	13,038	3,688	7,543	63,898	27,160	194,616
2048	18,922	13,625	17,950	6,014	8,717	14,215	13,096	3,701	7,583	64,035	27,299	195,157
2049	18,940	13,640	17,955	6,011	8,722	14,242	13,133	3,710	7,617	64,142	27,420	195,532
2050	18,929	13,635	17,924	6,006	8,713	14,243	13,140	3,716	7,638	64,170	27,506	195,620
2051	18,948	13,649	17,929	6,005	8,716	14,267	13,166	3,726	7,671	64,315	27,633	196,025
2052	18,955	13,655	17,923	6,005	8,716	14,277	13,176	3,732	7,685	64,383	27,695	196,202

Note: 90th percentile energy forecast is representative of cooler than expected trended weather conditions in summer and warmer than expected trended weather conditions in winter.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-7a: 90th Percentile Forecast of Baseline Summer Coincident Peak Demand due to Weather

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

90th Percentile of Summer Coincident Peak Demand due to Weather - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	2,851	2,127	2,893	689	1,426	2,605	2,372	662	1,451	11,227	5,444	33,747
2023	2,921	2,277	2,973	736	1,396	2,569	2,364	666	1,459	11,324	5,331	34,016
2024	2,899	2,276	2,928	736	1,363	2,537	2,355	662	1,451	11,308	5,243	33,758
2025	2,883	2,274	2,883	735	1,333	2,507	2,346	659	1,444	11,254	5,149	33,467
2026	2,870	2,269	2,837	733	1,307	2,481	2,340	657	1,438	11,246	5,110	33,288
2027	2,860	2,267	2,795	730	1,286	2,461	2,337	657	1,438	11,273	5,134	33,238
2028	2,845	2,265	2,758	726	1,269	2,450	2,339	659	1,442	11,336	5,174	33,263
2029	2,843	2,259	2,731	723	1,259	2,449	2,349	663	1,454	11,463	5,229	33,422
2030	2,843	2,256	2,712	721	1,254	2,455	2,363	670	1,468	11,624	5,283	33,649
2031	2,850	2,261	2,704	718	1,256	2,466	2,379	678	1,484	11,794	5,336	33,926
2032	2,864	2,268	2,709	716	1,261	2,482	2,397	684	1,499	11,938	5,391	34,209
2033	2,887	2,281	2,723	716	1,272	2,501	2,419	690	1,512	12,038	5,446	34,485
2034	2,915	2,298	2,745	717	1,287	2,527	2,445	694	1,521	12,114	5,501	34,764
2035	2,948	2,317	2,771	720	1,302	2,553	2,473	698	1,528	12,185	5,556	35,051
2036	2,975	2,332	2,792	721	1,316	2,577	2,497	701	1,536	12,257	5,615	35,319
2037	2,997	2,342	2,809	721	1,326	2,596	2,514	704	1,544	12,336	5,672	35,561
2038	3,014	2,351	2,823	721	1,337	2,612	2,528	709	1,552	12,411	5,727	35,785
2039	3,031	2,360	2,836	721	1,347	2,628	2,541	713	1,561	12,491	5,778	36,007
2040	3,046	2,370	2,850	721	1,356	2,643	2,553	716	1,568	12,564	5,823	36,210
2041	3,059	2,378	2,862	721	1,365	2,656	2,564	719	1,575	12,631	5,857	36,387
2042	3,065	2,381	2,869	720	1,373	2,665	2,570	722	1,582	12,692	5,888	36,527
2043	3,070	2,382	2,874	718	1,378	2,671	2,574	725	1,589	12,758	5,920	36,659
2044	3,074	2,384	2,878	716	1,384	2,680	2,579	729	1,598	12,823	5,949	36,794
2045	3,080	2,387	2,885	715	1,391	2,689	2,584	733	1,604	12,884	5,974	36,926
2046	3,088	2,393	2,893	714	1,396	2,699	2,590	735	1,612	12,938	6,000	37,058
2047	3,094	2,396	2,898	713	1,401	2,706	2,596	738	1,617	12,990	6,029	37,178
2048	3,099	2,399	2,902	711	1,405	2,713	2,600	740	1,622	13,030	6,060	37,281
2049	3,104	2,402	2,905	709	1,408	2,719	2,604	743	1,629	13,076	6,089	37,388
2050	3,109	2,405	2,909	708	1,411	2,727	2,609	746	1,635	13,123	6,120	37,502
2051	3,115	2,410	2,914	707	1,415	2,732	2,613	749	1,639	13,176	6,153	37,623
2052	3,117	2,412	2,917	707	1,416	2,736	2,614	750	1,642	13,203	6,169	37,683

Note: 90th percentile summer peak demand forecast is representative of a warmer than expected summer peak day.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Note: Forecast values assume no demand response reductions.

Table I-7b: 10th Percentile Forecast of Baseline Summer Coincident Peak Demand due to Weather

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

10th Percentile of Summer Coincident Peak Demand due to Weather - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	2,468	1,841	2,504	596	1,234	2,206	2,009	554	1,213	9,675	4,510	28,810
2023	2,528	1,970	2,573	637	1,208	2,175	2,001	557	1,220	9,759	4,416	29,044
2024	2,509	1,970	2,534	637	1,180	2,148	1,994	554	1,213	9,744	4,344	28,827
2025	2,495	1,968	2,495	636	1,154	2,122	1,987	551	1,207	9,699	4,265	28,579
2026	2,484	1,964	2,455	634	1,131	2,101	1,981	549	1,203	9,691	4,233	28,426
2027	2,475	1,962	2,419	631	1,113	2,084	1,979	549	1,203	9,715	4,253	28,383
2028	2,462	1,960	2,387	629	1,098	2,074	1,980	551	1,206	9,769	4,287	28,403
2029	2,460	1,955	2,364	626	1,090	2,073	1,989	555	1,216	9,878	4,332	28,538
2030	2,460	1,953	2,347	624	1,085	2,079	2,000	561	1,228	10,017	4,377	28,731
2031	2,467	1,957	2,340	621	1,087	2,088	2,014	567	1,241	10,163	4,420	28,965
2032	2,479	1,963	2,344	619	1,091	2,101	2,030	572	1,253	10,287	4,466	29,205
2033	2,498	1,974	2,356	619	1,101	2,118	2,049	577	1,265	10,374	4,511	29,442
2034	2,523	1,989	2,376	620	1,114	2,140	2,071	580	1,272	10,439	4,557	29,681
2035	2,551	2,005	2,398	623	1,127	2,162	2,094	584	1,278	10,501	4,602	29,925
2036	2,575	2,018	2,417	624	1,139	2,182	2,114	586	1,284	10,563	4,651	30,153
2037	2,594	2,027	2,431	624	1,148	2,198	2,129	589	1,291	10,631	4,699	30,361
2038	2,608	2,034	2,443	624	1,157	2,212	2,141	593	1,298	10,695	4,744	30,549
2039	2,623	2,043	2,455	624	1,166	2,225	2,152	596	1,305	10,764	4,787	30,740
2040	2,636	2,051	2,467	624	1,174	2,238	2,162	599	1,312	10,827	4,823	30,913
2041	2,647	2,058	2,477	624	1,181	2,249	2,171	601	1,317	10,885	4,852	31,062
2042	2,653	2,060	2,483	623	1,188	2,256	2,176	604	1,323	10,938	4,878	31,182
2043	2,657	2,061	2,487	621	1,192	2,262	2,180	607	1,329	10,994	4,904	31,294
2044	2,660	2,063	2,491	619	1,198	2,269	2,183	609	1,336	11,050	4,928	31,406
2045	2,666	2,066	2,497	618	1,204	2,277	2,188	613	1,342	11,103	4,949	31,523
2046	2,672	2,071	2,504	618	1,208	2,285	2,193	615	1,348	11,149	4,971	31,634
2047	2,678	2,073	2,508	617	1,213	2,292	2,198	617	1,352	11,194	4,995	31,737
2048	2,682	2,076	2,511	616	1,216	2,297	2,202	619	1,357	11,229	5,020	31,825
2049	2,686	2,079	2,514	614	1,218	2,303	2,205	622	1,362	11,268	5,044	31,915
2050	2,691	2,082	2,518	613	1,221	2,309	2,209	623	1,367	11,309	5,070	32,012
2051	2,696	2,085	2,522	612	1,225	2,314	2,213	626	1,371	11,355	5,097	32,116
2052	2,697	2,087	2,524	612	1,226	2,316	2,213	627	1,373	11,377	5,111	32,163

Note: 10th percentile summer peak demand forecast is representative of a cooler than expected summer peak day.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Note: Forecast values assume no demand response reductions.

Table I-7c: 90th Percentile Forecast of Baseline Winter Coincident Peak Demand due to Weather

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

90th Percentile of Winter Coincident Peak Demand due to Weather - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022-23	2,343	1,729	2,671	920	1,335	2,058	1,600	508	895	7,734	3,330	25,123
2023-24	2,380	1,755	2,812	925	1,348	2,073	1,624	512	903	7,825	3,378	25,535
2024-25	2,427	1,781	2,823	925	1,354	2,087	1,649	514	904	7,880	3,395	25,739
2025-26	2,474	1,808	2,833	925	1,363	2,106	1,677	515	908	7,968	3,430	26,007
2026-27	2,521	1,838	2,844	925	1,373	2,130	1,710	516	919	8,122	3,490	26,388
2027-28	2,569	1,873	2,860	925	1,388	2,162	1,747	520	934	8,342	3,571	26,891
2028-29	2,620	1,907	2,883	925	1,407	2,202	1,794	525	954	8,630	3,671	27,518
2029-30	2,681	1,943	2,915	927	1,432	2,250	1,849	532	977	8,971	3,789	28,266
2030-31	2,754	1,988	2,956	929	1,466	2,310	1,916	540	1,005	9,351	3,929	29,144
2031-32	2,842	2,044	3,016	933	1,507	2,383	1,994	553	1,043	9,831	4,091	30,237
2032-33	2,944	2,109	3,087	937	1,556	2,462	2,081	567	1,088	10,406	4,257	31,494
2033-34	3,054	2,178	3,172	942	1,611	2,549	2,172	582	1,139	11,078	4,419	32,896
2034-35	3,168	2,247	3,257	947	1,668	2,637	2,266	597	1,189	11,764	4,575	34,315
2035-36	3,284	2,318	3,344	954	1,725	2,727	2,359	613	1,241	12,443	4,734	35,742
2036-37	3,412	2,398	3,441	960	1,791	2,829	2,464	631	1,297	13,170	4,909	37,302
2037-38	3,553	2,487	3,549	966	1,863	2,943	2,577	652	1,360	13,948	5,105	39,003
2038-39	3,691	2,573	3,654	973	1,934	3,055	2,690	673	1,420	14,694	5,294	40,651
2039-40	3,808	2,648	3,742	977	1,996	3,154	2,789	692	1,474	15,314	5,463	42,057
2040-41	3,905	2,710	3,815	981	2,046	3,235	2,874	707	1,519	15,777	5,598	43,167
2041-42	3,989	2,765	3,876	984	2,090	3,308	2,949	719	1,558	16,136	5,713	44,087
2042-43	4,061	2,812	3,926	986	2,126	3,370	3,014	731	1,593	16,404	5,813	44,836
2043-44	4,122	2,850	3,969	988	2,156	3,425	3,073	741	1,623	16,616	5,904	45,467
2044-45	4,177	2,886	4,006	989	2,184	3,475	3,125	751	1,652	16,781	5,989	46,015
2045-46	4,223	2,916	4,034	989	2,206	3,517	3,169	759	1,677	16,890	6,063	46,443
2046-47	4,253	2,936	4,050	989	2,220	3,548	3,203	764	1,697	16,938	6,117	46,715
2047-48	4,268	2,945	4,053	988	2,225	3,564	3,224	766	1,712	16,941	6,154	46,840
2048-49	4,274	2,949	4,048	987	2,225	3,575	3,236	768	1,722	16,920	6,182	46,886
2049-50	4,274	2,949	4,039	985	2,222	3,582	3,247	768	1,733	16,892	6,206	46,897
2050-51	4,272	2,947	4,026	982	2,217	3,585	3,252	769	1,741	16,864	6,226	46,881
2051-52	4,267	2,943	4,012	981	2,212	3,587	3,257	768	1,749	16,841	6,244	46,861
2052-53	4,263	2,940	4,004	980	2,208	3,587	3,257	766	1,752	16,829	6,252	46,838

Note: 90th percentile winter peak demand forecast is representative of a colder than expected winter peak day.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-7d: 10th Percentile Forecast of Baseline Winter Coincident Peak Demand due to Weather

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

10th Percentile of Winter Coincident Peak Demand due to Weather - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022-23	2,098	1,548	2,391	824	1,196	1,843	1,433	455	801	6,926	2,982	22,497
2023-24	2,132	1,571	2,518	829	1,207	1,857	1,455	459	809	7,007	3,025	22,869
2024-25	2,173	1,595	2,528	829	1,213	1,869	1,476	460	810	7,057	3,040	23,050
2025-26	2,215	1,619	2,536	829	1,220	1,886	1,502	461	813	7,135	3,071	23,287
2026-27	2,258	1,646	2,547	829	1,230	1,908	1,531	462	823	7,273	3,125	23,632
2027-28	2,300	1,677	2,561	829	1,243	1,936	1,565	466	836	7,470	3,197	24,080
2028-29	2,346	1,708	2,582	829	1,260	1,972	1,606	470	854	7,728	3,287	24,642
2029-30	2,401	1,740	2,610	830	1,282	2,015	1,656	476	875	8,033	3,393	25,311
2030-31	2,466	1,780	2,647	832	1,312	2,069	1,715	484	900	8,374	3,518	26,097
2031-32	2,545	1,830	2,700	835	1,349	2,133	1,785	495	934	8,803	3,663	27,072
2032-33	2,636	1,889	2,764	839	1,393	2,205	1,863	507	974	9,318	3,812	28,200
2033-34	2,735	1,950	2,841	844	1,442	2,282	1,945	522	1,020	9,920	3,957	29,458
2034-35	2,837	2,012	2,917	848	1,493	2,361	2,029	535	1,065	10,535	4,097	30,729
2035-36	2,940	2,076	2,994	854	1,545	2,442	2,113	549	1,111	11,142	4,239	32,005
2036-37	3,055	2,148	3,082	860	1,603	2,534	2,206	565	1,162	11,794	4,396	33,405
2037-38	3,181	2,227	3,178	865	1,668	2,635	2,308	584	1,217	12,490	4,571	34,924
2038-39	3,305	2,304	3,272	871	1,731	2,736	2,408	603	1,272	13,158	4,741	36,401
2039-40	3,410	2,371	3,351	875	1,787	2,825	2,498	620	1,320	13,713	4,892	37,662
2040-41	3,497	2,426	3,416	878	1,832	2,897	2,573	633	1,361	14,128	5,013	38,654
2041-42	3,572	2,476	3,470	881	1,872	2,962	2,641	644	1,395	14,450	5,116	39,479
2042-43	3,636	2,518	3,516	883	1,904	3,018	2,699	654	1,426	14,690	5,206	40,150
2043-44	3,691	2,552	3,554	885	1,931	3,067	2,752	664	1,454	14,879	5,287	40,716
2044-45	3,741	2,584	3,587	886	1,956	3,112	2,798	672	1,479	15,027	5,363	41,205
2045-46	3,781	2,611	3,613	886	1,975	3,149	2,838	680	1,502	15,125	5,429	41,589
2046-47	3,808	2,629	3,627	886	1,988	3,177	2,868	684	1,520	15,167	5,478	41,832
2047-48	3,822	2,637	3,630	885	1,992	3,192	2,887	686	1,533	15,170	5,511	41,945
2048-49	3,827	2,641	3,625	884	1,992	3,201	2,898	687	1,542	15,151	5,536	41,984
2049-50	3,827	2,641	3,616	882	1,989	3,208	2,907	687	1,552	15,127	5,557	41,993
2050-51	3,825	2,639	3,605	879	1,986	3,211	2,912	688	1,559	15,101	5,575	41,980
2051-52	3,821	2,635	3,593	878	1,981	3,212	2,917	687	1,566	15,080	5,592	41,962
2052-53	3,817	2,633	3,585	878	1,977	3,212	2,917	686	1,569	15,070	5,598	41,942

Note: 10th percentile winter peak demand forecast is representative of a warmer than expected winter peak day.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-7e: 99th Percentile Forecast of Baseline Summer Coincident Peak Demand due to Weather

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

99th Percentile of Summer Coincident Peak Demand due to Weather - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	2,996	2,235	3,040	724	1,499	2,755	2,508	695	1,523	11,701	5,760	35,436
2023	3,069	2,392	3,124	773	1,467	2,716	2,499	700	1,531	11,802	5,640	35,713
2024	3,047	2,391	3,077	773	1,432	2,682	2,490	695	1,523	11,785	5,548	35,443
2025	3,030	2,389	3,030	772	1,401	2,650	2,481	692	1,516	11,729	5,448	35,138
2026	3,016	2,385	2,981	770	1,374	2,623	2,474	690	1,510	11,721	5,407	34,951
2027	3,005	2,382	2,937	767	1,351	2,603	2,471	690	1,510	11,749	5,432	34,897
2028	2,989	2,380	2,898	763	1,333	2,590	2,473	692	1,514	11,814	5,475	34,921
2029	2,987	2,373	2,870	760	1,323	2,589	2,483	696	1,527	11,947	5,533	35,088
2030	2,987	2,371	2,850	758	1,317	2,596	2,498	704	1,541	12,114	5,590	35,326
2031	2,995	2,376	2,842	754	1,320	2,607	2,515	712	1,558	12,292	5,646	35,617
2032	3,009	2,383	2,846	752	1,325	2,624	2,534	718	1,573	12,442	5,704	35,910
2033	3,033	2,397	2,861	752	1,336	2,645	2,558	724	1,588	12,546	5,762	36,202
2034	3,064	2,415	2,884	753	1,352	2,672	2,586	728	1,597	12,625	5,820	36,496
2035	3,097	2,434	2,912	757	1,368	2,699	2,615	733	1,604	12,699	5,878	36,796
2036	3,127	2,450	2,934	758	1,383	2,725	2,640	736	1,612	12,774	5,941	37,080
2037	3,149	2,461	2,952	758	1,394	2,745	2,658	739	1,621	12,857	6,001	37,335
2038	3,167	2,470	2,967	758	1,405	2,762	2,673	744	1,630	12,934	6,059	37,569
2039	3,185	2,480	2,980	758	1,415	2,779	2,687	748	1,639	13,018	6,114	37,803
2040	3,201	2,490	2,995	758	1,425	2,795	2,699	752	1,647	13,094	6,161	38,017
2041	3,214	2,498	3,007	758	1,434	2,808	2,711	755	1,653	13,164	6,197	38,199
2042	3,221	2,502	3,015	757	1,442	2,817	2,717	758	1,661	13,228	6,230	38,348
2043	3,226	2,503	3,020	754	1,448	2,824	2,722	762	1,669	13,296	6,263	38,487
2044	3,230	2,505	3,024	752	1,455	2,833	2,727	765	1,678	13,364	6,294	38,627
2045	3,237	2,508	3,032	751	1,461	2,844	2,732	769	1,684	13,428	6,321	38,767
2046	3,245	2,514	3,040	750	1,467	2,854	2,739	772	1,692	13,483	6,349	38,905
2047	3,252	2,517	3,045	749	1,473	2,862	2,745	775	1,698	13,538	6,379	39,033
2048	3,256	2,521	3,049	748	1,476	2,869	2,749	777	1,703	13,580	6,411	39,139
2049	3,262	2,524	3,052	745	1,479	2,875	2,754	781	1,710	13,628	6,442	39,252
2050	3,267	2,528	3,057	744	1,483	2,883	2,758	783	1,717	13,677	6,475	39,372
2051	3,273	2,532	3,062	743	1,487	2,889	2,763	786	1,721	13,732	6,510	39,498
2052	3,275	2,534	3,065	743	1,488	2,893	2,764	787	1,724	13,760	6,527	39,560

Note: 99th percentile summer peak demand forecast is representative of an extremely hot and humid (well above expected weather) summer peak day.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Note: Forecast values assume no demand response reductions.

Table I-7f: 99th Percentile Forecast of Baseline Winter Coincident Peak Demand due to Weather

Reflects Impacts of Energy Saving Programs & Behind-the-Meter Generation

99th Percentile of Winter Coincident Peak Demand due to Weather - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022-23	2,463	1,818	2,808	967	1,404	2,164	1,683	534	941	8,133	3,502	26,417
2023-24	2,503	1,845	2,957	973	1,417	2,180	1,708	538	950	8,228	3,552	26,851
2024-25	2,552	1,873	2,969	973	1,424	2,195	1,734	541	951	8,287	3,570	27,069
2025-26	2,602	1,902	2,979	973	1,433	2,215	1,764	542	955	8,379	3,607	27,351
2026-27	2,651	1,933	2,991	973	1,444	2,240	1,798	543	966	8,541	3,670	27,750
2027-28	2,701	1,969	3,007	973	1,459	2,273	1,838	547	982	8,772	3,755	28,276
2028-29	2,755	2,006	3,032	973	1,479	2,315	1,886	552	1,003	9,075	3,860	28,936
2029-30	2,819	2,043	3,065	975	1,506	2,366	1,945	559	1,027	9,433	3,985	29,723
2030-31	2,896	2,091	3,108	977	1,541	2,429	2,014	568	1,057	9,834	4,132	30,647
2031-32	2,989	2,149	3,171	981	1,584	2,505	2,096	582	1,097	10,338	4,302	31,794
2032-33	3,096	2,218	3,246	985	1,636	2,589	2,188	596	1,144	10,943	4,477	33,118
2033-34	3,212	2,290	3,336	991	1,694	2,680	2,284	613	1,197	11,649	4,647	34,593
2034-35	3,331	2,363	3,425	996	1,754	2,773	2,383	628	1,250	12,371	4,811	36,085
2035-36	3,453	2,438	3,516	1,003	1,814	2,868	2,481	645	1,305	13,084	4,978	37,585
2036-37	3,588	2,522	3,619	1,009	1,883	2,975	2,591	663	1,364	13,849	5,162	39,225
2037-38	3,736	2,615	3,732	1,016	1,959	3,095	2,710	686	1,430	14,668	5,368	41,015
2038-39	3,881	2,706	3,842	1,023	2,033	3,213	2,828	708	1,494	15,451	5,567	42,746
2039-40	4,005	2,784	3,935	1,027	2,099	3,317	2,933	728	1,550	16,104	5,745	44,227
2040-41	4,106	2,849	4,011	1,032	2,152	3,402	3,022	743	1,598	16,590	5,886	45,391
2041-42	4,195	2,908	4,075	1,035	2,198	3,478	3,101	756	1,639	16,968	6,008	46,361
2042-43	4,270	2,957	4,128	1,037	2,236	3,544	3,170	768	1,675	17,250	6,113	47,148
2043-44	4,334	2,997	4,174	1,039	2,268	3,601	3,232	779	1,707	17,473	6,208	47,812
2044-45	4,393	3,035	4,213	1,040	2,296	3,654	3,286	789	1,737	17,646	6,298	48,387
2045-46	4,440	3,066	4,242	1,040	2,320	3,698	3,332	798	1,764	17,761	6,375	48,836
2046-47	4,472	3,087	4,259	1,040	2,334	3,730	3,368	804	1,785	17,811	6,433	49,123
2047-48	4,488	3,097	4,262	1,039	2,340	3,748	3,390	806	1,800	17,814	6,471	49,255
2048-49	4,494	3,101	4,257	1,038	2,340	3,759	3,403	807	1,811	17,792	6,501	49,303
2049-50	4,494	3,101	4,247	1,036	2,336	3,767	3,414	807	1,822	17,763	6,526	49,313
2050-51	4,492	3,099	4,234	1,033	2,332	3,770	3,420	808	1,831	17,734	6,547	49,300
2051-52	4,487	3,095	4,219	1,032	2,326	3,772	3,425	807	1,839	17,709	6,566	49,277
2052-53	4,482	3,091	4,210	1,030	2,322	3,772	3,425	806	1,842	17,697	6,574	49,251

Note: 99th percentile winter peak demand forecast is representative of an extremely cold (well below expected weather) winter peak day.

Note: Expected weather conditions include an increasing temperature trend from the NYISO *Climate Change Impact Study Phase I* report.

Table I-8a: Energy Efficiency and Codes & Standards Energy Impacts

Reflects Cumulative Impacts

Estimated Historical Cumulative Reductions in Annual Energy by Zone - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2004	228	114	224	21	105	168	46	29	42	371	21	1,369
2005	320	163	316	29	148	237	68	42	63	555	36	1,977
2006	451	236	447	41	210	334	100	61	92	804	57	2,833
2007	540	287	537	49	253	401	131	76	118	1,039	81	3,512
2008	588	347	587	53	275	441	153	82	130	1,125	255	4,036
2009	703	423	698	63	331	535	228	99	157	1,371	429	5,037
2010	873	507	838	75	411	672	297	120	207	1,840	639	6,479
2011	1,124	651	1,049	94	525	865	439	152	273	2,433	880	8,485
2012	1,279	758	1,192	107	602	988	534	172	311	2,768	1,173	9,884
2013	1,442	886	1,353	121	687	1,125	643	197	356	3,206	1,513	11,529
2014	1,641	1,031	1,542	137	787	1,284	771	225	412	3,687	1,852	13,369
2015	1,859	1,170	1,742	154	896	1,471	897	252	459	4,105	2,228	15,233
2016	2,052	1,260	1,898	168	989	1,643	1,055	271	504	4,508	2,647	16,995
2017	2,279	1,397	2,097	186	1,102	1,839	1,258	302	580	5,195	2,986	19,221
2018	2,500	1,517	2,290	203	1,212	2,030	1,467	333	658	5,901	3,377	21,488
2019	2,745	1,650	2,501	222	1,333	2,244	1,711	369	760	6,814	3,803	24,152
2020	2,987	1,778	2,709	241	1,452	2,455	1,934	404	855	7,664	4,264	26,743
2021	3,259	1,894	2,929	263	1,583	2,697	2,146	436	944	8,455	4,609	29,215

Forecast of Cumulative Reductions in Annual Energy by Zone Relative to 2021 - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	276	142	239	21	136	240	220	37	96	858	351	2,616
2023	572	310	509	44	284	491	449	82	203	1,807	707	5,458
2024	895	499	814	71	447	762	679	133	322	2,868	1,067	8,557
2025	1,245	699	1,185	103	631	1,040	905	199	446	3,977	1,432	11,862
2026	1,598	920	1,571	136	819	1,315	1,125	268	571	5,096	1,799	15,218
2027	1,938	1,139	1,948	168	1,001	1,579	1,339	336	691	6,160	2,167	18,466
2028	2,259	1,354	2,314	199	1,175	1,824	1,535	402	801	7,143	2,539	21,545
2029	2,563	1,565	2,668	229	1,340	2,053	1,715	466	903	8,054	2,891	24,447
2030	2,850	1,774	3,013	258	1,499	2,266	1,882	528	997	8,895	3,224	27,186
2031	3,124	1,932	3,348	286	1,651	2,466	2,038	589	1,085	9,676	3,540	29,735
2032	3,336	2,067	3,558	304	1,760	2,641	2,180	626	1,166	10,404	3,841	31,883
2033	3,535	2,195	3,754	321	1,862	2,804	2,313	661	1,242	11,081	4,126	33,894
2034	3,720	2,313	3,936	337	1,957	2,955	2,436	693	1,313	11,713	4,397	35,770
2035	3,892	2,425	4,106	351	2,045	3,097	2,549	723	1,379	12,303	4,657	37,527
2036	4,052	2,529	4,265	365	2,128	3,229	2,657	751	1,442	12,860	4,904	39,182
2037	4,203	2,628	4,414	378	2,205	3,352	2,755	778	1,500	13,383	5,140	40,736
2038	4,344	2,721	4,553	390	2,277	3,468	2,849	803	1,556	13,876	5,368	42,205
2039	4,476	2,810	4,684	401	2,345	3,577	2,936	826	1,608	14,342	5,585	43,590
2040	4,601	2,893	4,808	412	2,409	3,679	3,019	849	1,657	14,784	5,795	44,906
2041	4,719	2,973	4,925	422	2,470	3,776	3,098	870	1,705	15,207	5,998	46,163
2042	4,831	3,050	5,037	432	2,528	3,867	3,174	890	1,750	15,608	6,193	47,360
2043	4,937	3,125	5,143	441	2,582	3,954	3,244	909	1,792	15,988	6,382	48,497
2044	5,037	3,194	5,243	449	2,634	4,036	3,311	928	1,833	16,349	6,564	49,578
2045	5,134	3,262	5,340	458	2,684	4,114	3,376	945	1,872	16,696	6,746	50,627
2046	5,227	3,327	5,434	466	2,732	4,191	3,438	962	1,909	17,030	6,925	51,641
2047	5,318	3,393	5,526	474	2,779	4,265	3,500	979	1,946	17,358	7,104	52,642
2048	5,407	3,456	5,616	481	2,825	4,336	3,559	996	1,982	17,675	7,281	53,614
2049	5,492	3,520	5,703	489	2,869	4,405	3,616	1,012	2,016	17,980	7,454	54,556
2050	5,572	3,578	5,785	496	2,911	4,470	3,672	1,027	2,048	18,268	7,624	55,451
2051	5,652	3,638	5,868	503	2,953	4,534	3,727	1,042	2,080	18,554	7,797	56,348
2052	5,728	3,695	5,946	510	2,992	4,595	3,778	1,056	2,111	18,826	7,963	57,200

Table I-8b: Energy Efficiency and Codes & Standards Summer Peak Impacts

Reflects Cumulative Impacts

Reductions in Summer Coincident Peak Demand by Zone Relative to 2021 - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	34	23	34	3	18	27	25	6	14	122	59	365
2023	71	52	75	6	37	56	51	14	29	258	120	769
2024	112	84	122	10	59	87	78	23	46	409	183	1,213
2025	158	117	182	15	86	120	104	35	64	569	246	1,696
2026	206	156	246	21	114	154	129	47	82	731	311	2,197
2027	253	195	309	26	140	185	155	60	99	887	378	2,687
2028	298	234	371	31	167	215	179	72	116	1,033	444	3,160
2029	341	272	431	36	192	244	201	84	131	1,169	509	3,610
2030	382	311	492	41	217	271	222	96	145	1,296	571	4,044
2031	422	340	550	46	241	296	243	108	159	1,416	630	4,451
2032	451	366	584	49	257	318	261	114	171	1,527	688	4,786
2033	478	388	616	52	272	338	278	121	183	1,632	743	5,101
2034	504	410	646	54	285	357	293	127	194	1,732	795	5,397
2035	527	430	673	56	298	375	309	132	204	1,823	845	5,672
2036	549	451	699	59	310	392	324	137	214	1,910	892	5,937
2037	570	470	723	61	322	407	337	142	223	1,991	939	6,185
2038	590	486	746	63	332	422	349	146	232	2,066	983	6,415
2039	608	502	766	64	342	436	362	151	240	2,138	1,025	6,634
2040	624	517	785	66	351	448	374	154	247	2,205	1,064	6,835
2041	640	531	803	67	360	460	384	158	254	2,268	1,102	7,027
2042	654	545	819	69	367	471	393	161	261	2,325	1,138	7,203
2043	667	557	834	70	374	481	403	164	267	2,380	1,172	7,369
2044	679	569	848	71	381	491	412	167	272	2,429	1,204	7,523
2045	691	580	860	72	387	500	418	169	277	2,475	1,233	7,662
2046	702	590	873	73	393	508	425	172	282	2,520	1,263	7,801
2047	712	600	884	74	398	516	433	174	287	2,562	1,291	7,931
2048	722	608	895	75	404	524	441	176	292	2,602	1,318	8,057
2049	731	616	906	76	409	531	449	178	296	2,641	1,343	8,176
2050	740	626	915	77	413	537	454	180	300	2,676	1,366	8,284
2051	747	633	923	78	417	544	460	182	304	2,710	1,391	8,389
2052	755	641	931	78	421	550	465	184	307	2,742	1,413	8,487

Table I-8c: Energy Efficiency and Codes & Standards Winter Peak Impacts

Reflects Cumulative Impacts

Reductions in Winter Coincident Peak Demand by Zone Relative to 2021-22 - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022-23	22	14	22	2	11	17	15	4	8	76	36	227
2023-24	46	32	49	4	24	36	32	9	18	160	73	483
2024-25	72	53	79	7	38	56	47	15	29	255	112	763
2025-26	103	74	119	10	56	78	66	23	40	355	150	1,074
2026-27	135	98	162	14	74	100	81	31	51	457	190	1,393
2027-28	166	124	205	17	93	121	98	39	63	558	231	1,715
2028-29	197	148	248	21	111	142	114	48	74	656	272	2,031
2029-30	228	172	292	24	129	162	129	56	84	749	313	2,338
2030-31	258	199	335	28	147	182	143	65	94	841	353	2,645
2031-32	290	218	381	32	166	202	159	74	104	930	391	2,947
2032-33	314	235	409	34	179	220	173	79	115	1,022	432	3,212
2033-34	338	254	438	37	192	238	187	85	125	1,116	471	3,481
2034-35	361	269	466	39	205	255	200	91	136	1,211	511	3,744
2035-36	384	286	494	41	218	272	213	97	146	1,305	551	4,007
2036-37	408	303	522	44	231	290	229	102	157	1,401	592	4,279
2037-38	432	320	550	46	244	308	243	108	169	1,505	634	4,559
2038-39	455	335	578	48	257	325	257	114	180	1,608	678	4,835
2039-40	480	355	606	51	270	344	270	120	192	1,714	721	5,123
2040-41	504	371	635	53	284	362	286	126	204	1,819	765	5,409
2041-42	528	388	662	56	296	380	300	131	216	1,926	810	5,693
2042-43	551	405	689	58	309	398	317	137	228	2,032	855	5,979
2043-44	575	423	716	60	322	416	332	143	239	2,133	899	6,258
2044-45	601	442	745	63	336	436	348	148	250	2,231	942	6,542
2045-46	627	460	774	65	350	456	365	154	261	2,325	986	6,823
2046-47	654	480	804	68	364	477	383	160	271	2,417	1,029	7,107
2047-48	683	502	838	71	380	499	401	166	281	2,509	1,074	7,404
2048-49	713	525	871	73	396	523	423	171	291	2,598	1,118	7,702
2049-50	744	549	906	76	413	547	444	177	300	2,680	1,162	7,998
2050-51	775	574	939	79	429	570	463	183	309	2,752	1,203	8,276
2051-52	807	596	973	82	446	595	484	188	316	2,821	1,246	8,554
2052-53	838	620	1,008	85	463	620	506	193	324	2,886	1,286	8,829

Table I-9a: Solar PV Nameplate Capacity, Behind-the-Meter

Reflects Total Cumulative Nameplate Capacity

Nameplate Capacity by Zone - MW DC

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2012	12	2	8	1	5	17	16	2	4	16	88	171
2013	17	4	16	1	7	35	28	3	10	27	122	270
2014	22	10	26	1	14	64	52	5	16	48	186	444
2015	32	20	45	2	28	99	95	10	25	73	286	715
2016	43	31	71	2	41	151	137	16	34	108	392	1,026
2017	66	55	96	3	68	221	161	20	41	146	473	1,350
2018	94	77	131	5	99	309	201	25	48	190	537	1,716
2019	128	102	196	20	135	354	296	30	56	234	693	2,244
2020	200	112	265	20	225	453	379	37	64	277	754	2,786
2021	287	178	422	30	307	522	488	47	77	338	827	3,523
2022	443	225	573	50	443	628	530	55	85	367	870	4,269
2023	615	289	743	62	589	770	609	59	94	401	921	5,152
2024	822	349	910	70	729	911	674	70	109	439	988	6,071
2025	953	402	1,051	81	842	1,049	759	80	128	494	1,087	6,926
2026	1,079	452	1,185	91	951	1,181	834	90	146	549	1,182	7,740
2027	1,197	499	1,311	100	1,053	1,304	899	98	164	603	1,272	8,500
2028	1,299	538	1,419	108	1,140	1,407	947	106	179	666	1,353	9,162
2029	1,384	570	1,507	114	1,212	1,491	979	111	192	721	1,424	9,705
2030	1,439	590	1,563	118	1,258	1,544	998	114	202	763	1,479	10,068
2031	1,472	603	1,598	121	1,286	1,578	1,020	117	206	780	1,521	10,302
2032	1,496	613	1,625	123	1,307	1,604	1,037	119	210	793	1,557	10,484
2033	1,517	621	1,647	125	1,325	1,626	1,051	120	213	803	1,589	10,637
2034	1,535	629	1,666	126	1,341	1,645	1,063	122	215	813	1,617	10,772
2035	1,551	635	1,684	127	1,355	1,662	1,074	123	218	821	1,641	10,891
2036	1,565	641	1,700	129	1,367	1,678	1,084	124	220	829	1,662	10,999
2037	1,579	647	1,714	130	1,379	1,692	1,093	125	221	836	1,681	11,097
2038	1,591	652	1,727	131	1,390	1,705	1,102	126	223	842	1,697	11,186
2039	1,602	656	1,739	132	1,399	1,717	1,109	127	225	848	1,711	11,265
2040	1,612	661	1,751	132	1,408	1,728	1,116	128	226	853	1,724	11,339
2041	1,622	664	1,761	133	1,417	1,738	1,123	129	227	858	1,735	11,407
2042	1,630	668	1,770	134	1,424	1,747	1,128	129	229	863	1,745	11,467
2043	1,638	671	1,778	135	1,431	1,755	1,134	130	230	867	1,753	11,522
2044	1,645	674	1,786	135	1,437	1,763	1,138	131	231	870	1,760	11,570
2045	1,652	677	1,793	136	1,442	1,770	1,143	131	232	874	1,766	11,616
2046	1,657	679	1,799	136	1,448	1,776	1,147	132	232	877	1,772	11,655
2047	1,663	681	1,805	137	1,452	1,782	1,151	132	233	880	1,777	11,693
2048	1,668	683	1,811	137	1,457	1,787	1,154	132	234	882	1,781	11,726
2049	1,673	685	1,816	137	1,461	1,792	1,157	133	235	885	1,785	11,759
2050	1,677	687	1,820	138	1,464	1,797	1,160	133	235	887	1,788	11,786
2051	1,681	688	1,824	138	1,468	1,801	1,163	133	236	889	1,791	11,812
2052	1,684	690	1,828	138	1,471	1,805	1,165	134	236	891	1,794	11,836

Note: Historical values reflect information from New York State's *"Solar Electric Programs Reported by NYSERDA"* database, and from Standardized Interconnection Requiriements (SIR) Inventory Information submitted by Transmission Owners.

Note: Nameplate values reflect aggregate MW DC rating of installed panels.

Table I-9b: Solar PV Annual Energy Reductions, Behind-the-Meter

Reflects Total Cumulative Impacts

Reductions in Annual Energy by Zone - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	463	235	590	56	537	679	604	67	99	391	914	4,635
2023	643	303	768	69	716	834	694	71	111	428	968	5,605
2024	861	368	942	78	886	987	770	86	129	469	1,040	6,616
2025	1,001	424	1,088	90	1,026	1,138	867	98	152	530	1,145	7,559
2026	1,147	480	1,242	102	1,165	1,295	962	110	174	594	1,261	8,532
2027	1,288	534	1,392	113	1,296	1,444	1,046	120	196	659	1,374	9,462
2028	1,414	580	1,525	123	1,410	1,574	1,112	131	215	735	1,479	10,298
2029	1,525	620	1,640	131	1,507	1,685	1,160	137	232	803	1,576	11,016
2030	1,604	646	1,722	137	1,572	1,763	1,193	142	245	858	1,656	11,538
2031	1,648	663	1,769	141	1,611	1,809	1,224	146	251	880	1,711	11,853
2032	1,683	676	1,807	144	1,641	1,846	1,249	148	256	898	1,760	12,108
2033	1,714	687	1,840	146	1,667	1,878	1,271	150	260	913	1,804	12,330
2034	1,742	698	1,870	148	1,691	1,907	1,290	153	264	928	1,844	12,535
2035	1,769	707	1,899	150	1,713	1,935	1,308	154	268	941	1,880	12,724
2036	1,793	716	1,926	153	1,732	1,961	1,325	156	271	954	1,913	12,900
2037	1,817	725	1,951	154	1,752	1,985	1,341	157	273	965	1,943	13,063
2038	1,839	733	1,975	156	1,770	2,008	1,357	159	276	976	1,971	13,220
2039	1,860	739	1,998	158	1,786	2,030	1,370	160	279	987	1,996	13,363
2040	1,880	747	2,021	158	1,801	2,050	1,384	162	281	996	2,020	13,500
2041	1,895	752	2,036	159	1,815	2,066	1,395	163	283	1,004	2,036	13,604
2042	1,908	758	2,050	161	1,827	2,080	1,404	163	286	1,012	2,052	13,701
2043	1,921	762	2,063	162	1,838	2,093	1,413	165	288	1,018	2,065	13,788
2044	1,933	767	2,076	162	1,849	2,106	1,421	166	289	1,024	2,077	13,870
2045	1,945	771	2,088	164	1,858	2,118	1,430	166	291	1,030	2,088	13,949
2046	1,954	775	2,099	164	1,868	2,128	1,437	168	292	1,036	2,098	14,019
2047	1,965	778	2,110	165	1,876	2,139	1,444	168	293	1,041	2,108	14,087
2048	1,975	782	2,121	165	1,885	2,148	1,451	168	295	1,045	2,117	14,152
2049	1,985	785	2,131	166	1,893	2,158	1,457	170	297	1,051	2,125	14,218
2050	1,993	789	2,139	167	1,899	2,167	1,463	170	297	1,055	2,133	14,272
2051	2,002	791	2,148	167	1,907	2,176	1,469	170	299	1,060	2,140	14,329
2052	2,009	795	2,157	167	1,913	2,184	1,474	172	299	1,064	2,147	14,381

Table I-9c: Solar PV Peak Reductions, Behind-the-Meter

Reflects Total Cumulative Impacts

Reductions in Summer Coincident Peak Demand by Zone - MW AC

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	98	54	126	9	91	147	123	13	20	94	210	985
2023	127	67	153	10	112	170	133	13	21	96	211	1,113
2024	158	74	175	11	129	187	137	14	22	98	211	1,216
2025	174	81	192	12	142	203	146	15	25	105	219	1,314
2026	187	87	205	12	150	216	151	16	27	110	225	1,386
2027	194	89	211	13	155	223	152	17	28	113	226	1,421
2028	195	90	213	13	156	223	149	17	28	116	223	1,423
2029	197	90	212	12	156	222	145	16	28	118	220	1,416
2030	192	87	207	12	152	216	138	16	28	117	214	1,379
2031	184	83	197	12	144	205	131	15	27	112	205	1,315
2032	177	80	189	11	139	196	126	14	25	107	197	1,261
2033	169	76	181	11	133	187	119	13	25	102	189	1,205
2034	161	72	172	10	126	176	113	13	23	96	180	1,142
2035	153	69	162	9	119	166	106	12	22	91	170	1,079
2036	146	65	155	9	114	157	101	12	20	86	161	1,026
2037	138	62	146	9	108	148	95	11	20	81	152	970
2038	131	58	139	8	103	140	90	10	18	76	144	917
2039	124	55	131	8	97	132	85	10	17	72	135	866
2040	117	51	124	8	92	124	80	9	16	67	127	815
2041	109	48	115	7	86	116	74	9	15	62	118	759
2042	102	44	108	7	81	108	69	8	14	58	109	708
2043	94	41	100	6	75	100	64	7	13	53	101	654
2044	87	38	93	6	69	91	58	7	12	49	92	602
2045	81	35	86	5	64	84	54	6	11	45	84	555
2046	74	32	79	5	59	77	49	6	10	41	77	509
2047	69	29	74	5	56	72	46	5	9	38	71	474
2048	65	27	69	4	53	67	43	5	9	35	66	443
2049	61	26	65	4	50	63	41	5	8	33	62	418
2050	57	25	62	4	47	60	38	4	8	31	59	395
2051	55	23	58	4	45	57	36	4	8	29	56	375
2052	52	22	55	4	43	54	35	4	7	28	53	357

Note: The actual impact of solar PV varies considerably by hour of day. The hour of the NYCA coincident peak varies annually. Currently, the NYCA summer peak typically occurs in late afternoon. The NYCA summer peak will likely shift into the evening as additional BTM PV is added to the system, and as electric vehicle charging impacts increase during the evening hours.

Note: The winter coincident peak behind-the-meter solar PV impact is zero because the system typically peaks after sunset.

Table I-9d: Maximum Solar PV Generation, Behind-the-Meter

Reflects Total Cumulative Impacts

Maximum Hourly NYCA BTM Solar PV Generation - MW AC

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	267	153	318	15	245	365	398	38	61	244	651	2,755
2023	398	194	426	23	345	441	439	44	68	265	686	3,329
2024	546	244	542	28	448	535	499	48	76	290	730	3,986
2025	700	291	653	32	544	629	554	57	88	320	788	4,656
2026	807	333	750	37	625	720	621	64	103	359	864	5,283
2027	908	373	841	41	702	807	677	71	118	398	936	5,872
2028	1,002	409	925	45	773	885	726	78	131	437	1,004	6,415
2029	1,082	438	997	48	832	950	761	83	141	480	1,066	6,878
2030	1,146	462	1,052	51	879	1,001	785	86	150	517	1,118	7,247
2031	1,185	476	1,087	52	909	1,033	800	89	156	542	1,158	7,487
2032	1,211	487	1,110	54	928	1,055	817	92	160	552	1,189	7,655
2033	1,230	494	1,127	55	942	1,071	830	92	162	562	1,216	7,781
2034	1,246	501	1,142	55	956	1,085	841	94	166	570	1,240	7,896
2035	1,260	507	1,155	55	966	1,097	851	94	168	575	1,262	7,990
2036	1,275	512	1,168	56	976	1,109	859	95	169	582	1,280	8,081
2037	1,285	517	1,177	57	985	1,120	866	96	171	587	1,295	8,156
2038	1,296	521	1,187	57	993	1,128	873	98	172	591	1,309	8,225
2039	1,307	524	1,196	58	1,000	1,137	880	98	174	596	1,322	8,292
2040	1,315	528	1,205	58	1,007	1,145	886	99	173	599	1,332	8,347
2041	1,322	532	1,213	58	1,013	1,152	892	99	174	603	1,342	8,400
2042	1,330	535	1,219	58	1,020	1,158	896	100	176	606	1,351	8,449
2043	1,337	537	1,224	59	1,025	1,164	901	100	176	610	1,358	8,491
2044	1,344	540	1,231	59	1,030	1,169	905	100	177	613	1,365	8,533
2045	1,350	542	1,235	59	1,034	1,174	909	101	178	616	1,369	8,567
2046	1,355	545	1,241	60	1,037	1,180	912	101	179	618	1,374	8,602
2047	1,360	546	1,245	60	1,041	1,183	915	102	179	621	1,378	8,630
2048	1,363	548	1,249	60	1,044	1,186	918	102	180	622	1,382	8,654
2049	1,367	550	1,253	60	1,048	1,190	921	102	181	623	1,385	8,680
2050	1,371	551	1,257	60	1,051	1,193	923	103	182	625	1,388	8,704
2051	1,374	552	1,260	61	1,053	1,196	926	103	182	627	1,390	8,724
2052	1,377	554	1,262	61	1,056	1,199	928	103	182	628	1,393	8,743

Note: These values represent the hour with maximum BTM solar generation across the NYCA.

Table I-10a: Non-Solar Distributed Generation Nameplate Capacity, Behind-the-Meter

Reflects Total Cumulative Nameplate Capacity

Namplate Capacity by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2012	16	2	36	0	4	9	3	1	3	65	0	139
2013	16	2	36	0	6	9	4	1	5	72	0	151
2014	16	2	42	0	8	11	4	1	5	73	0	162
2015	16	2	43	0	10	12	4	1	5	75	2	170
2016	16	2	45	0	12	14	5	1	7	79	5	186
2017	16	2	46	1	13	23	7	1	8	84	7	208
2018	17	2	47	1	13	32	7	1	8	102	9	239
2019	17	2	48	1	13	32	7	1	8	131	12	272
2020	17	2	49	1	14	33	7	1	11	147	24	306
2021	17	2	49	1	18	35	8	1	11	157	37	336
2022	18	3	52	1	27	36	8	1	12	163	39	360
2023	19	3	55	1	27	42	9	1	12	169	38	376
2024	20	3	58	1	28	45	10	1	14	175	42	397
2025	20	3	60	1	30	47	10	1	14	181	43	410
2026	21	3	63	1	31	48	10	2	15	186	43	423
2027	22	3	65	1	32	49	10	2	15	192	44	435
2028	22	3	66	1	33	51	10	2	16	197	44	445
2029	22	3	68	1	34	52	10	2	17	202	45	456
2030	23	4	70	1	35	53	10	2	17	207	45	467
2031	23	4	71	2	36	54	11	2	18	212	45	478
2032	23	4	72	2	37	55	11	2	18	217	46	487
2033	23	4	73	2	37	57	11	2	19	221	46	495
2034	24	4	74	2	38	58	11	2	19	225	47	504
2035	24	4	75	2	39	59	11	2	20	230	47	513
2036	24	4	76	2	40	60	11	2	20	234	47	520
2037	24	4	76	2	41	61	11	2	21	238	48	528
2038	24	4	77	2	41	62	11	2	21	242	48	534
2039	24	4	77	2	42	63	12	2	22	246	49	543
2040	24	4	78	2	43	63	12	3	22	249	49	549
2041	24	4	78	2	43	64	12	3	22	253	49	554
2042	24	4	79	2	44	65	12	3	23	256	50	562
2043	24	4	79	2	45	66	12	3	23	260	50	568
2044	24	4	79	2	45	67	12	3	23	263	50	572
2045	24	4	80	2	46	67	12	3	24	266	50	578
2046	24	4	80	2	47	68	12	3	24	269	51	584
2047	24	4	80	2	47	69	12	3	25	272	51	589
2048	25	4	80	2	48	70	12	3	25	275	51	595
2049	25	4	80	3	48	70	12	3	25	278	52	600
2050	25	4	81	3	49	71	12	3	25	280	52	605
2051	25	4	81	3	49	72	13	3	26	283	52	611
2052	25	4	81	3	50	72	13	3	26	285	52	614

Note: Historical values reflect information from NYSERDA's *"DER Integrated Data System"* and from Transmission Owners.

Note: Resources include combined heat and power, anaerobic digesters, fuel cell facilities, small wind resources, and others.

Table I-10b: Non-Solar Distributed Generation Annual Energy Reductions, Behind-the-Meter

Reflects Total Cumulative Impacts

Reductions in Annual Energy by Zone - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	104	17	301	6	156	208	46	6	69	600	143	1,656
2023	110	17	318	6	156	243	52	6	69	622	140	1,739
2024	116	17	335	6	162	260	58	6	81	644	155	1,840
2025	116	17	347	6	173	272	58	6	81	666	158	1,900
2026	121	17	364	6	179	278	58	12	87	684	158	1,964
2027	127	17	376	6	185	283	58	12	87	706	162	2,019
2028	127	17	382	6	191	295	58	12	93	725	162	2,068
2029	127	17	393	6	197	301	58	12	98	743	166	2,118
2030	133	23	405	6	202	306	58	12	98	762	166	2,171
2031	133	23	410	12	208	312	64	12	104	780	166	2,224
2032	133	23	416	12	214	318	64	12	104	798	169	2,263
2033	133	23	422	12	214	330	64	12	110	813	169	2,302
2034	139	23	428	12	220	335	64	12	110	828	173	2,344
2035	139	23	434	12	225	341	64	12	116	846	173	2,385
2036	139	23	439	12	231	347	64	12	116	861	173	2,417
2037	139	23	439	12	237	353	64	12	121	876	177	2,453
2038	139	23	445	12	237	358	64	12	121	890	177	2,478
2039	139	23	445	12	243	364	69	12	127	905	180	2,519
2040	139	23	451	12	249	364	69	17	127	916	180	2,547
2041	139	23	451	12	249	370	69	17	127	931	180	2,568
2042	139	23	457	12	254	376	69	17	133	942	184	2,606
2043	139	23	457	12	260	382	69	17	133	957	184	2,633
2044	139	23	457	12	260	387	69	17	133	968	184	2,649
2045	139	23	463	12	266	387	69	17	139	979	184	2,678
2046	139	23	463	12	272	393	69	17	139	990	188	2,705
2047	139	23	463	12	272	399	69	17	145	1,001	188	2,728
2048	145	23	463	12	278	405	69	17	145	1,012	188	2,757
2049	145	23	463	17	278	405	69	17	145	1,023	191	2,776
2050	145	23	468	17	283	410	69	17	145	1,030	191	2,798
2051	145	23	468	17	283	416	75	17	150	1,041	191	2,826
2052	145	23	468	17	289	416	75	17	150	1,049	191	2,840

Table I-10c: Non-Solar Distributed Generation Peak Reductions, Behind-the-Meter

Reflects Total Cumulative Impacts

Reductions in Summer and Winter Coincident Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	16	3	45	1	23	31	7	1	10	122	29	288
2023	17	3	48	1	23	37	8	1	10	127	29	304
2024	17	3	50	1	24	39	9	1	12	131	32	319
2025	17	3	52	1	26	41	9	1	12	136	32	330
2026	18	3	55	1	27	42	9	2	13	140	32	342
2027	19	3	57	1	28	43	9	2	13	144	33	352
2028	19	3	57	1	29	44	9	2	14	148	33	359
2029	19	3	59	1	30	45	9	2	15	152	34	369
2030	20	3	61	1	30	46	9	2	15	155	34	376
2031	20	3	62	2	31	47	10	2	16	159	34	386
2032	20	3	63	2	32	48	10	2	16	163	35	394
2033	20	3	64	2	32	50	10	2	17	166	35	401
2034	21	3	64	2	33	50	10	2	17	169	35	406
2035	21	3	65	2	34	51	10	2	17	173	35	413
2036	21	3	66	2	35	52	10	2	17	176	35	419
2037	21	3	66	2	36	53	10	2	18	179	36	426
2038	21	3	67	2	36	54	10	2	18	182	36	431
2039	21	3	67	2	37	55	10	2	19	185	37	438
2040	21	3	68	2	37	55	10	3	19	187	37	442
2041	21	3	68	2	37	56	10	3	19	190	37	446
2042	21	3	69	2	38	57	10	3	20	192	38	453
2043	21	3	69	2	39	57	10	3	20	195	38	457
2044	21	3	69	2	39	58	10	3	20	197	38	460
2045	21	3	70	2	40	58	10	3	21	200	38	466
2046	21	3	70	2	41	59	10	3	21	202	38	470
2047	21	3	70	2	41	60	10	3	22	204	38	474
2048	22	3	70	2	42	61	10	3	22	206	38	479
2049	22	3	70	3	42	61	10	3	22	209	39	484
2050	22	3	70	3	43	62	10	3	22	210	39	487
2051	22	3	70	3	43	63	11	3	23	212	39	492
2052	22	3	70	3	44	63	11	3	23	214	39	495

Note: Peak reductions reflect estimated summer reductions for the year listed, along with reductions for the following winter. For example, the values listed for 2022 reflect reductions to the 2022 summer peak and the 2022-23 winter peak.

Table I-11a: Electric Vehicle Stock Forecast
Reflects Total New York State Stock

Number of Electric Vehicles by Type - NYCA

Year	LDV (1)	MHDV (2)	Buses (3)	Total Stock
2022	158,100	500	1,600	160,200
2023	242,700	1,300	1,800	245,800
2024	351,900	2,500	2,100	356,500
2025	498,300	4,200	2,400	504,900
2026	698,100	6,600	2,800	707,500
2027	966,400	9,800	3,300	979,500
2028	1,311,600	14,000	3,800	1,329,400
2029	1,734,700	19,300	4,500	1,758,500
2030	2,231,200	25,900	5,300	2,262,400
2031	2,789,800	33,900	6,300	2,830,000
2032	3,390,900	43,100	7,400	3,441,400
2033	4,012,700	53,800	8,600	4,075,100
2034	4,633,000	65,700	9,900	4,708,600
2035	5,235,400	78,900	11,300	5,325,600
2036	5,802,900	93,100	12,900	5,908,900
2037	6,323,200	108,200	14,500	6,445,900
2038	6,790,100	123,800	16,200	6,930,100
2039	7,195,300	139,700	18,000	7,353,000
2040	7,532,700	155,500	19,700	7,707,900
2041	7,752,000	170,800	21,400	7,944,200
2042	7,872,100	185,400	23,100	8,080,600
2043	7,959,200	199,000	24,600	8,182,800
2044	8,018,600	211,200	26,100	8,255,900
2045	8,053,000	222,000	27,400	8,302,400
2046	8,066,000	231,100	28,500	8,325,600
2047	8,061,000	238,600	29,500	8,329,100
2048	8,041,900	244,700	30,200	8,316,800
2049	8,016,000	249,300	30,900	8,296,200
2050	7,989,500	252,600	31,400	8,273,500
2051	7,962,900	254,800	31,700	8,249,400
2052	7,936,500	256,100	32,000	8,224,600

(1) - Light Duty Vehicles, at most 8,500 lb.

(2) - Medium and Heavy Duty Vehicles, greater than 8,500 lb.

(3) - Includes school and transit buses.

Note: For reference, according to the New York State Department of Motor Vehicles, there are approximately 9.4 million LDVs, 550,000 MHDVs, and 60,000 buses currently registered in the state.

Table I-11b: Electric Vehicle Annual Energy Usage

Reflects Total Cumulative Impacts

Total Annual Energy Usage by Zone - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	35	32	35	2	16	41	47	17	39	152	151	567
2023	57	51	57	4	27	65	75	25	59	216	232	868
2024	88	76	87	6	43	97	111	36	84	300	335	1,263
2025	132	109	128	9	66	141	161	49	117	411	472	1,795
2026	194	155	187	13	98	202	230	67	160	562	655	2,523
2027	279	217	267	20	143	285	323	90	217	764	898	3,503
2028	393	296	372	28	202	392	444	118	288	1,025	1,204	4,762
2029	539	395	505	38	279	525	594	151	371	1,344	1,572	6,313
2030	717	512	667	51	374	684	774	187	466	1,722	1,997	8,151
2031	928	646	856	66	487	867	981	226	568	2,149	2,466	10,240
2032	1,167	792	1,068	84	617	1,069	1,208	265	673	2,614	2,961	12,518
2033	1,429	947	1,299	103	760	1,285	1,449	302	776	3,099	3,463	14,912
2034	1,708	1,106	1,542	124	913	1,508	1,698	335	872	3,590	3,954	17,350
2035	1,988	1,264	1,787	145	1,068	1,732	1,947	367	966	4,074	4,437	19,775
2036	2,260	1,418	2,026	165	1,221	1,952	2,188	399	1,057	4,541	4,904	22,131
2037	2,516	1,565	2,254	185	1,365	2,161	2,416	430	1,146	4,982	5,352	24,372
2038	2,748	1,701	2,463	203	1,498	2,357	2,628	461	1,232	5,391	5,778	26,460
2039	2,951	1,825	2,650	219	1,614	2,535	2,818	493	1,316	5,757	6,181	28,359
2040	3,131	1,935	2,818	233	1,720	2,694	2,986	521	1,389	6,076	6,534	30,037
2041	3,271	2,020	2,950	245	1,805	2,820	3,115	542	1,443	6,310	6,797	31,318
2042	3,376	2,082	3,052	254	1,871	2,916	3,210	556	1,481	6,474	6,982	32,254
2043	3,465	2,136	3,139	262	1,929	2,999	3,290	568	1,511	6,610	7,136	33,045
2044	3,539	2,180	3,212	268	1,978	3,068	3,356	578	1,536	6,719	7,261	33,695
2045	3,599	2,215	3,272	274	2,018	3,124	3,409	586	1,555	6,804	7,359	34,215
2046	3,645	2,242	3,319	278	2,050	3,168	3,448	591	1,569	6,865	7,431	34,606
2047	3,678	2,261	3,353	281	2,074	3,200	3,477	595	1,578	6,905	7,478	34,880
2048	3,700	2,274	3,377	284	2,090	3,222	3,495	597	1,582	6,927	7,506	35,054
2049	3,713	2,281	3,392	285	2,101	3,236	3,505	598	1,584	6,936	7,519	35,150
2050	3,720	2,285	3,401	286	2,108	3,244	3,510	598	1,585	6,939	7,524	35,200
2051	3,722	2,286	3,405	286	2,112	3,248	3,511	598	1,584	6,934	7,521	35,207
2052	3,721	2,285	3,404	287	2,112	3,247	3,509	597	1,581	6,926	7,512	35,181

Table I-11c: Electric Vehicle Summer Coincident Peak Demand

Reflects Total Cumulative Impacts

Total Increase in Summer Coincident Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	4	4	5	0	2	5	6	2	5	16	9	58
2023	8	7	8	1	4	9	10	3	8	24	14	96
2024	12	10	12	1	6	13	15	5	11	34	20	139
2025	17	14	17	1	9	18	21	6	15	48	27	193
2026	25	20	24	2	12	26	29	9	20	66	36	269
2027	34	26	32	2	17	34	39	11	27	88	49	359
2028	45	34	42	3	23	45	51	14	34	115	65	471
2029	60	44	56	4	31	58	67	17	42	148	83	610
2030	81	58	75	6	42	77	88	22	54	193	105	801
2031	106	74	97	7	55	99	113	26	66	245	137	1,025
2032	130	89	119	9	68	119	136	30	77	292	177	1,246
2033	156	104	141	11	82	140	159	34	86	338	217	1,468
2034	181	117	162	13	95	159	180	36	94	381	257	1,675
2035	203	130	182	15	108	177	200	38	100	418	296	1,867
2036	222	140	199	16	119	192	216	40	105	448	336	2,033
2037	238	148	213	17	128	204	229	41	109	471	377	2,175
2038	249	154	223	18	136	214	239	42	112	488	413	2,288
2039	258	159	232	19	141	222	246	43	115	500	450	2,385
2040	266	164	240	20	147	230	253	44	117	511	479	2,471
2041	273	168	247	21	152	237	259	45	119	518	506	2,545
2042	278	171	253	21	156	242	263	45	120	522	520	2,591
2043	282	173	258	22	160	246	266	46	120	523	531	2,627
2044	285	174	262	22	163	250	268	46	120	522	541	2,653
2045	287	176	265	22	165	253	270	46	120	520	548	2,672
2046	289	176	268	23	168	256	271	45	119	517	553	2,685
2047	290	177	269	23	169	257	271	45	119	517	557	2,694
2048	291	177	270	23	170	258	271	45	119	515	559	2,698
2049	291	177	271	23	171	259	272	45	118	514	560	2,701
2050	292	177	272	23	171	259	272	45	118	514	560	2,703
2051	292	178	272	23	171	259	272	45	118	513	560	2,703
2052	292	178	272	23	172	260	272	45	118	513	559	2,704

Note: The baseline electric vehicle peak forecast assumes an increasing share of managed charging over time.

Table I-11d: Electric Vehicle Winter Coincident Peak Demand

Reflects Total Cumulative Impacts

Total Increase in Winter Coincident Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022-23	6	5	6	0	3	7	8	3	7	21	12	78
2023-24	9	8	9	1	4	11	12	4	10	31	19	118
2024-25	14	12	14	1	7	16	18	6	14	44	27	173
2025-26	20	18	20	1	10	22	26	8	20	62	37	244
2026-27	30	25	29	2	14	32	37	11	27	86	50	343
2027-28	41	33	39	3	20	42	49	14	35	114	67	457
2028-29	55	43	51	4	27	55	65	18	44	149	86	597
2029-30	72	55	67	5	35	70	83	22	55	189	107	760
2030-31	92	68	84	6	45	88	103	26	66	234	135	947
2031-32	124	89	112	8	61	115	135	33	83	305	173	1,238
2032-33	153	107	137	10	76	139	163	38	96	365	217	1,501
2033-34	183	124	162	12	91	162	191	42	108	424	261	1,760
2034-35	213	140	187	14	107	184	217	45	118	478	305	2,008
2035-36	240	155	209	16	121	204	240	48	126	527	348	2,234
2036-37	262	167	228	18	133	221	260	50	133	567	392	2,431
2037-38	280	177	243	19	142	234	275	51	138	599	424	2,582
2038-39	294	184	254	20	149	244	287	53	143	623	470	2,721
2039-40	303	190	262	21	154	252	296	54	147	643	506	2,828
2040-41	312	195	270	21	159	259	304	56	151	660	539	2,926
2041-42	318	200	276	22	162	265	311	57	154	674	565	3,004
2042-43	323	203	281	22	165	269	316	58	156	684	580	3,057
2043-44	327	205	283	23	167	272	319	58	158	692	593	3,097
2044-45	329	206	285	23	168	274	321	59	159	697	603	3,124
2045-46	330	207	287	23	169	275	322	59	159	700	611	3,142
2046-47	331	208	287	23	169	276	323	59	160	702	617	3,155
2047-48	335	210	290	23	171	279	327	59	162	709	621	3,186
2048-49	336	211	291	23	172	279	328	60	162	711	623	3,196
2049-50	336	211	292	23	172	280	328	60	162	713	624	3,201
2050-51	337	211	292	23	172	280	329	60	163	714	625	3,206
2051-52	337	212	293	23	172	281	329	60	163	715	625	3,210
2052-53	337	212	293	23	172	281	329	60	163	715	624	3,209

Note: The baseline electric vehicle peak forecast assumes an increasing share of managed charging over time.

Table I-12a: Energy Storage Nameplate Capacity

Reflects Total Cumulative Nameplate Capacity – Including Wholesale and Behind-the-Meter

Nameplate Capacity by Zone - MW

												NYCA		
Year	A	B	C	D	E	F	G	H	I	J	K	Total	Wholesale	BTM
2022	28	5	54	35	23	81	234	23	9	86	60	638	425	213
2023	41	6	77	38	33	104	254	43	15	158	113	882	540	342
2024	60	9	113	43	47	139	285	71	24	263	341	1,395	888	507
2025	82	12	149	45	54	163	318	109	30	375	441	1,778	1,209	569
2026	111	17	197	48	65	195	361	159	39	523	572	2,287	1,652	635
2027	147	22	256	52	77	233	414	220	49	704	733	2,907	2,206	701
2028	188	30	324	56	92	276	476	289	61	914	917	3,623	2,856	767
2029	234	38	397	60	107	320	541	366	74	1,145	1,119	4,401	3,570	831
2030	281	46	473	65	123	366	609	444	88	1,384	1,329	5,208	4,314	894
2031	316	54	530	69	134	397	660	503	99	1,566	1,488	5,816	4,860	956
2032	346	61	575	72	144	421	702	550	108	1,716	1,617	6,312	5,297	1,015
2033	375	68	619	75	153	444	742	595	117	1,862	1,741	6,791	5,719	1,072
2034	403	75	661	78	162	466	781	638	126	2,002	1,859	7,251	6,125	1,126
2035	430	83	701	81	171	488	817	679	135	2,138	1,972	7,695	6,516	1,179
2036	456	91	740	84	180	508	852	717	144	2,268	2,079	8,119	6,889	1,230
2037	481	99	777	87	188	527	885	753	152	2,393	2,180	8,522	7,245	1,277
2038	505	107	812	90	196	545	917	787	160	2,513	2,276	8,908	7,585	1,323
2039	528	115	846	93	204	562	948	819	167	2,628	2,368	9,278	7,910	1,368
2040	550	123	878	96	212	578	977	849	174	2,738	2,454	9,629	8,218	1,411
2041	571	131	908	99	220	594	1,004	878	181	2,843	2,536	9,965	8,514	1,451
2042	592	139	937	102	227	608	1,030	904	188	2,943	2,614	10,284	8,797	1,487
2043	612	147	964	105	234	621	1,054	928	195	3,040	2,687	10,587	9,064	1,523
2044	631	155	990	108	241	634	1,077	951	202	3,132	2,756	10,877	9,320	1,557
2045	649	163	1,015	111	248	646	1,099	973	209	3,220	2,821	11,154	9,564	1,590
2046	666	170	1,039	114	255	657	1,120	993	215	3,304	2,883	11,416	9,795	1,621
2047	683	177	1,061	117	262	668	1,140	1,012	221	3,384	2,940	11,665	10,014	1,651
2048	699	184	1,082	120	269	678	1,159	1,030	226	3,460	2,994	11,901	10,221	1,680
2049	714	191	1,102	123	276	688	1,177	1,047	231	3,532	3,045	12,126	10,418	1,708
2050	729	198	1,121	126	282	697	1,193	1,063	236	3,602	3,094	12,341	10,607	1,734
2051	742	205	1,139	129	288	705	1,209	1,078	241	3,668	3,140	12,544	10,787	1,757
2052	755	212	1,156	132	294	713	1,224	1,092	246	3,731	3,182	12,737	10,959	1,778

Note: Nameplate capacity values include both wholesale market and behind-the-meter storage.
Pumped Storage is not included. See Table III-2 for current resources.

Table I-12b: Energy Storage Energy Impacts

Reflects Total Cumulative Impacts – Including Wholesale and Behind-the-Meter

Annual Net Electricity Consumption by Zone - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	3	1	6	2	3	8	4	3	1	9	7	47
2023	4	0	8	2	3	9	6	5	2	18	13	70
2024	6	1	12	2	4	12	10	9	3	33	25	117
2025	10	1	18	2	6	16	16	16	4	53	42	184
2026	15	3	26	3	8	22	23	25	6	79	65	275
2027	22	4	37	4	10	29	32	35	7	110	93	383
2028	29	5	49	4	12	36	44	48	10	148	125	510
2029	37	5	62	5	15	44	54	61	12	188	162	645
2030	45	7	75	6	19	52	67	74	15	229	197	786
2031	51	8	85	6	21	57	76	84	16	262	225	891
2032	57	10	93	7	21	62	83	93	18	288	248	980
2033	62	11	101	7	23	66	90	101	19	313	269	1,062
2034	66	12	108	8	25	69	97	108	21	338	291	1,143
2035	72	14	115	8	27	73	103	116	22	362	310	1,222
2036	76	15	122	9	28	76	109	122	24	385	329	1,295
2037	80	17	128	9	30	80	115	128	25	407	347	1,366
2038	85	18	134	10	31	84	121	135	27	427	364	1,436
2039	88	20	141	11	33	86	126	140	28	447	379	1,499
2040	92	21	146	11	33	90	131	146	29	467	394	1,560
2041	96	22	152	12	35	92	136	151	31	486	409	1,622
2042	100	23	156	12	36	94	141	155	32	502	422	1,673
2043	103	25	161	13	38	97	145	159	32	520	435	1,728
2044	107	27	166	13	39	99	148	163	34	536	447	1,779
2045	110	28	170	14	40	101	153	168	35	551	459	1,829
2046	112	29	174	14	42	103	156	171	36	567	470	1,874
2047	116	30	178	15	43	105	159	174	37	580	480	1,917
2048	118	31	182	15	43	107	163	177	39	594	489	1,958
2049	122	33	185	16	45	109	166	180	39	606	498	1,999
2050	124	34	189	16	46	110	169	182	40	619	507	2,036
2051	126	35	191	17	47	111	171	186	41	629	515	2,069
2052	128	36	194	17	48	113	175	188	41	641	522	2,103

Note: Net energy consumption values include both wholesale and behind-the-meter Storage.

Note: Values listed reflect net energy consumption due to charging cycle efficiency.

Table I-12c: Energy Storage Summer Coincident Peak Reductions, Behind-the-Meter

Reflects Total Cumulative Impacts

Reductions in Summer Coincident Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	2	3	20	0	20	16	18	6	7	41	15	148
2023	4	4	26	0	28	23	25	10	12	82	30	244
2024	7	5	32	0	39	32	34	15	19	133	49	365
2025	9	6	35	0	43	35	37	18	21	155	57	416
2026	10	7	38	0	47	39	41	20	24	178	65	469
2027	12	8	42	0	52	44	46	23	26	201	74	528
2028	14	8	46	0	56	48	50	25	29	225	82	583
2029	15	9	49	0	61	52	54	28	32	249	91	640
2030	17	10	53	0	66	55	58	30	34	274	100	697
2031	19	11	57	0	70	59	62	33	37	298	109	755
2032	21	12	60	0	75	63	66	35	40	322	118	812
2033	23	13	63	0	79	67	70	37	43	347	126	868
2034	25	14	66	0	84	71	74	39	46	370	134	923
2035	27	15	70	0	88	76	77	42	49	393	143	980
2036	29	16	73	0	92	79	81	44	52	417	151	1,034
2037	31	17	77	0	96	82	84	46	54	439	159	1,085
2038	32	18	79	0	99	85	87	48	56	456	165	1,125
2039	34	19	82	0	101	88	89	49	58	473	171	1,164
2040	36	20	84	0	104	90	92	51	60	488	176	1,201
2041	37	20	86	0	106	93	94	53	61	502	181	1,233
2042	39	21	88	0	108	94	95	54	63	516	186	1,264
2043	41	22	89	0	110	96	97	54	65	530	191	1,295
2044	43	23	91	0	111	98	99	55	66	542	196	1,324
2045	44	24	93	0	113	99	100	56	68	554	200	1,351
2046	46	25	94	0	115	101	102	57	69	565	204	1,378
2047	48	26	96	0	116	103	104	58	70	576	207	1,404
2048	49	26	98	0	118	105	105	59	71	587	211	1,429
2049	51	27	99	0	120	106	107	60	71	596	214	1,451
2050	53	28	101	0	121	108	108	60	72	605	218	1,474
2051	54	29	103	0	122	109	109	61	73	614	221	1,495
2052	54	30	104	0	122	110	110	62	74	622	224	1,512

Note: Peak Reductions due to behind-the-meter storage. Wholesale market storage is assumed to be dispatched as generation.

Table I-12d: Energy Storage Winter Coincident Peak Reductions, Behind-the-Meter

Reflects Total Cumulative Impacts

Reductions in Winter Coincident Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022-23	2	2	16	0	16	13	14	4	6	32	12	117
2023-24	3	3	21	0	23	18	20	8	10	66	24	196
2024-25	6	4	27	0	32	26	28	12	15	109	40	299
2025-26	7	5	29	0	36	29	31	15	18	129	48	347
2026-27	9	6	33	0	40	33	35	17	20	151	55	399
2027-28	10	7	36	0	45	38	40	20	23	174	64	457
2028-29	12	7	40	0	50	42	44	22	25	198	72	512
2029-30	14	8	44	0	55	46	48	25	28	224	81	573
2030-31	16	9	48	0	60	50	53	28	31	249	91	635
2031-32	18	10	53	0	65	55	57	31	34	275	101	699
2032-33	20	11	56	0	71	59	62	33	38	302	110	762
2033-34	22	12	60	0	75	64	66	35	41	330	120	825
2034-35	24	13	64	0	81	69	71	38	44	356	130	890
2035-36	26	15	68	0	86	74	75	41	48	384	139	956
2036-37	28	16	72	0	91	78	80	43	51	412	149	1,020
2037-38	31	17	77	0	96	82	84	46	54	439	159	1,085
2038-39	32	18	79	0	99	85	87	48	56	456	165	1,125
2039-40	34	19	82	0	101	88	89	49	58	473	171	1,164
2040-41	36	20	84	0	104	90	92	51	60	488	176	1,201
2041-42	37	20	86	0	106	93	94	53	61	502	181	1,233
2042-43	39	21	88	0	108	94	95	54	63	516	186	1,264
2043-44	41	22	89	0	110	96	97	54	65	530	191	1,295
2044-45	43	23	91	0	111	98	99	55	66	542	196	1,324
2045-46	44	24	93	0	113	99	100	56	68	554	200	1,351
2046-47	46	25	94	0	115	101	102	57	69	565	204	1,378
2047-48	48	26	96	0	116	103	104	58	70	576	207	1,404
2048-49	49	26	98	0	118	105	105	59	71	587	211	1,429
2049-50	51	27	99	0	120	106	107	60	71	596	214	1,451
2050-51	53	28	101	0	121	108	108	60	72	605	218	1,474
2051-52	54	29	103	0	122	109	109	61	73	614	221	1,495
2052-53	54	30	104	0	122	110	110	62	74	622	224	1,512

Note: Peak Reductions due to behind-the-meter storage. Wholesale market storage is assumed to be dispatched as generation.

Table I-13a: Building Electrification Annual Energy Usage

Reflects Cumulative Future Impacts

Total Annual Energy Usage by Zone - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	44	27	36	2	24	35	32	7	17	179	85	488
2023	109	68	90	6	60	86	81	18	42	464	210	1,234
2024	180	112	148	9	99	142	133	30	70	798	389	2,110
2025	259	162	212	13	142	205	192	43	101	1,194	515	3,038
2026	348	218	286	18	192	276	260	58	136	1,674	718	4,184
2027	450	282	370	23	248	358	337	75	176	2,254	968	5,541
2028	565	355	465	29	311	450	425	95	222	2,953	1,239	7,109
2029	691	434	569	35	381	552	521	117	272	3,733	1,562	8,867
2030	835	526	688	43	460	669	633	141	330	4,617	1,906	10,848
2031	997	628	822	51	549	801	757	169	395	5,579	2,281	13,029
2032	1,179	744	973	60	650	950	899	201	468	6,654	2,635	15,413
2033	1,372	866	1,132	70	756	1,107	1,049	234	546	7,878	2,950	17,960
2034	1,583	1,001	1,307	81	873	1,282	1,215	271	632	9,185	3,243	20,673
2035	1,807	1,144	1,493	92	996	1,467	1,392	310	723	10,502	3,573	23,499
2036	2,045	1,296	1,690	104	1,127	1,664	1,580	352	820	11,820	3,895	26,393
2037	2,279	1,446	1,884	116	1,255	1,859	1,767	393	916	13,050	4,192	29,157
2038	2,518	1,600	2,083	128	1,387	2,060	1,959	435	1,015	14,266	4,454	31,905
2039	2,755	1,752	2,279	140	1,517	2,259	2,150	477	1,112	15,407	4,717	34,565
2040	2,990	1,903	2,473	151	1,645	2,458	2,341	518	1,209	16,476	4,973	37,137
2041	3,201	2,040	2,649	162	1,760	2,638	2,515	556	1,298	17,348	5,235	39,402
2042	3,405	2,172	2,818	172	1,871	2,813	2,683	593	1,383	18,115	5,513	41,538
2043	3,591	2,292	2,972	181	1,972	2,974	2,838	626	1,461	18,738	5,805	43,450
2044	3,768	2,408	3,119	189	2,067	3,129	2,988	658	1,536	19,283	6,065	45,210
2045	3,909	2,500	3,236	196	2,143	3,255	3,111	684	1,597	19,623	6,295	46,549
2046	4,041	2,587	3,345	202	2,213	3,373	3,226	709	1,654	19,896	6,500	47,746
2047	4,154	2,662	3,438	207	2,273	3,476	3,326	730	1,703	20,080	6,719	48,768
2048	4,255	2,729	3,522	212	2,326	3,570	3,419	749	1,748	20,247	6,907	49,684
2049	4,314	2,770	3,571	214	2,356	3,629	3,478	761	1,775	20,278	7,070	50,216
2050	4,365	2,805	3,613	216	2,381	3,681	3,530	771	1,800	20,311	7,206	50,679
2051	4,407	2,834	3,648	218	2,401	3,726	3,576	780	1,820	20,326	7,374	51,110
2052	4,453	2,867	3,686	219	2,424	3,775	3,626	790	1,843	20,360	7,504	51,547

Note: Reflects end-use electrification of space heating, water heating, cooking, and other end-uses.

Table I-13b: Building Electrification Summer Coincident Peak Demand

Reflects Cumulative Future Impacts

Total Increase in Summer Coincident Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	3	2	2	0	2	2	2	0	1	12	6	32
2023	5	3	4	0	3	4	4	1	2	21	10	57
2024	7	5	6	0	4	6	5	1	3	32	14	83
2025	10	6	9	1	6	8	8	2	4	47	21	122
2026	13	8	11	1	7	10	10	2	5	62	27	156
2027	17	11	14	1	9	13	13	3	7	83	35	206
2028	21	13	17	1	11	16	16	3	8	106	44	256
2029	25	16	21	1	14	20	19	4	10	133	53	316
2030	30	19	25	2	16	24	23	5	12	163	63	382
2031	35	22	29	2	19	28	27	6	14	195	74	451
2032	41	26	34	2	23	33	31	7	16	230	87	530
2033	48	30	40	2	26	39	37	8	19	273	98	620
2034	55	35	46	3	30	45	42	9	22	318	109	714
2035	63	40	52	3	35	51	48	11	25	364	121	813
2036	71	45	59	4	39	58	55	12	28	409	134	914
2037	79	50	66	4	44	65	62	14	32	453	147	1,016
2038	88	56	73	4	49	72	68	15	35	497	161	1,118
2039	97	61	80	5	53	79	75	17	39	539	173	1,218
2040	105	67	87	5	58	86	82	18	42	577	185	1,312
2041	113	72	94	6	62	93	89	20	46	613	198	1,406
2042	122	77	101	6	67	100	96	21	49	645	211	1,495
2043	131	83	108	7	72	108	103	23	53	681	226	1,595
2044	141	90	117	7	77	117	112	25	57	720	242	1,705
2045	150	96	125	8	82	125	120	27	61	751	257	1,802
2046	159	102	132	8	87	133	127	28	65	782	271	1,894
2047	167	107	138	8	91	140	134	29	68	806	284	1,972
2048	175	112	144	9	95	146	140	31	72	829	296	2,049
2049	181	116	150	9	99	152	146	32	74	848	306	2,113
2050	186	119	154	9	101	157	150	33	77	864	314	2,164
2051	194	125	161	10	106	164	158	34	80	895	328	2,255
2052	198	128	165	11	109	168	162	35	82	911	335	2,304

Note: Reflects end-use electrification of space conditioning, water heating, cooking, and other end-uses.

Table I-13c: Building Electrification Winter Coincident Peak Demand

Reflects Cumulative Future Impacts

Total Increase in Winter Coincident Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022-23	31	19	25	2	17	24	23	5	12	128	43	329
2023-24	64	40	52	3	35	50	47	11	25	278	122	727
2024-25	101	63	83	5	56	80	76	17	40	462	196	1,179
2025-26	143	89	117	7	79	113	107	24	56	678	285	1,698
2026-27	188	118	155	10	104	150	141	32	74	932	391	2,295
2027-28	240	151	198	12	133	192	181	41	95	1,240	512	2,995
2028-29	300	188	247	15	165	240	226	51	118	1,611	642	3,803
2029-30	366	230	301	19	201	293	277	62	144	2,025	788	4,706
2030-31	439	276	362	22	242	352	333	75	174	2,481	947	5,703
2031-32	516	326	426	26	285	416	394	88	205	2,950	1,116	6,748
2032-33	608	384	502	31	335	491	465	104	242	3,493	1,294	7,949
2033-34	704	445	581	36	388	569	540	120	281	4,110	1,455	9,229
2034-35	807	510	666	41	445	654	621	138	323	4,749	1,613	10,567
2035-36	909	576	751	46	501	739	702	156	364	5,355	1,773	11,872
2036-37	1,035	656	856	53	571	844	802	178	416	6,058	1,962	13,431
2037-38	1,180	748	976	61	649	964	917	204	475	6,807	2,181	15,162
2038-39	1,311	833	1,085	67	722	1,074	1,022	227	529	7,490	2,377	16,737
2039-40	1,431	910	1,184	73	788	1,175	1,119	248	579	8,065	2,555	18,127
2040-41	1,540	981	1,275	78	848	1,268	1,208	267	624	8,547	2,707	19,343
2041-42	1,638	1,044	1,355	83	901	1,351	1,288	285	665	8,930	2,847	20,387
2042-43	1,722	1,099	1,425	87	946	1,424	1,359	300	700	9,212	2,971	21,245
2043-44	1,799	1,149	1,490	91	988	1,492	1,425	314	733	9,441	3,090	22,012
2044-45	1,877	1,200	1,554	94	1,030	1,560	1,491	328	766	9,652	3,209	22,761
2045-46	1,945	1,245	1,610	98	1,066	1,621	1,550	341	795	9,805	3,313	23,389
2046-47	1,998	1,280	1,654	100	1,094	1,670	1,598	351	819	9,876	3,390	23,830
2047-48	2,034	1,304	1,684	102	1,113	1,704	1,632	358	835	9,912	3,440	24,118
2048-49	2,061	1,323	1,706	103	1,126	1,731	1,659	363	848	9,930	3,476	24,326
2049-50	2,093	1,344	1,733	104	1,143	1,763	1,690	370	862	9,939	3,524	24,565
2050-51	2,116	1,361	1,752	105	1,154	1,787	1,715	374	874	9,944	3,560	24,742
2051-52	2,130	1,371	1,763	105	1,160	1,803	1,731	378	881	9,947	3,580	24,849
2052-53	2,150	1,385	1,780	106	1,170	1,825	1,754	382	891	9,949	3,612	25,004

Note: Reflects end-use electrification of space heating, water heating, cooking, and other end-uses.

Table I-13d: Electrification Impacts by Scenario
Reflects Cumulative Impacts

NYCA Annual Energy Usage - GWh

	Low Load Scenario			Baseline Forecast			High Load Scenario		
Year	EV	Building	Total	EV	Building	Total	EV	Building	Total
2022	565	208	773	567	488	1,055	569	597	1,166
2023	851	675	1,526	868	1,234	2,102	884	1,433	2,317
2024	1,199	1,205	2,404	1,263	2,110	3,373	1,326	2,387	3,713
2025	1,614	1,837	3,451	1,795	3,038	4,833	1,978	3,475	5,453
2026	2,114	2,587	4,701	2,523	4,184	6,707	2,931	4,762	7,693
2027	2,725	3,476	6,201	3,503	5,541	9,044	4,275	6,274	10,549
2028	3,480	4,509	7,989	4,762	7,109	11,871	6,042	8,007	14,049
2029	4,428	5,653	10,081	6,313	8,867	15,180	8,199	9,931	18,130
2030	5,588	6,943	12,531	8,151	10,848	18,999	10,717	12,105	22,822
2031	6,943	8,377	15,320	10,240	13,029	23,269	13,538	14,526	28,064
2032	8,489	9,991	18,480	12,518	15,413	27,931	16,548	17,233	33,781
2033	10,192	11,715	21,907	14,912	17,960	32,872	19,632	20,087	39,719
2034	11,991	13,580	25,571	17,350	20,673	38,023	22,711	23,158	45,869
2035	13,845	15,506	29,351	19,775	23,499	43,274	25,708	26,346	52,054
2036	15,724	17,511	33,235	22,131	26,393	48,524	28,542	29,668	58,210
2037	17,575	19,457	37,032	24,372	29,157	53,529	31,166	32,863	64,029
2038	19,370	21,419	40,789	26,460	31,905	58,365	33,549	36,061	69,610
2039	21,063	23,299	44,362	28,359	34,565	62,924	35,654	39,131	74,785
2040	22,622	25,134	47,756	30,037	37,137	67,174	37,451	42,113	79,564
2041	24,010	26,756	50,766	31,318	39,402	70,720	38,626	44,707	83,333
2042	25,214	28,287	53,501	32,254	41,538	73,792	39,291	47,148	86,439
2043	26,232	29,631	55,863	33,045	43,450	76,495	39,852	49,288	89,140
2044	27,070	30,881	57,951	33,695	45,210	78,905	40,321	51,290	91,611
2045	27,736	31,825	59,561	34,215	46,549	80,764	40,693	52,773	93,466
2046	28,247	32,683	60,930	34,606	47,746	82,352	40,964	54,118	95,082
2047	28,624	33,386	62,010	34,880	48,768	83,648	41,135	55,206	96,341
2048	28,889	34,011	62,900	35,054	49,684	84,738	41,217	56,191	97,408
2049	29,080	34,352	63,432	35,150	50,216	85,366	41,220	56,707	97,927
2050	29,242	34,649	63,891	35,200	50,679	85,879	41,157	57,181	98,338
2051	29,371	34,900	64,271	35,207	51,110	86,317	41,041	57,541	98,582
2052	29,473	35,189	64,662	35,181	51,547	86,728	40,889	57,971	98,860

Note: Electric Vehicle annual energy usage from Tables I-1b, I-11b, I-15a, I-16a.
Includes light duty vehicles, medium and heavy duty vechiles, and buses.
Note: Building electrification annual energy usage from Tables I-1b, I-13a, I-15a, and I-16a.
Includes electrification of space heating, water heating, cooking, and other end uses.

Table I-14: Interconnecting Large Loads Forecast

Reflects Cumulative Existing and Future Impacts of Large Load Projects

Annual Energy by Zone - GWh

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	120	200	0	1,000	0	0	0	0	0	0	0	1,320
2023	760	1,190	580	1,290	0	0	0	0	0	0	0	3,820
2024	850	1,250	860	1,290	0	0	0	0	0	0	0	4,250
2025	1,010	1,330	860	1,290	0	0	0	0	0	0	0	4,490
2026	1,170	1,410	860	1,290	0	0	0	0	0	0	0	4,730
2027	1,310	1,490	860	1,290	0	0	0	0	0	0	0	4,950
2028	1,340	1,560	860	1,290	0	0	0	0	0	0	0	5,050
2029	1,340	1,580	860	1,290	0	0	0	0	0	0	0	5,070
2030	1,340	1,580	860	1,290	0	0	0	0	0	0	0	5,070
2031	1,340	1,580	860	1,290	0	0	0	0	0	0	0	5,070
2032	1,340	1,580	860	1,290	0	0	0	0	0	0	0	5,070

Note: Forecasts for 2033 through 2052 match the 2032 forecast.

Note: These forecast values are embedded in the econometric and final baseline annual energy forecasts.

Summer Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022	0	0	0	120	0	0	0	0	0	0	0	120
2023	95	150	110	155	0	0	0	0	0	0	0	510
2024	110	160	110	155	0	0	0	0	0	0	0	535
2025	130	170	110	155	0	0	0	0	0	0	0	565
2026	150	180	110	155	0	0	0	0	0	0	0	595
2027	170	190	110	155	0	0	0	0	0	0	0	625
2028	170	200	110	155	0	0	0	0	0	0	0	635
2029	170	200	110	155	0	0	0	0	0	0	0	635
2030	170	200	110	155	0	0	0	0	0	0	0	635
2031	170	200	110	155	0	0	0	0	0	0	0	635
2032	170	200	110	155	0	0	0	0	0	0	0	635

Note: Forecasts for 2033 through 2052 match the 2032 forecast.

Note: These forecast values are embedded in the econometric and final baseline summer peak demand forecasts.

Winter Peak Demand by Zone - MW

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2022-23	95	150	0	155	0	0	0	0	0	0	0	400
2023-24	100	155	110	155	0	0	0	0	0	0	0	520
2024-25	120	165	110	155	0	0	0	0	0	0	0	550
2025-26	140	175	110	155	0	0	0	0	0	0	0	580
2026-27	160	185	110	155	0	0	0	0	0	0	0	610
2027-28	170	195	110	155	0	0	0	0	0	0	0	630
2028-29	170	200	110	155	0	0	0	0	0	0	0	635
2029-30	170	200	110	155	0	0	0	0	0	0	0	635
2030-31	170	200	110	155	0	0	0	0	0	0	0	635
2031-32	170	200	110	155	0	0	0	0	0	0	0	635
2032-33	170	200	110	155	0	0	0	0	0	0	0	635

Note: Forecasts for 2033-34 through 2052-53 match the 2032-33 forecast.

Note: These forecast values are embedded in the econometric and final baseline winter peak demand forecasts.

Table I-15a: Summary of NYCA Low Load Scenario Annual Energy Forecasts – GWh

Year	(a) Econometric Energy	(b) (-) EE and C&S	(c) = a - b End-Use Energy	(d) (-) Solar PV, BTM	(e) (-) Non-Solar DG, BTM	(f) (+) Storage Net Energy Consumption	(g) (+) EV Energy	(h) (+) Building Electrification	(i) = c-d-e+f+g+h Low Load Scenario Annual Energy Forecast
2022	158,374	2,715	155,659	4,675	1,656	49	565	208	150,150
2023	161,055	5,663	155,392	5,693	1,739	74	851	675	149,560
2024	163,013	8,877	154,136	6,757	1,840	127	1,199	1,205	148,070
2025	164,093	12,303	151,790	7,744	1,900	203	1,614	1,837	145,800
2026	165,287	15,786	149,501	8,764	1,964	306	2,114	2,587	143,780
2027	166,324	19,153	147,171	9,740	2,019	427	2,725	3,476	142,040
2028	167,247	22,349	144,898	10,616	2,068	577	3,480	4,509	140,780
2029	168,058	25,361	142,697	11,367	2,118	737	4,428	5,653	140,030
2030	168,916	28,207	140,709	11,913	2,171	904	5,588	6,943	140,060
2031	169,695	30,852	138,843	12,282	2,224	1,043	6,943	8,377	140,700
2032	170,281	33,081	137,200	12,614	2,263	1,167	8,489	9,991	141,970
2033	170,696	35,168	135,528	12,927	2,302	1,284	10,192	11,715	143,490
2034	171,130	37,114	134,016	13,238	2,344	1,395	11,991	13,580	145,400
2035	171,505	38,935	132,570	13,539	2,385	1,503	13,845	15,506	147,500
2036	171,960	40,650	131,310	13,833	2,417	1,605	15,724	17,511	149,900
2037	172,341	42,264	130,077	14,114	2,453	1,708	17,575	19,457	152,250
2038	172,787	43,789	128,998	14,379	2,478	1,810	19,370	21,419	154,740
2039	173,229	45,225	128,004	14,621	2,519	1,904	21,063	23,299	157,130
2040	173,776	46,591	127,185	14,851	2,547	1,997	22,622	25,134	159,540
2041	174,244	47,895	126,349	15,039	2,568	2,092	24,010	26,756	161,600
2042	174,856	49,137	125,719	15,210	2,606	2,176	25,214	28,287	163,580
2043	175,388	50,317	125,071	15,365	2,633	2,264	26,232	29,631	165,200
2044	175,986	51,438	124,548	15,508	2,649	2,348	27,070	30,881	166,690
2045	176,508	52,528	123,980	15,644	2,678	2,431	27,736	31,825	167,650
2046	177,086	53,579	123,507	15,763	2,705	2,511	28,247	32,683	168,480
2047	177,587	54,618	122,969	15,880	2,728	2,589	28,624	33,386	168,960
2048	178,181	55,628	122,553	15,989	2,757	2,663	28,889	34,011	169,370
2049	178,688	56,604	122,084	16,097	2,776	2,737	29,080	34,352	169,380
2050	179,301	57,535	121,766	16,188	2,798	2,809	29,242	34,649	169,480
2051	179,937	58,468	121,469	16,280	2,826	2,876	29,371	34,900	169,510
2052	180,340	59,351	120,989	16,364	2,840	2,943	29,473	35,189	169,390

(a) - Econometric Energy Forecast - Reflects impacts of projected weather trends, economic growth, and interconnecting large loads

(b) - Table I-8a-L: Energy Efficiency and Codes & Standards Energy Impacts, Relative to 2021

(c) - End-Use Energy Consumption - Reflects projected end use energy consumption

(d) - Table I-9b-L: Solar PV Impacts, Behind-the-Meter - Total Reductions in Annual Energy

(e) - Table I-10b-L: Non-Solar Distributed Generation Impacts, Behind-the-Meter - Total Reductions in Annual Energy

(f) - Table I-12b-L: Storage Annual Net Energy Consumption, both wholesale and behind-the-meter (pumped storage is not included - see Table III-2 for current resources)

(g) - Table I-11b-L: Electric Vehicle Energy Usage

(h) - Table I-13a-L: Building Electrification Energy Usage - future end-use electrification including heat pumps, water heating, cooking, and other end-uses

(i) - Table I-2-L: Low Load Scenario Annual Energy Forecast

Low load scenario forecast tables: https://www.nyiso.com/library

Table I-15b: Summary of NYCA Low Load Scenario Summer Coincident Peak Demand Forecasts – MW

Year	(a) Econometric Peak Demand	(b) (-) EE and C&S	(c) = a - b End-Use Peak Demand	(d) (-) Solar PV, BTM	(e) (-) Non-Solar DG, BTM	(f) (-) BTM Storage Peak Reductions	(g) (+) EV Peak Demand	(h) (+) Building Electrification	(i) = c-d-e-f+g+h Low Load Scenario Summer Peak Forecast
2022	33,301	379	32,922	993	288	156	57	20	31,562
2023	33,824	799	33,025	1,130	304	263	79	31	31,438
2024	34,321	1,258	33,063	1,241	319	398	102	45	31,252
2025	34,700	1,760	32,940	1,346	330	460	132	63	30,999
2026	35,079	2,280	32,799	1,423	342	521	154	80	30,747
2027	35,454	2,788	32,666	1,463	352	591	186	108	30,554
2028	35,845	3,280	32,565	1,469	359	659	222	133	30,433
2029	36,251	3,748	32,503	1,462	369	730	273	166	30,381
2030	36,649	4,198	32,451	1,424	376	801	330	199	30,379
2031	37,006	4,621	32,385	1,362	386	885	421	238	30,411
2032	37,273	4,968	32,305	1,312	394	966	535	280	30,448
2033	37,546	5,296	32,250	1,264	401	1,076	657	329	30,495
2034	37,783	5,603	32,180	1,206	406	1,184	785	382	30,551
2035	38,016	5,889	32,127	1,149	413	1,297	915	435	30,618
2036	38,251	6,163	32,088	1,100	419	1,411	1,050	492	30,700
2037	38,469	6,420	32,049	1,050	426	1,526	1,192	548	30,787
2038	38,673	6,659	32,014	999	431	1,629	1,327	605	30,887
2039	38,867	6,885	31,982	948	438	1,737	1,463	661	30,983
2040	39,042	7,093	31,949	897	442	1,844	1,585	766	31,117
2041	39,189	7,294	31,895	839	446	1,949	1,703	864	31,228
2042	39,341	7,477	31,864	787	453	2,052	1,790	987	31,349
2043	39,469	7,650	31,819	729	457	2,163	1,865	1,106	31,441
2044	39,579	7,809	31,770	673	460	2,270	1,929	1,224	31,520
2045	39,697	7,954	31,743	622	466	2,380	1,977	1,329	31,581
2046	39,825	8,099	31,726	573	470	2,493	2,015	1,430	31,635
2047	39,956	8,233	31,723	535	474	2,605	2,048	1,522	31,679
2048	40,099	8,363	31,736	503	479	2,722	2,076	1,608	31,716
2049	40,237	8,488	31,749	473	484	2,834	2,101	1,682	31,741
2050	40,378	8,600	31,778	448	487	2,949	2,122	1,751	31,767
2051	40,501	8,708	31,793	427	492	3,064	2,138	1,815	31,763
2052	40,636	8,811	31,825	407	495	3,173	2,152	1,872	31,774

(a) - Econometric Summer Peak Demand - Reflects impacts of projected weather trends, economic growth, and interconnecting large loads

(b) - Table I-8b-L: Energy Efficiency and Codes & Standards Summer Coincident Peak Demand Reductions, Relative to 2021

(c) - End-Use Summer Peak Demand - Reflects projected end use summer coincident peak demand

(d) - Table I-9c-L: Solar PV Impacts, Behind-the-Meter, Total Reductions in Summer Coincident Peak Demand

(e) - Table I-10c-L: Non-Solar Distributed Generation Impacts, Behind-the-Meter, Total Reductions in Coincident Peak Demand

(f) - Table I-12c-L: Storage Impacts, Behind-the-Meter, Reductions in Summer Coincident Peak Demand (pumped storage is not included - see Table III-2 for current resources)

(g) - Table I-11c-L: Electric Vehicle Summer Coincident Peak Demand

(h) - Table I-13b-L: Building Electrification Summer Coincident Peak Demand - future end-use electrification including heat pumps, water heating, cooking, and other end-uses

(i) - Table I-3a-L: Low Load Scenario Summer Coincident Peak Demand Forecast

Low load scenario forecast tables: https://www.nyiso.com/library

Table I-15c: Summary of NYCA Low Load Scenario Winter Coincident Peak Demand Forecasts – MW

Year	(a) Econometric Peak Demand	(b) (-) EE and C&S	(c) = a - b End-Use Peak Demand	(d) (-) Solar PV, BTM	(e) (-) Non-Solar DG, BTM	(f) (-) BTM Storage Peak Reductions	(g) (+) EV Peak Demand	(h) (+) Building Electrification	(i) = c-d-e-f+g+h Low Load Scenario Winter Peak Forecast
2022-23	23,945	236	23,709	0	288	124	78	230	23,605
2023-24	24,102	501	23,601	0	304	212	115	484	23,684
2024-25	24,237	793	23,444	0	319	326	160	785	23,744
2025-26	24,267	1,115	23,152	0	330	384	211	1,135	23,784
2026-27	24,296	1,447	22,849	0	342	444	276	1,538	23,877
2027-28	24,330	1,780	22,550	0	352	512	345	2,016	24,047
2028-29	24,342	2,108	22,234	0	359	579	427	2,565	24,288
2029-30	24,346	2,426	21,920	0	369	652	523	3,171	24,593
2030-31	24,370	2,745	21,625	0	376	729	645	3,847	25,012
2031-32	24,431	3,059	21,372	0	386	818	813	4,555	25,536
2032-33	24,449	3,334	21,115	0	394	906	1,000	5,385	26,200
2033-34	24,516	3,613	20,903	0	401	1,022	1,191	6,254	26,925
2034-35	24,594	3,884	20,710	0	406	1,141	1,379	7,165	27,707
2035-36	24,735	4,158	20,577	0	413	1,264	1,559	8,028	28,487
2036-37	24,815	4,441	20,374	0	419	1,391	1,720	9,395	29,679
2037-38	24,852	4,730	20,122	0	426	1,526	1,851	10,806	30,827
2038-39	24,926	5,016	19,910	0	431	1,629	1,977	12,171	31,998
2039-40	25,079	5,314	19,765	0	438	1,737	2,051	13,362	33,003
2040-41	25,193	5,611	19,582	0	442	1,844	2,128	14,271	33,695
2041-42	25,244	5,904	19,340	0	446	1,949	2,191	15,053	34,189
2042-43	25,338	6,199	19,139	0	453	2,052	2,234	15,693	34,561
2043-44	25,415	6,490	18,925	0	457	2,163	2,267	16,262	34,834
2044-45	25,469	6,785	18,684	0	460	2,270	2,290	16,825	35,069
2045-46	25,495	7,076	18,419	0	466	2,380	2,301	17,293	35,167
2046-47	25,581	7,371	18,210	0	470	2,493	2,314	17,620	35,181
2047-48	25,724	7,679	18,045	0	474	2,605	2,320	17,800	35,086
2048-49	25,904	7,989	17,915	0	479	2,722	2,323	17,916	34,953
2049-50	25,991	8,297	17,694	0	484	2,834	2,324	18,102	34,802
2050-51	26,105	8,587	17,518	0	487	2,949	2,322	18,238	34,642
2051-52	26,259	8,875	17,384	0	492	3,064	2,323	18,296	34,447
2052-53	26,362	9,161	17,201	0	495	3,173	2,322	18,424	34,279

(a) - Econometric Winter Peak Demand - Reflects impacts of projected weather trends, economic growth, and interconnecting large loads

(b) - Table I-8c-L: Energy Efficiency and Codes & Standards Winter Coincident Peak Demand Reductions, Relative to 2021-22

(c) - End-Use Winter Peak Demand - Reflects projected end use winter coincident peak demand

(d) - The forecast of solar PV-related reductions to the winter peak is zero because the system typically peaks after sunset

(e) - Table I-10c-L: Non-Solar Distributed Generation Impacts, Behind-the-Meter, Total Reductions in Coincident Peak Demand

(f) - Table I-12d-L: Storage Impacts, Behind-the-Meter, Reductions in Winter Coincident Peak Demand (pumped storage is not included - see Table III-2 for current resources)

(g) - Table I-11d-L: Electric Vehicle Winter Coincident Peak Demand

(h) - Table I-13c-L: Building Electrification Winter Coincident Peak Demand - future end-use electrification including heat pumps, water heating, cooking, and other end-uses

(i) - Table I-3b-L: Low Load Scenario Winter Coincident Peak Demand Forecast

Low load scenario forecast tables: https://www.nyiso.com/library

Table I-16a: Summary of NYCA High Load Scenario Annual Energy Forecasts – GWh

Year	(a) Econometric Energy	(b) (-) EE and C&S	(c) = a - b End-Use Energy	(d) (-) Solar PV, BTM	(e) (-) Non-Solar DG, BTM	(f) (+) Storage Net Energy Consumption	(g) (+) EV Energy	(h) (+) Building Electrification	(i) = c-d-e+f+g+h High Load Scenario Annual Energy Forecast
2022	160,378	1,829	158,549	4,441	1,656	42	569	597	153,660
2023	164,754	3,816	160,938	5,154	1,739	58	884	1,433	156,420
2024	166,463	5,979	160,484	5,879	1,840	92	1,326	2,387	156,570
2025	167,637	8,285	159,352	6,616	1,900	141	1,978	3,475	156,430
2026	168,937	10,625	158,312	7,462	1,964	201	2,931	4,762	156,780
2027	170,221	12,892	157,329	8,352	2,019	273	4,275	6,274	157,780
2028	171,100	15,043	156,057	9,239	2,068	351	6,042	8,007	159,150
2029	172,158	17,069	155,089	10,028	2,118	427	8,199	9,931	161,500
2030	173,090	18,984	154,106	10,689	2,171	502	10,717	12,105	164,570
2031	174,306	20,766	153,540	11,183	2,224	573	13,538	14,526	168,770
2032	175,075	22,266	152,809	11,552	2,263	635	16,548	17,233	173,410
2033	175,908	23,671	152,237	11,806	2,302	692	19,632	20,087	178,540
2034	176,525	24,982	151,543	11,978	2,344	750	22,711	23,158	183,840
2035	177,449	26,209	151,240	12,128	2,385	809	25,708	26,346	189,590
2036	178,287	27,365	150,922	12,250	2,417	865	28,542	29,668	195,330
2037	179,313	28,453	150,860	12,354	2,453	918	31,166	32,863	201,000
2038	180,180	29,479	150,701	12,446	2,478	973	33,549	36,061	206,360
2039	181,392	30,447	150,945	12,526	2,519	1,025	35,654	39,131	211,710
2040	182,452	31,365	151,087	12,596	2,547	1,072	37,451	42,113	216,580
2041	183,752	32,246	151,506	12,642	2,568	1,121	38,626	44,707	220,750
2042	184,942	33,084	151,858	12,687	2,606	1,166	39,291	47,148	224,170
2043	186,415	33,879	152,536	12,727	2,633	1,214	39,852	49,288	227,530
2044	187,631	34,633	152,998	12,768	2,649	1,258	40,321	51,290	230,450
2045	189,034	35,368	153,666	12,807	2,678	1,303	40,693	52,773	232,950
2046	190,178	36,079	154,099	12,841	2,705	1,345	40,964	54,118	234,980
2047	191,665	36,779	154,886	12,876	2,728	1,387	41,135	55,206	237,010
2048	192,834	37,459	155,375	12,911	2,757	1,425	41,217	56,191	238,540
2049	194,239	38,119	156,120	12,946	2,776	1,465	41,220	56,707	239,790
2050	195,402	38,747	156,655	12,975	2,798	1,500	41,157	57,181	240,720
2051	196,991	39,376	157,615	13,007	2,826	1,536	41,041	57,541	241,900
2052	198,308	39,973	158,335	13,037	2,840	1,572	40,889	57,971	242,890

(a) - Econometric Energy Forecast - Reflects impacts of projected weather trends, economic growth, and interconnecting large loads

(b) - Table I-8a-H: Energy Efficiency and Codes & Standards Energy Impacts, Relative to 2021

(c) - End-Use Energy Consumption - Reflects projected end use energy consumption

(d) - Table I-9b-H: Solar PV Impacts, Behind-the-Meter - Total Reductions in Annual Energy

(e) - Table I-10b-H: Non-Solar Distributed Generation Impacts, Behind-the-Meter - Total Reductions in Annual Energy

(f) - Table I-12b-H: Storage Annual Net Energy Consumption, both wholesale and behind-the-meter (pumped storage is not included - see Table III-2 for current resources)

(g) - Table I-11b-H: Electric Vehicle Energy Usage

(h) - Table I-13a-H: Building Electrification Energy Usage - future end-use electrification including heat pumps, water heating, cooking, and other end-uses

(i) - Table I-2-H: High Load Scenario Annual Energy Forecast

High load scenario forecast tables: https://www.nyiso.com/library

Table I-16b: Summary of NYCA High Load Scenario Summer Coincident Peak Demand Forecasts – MW

Year	(a) Econometric Peak Demand	(b) (-) EE and C&S	(c) = a - b End-Use Peak Demand	(d) (-) Solar PV, BTM	(e) (-) Non-Solar DG, BTM	(f) (-) BTM Storage Peak Reductions	(g) (+) EV Peak Demand	(h) (+) Building Electrification	(i) = c-d-e-f+g+h High Load Scenario Summer Peak Forecast
2022	33,689	257	33,432	944	288	125	68	36	32,179
2023	34,666	538	34,128	1,023	304	198	114	63	32,780
2024	35,126	847	34,279	1,082	319	289	168	92	32,849
2025	35,454	1,185	34,269	1,151	330	318	253	131	32,854
2026	35,839	1,535	34,304	1,212	342	346	371	171	32,946
2027	36,235	1,877	34,358	1,254	352	377	536	222	33,133
2028	36,688	2,210	34,478	1,277	359	400	743	279	33,464
2029	37,119	2,523	34,596	1,288	369	423	1,056	343	33,915
2030	37,535	2,827	34,708	1,278	376	445	1,453	413	34,475
2031	37,920	3,111	34,809	1,240	386	485	1,890	492	35,080
2032	38,258	3,347	34,911	1,202	394	527	2,330	580	35,698
2033	38,550	3,567	34,983	1,154	401	566	2,777	677	36,316
2034	38,844	3,773	35,071	1,091	406	606	3,216	777	36,961
2035	39,115	3,966	35,149	1,028	413	648	3,671	884	37,615
2036	39,405	4,150	35,255	975	419	690	4,100	996	38,267
2037	39,690	4,325	35,365	919	426	729	4,486	1,107	38,884
2038	39,966	4,484	35,482	865	431	764	4,830	1,244	39,496
2039	40,239	4,639	35,600	812	438	795	5,123	1,418	40,096
2040	40,485	4,781	35,704	762	442	825	5,367	1,595	40,637
2041	40,733	4,915	35,818	707	446	854	5,504	1,762	41,077
2042	40,990	5,039	35,951	655	453	882	5,553	1,923	41,437
2043	41,202	5,155	36,047	603	457	909	5,592	2,071	41,741
2044	41,393	5,262	36,131	555	460	936	5,624	2,214	42,018
2045	41,603	5,360	36,243	510	466	961	5,645	2,340	42,291
2046	41,817	5,457	36,360	467	470	986	5,658	2,454	42,549
2047	42,051	5,549	36,502	435	474	1,015	5,662	2,559	42,799
2048	42,275	5,638	36,637	404	479	1,039	5,658	2,651	43,024
2049	42,513	5,720	36,793	381	484	1,062	5,646	2,734	43,246
2050	42,766	5,797	36,969	361	487	1,087	5,629	2,800	43,463
2051	42,950	5,871	37,079	342	492	1,110	5,608	2,854	43,597
2052	43,087	5,941	37,146	324	495	1,128	5,580	2,897	43,676

(a) - Econometric Summer Peak Demand - Reflects impacts of projected weather trends, economic growth, and interconnecting large loads

(b) - Table I-8b-H: Energy Efficiency and Codes & Standards Summer Coincident Peak Demand Reductions, Relative to 2021

(c) - End-Use Summer Peak Demand - Reflects projected end use summer coincident peak demand

(d) - Table I-9c-H: Solar PV Impacts, Behind-the-Meter, Total Reductions in Summer Coincident Peak Demand

(e) - Table I-10c-H: Non-Solar Distributed Generation Impacts, Behind-the-Meter, Total Reductions in Coincident Peak Demand

(f) - Table I-12c-H: Storage Impacts, Behind-the-Meter, Reductions in Summer Coincident Peak Demand (pumped storage is not included - see Table III-2 for current resources)

(g) - Table I-11c-H: Electric Vehicle Summer Coincident Peak Demand

(h) - Table I-13b-H: Building Electrification Summer Coincident Peak Demand - future end-use electrification including heat pumps, water heating, cooking, and other end-uses

(i) - Table I-3a-H: High Load Scenario Summer Coincident Peak Demand Forecast

High load scenario forecast tables: https://www.nyiso.com/library

Table I-16c: Summary of NYCA High Load Scenario Winter Coincident Peak Demand Forecasts – MW

Year	(a) Econometric Peak Demand	(b) (-) EE and C&S	(c) = a - b End-Use Peak Demand	(d) (-) Solar PV, BTM	(e) (-) Non-Solar DG, BTM	(f) (-) BTM Storage Peak Reductions	(g) (+) EV Peak Demand	(h) (+) Building Electrification	(i) = c-d-e-f+g+h High Load Scenario Winter Peak Forecast
2022-23	24,281	158	24,123	0	288	98	92	396	24,225
2023-24	24,690	337	24,353	0	304	160	142	834	24,865
2024-25	24,834	532	24,302	0	319	234	214	1,352	25,315
2025-26	24,927	751	24,176	0	330	264	320	1,943	25,845
2026-27	24,996	974	24,022	0	342	294	471	2,623	26,480
2027-28	25,061	1,199	23,862	0	352	325	670	3,421	27,276
2028-29	25,089	1,421	23,668	0	359	350	947	4,344	28,250
2029-30	25,144	1,633	23,511	0	369	379	1,284	5,359	29,406
2030-31	25,148	1,848	23,300	0	376	406	1,744	6,488	30,750
2031-32	25,269	2,059	23,210	0	386	450	2,248	7,669	32,291
2032-33	25,320	2,245	23,075	0	394	492	2,787	9,047	34,023
2033-34	25,439	2,434	23,005	0	401	538	3,325	10,453	35,844
2034-35	25,537	2,615	22,922	0	406	585	3,874	11,918	37,723
2035-36	25,777	2,800	22,977	0	413	633	4,392	13,339	39,662
2036-37	25,882	2,990	22,892	0	419	681	4,862	14,788	41,442
2037-38	25,899	3,183	22,716	0	426	729	5,282	16,630	43,473
2038-39	26,070	3,380	22,690	0	431	764	5,641	18,753	45,889
2039-40	26,288	3,579	22,709	0	438	795	5,947	20,159	47,582
2040-41	26,455	3,779	22,676	0	442	825	6,305	21,507	49,221
2041-42	26,509	3,974	22,535	0	446	854	6,769	22,666	50,670
2042-43	26,709	4,176	22,533	0	453	882	7,137	23,616	51,951
2043-44	26,891	4,368	22,523	0	457	909	7,428	24,468	53,053
2044-45	26,972	4,568	22,404	0	460	936	7,685	25,296	53,989
2045-46	27,084	4,766	22,318	0	466	961	7,887	25,989	54,767
2046-47	27,250	4,963	22,287	0	470	986	8,046	26,479	55,356
2047-48	27,471	5,171	22,300	0	474	1,015	8,166	26,754	55,731
2048-49	27,689	5,379	22,310	0	479	1,039	8,253	26,930	55,975
2049-50	27,828	5,587	22,241	0	484	1,062	8,308	27,217	56,220
2050-51	27,998	5,781	22,217	0	487	1,087	8,334	27,416	56,393
2051-52	28,225	5,977	22,248	0	492	1,110	8,341	27,501	56,488
2052-53	28,309	6,173	22,136	0	495	1,128	8,310	27,668	56,491

(a) - Econometric Winter Peak Demand - Reflects impacts of projected weather trends, economic growth, and interconnecting large loads

(b) - Table I-8c-H: Energy Efficiency and Codes & Standards Winter Coincident Peak Demand Reductions, Relative to 2021-22

(c) - End-Use Winter Peak Demand - Reflects projected end use winter coincident peak demand

(d) - The forecast of solar PV-related reductions to the winter peak is zero because the system typically peaks after sunset

(e) - Table I-10c-H: Non-Solar Distributed Generation Impacts, Behind-the-Meter, Total Reductions in Coincident Peak Demand

(f) - Table I-12d-H: Storage Impacts, Behind-the-Meter, Reductions in Winter Coincident Peak Demand (pumped storage is not included - see Table III-2 for current resources)

(g) - Table I-11d-H: Electric Vehicle Winter Coincident Peak Demand

(h) - Table I-13c-H: Building Electrification Winter Coincident Peak Demand - future end-use electrification including heat pumps, water heating, cooking, and other end-uses

(i) - Table I-3b-H: High Load Scenario Winter Coincident Peak Demand Forecast

High load scenario forecast tables: https://www.nyiso.com/library

Table I-17: Projection of SCR and EDRP Enrollment

Special Case Resources - MW

Zone	Summer	Winter
A	223.3	124.4
B	28.1	19.7
C	83.9	66.9
D	188.3	77.9
E	33.0	15.3
F	79.4	77.0
G	44.5	19.8
H	11.4	8.6
I	29.0	19.1
J	406.4	243.0
K	36.8	21.9
NYCA	1,164.1	693.6

Emergency Demand Response Program - MW

Zone	Summer	Winter
A	0.0	0.0
B	0.0	0.0
C	0.0	0.1
D	0.0	0.0
E	0.1	0.1
F	0.0	0.0
G	0.0	0.1
H	0.0	0.1
I	0.2	0.3
J	5.4	0.1
K	0.0	0.0
NYCA	5.7	0.8

Note: SCR and EDRP values are based on the projected enrollment for Summer 2022 and Winter 2022-23.
Projected SCR enrollment is assumed to remain constant through the 2032-33 Capability Year in Table V-2.

Table I-18: Historical NYCA System Peak Demand

New York Control Area System Coincident Peaks

Summer Coincident Peak Dates & Times

May 1 through October 31

Year	Date	Hour Beginning	Summer Peak MW
1997	7/15/1997	14	28,699
1998	7/22/1998	16	28,161
1999	7/6/1999	13	30,311
2000	6/26/2000	16	28,138
2001	8/9/2001	14	30,982
2002	7/29/2002	16	30,664
2003	6/26/2003	16	30,333
2004	6/9/2004	16	28,433
2005	7/26/2005	16	32,075
2006	8/2/2006	13	33,939
2007	8/8/2007	16	32,169
2008	6/9/2008	16	32,432
2009	8/17/2009	15	30,844
2010	7/6/2010	16	33,452
2011	7/22/2011	15	33,865
2012	7/17/2012	16	32,439
2013	7/19/2013	16	33,956
2014	9/2/2014	15	29,782
2015	7/29/2015	16	31,138
2016	8/11/2016	16	32,076
2017	7/19/2017	17	29,699
2018	8/29/2018	16	31,861
2019	7/20/2019	16	30,397
2020	7/27/2020	17	30,660
2021*	6/29/2021	17	30,919

Winter Coincident Peak Dates & Times

November 1 through following April 30

Year	Date	Hour Beginning	Winter Peak MW
1997 - 98	12/10/1997	17	22,445
1998 - 99	1/14/1999	17	23,878
1999 - 00	1/18/2000	17	24,041
2000 - 01	12/13/2000	17	23,774
2001 - 02	4/18/2002	16	23,713
2002 - 03	1/23/2003	18	24,454
2003 - 04	1/15/2004	18	25,262
2004 - 05	12/20/2004	17	25,541
2005 - 06	12/14/2005	18	25,060
2006 - 07	2/5/2007	17	25,057
2007 - 08	1/3/2008	18	25,021
2008 - 09	12/22/2008	17	24,673
2009 - 10	12/17/2009	17	24,074
2010 - 11	12/14/2010	17	24,654
2011 - 12	1/3/2012	17	23,901
2012 - 13	1/24/2013	18	24,658
2013 - 14	1/7/2014	18	25,738
2014 - 15	1/7/2015	18	24,648
2015 - 16	1/19/2016	18	23,317
2016 - 17	12/15/2016	17	24,164
2017 - 18	1/5/2018	17	25,081
2018 - 19	1/21/2019	18	24,728
2019 - 20	12/19/2019	17	23,253
2020 - 21	12/16/2020	17	22,542
2021 - 22	1/11/2022	17	23,235

Note: Record peaks are highlighted.

Note: Peak hours are reported as hour beginning (e.g., if the peak occurs during the 4 to 5 PM hour, the hour beginning value is 16).

Note: Beginning in 2021, the peak hour for purposes of the ICAP market weather normalization and forecast is constrained to July and August non-holiday weekdays.

* The ICAP market peak hour in 2021 was 8/26/2021, hour beginning 16.

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Section II

Changes in Generating Facilities & Generation Since the 2021 *Gold Book*

New York ISO

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Section II

This section provides an overview of significant changes in generating facilities since the 2021 *Gold Book* was issued, together with a summary of changes in energy generation in the past year. This information is presented in two steps. Reported first is the net change in existing generation from the 2021 Gold Book through March 15, 2022, which is a decrease of 1,150.1 MW[7] for the summer. Second, any additional generation changes from March 15, 2022 until the summer of 2022 are reported, which is a decrease of -89.7 MW, excluding changes in Special Case Resources and Net Purchases. This results in a total capacity decrease of 1,239.8 MW from the summer of 2021 to the summer of 2022. All generator capacity values listed in this section are Dependable Maximum Net Generating Capability ("DMNC").

Changes in Existing Generation Since the 2021 *Gold Book*

The existing summer 2022 NYCA installed generating capacity as of March 15, 2022 of 37,520.3 MW decreased by 1,150.1 MW from the summer 2021 generating capacity of 38,670.4 MW, as shown in Table II-1a. The winter 2022-23 NYCA installed generating capacity as of March 15, 2022 of 40,139.0 MW decreased by 1,033.0 MW from the winter 2021-22 generating capacity of 41,172.0 MW, as shown in Table II-1b.

Table II-1a: Summary of Changes in Summer Capacity Since 2021 – MW

Generator Fuel Types	2021 Capacity	Deactivations	Additions & Uprates	Reclassi-fications	Ratings Changes	2022 Capacity
Gas	4,816.7			-36.7	-49.9	4,730.1
Oil	2,326.6	-54.2			15.5	2,287.9
Gas & Oil	19,314.6		12.5	36.7	-80.5	19,283.3
Nuclear	4,378.3	-1,036.3			-0.8	3,341.2
Pumped Storage	1,406.8				2.0	1,408.8
Hydro	4,259.3				14.5	4,273.8
Wind	1,817.6				0.0	1,817.6
Solar	31.5		20.0		0.0	51.5
Other	319.0				7.1	326.1
Total	38,670.4	-1,090.5	32.5	0.0	-92.1	37,520.3

[7] All values in this section have been rounded to the 0.1 MW. This may result in slight numerical differences as compared to values reported in other sections of this report.

Since the publication of the 2021 *Gold Book*, two units totaling 32.5 MW have been added in the summer and winter capability periods. Four units totaling 1,090.5 MW of summer capacity and 1,117.5 MW of winter capacity have been deactivated. Reclassifications of generators from gas-only to dual fuel units resulted in a transfer of 36.7 MW in summer and 40.3 MW in winter since the 2021 *Gold Book*. Finally, capability (or ratings) changes in existing generators resulted in a net decrease of 92.1 MW in summer and a net increase of 52.0 MW in winter.

Table II-1b: Summary of Changes in Winter Capacity Since 2021 – MW

Generator Fuel Types	2021-22 Capacity	Deactivations	Additions & Uprates	Reclassi-fications	Ratings Changes	2022-23 Capacity
Gas	5,155.4			-40.3	7.7	5,122.8
Oil	2,773.3	-78.7			-5.5	2,689.1
Gas & Oil	21,043.1		12.5	40.3	34.9	21,130.8
Nuclear	4,404.7	-1,038.8			-7.6	3,358.3
Pumped Storage	1,406.7				4.2	1,410.9
Hydro	4,213.5				14.3	4,227.8
Wind	1,817.6				0.0	1,817.6
Solar	31.5		20.0		0.0	51.5
Other	326.2				4.0	330.2
Total	41,172.0	-1,117.5	32.5	0.0	52.0	40,139.0

The gas and oil fuel type is identified based upon whether or not environmental permits, pipeline connections, regulatory compliance requirements, and/or storage tanks, as appropriate, are in place to allow for the use of the fuel(s) listed for each generating unit in Table III-2. The fuel type selection is not meant to provide any information on current fuel inventory. It should be noted that maximum capabilities on secondary fuels may be limited.

Generator ratings are updated semi-annually for the Summer and Winter Capability Periods. Additional information on existing generation is provided in Section III. The NYISO also reports generator status changes each month on our website at: https://www.nyiso.com/ny-power-system-information-outlook.

Proposed Changes to Generation for Summer 2022

Proposed generator additions result in an increase of 162.9 MW for the Summer Capability Period. Proposed generator deactivations result in a decrease 252.6 MW for the Summer, resulting in an overall decrease of 89.7 MW, as shown in Table V-2a.

Demand Response Resources for Summer 2022 and Winter 2022-23

The projected 2022 Summer Capability for SCR is 1,164.1 MW. The projected summer 2022 enrollment for the EDRP is 5.7 MW. For winter 2022-23, the SCR total is 693.6 MW and the EDRP enrollment is 0.8 MW.

Total Resource Capability for Summer 2022 and Winter 2022-23

The Total Resource Capability forecasted for the 2022 Summer Capability Period is 41,059.9 MW. This value is the sum of existing facilities (37,520.3 MW), Special Case Resources (1,164.1 MW), net generation additions[8] and deactivations (-89.7 MW) and net purchases from external areas (2,465.2 MW). This is a decrease of 10.7 MW from the 2021 value of 41,070.6 MW.

For the Winter Capability Period, the forecasted Total Resource Capability is 44,315.7 MW. This value is the sum of existing facilities (40,139.0 MW), Special Case Resources (693.6MW), net generation additions and deactivations (1,386.0 MW), and net purchases from external areas (2,097.1 MW). This is an increase of 1,753.2 MW from the 2021-2022 value of 42,562.2 MW.

Summary of 2021 Energy Generation

In 2021, a total of 126,766 GWh was generated in the NYCA, a decrease of 3.6% from the 131,462 GWh generated in 2020. Renewable energy generation was 35,321 GWh in 2021 (27.9% of total NYCA generation), compared to 35,964 GWh in 2020 (27.4%). Fossil-fueled energy generation in 2021 was 60,332 GWh (47.6%), compared to 57,060 GWh in 2020 (43.4%). Nuclear energy generation was 31,113 GWh in 2021 (24.5%), compared to 38,437 GWh in 2020 (29.2%).

[8] Expected additions include projects that have either completed a Class Year Interconnection Facilities Study or an Interconnection Agreement for Non Class Year Generators, as shown in Table IV-1.

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Section III

Existing Generating Facilities

New York ISO

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Section III

This section lists existing generating resources operating in the NYCA as of March 15, 2022. Table III-2 reports information on generator ownership, location, in-service date, fuels used, and generator type. It includes values for nameplate rating, NYISO summer and winter Capacity Resource Interconnection Service (CRIS) MW values[9] for generators, summer and winter capability, and net energy generated during the preceding calendar year. Generator facilities that have been deactivated since the publication of the 2021 *Gold Book* remain listed in Table III-2 for one year. Table III-2a reports this information for generators that participate in the NYISO's markets, while Table III-2b reports applicable information for generators that do not participate in the NYISO's markets, such as generators that operate solely as load modifiers. Generators are listed by zone, and generally by PTID number and/or station-unit name.

The values for the Summer Capability Period in this *Gold Book* reflect the most recent DMNC values available. The 2022 Summer Installed Capacity market will generally use DMNC values taken from the 2021 Summer Capability Period. The Winter Capability Period values represent the most recent DMNC values demonstrated during a Winter Capability Period. The 2022-23 Winter Installed Capacity Market will generally use DMNC values taken from the 2021-22 Winter Capability Period.

Units are classified as dual-fuel (gas & oil) when environmental permits, pipeline connections, regulatory compliance requirements, and/or storage tanks allow for the use of the Type 2 fuel listed for each generating unit in Table III-2. Generators may choose the fuel type when conducting their DMNC test. The fuel type selection is not meant to provide any information on current fuel inventories, nor does it indicate which of the fuels generators might consider as their primary fuel. The NYISO does not report the DMNC for generation with alternate fuels since: (1) the NYISO does not currently require a DMNC test on alternate fuels, (2) alternate fuel inventories are unit-specific, and (3) permit capabilities do not necessarily reflect unit performance.

Table III-3c provides the amount of energy generated in the state, and Table III-3d provides the amount of NYCA net energy interchange scheduled with other control areas.

[9] CRIS values, in MW of Installed Capacity, for the Summer Capability Period are established pursuant to applicable procedures contained in Attachments X, S and Z to the NYISO OATT.

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Table III-1: Existing Generating Facilities Codes and Abbreviations

FUEL TYPE		UNIT TYPE	
BAT	Battery	CC	Combined Cycle
BUT	Butane	CG	Cogeneration
FO2	No. 2 Fuel Oil	CT	Combustion Turbine Portion (CC)
FO4	No. 4 Fuel Oil	CW	Waste Heat Only (CC)
FO6	No. 6 Fuel Oil	ES	Energy Storage
FW	Fly Wheel	FC	Fuel Cell
JF	Jet Fuel	GT	Combustion Turbine
KER	Kerosene	HY	Conventional Hydro
MTE	Methane (Bio Gas)	IC	Internal Combustion
NG	Natural Gas	JE	Jet Engine
OT	Other (Describe in Footnote)	NB	Steam (BWR Nuclear)
REF	Refuse (Solid Waste)	NP	Steam (PWR Nuclear)
SUN	Sunlight	PS	Pumped Storage Hydro
UR	Uranium	PV	Photovoltaic
WAT	Water	ST	Steam Turbine (Fossil)
WD	Wood and/or Wood Waste	WT	Wind Turbine
WND	Wind		

COUNTY CODES
NEW YORK - NY - 36

001 - Albany	063 - Niagara
003 - Allegany	065 - Oneida
005 - Bronx	067 - Onondaga
007 - Broome	069 - Ontario
009 - Cattaraugus	071 - Orange
011 - Cayuga	073 - Orleans
013 - Chautauqua	075 - Oswego
015 - Chemung	077 - Otsego
017 - Chenango	079 - Putnam
019 - Clinton	081 - Queens
021 - Columbia	083 - Rensselaer
023 - Cortland	085 - Richmond
025 - Delaware	087 - Rockland
027 - Dutchess	089 - St Lawrence
029 - Erie	091 - Saratoga
031 - Essex	093 - Schenectady
033 - Franklin	095 - Schoharie
035 - Fulton	097 - Schuyler
037 - Genesee	099 - Seneca
039 - Greene	101 - Steuben
041 - Hamilton	103 - Suffolk
043 - Herkimer	105 - Sullivan
045 - Jefferson	107 - Tioga
047 - Kings	109 - Tompkins
049 - Lewis	111 - Ulster
051 - Livingston	113 - Warren
053 - Madison	115 - Washington
055 - Monroe	117 - Wayne
057 - Montgomery	119 - Westchester
059 - Nassau	121 - Wyoming
061 - New York	123 - Yates

COUNTY CODES
PENNSYLVANIA - PA - 42

001 - Adams	067 - Juniata
003 - Allegheny	069 - Lackawanna
005 - Armstrong	071 - Lancaster
007 - Beaver	073 - Lawrence
009 - Bedford	075 - Lebannon
011 - Berks	077 - Lehigh
013 - Blair	079 - Luzerne
015 - Bradford	081 - Lycoming
017 - Bucks	083 - McKean
019 - Butler	085 - Mercer
021 - Cambria	087 - Mifflin
023 - Cameron	089 - Monroe
025 - Carbon	091 - Montgomery
027 - Centre	093 - Montour
029 - Chester	095 - Northhampton
031 - Clarion	097 - Northumberland
033 - Clearfield	099 - Perry
035 - Clinton	101 - Philadelphia
037 - Columbia	103 - Pike
039 - Crawford	105 - Potter
041 - Cumberland	107 - Schuylkill
043 - Dauphin	109 - Snyder
045 - Delaware	111 - Somerset
047 - Elk	113 - Sullivan
049 - Erie	115 - Susquehanna
051 - Fayette	117 - Tioga
053 - Forest	119 - Union
055 - Franklin	121 - Venango
057 - Fulton	123 - Warren
059 - Greene	125 - Washington
061 - Huntingdon	127 - Wayne
063 - Indiana	129 - Westmoreland
065 - Jefferson	131 - Wyoming
	133 - York

COUNTY CODES
MASSACHUSETTS - MA - 25

001 - Barnstable
003 - Berkshire
005 - Bristol
007 - Dukes
009 - Essex
011 - Franklin
013 - Hampden
015 - Hampshire
017 - Middlesex
019 - Nantucket
021 - Norfolk
023 - Plymouth
025 - Suffolk
027 - Worcester

COUNTY CODES
NEW JERSEY - NJ - 34

001 - Atlantic
003 - Bergen
005 - Burlington
007 - Camden
009 - Cape May
011 - Cumberland
013 - Essex
015 - Gloucester
017 - Hudson
019 - Hunterdon
021 - Mercer
023 - Middlesex
025 - Monmouth
027 - Morris
029 - Ocean
031 - Passaic
033 - Salem
035 - Somerset
037 - Sussex
039 - Union
041 - Warren

Table III-2a: NYISO Market Generators

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy	Notes
								YYYY-MM-DD	MW									GWh	
Jamestown Board of Public Utilities	Jamestown 5		A	1658	Jamestown	013	36	1951-08-01	28.7	23.0	23.0	21.9	20.6	YES	ST	NG	FO2	0.3	
Jamestown Board of Public Utilities	Jamestown 6		A	1658	Jamestown	013	36	1968-08-01	25.0	22.4	22.4	19.1	17.9	YES	ST	NG	FO2	3.9	
Jamestown Board of Public Utilities	Jamestown 7		A	1659	Jamestown	013	36	2002-01-01	47.3	40.0	40.0	40.4	46.1		GT	NG		59.0	
New York Power Authority	Lewiston PS (Fleet)		A	23760	Niagara Falls	063	36	1961-01-01	240.0	240.0	240.0	240.0	240.0		PS	WAT		428.6	
New York Power Authority	Moses Niagara (Fleet)		A	23760	Niagara Falls	063	36	1961-01-01	2,860.0	2,460.0	2,460.0	2,435.0	2,435.0		HY	WAT		16,425.5	
Indeck-Yerkes LP	Indeck-Yerkes		A	23781	Tonawanda	029	36	1990-02-01	59.9	49.7	60.5	47.6	56.8	YES	CC	NG	FO2	22.3	
Erie Blvd. Hydro - NYS Barge	Hydraulic Race		A	23848	Lockport	063	36	1942-01-01	4.7	3.1	3.1	4.7	4.7		HY	WAT		6.6	
Indeck-Olean LP	Indeck-Olean		A	23982	Olean	009	36	1993-12-01	90.6	79.4	88.5	78.7	87.7	YES	CC	NG	FO2	52.3	
Covanta Niagara, LP	American Ref-Fuel 1		A	24010	Niagara	063	36	1993-05-01	25.0	19.6	19.6	17.9	17.5		ST	REF		238.6	(G)
Covanta Niagara, LP	American Ref-Fuel 2		A	24010	Niagara	063	36	1993-05-01	25.0	19.6	19.6	17.9	17.4		ST	REF			
Emera Energy Services Sub. No. 3 LLC	Fortistar - N.Tonawanda		A	24026	N Tonawanda	029	36	1993-06-01	68.5	59.0	75.0	56.8	64.4	YES	CC	NG	FO2	5.1	
Model City Energy LLC	Model City Energy		A	24167	Lewiston	063	36	2001-06-01	5.6	5.6	5.6	5.6	5.6		IC	MTE		38.5	
Modern Innovative Energy, LLC	Modern LF		A	323580	Lewiston	063	36	2006-02-01	6.4	6.4	6.4	6.4	6.4		IC	MTE		32.6	
Niagara Wind Power, LLC	Steel Wind		A	323596	Lackawanna	029	36	2007-01-23	20.0	0.0	0.0	0.0	0.0		WT	WND		34.0	
Exelon Generation Company, LLC	Chaffee		A	323603	Chaffee	029	36	2007-08-09	6.4	6.4	6.4	6.4	6.4		IC	MTE		34.6	
Noble Bliss Windpark, LLC	Bliss Wind Power		A	323608	Bliss	121	36	2008-03-20	100.5	100.5	100.5	100.5	100.5		WT	WND		175.5	
Innovative Energy Systems, Inc.	Chautauqua LFGE		A	323629	Jamestown	013	36	2010-02-12	9.6	0.0	0.0	0.0	0.0		IC	MTE		39.0	
Erie Wind, LLC	Erie Wind		A	323693	Lackawanna	029	36	2012-02-01	15.0	0.0	0.0	0.0	0.0		WT	WND		26.1	
EDP Renewables NA	Arkwright Summit Wind Farm		A	323751	Arkwright	013	36	2018-09-01	78.4	78.4	78.4	78.4	78.4		WT	WND		233.3	
Consolidated Edison Energy, Inc.	Lockport CC1		A	323769	Lockport	063	36	1992-07-01	73.8	75.1	87.3	68.1	76.0	YES	CC	NG	FO2	18.9	
Consolidated Edison Energy, Inc.	Lockport CC2		A	323770	Lockport	063	36	1992-07-01	73.8	75.1	87.2	68.1	76.0	YES	CC	NG	FO2	18.9	
Consolidated Edison Energy, Inc.	Lockport CC3		A	323771	Lockport	063	36	1992-07-01	73.8	75.0	87.2	68.1	76.0	YES	CC	NG	FO2	18.9	
Cassadaga Wind, LLC	Cassadaga Wind		A	323784	Charlotte	013	36	2021-04-01	126.5	126.0	126.0	0.0	0.0		WT	WND		126.9	(12) (N)
Orangeville Energy Storage LLC	Orangeville ESR		A	323794	Orangeville	121	36	2021-10-19	20.0	20.0	20.0	0.0	0.0		ES	BAT		0.0	(5) (N)
Seneca Power Partners, L.P.	Allegany		B	23514	Hume	003	36	1995-03-01	67.0	62.9	82.2	62.0	62.7		CC	NG		15.0	
R.E. Ginna Nuclear Power Plant, LLC	R. E. Ginna		B	23603	Ontario	117	36	1970-07-01	614.0	582.0	582.0	580.2	581.3		NP	UR		4,700.5	
Rochester Gas and Electric Corp.	Station 2	1	B	23604	Rochester	055	36	1913-07-01	8.5	6.5	6.5	8.5	8.5		HY	WAT		7.2	(G)
Rochester Gas and Electric Corp.	Station 26	1	B	23604	Rochester	055	36	1952-08-01	3.0	3.0	3.0	3.0	3.0		HY	WAT			
Rochester Gas and Electric Corp.	Station 5	1	B	23604	Rochester	055	36	1918-07-01	14.0	11.8	11.8	14.0	14.0		HY	WAT			
Rochester Gas and Electric Corp.	Station 5	2	B	23604	Rochester	055	36	1918-07-01	13.6	11.8	11.8	13.6	13.6		HY	WAT			
Rochester Gas and Electric Corp.	Station 5	3	B	23604	Rochester	055	36	1918-07-01	18.0	16.5	16.5	18.0	18.0		HY	WAT			
Seneca Power Partners, L.P.	Batavia		B	24024	Batavia	037	36	1992-06-01	67.3	57.1	71.7	48.7	59.0		CC	NG		16.2	
Erie Blvd. Hydro - Oak Orchard	Glenwood 1		B	24046	Medina	073	36	1950-01-01	0.5	0.5	0.5	0.5	0.5		HY	WAT		2.2	
Erie Blvd. Hydro - Oak Orchard	Glenwood 2		B	24046	Medina	073	36	1950-01-01	0.5	0.5	0.5	0.5	0.5		HY	WAT		1.5	
Erie Blvd. Hydro - Oak Orchard	Glenwood 3		B	24046	Medina	073	36	1950-01-01	0.5	0.5	0.5	0.5	0.5		HY	WAT		2.6	
Erie Blvd. Hydro - Oak Orchard	Oak Orchard		B	24046	Waterport	073	36	1941-01-01	0.4	0.3	0.3	0.4	0.4		HY	WAT		0.9	
Erie Blvd. Hydro - Oak Orchard	Waterport 1		B	24046	Waterport	073	36	1941-01-01	2.3	1.6	1.6	2.3	2.3		HY	WAT		7.7	
Erie Blvd. Hydro - Oak Orchard	Waterport 2		B	24046	Waterport	073	36	1968-01-01	2.5	1.8	1.8	2.5	2.5		HY	WAT		5.2	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy	Notes
								YYYY-MM-DD	MW									GWh	
Western New York Wind Corp.	Western NY Wind Power		B	24143	Wethersfield	121	36	2000-10-01	6.6	0.0	0.0	0.0	0.0		WT	WND		1.7	
Exelon Generation Company, LLC	Mill Seat		B	323607	Riga	055	36	2007-07-20	6.4	6.4	6.4	6.4	6.4		IC	MTE		51.4	
Innovative Energy Systems, Inc.	Hyland LFGE		B	323620	Angelica	003	36	2008-09-08	4.8	4.8	4.8	4.8	4.8		IC	MTE		36.9	
Exelon Generation Company, LLC	Synergy Biogas		B	323694	Wyoming	121	36	2012-09-01	2.0	0.0	0.0	0.0	0.0		IC	MTE		0.3	
RED-Rochester, LLC	Red Rochester (BTM:NG)		B	323720	Rochester	055	36	2021-04-05	117.0	12.5	12.5	12.5	12.5	YES	ST	NG	FO2	0.4	(4) (11) (N)
New York State Elec. & Gas Corp.	Allegheny 8		C	23528	Kittanning PA	005	42	1990-10-01	16.0	14.7	14.7	16.0	16.0		HY	WAT		185.7	(G)
New York State Elec. & Gas Corp.	Allegheny 9		C	23528	Kittanning PA	005	42	1990-10-01	22.0	20.2	20.2	22.0	22.0		HY	WAT			
Nine Mile Point Nuclear Station, LLC	Nine Mile Point 1		C	23575	Scriba	075	36	1969-11-01	641.8	630.5	630.5	621.9	624.2		NB	UR		5,037.6	
Nine Mile Point Nuclear Station, LLC	Nine Mile Point 2		C	23744	Scriba	075	36	1988-08-01	1,399.0	1,310.0	1,310.0	1,285.1	1,297.3		NB	UR		11,155.9	
Emera Energy U.S. Sub. No. 1, Inc.	Greenidge 4 (BTM:NG)		C	23583	Torrey	123	36	1953-12-01	112.5	106.3	106.3	82.3	82.7		ST	NG	WD	162.8	(9) (E)
Exelon Generation Company, LLC	James A. FitzPatrick		C	23598	Scriba	075	36	1975-07-01	882.0	858.9	858.9	854.0	855.5		NB	UR		7,397.7	
NRG Power Marketing LLC	Oswego 5		C	23606	Oswego	075	36	1976-02-01	901.8	850.3	850.3	811.7	821.2		ST	FO6		6.7	
NRG Power Marketing LLC	Oswego 6		C	23613	Oswego	075	36	1980-07-01	901.8	835.2	835.2	819.5	817.7	YES	ST	FO6	NG	4.8	
Exelon Generation Company, LLC	High Acres		C	23767	Fairport	117	36	1991-06-01	9.6	9.6	9.6	9.6	9.6		IC	MTE		70.7	
Indeck Energy Services of Silver Springs	Indeck-Silver Springs		C	23768	Silver Springs	121	36	1991-04-01	56.6	51.5	66.1	52.2	59.9	YES	CC	NG	FO2	37.6	
Indeck-Oswego LP	Indeck-Oswego		C	23783	Oswego	075	36	1990-05-01	57.4	51.6	66.7	52.7	60.4	YES	CC	NG	FO2	23.8	
Seneca Energy II, LLC	Seneca Energy 1		C	23797	Seneca Falls	099	36	1996-03-01	8.8	8.8	8.8	8.8	8.8		IC	MTE		94.8	(G)
Seneca Energy II, LLC	Seneca Energy 2		C	23797	Seneca Falls	099	36	1997-08-01	8.8	8.8	8.8	8.8	8.8		IC	MTE			
Seneca Energy II, LLC	Ontario LFGE		C	23819	Canandaigua	069	36	2003-12-01	11.2	11.2	11.2	11.2	11.2		IC	MTE		80.5	
Consolidated Edison Energy, Inc.	Syracuse		C	23985	Syracuse	067	36	1993-09-01	102.7	86.8	107.3	88.4	102.2	YES	CC	NG	FO2	12.4	
Erie Blvd. Hydro - Seneca Oswego	Baldwinsville 1		C	24041	Baldwinsville	067	36	1927-01-01	0.3	0.2	0.2	0.3	0.3		HY	WAT		1.1	
Erie Blvd. Hydro - Seneca Oswego	Baldwinsville 2		C	24041	Baldwinsville	067	36	1927-01-01	0.3	0.2	0.2	0.3	0.3		HY	WAT		1.5	
Erie Blvd. Hydro - Seneca Oswego	Fulton 1		C	24041	Fulton	075	36	1924-01-01	0.8	0.8	0.8	0.8	0.8		HY	WAT		2.6	
Erie Blvd. Hydro - Seneca Oswego	Fulton 2		C	24041	Fulton	075	36	1928-01-01	0.5	0.4	0.4	0.5	0.5		HY	WAT		3.0	
Erie Blvd. Hydro - Seneca Oswego	Granby 1		C	24041	Granby	075	36	1983-05-01	5.0	5.1	5.1	5.0	5.0		HY	WAT		18.0	
Erie Blvd. Hydro - Seneca Oswego	Granby 2		C	24041	Granby	075	36	1983-05-01	5.0	5.1	5.1	5.0	5.0		HY	WAT		15.2	
Erie Blvd. Hydro - Seneca Oswego	Minetto 2		C	24041	Minetto	075	36	1915-01-01	1.6	1.5	1.5	1.6	1.6		HY	WAT		5.2	
Erie Blvd. Hydro - Seneca Oswego	Minetto 3		C	24041	Minetto	075	36	1915-01-01	1.6	1.5	1.5	1.6	1.6		HY	WAT		6.5	
Erie Blvd. Hydro - Seneca Oswego	Minetto 4		C	24041	Minetto	075	36	1915-01-01	1.6	1.5	1.5	1.6	1.6		HY	WAT		5.3	
Erie Blvd. Hydro - Seneca Oswego	Minetto 5		C	24041	Minetto	075	36	1975-01-01	1.6	1.5	1.5	1.6	1.6		HY	WAT		4.9	
Erie Blvd. Hydro - Seneca Oswego	Minetto 6		C	24041	Minetto	075	36	1975-01-01	1.6	1.5	1.5	1.6	1.6		HY	WAT		4.0	
Erie Blvd. Hydro - Seneca Oswego	Oswego Falls E 1		C	24041	Oswego	075	36	1914-01-01	1.5	1.5	1.5	1.5	1.5		HY	WAT		8.9	
Erie Blvd. Hydro - Seneca Oswego	Oswego Falls E 2		C	24041	Oswego	075	36	1914-01-01	1.5	1.5	1.5	1.5	1.5		HY	WAT		7.2	
Erie Blvd. Hydro - Seneca Oswego	Oswego Falls E 3		C	24041	Oswego	075	36	1914-01-01	1.5	1.5	1.5	1.5	1.5		HY	WAT		7.6	
Erie Blvd. Hydro - Seneca Oswego	Oswego Falls W 4		C	24041	Oswego	075	36	1914-01-01	0.9	1.0	1.0	0.9	0.9		HY	WAT		1.9	
Erie Blvd. Hydro - Seneca Oswego	Oswego Falls W 5		C	24041	Oswego	075	36	1914-01-01	0.9	1.0	1.0	0.9	0.9		HY	WAT		1.1	
Erie Blvd. Hydro - Seneca Oswego	Oswego Falls W 6		C	24041	Oswego	075	36	2007-01-01	0.5	0.5	0.5	0.5	0.5		HY	WAT		0.9	
Erie Blvd. Hydro - Seneca Oswego	Oswego Falls W 7		C	24041	Oswego	075	36	2007-01-01	0.5	0.5	0.5	0.5	0.5		HY	WAT		0.1	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy GWh	Notes
								YYYY-MM-DD	MW										
Erie Blvd. Hydro - Seneca Oswego	Varick 2		C	24041	Oswego	075	36	1926-01-01	2.2	1.9	1.9	2.2	2.2		HY	WAT		8.8	
Erie Blvd. Hydro - Seneca Oswego	Varick 3		C	24041	Oswego	075	36	1926-01-01	2.2	2.1	2.1	2.2	2.2		HY	WAT		6.1	
Erie Blvd. Hydro - Seneca Oswego	Varick 4		C	24041	Oswego	075	36	1926-01-01	2.2	1.9	1.9	2.2	2.2		HY	WAT		5.3	
Erie Blvd. Hydro - Seneca Oswego	Varick 5		C	24041	Oswego	075	36	1926-01-01	2.2	1.9	1.9	2.2	2.2		HY	WAT		0.0	
Erie Blvd. Hydro - South Salmon	Bennetts Bridge 1		C	24043	Altmar	075	36	1964-01-01	6.4	7.0	7.0	6.4	6.4		HY	WAT		10.3	
Erie Blvd. Hydro - South Salmon	Bennetts Bridge 2		C	24043	Altmar	075	36	1966-01-01	6.4	7.0	7.0	6.4	6.4		HY	WAT		6.3	
Erie Blvd. Hydro - South Salmon	Bennetts Bridge 3		C	24043	Altmar	075	36	1970-01-01	7.0	7.7	7.7	7.0	7.0		HY	WAT		31.2	
Erie Blvd. Hydro - South Salmon	Bennetts Bridge 4		C	24043	Altmar	075	36	1970-01-01	7.0	7.7	7.7	7.0	7.0		HY	WAT		37.0	
Erie Blvd. Hydro - South Salmon	Lighthouse Hill 1		C	24043	Altmar	075	36	1930-01-01	3.8	4.1	4.1	3.8	3.8		HY	WAT		12.2	
Erie Blvd. Hydro - South Salmon	Lighthouse Hill 2		C	24043	Altmar	075	36	1930-01-01	3.8	4.1	4.1	3.8	3.8		HY	WAT		8.9	
Carr Street Generating Station LP	Carr St.-E. Syr		C	24060	Dewitt	067	36	1993-08-01	122.6	89.0	116.8	91.0	107.1	YES	CC	NG	FO2	139.1	
Dynegy Marketing and Trade, LLC	Independence GS1		C	24169	Scriba	075	36	1994-11-01	313.5	253.2	303.0	245.1	296.1		CC	NG		3,063.1	(G)
Dynegy Marketing and Trade, LLC	Independence GS2		C	24170	Scriba	075	36	1994-11-01	313.5	253.2	302.9	245.1	296.1		CC	NG			
Dynegy Marketing and Trade, LLC	Independence GS3		C	24171	Scriba	075	36	1994-11-01	313.5	253.3	303.0	245.1	293.4		CC	NG			
Dynegy Marketing and Trade, LLC	Independence GS4		C	24172	Scriba	075	36	1994-11-01	313.5	253.2	302.8	245.1	296.1		CC	NG			
Canastota Windpower LLC	Fenner Wind Power		C	24204	Fenner	053	36	2001-12-01	30.0	30.0	30.0	0.0	0.0		WT	WND		73.2	
Consolidated Edison Energy, Inc.	Broome LFGE		C	323600	Binghamton	007	36	2007-09-01	2.4	2.1	2.1	2.4	2.4		IC	MTE		11.2	
Canandaigua Power Partners, LLC	Canandaigua Wind Power		C	323617	Avoca	101	36	2008-12-05	125.0	125.0	125.0	125.0	125.0		WT	WND		162.4	
Sheldon Energy LLC	High Sheldon Wind Farm		C	323625	Sheldon	121	36	2009-02-01	118.1	112.5	112.5	118.1	118.1		WT	WND		222.2	
Noble Wethersfield Windpark, LLC	Wethersfield Wind Power		C	323626	Wethersfield	121	36	2008-12-11	126.0	126.0	126.0	126.0	126.0		WT	WND		227.9	
Consolidated Edison Energy, Inc.	Broome 2 LFGE		C	323671	Binghamton	007	36	2013-01-31	2.1	2.0	2.0	2.1	2.1		IC	MTE		13.3	
Howard Wind LLC	Howard Wind		C	323690	Howard	101	36	2011-12-01	55.4	57.4	57.4	55.4	55.4		WT	WND		109.3	
Stony Creek Energy LLC	Orangeville Wind Farm		C	323706	Orangeville	121	36	2013-12-01	93.9	94.4	94.4	93.9	93.9		WT	WND		245.8	
Marsh Hill Energy LLC	Marsh Hill Wind Farm		C	323713	Jasper	101	36	2014-12-01	16.2	0.0	0.0	0.0	0.0		WT	WND		48.8	
New York Power Authority	St Lawrence - FDR (Fleet)		D	23600	Massena	089	36	1958-07-01	1,088.0	856.0	856.0	856.0	810.0		HY	WAT		7,328.0	
New York State Elec. & Gas Corp.	Cadyville 1		D	23628	Schuyler Falls	019	36	1921-08-01	1.2	1.0	1.0	1.2	1.2		HY	WAT		64.0	(G)
New York State Elec. & Gas Corp.	Cadyville 2		D	23628	Schuyler Falls	019	36	1921-08-01	1.2	1.0	1.0	1.2	1.2		HY	WAT			
New York State Elec. & Gas Corp.	Cadyville 3		D	23628	Schuyler Falls	019	36	1986-09-01	3.1	2.7	2.7	3.1	3.1		HY	WAT			
New York State Elec. & Gas Corp.	High Falls 1		D	23628	Saranac	019	36	1948-08-01	4.0	4.3	4.3	4.0	4.0		HY	WAT			
New York State Elec. & Gas Corp.	High Falls 2		D	23628	Saranac	019	36	1949-08-01	4.0	4.3	4.3	4.0	4.0		HY	WAT			
New York State Elec. & Gas Corp.	High Falls 3		D	23628	Saranac	019	36	1956-08-01	7.0	8.2	8.2	7.0	7.0		HY	WAT			
New York State Elec. & Gas Corp.	Kent Falls 1		D	23628	Schuyler Falls	019	36	1928-08-01	3.6	3.0	3.0	3.6	3.6		HY	WAT			
New York State Elec. & Gas Corp.	Kent Falls 2		D	23628	Schuyler Falls	019	36	1928-08-01	3.6	3.0	3.0	3.6	3.6		HY	WAT			
New York State Elec. & Gas Corp.	Kent Falls 3		D	23628	Schuyler Falls	019	36	1985-07-01	6.4	6.0	6.0	6.4	6.4		HY	WAT			
New York State Elec. & Gas Corp.	Mill C 1		D	23628	Plattsburgh	019	36	1944-08-01	1.0	0.9	0.9	1.0	1.0		HY	WAT			
New York State Elec. & Gas Corp.	Mill C 2		D	23628	Plattsburgh	019	36	1943-08-01	1.2	1.2	1.2	1.2	1.2		HY	WAT			
New York State Elec. & Gas Corp.	Mill C 3		D	23628	Plattsburgh	019	36	1984-11-01	3.8	3.7	3.7	3.8	3.8		HY	WAT			
New York State Elec. & Gas Corp.	Rainbow Falls 1		D	23628	Ausable	019	36	1926-08-01	1.3	1.5	1.5	1.3	1.3		HY	WAT			

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy GWh	Notes
								YYYY-MM-DD	MW										
New York State Elec. & Gas Corp.	Rainbow Falls 2		D	23628	Ausable	019	36	1927-08-01	1.3	1.5	1.5	1.3	1.3		HY	WAT			
Seneca Power Partners, L.P.	Massena		D	23902	Massena	089	36	1992-07-01	102.1	82.2	107.9	81.5	92.3	YES	CC	NG	FO2	17.3	
New York State Elec. & Gas Corp.	Lower Saranac 1		D	23913	Schuyler Falls	019	36	1990-10-01	3.2	3.5	3.5	0.0	0.0		HY	WAT			
New York State Elec. & Gas Corp.	Lower Saranac 2		D	23913	Schuyler Falls	019	36	1990-10-01	3.2	3.5	3.5	0.0	0.0		HY	WAT			
New York State Elec. & Gas Corp.	Lower Saranac 3		D	23913	Schuyler Falls	019	36	1990-10-01	0.3	2.9	2.9	0.0	0.0		HY	WAT			
Erie Blvd. Hydro - North Salmon	Allens Falls		D	24042	Allens Falls	089	36	1927-01-01	4.4	5.0	5.0	4.4	4.4		HY	WAT		21.6	
Erie Blvd. Hydro - North Salmon	Chasm 1		D	24042	Chateaugay	033	36	1913-01-01	1.0	1.1	1.1	1.0	1.0		HY	WAT		4.8	
Erie Blvd. Hydro - North Salmon	Chasm 2		D	24042	Chateaugay	033	36	1913-01-01	1.0	1.1	1.1	1.0	1.0		HY	WAT		3.5	
Erie Blvd. Hydro - North Salmon	Chasm 3		D	24042	Chateaugay	033	36	1926-01-01	1.4	1.6	1.6	1.4	1.4		HY	WAT		9.0	
Erie Blvd. Hydro - North Salmon	Franklin 1		D	24042	Franklin	033	36	1911-01-01	1.1	1.1	1.1	1.1	1.1		HY	WAT		4.5	
Erie Blvd. Hydro - North Salmon	Franklin 2		D	24042	Franklin	033	36	1926-01-01	1.1	1.1	1.1	1.1	1.1		HY	WAT		3.2	
Erie Blvd. Hydro - North Salmon	Macomb		D	24042	Malone	033	36	1940-01-01	1.0	1.1	1.1	1.0	1.0		HY	WAT		5.6	
Erie Blvd. Hydro - North Salmon	Parishville		D	24042	Parishville	089	36	1925-01-01	2.4	2.4	2.4	2.4	2.4		HY	WAT		12.3	
Erie Blvd. Hydro - North Salmon	Piercefield 1		D	24042	Piercefield	089	36	1957-01-01	1.5	1.6	1.6	1.5	1.5		HY	WAT		9.7	
Erie Blvd. Hydro - North Salmon	Piercefield 2		D	24042	Piercefield	089	36	1924-01-01	0.6	0.6	0.6	0.6	0.6		HY	WAT		3.0	
Erie Blvd. Hydro - North Salmon	Piercefield 3		D	24042	Piercefield	089	36	1924-01-01	0.6	0.6	0.6	0.6	0.6		HY	WAT		3.8	
Triton Power Company	Chateaugay High Falls		D	323578	Chateaugay	033	36	1987-12-01	1.7	1.7	1.7	0.0	0.0		HY	WAT		2.0	
Noble Ellenburg Windpark, LLC	Ellenburg Wind Power		D	323604	Ellenburg	019	36	2008-03-31	81.0	81.0	81.0	81.0	81.0		WT	WND		144.9	
Noble Clinton Windpark 1, LLC	Clinton Wind Power		D	323605	Clinton	019	36	2008-04-09	100.5	100.5	100.5	100.5	100.5		WT	WND		151.4	
Noble Altona Windpark, LLC	Altona Wind Power		D	323606	Altona	019	36	2008-09-23	97.5	97.5	97.5	97.5	97.5		WT	WND		162.5	
Noble Chateaugay Windpark, LLC	Chateaugay Wind Power		D	323614	Chateaugay	033	36	2008-10-07	106.5	106.5	106.5	106.5	106.5		WT	WND		175.3	
Innovative Energy Systems, Inc.	Clinton LFGE		D	323618	Morrisonville	019	36	2008-10-01	6.4	6.4	6.4	6.4	6.4		IC	MTE		38.4	
Marble River LLC	Marble River Wind		D	323696	Ellenburg	019	36	2012-07-01	215.2	215.2	215.2	215.2	215.2		WT	WND		447.6	
Jericho Rise Wind Farm LLC	Jericho Rise Wind Farm		D	323719	Chateaugay	033	36	2016-12-01	77.7	77.7	77.7	77.7	77.7		WT	WND		200.9	
TransAlta Energy Marketing (U.S.) Inc.	Saranac Energy CC1		D	323796	Plattsburgh	019	36	1994-06-01	142.8	126.9	149.2	119.9	140.1		CC	NG		47.3	**(G)**
TransAlta Energy Marketing (U.S.) Inc.	Saranac Energy CC2		D	323797	Plattsburgh	019	36	1994-06-01	142.8	126.8	149.2	119.9	140.1		CC	NG			
Northbrook Lyons Falls, LLC	Lyons Falls Hydro (BTM:NG)		E	23570	Lyons Falls	049	36	1986-01-01	8.6	7.3	7.3	0.0	0.0		HY	WAT		21.5	**(10) (E)**
New York Power Authority	Jarvis 1		E	23743	Hinckley	065	36	1991-07-01	4.5	4.5	4.5	4.5	4.5		HY	WAT		17.0	
New York Power Authority	Jarvis 2		E	23743	Hinckley	065	36	1991-07-01	4.5	4.5	4.5	4.5	4.5		HY	WAT		11.2	
Seneca Power Partners, L.P.	Sterling		E	23777	Sherrill	065	36	1991-06-01	65.3	57.4	72.1	49.2	61.9		CC	NG		15.5	
Black River Hydroelectric, LLC	Glen Park Hydro		E	23778	Glen Park	045	36	1986-01-01	32.6	40.4	40.4	32.6	32.6		HY	WAT		108.4	
Seneca Power Partners, L.P.	Carthage Energy		E	23857	Carthage	045	36	1991-08-01	62.9	59.0	70.6	56.1	65.3	YES	CC	NG	FO2	4.9	
Consolidated Edison Energy, Inc.	Beaver Falls		E	23983	Beaver Falls	049	36	1995-03-01	107.8	80.2	94.9	80.3	92.8	YES	CC	NG	FO2	4.2	
Erie Blvd. Hydro - Oswegatchie	Browns Falls 1		E	24044	Oswegatchie	089	36	1923-01-01	7.5	8.0	8.0	7.5	7.5		HY	WAT		26.3	
Erie Blvd. Hydro - Oswegatchie	Browns Falls 2		E	24044	Oswegatchie	089	36	1923-01-01	7.5	8.0	8.0	7.5	7.5		HY	WAT		14.5	
Erie Blvd. Hydro - Oswegatchie	Eel Weir 1		E	24044	Heuvelton	089	36	1928-01-01	0.5	0.3	0.3	0.5	0.5		HY	WAT		1.8	
Erie Blvd. Hydro - Oswegatchie	Eel Weir 2		E	24044	Heuvelton	089	36	1938-01-01	1.1	0.8	0.8	1.1	1.1		HY	WAT		2.4	
Erie Blvd. Hydro - Oswegatchie	Eel Weir 3		E	24044	Heuvelton	089	36	1938-01-01	1.1	0.8	0.8	1.1	1.1		HY	WAT		3.6	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location			In-Service Date	Name Plate Rating (V)	2022 CRIS (A)		2022 Capability (B)		DUAL	Unit Type	Fuel (U)		2021 Net (C) Energy	Notes
					Town	Cnty	St			MW		MW				Type 1	Type 2		
								YYYY-MM-DD	MW	SUM	WIN	SUM	WIN					GWh	
Erie Blvd. Hydro - Oswegatchie	Flat Rock 1		E	24044	Flat Rock	089	36	1924-01-01	3.0	2.6	2.6	3.0	3.0		HY	WAT		7.8	
Erie Blvd. Hydro - Oswegatchie	Flat Rock 2		E	24044	Flat Rock	089	36	1924-01-01	3.0	2.6	2.6	3.0	3.0		HY	WAT		6.6	
Erie Blvd. Hydro - Oswegatchie	Heuvelton 1		E	24044	Heuvelton	089	36	1924-01-01	0.5	0.4	0.4	0.5	0.5		HY	WAT		2.5	
Erie Blvd. Hydro - Oswegatchie	Heuvelton 2		E	24044	Heuvelton	089	36	1924-01-01	0.5	0.4	0.4	0.5	0.5		HY	WAT		2.0	
Erie Blvd. Hydro - Oswegatchie	Lower Newton Falls 1		E	24044	Newton Falls	089	36	2002-07-01	0.5	0.6	0.6	0.5	0.5		HY	WAT		1.7	
Erie Blvd. Hydro - Oswegatchie	Oswegatchie 1		E	24044	Oswegatchie	089	36	1937-01-01	0.6	1.3	1.3	0.6	0.6		HY	WAT		3.8	
Erie Blvd. Hydro - Oswegatchie	Oswegatchie 2		E	24044	Oswegatchie	089	36	1937-01-01	0.2	0.5	0.5	0.2	0.2		HY	WAT		2.7	
Erie Blvd. Hydro - Oswegatchie	South Edwards 1		E	24044	South Edwards	089	36	1937-01-01	1.0	1.2	1.2	1.0	1.0		HY	WAT		4.7	
Erie Blvd. Hydro - Oswegatchie	South Edwards 2		E	24044	South Edwards	089	36	1937-01-01	1.0	1.2	1.2	1.0	1.0		HY	WAT		1.9	
Erie Blvd. Hydro - Oswegatchie	South Edwards 3		E	24044	South Edwards	089	36	1921-01-01	0.7	0.8	0.8	0.7	0.7		HY	WAT		2.1	
Erie Blvd. Hydro - Oswegatchie	South Edwards 4		E	24044	South Edwards	089	36	1937-01-01	0.2	0.2	0.2	0.2	0.2		HY	WAT		1.2	
Erie Blvd. Hydro - Oswegatchie	Talcville 1		E	24044	Edwards	089	36	1986-12-01	0.5	0.4	0.4	0.5	0.5		HY	WAT		3.6	
Erie Blvd. Hydro - Oswegatchie	Talcville 2		E	24044	Edwards	089	36	1986-12-01	0.5	0.4	0.4	0.5	0.5		HY	WAT		0.5	
Erie Blvd. Hydro - Oswegatchie	Upper Newton Falls 2		E	24044	Newton Falls	089	36	2002-07-01	0.5	0.4	0.4	0.5	0.5		HY	WAT		2.3	
Erie Blvd. Hydro - Oswegatchie	Upper Newton Falls 3		E	24044	Newton Falls	089	36	2002-07-01	0.5	0.4	0.4	0.5	0.5		HY	WAT		1.2	
Erie Blvd. Hydro - Oswegatchie	Upper Newton Falls 4		E	24044	Newton Falls	089	36	2002-07-01	0.5	0.4	0.4	0.5	0.5		HY	WAT		1.2	
Erie Blvd. Hydro - Black River	Beebee Island 1		E	24047	Watertown	045	36	1963-01-01	4.0	4.4	4.4	4.0	4.0		HY	WAT		19.1	
Erie Blvd. Hydro - Black River	Beebee Island 2		E	24047	Watertown	045	36	1968-01-01	4.0	4.4	4.4	4.0	4.0		HY	WAT		28.2	
Erie Blvd. Hydro - Black River	Black River 1		E	24047	Black River	045	36	1920-01-01	2.0	2.3	2.3	2.0	2.0		HY	WAT		11.9	
Erie Blvd. Hydro - Black River	Black River 2		E	24047	Black River	045	36	1920-01-01	2.0	2.3	2.3	2.0	2.0		HY	WAT		14.7	
Erie Blvd. Hydro - Black River	Black River 3		E	24047	Black River	045	36	1920-01-01	2.0	2.3	2.3	2.0	2.0		HY	WAT		6.7	
Erie Blvd. Hydro - Black River	Deferiet 1		E	24047	Deferiet	045	36	1925-01-01	3.6	3.7	3.7	3.6	3.6		HY	WAT		10.5	
Erie Blvd. Hydro - Black River	Deferiet 2		E	24047	Deferiet	045	36	1925-01-01	3.6	3.7	3.7	3.6	3.6		HY	WAT		28.5	
Erie Blvd. Hydro - Black River	Deferiet 3		E	24047	Deferiet	045	36	1925-01-01	3.6	3.7	3.7	3.6	3.6		HY	WAT		13.3	
Erie Blvd. Hydro - Black River	Herrings 1		E	24047	Herrings	045	36	1924-01-01	1.8	1.8	1.8	1.8	1.8		HY	WAT		6.6	
Erie Blvd. Hydro - Black River	Herrings 2		E	24047	Herrings	045	36	1924-01-01	1.8	1.8	1.8	1.8	1.8		HY	WAT		12.5	
Erie Blvd. Hydro - Black River	Herrings 3		E	24047	Herrings	045	36	1924-01-01	1.8	1.8	1.8	1.8	1.8		HY	WAT		5.8	
Erie Blvd. Hydro - Black River	Kamargo 1		E	24047	Black River	045	36	1921-01-01	1.8	1.8	1.8	1.8	1.8		HY	WAT		9.3	
Erie Blvd. Hydro - Black River	Kamargo 2		E	24047	Black River	045	36	1921-01-01	1.8	1.8	1.8	1.8	1.8		HY	WAT		12.8	
Erie Blvd. Hydro - Black River	Kamargo 3		E	24047	Black River	045	36	1921-01-01	1.8	1.8	1.8	1.8	1.8		HY	WAT		5.5	
Erie Blvd. Hydro - Black River	Sewalls 1		E	24047	Watertown	045	36	1925-01-01	1.0	1.1	1.1	1.0	1.0		HY	WAT		6.6	
Erie Blvd. Hydro - Black River	Sewalls 2		E	24047	Watertown	045	36	1925-01-01	1.0	1.1	1.1	1.0	1.0		HY	WAT		9.4	
Erie Blvd. Hydro - Beaver River	Belfort 1		E	24048	Belfort	049	36	1903-01-01	0.4	0.4	0.4	0.4	0.4		HY	WAT		1.2	
Erie Blvd. Hydro - Beaver River	Belfort 2		E	24048	Belfort	049	36	1915-01-01	0.6	0.6	0.6	0.6	0.6		HY	WAT		2.3	
Erie Blvd. Hydro - Beaver River	Belfort 3		E	24048	Belfort	049	36	1918-01-01	1.0	1.0	1.0	1.0	1.0		HY	WAT		6.9	
Erie Blvd. Hydro - Beaver River	Eagle 1		E	24048	Watson	049	36	1914-01-01	1.3	1.2	1.2	1.3	1.3		HY	WAT		6.2	
Erie Blvd. Hydro - Beaver River	Eagle 2		E	24048	Watson	049	36	1915-01-01	1.4	1.3	1.3	1.4	1.4		HY	WAT		4.7	
Erie Blvd. Hydro - Beaver River	Eagle 3		E	24048	Watson	049	36	1919-01-01	1.4	1.3	1.3	1.4	1.4		HY	WAT		4.8	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location			In-Service Date	Name Plate Rating (V)	2022 CRIS (A)		2022 Capability (B)		DUAL	Unit Type	Fuel (U)		2021 Net (C) Energy	Notes
					Town	Cnty	St			MW		MW				Type 1	Type 2		
								YYYY-MM-DD	MW	SUM	WIN	SUM	WIN					GWh	
Erie Blvd. Hydro - Beaver River	Eagle 4		E	24048	Watson	049	36	1925-01-01	2.1	2.0	2.0	2.1	2.1		HY	WAT		13.2	
Erie Blvd. Hydro - Beaver River	Effley 1		E	24048	Belfort	049	36	1902-01-01	0.4	0.3	0.3	0.4	0.4		HY	WAT		1.0	
Erie Blvd. Hydro - Beaver River	Effley 2		E	24048	Belfort	049	36	1907-01-01	0.4	0.3	0.3	0.4	0.4		HY	WAT		1.4	
Erie Blvd. Hydro - Beaver River	Effley 3		E	24048	Belfort	049	36	1910-01-01	0.6	0.5	0.5	0.6	0.6		HY	WAT		3.4	
Erie Blvd. Hydro - Beaver River	Effley 4		E	24048	Belfort	049	36	1923-01-01	1.6	1.5	1.5	1.6	1.6		HY	WAT		7.4	
Erie Blvd. Hydro - Beaver River	Elmer 1		E	24048	Belfort	049	36	1916-01-01	0.8	0.9	0.9	0.8	0.8		HY	WAT		4.9	
Erie Blvd. Hydro - Beaver River	Elmer 2		E	24048	Belfort	049	36	1916-01-01	0.8	0.9	0.9	0.8	0.8		HY	WAT		4.0	
Erie Blvd. Hydro - Beaver River	High Falls 1		E	24048	Indian River	049	36	1925-01-01	1.6	1.9	1.9	1.6	1.6		HY	WAT		6.0	
Erie Blvd. Hydro - Beaver River	High Falls 2		E	24048	Indian River	049	36	1925-01-01	1.6	1.9	1.9	1.6	1.6		HY	WAT		8.5	
Erie Blvd. Hydro - Beaver River	High Falls 3		E	24048	Indian River	049	36	1925-01-01	1.6	1.9	1.9	1.6	1.6		HY	WAT		12.5	
Erie Blvd. Hydro - Beaver River	Moshier 1		E	24048	Belfort	043	36	1929-01-01	4.0	4.0	4.0	4.0	4.0		HY	WAT		17.8	
Erie Blvd. Hydro - Beaver River	Moshier 2		E	24048	Belfort	043	36	1929-01-01	4.0	4.0	4.0	4.0	4.0		HY	WAT		15.1	
Erie Blvd. Hydro - Beaver River	Soft Maple 1		E	24048	Croghan	049	36	1925-01-01	7.5	8.0	8.0	7.5	7.5		HY	WAT		7.5	
Erie Blvd. Hydro - Beaver River	Soft Maple 2		E	24048	Croghan	049	36	1925-01-01	7.5	8.0	8.0	7.5	7.5		HY	WAT		21.3	
Erie Blvd. Hydro - Beaver River	Taylorville 1		E	24048	Belfort	049	36	1913-01-01	1.1	1.0	1.0	1.1	1.1		HY	WAT		4.4	
Erie Blvd. Hydro - Beaver River	Taylorville 2		E	24048	Belfort	049	36	1913-01-01	1.1	1.0	1.0	1.1	1.1		HY	WAT		6.3	
Erie Blvd. Hydro - Beaver River	Taylorville 3		E	24048	Belfort	049	36	1913-01-01	1.1	1.0	1.0	1.1	1.1		HY	WAT		4.6	
Erie Blvd. Hydro - Beaver River	Taylorville 4		E	24048	Belfort	049	36	1927-01-01	1.2	1.1	1.1	1.2	1.2		HY	WAT		6.0	
Erie Blvd. Hydro - West Canada	Prospect		E	24049	Prospect	043	36	1959-01-01	17.3	21.7	21.7	17.3	17.3		HY	WAT		69.4	
Erie Blvd. Hydro - West Canada	Trenton Falls 5		E	24049	Trenton	065	36	1919-01-01	6.8	9.6	9.6	6.8	6.8		HY	WAT		46.9	
Erie Blvd. Hydro - West Canada	Trenton Falls 6		E	24049	Trenton	065	36	1919-01-01	6.4	9.1	9.1	6.4	6.4		HY	WAT		53.3	
Erie Blvd. Hydro - West Canada	Trenton Falls 7		E	24049	Trenton	065	36	1922-01-01	6.4	9.1	9.1	6.4	6.4		HY	WAT		41.0	
Erie Blvd. Hydro - East Canada Mohawk	Inghams 1		E	24050	Little Falls	043	36	1912-01-01	3.2	3.5	3.5	3.2	3.2		HY	WAT		12.4	
Erie Blvd. Hydro - East Canada Mohawk	Inghams 2		E	24050	Little Falls	043	36	1912-01-01	3.2	3.5	3.5	3.2	3.2		HY	WAT		16.1	
Erie Blvd. Hydro - Upper Raquette	Blake		E	24056	Stark	089	36	1957-01-01	14.4	15.6	15.6	14.4	14.4		HY	WAT		56.8	
Erie Blvd. Hydro - Upper Raquette	Five Falls		E	24056	Colton	089	36	1955-01-01	22.5	24.4	24.4	22.5	22.5		HY	WAT		90.8	
Erie Blvd. Hydro - Upper Raquette	Rainbow Falls		E	24056	Colton	089	36	1956-01-01	22.5	24.4	24.4	22.5	22.5		HY	WAT		94.3	
Erie Blvd. Hydro - Upper Raquette	South Colton		E	24056	South Colton	089	36	1954-01-01	19.4	20.9	20.9	19.4	19.4		HY	WAT		76.8	
Erie Blvd. Hydro - Upper Raquette	Stark		E	24056	Stark	089	36	1957-01-01	22.5	24.6	24.6	22.5	22.5		HY	WAT		90.9	
Erie Blvd. Hydro - Lower Raquette	Colton 1		E	24057	Colton	089	36	1962-01-01	10.0	10.0	10.0	10.0	10.0		HY	WAT		63.2	
Erie Blvd. Hydro - Lower Raquette	Colton 2		E	24057	Colton	089	36	1918-01-01	10.0	10.0	10.0	10.0	10.0		HY	WAT		63.1	
Erie Blvd. Hydro - Lower Raquette	Colton 3		E	24057	Colton	089	36	1928-01-01	10.0	10.0	10.0	10.0	10.0		HY	WAT		60.6	
Erie Blvd. Hydro - Lower Raquette	East Norfolk		E	24057	East Norfolk	089	36	1928-01-01	3.6	4.0	4.0	3.6	3.6		HY	WAT		22.9	
Erie Blvd. Hydro - Lower Raquette	Hannawa Falls 1		E	24057	Hannawa Falls	089	36	1914-01-01	3.6	3.7	3.7	3.6	3.6		HY	WAT		23.4	
Erie Blvd. Hydro - Lower Raquette	Hannawa Falls 2		E	24057	Hannawa Falls	089	36	1920-01-01	3.6	3.7	3.7	3.6	3.6		HY	WAT		21.5	
Erie Blvd. Hydro - Lower Raquette	Higley 1		E	24057	Colton	089	36	1913-01-01	1.2	1.1	1.1	1.2	1.2		HY	WAT		9.9	
Erie Blvd. Hydro - Lower Raquette	Higley 2		E	24057	Colton	089	36	1913-01-01	1.2	1.1	1.1	1.2	1.2		HY	WAT		7.6	
Erie Blvd. Hydro - Lower Raquette	Higley 3		E	24057	Colton	089	36	1943-01-01	2.1	2.0	2.0	2.1	2.1		HY	WAT		9.1	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy	Notes
								YYYY-MM-DD	MW									GWh	
Erie Blvd. Hydro - Lower Raquette	Higley 4		E	24057	Colton	089	36	1943-01-01	2.1	2.0	2.0	2.1	2.1		HY	WAT		9.1	
Erie Blvd. Hydro - Lower Raquette	Norfolk		E	24057	Norfolk	089	36	1928-01-01	4.5	4.8	4.8	4.5	4.5		HY	WAT		26.0	
Erie Blvd. Hydro - Lower Raquette	Norwood		E	24057	Norwood	089	36	1928-01-01	2.0	2.2	2.2	2.0	2.0		HY	WAT		12.7	
Erie Blvd. Hydro - Lower Raquette	Raymondville		E	24057	Raymondville	089	36	1928-01-01	2.0	2.1	2.1	2.0	2.0		HY	WAT		12.3	
Erie Blvd. Hydro - Lower Raquette	Sugar Island 1		E	24057	Potsdam	089	36	1924-01-01	2.5	2.1	2.1	2.5	2.5		HY	WAT		11.1	
Erie Blvd. Hydro - Lower Raquette	Sugar Island 2		E	24057	Potsdam	089	36	1924-01-01	2.5	2.0	2.0	2.5	2.5		HY	WAT		12.4	
Erie Blvd. Hydro - Lower Raquette	Yaleville 1		E	24057	Norwood	089	36	1940-01-01	0.5	0.2	0.2	0.5	0.5		HY	WAT		2.4	
Erie Blvd. Hydro - Lower Raquette	Yaleville 2		E	24057	Norwood	089	36	1940-01-01	0.2	0.3	0.3	0.2	0.2		HY	WAT		1.1	
Madison Windpower, LLC	Madison Wind Power		E	24146	Madison	053	36	2000-09-01	11.6	11.5	11.5	11.6	11.6		WT	WND		10.3	
Flat Rock Windpower, LLC	Maple Ridge Wind 1		E	323574	Lowville	049	36	2006-01-01	231.0	231.0	231.0	231.0	231.0		WT	WND		454.2	
Flat Rock Windpower II, LLC	Maple Ridge Wind 2		E	323611	Lowville	049	36	2007-12-01	90.8	90.7	90.7	90.8	90.8		WT	WND		168.3	
Northbrook Lyons Falls, LLC	Hampshire Paper		E	323593	Gouverneur	089	36	1987-03-01	3.4	3.5	3.5	3.4	3.4		HY	WAT		8.9	
Munnsville Wind Farm, LLC	Munnsville Wind Power		E	323609	Bouckville	053	36	2007-08-20	34.5	34.5	34.5	34.5	34.5		WT	WND		79.8	
Innovative Energy Systems, Inc.	DANC LFGE		E	323619	Watertown	045	36	2008-09-08	6.4	6.4	6.4	6.4	6.4		IC	MTE		31.9	
Exelon Generation Company, LLC	Madison County LF		E	323628	Wampsville	053	36	2010-03-01	1.6	1.6	1.6	1.6	1.6		IC	MTE		3.6	
Hardscrabble Wind Power LLC	Hardscrabble Wind		E	323673	Fairfield	043	36	2011-02-01	74.0	74.0	74.0	74.0	74.0		WT	WND		159.1	
Exelon Generation Company, LLC	Oneida-Herkimer LFGE		E	323681	Boonville	065	36	2012-04-01	3.2	3.2	3.2	3.2	3.2		IC	MTE		25.7	
EDF Renewable Energy	Copenhagen Wind Farm		E	323753	Copenhagen	049	36	2018-12-01	79.9	79.9	79.9	0.0	0.0		WT	WND		239.8	
Avangrid Renewables LLC	Roaring Brook Wind		E	323790	Martinsburg	049	36	2021-08-30	79.7	79.7	79.7	0.0	0.0		WT	WND		29.5	(6) (N)
Boralex Hydro Operations Inc	NYS Dam		F	23527	Waterford	091	36	1990-12-01	11.4	11.3	11.3	11.4	11.4		HY	WAT		52.4	
New York State Elec. & Gas Corp.	Mechanicville 1		F	23645	Stillwater	091	36	1983-09-01	9.2	10.0	10.0	9.2	9.2		HY	WAT		36.3	(G)
New York State Elec. & Gas Corp.	Mechanicville 2		F	23645	Stillwater	091	36	1983-09-01	9.3	10.0	10.0	9.3	9.3		HY	WAT			
New Athens Generating Company LLC	Athens 1		F	23668	Athens	039	36	2004-05-01	441.0	316.6	399.9	330.2	406.3	YES	CC	NG	FO2	653.6	
New Athens Generating Company LLC	Athens 2		F	23670	Athens	039	36	2004-05-01	441.0	315.6	398.6	326.5	402.4	YES	CC	NG	FO2	371.7	
New Athens Generating Company LLC	Athens 3		F	23677	Athens	039	36	2004-05-01	441.0	312.8	395.1	327.6	408.2	YES	CC	NG	FO2	745.1	
Boralex Hydro Operations Inc	Warrensburg		F	23737	Warrensburg	113	36	1988-12-01	2.9	3.0	3.0	2.9	2.9		HY	WAT		11.9	
New York Power Authority	Gilboa 1		F	23756	Gilboa NY	095	36	1973-07-01	290.0	290.7	290.7	292.2	291.7		PS	WAT		26.4	
New York Power Authority	Gilboa 2		F	23757	Gilboa NY	095	36	1973-07-01	290.0	291.2	291.2	291.1	293.5		PS	WAT		162.1	
New York Power Authority	Gilboa 3		F	23758	Gilboa NY	095	36	1973-07-01	290.0	291.7	291.7	292.6	293.3		PS	WAT		50.0	
New York Power Authority	Gilboa 4		F	23759	Gilboa NY	095	36	1973-07-01	290.0	291.5	291.5	292.9	292.4		PS	WAT		44.8	
Consolidated Edison Energy, Inc.	Rensselaer		F	23796	Rensselaer	083	36	1993-12-01	96.9	79.0	79.0	77.0	82.7	YES	CC	NG	FO2	34.9	
Wheelabrator Hudson Falls, LLC	Wheelabrator Hudson Falls		F	23798	Hudson Falls	115	36	1991-10-01	14.4	12.7	12.7	10.4	10.4		ST	REF		63.6	
Consolidated Edison Energy, Inc.	Selkirk-I		F	23801	Selkirk	001	36	1992-03-01	107.2	82.1	107.2	78.3	103.9	YES	CC	NG	FO2	11.3	
Consolidated Edison Energy, Inc.	Selkirk-II		F	23799	Selkirk	001	36	1994-09-01	338.8	291.3	380.5	273.5	326.3	YES	CC	NG	FO2	97.2	
Indeck-Corinth LP	Indeck-Corinth		F	23802	Corinth	091	36	1995-07-01	147.0	131.2	134.0	129.2	135.3	YES	CC	NG	FO2	554.5	
Boralex Hydro Operations Inc	Fourth Branch		F	23824	Waterford	091	36	1987-12-01	3.3	3.5	3.5	3.3	3.3		HY	WAT		15.3	
Castleton Power, LLC	Castleton Energy Center		F	23900	Castleton	083	36	1992-01-01	72.0	69.0	86.6	64.4	77.4	YES	CC	NG	FO2	144.8	
New York Power Authority	Crescent 1		F	24018	Crescent	001	36	1991-07-01	2.8	3.2	3.2	2.8	2.8		HY	WAT		15.6	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy GWh	Notes
								YYYY-MM-DD	MW										
New York Power Authority	Crescent 2		F	24018	Crescent	001	36	1991-07-01	2.8	3.2	3.2	2.8	2.8		HY	WAT		18.6	
New York Power Authority	Crescent 3		F	24018	Crescent	001	36	1991-07-01	3.0	3.2	3.2	3.0	3.0		HY	WAT		18.8	
New York Power Authority	Crescent 4		F	24018	Crescent	001	36	1991-07-01	3.0	3.2	3.2	3.0	3.0		HY	WAT		16.6	
New York Power Authority	Vischer Ferry 1		F	24020	Vischer Ferry	091	36	1991-07-01	2.8	3.2	3.2	2.8	2.9		HY	WAT		17.6	
New York Power Authority	Vischer Ferry 2		F	24020	Vischer Ferry	091	36	1991-07-01	2.8	3.2	3.2	2.8	2.9		HY	WAT		15.8	
New York Power Authority	Vischer Ferry 3		F	24020	Vischer Ferry	091	36	1991-07-01	3.0	3.2	3.2	3.0	2.9		HY	WAT		17.6	
New York Power Authority	Vischer Ferry 4		F	24020	Vischer Ferry	091	36	1991-07-01	3.0	3.2	3.2	3.0	2.9		HY	WAT		15.8	
Erie Blvd. Hydro - East Canada Capital	Beardslee 1		F	24051	Little Falls	043	36	1924-01-01	10.0	9.5	9.5	10.0	10.0		HY	WAT		18.9	
Erie Blvd. Hydro - East Canada Capital	Beardslee 2		F	24051	Little Falls	043	36	1924-01-01	10.0	9.5	9.5	10.0	10.0		HY	WAT		31.4	
Erie Blvd. Hydro - East Canada Capital	Ephratah 1		F	24051	Caroga Lake	035	36	1920-01-01	1.4	0.7	0.7	1.4	1.4		HY	WAT		0.1	
Erie Blvd. Hydro - East Canada Capital	Ephratah 2		F	24051	Caroga Lake	035	36	1911-01-01	1.2	0.6	0.6	1.2	1.2		HY	WAT		7.8	
Erie Blvd. Hydro - East Canada Capital	Ephratah 3		F	24051	Caroga Lake	035	36	1911-01-01	1.3	0.0	0.0	1.3	1.3		HY	WAT		2.6	
Erie Blvd. Hydro - East Canada Capital	Ephratah 4		F	24051	Caroga Lake	035	36	1911-01-01	1.3	0.7	0.7	1.3	1.3		HY	WAT		2.1	
Erie Blvd. Hydro - Upper Hudson	E J West 1		F	24058	Hadley	091	36	1930-01-01	10.0	11.9	11.9	11.9	11.9		HY	WAT		29.4	
Erie Blvd. Hydro - Upper Hudson	E J West 2		F	24058	Hadley	091	36	1930-01-01	10.0	11.9	11.9	11.9	11.9		HY	WAT		33.1	
Erie Blvd. Hydro - Upper Hudson	Feeder Dam 1		F	24058	S Glens Falls	091	36	1924-01-01	1.2	0.9	0.9	1.2	1.2		HY	WAT		4.7	
Erie Blvd. Hydro - Upper Hudson	Feeder Dam 2		F	24058	S Glens Falls	091	36	1924-01-01	1.2	0.9	0.9	1.2	1.2		HY	WAT		4.9	
Erie Blvd. Hydro - Upper Hudson	Feeder Dam 3		F	24058	S Glens Falls	091	36	1924-01-01	1.2	0.9	0.9	1.2	1.2		HY	WAT		4.1	
Erie Blvd. Hydro - Upper Hudson	Feeder Dam 4		F	24058	S Glens Falls	091	36	1924-01-01	1.2	0.9	0.9	1.2	1.2		HY	WAT		4.2	
Erie Blvd. Hydro - Upper Hudson	Feeder Dam 5		F	24058	S Glens Falls	091	36	1924-01-01	1.2	0.9	0.9	1.2	1.2		HY	WAT		4.8	
Erie Blvd. Hydro - Upper Hudson	Sherman Island 1		F	24058	Queensbury	113	36	2009-03-01	8.0	0.0	0.0	0.0	0.0		HY	WAT		38.6	
Erie Blvd. Hydro - Upper Hudson	Sherman Island 2		F	24058	Queensbury	113	36	1923-01-01	7.2	8.1	8.1	8.1	8.1		HY	WAT		40.4	
Erie Blvd. Hydro - Upper Hudson	Sherman Island 3		F	24058	Queensbury	113	36	1923-01-01	8.7	9.7	9.7	9.7	9.7		HY	WAT		34.5	
Erie Blvd. Hydro - Upper Hudson	Sherman Island 4		F	24058	Queensbury	113	36	1923-01-01	7.2	8.1	8.1	8.1	8.1		HY	WAT		36.0	
Erie Blvd. Hydro - Upper Hudson	Sherman Island 5		F	24058	Queensbury	113	36	1923-01-01	7.2	8.1	8.1	8.1	8.1		HY	WAT		17.3	
Erie Blvd. Hydro - Upper Hudson	Sherman Island 6		F	24058	Queensbury	113	36	2009-02-02	1.3	0.0	0.0	0.0	0.0		HY	WAT		9.6	
Erie Blvd. Hydro - Upper Hudson	Spier Falls 1		F	24058	Moreau	091	36	1924-01-01	6.8	8.4	8.4	8.1	8.1		HY	WAT		43.6	
Erie Blvd. Hydro - Upper Hudson	Spier Falls 2		F	24058	Moreau	091	36	1930-01-01	37.6	46.9	46.9	38.1	38.1		HY	WAT		179.4	
Erie Blvd. Hydro - Upper Hudson	Stewarts Bridge 1		F	24058	Hadley	091	36	1952-01-01	30.0	35.8	35.8	32.5	32.5		HY	WAT		109.7	
Erie Blvd. Hydro - Upper Hudson	Stewarts Bridge 2		F	24058	Hadley	091	36	2013-06-01	2.5	0.0	0.0	0.0	0.0		HY	WAT		20.4	
Erie Blvd. Hydro - Lower Hudson	Johnsonville 1		F	24059	Johnsonville	083	36	1909-01-01	1.2	1.3	1.3	1.2	1.2		HY	WAT		7.1	
Erie Blvd. Hydro - Lower Hudson	Johnsonville 2		F	24059	Johnsonville	083	36	1909-01-01	1.2	1.3	1.3	1.2	1.2		HY	WAT		4.6	
Erie Blvd. Hydro - Lower Hudson	Schaghticoke 1		F	24059	Schaghticoke	083	36	1908-01-01	3.3	4.1	4.1	3.3	3.3		HY	WAT		15.4	
Erie Blvd. Hydro - Lower Hudson	Schaghticoke 2		F	24059	Schaghticoke	083	36	1908-01-01	3.3	4.1	4.1	3.3	3.3		HY	WAT		22.4	
Erie Blvd. Hydro - Lower Hudson	Schaghticoke 3		F	24059	Schaghticoke	083	36	1908-01-01	3.3	4.1	4.1	3.3	3.3		HY	WAT		13.3	
Erie Blvd. Hydro - Lower Hudson	Schaghticoke 4		F	24059	Schaghticoke	083	36	1908-01-01	3.3	4.1	4.1	3.3	3.3		HY	WAT		26.4	
Erie Blvd. Hydro - Lower Hudson	School Street 1		F	24059	Cohoes	001	36	1974-01-01	7.2	6.9	6.9	7.2	7.2		HY	WAT		35.0	
Erie Blvd. Hydro - Lower Hudson	School Street 2		F	24059	Cohoes	001	36	1915-01-01	7.2	6.9	6.9	7.2	7.2		HY	WAT		35.5	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy	Notes
								YYYY-MM-DD	MW									GWh	
Erie Blvd. Hydro - Lower Hudson	School Street 3		F	24059	Cohoes	001	36	1915-01-01	7.2	6.9	6.9	7.2	7.2		HY	WAT		36.9	
Erie Blvd. Hydro - Lower Hudson	School Street 4		F	24059	Cohoes	001	36	1922-01-01	7.2	6.9	6.9	7.2	7.2		HY	WAT		30.6	
Erie Blvd. Hydro - Lower Hudson	School Street 5		F	24059	Cohoes	001	36	1924-01-01	10.0	9.6	9.6	10.0	10.0		HY	WAT		36.9	
PSEG Power New York LLC	Bethlehem GS1		F	323560	Bethlehem	001	36	2005-07-01	297.7	278.3	308.2	270.6	308.7	YES	CC	NG	FO2	5,305.3	(G)
PSEG Power New York LLC	Bethlehem GS2		F	323561	Bethlehem	001	36	2005-07-01	297.7	278.3	308.3	272.3	308.7	YES	CC	NG	FO2		
PSEG Power New York LLC	Bethlehem GS3		F	323562	Bethlehem	001	36	2005-07-01	297.7	278.4	308.3	269.4	308.7	YES	CC	NG	FO2		
Innovative Energy Systems, Inc.	Colonie LFGTE		F	323577	Colonie	001	36	2006-03-01	6.4	6.4	6.4	6.4	6.4		IC	MTE		34.6	
Innovative Energy Systems, Inc.	Fulton LFGE		F	323630	Johnstown	035	36	2010-06-04	3.2	3.2	3.2	3.2	3.2		IC	MTE		13.2	
Stephentown Spindle LLC	Beacon LESR		F	323632	Stephentown	083	36	2010-11-29	20.0	0.0	0.0	0.0	0.0		ES	FW		0.0	
Empire Generating Co, LLC	Empire CC1		F	323656	Rensselaer	083	36	2010-09-02	335.0	294.2	360.2	296.4	334.6	YES	CC	NG	FO2	1,751.9	
Empire Generating Co, LLC	Empire CC2		F	323658	Rensselaer	083	36	2010-09-02	335.0	298.2	365.1	296.4	334.6	YES	CC	NG	FO2	1,740.8	
Gravity Renewables, Inc.	LaChute		F	323717	Ticonderoga	031	36	1987-12-01	9.0	8.9	8.9	9.0	9.0		HY	WAT		32.2	
Galt Power Inc.	KCE NY 1		F	323755	Stillwater	091	36	2019-03-13	20.0	0.0	0.0	0.0	0.0		ES	BAT		0.0	
Gravity Renewables, Inc.	Dahowa Hydroelectric		F	323763	Middle Falls	115	36	1987-12-01	10.5	10.5	10.5	12.3	12.3		HY	WAT		18.4	
Branscomb Solar, LLC	Branscomb Solar		F	323811	Easton	115	36	2021-12-18	20.0	20.0	20.0	20.0	20.0		PV	SUN		0.0	(7) (N)
GenOn Energy Management, LLC	Bowline 1		G	23526	West Haverstraw	087	36	1972-09-01	621.0	594.0	594.0	574.9	593.2	YES	ST	NG	FO6	660.9	
GenOn Energy Management, LLC	Bowline 2		G	23595	West Haverstraw	087	36	1974-05-01	621.0	575.0	575.0	556.7	568.8	YES	ST	NG	FO6	321.3	
Consolidated Edison Energy, Inc.	Danskammer 1		G	23586	Newburgh	071	36	1951-12-01	72.0	69.0	69.0	69.2	69.2	YES	ST	NG	FO6	1.6	
Consolidated Edison Energy, Inc.	Danskammer 2		G	23589	Newburgh	071	36	1954-09-01	73.5	64.7	64.7	65.2	65.4	YES	ST	NG	FO6	1.3	
Consolidated Edison Energy, Inc.	Danskammer 3		G	23590	Newburgh	071	36	1959-10-01	147.1	139.2	139.2	139.7	141.0		ST	NG		2.8	
Consolidated Edison Energy, Inc.	Danskammer 4		G	23591	Newburgh	071	36	1967-09-01	239.4	238.2	238.2	225.9	229.5		ST	NG		7.3	
Consolidated Edison Energy, Inc.	Roseton 1		G	23587	Newburgh	071	36	1974-12-01	621.0	614.8	614.8	599.0	614.7	YES	ST	NG	FO6	53.0	
Consolidated Edison Energy, Inc.	Roseton 2		G	23588	Newburgh	071	36	1974-09-01	621.0	605.7	605.7	617.5	612.5	YES	ST	NG	FO6	85.5	
New York Power Authority	Grahamsville		G	23607	Grahamsville	105	36	1956-12-01	18.0	16.3	16.3	18.0	18.0		HY	WAT		85.4	
New York Power Authority	Neversink		G	23608	Grahamsville	105	36	1953-12-01	25.0	22.0	22.0	25.0	25.0		HY	WAT		29.6	
Central Hudson Gas & Electric Corp.	Coxsackie GT		G	23611	Coxsackie	039	36	1969-12-01	21.6	21.6	26.0	19.2	24.0	YES	GT	NG	KER	0.8	
Central Hudson Gas & Electric Corp.	South Cairo		G	23612	Cairo	039	36	1970-06-01	21.6	19.8	25.9	18.9	23.0		GT	KER		0.3	
Seneca Power Partners, L.P.	Hillburn GT		G	23639	Hillburn	087	36	1971-04-01	46.5	37.9	51.8	36.7	45.3	YES	JE	NG	KER	0.2	
Seneca Power Partners, L.P.	Shoemaker GT		G	23640	Middletown	071	36	1971-05-01	41.9	33.1	45.2	32.8	41.1	YES	JE	NG	KER	0.2	
Eagle Creek Hydro Power, LLC	Mongaup 1		G	23641	Forestburg	105	36	1923-07-01	1.0	0.9	0.9	1.0	1.0		HY	WAT		15.2	(G)
Eagle Creek Hydro Power, LLC	Mongaup 2		G	23641	Forestburg	105	36	1923-07-01	1.0	1.0	1.0	1.0	1.0		HY	WAT			
Eagle Creek Hydro Power, LLC	Mongaup 3		G	23641	Forestburg	105	36	1923-07-01	1.0	1.0	1.0	1.0	1.0		HY	WAT			
Eagle Creek Hydro Power, LLC	Mongaup 4		G	23641	Forestburg	105	36	1926-01-01	1.0	1.0	1.0	1.0	1.0		HY	WAT			
Eagle Creek Hydro Power, LLC	Rio		G	23641	Glen Spey	105	36	1927-12-01	10.8	10.8	10.8	11.0	11.0		HY	WAT		33.3	
Eagle Creek Hydro Power, LLC	Swinging Bridge 2		G	23641	Forestburg	105	36	1930-02-01	9.0	7.9	7.9	7.0	7.0		HY	WAT		19.3	
New York Power Authority	Ashokan 1		G	23654	Ashokan	111	36	1982-11-01	2.3	1.8	1.8	2.3	2.3		HY	WAT		2.7	
New York Power Authority	Ashokan 2		G	23654	Ashokan	111	36	1982-11-01	2.3	1.8	1.8	2.3	2.3		HY	WAT		4.1	
Central Hudson Gas & Electric Corp.	High Falls		G	23754	Marbletown	111	36	1986-12-01	3.2	3.0	3.0	0.0	0.0		HY	WAT		34.7	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy	Notes
								YYYY-MM-DD	MW									GWh	
Central Hudson Gas & Electric Corp.	DCRRA		G	23765	Poughkeepsie	027	36	1987-09-01	9.2	8.8	8.8	8.5	8.9		ST	REF		40.4	
Central Hudson Gas & Electric Corp.	Wappingers Falls		G	23765	Wappingers Falls	027	36	1988-12-01	2.0	2.0	2.0	2.0	2.0		HY	WAT		10.1	
Consolidated Hydro New York, Inc.	Walden Hydro		G	24148	Walden	071	36	1983-12-01	2.4	0.0	0.0	0.0	0.0		HY	WAT		3.2	
Erie Blvd. Hydropower LP	West Delaware Hydro		G	323627	Grahamsville	105	36	1988-12-01	7.5	7.5	7.5	7.5	7.5		HY	WAT		27.0	
CPV Valley, LLC	CPV Valley CC1		G	323721	Wawayanda	071	36	2018-03-01	385.0	340.0	380.5	320.0	373.3	YES	CC	NG	FO2	2,194.9	
CPV Valley, LLC	CPV Valley CC2		G	323722	Wawayanda	071	36	2018-03-01	385.0	340.0	380.5	320.4	373.3	YES	CC	NG	FO2	2,139.2	
Cricket Valley Energy Center, LLC	Cricket Valley CC1		G	323756	Dover	027	36	2019-10-29	392.3	364.2	402.4	354.4	382.5		CC	NG		1,525.1	
Cricket Valley Energy Center, LLC	Cricket Valley CC2		G	323757	Dover	028	36	2020-01-03	392.3	361.2	399.1	352.9	380.7		CC	NG		1,724.1	
Cricket Valley Energy Center, LLC	Cricket Valley CC3		G	323758	Dover	029	36	2020-01-17	392.3	364.2	402.4	353.9	379.7		CC	NG		1,686.6	
Entergy Nuclear Power Marketing LLC	Indian Point 3		H	23531	Buchanan	119	36	1976-04-01	1,012.0	1,040.4	1,040.4	0.0	0.0		NP	UR		2,821.4	(1)(R)
Wheelabrator Westchester, LP	Wheelabrator Westchester		H	23653	Peekskill	119	36	1984-04-01	59.7	53.5	53.5	50.6	52.9		ST	REF		323.1	
NRG Power Marketing LLC	Arthur Kill GT 1		J	23520	Staten Island	085	36	1970-06-01	20.0	16.5	21.6	12.1	15.1		GT	NG		0.7	
NRG Power Marketing LLC	Arthur Kill ST 2		J	23512	Staten Island	085	36	1959-08-01	376.2	357.7	357.7	340.0	344.2		ST	NG		718.6	
NRG Power Marketing LLC	Arthur Kill ST 3		J	23513	Staten Island	085	36	1969-06-01	535.5	518.0	518.0	520.1	522.5		ST	NG		156.2	
Consolidated Edison Co. of NY, Inc.	Brooklyn Navy Yard		J	23515	Brooklyn	047	36	1996-11-01	322.0	266.9	348.6	256.9	306.5	YES	CC	NG	FO2	2,009.5	
Astoria Generating Company L.P.	Astoria GT 01		J	23523	Queens	081	36	1967-07-01	16.0	15.7	20.5	13.6	19.0		GT	NG		0.9	
Astoria Generating Company L.P.	Astoria 2		J	24149	Queens	081	36	1954-03-01	180.0	177.0	177.0	172.4	169.3		ST	NG		7.5	
Astoria Generating Company L.P.	Astoria 3		J	23516	Queens	081	36	1958-09-01	376.0	369.9	369.9	371.3	368.9	YES	ST	NG	FO2	251.5	
Astoria Generating Company L.P.	Astoria 5		J	23518	Queens	081	36	1962-05-01	387.0	376.3	376.3	375.1	375.6	YES	ST	NG	FO2	398.8	
NRG Power Marketing LLC	Astoria GT 2-1		J	24094	Queens	081	36	1970-06-01	46.5	41.2	50.7	34.8	46.4	YES	JE	NG	KER	3.2	
NRG Power Marketing LLC	Astoria GT 2-2		J	24095	Queens	081	36	1970-06-01	46.5	42.4	52.2	34.7	45.1	YES	JE	NG	KER	1.9	
NRG Power Marketing LLC	Astoria GT 2-3		J	24096	Queens	081	36	1970-06-01	46.5	41.2	50.7	36.7	46.5	YES	JE	NG	KER	3.7	
NRG Power Marketing LLC	Astoria GT 2-4		J	24097	Queens	081	36	1970-06-01	46.5	41.0	50.5	35.4	45.7	YES	JE	NG	KER	2.9	
NRG Power Marketing LLC	Astoria GT 3-1		J	24098	Queens	081	36	1970-06-01	46.5	41.2	50.7	35.5	45.8	YES	JE	NG	KER	2.2	
NRG Power Marketing LLC	Astoria GT 3-2		J	24099	Queens	081	36	1970-06-01	46.5	43.5	53.5	35.7	45.7	YES	JE	NG	KER	2.5	
NRG Power Marketing LLC	Astoria GT 3-3		J	24100	Queens	081	36	1970-06-01	46.5	43.0	52.9	34.0	45.2	YES	JE	NG	KER	4.0	
NRG Power Marketing LLC	Astoria GT 3-4		J	24101	Queens	081	36	1970-06-01	46.5	43.0	52.9	35.3	46.1	YES	JE	NG	KER	6.1	
NRG Power Marketing LLC	Astoria GT 4-1		J	24102	Queens	081	36	1970-07-01	46.5	42.6	52.4	33.8	43.9	YES	JE	NG	KER	2.7	
NRG Power Marketing LLC	Astoria GT 4-2		J	24103	Queens	081	36	1970-07-01	46.5	41.4	51.0	34.3	44.9	YES	JE	NG	KER	3.0	
NRG Power Marketing LLC	Astoria GT 4-3		J	24104	Queens	081	36	1970-07-01	46.5	41.1	50.6	35.3	46.3	YES	JE	NG	KER	3.4	
NRG Power Marketing LLC	Astoria GT 4-4		J	24105	Queens	081	36	1970-07-01	46.5	42.8	52.7	34.9	45.2	YES	JE	NG	KER	1.8	
Helix Ravenswood, LLC	Ravenswood 01		J	23729	Queens	081	36	1967-07-01	18.6	8.8	11.5	7.7	11.1		GT	NG		0.0	(I) (3)
Helix Ravenswood, LLC	Ravenswood ST 01		J	23533	Queens	081	36	1963-02-01	400.0	365.1	365.1	372.3	375.0	YES	ST	NG	FO4	141.0	
Helix Ravenswood, LLC	Ravenswood ST 02		J	23534	Queens	081	36	1963-05-01	400.0	391.6	391.6	377.5	378.5	YES	ST	NG	FO4	232.1	
Helix Ravenswood, LLC	Ravenswood ST 03		J	23535	Queens	081	36	1965-06-01	1,027.0	986.8	986.8	980.3	990.1	YES	ST	NG	FO4	71.8	
Helix Ravenswood, LLC	Ravenswood CC 04		J	23820	Queens	081	36	2004-05-01	250.0	231.2	276.7	232.5	285.0	YES	CC	NG	FO2	1,591.9	
Helix Ravenswood, LLC	Ravenswood 10		J	24258	Queens	081	36	1970-08-01	25.0	21.2	27.0	16.0	22.3	YES	JE	NG	KER	1.0	
Helix Ravenswood, LLC	Ravenswood 11		J	24259	Queens	081	36	1970-08-01	25.0	20.2	25.7	16.1	22.4	YES	JE	NG	KER	0.5	(I) (2)

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location			In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW		2022 Capability (B) MW		DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy	Notes
					Town	Cnty	St	YYYY-MM-DD	MW	SUM	WIN	SUM	WIN					GWh	
Consolidated Edison Co. of NY, Inc.	Hudson Ave 3		J	23810	Brooklyn	047	36	1970-07-01	16.3	16.0	20.9	12.3	15.6		GT	KER		0.1	
Consolidated Edison Co. of NY, Inc.	Hudson Ave 5		J	23657	Brooklyn	047	36	1970-07-01	16.3	15.1	19.7	15.3	18.6		GT	KER		0.2	
Consolidated Edison Co. of NY, Inc.	East River 1		J	323558	Manhattan	061	36	2005-04-01	185.0	160.5	199.0	155.8	192.5	YES	CC	NG	KER	1,184.0	
Consolidated Edison Co. of NY, Inc.	East River 2		J	323559	Manhattan	061	36	2005-04-05	185.0	162.4	201.4	152.9	195.0	YES	CC	NG	KER	1,239.6	
Consolidated Edison Co. of NY, Inc.	East River 6		J	23660	Manhattan	061	36	1951-11-01	156.2	144.3	144.3	145.3	150.2	YES	ST	NG	FO6	562.0	
Consolidated Edison Co. of NY, Inc.	East River 7		J	23524	Manhattan	061	36	1955-06-01	200.0	186.7	186.7	184.8	188.8	YES	ST	NG	FO6	197.4	
East Coast Power, LLC	Linden Cogen		J	23786	Linden NJ	039	34	1992-05-01	800.0	790.8	924.9	790.8	816.6	YES	CC	NG	BUT	4,354.7	
Calpine Energy Services LP	KIAC_JFK_GT1		J	23816	Jamaica	081	36	1995-02-01	60.6	58.7	58.7	53.4	56.8	YES	CC	NG	FO2	470.2	(G)
Calpine Energy Services LP	KIAC_JFK_GT2		J	23817	Jamaica	081	36	1995-02-01	60.6	58.3	58.3	52.1	58.0	YES	CC	NG	FO2		
Astoria Generating Company L.P.	Gowanus 1-1		J	24077	Brooklyn	047	36	1971-06-01	20.0	19.1	24.9	15.9	24.8		GT	FO2		0.2	
Astoria Generating Company L.P.	Gowanus 1-2		J	24078	Brooklyn	047	36	1971-06-01	20.0	17.1	22.3	19.5	24.9		GT	FO2		0.1	
Astoria Generating Company L.P.	Gowanus 1-3		J	24079	Brooklyn	047	36	1971-06-01	20.0	17.2	22.5	15.3	23.4		GT	FO2		0.1	
Astoria Generating Company L.P.	Gowanus 1-4		J	24080	Brooklyn	047	36	1971-06-01	20.0	17.1	22.3	16.4	21.7		GT	FO2		0.1	
Astoria Generating Company L.P.	Gowanus 1-5		J	24084	Brooklyn	047	36	1971-06-01	20.0	16.5	21.6	17.8	22.7		GT	FO2		0.2	
Astoria Generating Company L.P.	Gowanus 1-6		J	24111	Brooklyn	047	36	1971-06-01	20.0	18.0	23.5	14.2	21.3		GT	FO2		0.1	
Astoria Generating Company L.P.	Gowanus 1-7		J	24112	Brooklyn	047	36	1971-06-01	20.0	17.6	23.0	18.0	22.4		GT	FO2		0.1	
Astoria Generating Company L.P.	Gowanus 2-1		J	24114	Brooklyn	047	36	1971-06-01	20.0	17.9	23.4	17.1	22.5	YES	GT	NG	FO2	1.2	
Astoria Generating Company L.P.	Gowanus 2-2		J	24115	Brooklyn	047	36	1971-06-01	20.0	18.8	24.6	16.9	22.5	YES	GT	NG	FO2	1.3	
Astoria Generating Company L.P.	Gowanus 2-3		J	24116	Brooklyn	047	36	1971-06-01	20.0	20.6	26.9	19.1	24.0	YES	GT	NG	FO2	0.9	
Astoria Generating Company L.P.	Gowanus 2-4		J	24117	Brooklyn	047	36	1971-06-01	20.0	19.3	25.2	18.5	22.4	YES	GT	NG	FO2	1.8	
Astoria Generating Company L.P.	Gowanus 2-5		J	24118	Brooklyn	047	36	1971-06-01	20.0	18.6	24.3	17.8	23.4	YES	GT	NG	FO2	0.9	
Astoria Generating Company L.P.	Gowanus 2-6		J	24119	Brooklyn	047	36	1971-06-01	20.0	20.3	26.5	19.7	24.9	YES	GT	NG	FO2	0.7	
Astoria Generating Company L.P.	Gowanus 2-7		J	24120	Brooklyn	047	36	1971-06-01	20.0	19.6	25.6	19.1	24.1	YES	GT	NG	FO2	1.1	
Astoria Generating Company L.P.	Gowanus 2-8		J	24121	Brooklyn	047	36	1971-06-01	20.0	17.7	23.1	17.3	23.1	YES	GT	NG	FO2	0.5	
Astoria Generating Company L.P.	Gowanus 3-1		J	24122	Brooklyn	047	36	1971-07-01	20.0	17.7	23.1	17.0	22.2	YES	GT	NG	FO2	0.7	
Astoria Generating Company L.P.	Gowanus 3-2		J	24123	Brooklyn	047	36	1971-07-01	20.0	17.7	23.1	16.9	22.2	YES	GT	NG	FO2	0.7	
Astoria Generating Company L.P.	Gowanus 3-3		J	24124	Brooklyn	047	36	1971-07-01	20.0	19.8	25.9	18.3	24.4	YES	GT	NG	FO2	1.3	
Astoria Generating Company L.P.	Gowanus 3-4		J	24125	Brooklyn	047	36	1971-07-01	20.0	17.9	23.4	15.2	22.3	YES	GT	NG	FO2	0.7	
Astoria Generating Company L.P.	Gowanus 3-5		J	24126	Brooklyn	047	36	1971-07-01	20.0	19.0	24.8	17.0	22.5	YES	GT	NG	FO2	0.6	
Astoria Generating Company L.P.	Gowanus 3-6		J	24127	Brooklyn	047	36	1971-07-01	20.0	17.6	23.0	17.2	21.0	YES	GT	NG	FO2	0.5	
Astoria Generating Company L.P.	Gowanus 3-7		J	24128	Brooklyn	047	36	1971-07-01	20.0	18.1	23.6	18.2	24.3	YES	GT	NG	FO2	0.6	
Astoria Generating Company L.P.	Gowanus 3-8		J	24129	Brooklyn	047	36	1971-07-01	20.0	19.0	24.8	17.6	24.6	YES	GT	NG	FO2	0.7	
Astoria Generating Company L.P.	Gowanus 4-1		J	24130	Brooklyn	047	36	1971-07-01	20.0	16.8	21.9	15.2	24.1		GT	FO2		0.2	
Astoria Generating Company L.P.	Gowanus 4-2		J	24131	Brooklyn	047	36	1971-07-01	20.0	17.3	22.6	18.5	23.5		GT	FO2		0.2	
Astoria Generating Company L.P.	Gowanus 4-3		J	24132	Brooklyn	047	36	1971-07-01	20.0	17.6	23.0	18.4	22.0		GT	FO2		0.1	
Astoria Generating Company L.P.	Gowanus 4-4		J	24133	Brooklyn	047	36	1971-07-01	20.0	17.1	22.3	16.0	21.5		GT	FO2		0.1	
Astoria Generating Company L.P.	Gowanus 4-5		J	24134	Brooklyn	047	36	1971-07-01	20.0	17.1	22.3	16.6	22.1		GT	FO2		0.1	
Astoria Generating Company L.P.	Gowanus 4-6		J	24135	Brooklyn	047	36	1971-07-01	20.0	18.6	24.3	18.5	24.3		GT	FO2		0.1	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy	Notes
								YYYY-MM-DD	MW									GWh	
Astoria Generating Company L.P.	Gowanus 4-7		J	24136	Brooklyn	047	36	1971-07-01	20.0	16.6	21.7	18.4	23.6		GT	FO2		0.2	
Astoria Generating Company L.P.	Gowanus 4-8		J	24137	Brooklyn	047	36	1971-07-01	20.0	19.0	24.8	17.2	22.3		GT	FO2		0.1	
New York Power Authority	Gowanus 5		J	24156	Brooklyn	047	36	2001-08-01	47.0	45.4	45.4	40.0	40.0		GT	NG		40.4	
New York Power Authority	Gowanus 6		J	24157	Brooklyn	047	36	2001-08-01	47.0	46.1	46.1	39.9	39.9		GT	NG		38.5	
Consolidated Edison Co. of NY, Inc.	59 St. GT 1		J	24138	Manhattan	061	36	1969-06-01	17.1	15.4	20.1	13.1	18.8	YES	GT	NG	KER	1.0	
New York Power Authority	Kent		J	24152	Brooklyn	047	36	2001-08-01	47.0	46.9	46.9	46.0	46.0		GT	NG		35.1	
New York Power Authority	Pouch		J	24155	Staten Island	085	36	2001-08-01	47.0	47.1	47.1	45.2	45.6		GT	NG		57.5	
New York Power Authority	Hellgate 1		J	24158	Bronx	005	36	2001-08-01	47.0	45.0	45.0	39.9	39.9		GT	NG		38.6	
New York Power Authority	Hellgate 2		J	24159	Bronx	005	36	2001-08-01	47.0	45.0	45.0	40.0	40.0		GT	NG		34.1	
New York Power Authority	Harlem River 1		J	24160	Bronx	005	36	2001-08-01	47.0	46.0	46.0	39.9	39.9		GT	NG		38.9	
New York Power Authority	Harlem River 2		J	24161	Bronx	005	36	2001-08-01	47.0	45.2	45.2	40.0	40.0		GT	NG		33.3	
New York Power Authority	Vernon Blvd 2		J	24162	Queens	081	36	2001-08-01	47.0	46.2	46.2	40.0	40.0		GT	NG		47.5	
New York Power Authority	Vernon Blvd 3		J	24163	Queens	081	36	2001-08-01	47.0	43.8	43.8	39.9	39.9		GT	NG		41.0	
Astoria Generating Company L.P.	Narrows 1-1		J	24228	Brooklyn	047	36	1972-05-01	22.0	21.0	27.4	19.4	24.8	YES	GT	NG	FO2	2.5	
Astoria Generating Company L.P.	Narrows 1-2		J	24229	Brooklyn	047	36	1972-05-01	22.0	19.5	25.5	17.5	22.8	YES	GT	NG	FO2	2.9	
Astoria Generating Company L.P.	Narrows 1-3		J	24230	Brooklyn	047	36	1972-05-01	22.0	20.4	26.6	18.5	24.4	YES	GT	NG	FO2	2.0	
Astoria Generating Company L.P.	Narrows 1-4		J	24231	Brooklyn	047	36	1972-05-01	22.0	20.1	26.3	18.7	24.9	YES	GT	NG	FO2	2.2	
Astoria Generating Company L.P.	Narrows 1-5		J	24232	Brooklyn	047	36	1972-05-01	22.0	19.8	25.9	20.7	24.9	YES	GT	NG	FO2	3.2	
Astoria Generating Company L.P.	Narrows 1-6		J	24233	Brooklyn	047	36	1972-05-01	22.0	18.9	24.7	16.3	22.3	YES	GT	NG	FO2	1.4	
Astoria Generating Company L.P.	Narrows 1-7		J	24234	Brooklyn	047	36	1972-05-01	22.0	18.4	24.0	19.0	24.9	YES	GT	NG	FO2	1.8	
Astoria Generating Company L.P.	Narrows 1-8		J	24235	Brooklyn	047	36	1972-05-01	22.0	19.9	26.0	17.7	23.4	YES	GT	NG	FO2	1.5	
Astoria Generating Company L.P.	Narrows 2-1		J	24236	Brooklyn	047	36	1972-06-01	22.0	19.4	25.3	19.2	24.8	YES	GT	NG	FO2	3.7	
Astoria Generating Company L.P.	Narrows 2-2		J	24237	Brooklyn	047	36	1972-06-01	22.0	18.7	24.4	16.4	22.8	YES	GT	NG	FO2	1.7	
Astoria Generating Company L.P.	Narrows 2-3		J	24238	Brooklyn	047	36	1972-06-01	22.0	18.4	24.0	17.5	23.4	YES	GT	NG	FO2	2.0	
Astoria Generating Company L.P.	Narrows 2-4		J	24239	Brooklyn	047	36	1972-06-01	22.0	18.4	24.0	19.7	24.9	YES	GT	NG	FO2	3.3	
Astoria Generating Company L.P.	Narrows 2-5		J	24240	Brooklyn	047	36	1972-06-01	22.0	19.9	26.0	20.2	24.9	YES	GT	NG	FO2	4.0	
Astoria Generating Company L.P.	Narrows 2-6		J	24241	Brooklyn	047	36	1972-06-01	22.0	18.1	23.6	15.3	21.5	YES	GT	NG	FO2	1.4	
Astoria Generating Company L.P.	Narrows 2-7		J	24242	Brooklyn	047	36	1972-06-01	22.0	20.7	27.0	19.0	24.9	YES	GT	NG	FO2	3.2	
Astoria Generating Company L.P.	Narrows 2-8		J	24243	Brooklyn	047	36	1972-06-01	22.0	17.5	22.9	16.4	22.4	YES	GT	NG	FO2	1.8	
Consolidated Edison Co. of NY, Inc.	74 St. GT 1		J	24260	Manhattan	061	36	1968-10-01	18.5	19.0	23.5	19.4	22.6		GT	KER		0.4	
Consolidated Edison Co. of NY, Inc.	74 St. GT 2		J	24261	Manhattan	061	36	1968-10-01	18.5	20.1	25.7	19.9	22.6		GT	KER		0.3	
New York Power Authority	Astoria CC 1		J	323568	Queens	081	36	2006-01-01	288.0	246.2	270.2	239.9	270.2	YES	CC	NG	FO2	2,766.0	(G)
New York Power Authority	Astoria CC 2		J	323569	Queens	081	36	2006-01-01	288.0	246.2	270.2	239.9	270.2	YES	CC	NG	FO2		
Astoria Energy LLC	Astoria East Energy - CC1		J	323581	Queens	081	36	2006-04-01	320.0	292.6	355.3	292.2	335.1	YES	CC	NG	FO2	3,058.2	(G)
Astoria Energy LLC	Astoria East Energy - CC2		J	323582	Queens	081	36	2006-04-01	320.0	292.6	355.3	292.2	335.1	YES	CC	NG	FO2		
Astoria Energy II, LLC	Astoria Energy 2 - CC3		J	323677	Queens	081	36	2011-07-01	330.0	288.0	376.3	285.6	329.6	YES	CC	NG	FO2	2,818.8	(G)
Astoria Energy II, LLC	Astoria Energy 2 - CC4		J	323678	Queens	081	36	2011-07-01	330.0	288.0	376.3	285.6	329.6	YES	CC	NG	FO2		
Bayonne Energy Center, LLC	Bayonne EC CTG1		J	323682	Bayonne NJ	017	34	2012-06-01	64.0	63.2	66.1	61.1	62.5	YES	JE	NG	KER	61.2	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy GWh	Notes
								YYYY-MM-DD	MW										
Bayonne Energy Center, LLC	Bayonne EC	CTG2	J	323683	Bayonne NJ	017	34	2012-06-01	64.0	63.2	66.1	60.0	62.1	YES	JE	NG	KER	55.7	
Bayonne Energy Center, LLC	Bayonne EC	CTG3	J	323684	Bayonne NJ	017	34	2012-06-01	64.0	63.2	66.1	59.2	62.4	YES	JE	NG	KER	51.3	
Bayonne Energy Center, LLC	Bayonne EC	CTG4	J	323685	Bayonne NJ	017	34	2012-06-01	64.0	63.2	66.1	61.8	62.6	YES	JE	NG	KER	60.7	
Bayonne Energy Center, LLC	Bayonne EC	CTG5	J	323686	Bayonne NJ	017	34	2012-06-01	64.0	63.2	66.1	60.7	62.5	YES	JE	NG	KER	40.5	
Bayonne Energy Center, LLC	Bayonne EC	CTG6	J	323687	Bayonne NJ	017	34	2012-06-01	64.0	63.2	66.1	59.5	62.4	YES	JE	NG	KER	56.8	
Bayonne Energy Center, LLC	Bayonne EC	CTG7	J	323688	Bayonne NJ	017	34	2012-06-01	64.0	63.2	66.1	60.6	63.1	YES	JE	NG	KER	58.0	
Bayonne Energy Center, LLC	Bayonne EC	CTG8	J	323689	Bayonne NJ	017	34	2012-06-01	64.0	63.2	66.1	61.0	62.5	YES	JE	NG	KER	62.3	
Bayonne Energy Center, LLC	Bayonne EC	CTG9	J	323749	Bayonne NJ	017	34	2018-06-01	64.0	63.4	66.3	61.3	65.0	YES	JE	NG	KER	78.0	
Bayonne Energy Center, LLC	Bayonne EC	CTG10	J	323750	Bayonne NJ	017	34	2018-06-01	64.0	63.4	66.3	62.6	64.9	YES	JE	NG	KER	69.4	
Cubit Power One Inc.	Arthur Kill Cogen		J	323718	Staten Island	085	36	2018-05-22	11.1	11.1	11.1	9.0	10.0		IC	NG		34.2	
New York Power Authority	Greenport IC 4		K	1652	Greenport	103	36	1957-06-06	1.2	1.7	1.7	1.5	1.5		IC	FO2		0.0	
New York Power Authority	Greenport IC 5		K	1652	Greenport	103	36	1965-07-08	1.8	1.7	1.7	1.5	1.5		IC	FO2		0.0	
New York Power Authority	Greenport IC 6		K	1652	Greenport	103	36	1971-09-17	3.8	2.7	2.7	2.4	2.4		IC	FO2		0.0	
Freeport Electric	Freeport 1-2		K	1660	Freeport	059	36	1949-08-01	2.9	2.0	2.0	1.6	1.9		IC	FO2		0.0	
Freeport Electric	Freeport 1-3		K	1660	Freeport	059	36	1954-08-01	3.4	2.1	2.1	1.7	2.0		IC	FO2		0.0	
Freeport Electric	Freeport 1-4		K	1660	Freeport	059	36	1964-10-01	6.0	4.4	4.4	3.5	4.4		IC	FO2		0.0	
Freeport Electric	Freeport 2-3		K	1660	Freeport	059	36	1973-05-01	18.2	18.1	18.1	14.3	16.8		GT	KER		0.3	
Rockville Centre, Village of	Charles P Keller	07	K	1661	Rockville Centre	059	36	1942-09-01	2.0	2.0	2.0	0.0	0.0		IC	FO2		0.0	(R)
Rockville Centre, Village of	Charles P Keller	09	K	1661	Rockville Centre	059	36	1954-09-01	3.5	3.3	3.3	1.9	1.9	YES	IC	NG	FO2	0.0	
Rockville Centre, Village of	Charles P Keller	10	K	1661	Rockville Centre	059	36	1954-09-01	3.5	3.2	3.2	1.9	1.9	YES	IC	NG	FO2	0.0	
Rockville Centre, Village of	Charles P Keller	11	K	1661	Rockville Centre	059	36	1962-09-01	5.2	5.2	5.2	2.8	2.8	YES	IC	NG	FO2	0.0	
Rockville Centre, Village of	Charles P Keller	12	K	1661	Rockville Centre	059	36	1967-09-01	5.5	5.5	5.5	3.0	3.0	YES	IC	NG	FO2	0.0	
Rockville Centre, Village of	Charles P Keller	13	K	1661	Rockville Centre	059	36	1974-09-01	5.5	5.6	5.6	3.0	3.0	YES	IC	NG	FO2	0.0	
Rockville Centre, Village of	Charles P Keller	14	K	1661	Rockville Centre	059	36	1994-09-01	6.2	6.3	6.3	3.4	3.4	YES	IC	NG	FO2	0.3	
Long Island Power Authority	Wading River	1	K	23522	Shoreham	103	36	1989-08-01	79.5	81.2	106.1	75.6	98.4		GT	FO2		9.9	
Long Island Power Authority	Wading River	2	K	23547	Shoreham	103	36	1989-08-01	79.5	81.3	106.2	74.0	97.4		GT	FO2		6.8	
Long Island Power Authority	Wading River	3	K	23601	Shoreham	103	36	1989-08-01	79.5	81.3	106.2	74.9	98.0		GT	FO2		11.7	
Long Island Power Authority	Barrett ST	01	K	23545	Island Park	059	36	1956-11-01	188.0	200.2	200.2	190.0	194.7	YES	ST	NG	FO6	760.4	
Long Island Power Authority	Barrett ST	02	K	23546	Island Park	059	36	1963-10-01	188.0	197.5	197.5	193.0	191.7	YES	ST	NG	FO6	610.4	
Long Island Power Authority	Barrett GT	01	K	23704	Island Park	059	36	1970-06-01	18.0	18.1	23.6	16.4	19.1	YES	GT	NG	FO2	4.6	
Long Island Power Authority	Barrett GT	02	K	23705	Island Park	059	36	1970-06-01	18.0	17.4	22.7	16.5	20.2	YES	GT	NG	FO2	6.7	
Long Island Power Authority	Barrett	03	K	23706	Island Park	059	36	1970-06-01	18.0	17.9	23.4	16.5	19.4	YES	GT	NG	FO2	3.8	
Long Island Power Authority	Barrett	04	K	23707	Island Park	059	36	1970-07-01	18.0	17.7	23.1	16.1	20.0	YES	GT	NG	FO2	3.0	
Long Island Power Authority	Barrett	05	K	23708	Island Park	059	36	1970-07-01	18.0	17.8	23.3	15.0	18.4	YES	GT	NG	FO2	3.1	
Long Island Power Authority	Barrett	06	K	23709	Island Park	059	36	1970-07-01	18.0	17.8	23.3	15.8	19.3	YES	GT	NG	FO2	4.7	
Long Island Power Authority	Barrett	08	K	23711	Island Park	059	36	1970-07-01	18.0	17.3	22.6	14.9	19.6	YES	GT	NG	FO2	4.1	
Long Island Power Authority	Barrett	09	K	23700	Island Park	059	36	1971-06-01	41.8	43.4	55.2	39.0	49.3	YES	JE	NG	FO2	26.5	
Long Island Power Authority	Barrett	10	K	23701	Island Park	059	36	1971-06-01	41.8	42.7	54.3	38.6	49.6	YES	JE	NG	FO2	25.9	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location			In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW		2022 Capability (B) MW		DUAL	Unit Type	Fuel (U)		2021 Net (C) Energy	Notes
					Town	Cnty	St									Type 1	Type 2		
								YYYY-MM-DD	MW	SUM	WIN	SUM	WIN					GWh	
Long Island Power Authority	Barrett 11		K	23702	Island Park	059	36	1971-06-01	41.8	43.3	55.1	38.7	50.1	YES	JE	NG	FO2	39.0	
Long Island Power Authority	Barrett 12		K	23703	Island Park	059	36	1971-06-01	41.8	44.0	56.0	37.0	46.9	YES	JE	NG	FO2	24.8	
Long Island Power Authority	Northport GT		K	23718	Northport	103	36	1967-03-01	16.0	13.8	18.0	12.0	15.7		GT	FO2		0.5	
Long Island Power Authority	Northport 1		K	23551	Northport	103	36	1967-07-01	387.0	395.0	395.0	394.7	397.0	YES	ST	NG	FO6	879.1	
Long Island Power Authority	Northport 2		K	23552	Northport	103	36	1968-06-01	387.0	396.0	396.0	398.2	398.0	YES	ST	NG	FO6	886.6	
Long Island Power Authority	Northport 3		K	23553	Northport	103	36	1972-07-01	387.0	399.2	399.2	397.0	380.0	YES	ST	NG	FO6	808.8	
Long Island Power Authority	Northport 4		K	23650	Northport	103	36	1977-12-01	387.0	399.2	399.2	378.0	396.0	YES	ST	NG	FO6	1,374.2	
Long Island Power Authority	Port Jefferson GT 01		K	23713	Port Jefferson	103	36	1966-12-01	16.0	14.1	18.4	12.6	17.3		GT	FO2		0.4	
Long Island Power Authority	Port Jefferson GT 02		K	24210	Port Jefferson	103	36	2002-07-01	53.0	44.0	52.0	41.7	46.6	YES	GT	NG	FO2	58.4	
Long Island Power Authority	Port Jefferson GT 03		K	24211	Port Jefferson	103	36	2002-07-01	53.0	43.1	50.9	39.0	45.6	YES	GT	NG	FO2	30.3	
Long Island Power Authority	Port Jefferson 3		K	23555	Port Jefferson	103	36	1958-11-01	188.0	194.5	194.5	188.5	193.5	YES	ST	NG	FO6	260.0	
Long Island Power Authority	Port Jefferson 4		K	23616	Port Jefferson	103	36	1960-11-01	188.0	198.7	198.7	188.7	198.1	YES	ST	NG	FO6	175.1	
Long Island Power Authority	Hempstead (RR)		K	23647	Hempstead	059	36	1989-10-01	78.6	73.7	73.7	74.2	75.6		ST	REF		587.4	
Long Island Power Authority	Glenwood GT 01		K	23712	Glenwood	059	36	1967-04-01	16.0	14.6	19.1	0.0	0.0		GT	FO2		0.0	
Long Island Power Authority	Glenwood GT 02		K	23688	Glenwood	059	36	1972-06-01	55.0	52.7	68.8	43.8	64.4		GT	FO2		3.1	
Long Island Power Authority	Glenwood GT 03		K	23689	Glenwood	059	36	1972-06-01	55.0	54.7	71.5	44.7	66.5		GT	FO2		1.5	
Long Island Power Authority	Glenwood GT 04		K	24219	Glenwood	059	36	2002-06-01	53.0	42.3	50.0	41.6	46.0	YES	GT	NG	FO2	86.2	
Long Island Power Authority	Glenwood GT 05		K	24220	Glenwood	059	36	2002-06-01	53.0	42.0	49.6	40.9	46.2	YES	GT	NG	FO2	57.2	
Long Island Power Authority	Holtsville 01		K	23690	Holtsville	103	36	1974-07-01	56.7	56.7	72.1	52.9	66.8		JE	FO2		6.5	
Long Island Power Authority	Holtsville 02		K	23691	Holtsville	103	36	1974-07-01	56.7	55.3	70.3	54.8	66.8		JE	FO2		2.7	
Long Island Power Authority	Holtsville 03		K	23692	Holtsville	103	36	1974-07-01	56.7	52.1	66.3	51.3	64.4		JE	FO2		3.7	
Long Island Power Authority	Holtsville 04		K	23693	Holtsville	103	36	1974-07-01	56.7	52.7	67.0	54.2	64.5		JE	FO2		2.3	
Long Island Power Authority	Holtsville 05		K	23694	Holtsville	103	36	1974-07-01	56.7	55.3	70.3	55.1	64.5		JE	FO2		2.0	
Long Island Power Authority	Holtsville 06		K	23695	Holtsville	103	36	1975-07-01	56.7	53.0	67.4	50.6	62.2		JE	FO2		7.6	
Long Island Power Authority	Holtsville 07		K	23696	Holtsville	103	36	1975-07-01	56.7	55.1	70.1	51.8	62.6		JE	FO2		2.0	
Long Island Power Authority	Holtsville 08		K	23697	Holtsville	103	36	1975-07-01	56.7	57.4	73.0	53.3	66.1		JE	FO2		1.6	
Long Island Power Authority	Holtsville 09		K	23698	Holtsville	103	36	1975-07-01	56.7	57.5	73.1	56.5	66.9		JE	FO2		3.7	
Long Island Power Authority	Holtsville 10		K	23699	Holtsville	103	36	1975-07-01	56.7	55.1	70.1	49.4	64.2		JE	FO2		4.0	
Long Island Power Authority	West Babylon 4		K	23714	West Babylon	103	36	1971-08-01	52.4	49.0	64.0	0.0	0.0		GT	FO2		0.3	
Long Island Power Authority	Shoreham 1		K	23715	Shoreham	103	36	1971-07-01	52.9	48.9	63.9	44.7	64.6		GT	FO2		2.7	
Long Island Power Authority	Shoreham 2		K	23716	Shoreham	103	36	1984-04-01	18.6	18.5	23.5	15.7	20.0		JE	FO2		1.2	
Long Island Power Authority	Shoreham GT3		K	24213	Shoreham	103	36	2002-08-01	50.0	45.4	45.4	42.4	46.0		GT	FO2		13.4	
Long Island Power Authority	Shoreham GT4		K	24214	Shoreham	103	36	2002-08-01	50.0	43.9	43.9	42.5	45.9		GT	FO2		11.3	
Long Island Power Authority	East Hampton GT 01		K	23717	E Hampton	103	36	1970-12-01	21.3	19.2	24.4	19.3	23.4		JE	FO2		10.4	
Long Island Power Authority	East Hampton 2		K	23722	E Hampton	103	36	1962-12-01	2.0	2.0	2.0	2.0	2.0		IC	FO2		0.8	
Long Island Power Authority	East Hampton 3		K	23722	E Hampton	103	36	1962-12-01	2.0	2.0	2.0	2.0	2.0		IC	FO2		0.9	
Long Island Power Authority	East Hampton 4		K	23722	E Hampton	103	36	1962-12-01	2.0	2.0	2.0	2.0	2.0		IC	FO2		0.8	
Long Island Power Authority	Southold 1		K	23719	Southold	103	36	1964-08-01	14.0	12.3	16.1	9.1	12.5		GT	FO2		1.4	

Table III-2a: NYISO Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW		2022 Capability (B) MW		DUAL	Unit Type	Fuel (U) Type 1	Type 2	2021 Net (C) Energy	Notes
								YYYY-MM-DD	MW	SUM	WIN	SUM	WIN					GWh	
Long Island Power Authority	S Hampton 1		K	23720	South Hampton	103	36	1963-03-01	11.5	10.3	13.5	8.3	10.4		GT	FO2		0.5	
Tenaska Power Services Co.	Freeport CT 1		K	23764	Freeport	059	36	2004-06-01	60.0	48.3	51.3	45.2	47.7	YES	GT	NG	FO2	78.6	
Freeport Electric	Freeport CT 2		K	23818	Freeport	059	36	2004-03-01	50.0	50.3	50.3	40.0	40.0	YES	GT	NG	KER	62.2	
New York Power Authority	Flynn		K	23794	Holtsville	103	36	1994-05-01	170.0	135.5	168.4	141.5	160.0	YES	CC	NG	FO2	127.0	
Long Island Power Authority	Greenport GT1		K	23814	Greenport	103	36	2003-07-02	54.0	51.9	52.4	52.5	54.9		JE	FO2		30.1	
Long Island Power Authority	Far Rockaway GT1		K	24212	Far Rockaway	081	36	2002-07-01	60.5	53.5	73.1	54.0	58.8		JE	NG		79.3	
Long Island Power Authority	Far Rockaway GT2		K	23815	Jamaica Bay	081	36	2003-07-02	60.5	55.4	75.7	55.7	60.3	YES	JE	NG	FO2	38.6	
Calpine Energy Services LP	Bethpage		K	23823	Hicksville	059	36	1989-09-01	83.6	54.9	55.1	50.6	57.3	YES	CC	NG	FO2	221.2	
Long Island Power Authority	Bethpage 3		K	323564	Hicksville	059	36	2005-05-01	96.0	79.9	91.4	74.8	78.1		CC	NG		286.8	
Calpine Energy Services LP	Bethpage GT4		K	323586	Hicksville	059	36	2002-07-01	60.0	48.2	51.2	44.0	47.9		GT	NG		171.6	
Calpine Energy Services LP	Stony Brook (BTM:NG)		K	24151	Stony Brook	103	36	1995-04-01	47.0	9.6	9.6	0.0	0.0	YES	GT	NG	FO2	280.8	(8) (E)
New York Power Authority	Brentwood		K	24164	Brentwood	103	36	2001-08-01	47.0	47.1	47.1	45.0	46.0		GT	NG		63.9	
Long Island Power Authority	Pilgrim GT1		K	24216	Brentwood	103	36	2002-08-01	50.0	45.6	45.6	42.5	45.8		GT	NG		76.3	
Long Island Power Authority	Pilgrim GT2		K	24217	Brentwood	103	36	2002-08-01	50.0	46.2	46.2	42.0	43.6		GT	NG		60.1	
Long Island Power Authority	Pinelawn Power 1		K	323563	Babylon	103	36	2005-06-01	82.0	78.0	78.0	72.2	76.3	YES	CC	NG	KER	100.8	
Long Island Power Authority	Caithness_CC_1		K	323624	Brookhaven	103	36	2009-08-01	375.0	315.6	389.8	310.1	365.2	YES	CC	NG	FO2	2,481.0	
Long Island Power Authority	Islip (RR)		K	323679	Ronkonkoma	103	36	1990-03-01	12.5	11.2	11.2	7.9	8.3		ST	REF		42.6	
Long Island Power Authority	Long Island Solar Farm		K	323691	Upton	103	36	2011-11-01	31.5	31.5	31.5	31.5	31.5		PV	SUN		49.8	
ENGIE Energy Marketing NA, Inc.	Nassau Energy Corporation		K	323695	Garden City	059	36	1991-03-01	55.0	51.6	60.1	38.5	51.0	YES	CC	NG	FO2	266.7	
Long Island Power Authority	Babylon (RR)		K	323704	Babylon	103	36	1989-04-01	17.0	15.5	15.5	14.7	15.0		ST	REF		114.9	
Long Island Power Authority	Huntington (RR)		K	323705	Huntington	103	36	1991-12-01	28.0	24.7	24.7	24.3	24.5		ST	REF		192.7	
Table III-2a - NYISO Market Totals:									**43,388.4**	**39,951.5**	**43,040.0**	**37,520.3**	**40,139.0**					**125,360.9**	

Table III-2b: Non-Market Generators

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location			In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW		2022 Capability (B) MW		DUAL	Unit Type	Fuel (U)		2021 Net (C) Energy	Notes
					Town	Cnty	St									Type 1	Type 2		
								YYYY-MM-DD	MW	SUM	WIN	SUM	WIN					GWh	
Niagara Mohawk Power Corp.	Allied Frozen Storage		A	23774	Cheektowaga	029	36	2008-05-01	0.1	0.0	0.0	0.0	0.0		IC	NG		0.0	
Niagara Mohawk Power Corp.	Burt Dam Hydro		A	23774	Burt	063	36	1987-12-01	0.6	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Cal Ban Power		A	23774	Allegany	003	36	1995-06-01	0.1	0.0	0.0	0.0	0.0		IC	NG		0.0	
Niagara Mohawk Power Corp.	Hydrocarbon-Algny		A	23774	Allegany	003	36	1992-12-01	0.2	0.0	0.0	0.0	0.0		IC	NG		0.0	
Niagara Mohawk Power Corp.	Laidlaw Energy		A	23774	Ellicottville	009	36	1991-07-01	3.4	0.0	0.0	0.0	0.0		GT	NG		0.0	
Niagara Mohawk Power Corp.	Laidlaw Energy		A	23774	Ellicottville	009	36	1991-07-01	2.4	0.0	0.0	0.0	0.0		ST	NG		0.0	
Niagara Mohawk Power Corp.	Sustainable Bioelectric LLC		A	23774	Wheatfield	063	36	2014-03-01	0.6	0.0	0.0	0.0	0.0		IC	MTE		1.0	
Niagara Mohawk Power Corp.	General Mills Inc		A	23808	Buffalo	029	36	1988-12-01	3.8	3.8	3.8	0.0	0.0		GT	NG		0.0	
Rochester Gas and Electric Corp.	Mills Mills		B	5059	Fillmore	003	36	1906-07-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Rochester Gas and Electric Corp.	Mt Morris		B	5060	Mt Morris	051	36	1916-07-01	0.3	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	United States Gypsum		B	23774	Batavia	037	36	2009-11-01	5.8	0.0	0.0	0.0	0.0		CG	NG		1.3	
New York State Elec. & Gas Corp.	AA Dairy		C	5013	Ithaca	109	36	1998-06-01	0.1	0.0	0.0	0.0	0.0		IC	MTE		0.0	
New York State Elec. & Gas Corp.	Auburn - Mill St.		C	5014	Auburn	011	36	1981-10-01	0.4	0.0	0.0	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Auburn - No. Div.St		C	5015	Auburn	011	36	1992-12-01	0.8	0.0	0.0	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Montville Falls		C	5019	Moravia	011	36	1992-08-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Waterloo 2		C	5020	Waterloo	099	36	1998-06-01	0.5	0.0	0.0	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Waterloo 3		C	5021	Waterloo	099	36	1998-06-01	0.5	0.0	0.0	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Waterloo 4		C	5022	Waterloo	099	36	1998-06-01	0.5	0.0	0.0	0.0	0.0		HY	WAT		0.0	
NRG Power Marketing LLC	Oswego IC 1		C	5052	Oswego	075	36	1967-08-01	0.7	0.0	0.0	0.0	0.0		IC	FO2		0.0	
NRG Power Marketing LLC	Oswego IC 2		C	5053	Oswego	075	36	1976-02-01	0.8	0.0	0.0	0.0	0.0		IC	FO2		0.0	
NRG Power Marketing LLC	Oswego IC 3		C	5054	Oswego	075	36	1980-07-01	0.8	0.0	0.0	0.0	0.0		IC	FO2		0.0	
New York State Elec. & Gas Corp.	Seneca Falls 1		C	23627	Seneca Falls	099	36	1998-06-01	1.8	1.6	1.6	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Seneca Falls 2		C	23627	Seneca Falls	099	36	1998-06-01	1.8	1.6	1.6	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Seneca Falls 4		C	23627	Seneca Falls	099	36	1998-06-01	2.0	1.8	1.8	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	City of Oswego (High Dam)		C	23634	Oswego	075	36	1994-02-01	11.9	0.0	0.0	0.0	0.0		HY	WAT		21.4	
Niagara Mohawk Power Corp.	Nottingham High School		C	23634	Syracuse	067	36	1988-06-01	0.2	0.0	0.0	0.0	0.0		CG	NG		0.0	
Niagara Mohawk Power Corp.	Onondaga Energy Partners		C	23634	Onondaga	067	36	1987-12-01	1.4	0.0	0.0	0.0	0.0		IC	MTE		0.0	
Niagara Mohawk Power Corp.	Oswego County		C	23634	Oswego	075	36	1986-03-01	3.6	0.0	0.0	0.0	0.0		ST	REF		3.6	
Niagara Mohawk Power Corp.	Oswego Hydro Partners LP (Phoenix)		C	23634	Phoenix	075	36	1990-12-01	3.4	0.0	0.0	0.0	0.0		HY	WAT		11.0	
Niagara Mohawk Power Corp.	Seneca Limited		C	23634	Syracuse	067	36	1985-12-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Wave Hydro LLC		C	23634	Baldwinsville	067	36	2010-02-07	0.8	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Onondaga County		C	23987	North Syracuse	067	36	1994-12-01	39.5	32.6	32.6	0.0	0.0		ST	REF		225.4	
New York State Elec. & Gas Corp.	Chasm Falls Hydro		D	5016	Chateaugay	033	36	1982-03-01	1.6	0.0	0.0	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Harris Lake		D	5018	Newcomb	031	36	1967-08-01	1.7	0.0	0.0	0.0	0.0		IC	FO2		0.0	
New York State Elec. & Gas Corp.	Alice Falls 1		D	23915	Ausable	019	36	1991-11-01	1.5	1.6	1.6	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Alice Falls 2		D	23915	Ausable	019	36	1991-11-01	0.6	0.6	0.6	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Azure Mountain		D	24055	St. Regis Falls	033	36	1993-08-01	0.6	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Bellows Towers		D	24055	Malone	033	36	1987-06-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.0	

Table III-2b: Non-Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location			In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW		2022 Capability (B) MW		DUAL	Unit Type	Fuel (U)		2021 Net (C) Energy	Notes
					Town	Cnty	St									Type 1	Type 2		
								YYYY-MM-DD	MW	SUM	WIN	SUM	WIN					GWh	
Niagara Mohawk Power Corp.	Franklin Hydro		D	24055	Franklin Falls	033	36	1995-03-01	0.3	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Oakvale Construction		D	24055	Wilmington	031	36	2009-11-01	0.4	0.0	0.0	0.0	0.0		HY	WAT		1.4	
Niagara Mohawk Power Corp.	Synergics - Union Falls		D	24055	Union Falls	019	36	1987-12-01	3.0	0.0	0.0	0.0	0.0		HY	WAT		4.4	
Niagara Mohawk Power Corp.	Village of Saranac Lake		D	24055	Saranac Lake	033	36	1996-12-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Fortis Energy - Philadelphia		E	1656	Philadelphia	045	36	1986-08-01	3.6	3.2	3.2	0.0	0.0		HY	WAT		5.6	
Niagara Mohawk Power Corp.	Adams Hydro		E	23633	Adams	045	36	1987-11-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Algon.-Herkimer		E	23633	Herkimer	043	36	1987-12-01	1.6	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Algon.-Otter Creek		E	23633	Greig	049	36	1986-11-01	0.5	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Beaver Falls #1		E	23633	Beaver Falls	049	36	1986-01-01	1.5	0.0	0.0	0.0	0.0		HY	WAT		4.3	
Niagara Mohawk Power Corp.	Beaver Falls #2		E	23633	Beaver Falls	049	36	1986-01-01	1.0	0.0	0.0	0.0	0.0		HY	WAT		8.6	
Niagara Mohawk Power Corp.	Black River Hyd#1 - Rock Isl.		E	23633	Port Leyden	049	36	1984-07-01	1.9	0.0	0.0	0.0	0.0		HY	WAT		2.9	
Niagara Mohawk Power Corp.	Black River Hyd#2 - Denley		E	23633	Port Leyden	049	36	1985-12-01	1.6	0.0	0.0	0.0	0.0		HY	WAT		0.5	
Niagara Mohawk Power Corp.	Black River Hyd#3 - Pt. Leyden		E	23633	Port Leyden	049	36	1984-07-01	2.2	0.0	0.0	0.0	0.0		HY	WAT		12.1	
Niagara Mohawk Power Corp.	Burrstone Engy Center, LLC LU		E	23633	Utica	065	36	2009-11-01	1.1	0.0	0.0	0.0	0.0		IC	NG		0.1	
Niagara Mohawk Power Corp.	Burrstone Engy Center, LLC U		E	23633	Utica	065	36	2009-11-01	2.2	0.0	0.0	0.0	0.0		IC	NG		0.0	
Niagara Mohawk Power Corp.	C.H.I. (Dexter) Hydro		E	23633	Dexter	045	36	1988-01-01	4.2	0.0	0.0	0.0	0.0		HY	WAT		15.0	
Niagara Mohawk Power Corp.	C.H.I. (Diamond Is)		E	23633	Watertown	045	36	1986-01-01	1.2	0.0	0.0	0.0	0.0		HY	WAT		3.9	
Niagara Mohawk Power Corp.	C.H.I. (Fowler)		E	23633	Fowler	049	36	1986-01-01	0.6	0.0	0.0	0.0	0.0		HY	WAT		3.1	
Niagara Mohawk Power Corp.	C.H.I. (Hailsboro #3)		E	23633	Hailsboro	089	36	1986-01-01	0.8	0.0	0.0	0.0	0.0		HY	WAT		3.8	
Niagara Mohawk Power Corp.	C.H.I. (Hailsboro #4)		E	23633	Hailsboro	089	36	1986-01-01	1.4	0.0	0.0	0.0	0.0		HY	WAT		10.1	
Niagara Mohawk Power Corp.	C.H.I. (Hailsboro #6)		E	23633	Hailsboro	089	36	1986-01-01	0.8	0.0	0.0	0.0	0.0		HY	WAT		4.6	
Niagara Mohawk Power Corp.	C.H.I. (Theresa)		E	23633	Theresa	089	36	1986-01-01	1.3	0.0	0.0	0.0	0.0		HY	WAT		4.7	
Niagara Mohawk Power Corp.	Cellu-Tissue Corp - Natural Dam		E	23633	Gouverneur	089	36	1986-01-01	1.0	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	City of Utica - Sand Road		E	23633	Utica	065	36	1993-05-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		1.3	
Niagara Mohawk Power Corp.	City of Utica -Trenton Falls		E	23633	Utica	065	36	1993-02-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.4	
Niagara Mohawk Power Corp.	City of Watertown		E	23633	Watertown	045	36	1986-01-01	8.1	0.0	0.0	0.0	0.0		HY	WAT		15.2	
Niagara Mohawk Power Corp.	Copenhagen Assoc.		E	23633	Copenhagen	049	36	1986-01-01	3.3	0.0	0.0	0.0	0.0		HY	WAT		8.5	
Niagara Mohawk Power Corp.	Cranberry Lake		E	23633	Cranberry Lake	049	36	1987-12-01	0.5	0.0	0.0	0.0	0.0		HY	WAT		0.3	
Niagara Mohawk Power Corp.	Empire Hydro Partners		E	23633	Port Leyden	049	36	1984-11-01	1.0	0.0	0.0	0.0	0.0		HY	WAT		5.0	
Niagara Mohawk Power Corp.	Forestport Hydro		E	23633	Forestport	065	36	1987-12-01	3.4	0.0	0.0	0.0	0.0		HY	WAT		10.7	
Niagara Mohawk Power Corp.	Fortis Energy - Diana		E	23633	Diana	049	36	1985-07-01	1.8	0.0	0.0	0.0	0.0		HY	WAT		6.2	
Niagara Mohawk Power Corp.	Hewittville Hydro		E	23633	Potsdam	089	36	1984-07-01	3.0	0.0	0.0	0.0	0.0		HY	WAT		14.2	
Niagara Mohawk Power Corp.	Hollow Dam Power		E	23633	Saint Lawrence	089	36	1987-12-01	1.0	0.0	0.0	0.0	0.0		HY	WAT		2.6	
Niagara Mohawk Power Corp.	Indian Falls HY		E	23633	Theresa	045	36	1986-01-01	0.3	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Kayuta Lake		E	23633	Kayuta	065	36	1988-05-01	0.4	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Kings Falls		E	23633	Copenhagen	049	36	1988-05-01	1.6	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Long Falls Hydro		E	23633	Carthage	045	36	1991-06-01	3.3	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Lyonsdale Assoc. (Burrows)		E	23633	Lyons Falls	049	36	1984-07-01	3.0	0.0	0.0	0.0	0.0		HY	WAT		11.0	

Table III-2b: Non-Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy	Notes
								YYYY-MM-DD	MW									GWh	
Niagara Mohawk Power Corp.	Newport Hydro Assoc.		E	23633	Newport	043	36	1987-12-01	1.7	0.0	0.0	0.0	0.0		HY	WAT		6.2	
Niagara Mohawk Power Corp.	Northbrook Carthage		E	23633	Carthage	045	36	1986-01-01	4.4	0.0	0.0	0.0	0.0		HY	WAT		21.4	
Niagara Mohawk Power Corp.	Ogdensburg Hydro		E	23633	Ogdensburg	089	36	1987-12-01	3.5	0.0	0.0	0.0	0.0		HY	WAT		8.6	
Niagara Mohawk Power Corp.	Sandy Hollow Hydro Assoc.		E	23633	Philadelphia	045	36	1986-09-01	0.6	0.0	0.0	0.0	0.0		HY	WAT		0.4	
Niagara Mohawk Power Corp.	St. Elizabeth Medical Center		E	23633	Utica	065	36	2012-02-01	0.6	0.0	0.0	0.0	0.0		IC	NG		0.1	
Niagara Mohawk Power Corp.	Stillwater Assoc.		E	23633	Webb	043	36	1987-01-01	1.8	0.0	0.0	0.0	0.0		HY	WAT		5.7	
Niagara Mohawk Power Corp.	Tannery Island		E	23633	Carthage	045	36	1986-01-01	1.5	0.0	0.0	0.0	0.0		HY	WAT		7.2	
Niagara Mohawk Power Corp.	Unionville Hydro		E	23633	Potsdam	089	36	1984-07-01	3.0	0.0	0.0	0.0	0.0		HY	WAT		14.0	
Niagara Mohawk Power Corp.	Village of Gouverneur		E	23633	Gouverneur	089	36	1986-01-01	0.1	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Village of Potsdam		E	23633	Potsdam	089	36	1986-01-01	0.8	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Village of Potsdam 2		E	23633	Potsdam	089	36	2014-04-01	0.5	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Boralex Hydro Operations Inc	Sissonville		E	23735	Potsdam	089	36	1990-08-01	3.1	3.0	3.0	0.0	0.0		HY	WAT		13.0	
Niagara Mohawk Power Corp.	Fortis - Dolgeville		E	23807	Dolgeville	043	36	1985-07-01	5.0	6.3	6.3	0.0	0.0		HY	WAT		12.0	
Niagara Mohawk Power Corp.	Little Falls Hydro		E	24013	Little Falls	043	36	1987-01-01	13.0	12.6	12.6	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Fortis Energy - Moose River		E	24016	Lyonsdale	049	36	1987-09-01	12.6	12.0	12.0	0.0	0.0		HY	WAT		55.7	
Niagara Mohawk Power Corp.	Pyrites Assoc.		E	24023	Canton	089	36	1985-12-01	8.2	7.5	7.5	0.0	0.0		HY	WAT		21.2	
CHI Energy Inc	Goodyear Lake		E	323669	Milford	077	36	1980-07-01	1.4	1.4	1.4	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	International Paper - Curtis		F	1655	Corinth	091	36	1986-01-01	9.8	30.8	30.8	0.0	0.0		HY	WAT		345.3	(G)
Niagara Mohawk Power Corp.	International Paper - Palmer		F	1655	Corinth	091	36	1986-01-01	49.2	30.8	30.8	0.0	0.0		HY	WAT			
Niagara Mohawk Power Corp.	Boralex - Middle Falls		F	23643	Easton	115	36	1989-12-01	2.2	0.0	0.0	0.0	0.0		HY	WAT		14.7	
Niagara Mohawk Power Corp.	Champlain Spinner		F	23643	Whitehall	031	36	1992-07-01	0.4	0.0	0.0	0.0	0.0		HY	WAT		0.7	
Niagara Mohawk Power Corp.	Chittenden Falls		F	23643	Stuyvesant	021	36	1995-12-01	0.6	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Christine Falls Hydro		F	23643	Wells	041	36	1987-12-01	0.9	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	City of Watervliet Hydro		F	23643	Guilderland	001	36	1986-01-01	1.5	0.0	0.0	0.0	0.0		HY	WAT		0.9	
Niagara Mohawk Power Corp.	Cons. HY-Victory		F	23643	Victory Falls	091	36	1986-12-01	1.7	0.0	0.0	0.0	0.0		HY	WAT		7.4	
Niagara Mohawk Power Corp.	Cottrell Paper		F	23643	Rock City Falls	091	36	1987-01-01	0.3	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Edison Hydro Electric		F	23643	Stottville	021	36	2009-11-01	0.3	0.0	0.0	0.0	0.0		HY	WAT		1.5	
Niagara Mohawk Power Corp.	Finch Paper LLC - Glens Falls		F	23643	Glens Falls	113	36	2009-11-01	11.8	0.0	0.0	0.0	0.0		HY	WAT		0.1	
Niagara Mohawk Power Corp.	Finch Pruyn		F	23643	Glens Falls	113	36	1989-12-01	29.0	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Fort Miller Assoc (Hudson River)		F	23643	Schuylerville	091	36	1985-10-01	5.0	0.0	0.0	0.0	0.0		HY	WAT		19.3	
Niagara Mohawk Power Corp.	Gloversville Johnstown WWT		F	23643	Gloversville	035	36	2010-01-01	0.7	0.0	0.0	0.0	0.0		IC	MTE		0.7	
Niagara Mohawk Power Corp.	Green Island Power Authority		F	23643	Green Island	001	36	1971-01-01	6.0	0.0	0.0	0.0	0.0		HY	WAT		44.8	
Niagara Mohawk Power Corp.	Hollings&Vose-Center		F	23643	Easton	115	36	1986-01-01	0.4	0.0	0.0	0.0	0.0		HY	WAT		0.3	
Niagara Mohawk Power Corp.	Hollings&Vose-Lower		F	23643	Easton	115	36	1986-01-01	0.4	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Hollings&Vose-Upper		F	23643	Easton	115	36	1986-01-01	0.4	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Hoosick Falls		F	23643	Hoosick Falls	083	36	1988-08-01	0.6	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Mechanicville		F	23643	Halfmoon	091	36	2005-03-01	3.8	0.0	0.0	0.0	0.0		HY	WAT		23.5	
Niagara Mohawk Power Corp.	Mount Ida Hydro		F	23643	Troy	083	36	1986-01-01	3.0	0.0	0.0	0.0	0.0		HY	WAT		9.2	
Niagara Mohawk Power Corp.	Mountainaire Massage Spa		F	23643	Wevertown	113	36	2009-11-01	0.0	0.0	0.0	0.0	0.0		HY	WAT		0.0	

Table III-2b: Non-Market Generators (cont'd)

Owner, Operator, and / or Billing Organization	Station	Unit	Zone	PTID	Location Town	Cnty	St	In-Service Date	Name Plate Rating (V)	2022 CRIS (A) MW SUM	2022 CRIS (A) MW WIN	2022 Capability (B) MW SUM	2022 Capability (B) MW WIN	DUAL	Unit Type	Fuel (U) Type 1	Fuel (U) Type 2	2021 Net (C) Energy	Notes
								YYYY-MM-DD	MW									GWh	
Niagara Mohawk Power Corp.	Riverrat Glass & Electric		F	23643	Wadhams	031	36	1986-01-01	0.6	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Stillwater Hydro Partners LP		F	23643	Stillwater	091	36	1993-04-01	3.4	0.0	0.0	0.0	0.0		HY	WAT		16.1	
Niagara Mohawk Power Corp.	Stuyvesant Falls Hydro		F	23643	Stuyvesant	021	36	2013-02-01	7.0	0.0	0.0	0.0	0.0		HY	WAT		22.8	
Niagara Mohawk Power Corp.	Synergics - Middle Greenwich		F	23643	Greenwich	115	36	1987-12-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Synergics - Upper Greenwich		F	23643	Greenwich	115	36	1987-12-01	0.4	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Niagara Mohawk Power Corp.	Town of Wells (Lake Algonquin)		F	23643	Wells	041	36	1987-12-01	0.5	0.0	0.0	0.0	0.0		HY	WAT		1.5	
Niagara Mohawk Power Corp.	Tri-City JATC		F	23643	Latham	001	36	2009-11-01	0.0	0.0	0.0	0.0	0.0		IC	NG		0.0	
Niagara Mohawk Power Corp.	Valatie Falls		F	23643	Valatie	021	36	1992-12-01	0.1	0.0	0.0	0.0	0.0		HY	WAT		0.6	
Niagara Mohawk Power Corp.	Valley Falls Assoc.		F	23643	Valley Falls	083	36	1985-08-01	2.5	0.0	0.0	0.0	0.0		HY	WAT		9.2	
Niagara Mohawk Power Corp.	Boralex - Hudson Falls		F	24011	Hudson Falls	115	36	1995-10-01	44.0	43.7	43.7	0.0	0.0		HY	WAT		218.0	
Niagara Mohawk Power Corp.	Boralex - South Glens Falls		F	24028	Moreau	091	36	1994-12-01	13.8	14.8	14.8	0.0	0.0		HY	WAT		78.9	
Erie Blvd. Hydro - Lower Hudson	Schuylerville		F	24059	Schuylerville	091	36	1919-01-01	1.2	1.5	1.5	0.0	0.0		HY	WAT			
Central Hudson Gas & Electric Corp.	Millpond		G	5004	Catskill	039	36	1993-12-01	0.9	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Central Hudson Gas & Electric Corp.	Montgomery West		G	5005	Montgomery	071	36	1985-11-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Central Hudson Gas & Electric Corp.	Salisbury Mills		G	5006	Salisbury Mills	071	36	1986-12-01	0.5	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Central Hudson Gas & Electric Corp.	Wallkill		G	5007	Shwangunk	111	36	1986-12-01	0.5	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Orange and Rockland Utilities	Buttermilk Falls		G	5055	Highland Falls	071	36	1986-12-01	0.1	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Orange and Rockland Utilities	Intl. Crossroads		G	5056	Mahwah NJ	003	34	1987-12-01	3.0	0.0	0.0	0.0	0.0	YES	IC	NG	FO2	0.0	
Orange and Rockland Utilities	Landfill G.Part19		G	5057	Goshen	071	36	1988-12-01	2.5	0.0	0.0	0.0	0.0		IC	MTE		0.0	
Orange and Rockland Utilities	Middletown LFG		G	5058	Goshen	071	36	1988-12-01	3.0	0.0	0.0	0.0	0.0		IC	MTE		0.0	
Central Hudson Gas & Electric Corp.	Sturgeon 1		G	23609	Rifton	111	36	1924-01-01	4.8	5.0	5.0	0.0	0.0		HY	WAT		0.0	
Central Hudson Gas & Electric Corp.	Sturgeon 2		G	23609	Rifton	111	36	1924-01-01	4.8	5.8	5.8	0.0	0.0		HY	WAT		0.0	
Central Hudson Gas & Electric Corp.	Sturgeon 3		G	23609	Rifton	111	36	1924-01-01	4.8	5.0	5.0	0.0	0.0		HY	WAT		0.0	
Central Hudson Gas & Electric Corp.	Dashville 1		G	23610	Rifton	111	36	1920-01-01	2.4	2.7	2.7	0.0	0.0		HY	WAT		0.0	
Central Hudson Gas & Electric Corp.	Dashville 2		G	23610	Rifton	111	36	1920-01-01	2.4	2.7	2.7	0.0	0.0		HY	WAT		0.0	
Consolidated Hydro New York, Inc.	Groveville Hydro		G	323602	Beacon	027	36	1983-12-01	0.9	0.0	0.0	0.0	0.0		HY	WAT		0.0	
New York State Elec. & Gas Corp.	Croton Falls Hydro		I	5017	North Salem	119	36	1987-01-01	0.2	0.0	0.0	0.0	0.0		HY	WAT		0.0	
Long Island Power Authority	Oceanside (LF)		K	5008	Oceanside	059	36	1991-02-01	2.1	1.1	1.1	0.0	0.0		IC	MTE		0.0	
Long Island Power Authority	Oyster Bay (LF)		K	5009	Bethpage	059	36	1986-07-01	1.3	0.0	0.0	0.0	0.0		IC	MTE		0.0	
Long Island Power Authority	Smithtown (LF)		K	5010	Smithtown	103	36	1985-12-01	1.1	0.0	0.0	0.0	0.0		IC	MTE		0.0	
Long Island Power Authority	South Oaks Hosp		K	5011	Amityville	103	36	1990-06-01	1.0	0.0	0.0	0.0	0.0		IC	NG		0.0	
Long Island Power Authority	Yaphank (LF)		K	5012	Yaphank	103	36	1983-09-01	1.6	1.5	1.5	0.0	0.0		IC	MTE		0.0	
LI Energy Storage System, LLC	East Hampton Battery Storage		K	5066	East Hampton	103	36	2018-08-01	5.0	5.0	5.0	0.0	0.0		ES	BAT			
LI Energy Storage System, LLC	Montauk Battery Storage		K	5068	Montauk	103	36	2018-12-01	5.0	5.0	5.0	0.0	0.0		ES	BAT			
Shoreham Solar Commons LLC	Shoreham Solar		K	323752	East Shoreham	103	36	2018-07-01	25.0	24.9	24.9	0.0	0.0		PV	SUN		0.0	
Table III-2b - Non-Market Totals									**495.9**	**269.9**	**269.9**	**0.0**	**0.0**					**1,405.2**	
Tables III-2a and III-2b - Existing Generating Facilities Totals									**43,884.3**	**40,221.4**	**43,309.9**	**37,520.3**	**40,139.0**					**126,766.1**	

Notes for Table III-2

Note	Owner / Operator	Station Unit	Zone	PTID	Description
1	Entergy Nuclear Power Marketing LLC	Indian Point 3	H	23531	Unit Retired on 04/30/2021
2	Helix Ravenswood, LLC	Ravenswood 11	J	24259	Unit became ICAP Ineligble on 12/1/2021
3	Helix Ravenswood, LLC	Ravenswood 01	J	23729	Unit became ICAP Ineligble on 1/1/2022
4	RED-Rochester, LLC	Red Rochester	B	323720	New generator
5	Orangeville Energy Storage LLC	Orangeville ESR	A	323794	New generator
6	Avangrid Renewables LLC	Roaring Brook Wind	E	323790	New generator
7	Branscomb Solar, LLC	Branscomb Solar	F	323811	New generator
8	Calpine Energy Services LP	Stony Brook	K	24151	Behind-the-Meter: Net Generation Resource
9	Emera Energy U.S. Sub. No. 1, Inc.	Greenidge 4	C	23583	Behind-the-Meter: Net Generation Resource
10	Northbrook Lyons Falls, LLC	Lyons Falls Hydro	E	23570	Behind-the-Meter: Net Generation Resource
11	RED-Rochester, LLC	Red Rochester	B	323720	Behind-the-Meter: Net Generation Resource
12	Cassadaga Wind, LLC	Cassadaga Wind	A	323784	New generator
A	Various	Generating Units	A-K	Various	Summer/Winter CRIS caps reflect capacity level of the unit that is deemed deliverable. See Definitions of Labels for the Load & Capacity Schedules (Section V) for description.
B	Various	Generating Units	A-K	Various	Summer Capability reflects DMNC values that are applicable to the Summer 2022 ICAP Market. Winter Capability reflects DMNC values that were applicable to the Winter 2021-2022 ICAP Market. DMNC stands for Dependable Maximum Net Generating Capabil ty.
C	Various	Generating Units	A-K	Various	Net Energy from resources not directly participating in NYISO markets is obtained directly from the local TO.
D	Various	Generating Units	A-K	Various	Typically, Name Plate refers to a historical rating and may not reflect the most current value.
E	Various	Behind-the-Meter: Net Generation Resource	A-K	Various	Units that are Behind the Meter Net Generation Resources. Summer and Winter Net-ICAP replaces Summer Capability and Winter Capability values
G	Various	Generating Station	A-K	Various	Generation is reported as Station Total.
I	Various	ICAP Ineligible Generator	A-K	Various	This unit is in an ICAP Ineligible Forced Outage (IIFO) as defined in the MST.
M	Various	Mothballed Generator	A-K	Various	This unit is mothballed or is in a Mothball Outage per MST Section 5.18.
N	Various	New Generator	A-K	Various	Unit(s) added since the publication of the 2021 Load and Capacity Data Report.
R	Various	Retired Generator	A-K	Various	This unit is retired or Retired as defined in the MST.
U	Various	Generating Units	A-K	Various	The fuel type selection is not meant to provide any information on current fuel inventories, nor does it indicate which of the fuels might be considered as primary.

Table III-3a: Existing Summer Capability by Zone and Type

Generator Type		ZONE											TOTAL
		A	B	C	D	E	F	G	H	I	J	K	
		Summer Capability Period (MW) [2]											
Fossil	Steam Turbine (Oil)	0.0	0.0	811.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	811.7
	Steam Turbine (Oil & Gas)	41.0	12.5	819.5	0.0	0.0	0.0	2,482.5	0.0	0.0	2,806.6	2,328.1	8,490.2
	Steam Turbine (Gas)	0.0	0.0	82.3	0.0	0.0	0.0	365.6	0.0	0.0	1,032.5	0.0	1,480.4
	Combined Cycle (Oil & Gas)	387.4	0.0	284.3	81.5	136.4	3,011.8	640.4	0.0	0.0	3,329.8	612.9	8,484.5
	Combined Cycle (Gas)	0.0	110.7	980.4	239.8	49.2	0.0	1,061.2	0.0	0.0	0.0	74.8	2,516.1
	Jet Engine (Oil)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	617.4	617.4
	Jet Engine (Oil & Gas)	0.0	0.0	0.0	0.0	0.0	0.0	69.5	0.0	0.0	1,060.3	209.0	1,338.8
	Jet Engine (Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	54.0
	Combustion Turbine (Oil)	0.0	0.0	0.0	0.0	0.0	0.0	18.9	0.0	0.0	322.8	498.9	840.6
	Combustion Turbine (Oil & Gas)	0.0	0.0	0.0	0.0	0.0	0.0	19.2	0.0	0.0	587.5	359.6	966.3
	Combustion Turbine (Gas)	40.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	444.2	173.5	658.1
	Internal Combustion (Oil)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2	18.2
	Internal Combustion (Oil & Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	16.0
	Internal Combustion (Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	9.0
Pumped Storage	Pumped Storage Hydro	240.0	0.0	0.0	0.0	0.0	1,168.8	0.0	0.0	0.0	0.0	0.0	1,408.8
Nuclear	Steam (PWR Nuclear)	0.0	580.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	580.2
	Steam (BWR Nuclear)	0.0	0.0	2,761.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,761.0
Renewable [1]	Conventional Hydro	2,439.7	63.8	108.4	914.8	365.3	302.7	79.1	0.0	0.0	0.0	0.0	4,273.8
	Internal Combustion (Methane)	18.4	11.2	42.9	6.4	11.2	9.6	0.0	0.0	0.0	0.0	0.0	99.7
	Steam Turbine (Wood)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Steam Turbine (Refuse)	35.8	0.0	0.0	0.0	0.0	10.4	8.5	50.6	0.0	0.0	121.1	226.4
	Wind	178.9	0.0	518.4	678.4	441.9	0.0	0.0	0.0	0.0	0.0	0.0	1,817.6
	Solar	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	31.5	51.5
	Totals	3,381.6	778.4	6,408.9	1,920.9	1,004.0	4,523.3	4,744.9	50.6	0.0	9,592.7	5,115.0	37,520.3

(1) - The Renewable Category does not necessarily match the New York State Clean Energy Standard (CES) Definition.
(2) - Values are from the Summer Capability column in Table III-2a: NYISO Market Generators.

Table III-3b: Existing Winter Capability by Zone and Type

Generator Type		ZONE A	B	C	D	E	F	G	H	I	J	K	TOTAL
		Winter Capability Period (MW) [2]											
Fossil	Steam Turbine (Oil)	0.0	0.0	821.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	821.2
	Steam Turbine (Oil & Gas)	38.5	12.5	817.7	0.0	0.0	0.0	2,523.8	0.0	0.0	2,827.1	2,349.0	8,568.6
	Steam Turbine (Gas)	0.0	0.0	82.7	0.0	0.0	0.0	370.5	0.0	0.0	1,036.0	0.0	1,489.2
	Combined Cycle (Oil & Gas)	436.9	0.0	329.6	92.3	158.1	3,537.8	746.6	0.0	0.0	3,780.2	709.8	9,791.3
	Combined Cycle (Gas)	0.0	121.7	1,181.7	280.2	61.9	0.0	1,142.9	0.0	0.0	0.0	78.1	2,866.5
	Jet Engine (Oil)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	747.3	747.3
	Jet Engine (Oil & Gas)	0.0	0.0	0.0	0.0	0.0	0.0	86.4	0.0	0.0	1,221.5	256.2	1,564.1
	Jet Engine (Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.8	58.8
	Combustion Turbine (Oil)	0.0	0.0	0.0	0.0	0.0	0.0	23.0	0.0	0.0	424.0	653.9	1,100.9
	Combustion Turbine (Oil & Gas)	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	771.2	408.1	1,203.3
	Combustion Turbine (Gas)	46.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	456.4	183.3	685.8
	Internal Combustion (Oil)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.7	19.7
	Internal Combustion (Oil & Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	16.0
	Internal Combustion (Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Pumped Storage	Pumped Storage Hydro	240.0	0.0	0.0	0.0	0.0	1,170.9	0.0	0.0	0.0	0.0	0.0	1,410.9
Nuclear	Steam (PWR Nuclear)	0.0	581.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	581.3
	Steam (BWR Nuclear)	0.0	0.0	2,777.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,777.0
Renewable [1]	Conventional Hydro	2,439.7	63.8	108.4	868.8	365.3	302.7	79.1	0.0	0.0	0.0	0.0	4,227.8
	Internal Combustion (Methane)	18.4	11.2	42.9	6.4	11.2	9.6	0.0	0.0	0.0	0.0	0.0	99.7
	Steam Turbine (Wood)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Steam Turbine (Refuse)	34.9	0.0	0.0	0.0	0.0	10.4	8.9	52.9	0.0	0.0	123.4	230.5
	Wind	178.9	0.0	518.4	678.4	441.9	0.0	0.0	0.0	0.0	0.0	0.0	1,817.6
	Solar	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	31.5	51.5
	Totals	3,433.4	790.5	6,679.6	1,926.1	1,038.4	5,051.4	5,005.2	52.9	0.0	10,526.4	5,635.1	40,139.0

(1) - The Renewable Category does not necessarily match the New York State Clean Energy Standard (CES) Definition.
(2) - Values are from the Winter Capability column in Table III-2a: NYISO Market Generators.

Table III-3c: Annual Net Energy Generation by Zone and Type - 2021

Generator Type		ZONE											TOTAL
		A	B	C	D	E	F	G	H	I	J	K	
Annual Net Energy Production (GWh) [2]													
Fossil	Steam Turbine (Oil)	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
	Steam Turbine (Oil & Gas)	4.2	0.4	4.8	0.0	0.0	0.0	1,123.6	0.0	0.0	1,854.6	5,754.6	8,742.2
	Steam Turbine (Gas)	0.0	0.0	162.8	0.0	0.0	0.0	10.1	0.0	0.0	882.3	0.0	1,055.2
	Combined Cycle (Oil & Gas)	136.4	0.0	212.9	17.3	9.1	11,411.1	4,334.1	0.0	0.0	19,492.9	3,196.7	38,810.5
	Combined Cycle (Gas)	0.0	32.5	3,063.1	47.3	15.5	0.0	4,935.8	0.0	0.0	0.0	286.8	8,381.0
	Jet Engine (Oil)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.8	77.8
	Jet Engine (Oil & Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	632.8	154.8	788.0
	Jet Engine (Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.3	79.3
	Combustion Turbine (Oil)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	3.0	63.8	67.1
	Combustion Turbine (Oil & Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	53.8	683.7	738.3
	Combustion Turbine (Gas)	59.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	406.5	371.9	837.4
	Internal Combustion (Oil)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5
	Internal Combustion (Oil & Gas)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
	Internal Combustion (Gas)	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	34.2	0.0	34.4
Pumped Storage	Pumped Storage Hydro	428.6	0.0	0.0	0.0	0.0	283.3	0.0	0.0	0.0	0.0	0.0	711.9
Nuclear	Steam (PWR Nuclear)	0.0	4,700.5	0.0	0.0	0.0	0.0	0.0	2,821.4	0.0	0.0	0.0	7,521.9
	Steam (BWR Nuclear)	0.0	0.0	23,591.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23,591.2
Renewable [1]	Conventional Hydro	16,432.1	27.3	439.2	7,480.8	1,971.3	2,059.4	264.6	0.0	0.0	0.0	0.0	28,674.7
	Internal Combustion (Methane)	145.7	88.6	270.5	38.4	61.2	48.5	0.0	0.0	0.0	0.0	0.0	652.9
	Steam Turbine (Wood)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Steam Turbine (Refuse)	238.6	0.0	229.0	0.0	0.0	63.6	40.4	323.1	0.0	0.0	937.6	1,832.3
	Wind	595.8	1.7	1,089.6	1,282.6	1,141.0	0.0	0.0	0.0	0.0	0.0	0.0	4,110.7
	Solar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.8	49.8
	Totals	18,040.4	4,851.0	29,069.8	8,866.4	3,198.3	13,865.9	10,710.1	3,144.5	0.0	23,360.1	11,659.6	**126,766.1**

(1) - The Renewable Category does not necessarily match the New York State Clean Energy Standard (CES) Definition.
(2) - Values are from the 2021 Net Energy column in Table III-2a and Table III-2b.

Table III-3d: Scheduled Real-Time Transactions by Control Area and Proxy Bus (GWh) – 2021

Control Area	Proxy Bus Name	Imports	Wheels-In	Exports	Wheels-Out	Net Imports
HQ	Cedars	851	0	0	0	851
HQ	Chateaugay	7,638	2,274	5	0	9,907
IESO	Bruce	5,777	21	111	5	5,682
ISO-NE	1385 Line	884	0	150	0	734
ISO-NE	Cross Sound Cable	1,937	0	0	0	1,937
ISO-NE	Sandy Pond	5,821	2	8,715	2,276	-5,168
PJM	HTP	2,808	0	0	0	2,808
PJM	Keystone	6,927	5	1,428	21	5,483
PJM	Linden VFT	2,253	0	5	0	2,248
PJM	Neptune	2,730	0	0	0	2,730
	NYCA Total	37,626	2,302	10,414	2,302	27,212

Figure III-1: 2021 NYCA Energy Production by Zone

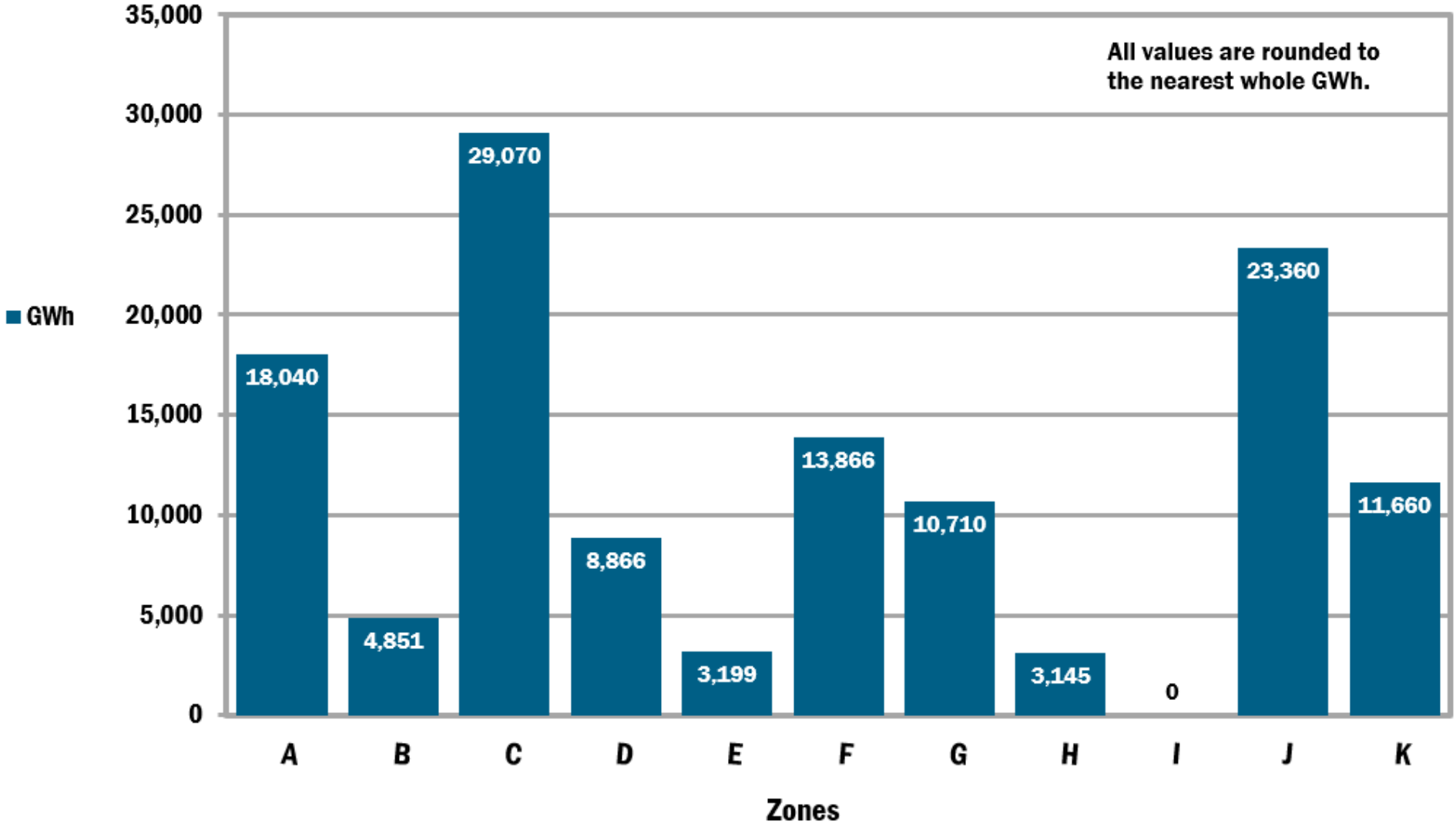
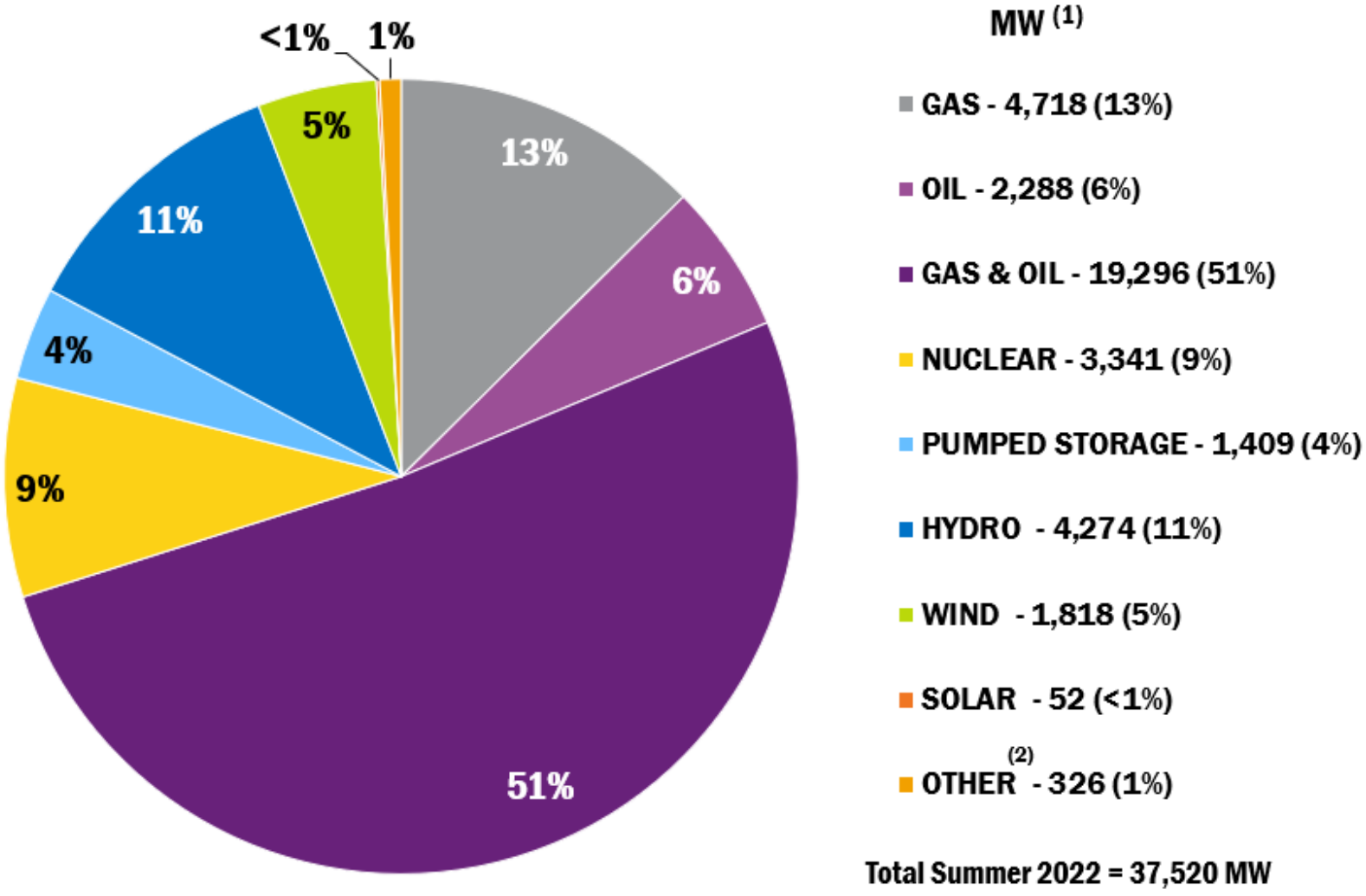


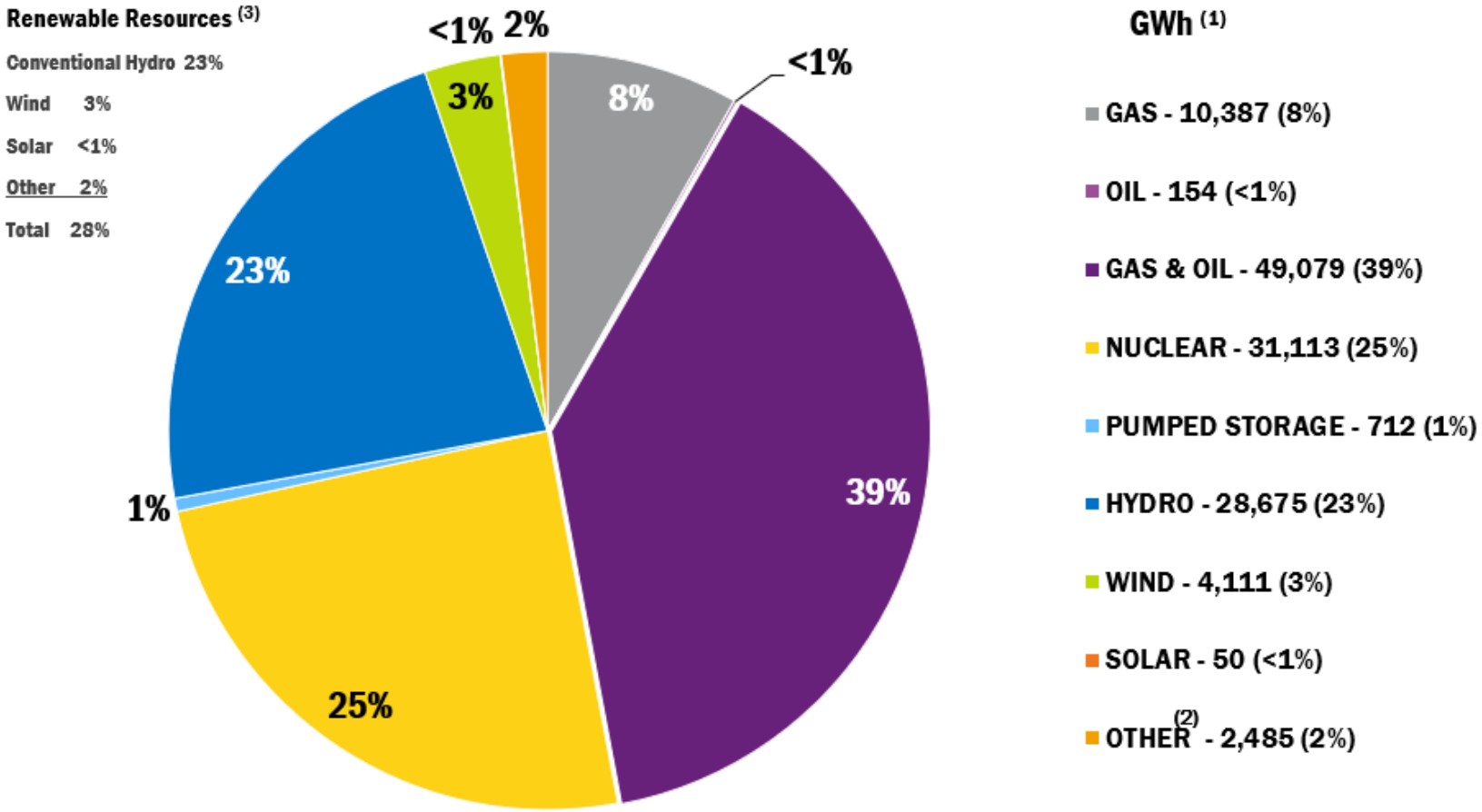
Figure III-2: Existing NYCA Summer Capability by Fuel Type



(1) All values are from the Summer Capability column in Table III-2a and are rounded to the nearest whole MW.

(2) Includes Methane, Refuse & Wood.

Figure III-3: 2021 NYCA Energy Production by Fuel Type

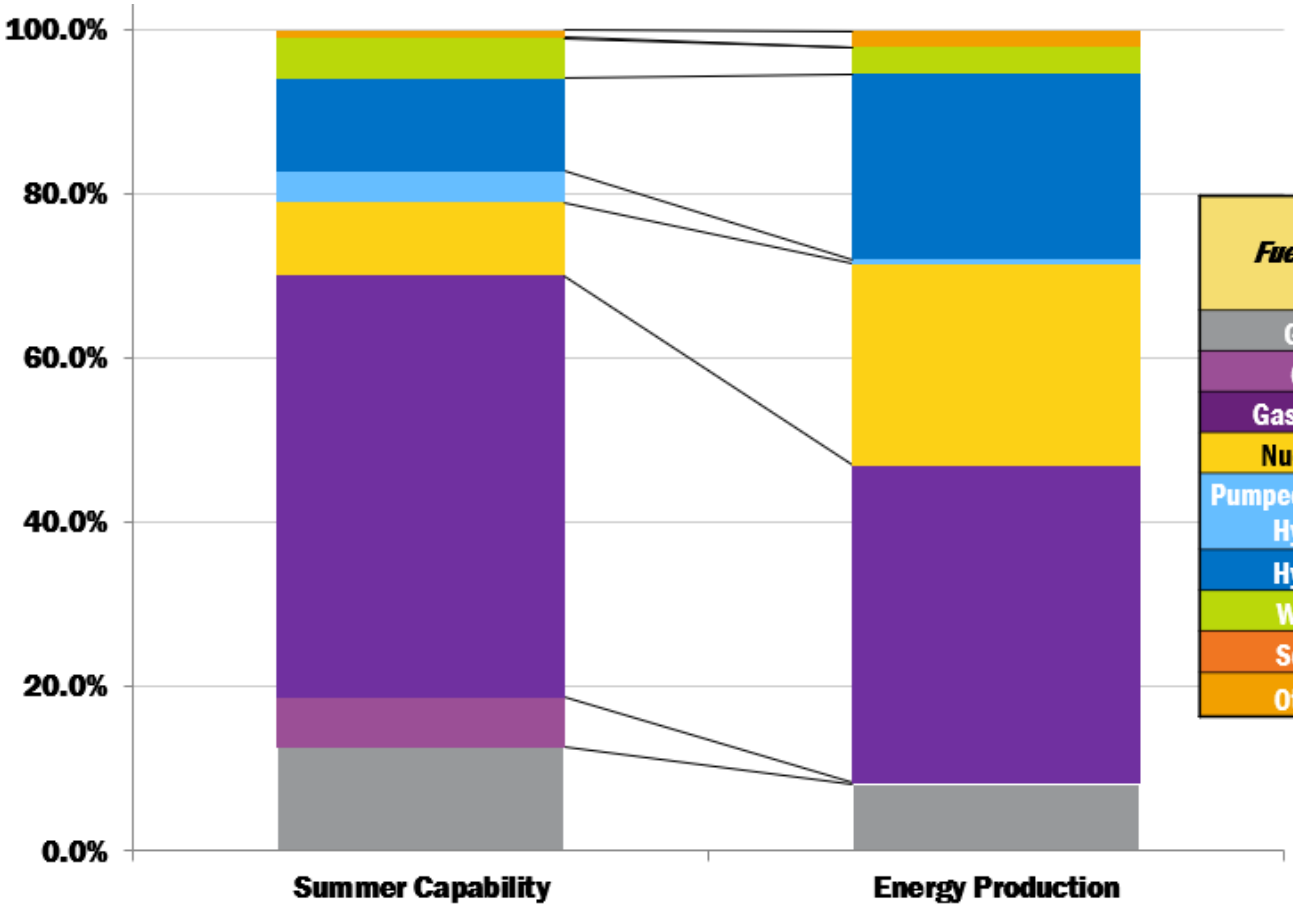


(1) All values are rounded to the nearest whole GWh.

(2) Includes Methane, Refuse & Wood.

(3) Renewable Resources do not necessarily match the NYS Clean Energy Standard (CES) definition.

Figure III-4: 2021 NYCA Energy Production and Summer Capability by Fuel Type



Fuel Type	*Summer Capability (MW)*	*Energy Production (GWH)*
Gas	13%	8%
Oil	6%	<1%
Gas & Oil	51%	39%
Nuclear	9%	25%
Pumped Storage Hydro	4%	1%
Hydro	11%	23%
Wind	5%	3%
Solar	<1%	<1%
Other	1%	2%

Note: Other Includes Methane, Refuse & Wood.

Figure III-5a: NYCA Wind Resources – Historical Installed Nameplate Capacity

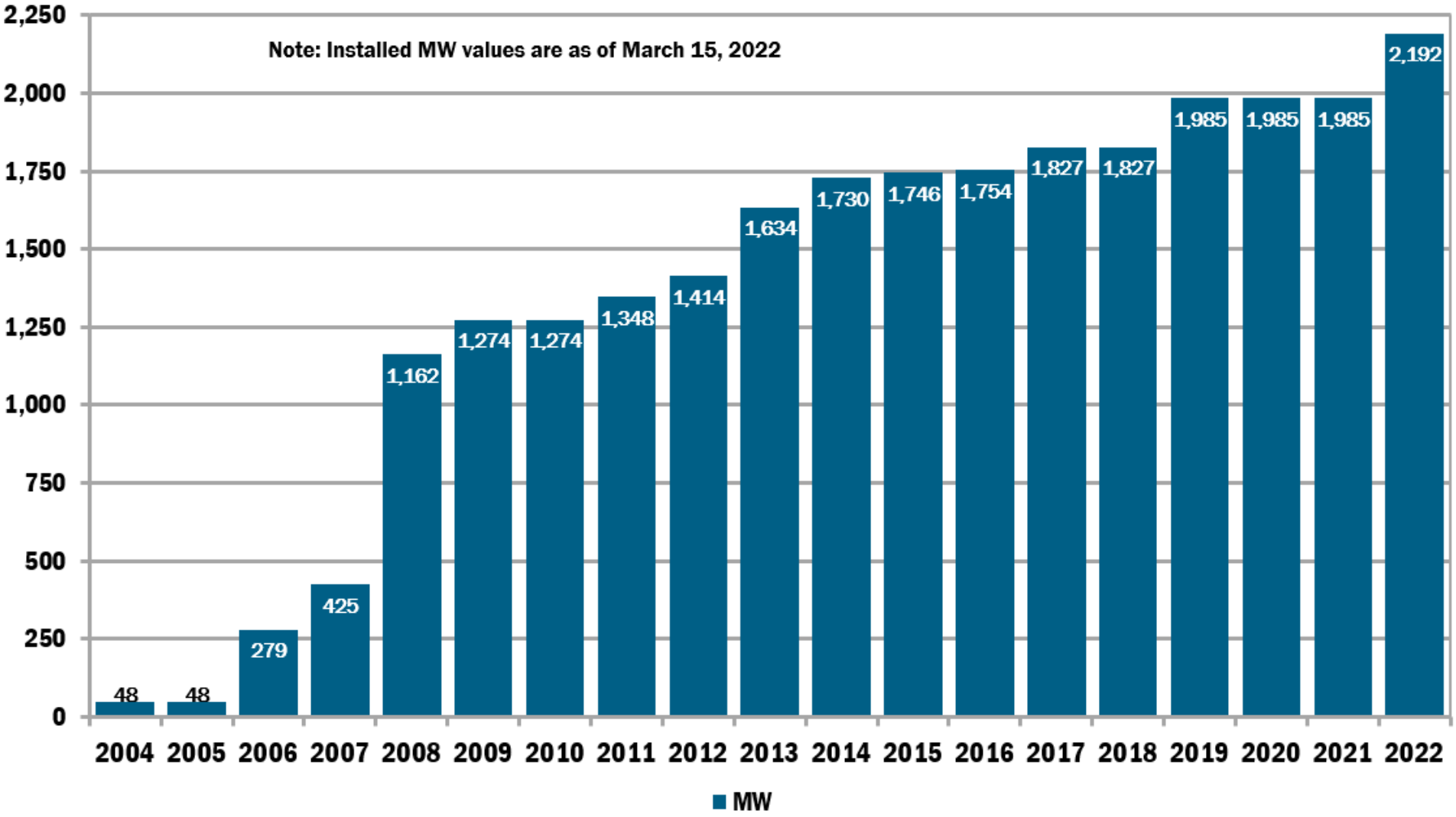
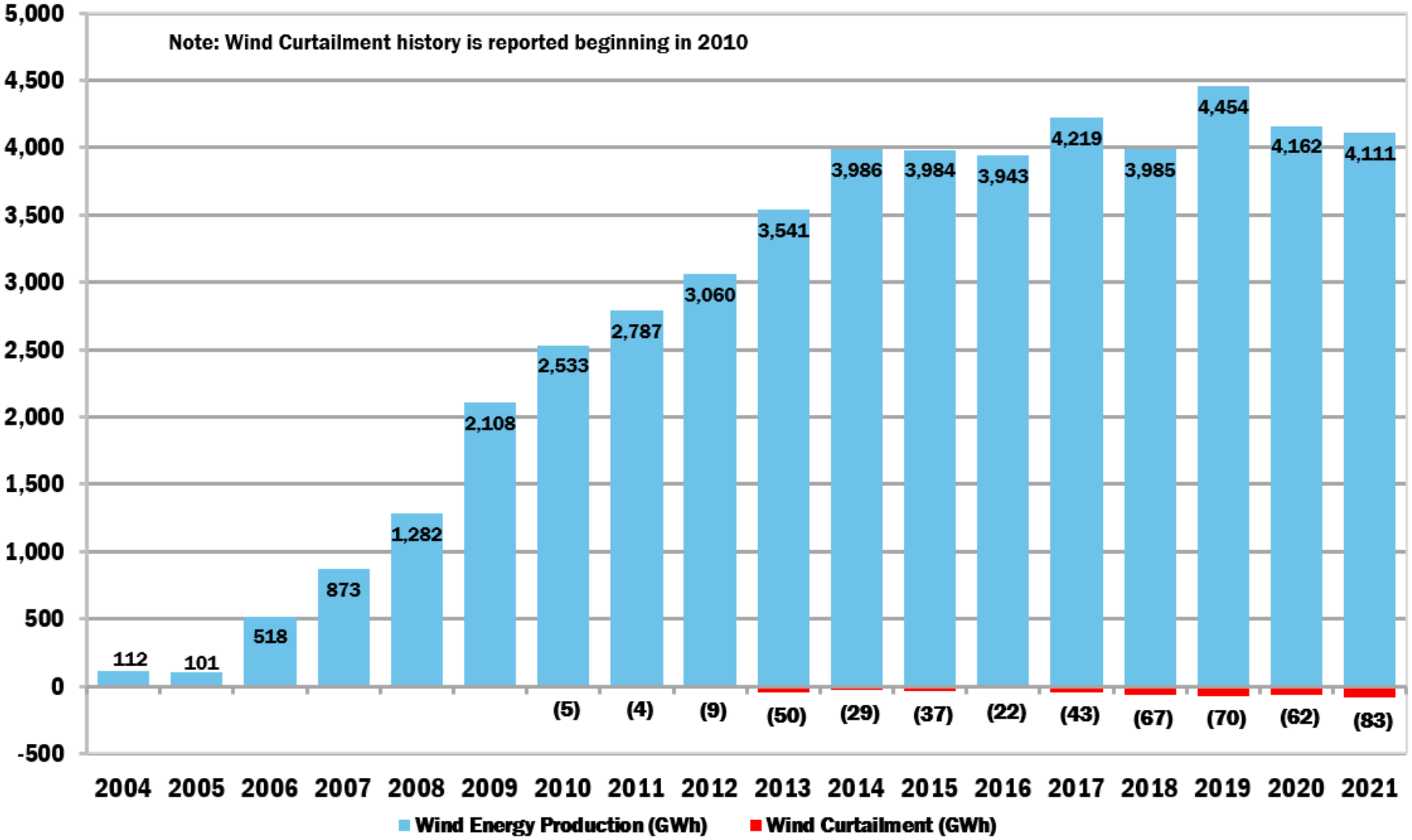


Figure III-5b: NYCA Wind Resources – Historical Energy Production and Curtailment



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Section IV

Changes in Generating Capacity

New York ISO

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Section IV

This section reports proposed projects in the Interconnection Facilities Study stage of the NYISO interconnection process, together with re-ratings, and deactivations. Table IV-1 lists proposed facilities that have completed, are enrolled in, or are candidates to enter a Class Year Interconnection Facilities Study; or have met other comparable milestones. Table IV-2 reports units that have proposed re-ratings. Table IV-3 shows deactivated units that are no longer listed in Existing Capacity Table III-2 and have unexpired CRIS MW. Table IV-4 shows units that remain listed in Table III-2 and that have been deactivated since the publication of the 2020 *Gold Book*. Table IV-5 lists units that have provided a notice of deactivation at some future date. Table IV-6 lists the proposed status changes of simple-cycle combustion turbines to comply with the DEC Peaker Rule. Table IV-7 provides information on proposed large load projects listed in the NYISO Interconnection Queue. These tables are current through March 15, 2022. Monthly updates to this information are available in the *Generator Status Updates* folder on the *NY Power System Information & Outlook* page:

https://www.nyiso.com/ny-power-system-information-outlook.

Table IV-1: Proposed Generator Additions & CRIS Requests, as of February 28, 2022

QUEUE POS.	OWNER / OPERATOR	STATION UNIT	ZONE	Proposed Date[6] (M-YY)	NAMEPLATE RATING (MW)	REQUESTED CRIS (MW)[1]	CRIS[1] (MW)	SUMMER (MW)	WINTER (MW)	UNIT TYPE	CLASS YEAR	NOTES
		Completed Class Year Facilities Study										
678	LI Solar Generation, LLC	Calverton Solar Energy Center	K	Jun-22	22.9	22.9	22.9	22.9	22.9	Solar	2019	(2)
422	NextEra Energy Resources, LLC	Eight Point Wind Enery Center	B	Sep-22	101.8	101.2	101.2	101.8	101.8	Wind Turbines	2017	(2)
531	Invenergy Wind Development LLC	Number 3 Wind Energy	E	Oct-22	103.9	105.8	105.8	103.9	103.9	Wind Turbines	2019	(2)
579	Bluestone Wind, LLC	Bluestone Wind	E	Oct-22	111.8	124.2	124.2	111.8	111.8	Wind Turbines	2019	(2)
505	Ball Hill Wind Energy, LLC	Ball Hill Wind	A	Nov-22	100.0	100.0	100.0	100.0	100.0	Wind Turbines	2017	(2)
618	High River Energy Center, LLC	High River Solar	F	Nov-22	90.0	90.0	90.0	90.0	90.0	Solar	2019	(2)
619	East Point Energy Center, LLC	East Point Solar	F	Nov-22	50.0	50.0	50.0	50.0	50.0	Solar	2019	(2)
721	Excelsior Energy Center, LLC	Excelsior Energy Center	A	Nov-22	280.0	280.0	280.0	280.0	280.0	Solar	2019	(2)
519	Canisteo Wind Energy LLC	Canisteo Wind	C	Dec-22	290.7	290.7	290.7	290.7	290.7	Wind Turbines	2019	(2)
535	Riverhead Solar 2 LLC	Riverhead Expansion	K	Dec-22	36.0	36.0	36.0	36.0	36.0	Solar	2019	(2)
612	South Fork Wind, LLC	South Fork Wind Farm	K	Dec-22	96.0	96.0	96.0	96.0	96.0	Wind Turbines	2019	(2)
683	KCE NY 2, LLC	KCE NY 2	G	Dec-22	200.0	200.0	TBD	200.0	200.0	Energy Storage	2019	(2) (3)
695	South Fork Wind, LLC	South Fork Wind Farm II	K	Dec-22	40.0	40.0	40.0	40.0	40.0	Wind Turbines	2019	(2)
704	Bear Ridge Solar, LLC	Bear Ridge Solar	A	Dec-22	100.0	100.0	100.0	100.0	100.0	Solar	2019	(2)
706	High Brigde Wind, LLC	High Brigde Wind	E	Dec-22	100.8	100.8	100.8	100.8	100.8	Wind Turbines	2019	(2)
596	Invenergy Wind Development LLC	Alle Catt II Wind	A	May-23	339.1	339.1	339.1	339.1	339.1	Wind Turbines	2019	(2)
276	EDF Renewables Development, Inc.	Homer Solar Energy Center	C	Sep-23	90.0	90.0	90.0	90.0	90.0	Solar	2019	(2)
637	Flint Mine Solar LLC	Flint Mine Solar	G	Sep-23	100.0	100.0	100.0	100.0	100.0	Solar	2019	(2)
617	Watkins Glen Energy Center, LLC	Watkins Glen Solar	C	Nov-23	50.0	50.0	50.0	50.0	50.0	Solar	2019	(2)
620	North Side Energy Center, LLC	North Side Solar	D	Nov-23	180.0	180.0	180.0	180.0	180.0	Solar	2019	(2)
720	Trelina Solar Energy Center, LLC	Trelina Solar Energy Center	C	Nov-23	80.0	80.0	80.0	80.0	80.0	Solar	2019	(2)
393	NRG Berrians East Development, LLC	Berrians East Replacement	J	Dec-23	465.0	508.0	508.0	431.0	438.0	Combustion Turbines	2017	(2) (7)
396	Baron Winds, LLC	Baron Winds	C	Dec-23	238.4	300.0	300.0	238.4	238.4	Wind Turbines	2017	(2)
591	SunEast Highview Solar LLC	Highview Solar	C	Dec-23	20.0	20.0	20.0	20.0	20.0	Solar	2019	(2)
644	Hecate Energy Columbia County 1, LLC	Columbia County 1	F	Dec-23	60.0	60.0	60.0	60.0	60.0	Solar	2019	(2)
746	Peconic River Energy Storage, LLC	North Street Energy Storage	K	Mar-24	150.0	150.0	TBD	150.0	150.0	Energy Storage	2019	(2) (3)
495	Mohawk Solar LLC	Mohawk Solar	F	Nov-24	90.5	90.5	90.5	90.5	90.5	Solar	2019	(2)
791	Danskammer Energy LLC	Danskammer Energy Center	G	Jan-25	615.0	88.9	600.0	595.5	600.0	Combined Cycle	2019	(2) (9)
737	Empire Offshore Wind LLC	El Sunset Park	J	Dec-26	816.0	816.0	816.0	816.0	816.0	Wind Turbines	2019	(2)
		Completed CRIS Requests										
430	HQUS	Cedar Rapids Transmission Upgrade	D	Oct-21	N/A	80.0	80.0	N/A	N/A		2017	
	BSC Owner LLC	Spring Creek Tower	J	N/A	N/A	8.0	8.0	N/A	N/A	Diesel	2019	
	Energy Storage Resources, LLC	Eagle Energy Storage	J	N/A	N/A	20.0	20.0	N/A	N/A	Energy Storage	2019	
	Strata Storage, LLC	Groundvault Energy Storage	J	N/A	N/A	12.5	12.5	N/A	N/A	Energy Storage	2019	
	Strata Storage, LLC	Stillwell Energy Storage	J	N/A	N/A	10.0	10.0	N/A	N/A	Energy Storage	2019	
	Strata Storage, LLC	Cleancar Energy Storage	J	N/A	N/A	15.0	15.0	N/A	N/A	Energy Storage	2019	
	Hannacroix Solar Facility, LLC	Hannacroix Solar	G	N/A	N/A	3.2	3.2	N/A	N/A	Solar	2019	
	RWE Solar Development, LLC	Monsey 44-6	G	N/A	N/A	5.0	5.0	N/A	N/A	Energy Storage	2019	
	RWE Solar Development, LLC	Monsey 44-2	G	N/A	N/A	5.0	5.0	N/A	N/A	Energy Storage	2019	
	RWE Solar Development, LLC	Monsey 44-3	G	N/A	N/A	5.0	5.0	N/A	N/A	Energy Storage	2019	
	RWE Solar Development, LLC	Cuddebackville Battery	G	N/A	N/A	10.0	10.0	N/A	N/A	Energy Storage	2019	
	Yonkers Grid, LLC	Yonkers Grid	J	N/A	N/A	20.0	20.0	N/A	N/A	Energy Storage	2019	
	King's Plaza Energy LLC	King's Plaza	J	N/A	N/A	6.0	6.0	N/A	N/A	Natural Gas	2019	
	Port Jefferson Energy Storage, LLC	Port Jefferson Energy Storage	K	N/A	N/A	9.9	9.9	N/A	N/A	Energy Storage		(15)
	Suffolk County Energy Storage, LLC	Suffork County Energy Storage	K	N/A	N/A	9.9	9.9	N/A	N/A	Energy Storage		(15)

Table IV-1: Proposed Generator Additions & CRIS Requests (cont'd)

QUEUE POS.	OWNER / OPERATOR	STATION UNIT	ZONE	Proposed Date[6] (M-YY)	NAMEPLATE RATING (MW)	REQUESTED CRIS (MW)[1]	CRIS[1] (MW)	SUMMER (MW)	WINTER (MW)	UNIT TYPE	CLASS YEAR	NOTES
		Class Year 2021[4]										
577	Greene County Energy Properties, LLC	Greene County Energy	G	Jan-22	20.0	20.0	TBD	20.0	20.0	Solar		
840	Hecate Grid Swiftsure LLC	Swiftsure Energy Storage	J	Jun-22	650.0	650.0	TBD	650.0	650.0	Energy Storage		
967	KCE NY 5 LLC	KCE NY 5	G	Oct-22	94.0	94.0	TBD	94.0	94.0	Energy Storage		
694	Sunset Hill Solar, LLC	Sunset Hill Solar	G	Nov-22	20.0	20.0	TBD	20.0	20.0	Solar		
521	Invenergy NY, LLC	Bull Run II Wind	D	Dec-22	145.4	145.4	TBD	145.4	145.4	Wind Turbines		
629	Silver Lake Solar, LLC	Silver Lake Solar	C	Dec-22	24.9	24.9	TBD	24.9	24.9	Solar		
801	Prattsburgh Wind, LLC	Prattsburgh Wind Farm	C	Dec-22	147.0	147.0	TBD	147.0	147.0	Wind Turbines		
925	Hecate Grid Clermont 1 LLC	Clermont 1	K	Dec-22	100.0	100.0	TBD	100.0	100.0	Energy Storage		
931	Hanwha Energy USA Holdings d/d/a/ 174 Power Global	Astoria Energy Storage	J	Dec-22	100.0	100.0	TBD	100.0	100.0	Energy Storage		
950	Orleans Solar LLC	Orleans Solar	B	Dec-22	200.0	200.0	TBD	200.0	200.0	Solar		
774	EDF Renewables Development, Inc.	Tracy Solar Energy Centre	E	Jan-23	119.0	119.0	TBD	119.0	119.0	Solar		
597	Hecate Energy Greene County 3 LLC	Greene County 3	G	Apr-23	20.0	20.0	20.0	20.0	20.0	Solar		(10)
779	Hecate Energy Gedney Hill LLC	Gedney Hill Solar	G	Apr-23	20.0	20.0	TBD	20.0	20.0	Solar		
956	Holbrook Energy Storage	Holbrook Energy Storage	K	May-23	300.9	294.9	TBD	294.9	296.4	Energy Storage		
965	Yaphank Energy Storage, LLC	Yaphank Energy Storage	K	May-23	79.6	76.8	TBD	76.8	77.6	Energy Storage		
740	Oakdale Battery Storage LLC	Oakdale Battery Storage	C	Jun-23	120.0	120.0	TBD	120.0	120.0	Energy Storage		
815	Bayonne Energy Center, LLC	Bayonne Energy Center III	J	Jun-23	49.8	49.8	TBD	49.8	49.8	Energy Storage		
787	Levy Grid, LLC	Levy Grid, LLC	A	Sep-23	150.0	150.0	TBD	150.0	150.0	Energy Storage		
805	Osbow Hill Solar, LLC	Owbox Hill Solar	C	Sep-23	140.0	140.0	TBD	140.0	140.0	Solar		
571	Heritage Renewables, LLC	Heritage Wind	A	Oct-23	200.1	200.1	TBD	200.1	200.1	Wind Turbines		
710	Invenergy Solar Development North America LLC	Horseshoe Solar	B	Oct-23	180.0	180.0	TBD	180.0	180.0	Solar		
716	EDF Renewables Development, Inc.	Moraine Solar	C	Oct-23	93.5	93.5	TBD	93.5	93.5	Solar		
717	EDF Renewables Development, Inc.	Morris Ridge Solar Energy Center	C	Oct-23	177.0	177.0	TBD	177.0	177.0	Solar		
995	Alabama Solar Park LLC	Alabama Solar Park LLC	B	Oct-23	132.4	130.0	TBD	130.0	130.0	Solar		
783	ConnectGen Chautauqua County LLC	South Ripley Solar	A	Nov-23	270.0	270.0	TBD	270.0	270.0	Solar		
880	Brookside Solar, LLC	Brookside Solar	D	Nov-23	100.0	100.0	TBD	100.0	100.0	Solar		
881	New Breman Solar, LLC	New Breman Solar	E	Nov-23	100.0	100.0	TBD	100.0	100.0	Solar		
882	Riverside Solar, LLC	Riverside Solar	E	Nov-23	100.0	100.0	TBD	100.0	100.0	Solar		
883	North Park Energy, LLC	Garnet Energy Center	B	Nov-23	200.0	200.0	TBD	200.0	200.0	Solar		
522	NYC Energy LLC	NYC Energy	J	Dec-23	79.9	79.9	TBD	79.9	79.9	Energy Storage		
709	Alder Creek Solar, LLC	Alder Creek Solar	E	Dec-23	165.0	165.0	TBD	165.0	165.0	Solar		
777	Community Energy Solar, LLC	White Creek Solar	B	Dec-23	135.0	135.0	TBD	135.0	135.0	Solar		
811	Hecate Energy Cider Solar LLC	Cider Solar	A	Dec-23	500.0	500.0	TBD	500.0	500.0	Solar		
907	174 Power Global	Harlem River Yard	J	Dec-23	100.0	100.0	TBD	100.0	100.0	Energy Storage		
929	EDF Renewables Development, Inc.	Morris Ridge Battery Storage	C	Dec-23	84.2	83.0	TBD	83.0	83.0	Energy Storage		
953	Sugar Maple Solar, LLC	Sugar Maple Solar	E	Dec-23	125.0	125.0	TBD	125.0	125.0	Solar		
954	Empire Solar, LLC	Empire Solar	A	Dec-23	125.0	125.0	TBD	125.0	125.0	Solar		
878	Energy Storage Resources, LLC	Pirates Island	A	Jan-24	100.0	100.0	TBD	100.0	100.0	Energy Storage		
766	Sunrise Wind LLC	NY Wind Holbrook	K	May-24	1,085.7	880.0	TBD	880.0	880.0	Wind Turbines		
822	Astoria Generating Company, LP	Narrows Generating Barge Battery Energy Storage	J	May-24	58.2	TBD	TBD	58.2	58.2	Energy Storage		
834	Astoria Generating Company, LP	Parking Lot Battery Energy Storage	J	May-24	97.0	TBD	TBD	79.0	79.0	Energy Storage		
835	Astoria Generating Company, LP	Dock Battery Energy Storage	J	May-24	59.1	TBD	TBD	56.3	57.3	Energy Storage		
864	Boralex US Development, LLC	NY38 Solar	E	Mar-24	120.0	TBD	TBD	120.0	120.0	Solar		
987	Sunrise Wind LLC	NY Wind Holbrook 2	K	May-24	1,085.7	44.0	TBD	44.0	44.0	Wind Turbines		(12)
830	NRG Astoria Storage LLC	Astoria Energy Storage 2	J	Jun-24	79.9	79.9	TBD	79.9	79.9	Energy Storage		
942	KCE NY 21, LLC	KCE NY 21	K	Dec-24	60.0	60.0	TBD	60.0	60.0	Energy Storage		
994	KCE NY 22, LLC	KCE NY 22	K	Dec-24	90.0	90.0	TBD	90.0	90.0	Energy Storage		
700	Able Grid Energy Solutions, LLC	Robinson Grid	J	Jul-25	300.0	300.0	TBD	300.0	300.0	Energy Storage		
958	Empire Offshore Wind LLC	El Oceanside	K	Dec-25	1,356.0	96.0	TBD	96.0	96.0	Wind Turbines		(13)
959	Empire Offshore Wind LLC	El Oceanside 2	K	Dec-25	1,356.0	1,260.0	TBD	1,260.0	1,260.0	Wind Turbines		

Table IV-1: Proposed Generator Additions & CRIS Requests (cont'd)

QUEUE POS.	OWNER / OPERATOR	STATION UNIT	ZONE	Proposed Date[6] (M-YY)	NAMEPLATE RATING (MW)	REQUESTED CRIS (MW)[1]	CRIS[1] (MW)	SUMMER (MW)	WINTER (MW)	UNIT TYPE	CLASS YEAR	NOTES
		EDS 2021-01										
	Central Rivers Power US, LLC	C.H.I. (Dexter) Hydro	E	I/S	N/A	5.3	TBD	N/A	N/A	Hydro		(16)
	Central Rivers Power US, LLC	Copenhagen Assoc.	E	I/S	N/A	4.2	TBD	N/A	N/A	Hydro		(16)
	West Babylon Energy Storage, LLC	West Babylon (PAM-2019-77593)	K	N/A	N/A	9.9	TBD	N/A	N/A	Energy Storage		(16)
		Future Class Year Candidates[14]										
745	Energy Storage Resources, LLC	Huckleberry Ridge Energy	G	Apr-22	100.0	TBD	TBD	100.0	100.0	Energy Storage		
697	Helix Ravenswood, LLC	Ravenswood Energy Storage 1	J	May-22	129.0	TBD	TBD	129.0	129.0	Energy Storage		
698	Helix Ravenswood, LLC	Ravenswood Energy Storage 2	J	May-22	129.0	TBD	TBD	129.0	129.0	Energy Storage		
778	Astoria Generating Company LP	Gowanus Gas Turbine Facility Repowering	J	May-22	710.0	TBD	TBD	549.0	588.0	Combustion Turbines		(8)
803	Yonkers Grid, LLC	Yonkers Grid, LLC	I	Jun-22	100.0	TBD	TBD	100.0	100.0	Energy Storage		
974	KCE NY 19 LLC	KCE NY 19	G	Jun-22	80.0	TBD	TBD	80.0	80.0	Energy Storage		
718	Cortland Energy Center,LLC	Cortland Energy Center	C	Nov-22	50.0	TBD	TBD	50.0	50.0	Solar		
719	East Ling Energy Center	East Light Energy Center	F	Nov-22	40.0	TBD	TBD	40.0	40.0	Solar		
497	Invenergy Wind Development LLC	Bull Run	D	Dec-22	303.6	TBD	TBD	303.6	303.6	Wind Turbines		
939	National Grid Generation LLC	Far Rockaway Battery Energy Storage	K	Dec-22	30.0	TBD	TBD	30.0	30.0	Energy Storage		
957	Holtsville Energy Storage	Holtsville Energy Storage	K	May-23	79.6	TBD	TBD	76.8	76.8	Energy Storage		
966	Suffolk County Energy Storage, LLC	Suffolk County Storage	K	May-23	41.3	TBD	TBD	40.3	40.3	Energy Storage		
520	EDP Renewables North America	Rolling Upland Wind	E	Nov-23	72.6	TBD	TBD	72.6	72.6	Wind Turbines		
594	North Park Energy, LLC	NW Energy	C	Dec-23	60.0	TBD	TBD	60.0	60.0	Energy Storage		
624	Franklin Solar, LLC	Franklin Solar	D	Dec-23	150.0	TBD	TBD	150.0	150.0	Solar		
825	Setauket Energy Storage, LLC	Setauket Energy Storage	K	Dec-23	76.9	TBD	TBD	76.9	76.9	Energy Storage		
668	North Bergen Liberty Generating, LLC	Liberty Generating Alternative	J	Feb-24	1,200.0	TBD	TBD	1,171.0	1,172.0	Combustion Turbines		
971	Savion, LLC	East Setauket Energy Storage	K	Mar-24	300.9	TBD	TBD	293.5	293.5	Energy Storage		
770	KCE NY 8 LLC	KCE NY 8a	G	Oct-24	20.0	TBD	TBD	20.0	20.0	Energy Storage		
857	EDF Renewables Development, Inc.	Columbia Solar Energy Center	E	Oct-24	350.0	TBD	TBD	350.0	350.0	Solar		
858	EDF Renewables Development, Inc.	Genesee Road Solar Energy Center	A	Oct-24	350.0	TBD	TBD	350.0	350.0	Solar		
859	EDF Renewables Development, Inc.	Ridge View Solar Energy Center	A	Oct-24	350.0	TBD	TBD	350.0	350.0	Solar		
860	EDF Renewables Development, Inc.	Rosalen Solar Energy Center	E	Oct-24	350.0	TBD	TBD	350.0	350.0	Solar		
686	Invenergy Solar Development North America LLC	Bull Run Solar Eneryg Center	D	Dec-24	170.0	TBD	TBD	170.0	170.0	Solar		
738	Empire Offshore Wind LLC	El Melville	K	Dec-24	816.0	TBD	TBD	816.0	816.0	Wind Turbines		
800	EDF Renewables Development, Inc.	Rich Road Solar Energy Center	E	Dec-24	240.0	TBD	TBD	240.0	240.0	Solar		
693	Renovo Energy Center, LLC	Renovo Energy Center Uprate	C	Jun-25	531.0	TBD	TBD	515.0	548.0	Combined Cycle		
526	Atlantic Wind, LLC	North Ridge Wind	D	Dec-25	100.0	TBD	TBD	100.0	100.0	Wind Turbines		
560	Atlantic Wind, LLC	Deer River Wind	E	Dec-25	100.0	TBD	TBD	100.0	100.0	Wind Turbines		
574	Atlantic Wind, LLC	Mad River Wind	E	Dec-25	450.0	TBD	TBD	450.0	450.0	Wind Turbines		
680	Anbaric Development Partners, LLC	Long Island Offshore Wind	K	Dec-25	1,200.0	TBD	TBD	1,200.0	1,200.0	Wind Turbines		
792	Anbaric Development Partners, LLC	Long Island Offshore Wind Connection	K	Dec-25	800.0	TBD	TBD	800.0	800.0	Wind Turbines		
679	Anbaric Development Partners, LLC	New York City Offshore Wind	J	Dec-26	1,200.0	TBD	TBD	1,200.0	1,200.0	Wind Turbines		
		Other Non Class Year Generators (Small Generator) Interconnection Agreement Complete										
584	SunEast Dog Corners Solar LLC	Dog Corners Solar	C	Mar-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (11)
769	New York Power Authority	North Country Energy Storage	D	Mar-22	20.0	N/A	N/A	20.0	20.0	Energy Storage		(2) (5)
670	SunEast Skyline Solar LLC	Skyline Solar	E	Apr-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (11)
768	Janis Solar, LLC	Janis Solar	C	Apr-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
775	Puckett Solar, LLC (Conti)	Puckett Solar	E	Apr-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
682	Grissom Solar, LLC	Grissom Solar	F	Jun-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
748	Regan Solar, LLC	Regan Solar	F	Jun-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
735	ELP Stillwater Solar LLC	ELP Stillwater Solar	F	Sep-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
565	Tayandenega Solar, LLC	Tayandenega Solar	F	Oct-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
666	Martin Rd Solar LLC	Martin Rd Solar	A	Oct-22	20.0	20.0	TBD	20.0	20.0	Solar		(2) (5) (16)
667	Bakerstand Solar LLC	Bakerstand Solar	A	Oct-22	20.0	20.0	TBD	20.0	20.0	Solar		(2) (5) (16)

Table IV-1: Proposed Generator Additions & CRIS Requests (cont'd)

QUEUE POS.	OWNER / OPERATOR	STATION UNIT	ZONE	Proposed Date[6] (M-YY)	NAMEPLATE RATING (MW)	REQUESTED CRIS (MW)[1]	CRIS[1] (MW)	SUMMER (MW)	WINTER (MW)	UNIT TYPE	CLASS YEAR	NOTES
564	Rock District Solar, LLC	Rock District Solar	F	Dec-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
570	Hecate Energy, LLC	Albany County	F	Dec-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
598	Hecate Energy, LLC	Albany County II	F	Dec-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
638	Pattersonville Solar Facility, LLC	Pattersonville	F	Dec-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
730	Darby Solar, LLC	Darby Solar	F	Dec-22	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
572	Hecate Energy Greene 1 LLC	Greene County 1	G	Jan-23	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (10)
573	Hecate Energy Greene 2 LLC	Greene County 2	G	Mar-23	10.0	10.0	10.0	10.0	10.0	Solar		(2) (5) (10)
590	Duke Energy Renewables Solar, LLC	Scipio Solar	C	May-23	20.0	N/A	N/A	20.0	20.0	Solar		(2) (5)
592	Duke Energy Renewables Solar, LLC	Niagara Solar	B	May-23	20.0	N/A	N/A	20.0	20.0	Solar		(2) (5)
545	Sky High Solar LLC	Sky High Solar	C	Jun-23	20.0	20.0	TBD	20.0	20.0	Solar		(2) (5) (16)
586	SunEast Watkins Road Solar LLC	Watkins Rd Solar	E	Jun-23	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (11)
807	SunEast Hilltop Solar LLC	Hilltop Solar	F	Jul-23	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (15)
581	SED NY Holdings LLC	Hills Solar	E	Aug-23	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (11)
589	Duke Energy Renewables Solar, LLC	North Country Solar	E	Oct-23	15.0	N/A	N/A	15.0	15.0	Solar		(2) (5)
848	SunEast Fairway Solar LLC	Fairway Solar	E	Oct-23	20.0	20.0	20.0	20.0	20.0	Solar		(2) (5) (15)
		Facilities Study Complete										
575	Little Pond Solar, LLC	Little Pond Solar	G	Jul-23	20.0	20.0	10.0	20.0	20.0	Solar		(5) (10)
487	LI Energy Storage System, LLC	Far Rockaway Battery Storage	K	Nov-24	20.0	20.0	20.0	20.0	20.0	Energy Storage		(5) (10)
759	KCE NY 6, LLC	KCE NY 6	A	Apr-22	20.0	20.0	20.0	20.0	20.0	Energy Storage		(5) (10)
833	Dolan Solar, LLC	Dolan Solar	F	Sep-23	20.0	20.0	TBD	20.0	20.0	Solar		(5) (16)
828	SunEast Valley Solar LLC	Valley Solar	C	Jul-22	20.0	20.0	20.0	20.0	20.0	Solar		(5) (15)
734	ELP Ticonderoga Solar, LLC	ELP Ticonderoga Solar	F	Aug-22	20.0	20.0	20.0	20.0	20.0	Solar		(5) (10)
784	High Bridge Wind, LLC	High Bridge Wind	E	Sep-22	5.0	N/A	N/A	5.0	5.0	Wind Turbines		(5)
744	Granada Solar, LLC	Magruder Solar	G	Dec-22	20.0	20.0	20.0	20.0	20.0	Solar		(5) (15)
855	Boralex US Development, LLC	NY13 Solar	F	Nov-23	19.9	19.9	19.9	19.9	19.9	Solar		(5) (15)
		Facilities Study In Progress										
804	KCE NY 10, LLC	KCE NY 10	A	Oct-22	20.0	20.0	20.0	20.0	20.0	Energy Storage		(10)
832	Granada Solar, LLC	CS Hawthorn Solar	F	Dec-22	20.0	20.0	TBD	20.0	20.0	Solar		(16)
865	SED NY Holdings LLC	Flat Hill Solar	E	Feb-23	20.0	20.0	TBD	20.0	20.0	Solar		(16)
885	SED NY Holdings LLC	Grassy Knoll Solar	E	Feb-23	20.0	20.0	TBD	20.0	20.0	Solar		(16)
780	Hecate Energy Johnstown LLC	Johnstown Solar	F	Apr-23	20.0	N/A	N/A	20.0	20.0	Solar		(5)
863	Mitsubishi Hitachi Power Systems Americas, Inc.	Coverdale Solar	B	Oct-23	20.0	N/A	N/A	20.0	20.0	Solar		
843	Sandy Creek Solar LLC	NY37 Solar	E	Nov-23	20.0	20.0	TBD	20.0	20.0	Solar		(16)
827	NRG Arthur Kill Storage LLC	Arthur Kill Energy Storage 1	J	Jun-24	15.0	15.0	TBD	15.0	15.0	Energy Storage		(3) (5)
				Total				**24,830.7**	**24,918.5**			

Notes for Table IV-1: Proposed Generator Additions & CRIS Requests

1	"Requested CRIS" values reflect the Summer CRIS MW initially requested in the current Class Year Deliverability Study. "CRIS" values reflect the Summer CRIS MW deemed deliverable. See Definitions of Labels on Load & Capacity Schedule (Sec. V) for description.
2	Projects included as expected additions in this year's Load and Capacity Schedule, Table V-2a & V-2b.
3	Projects that are members of Class Year 2021 CRIS-only projects.
4	Projects that are members of Class Year 2021, i.e., Large Generating Facilities with Operating Committee approved System Reliability Impact Studies and Small Generating Facilities that have completed a comparable milestone and for which non-Local System Upgrade Facilities are required.
5	Small Generating Facilities that are not subject to a Class Year Study but have an executed Small Generator Facilities Study Agreement.
6	For projects in this Table, this date is the proposed Commercial Operation Date. These dates are proposed to the NYISO by the Developer and are typically updated throughout the interconnection study process and throughout project development, to the extent permitted by Attachments X and Z to the OATT.
7	Q#393 Berrians East Replacement is a repowering project that would include retiring NRG GTs 2, 3, and 4 (PTIDs 24094 through 24105). The Q#393 Berrians East Replacement, as proposed, will have a total ERIS capability of 431 MW (Summer) and 438 MW (Winter) and CRIS (Summer) of 508 MW (3.6 MW Summer CRIS increase).
8	Q#778 Gowanus Gas Turbine Facility Repowering is a repowering project that would include retiring Eastern Generation Gowanus Barges# 1, 2, 3, and 4 (PTIDs 24077 through 24080, 24084, 24111 through 24137). The Q#778 Gowanus Gas Turbine Facility Repowering, as proposed, will have a total ERIS capability of 549 MW (Summer) and 588 MW (Winter) and CRIS (Summer) of 578.4 MW (CRIS transfer at same location).
9	Q#791 Danskammer Energy Center is a repowering project that would include retiring Danskammer units# 1, 2, 3, and 4 (PTIDs 23586 and 23589 through 23591). The Q#791 Danskammer Energy Center, as proposed, will have a total ERIS capability of 595.5 MW (Summer) and 600.0 MW (Winter) and CRIS (Summer) of 600.0 MW (88.9 MW Summer CRIS increase).
10	Projects obtain CRIS via Class Year 2019
11	Projects obtain CRIS via Expedited Deliverability Study 2020-01
12	Q#987 is a 44 MW uprate of Q#766.
13	Q#958 is a 96 MW uprate of Q#959.
14	Projects that are potential candidates for future Class Year, i.e., Large Generating Facilities with Operating Committee approved System Reliability Impact Studies and Small Generating Facilities that have completed a comparable milestone and for which non-Local System Upgrade Facilities are required.
15	Projects obtain CRIS via Expedited Deliverability Study 2020-02
16	Projects are members of Expedited Deliverability Study 2021-01

Table IV-2: Proposed Generator Re-ratings[1], as of March 15, 2022

QUEUE POS.	OWNER / OPERATOR	STATION	UNIT	ZONE	DATE (3)	PTID	Class Year	INCREMENTAL CAPABILITY (MW)				TOTAL CAPABILITY (MW)			
								Nameplate Rating	CRIS	SUMMER	WINTER	Nameplate Rating	CRIS	SUMMER	WINTER
758	Dynegy Marketing and Trade, LLC	Independence GS1 to GS4		C	TBD	24169 - 24172	(2)	0.0	0.0	9.0	27.0	1,254.0	1,013.0	989.4	1,208.7
							Total	**0.0**	**0.0**	**9.0**	**27.0**	**1,254.0**	**1,013.0**	**989.4**	**1,208.7**

1. Re-ratings other than de minimis increases in capacity permitted by Section 30.3.1 of Attachments X and Section 32.1.3 of Attachment Z to the OATT.

2. Projects that are members of Class Year 2021, i.e., Large Generating Facilities with Operating Committee approved System Reliability Impact Studies and Small Generating Facilities that have completed a comparable milestone and for which non-Local System Upgrade Facilities are required.

3. For projects in this Table, this date is the proposed Commercial Operation Date. These dates are proposed to the NYISO by the Developer and are typically updated throughout the interconnection study process and throughout project development, to the extent permitted by Attachments X and Z to the OATT.

Tables IV-3, IV-4 and IV-5: Generator Deactivations

Table IV-3: Deactivated Units with Unexpired CRIS Rights Not Listed in Section III Existing Generating Facilities, as of March 15, 2022

OWNER / OPERATOR	STATION	UNIT	ZONE	DATE [1]	PTID	CRIS (MW)		CAPABILITY (MW)		Status [3]
						SUMMER [2]	WINTER [2]	SUMMER [2]	WINTER [2]	
International Paper Company	Ticonderoga [4]		F	05/01/2017	23804	7.6	7.6	9.5	9.8	See Note
Helix Ravenswood, LLC	Ravenswood 2-4		J	04/01/2018	24247	39.8	50.6	30.7	41.6	R
Helix Ravenswood, LLC	Ravenswood 3-1		J	04/01/2018	24248	40.5	51.5	31.9	40.8	R
Helix Ravenswood, LLC	Ravenswood 3-2		J	04/01/2018	24249	38.1	48.5	29.4	40.3	R
Helix Ravenswood, LLC	Ravenswood 3-4		J	04/01/2018	24251	35.8	45.5	31.2	40.8	R
Exelon Generation Company LLC	Monroe Livingston		B	09/01/2019	24207	2.4	2.4	2.4	2.4	R
Innovative Energy Systems, Inc	Steuben County LF		C	09/01/2019	323667	3.2	3.2	3.2	3.2	R
Consolidated Edison Co. of NY, Inc	Hudson Ave 4		J	09/10/2019	23540	13.9	18.2	14.0	16.3	R
New York State Elec& Gas Corp.	Auburn - State St		C	10/01/2019	24147	5.8	6.2	4.1	7.3	R
Cayuga Operating Company, LLC	Cayuga 1		C	06/04/2020	23584	154.1	154.1	151.0	152.0	R
Albany Energy LLC	Albany LFGE		F	07/01/2020	323615	4.5	4.5	5.6	5.6	I
Somerset Operating Company, LLC	Somerset		A	03/12/2020	23543	686.5	686.5	676.4	684.4	R
Entergy Nuclear Power Marketing, LLC	Indian Point 2		H	04/30/2020	23530	1,026.5	1,026.5	1,011.5	1,029.4	R
Astoria Generating Company L.P.	Gowanus 1-8[5]		J	02/01/2021	24113	16.1	21.0	16.0	21.0	I
					Total	**2,074.8**	**2,126.3**	**2,016.9**	**2,094.9**	

1. Approximate date of generator status change; not necessarily the date the generator became CRIS-inactive.

2. The CRIS, and Summer and Winter capacity levels are those that were in effect when the unit was last in service.

3. M = Mothball Outage per MST Section 5.18; R = retired or Retired as defined in the MST; I = ICAP Ineligible Forced Outage per MST Section 5.18.

4. Resource is currently participating in the ICAP Market as a Special Case Resource (SCR).

5. This unit has also submitted a peaker rule compliance plan to the DEC.

Tables IV-3, IV-4 and IV-5: Generator Deactivations

Table IV-4: Deactivated Units Listed in Section III Existing Generating Facilities, as of March 15, 2022

OWNER / OPERATOR	STATION	UNIT	ZONE	DATE	PTID	CRIS (MW)		CAPABILITY (MW)		Status [1]
						SUMMER [2]	WINTER [2]	SUMMER [2]	WINTER [2]	
Entergy Nuclear Power Marketing, LLC	Indian Point 3		H	04/30/2021	23531	1,040.4	1,040.4	1,036.3	1,038.8	R
Helix Ravenswood, LLC	Ravenswood 01 [3]		J	01/01/2022	23729	8.8	11.5	7.7	11.1	I
Helix Ravenswood, LLC	Ravenswood 11 [3]		J	12/01/2021	24259	20.2	25.7	16.1	22.4	I
					Total	**1,069.4**	**1,077.6**	**1,060.1**	**1,072.3**	

1. M = Mothball Outage per MST Section 5.18; R = retired or Retired as defined in the MST; I = ICAP Ineligible Forced Outage per MST Section 5.18.

2. The CRIS, and Summer and Winter capacity levels are those that were in effect when the unit was last in service.

3. This unit has also submitted a peaker rule compliance plan to the DEC.

Tables IV-3, IV-4 and IV-5: Generator Deactivations

Table IV-5: Notices of Proposed Deactivations[1] as of March 15, 2022

OWNER / OPERATOR	STATION	UNIT	ZONE	DATE [2]	PTID	CRIS (MW) SUMMER	CRIS (MW) WINTER	CAPABILITY (MW) SUMMER	CAPABILITY (MW) WINTER	Notes
National Grid	West Babylon 4		K	12/12/2020	23714	49.0	64.0	41.2	63.4	3
Long Island Power Authority	Glenwood GT 01		K	02/28/2021	23712	14.6	19.1	13.0	15.3	3
Seneca Power Partners. L.P.	Allegheny Cogen		B	05/02/2022	23514	62.9	82.2	62.0	62.7	
Seneca Power Partners. L.P.	Sithe Batavia		B	05/02/2022	24024	57.1	71.7	48.7	59.0	
Seneca Power Partners. L.P.	Sithe Sterling		B	05/02/2022	23777	57.4	72.1	49.2	61.9	
ENGIE Energy Marketing NA, Inc.	Nassau Energy Corporation		K	03/31/2022	323695	51.6	60.1	38.5	51.0	3, 4
Astoria Generating Company, L.P.	Gowanus 1-1		J	11/01/2022	24077	19.1	24.9	15.9	24.8	3, 4
Astoria Generating Company, L.P.	Gowanus 1-2		J	11/01/2022	24078	17.1	22.3	19.5	24.9	3, 4
Astoria Generating Company, L.P.	Gowanus 1-3		J	11/01/2022	24079	17.2	22.5	15.3	23.4	3, 4
Astoria Generating Company, L.P.	Gowanus 1-4		J	11/01/2022	24080	17.1	22.3	16.4	21.7	3, 4
Astoria Generating Company, L.P.	Gowanus 1-5		J	11/01/2022	24084	16.5	21.6	17.8	22.7	3, 4
Astoria Generating Company, L.P.	Gowanus 1-6		J	11/01/2022	24111	18.0	23.5	14.2	21.3	3, 4
Astoria Generating Company, L.P.	Gowanus 1-7		J	11/01/2022	24112	17.6	23.0	18.0	22.4	3, 4
Astoria Generating Company, L.P.	Gowanus 4-1		J	11/01/2022	24130	16.8	21.9	15.2	24.1	3, 4
Astoria Generating Company, L.P.	Gowanus 4-2		J	11/01/2022	24131	17.3	22.6	18.5	23.5	3, 4
Astoria Generating Company, L.P.	Gowanus 4-3		J	11/01/2022	24132	17.6	23.0	18.4	22.0	3, 4
Astoria Generating Company, L.P.	Gowanus 4-4		J	11/01/2022	24133	17.1	22.3	16.0	21.5	3, 4
Astoria Generating Company, L.P.	Gowanus 4-5		J	11/01/2022	24134	17.1	22.3	16.6	22.1	3, 4
Astoria Generating Company, L.P.	Gowanus 4-6		J	11/01/2022	24135	18.6	24.3	18.5	24.3	3, 4
Astoria Generating Company, L.P.	Gowanus 4-7		J	11/01/2022	24136	16.6	21.7	18.4	23.6	3, 4
Astoria Generating Company, L.P.	Gowanus 4-8		J	11/01/2022	24137	19.0	24.8	17.2	22.3	3, 4
NRG Power Marketing LLC	Astoria GT 2-1		J	05/01/2023	24094	41.2	50.7	34.8	46.4	3, 4
NRG Power Marketing LLC	Astoria GT 2-2		J	05/01/2023	24095	42.4	52.2	34.7	45.1	3, 4
NRG Power Marketing LLC	Astoria GT 2-3		J	05/01/2023	24096	41.2	50.7	36.7	46.5	3, 4
NRG Power Marketing LLC	Astoria GT 2-4		J	05/01/2023	24097	41.0	50.5	35.4	45.7	3, 4
NRG Power Marketing LLC	Astoria GT 3-1		J	05/01/2023	24098	41.2	50.7	35.5	45.8	3, 4
NRG Power Marketing LLC	Astoria GT 3-2		J	05/01/2023	24099	43.5	53.5	35.7	45.7	3, 4
NRG Power Marketing LLC	Astoria GT 3-3		J	05/01/2023	24100	43.0	52.9	34.0	45.2	3, 4
NRG Power Marketing LLC	Astoria GT 3-4		J	05/01/2023	24101	43.0	52.9	35.3	46.1	3, 4
NRG Power Marketing LLC	Astoria GT 4-1		J	05/01/2023	24102	42.6	52.4	33.8	43.9	3, 4
NRG Power Marketing LLC	Astoria GT 4-2		J	05/01/2023	24103	41.4	51.0	34.3	44.9	3, 4
NRG Power Marketing LLC	Astoria GT 4-3		J	05/01/2023	24104	41.1	50.6	35.3	46.3	3, 4
NRG Power Marketing LLC	Astoria GT 4-4		J	05/01/2023	24105	42.8	52.7	34.9	45.2	3, 4
					Total	**1,059.7**	**1,333.0**	**928.9**	**1,204.7**	

1. Units listed in Table IV-5 have provided a notice to the NYSPSC and/or have a completed Generator Deactivation Notice with the NYISO.
2. This date refers to the proposed generator deactivation date stated in the generator deactivation notice
3. This unit has also submitted a peaker rule compliance plan to the DEC.
4. As of March 15, 2022 this unit has yet to complete its Generator Deactivation Notice with the NYISO.

Table IV-6: Proposed Generator Status Changes to Comply with DEC Peaker Rule [1]

OWNER / OPERATOR	STATION UNIT	ZONE	DATE	PTID	CRIS (MW) SUMMER	CRIS (MW) WINTER	CAPABILITY (MW) SUMMER	CAPABILITY (MW) WINTER	Notes
Central Hudson Gas & Elec. Corp.	Coxsackie GT	G	05/01/2023	23611	21.6	26.0	19.2	24.0	2
Central Hudson Gas & Elec. Corp.	South Cairo	G	05/01/2023	23612	19.8	25.9	18.9	23.0	2
Consolidated Edison Co. of NY, Inc.	74 St. GT 1 & 2	J	05/01/2023	24260-24261	39.1	49.2	39.3	45.2	2
Astoria Generating Company, L.P.	Astoria GT 01	J	05/01/2023	23523	15.7	20.5	13.6	19.0	2
Consolidated Edison Co. of NY, Inc.	Hudson Ave 3	J	05/01/2023	23810	16.0	20.9	12.3	15.6	2
Consolidated Edison Co. of NY, Inc.	Hudson Ave 5	J	05/01/2023	23657	15.1	19.7	15.3	18.6	2
Helix Ravenswood, LLC	Ravenswood 10	J	05/01/2023	24258	21.2	27.0	16.0	22.3	2
National Grid	Northport GT	K	05/01/2023	23718	13.8	18.0	12.0	15.7	2
National Grid	Port Jefferson GT 01	K	05/01/2023	23713	14.1	18.4	12.6	17.3	2
National Grid	Shoreham 1	K	05/01/2023	23715	48.9	63.9	44.7	64.6	2, 4
National Grid	Shoreham 2	K	05/01/2023	23716	18.5	23.5	15.7	20.0	2, 4
National Grid	Glenwood GT 03	K	05/01/2023	23689	54.7	71.5	44.7	66.5	2, 4
Consolidated Edison Co. of NY, Inc.	59 St. GT 1	J	05/01/2025	24138	15.4	20.1	13.1	18.8	2
NRG Power Marketing, LLC	Arthur Kill GT 1	J	05/01/2025	23520	16.5	21.6	12.1	15.1	2
Astoria Generating Company, L.P.	Gowanus 2-1 through 2-8	J	05/01/2025	24114-24121	152.8	199.6	145.5	186.9	3
Astoria Generating Company, L.P.	Gowanus 3-1 through 3-8	J	05/01/2025	24122-24129	146.8	191.7	137.4	183.5	3
Astoria Generating Company, L.P.	Narrows 1-1 through 2-8	J	05/01/2025	24228-24243	309.1	403.6	291.5	382.0	3
				Total	**939.1**	**1,221.1**	**863.9**	**1,138.1**	

1. Units listed have not proivded a notice to the NYSPSC or completed a Generator Deactivation Notice with the NYISO.

2. These units have indicated they will be out of service as noted in their compliance plans in response to the DEC peaker rule.

3. These units have indicated they will be out of service during the ozone season (May through September) in their compliance plans in response to the DEC peaker rule.

4. Long Island Power Author ty (LIPA) has submitted notifications to the DEC per Part 227-3 of the Peaker Rule stating that these un ts are needed for reliability allowing these units to operate as directed by PSEG Long Island, until at least May 1, 2025

Table IV-7: Large Load Interconnection Requests

QUEUE POS.	OWNER / OPERATOR	PROJECT	ZONE	Proposed Date[1] (M-YY)	SUMMER (MW)[3]	WINTER (MW)[3]	NOTES
580	Genesee County Economic Devel.	WNY STAMP	B	Jun-22	300.0	300.0	(2)
776	Greenidge Generation LLC	Greenidge Load	C	Dec-22	60.0	60.0	(2)
849	Somerset Operating Company, LLC	Somerset Load	A	Nov-21	250.0	250.0	(2)
850	Cayuga Operating Company, LLC	Cayuga Load	C	Nov-21	50.0	50.0	(2)
979	North Country Data Center	Load Increase at North Country Data Center	D	Oct-20	185.0	185.0	(2)
1213	Petawatt Holdings, Inc.	St Lawrence Data and Agricultural Center	D	Jan-22	200.0	200.0	
				Total	**1,045.0**	**1,045.0**	

1. For projects in this Table, this date is the proposed In-Service Date.
2. Projects included in Table I-14, Interconnecting Large Loads Forecast.
   Table I-14 lists the annual zonal energy and peak demand impacts of these projects as assumed in the forecast, and does not necessarily reflect the proposed date and summer and winter MW listed in this table.
3. The values in this table reflect the information from the NYISO Interconnection Queue.

Section V

Load & Capacity Schedule

New York ISO

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Section V

This section provides a summary of NYCA load and capacity from 2021 through 2032 (as of March 15, 2022). Table V-1 summarizes Net Capacity Purchases (MW) from External Control Areas from 2022 through 2032. Table V-2a summarizes the NYCA Load and Capacity Schedule for the Summer Capability Period from 2021 through 2032. Table V-2b summarizes the NYCA Load and Capacity Schedule for the Winter Capability Period from 2021-22 through 2032-33. For reference, the values for the summer of 2021 and winter of 2021-22 are repeated from the *2021 Gold Book.* Information for Tables V-2a and V-2b is obtained from Tables I-1, III-2, IV-1 through IV-5, and V-1. Definitions of the entries reported in Table V-2 are listed on the following page. Table V-3 lists historical Installed Reserve Margin ("IRM") values as approved by the New York State Reliability Council ("NYSRC") for the New York Control Area and the historical minimum Locational Capacity Requirements ("LCRs") approved by the NYISO for the Zones G-J, Zone J, and Zone K localities.

The NYISO's Installed Capacity market rules allow Special Case Resources (*i.e.*, interruptible load customers and qualified Local Generators) to participate in the Installed Capacity market. Based on current projections, these customers are expected to provide 1,164.1 MW of summer capacity and 693.6 MW of winter capacity. Tables V-2a and V-2b include the summer and winter capacity projections for SCR.

The NYCA resource capability for the 2022 Summer Capability Period is 38,594.7 MW. This value is the sum of existing facilities (37,520.3 MW), SCR (1,164.1 MW), and net generation changes (-89.7 MW). With the inclusion of net Capacity purchases from external control areas of 2,465.2 MW, the total resource capability is 41,059.9 MW.

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Definitions of Labels on Load & Capacity Schedule

Existing Generating Facilities	Generating facilities that have been in operation prior to the peak demand
Additions	Generating additions expected prior to the seasonal peak demand
Re-rates	Generating re-rates expected prior to the seasonal peak demand
Noticed Deactivations	Noticed generator deactivations (retirements, mothballs, generator outages) expected prior to the seasonal peak demand
Special Case Resources (SCR)	SCR are loads capable of being interrupted upon demand and Local Generators that are not visible to the ISO's Market Information System. SCR are subject to special rules in order to participate as Capacity suppliers
NYCA Resource Capability	Summation of all existing generation, additions, re-ratings, retirements and Special Case Resources
Net Capacity Purchases	Positive values of net capacity purchases represent capacity that is imported to NYCA, after subtracting sales that are exported to other control areas
Unforced Capability Deliverability Right (UDR)	Controllable transmission project that provides a transmission interface into NYCA
Total Resource Capability	The sum of NYCA Resource Capability and Net Purchases
Peak Demand Forecast	Baseline forecast of coincident peak demand of the New York Control Area
Installed Reserve	Total Resource Capability minus Peak Demand Forecast.
Installed Reserve Percent	Installed Reserve divided by Peak Demand Forecast expressed as a percentage
Proposed Resource Changes	All proposed generator additions, re-ratings and retirements from Section IV, except those that have met Base Case inclusion rules as described in the Reliability Planning Process (RPP) manual
Adjusted Resource Capability	The Total Resource Capability plus all Proposed Resource Changes
Adjusted Installed Reserve	Adjusted Resource Capability minus Peak Demand Forecast
Adjusted Installed Reserve Percent	Adjusted Installed Reserve divided by Peak Demand Forecast expressed as a percentage
Capability Resource Interconnection Service (CRIS)	CRIS values, in MW of Installed Capacity, for the Summer/Winter Capability Period established pursuant to the applicable deliverability requirements contained in Attachments X, S, and Z to the NYISO OATT

Table V-1: Summary of Projected Net Capacity Purchases from External Control Areas

Summer Net Capacity Purchases (1,2,3)

MW

2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
2,465.2	1,776.2	1,601.8	1,484.5	1,937.9	1,937.9	1,937.9	1,937.9	1,937.9	1,937.9	1,937.9

Winter Net Capacity Purchases (1,2,3)

MW

2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/23
2,097.1	1,198.2	1,023.8	906.5	1,359.9	1,359.9	1,359.9	1,359.9	1,359.9	1,359.9	1,359.9

(1) — Positive values of Net Capacity Purchases represent capacity that is imported to NYCA, after subtracting capacity sales that are exported to other control areas.

(2) — Figures include the election of Unforced Capacity Deliverability Rights (UDRs), External CRIS Rights, Existing Transmission Capacity for Native Load (ETCNL) elections, estimated First Come First Serve Rights (FCFSR), and grandfathered exports. For more information on the use of UDRs, please see section 4.14 of the ICAP Manual.

(3) — The only forward capacity market transactions reflected in the above values are forward capacity market transactions with ISO-NE through 2026, excluding wheel transactions from HQ to ISO-NE.

Table V-2a: NYCA Load & Capacity Schedule – Summer Capability Period

	SUMMER CAPABILITY	2021 (from 2021 Gold Book)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Totals
Fossil	Steam Turbine (Oil)	761.7	811.7	811.7	811.7	811.7	811.7	811.7	811.7	811.7	811.7	811.7	811.7	
	Steam Turbine (Oil & Gas)	8,440.4	8,490.2	8,490.2	8,490.2	8,490.2	8,490.2	8,490.2	8,490.2	8,490.2	8,490.2	8,490.2	8,490.2	
	Steam Turbine (Gas)	1,533.1	1,480.4	1,480.4	1,480.4	1,480.4	1,480.4	1,480.4	1,480.4	1,480.4	1,480.4	1,480.4	1,480.4	
	Combined Cycle (Oil & Gas)	8,527.2	8,484.5	8,446.0	8,446.0	8,446.0	8,541.5	8,541.5	8,541.5	8,541.5	8,541.5	8,541.5	8,541.5	
	Combined Cycle (Gas)	2,561.0	2,516.1	2,356.2	2,356.2	2,356.2	2,356.2	2,356.2	2,356.2	2,356.2	2,356.2	2,356.2	2,356.2	
	Jet Engine (Oil)	628.7	617.4	617.4	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	
	Jet Engine (Oil & Gas)	1,334.7	1,338.8	1,338.8	902.4	902.4	902.4	902.4	902.4	902.4	902.4	902.4	902.4	
	Jet Engine (Gas)	54.3	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	
	Combustion Turbine (Oil)	929.6	840.6	786.4	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.7	
	Combustion Turbine (Oil & Gas)	982.9	966.3	966.3	947.1	1,378.1	790.6	790.6	790.6	790.6	790.6	790.6	790.6	
	Combustion Turbine (Gas)	659.3	658.1	658.1	644.5	644.5	632.4	632.4	632.4	632.4	632.4	632.4	632.4	
	Internal Combustion (Oil)	6.6	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	
	Internal Combustion (Oil & Gas)	29.4	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	
	Internal Combustion (Gas)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Pumped Storage	Pumped Storage Hydro	1,406.8	1,408.8	1,408.8	1,408.8	1,408.8	1,408.8	1,408.8	1,408.8	1,408.8	1,408.8	1,408.8	1,408.8	
Nuclear	Steam (PWR Nuclear)	1,615.9	580.2	580.2	580.2	580.2	580.2	580.2	580.2	580.2	580.2	580.2	580.2	
	Steam (BWR Nuclear)	2,762.4	2,761.0	2,761.0	2,761.0	2,761.0	2,761.0	2,761.0	2,761.0	2,761.0	2,761.0	2,761.0	2,761.0	
Renewable	Conventional Hydro (5)	4,259.3	4,273.8	4,273.8	4,273.8	4,273.8	4,273.8	4,273.8	4,273.8	4,273.8	4,273.8	4,273.8	4,273.8	
	Internal Combustion (Methane) (5)	96.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
	Steam Turbine (Wood) (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Steam Turbine (Refuse) (5)	222.5	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	
	Wind (5) (6)	1,817.6	1,817.6	1,817.6	3,101.7	3,340.1	3,340.1	3,340.1	4,156.1	4,156.1	4,156.1	4,156.1	4,156.1	
	Energy Storage	0.0	0.0	20.0	220.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	
	Solar (5) (8)	31.5	51.5	194.4	1,040.4	1,695.4	1,785.9	1,785.9	1,785.9	1,785.9	1,785.9	1,785.9	1,785.9	
	EXISTING GENERATING FACILITIES	**38,670.4**	**37,520.3**	**37,430.6**	**38,820.1**	**40,294.5**	**39,880.9**	**39,880.9**	**40,696.9**	**40,696.9**	**40,696.9**	**40,696.9**	**40,696.9**	
	Expected Changes													
Expected Changes	Additions and Re-rates (2)	225.2	162.9	2,330.1	1,474.4	186.0	0.0	816.0	0.0	0.0	0.0	0.0	0.0	4,969.4
	Noticed Deactivations (9)	-1,106.5	-252.6	-676.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-928.9
	DEC Peaker Rule Compliance (11)	0.0	0.0	-264.3	0.0	-599.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-863.9
	Subtotal of Expected Changes	-881.3	-89.7	1,389.5	1,474.4	-413.6	0.0	816.0	0.0	0.0	0.0	0.0	0.0	3,176.6
	Special Case Resources - SCR (3)	1,195.0	1,164.1	1,164.1	1,164.1	1,164.1	1,164.1	1,164.1	1,164.1	1,164.1	1,164.1	1,164.1	1,164.1	
	NYCA RESOURCE CAPABILITY	38,984.1	**38,594.7**	**39,984.2**	**41,458.6**	**41,045.0**	**41,045.0**	**41,861.0**	**41,861.0**	**41,861.0**	**41,861.0**	**41,861.0**	**41,861.0**	
Contracts	**Net Capacity Purchases (1) (7)**	2,086.5	2,465.2	1,776.2	1,601.8	1,484.5	1,937.9	1,937.9	1,937.9	1,937.9	1,937.9	1,937.9	1,937.9	
	TOTAL RESOURCE CAPABILITY	41,070.6	**41,059.9**	**41,760.4**	**43,060.4**	**42,529.5**	**42,982.9**	**43,798.9**	**43,798.9**	**43,798.9**	**43,798.9**	**43,798.9**	**43,798.9**	
	BASE FORECAST													
	Peak Demand Forecast		31,765.0	32,018.0	31,778.0	31,505.0	31,339.0	31,292.0	31,317.0	31,468.0	31,684.0	31,946.0	32,214.0	
	Installed Reserve		9,294.9	9,742.4	11,282.4	11,024.5	11,643.9	12,506.9	12,481.9	12,330.9	12,114.9	11,852.9	11,584.9	
	Installed Reserve Percent (4)		29.3	30.4	35.5	35.0	37.2	40.0	39.9	39.2	38.2	37.1	36.0	
	Proposed Resource Changes (10)		670.0	2,201.8	6,772.7	6,922.7	8,578.7	8,578.7	8,578.7	8,578.7	8,578.7	8,578.7	8,578.7	
	Adjusted Resource Capability		41,729.9	43,962.2	49,833.1	49,452.2	51,561.6	52,377.6	52,377.6	52,377.6	52,377.6	52,377.6	52,377.6	
	Adjusted Installed Reserve		9,964.9	11,944.2	18,055.1	17,947.2	20,222.6	21,085.6	21,060.6	20,909.6	20,693.6	20,431.6	20,163.6	
	Adjusted Installed Reserve Percent		31.4	37.3	56.8	57.0	64.5	67.4	67.2	66.4	65.3	64.0	62.6	

Table V-2b: NYCA Load & Capacity Schedule – Winter Capability Period

	WINTER CAPABILITY	2021/22 *(from 2021 Gold Book)*	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Totals
Fossil	Steam Turbine (Oil)	821.5	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	
	Steam Turbine (Oil & Gas)	8,488.0	8,568.6	8,568.6	8,568.6	8,568.6	8,568.6	8,568.6	8,568.6	8,568.6	8,568.6	8,568.6	8,568.6	
	Steam Turbine (Gas)	1,554.3	1,489.2	1,489.2	1,489.2	1,489.2	1,489.2	1,489.2	1,489.2	1,489.2	1,489.2	1,489.2	1,489.2	
	Combined Cycle (Oil & Gas)	9,774.3	9,791.3	9,740.3	9,740.3	9,740.3	9,835.2	9,835.2	9,835.2	9,835.2	9,835.2	9,835.2	9,835.2	
	Combined Cycle (Gas)	2,849.4	2,866.5	2,682.9	2,682.9	2,682.9	2,682.9	2,682.9	2,682.9	2,682.9	2,682.9	2,682.9	2,682.9	
	Jet Engine (Oil)	753.1	747.3	747.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	
	Jet Engine (Oil & Gas)	1,543.9	1,564.1	1,564.1	995.0	995.0	995.0	995.0	995.0	995.0	995.0	995.0	995.0	
	Jet Engine (Gas)	57.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	
	Combustion Turbine (Oil)	1,192.7	1,100.9	677.6	411.1	411.1	411.1	411.1	411.1	411.1	411.1	411.1	411.1	
	Combustion Turbine (Oil & Gas)	1,207.5	1,203.3	1,203.3	1,617.3	1,617.3	1,598.5	1,598.5	1,598.5	1,598.5	1,598.5	1,598.5	1,598.5	
	Combustion Turbine (Gas)	684.9	685.8	685.8	666.8	666.8	651.7	651.7	651.7	651.7	651.7	651.7	651.7	
	Internal Combustion (Oil)	6.0	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	
	Internal Combustion (Oil & Gas)	29.4	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	
	Internal Combustion (Gas)	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Pumped Storage	Pumped Storage Hydro	1,406.7	1,410.9	1,410.9	1,410.9	1,410.9	1,410.9	1,410.9	1,410.9	1,410.9	1,410.9	1,410.9	1,410.9	
Nuclear	Steam (PWR Nuclear)	1,620.2	581.3	581.3	581.3	581.3	581.3	581.3	581.3	581.3	581.3	581.3	581.3	
	Steam (BWR Nuclear)	2,784.5	2,777.0	2,777.0	2,777.0	2,777.0	2,777.0	2,777.0	2,777.0	2,777.0	2,777.0	2,777.0	2,777.0	
Renewable	Conventional Hydro (5)	4,213.5	4,227.8	4,227.8	4,227.8	4,227.8	4,227.8	4,227.8	4,227.8	4,227.8	4,227.8	4,227.8	4,227.8	
	Internal Combustion (Methane) (5)	96.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
	Steam Turbine (Wood) (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Steam Turbine (Refuse) (5)	229.7	230.5	230.5	230.5	230.5	230.5	230.5	230.5	230.5	230.5	230.5	230.5	
	Wind (5) (6)	1,817.6	1,817.6	2,762.6	3,340.1	3,340.1	3,340.1	4,156.1	4,156.1	4,156.1	4,156.1	4,156.1	4,156.1	
	Energy Storage	0.0	0.0	220.0	220.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	
	Solar (5) (8)	31.5	51.5	930.4	1,695.4	1,785.9	1,785.9	1,785.9	1,785.9	1,785.9	1,785.9	1,785.9	1,785.9	
	EXISTING GENERATING FACILITIES	**41,172.0**	**40,139.0**	**41,525.0**	**42,406.9**	**42,647.4**	**42,708.4**	**43,524.4**	**43,524.4**	**43,524.4**	**43,524.4**	**43,524.4**	**43,524.4**	
	Expected Changes													
Expected Changes	Additions and Re-rates (2)	351.6	2,043.9	1,780.5	240.5	94.9	816.0	0.0	0.0	0.0	0.0	0.0	0.0	**4,975.8**
	Noticed Deactivations (9)	-1,138.0	-657.9	-546.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**-1,204.7**
	DEC Peaker Rule Compliance (11)	0.0	0.0	-351.8	0.0	-33.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**-385.7**
	Subtotal of Expected Changes	-786.4	1,386.0	881.9	240.5	61.0	816.0	0.0	0.0	0.0	0.0	0.0	0.0	3,385.4
	Special Case Resources - SCR (3)	630.2	693.6	693.6	693.6	693.6	693.6	693.6	693.6	693.6	693.6	693.6	693.6	
	NYCA RESOURCE CAPABILITY	41,015.8	**42,218.6**	**43,100.5**	**43,341.0**	**43,402.0**	**44,218.0**	**44,218.0**	**44,218.0**	**44,218.0**	**44,218.0**	**44,218.0**	**44,218.0**	
Contracts	**Net Capacity Purchases (1) (7)**	1,546.4	2,097.1	1,198.2	1,023.8	906.5	1,359.9	1,359.9	1,359.9	1,359.9	1,359.9	1,359.9	1,359.9	
	TOTAL RESOURCE CAPABILITY	42,562.2	**44,315.7**	**44,298.7**	**44,364.8**	**44,308.5**	**45,577.9**	**45,577.9**	**45,577.9**	**45,577.9**	**45,577.9**	**45,577.9**	**45,577.9**	
	BASE FORECAST													
	Peak Demand Forecast		23,893.0	24,287.0	24,481.0	24,735.0	25,098.0	25,575.0	26,171.0	26,884.0	27,719.0	28,756.0	29,954.0	
	Installed Reserve		20,422.7	20,011.7	19,883.8	19,573.5	20,479.9	20,002.9	19,406.9	18,693.9	17,858.9	16,821.9	15,623.9	
	Installed Reserve Percent (4)		85.5	82.4	81.2	79.1	81.6	78.2	74.2	69.5	64.4	58.5	52.2	

Notes for Table V-2 Load & Capacity Schedule

(1)	Net Capacity Purchases - Positive values of Net Capacity Purchases represent capacity that is imported to NYCA, after subtracting capacity sales that are exported to other control areas.
(2)	Additions and Re-rates: Projects that have either completed a Class Year Interconnection Facilities Study or an Interconnection Agreement for Non Class Year Generators, as shown in Table IV-1. Additions are included for the Summer Capability Period if the in-service date is on or before June 30th of that year; and are included for the Winter Capability Period if the in-service date is on or before December 31st of that Capability Year.
(3)	Special Case Resources (SCR) are loads capable of being interrupted upon demand and Local Generators that are not visible to the ISO's Market Information System. SCRs are subject to special rules in order to participate as Capacity suppliers.
(4)	The Installed Reserve Margin requirement determined by the NYSRC for the 2022 - 2023 Capability Year is 19.6%. The Installed Reserve Percent calculated in Table V-2a should be compared to the Installed Reserve Margin requirement in the 2022 - 2023 Capability Year.
(5)	The renewable category does not necessarily match New York State policy definitions.
(6)	Existing wind generators are listed at their full nameplate rating.
(7)	Figures include the use of Unforced Capacity Deliverability Rights (UDR) as currently known. For more information on the use of UDR, please see Section 4.14 of the ICAP Manual.
(8)	Existing solar generators are listed at their full nameplate rating.
(9)	Noticed deactivations as shown in Table IV-5. Existing Retirements in Table IV-4 are accounted for in the list of 2022 Existing Generating Facilities.
(10)	Proposed Resource Changes: Projects that are members of Class Year 2021, i.e., Large Generating Facilities with Operating Committee approved System Reliability Impact Studies and Small Generating Facilities that have completed a comparable milestone and for which non-Local System Upgrade Facilities are required, as shown in Table IV-1.
(11)	Proposed generator status changes to comply with DEC Peaker Rule, as shown in Table IV-6.

Table V-3: Historical IRM and LCR Values

Capability Year (May - April)	IRM (%)	Zone J LCR (%)	Zone K LCR (%)	G-to-J LCR (%)
2000	18.0	80.0	107.0	--
2001	18.0	80.0	98.0	--
2002	18.0	80.0	93.0	--
2003	18.0	80.0	95.0	--
2004	18.0	80.0	99.0	--
2005	18.0	80.0	99.0	--
2006	18.0	80.0	99.0	--
2007	16.5	80.0	99.0	--
2008	15.0	80.0	94.0	--
2009	16.5	80.0	97.5	--
2010	18.0	80.0	104.5	--
2011	15.5	81.0	101.5	--
2012	16.0	83.0	99.0	--
2013	17.0	86.0	105.0	--
2014	17.0	85.0	107.0	88.0
2015	17.0	83.5	103.5	90.5
2016	17.5	80.5	102.5	90.0
2017	18.0	81.5	103.5	91.5
2018	18.2	80.5	103.5	94.5
2019	17.0	82.8	104.1	92.3
2020	18.9	86.6	103.4	90.0
2021	20.7	80.3	102.9	87.6
2022	19.6	81.2	99.5	89.2

Note: Historical Installed Reserve Margin ("IRM") percentage values as approved by the New York State Reliability Council ("NYSRC") and historical minimum Locational Capacity Requirement ("LCR") values as approved by the NYISO.

This information comes in part from the NYSRC website.

Note: The Capability Year runs from the May of the listed year to the April of the following year.
For example, the 19.6% IRM for 2022 is effective for the 2022 Capability Year (May 2022 through April 2023).

Note: G-to-J LCR percentage values begin in the 2014 Capability Year following the creation of the G-to-J Locality.

Section VI

Existing Transmission Facilities

New York ISO

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Section VI

This section contains the updated list of existing transmission facilities as provided by each Transmission Owner operating in the NYCA (as of March 15, 2022). The information in Table VI-1 is redacted as it may contain Critical Energy Infrastructure Information.

A version of the 2022 *Gold Book* that includes this table is available to individuals with a *myNYISO* account. To access a version of the 2022 *Gold Book* that includes Table VI-1, log in to *myNYISO* and visit the *Load & Capacity Data Report (Gold Book) – Secure* folder on the following webpage:

https://www.nyiso.com/cspp

To register for a *myNYISO* account visit:

https://www.nyiso.com/login?p_p_id=com_liferay_login_web_portlet_LoginPortlet&p_p_lifecycle=0&_com_liferay_login_web_portlet_LoginPortlet_redirect=%2F

Table VI-2: Mileage of Existing Transmission Facilities

Facilities by kV Class Overhead (OH) Underground (UG)	115 kV OH	 UG	138 kV OH	 UG	230 kV OH	 UG	345 kV OH	 UG	500 kV OH	765 kV OH	150 kV DC UG	500 kV DC UG	Total	
CENTRAL HUDSON GAS & ELECTRIC CORPORATION	230.5	4.1	0.0	0.0	0.0	0.0	76.1	0.0	0.0	0.0			310.7	
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC	0.0	0.0	21.7	214.5 (a)	0.4	0.0	421.8 (b) (i)	185.2 (h)	5.3	0.0			848.9	(b)
LONG ISLAND POWER AUTHORITY	0.0	0.0	255.8	184.8 (e)	0.0	0.0	0.0	9.3 (g)	0.0	0.0	24.0	66.0 (g)	540.0	
NEW YORK POWER AUTHORITY	54.0 (f)	1.8	0.0	0.0	336.8	0.0	884.7	42.8	0.0	155.2			1,475.3	
NEW YORK STATE ELECTRIC & GAS CORPORATION	1,489.5	7.5	0.0	0.0	241.1	0.0	550.5	0.0	0.0	0.0			2,288.6	
NATIONAL GRID WESTERN, CENTRAL & EASTERN	4,037.4	22.9	0.0	0.0	426.4	20.2	604.3	0.4	0.0	0.0			5,111.5	
ORANGE AND ROCKLAND UTILITIES INC.	0.0	0.0	86.0	6.9 (a)	0.0	0.0	64.0 (b)	3.4 (d)	0.0	0.0			160.3	
ROCHESTER GAS AND ELECTRIC CORPORATION	283.5	37.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			320.5	
NEW YORK TRANSCO, LLC	17.1						33.8						50.9	
LS POWER GRID NEW YORK CORPORATION I					10.0		5.3						15.3	
TOTALS BY kV CLASS (c)	**6,112.0**	**73.4**	**363.6**	**406.3**	**1,014.7**	**20.2**	**2,593.1**	**241.1**	**5.3**	**155.2**	**24.0**	**66.0**	**11,074.8**	(c)

TOTAL OVERHEAD	=	10,243.9	(c)
TOTAL UNDERGROUND	=	830.9	(c)
TOTAL	=	11,074.8	(c)

Notes:

(a) 1.4 circuit miles are owned by GenOn
(b) 47.2 circuit miles are jointly owned by Con Ed and Orange & Rockland
(c) These totals reflect the appropriate adjustments for jointly owned facilities (footnote b)
(d) 3.4 circuit miles are owned by GenOn as indicated in the list of existing transmission facilities
(e) Includes 5.6 miles of three parallel cables from LIPA's Northport to the NY/CT State Border (middle of Long Island Sound). Additional 3.9 miles energized in 1983 is part of an existing cable circuit between Newbridge and Bagatelle.
(f) 18.54 circuit miles are owned by Alcoa
(g) A total of 67.7 circuit miles are owned by NRTS-Neptune Regional Transmission as indicated in the list of existing transmission facilities
(h) 1.5 circuit miles are owned by East Coast Power, LLC as indicated in the list of existing transmission facilities
(i) 0.5 miles (345 kV) are owned by Entergy as indicated in the list of existing transmission facilities

Section VII

Proposed Transmission Facilities

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Section VII

This section contains the list of firm and non-firm proposed transmission projects and merchant transmission projects (as of March 15, 2022). Projects that were placed in-service since the publication of the 2021 *Gold Book* are maintained on the list of proposed transmission projects for one year.

Table VII: Proposed Transmission Facilities

[Project Queue Position] / Project Notes	Transmission Owner	Terminals		Line Length in Miles (1)	Expected In-Service Date/Yr Prior to (2)	Year	Nominal Voltage in kV Operating	Design	# of ckts	Thermal Ratings (4) Summer	Winter	Project Description / Conductor Size	Class Year / Type of Construction
Class Year Transmission Projects (18)													
[506]	Empire State Connector Corp.	Marcy 345kV	Gowanus 345kV	320	S	2023	320	320	1	1000 MW	1000 MW	-/+ 320kV Bipolar HVDC cable	TBD
[631],15	CHPE LLC	Hertel 735kV (Quebec)	Astoria Annex 345kV	363	W	2025	400	400	1	1000 MW	1000 MW	-/+ 320kV Bipolar HVDC cable	TBD
[887],15	CHPE LLC	Hertel 735kV (Quebec)	Astoria Annex 345kV	363	W	2025	400	400	1	250 MW	250 MW	-/+ 320kV Bipolar HVDC cable	TBD
TIP Projects (19) (Included in FERC 715 Base Case)													
[430]	National Grid	Dennison	Alcoa	3	In service	2021	115	115	1	1513	1851	954 ACSR. Alcoa-Dennison Line #12.	OH
545A	NextEra Energy Transmission NY	Dysinger (New Station)	East Stolle (New Stat on)	20	S	2022	345	345	1	1356 MVA	1612 MVA	Western NY - Empire State Line Project	OH
545A	NextEra Energy Transmission NY	Dysinger (New Station)	Dysinger (New Station)	PAR	S	2022	345	345	1	700 MVA	700 MVA	Western NY - Empire State Line Project	
556	LSP/NGRID	Porter	Rotterdam	-71.8	S	2022	230	230	1	1066	1284	AC Transmission Project Segment A/1-795 ACSR/1-1431 ACSR/2-954 ACSS	
556	LSP/NGRID	Porter	Rotterdam	-72.1	S	2022	230	230	1	1066	1284	AC Transmission Project Segment A/1-795 ACSR/1-1431 ACSR/2-954 ACSS	
556	LSP/NGRID	Ed c	New Scotland	-83.5	S	2022	345	345	1	2190	2718	AC Transm ssion Project Segment A/2-795 ACSR	
556	NGRID	Rotterdam	New Scotland	-18.1	S	2022	115	230	1	1212	1284	AC Transm ssion Project Segment A/1-1033.5 ACSR/1-1192.5 ACSR	
556	LSP/NGRID	Ed c	Gordon Rd (New Stat on)	68.7	S	2022	345	345	1	3410	3709	AC Transmission Project Segment A/2-795 ACSR/2-954 ACSS	
556	LSP/NGRID	Gordon Rd (New Station)	New Scotland	24.9	S	2022	345	345	1	2190	2718	AC Transmission Project Segment A/2-795 ACSR/2-954 ACSS	
556	LSP	Gordon Rd (New Station)	Rotterdam	transformer	S	2022	345/230	345/230	2	478 MVA	478 MVA	AC Transmission Project Segment A	
556	LSP/NGRID	Gordon Rd (New Station)	New Scotland	-24.9	S	2023	345	345	1	2190	2718	AC Transmission Project Segment A/2-795 ACSR/2-954 ACSS	
556	LSP	Gordon Rd (New Station)	Princetown (New Station)	5.3	S	2023	345	345	1	3410	3709	AC Transm ssion Project Segment A/2-954 ACSS	
556	LSP	Princetown (New Stat on)	New Scotland	20.1	S	2023	345	345	2	3410	3709	AC Transm ssion Project Segment A/2-954 ACSS	
556	LSP/NGRID	Princetown (New Stat on)	New Scotland	19.8	S	2023	345	345	1	2190	2718	AC Transm ssion Project Segment A/2-795 ACSR	
556	LSP/NYPA/NGRID	Ed c	Princetown (New Station)	67.0	W	2023	345	345	2	3410	3709	AC Transm ssion Project Segment A/2-954 ACSS	
556	NYPA	Ed c	Marcy	1.4	W	2023	345	345	1	3150	3750	AC Transmission Project Segment A; Terminal Equipment Upgrades to exist ng line	
556	NGRID	Rotterdam	Rotterdam	remove substation	S	2029	230	230	N/A	N/A	N/A	Rotterdam 230kV Substation Retirement	
556	NGRID	Rotterdam	Eastover Rd	-23.8	S	2029	230	230	1	1114	1284	Rotterdam 230kV Substation Ret rement, reconnect existing line	
556	LSP	Gordon Rd (New Station)	Rotterdam	remove transformer	S	2029	345/230	345/230	2	478 MVA	478 MVA	Rotterdam 230kV Substation Retirement	
556	NGRID	Gordon Rd (New Station)	Eastover Rd	23.8	S	2029	230	230	1	1114	1284	Rotterdam 230kV Substation Ret rement; reconnect existing line	
556	LSP	Gordon Rd (New Station)	Gordon Rd (New Stat on)	transformer	S	2029	345/230	345/230	1	478 MVA	478 MVA	Rotterdam 230kV Substation Retirement, reconnect transformer to existing line	
556	LSP	Gordon Rd (New Station)	Rotterdam	transformer	S	2029	345/115	345/115	2	650 MVA	650 MVA	Rotterdam 230kV Substation Retirement	
543	NGRID	Greenbush	Hudson	-26.4	W	2023	115	115	1	648	800	AC Transmission Project Segment B	
543	NGRID	Hudson	Pleasant Valley	-39.2	W	2023	115	115	1	648	800	AC Transmission Project Segment B	
543	NGRID	Schodack	Churchtown	-26.7	W	2023	115	115	1	937	1141	AC Transmission Project Segment B	
543	NGRID	Churchtown	Pleasant Valley	-32.2	W	2023	115	115	1	806	978	AC Transmission Project Segment B	
543	NGRID	Milan	Pleasant Valley	-16.8	W	2023	115	115	1	806	978	AC Transmission Project Segment B	
543	NGRID	Lafarge	Pleasant Valley	-60.4	W	2023	115	115	1	584	708	AC Transmission Project Segment B	
543	NGRID	North Catskill	Milan	-23.9	W	2023	115	115	1	937	1141	AC Transmission Project Segment B	
543	O&R	Shoemaker, M ddle	Sugarloaf, Chester	-12.0	W	2023	138	138	1	1098	1312	AC Transmission Project Segment B	
543	NGRID	New Scotland	Alps	-30.6	W	2023	345	765	1	2015	2140	AC Transmission Project Segment B	
543	New York Transco	Hudson	Churchtown	7.4	W	2023	115	115	1	648	798	AC Transmission Project Segment B	
543	New York Transco	Churchtown	Pleasant Valley	32.2	W	2023	115	115	1	623	733	AC Transmission Project Segment B	
543	NGRID	Lafarge	Churchtown	28.2	W	2023	115	115	1	582	708	AC Transmission Project Segment B	
543	NGRID	North Catskill	Churchtown	8.4	W	2023	115	115	1	648	848	AC Transmission Project Segment B	
543	New York Transco	Kn ckerbocker (New Stat on)	Pleasant Valley	55.1	W	2023	345	345	1	3836	4097	AC Transmission Project Segment B	
543	New York Transco	Kn ckerbocker (New Stat on)	Knickerbocker (New Station)	series capacitor	W	2023	345	345	1	3836	4097	AC Transmission Project Segment B	
543	NGRID	Kn ckerbocker (New Stat on)	New Scotland	12.4	W	2023	345	345	1	2381	3099	AC Transmission Project Segment B	
543	NGRID	Kn ckerbocker (New Stat on)	Alps	18.1	W	2023	345	345	1	2552	3134	AC Transmission Project Segment B	
543	New York Transco	Rock Tavern	Sugarloaf	12.0	W	2023	115	115	1	1647	2018	AC Transmiss on Project Segment B; 1-1590 ACSR	OH
543	New York Transco	Sugarloaf	Sugarloaf	Transformer	W	2023	138/115	138/115	---	1652	1652	AC Transmission Project Segment B	
543	New York Transco	Van Wagner (New Station)	---	Cap Bank	W	2023	345	345	---	N/A	N/A	AC Transmission Project Segment B	
543	NGRID	Athens	Pleasant Valley	-39.39	W	2023	345	345	1	2228	2718	Loop Line into new Van Wagner Substation/2-795 ACSR	OH
543	NGRID	Leeds	Pleasant Valley	-39.34	W	2023	345	345	1	2228	2718	Loop Line into new Van Wagner Substation/2-795 ACSR	OH
543	NGRID	Athens	Van Wagner (New Stat on)	38.65	W	2023	345	345	1	2228	2718	Loop Line into new Van Wagner Substation/2-795 ACSR	OH
543	NGRID	Leeds	Van Wagner (New Stat on)	38.63	W	2023	345	345	1	2228	2718	Loop Line into new Van Wagner Substation/2-795 ACSR	OH

Table VII: Proposed Transmission Facilities (Cont.)

[Project Queue Position] / Project Notes	Transmission Owner	Terminals		Line Length in Miles (1)	Expected In-Service Date/Yr Prior to (2)	Year	Nominal Voltage in kV		# of ckts	Thermal Ratings (4)		Project Description / Conductor Size	Class Year / Type of Construction
							Operating	Design		Summer	Winter		
543	New York Transco	Van Wagner (New Station)	Pleasant Valley	0.71	W	2023	345	345	1	3861	4087	Loop Line into new Van Wagner Substation/Reconductor w/2-795 ACSS	OH
543	New York Transco	Van Wagner (New Station)	Pleasant Valley	0.71	W	2023	345	345	1	3861	4087	Loop Line into new Van Wagner Substation/Reconductor w/2-795 ACSS	OH
543	New York Transco	Dover (New Station)	Dover (New Station)	Phase Shifter	W	2023	345	345	--	2510	2510	Loop Line 398 into new substation and install 2 x 750 MVAr PARs	--
543	ConEd	Cricket Va ley	CT State Line	-3.46	W	2023	345	345	1	2220	2700	Loop Line into new Dover Substation/2-795 ACSS	OH
543	ConEd	Cricket Va ley	Dover (New Station)	0.30	W	2023	345	345	1	2220	2700	Loop Line into new Dover Substation/2-795 ACSS	OH
543	ConEd	Dover (New Station)	CT State Line	3.13	W	2023	345	345	1	2220	2700	Loop Line into new Dover Substation/2-795 ACSS	OH
1125	NYPA	Edic	Marcy	1.4	W	2025	345	345	1	4030	4880	SPCP Terminal Equipment Upgrades to existing line	
1125	NYPA	Moses	Haverstock	2	W	2025	230	230	3	1089	1330	SPCP: Existing Moses - Adirondack (MA1), Moses - Adirondack (MA2), and Moses - W llis (MW2) 230 kV Lines to Haverstock Substation. 1 – 795 kcmil ACSR 26/7 "Drake"	
1125	NYPA	Moses	Moses	SUB	W	2025	230	230	N/A	N/A	N/A	SPCP: Terminal Upgrades at Moses 230 kV Substation and Transformer T3 and MW-2 breaker positions interchanged	
1125	NYPA	Haverstock 230 kV	Haverstock 345 kV	xfmr	W	2025	230/345	230/345	3	753	753	SPCP: Haverstock 230/345 kV xfmr-1, xfmr-2 and xfmr-3. Given Amp Ratings are for High Voltage side of xfmr.	
1125	NYPA	Haverstock	Haverstock	SUB	W	2025	345	345	N/A	N/A	N/A	SPCP: Haverstock 345 kV Substation. New Shunt Capac tor Banks.	
1125	NYPA	Haverstock	Adirondack	83.7	W	2025	345	345	2	2177	2663	SPCP: Existing Moses - Adirondack (MA1), Moses - Adirondack (MA2) 230kV lines to Haverstock Substation.Creating new Haverstock to Adirondack (HA1) and Haverstock to Adirondack (HA2) 345kV lines. 2 – 795 kcmil ACSR 26/7 "Drake"	
1125	NYPA	Adirondack 115 kV	Adirondack 345 kV	xfmr	W	2025	115/345	115/345	1	192	221	SPCP: Adirondack 115/345 kV xfmr. Given Amp Ratings are for High Vo tage side of xfmr.	
1125	NYPA	Adirondack	Adirondack	SUB	W	2025	345	345	N/A	N/A	N/A	SPCP: Adirondack 345 kV Substation. New Shunt Capac tor Banks. New Shunt Reactor Banks.	
1125	NYPA	Haverstock	Willis	34.99	W	2025	345	345	2	3119	3660	SPCP: Existing Moses - Willis (MW1) and Moses - Wi lis (MW2) 230 kV Lines diverted to to Haverstock Substation. Creating Haverstock - Wi lis (HW1) and Haverstock - Willis (HW1) 345 kV Lines. 2 – 795 kcmil ACSS 26/7 "Drake"	
1125	NYPA	Wil is 345 kV	Willis 230 kV	xfmr	W	2025	345/230	345/230	2	2259	2259	SPCP: W llis 345/230 kV xfmr-1 and xfmr-2. Given Amp Ratings are for High Voltage side.	
1125	NYPA	Willis	Willis	SUB	W	2025	230	230	N/A	N/A	N/A	SPCP: New Willis 345 kV Substation. New Shunt Capacitor Bank.	
1125	NYPA	Willis	Patnode	8.65	W	2025	230	230	2	2078	2440	SPCP: Two Wi lis - Patnode 230 kV Lines. 1 – 1272 kcmil ACSS 45/7 "Bittern"	
1125	NYPA	Willis	Ryan	6.59	W	2025	230	230	2	2078	2440	SPCP: Two Wil is - Ryan 230 kV Lines. 1 – 1272 kcmil ACSS 45/7 "Bittern"	
1125	NYPA	Ryan	Ryan	SUB	W	2025	230	230	N/A	N/A	N/A	SPCP: Terminal Upgrades at Ryan 230 kV Substation.	
1125	NYPA	Patnode	Patnode	SUB	W	2025	230	230	N/A	N/A	N/A	SPCP: Terminal Upgrades at Patnode 230 kV Substation.	
1125	NYPA	Wi lis (Existing)	Wi lis (New)	0.4	W	2025	230	230	2	2078	2440	SPCP: Two Willis (existing) - Willis (New) 230 kV Lines. 1 – 1272 kcmil ACSS 45/7 "Bittern"	
1125	NYPA/NGRID	Adirondack	Austin Road	11.6	W	2025	345	345	1	3119	3660	SPCP: Adirondack - Austin Road Circu t-1 345 kV Line. 2 – 795 kcmil ACSS 26/7 "Drake"	
1125	NYPA/NGRID	Adirondack	Marcy	52.6	W	2025	345	345	1	3119	3660	SPCP: Adirondack - Marcy Circuit-1 345 kV Line. 2 – 795 kcmil ACSS 26/7 "Drake"	
1125	NGRID	Austin Road	Edic	42.5	W	2025	345	345	1	3119	3660	SPCP: Austin Road -Edic Circuit-1 345 kV Line. 2 – 795 kcmil ACSS 26/7 "Drake"	
1125	NGRID	Rector Road	Austin Road	1	W	2025	230	230	1	1089	1330	SPCP: Rector Road - Austin Road Circuit-1 230 kV Line. 1 – 795 kcmil ACSR 26/7 "Drake"	
1125	NGRID	Austin Road 230 kV	Austin Road 345 kV	Transformer	W	2025	230/345	230/345	1	753	753	SPCP: Austin Road 230/345 kV xfmr. Given Amp Ratings are for High Voltage side of xfmr.	
1125	NGRID	Austin Road	Austin Road	Substation	W	2025	345	345	N/A	N/A	N/A	SPCP: Austin Road 345 kV Substation.	
1125	NGRID	Edic	Edic	Substation	W	2025	345	345	N/A	N/A	N/A	SPCP: Terminal Upgrades at Edic 345 kV Substation. New Shunt Capacitor Bank.	
1125	NGRID	Edic 345kV	Edic 230kV	Transformer	W	2025	345/230	345/230	1	N/A	N/A	SCSP: Remove Existing Transformer #2 345/230kV	
1125	NYPA	Marcy	Marcy	SUB	W	2025	345	345	N/A	N/A	N/A	SPCP: Terminal Upgrades at Marcy 345 kV Substation.	
1125	NGRID	Chases Lake	Chases Lake	Substation	W	2025	230	230	N/A	N/A	N/A	SPCP: Retire 230kV Substation.	
1125	NYPA	Moses	Massena	Series Reactor	W	2025	230	230	2	3840	4560	SPCP: Install Series Reactors on Moses -Massena 230 kV Lines	
1125	NYPA	Moses	Adirondack	-85.7	W	2025	230	230	2	N/A	N/A	SPCP: Retire Existing Moses - Adirondack MA1 and MA2 230 kV Lines	
1125	NYPA	Moses	Willis	-36.99	W	2025	230	230	2	N/A	N/A	SPCP: Retire Existing Moses - Willis MW1 and MW2 230 kV Line	
1125	NGRID	Adirondack	Porter	-54.41	W	2025	230	230	1	N/A	N/A	SPCP: Retire Existing Adirondack - Porter 230 kV Line	
1125	NGRID	Adirondack	Chases Lake	-11.05	W	2025	230	230	1	N/A	N/A	SPCP: Retire Existing Adirondack - Chases Lake 230 kV Line	
1125	NGRID	Chases Lake	Porter	-43.46	W	2025	230	230	1	N/A	N/A	SPCP: Retire Existing Chases Lake - Porter 230 kV Line	
1125	NYPA	Willis	Patnode	-8.65	W	2025	230	230	1	N/A	N/A	SPCP: Retire Existing Wi lis - Patnode WPN1 230 kV Line.	
1125	NYPA	Willis	Ryan	-6.59	W	2025	230	230	1	N/A	N/A	SPCP: Retire Existing Wi lis - Ryan WRY2 230 kV Line.	
1125	NGRID	Edic	Porter	-0.39	W	2025	230	230	1	N/A	N/A	SPCP: Retire Existing Edic-Porter #17 230kV Line	
1125	NGRID	Porter	Porter	Transformers	W	2025	230/115	230/115	2	N/A	N/A	SCSP: Remove Existing Transformers #1&2 230kV/115kV	
1125	NGRID	Porter	Porter	Substation	W	2025	230	230	N/A	N/A	N/A	SPCP: Retire Porter 230kV substation	

Table VII: Proposed Transmission Facilities (Cont.)

[Project Queue Position] / Project Notes	Transmission Owner	Terminals		Line Length in Miles (1)	Expected In-Service Date/Yr Prior to (2)	Year	Nominal Voltage in kV Operating	Design	# of ckts	Thermal Ratings (4) Summer	Winter	Project Description / Conductor Size	Class Year / Type of Construction
		Firm Plans (5) (Included in FERC 715 Base Case)											
3	CHGE	North Catskill	North Catskill	xfmr	In-Serv ce	2021	115/69	115/69	1	560	726	Replace Transformer 5	-
14	CHGE	Hurley Avenue	Leeds	Static synchronous series compensator	W	2022	345	345	1	2336	2866	21% Compensation	-
	CHGE	Rock Tavern	Sugarloaf	12.10	W	2023	115	115	1	N/A	N/A	Retire SL Line	OH
	CHGE	Kerhonkson	Kerhonkson	xfmr	W	2023	115/69	115/69	1	564	728	Add Transformer 3	-
	CHGE	Kerhonkson	Kerhonkson	xfmr	W	2023	115/69	115/69	1	564	728	Add Transformer 4	-
	CHGE	Sugarloaf	NY/NJ State Line	10.30	W	2024	115	115	2	N/A	N/A	Retire SD/SJ Lines	OH
11	CHGE	St. Pool	H gh Falls	5.69	W	2024	115	115	1	1010	1245	1-795 ACSR	OH
11	CHGE	High Falls	Kerhonkson	10.03	W	2024	115	115	1	1010	1245	1-795 ACSR	OH
11	CHGE	Modena	Galeville	4.62	W	2024	115	115	1	1010	1245	1-795 ACSR	OH
11	CHGE	Galev lle	Kerhonkson	8.96	W	2024	115	115	1	1010	1245	1-795 ACSR	OH
11	CHGE	Hurley Ave	Saugert es	11.50	W	2025	69	115	1	1114	1359	1-795 ACSR	OH
11	CHGE	Saugerties	North Catskill	12.46	W	2024	69	115	1	1114	1359	1-795 ACSR	OH
6	CHGE	Knapps Corners	Spackenki l	2.36	W	2024	115	115	1	1280	1563	1-1033 ACSR	OH
	ConEd	Hudson Ave East	New Vinegar H ll Distribution Sw tching Station	xfmrs/PARs/Feeders	S	2022	138/27	138/27		N/A	N/A	New V negar Hill Distribution Switching Station	UG
	ConEd	Rainey	Rainey	xfmr	S	2023	345	345		N/A	N/A	Replacing xfmr 3W	-
	ConEd	Rainey	Corona	xfmr/PAR/Feeder	S	2023	345/138	345/138		N/A	N/A	New second PAR regulated feeder	UG
	ConEd	Gowanus	Greenwood	xfmr/PAR/Feeder	S	2025	345/138	345/138		N/A	N/A	New PAR regulated feeder	UG
	ConEd	Goethals	Fox Hills	xfmr/PAR/Feeder	S	2025	345/138	345/138		N/A	N/A	New PAR regulated feeder	UG
	ConEd	Buchanan North	Buchanan North	Reconfiguration	S	2025	345	345		N/A	N/A	Reconfiguration (bus work related to decommissioning of Indian Point 2)	-
	ConEd	Mott Haven	Parkview	-	S	2026	345/138/13	345/138/13		N/A	N/A	Spare 345/138 kV xfmr at Mott Haven and a spare 138/13.8 kV xfmr at Parkview	UG
6/7/3	LIPA	Amagansett	Montauk	-13.00	In-Serv ce	2021	23	23	1	577	657	750 kcmil CU	UG
6/7/3	LIPA	Amagansett	Navy Road	12.74	In-Serv ce	2021	23	23	1	577	657	750 kcm l CU	UG
6/7/3	LIPA	Navy Road	Montauk	0.26	In-Serv ce	2021	23	23	1	577	657	750 kcm l CU	UG
9/3	LIPA	Riverhead	Wildwood	10.63	In-Serv ce	2021	138	138	1	1355	1436	1192ACSR	
13/3	LIPA	Riverhead	Canal	15.89	In-Serv ce	2021	138	138	1	945	945	2368 KCMIL (1200 mm²) Copper XLPE	
3	LIPA	Barrett	Barrett	-	In-Serv ce	2021	34.5	34.5	1	N/A	N/A	Barrett 34.5kV Bus Tie Reconfiguration	-
	LIPA	Round Swamp	Round Swamp	-	S	2022	69	69		N/A	N/A	New Round Swamp Road substation	
	LIPA	Round Swamp	Plainview	1.93	S	2022	69	69	1	1217	1217	2500kcm l XLPE	UG
	LIPA	Round Swamp	Ruland Rd	3.81	S	2022	69	69	1	1217	1217	2500kcm l XLPE	UG
3	NGRID	Oswego	Oswego	-	In-Serv ce	2020	115	115		N/A	N/A	Rebuild of Oswego 115kV Station	
6/3	NGRID	Clay	Dewitt	10.24	In-Serv ce	2021	115	115	1	220MVA	268MVA	Reconductor 4/0 CU to 795ACSR	OH
6/3	NGRID	Clay	Tea l	12.75	In-Serv ce	2021	115	115	1	220 MVA	268MVA	Reconductor 4/0 CU to 795ACSR	OH
3	NGRID	Gardenville 230kV	Gardenvi le 115kV	xfmr	In-Serv ce	2021	230/115	230/115	-	347 MVA	422 MVA	Replacement of 230/115kV TB#3 stepdown w th larger un t	
3	NGRID	Huntley 115kV	Huntley 115kV	-	In-Serv ce	2021	115	115	-	N/A	N/A	Rebuild of Huntley 115kV Station	
3	NGRID	Mortimer	Mortimer	xfmr	In-Serv ce	2021	115	115		50MVA	50MVA	Replace Mortimer 115/69kV Transformer	
3	NGRID	Royal Ave	Royal Ave	-	In-Serv ce	2021	115/13.2	115/13.2	-	-	-	Install new 115-13.2 kV distribution substation in Niagara Fa ls (Royal Ave)	-
3	NGRID	Niagara	Packard	3.4	In-Serv ce	2021	115	115	1	344MVA	449MVA	Replace 3.4 miles of 192 line	OH
	NGRID	Volney	Clay	-	S	2022	115	115	1	1200 MVA	1474 MVA	Replace Term nal Equipment L ne #6	OH
	NGRID	Mountain	Lockport	0.08	S	2022	115	115	2	174MVA	199MVA	Mountain-Lockport 103/104 Bypass	OH
	NGRID	South Oswego	Indeck (#6)	-	S	2022	115	115	1	-	-	Install High Speed Clearing on Line #6	
	NGRID	Porter	Porter	-	S	2022	230	230		N/A	N/A	Porter 230kV upgrades	
	NGRID	Watertown	Watertown		S	2022	115	115		N/A	N/A	New D stribution Station at Watertown	
	NGRID	Golah	Golah	xfmr	S	2022	69	69		50MVA	50MVA	Replace Golah 69/34.5kV Transformer	
	NGRID	Niagara	Packard	3.7	S	2022	115	115	1	344MVA	449MVA	Replace 3.7 miles of 191 line	OH
	NGRID	Wolf Rd	Menands	1.34	S	2022	115	115	1	182 MVA	222 MVA	Reconductor 1.34 miles betw Wolf Rd- Everett tap (per EHI)	OH
	NGRID	Volney	Clay	-	S	2022	115	115	1	1200 MVA	1474 MVA	Replace Term nal Equipment L ne #6	OH

Table VII: Proposed Transmission Facilities (Cont.)

[Project Queue Position] / Project Notes	Transmission Owner	Terminals		Line Length in Miles (1)	Expected In-Service Date/Yr Prior to (2)	Year	Nominal Voltage in kV Operating	Design	# of ckts	Thermal Ratings (4) Summer	Winter	Project Description / Conductor Size	Class Year / Type of Construction
	NGRID	Dunkirk	Dunk rk	-	S	2022	115	115	-	-	-	Rebuild Dunkirk Station/ Asset Separation.	
	NGRID	Lockport	Mortimer	56.5	W	2022	115	115	3	-	-	Replace Cables Lockport-Mortimer #111, 113, 114	
6	NGRID	Niagara	Packard	3.7	W	2022	115	115	2	344MVA	449MVA	Replace 3.7 miles of 193 and 194 lines	OH
	NGRID	Gardenville	Big Tree	6.3	W	2022	115	115	1	221MVA	221MVA	Gardenvi le-Arcade #151 Loop-in-and-out of NYSEG B g Tree	OH
	NGRID	Big Tree	Arcade	28.6	W	2022	115	115	1	129MVA	156MVA	Gardenvi le-Arcade #151 Loop-in-and-out of NYSEG B g Tree	OH
	NGRID	Seneca	Seneca	xfmr	W	2022	115/22	115/22		40MVA	40MVA	Seneca #5 xfmr asset replacement	
	NGRID	Batavia	Batavia		W	2022	115	115				Batavia replace five OCB s	
	NGRID	Kensington Term nal	Kensington Terminal	-	W	2022	115/23	115/23	-	50MVA	50MVA	Replace TR4 and TR5	
	NGRID	Taylorvi le	Boonville	-	W	2022	115	115	1	584	708	Replace Station connections	
	NGRID	Taylorvi le	Boonville	-	W	2022	115	115	1	584	708	Replace Station connections	
	NGRID	Taylorvi le	Browns Fa ls	-	W	2022	115	115	1	569	708	Replace Station connections	
	NGRID	Taylorvi le	Browns Fa ls	-	W	2022	115	115	1	584	702	Replace Station connections	
	NGRID	Batavia	Batavia		W	2022	115	115				Batavia replace five OCB s.	
	NGRID	Albany Steam	Albany Steam	-	W	2022	115	115				Replace NG s 115kV Breakers.	
	NGRID	Mountain	Lockport		S	2023	115	115	2	847	1000	Re nsulating Mounta n-Lockport 103/104	
	NGRID	Maplewood	Menands	3	S	2023	115	115	1	220 MVA	239 MVA	Reconductor approx 3 miles of 115kV Maplewood – Menands #19	
	NGRID	Maplewood	Reynolds	3	S	2023	115	115	1	217 MVA	265 MVA	Reconductor approx 3 miles of 115kV Maplewood – Reynolds Road #31	
	NGRID	Elm St	Elm St	-	S	2023	230/23	230/23	-	118MVA	133MVA	Replace TR2 as failure	
	NGRID	R dge	Ridge		S	2023				N/A	N/A	Ridge substation 34.5kV rebu ld	
	NGRID	Colton	Browns Fa ls	-	S	2023	115	115	1	629	764	Flat Rock station (mid-l ne) upgrades	
	NGRID	Mountain	Lockport		S	2023	115	115	2	847	1000	Reinsulating Mountain-Lockport 103/104. .	
	NGRID	Clay	Woodard		W	2023	115	115	1			Add 10.5mH reactor on line #17.	OH
	NGRID/NYSEG	Mortimer	Station 56		W	2023	115	115	1	649	788	Mortimer-Pannell #24 Loop in-and-out of NYSEG s Station 56	
	NGRID	Clay	Woodard		W	2023	115	115	1			Add 10.5mH reactor on line #17.	OH
	NGRID	Cortland	Clarks Corners	0.2	S	2024	115	115	1	147MVA	170MVA	Replace 0.2 miles of 1(716) I ne and series equipment	OH
	NGRID	Homer Hill	Homer Hi l	-	S	2024	115	115	-	116MVA	141MVA	Homer H ll Replace five OCB	
	NGRID	Packard	Huntley	9.1	W	2024	115	115	1	262MVA	275MVA	Walck-Huntley #133, Packard-Huntley #130 Reconductor	OH
	NGRID	Walck	Huntley	9.1	W	2024	115	115	1	262MVA	275MVA	Walck-Huntley #133, Packard-Huntley #130 Reconductor	OH
	NGRID	Station 56	Pannell		W	2024	115	115	1	649	788	Mortimer-Pannell #24 Loop in-and-out of NYSEG s Station 56	
	NGRID	Clay	Wetzel	3.7	W	2024	115	115	1	220 MVA	220 MVA	Add a breaker at Clay and build approximately 2000 feet of 115kV to create radial line	
	NGRID	Golah	Golah		S	2025				N/A	N/A	Golah substation rebuild	
	NGRID	Malone	Malone	-	S	2025	115	115	-	753	753	Install PAR on Malone - W llis line 1-910	
	NGRID	Oswego	Oswego	-	S	2026	345	345		N/A	N/A	Rebuild of Oswego 345kV Station (asset separation).	
6	NGRID	Gardenville	Dunk rk	20.5	S	2026	115	115	2	1105	1346	Replace 20.5 miles of 141 and 142 l nes	OH
	NGRID	Niagara	Gardenville	26.3	S	2026	115	115	1	275MVA	350MVA	Packard-Erie / Niagara-Garenv lle Reconfigurat on	OH
	NGRID	Packard	Gardenville	28.2	S	2026	115	115	2	168MVA	211 MVA	Packard-Gardenv lle Reactors, Packard-Erie / Niagara-Garenv lle Reconfigurat on	OH
	NGRID/NYSEG	Er e St	Gardenville	5.5	S	2026	115	115	1	139MVA	179MVA	Packard-Erie / Niagara-Garenv lle Reconf gurat on, Gardenvi le add breakers	OH
	NGRID	Lockport	Batavia	20	S	2026	115	115	1	646	784	Rebuild 20 miles of Lockport-Batavia 112	
	NGRID	Packard	Packard		S	2026	115	115				Packard replace three OCB s	
	NGRID	Oswego	Oswego	-	S	2026	345	345		N/A	N/A	Rebuild of Oswego 345kV Station (asset separation).	
	NGRID	Rotterdam	Rotterdam	-	S	2026	115/69	115/69	-	67	76	Rebuild Rotterdam 69kV substation and add a 2nd 115/69kV Transformer	-
	NGRID	Rotterdam	Schoharie	0.93	S	2026	69	115	1	77	93	Rebuild 0.93mi double circu t Rotterdam-Schoharie / Schenectady International-Rotterdam	OH
	NGRID	Schenectady International	Rotterdam	0.93	S	2026	69	115	1	69	84	Rebuild 0.93mi double circu t Rotterdam-Schoharie / Schenectady International-Rotterdam	OH
	NGRID	Tar Hill	Tar Hi l		S	2026	115	115				New stat on to replace Lighthouse Hill.	
	NGRID	Inghams	Inghams	-	S	2026	115	115				Rebu ld Inghams station, including rebuilding the PAR	
	NGRID	Huntley	Lockport	1.2	W	2026	115	115	2	747	934	Rebuild 1.2 miles of (2) single circuit taps on Huntley-Lockport 36/37 at Ayer Rd	
	NGRID	One da	Oneida	-	W	2026	115	115				115kV Oneida Station Rebuild & add Cap bank.	
	NGRID	Brockport	Brockport	3.5	S	2027	115	115	2	648	650	Refurb sh 111/113 3.5 mile single circuit taps to Brockport Station.	
	NGRID	Brockport	Brockport	3.5	S	2027	115	115	2	648	650	Refurb sh 111/113 3.5 mile single circuit taps to Brockport Station.	

Table VII: Proposed Transmission Facilities (Cont.)

[Project Queue Position] / Project Notes	Transmission Owner	Terminals		Line Length in Miles (1)	Expected In-Service Date/Yr Prior to (2)	Year	Nominal Voltage in kV		# of ckts	Thermal Ratings (4)		Project Description / Conductor Size	Class Year / Type of Construction
							Operating	Design		Summer	Winter		
	NGRID	Pannell	Geneva		W	2027	115	115	2	755	940	Critical Road crossings replace on Pannell-Geneva 4/4A	
	NGRID	Mortimer	Golah	9.7	W	2027	115	115	1	657	797	Refurbish 9.7 miles Single Circuit Wood H-Frames on Mortimer-Golah 110	
	NGRID	Lockport	Lockport		W	2027				N/A	N/A	Rebuild of Lockport Substation and control house	
	NGRID	Pannell	Geneva		W	2027	115	115	2	755	940	Critical Road crossings replace on Pannell-Geneva 4/4A.	
	NGRID	Mortimer	Golah	9.7	W	2027	115	115	1	657	797	Refurbish 9.7 miles Single Circuit Wood H-Frames on Mortimer-Golah 110.	
	NGRID	Mortimer	Mortimer	-	W	2027	115	115		N/A	N/A	Second 115kV Bus Tie Breaker at Mortimer Station	
	NGRID	Mortimer	Pannell	15.7	S	2028	115	115	2	221MVA	270MVA	Reconductor existing Mortimer – Pannell 24 and 25 lines with 795 ACSR	
	NGRID	SE Batavia	Golah	27.8	W	2028	115	115	1	648	846	Refurbish 27.8 miles Single Circuit Wood H-Frames on SE Batavia-Golah 119	
	NGRID	SE Batavia	Golah	27.8	W	2028	115	115	1	648	846	Refurbish 27.8 miles Single Circuit Wood H-Frames on SE Batavia-Golah 119.	
	NGRID	Gardenville	Homer Hill	37.5	S	2031	115	115	2	649	788	Refurbish 37.5 miles double circuit Gardenville-Homer Hill 151/152I	
	NGRID	Gardenville	Homer Hill	37.5	S	2031	115	115	2	649	788	Refurbish 37.5 miles double circuit Gardenville-Homer Hill 151/152I	
	NGRID	Huntley	Gardenville	23.4	W	2031	115	115	2	731	887	Refurbish 23.4 miles double circuit on Huntley-Gardenville 38/39.	
	NGRID	Huntley	Gardenville	23.4	W	2031	115	115	2	731	887	Refurbish 23.4 miles double circuit on Huntley-Gardenville 38/39.	
3	NYPA	East Garden City	East Garden City	Shunt Reactor	In-Service	2021	345	345	1	N/A	N/A	Swap with the spare unit	
580	NYPA/NGRID	STAMP	STAMP	Substation	W	2023	345/115	345/115		500 MVA	500 MVA	Load Interconnection.	
566/6	NYPA	Moses	Adirondack	78	S	2023	230	345	2	1088	1329	Replace 78 miles of both Moses-Adirondack 1&2	
	NYPA	Moses	Moses	Circuit Breakers Replacements	W	2025	115/230	115/230		N/A	N/A	St. Lawrence Breaker Replacement 115 and 230 kV	
3	NYSEG	Willet	Willet	xfmr	In-Service	2021	115/34.5	115/34.5	1	39 MVA	44 MVA	Transformer #2	-
	NYSEG	Big Tree Road	Big Tree Road	Rebuild	W	2022	115	115				Station Rebuild	
	NYSEG	Wood Street	Wood Street	xfmr	W	2022	345/115	345/115	1	327 MVA	378 MVA	Transformer #3	-
596	NYSEG	Hillside	E. Towanda (PJM)	Phase Shifter	S	2023	230	230	1	498 MVA	498 MVA	Phase Shifting Transformer between Hillside	CY19
	NYSEG	Coddington	E. Ithaca (to Coddington)	8.07	S	2024	115	115	1	307 MVA	307 MVA	665 ACCR	OH
	NYSEG	Fraser	Fraser	xfmr	S	2024	345/115	345/115	1	305 MVA	364 MVA	Transformer #2 and Station Reconfiguration	-
	NYSEG	Fraser 115	Fraser 115	Rebuild	S	2024	115	115		N/A	N/A	Station Rebuild to 4 bay BAAH	-
	NYSEG	Delhi	Delhi	Removal	S	2024	115	115		N/A	N/A	Remove 115 substation and terminate existing lines to Fraser 115 (short distance)	
	NYSEG	Erie Street Rebuild	Erie Street Rebuild	Rebuild	S	2026	115	115				Station Rebuild	
	NYSEG	Gardenville	Gardenville	xfmr	S	2026	230/115	230/115	1	316 MVA	370 MVA	NYSEG Transformer #3 and Station Reconfiguration	-
	NYSEG	Meyer	Meyer	xfmr	W	2026	115/34.5	115/34.5	2	59.2MVA	66.9MVA	Transformer #2	-
	NYSEG	South Perry	South Perry	xfmr	S	2027	230/115	230/115	1	246 MVA	291 MVA	Transformer	-
	NYSEG	Oakdale 115	Oakdale 115	Rebuild	S	2027	115	115		N/A	N/A	Complete rebuild of 115 kV to 6 bay BAAH	
	NYSEG	Westover 115	Westover	Removal	S	2027	115	115		N/A	N/A	Remove 115 substation and terminate existing lines to Oakdale 115 (short distance)	
	NYSEG	Oakdale 345	Oakdale 115	xfmr	S	2027	345/115	45/115/34.	1	494MVA	527 MVA	Transformer #3 and Station Reconfiguration	-
	NYSEG	Coopers Corners	Coopers Corners	Rebuild	S	2031	115	115		N/A	N/A	Complete rebuild of 115 kV to 5 bay BAAH	-
	NYSEG	Coopers Corners	Coopers Corners	xfmr	S	2031	115/34.5	115/34.5	1	58 MVA	66 MVA	Transformer #2 and Station Reconfiguration	-
	NYSEG	Coopers Corners	Coopers Corners	xfmr	S	2031	345/115	345/115	1	232 MVA	270 MVA	Transformer #3 and Station Reconfiguration	-
7	O & R/ConEd	Ladentown	Buchanan	-9.5	S	2023	345	345	1	3000	3211	2-2493 ACAR	
7	O & R/ConEd	Ladentown	Lovett 345 kV Station (New Station)	5.5	S	2023	345	345	1	3000	3211	2-2493 ACAR	
7	O & R/ConEd	Lovett 345 kV Station (New Station)	Buchanan	4	S	2024	345	345	1	3000	3211	2-2493 ACAR	
	O & R	Lovett 345 kV Station (New Station)	Lovett	xfmr	S	2024	345/138	345/138	1	562 MVA	562 MVA	Transformer	
3	RGE	Station 262	Station 23	1.46	In-Service	2021	115	115	1	2008	2008	Underground Cable	
3	RGE	Station 33	Station 262	2.97	In-Service	2021	115	115	1	2008	2008	Underground Cable	
3	RGE	Station 262	Station 262	xfmr	In-Service	2018	115/34.5	115/34.5	1	58.8MVA	58.8MVA	Transformer	-
7	RGE	Station 168	Mortimer (NG Trunk #2)	26.4	W	2023	115	115	1	145 MVA	176 MVA	Station 168 Reinforcement Project	OH
7	RGE	Station 168	Elbridge (NG Trunk # 6)	45.5	W	2023	115	115	1	145 MVA	176 MVA	Station 168 Reinforcement Project	OH
	RGE	Station 127	Station 127	xfmr	W	2024	115/34.5	115/34.5	1	75MVA	75MVA	Transformer #2	-
	RGE	Station 418	Station 48	7.6	S	2026	115	115	1	175 MVA	225 MVA	New 115kV Line	OH
	RGE	Station 33	Station 251 (Upgrade Line #942)		S	2026	115	115	1	400MVA	400MVA	Line Upgrade	
	RGE	Station 33	Station 251 (Upgrade Line #943)		S	2026	115	115	1	400MVA	400MVA	Line Upgrade	
	RGE	Station 82	Station 251 (Upgrade Line #902)		S	2028	115	115	1	400MVA	400MVA	Line Upgrade	
	RGE	Mortimer	Station 251 (Upgrade Line #901)	1.00	S	2028	115	115	1	400MVA	400MVA	Line Upgrade	

Table VII: Proposed Transmission Facilities (Cont.)

[Project Queue Position] / Project Notes	Transmission Owner	Terminals		Line Length in Miles (1)	Expected In-Service Date/Yr Prior to (2)	Year	Nominal Voltage in kV Operating	Design	# of ckts	Thermal Ratings (4) Summer	Winter	Project Description / Conductor Size	Class Year / Type of Construction
	Non-Firm Plans (not included in Base Cases)												
	LIPA	Syosset	Shore Rd	Phase Shifter	S	2026	138	138	1	TBD	TBD	Phase Shifter	
	LIPA	Southampton	Deerfield	4.00	S	2028	69	138	1	1171	1171	2000 SQMM XLPE	
	LIPA	Syosset	Shore Rd	11.00	S	2031	138	138	1	1171	1171	2000 SQMM XLPE	
	NGRID	Coffeen	Black River	-	W	2023	115	115	1	646	784	Term nal equipment replacements	
	NGRID	Coffeen	Black River	-	W	2023	115	115	1	584	708	Term nal equipment replacements	
	NGRID	Browns Falls	Taylorville	-	W	2023	115	115	1	584	708	Terminal equipment upgrades	
	NGRID	Browns Falls	Taylorville	-	W	2023	115	115	1	584	702	Terminal equipment upgrades	
	NGRID	Inghams	Saint Johnsville	2.94	W	2024	115	115	1	1114	1359	Reconductor 2.94mi of 2/0 + 4/0 Cu (of 7.11mi tota) to 795 ACSR	
	NGRID	Inghams 115kV	Inghams 115kV	Breaker	W	2024	115	115	-	2000	2000	Add series breaker to Inghams R15 (Inghams - Meco #15 115kV)	
	NGRID	Schenectady International	Rotterdam	0.93	W	2024	69	115	1	1114	1359	Reconductor 0.93mi of 4/0 Cu + 336.4 ACSR (of 21.08mi total) to 795 ACSR	
	NGRID	Rotterdam	Schoharie	0.93	W	2024	69	115	1	1114	1359	Reconductor 0.93mi of 4/0 Cu (of 21.08mi total) to 795 ACSR	
	NGRID	Stoner	Rotterdam	9.81	W	2025	115	115	1	1398	1708	Reconductor 9.81mi of 4/0 Cu + 336.4 ACSR (of 23.12mi total) to 1192.5 ACSR	
	NGRID	Meco	Rotterdam	9.81	W	2025	115	115	1	1398	1708	Reconductor 9.96mi of 4/0 Cu + 336.4 ACSR (of 30.79mi total) to 1192.5 ACSR	
	NGRID	Indian River	Lyme Junction	8.6	W	2026	115	115	1	2228	2718	New 8.6 m le 115kV circuit with 795ACSR to create a loop connecting two ex sting radial circuits	
	NGRID	Colton	Browns Fa ls	-	S	2027	115	115	1	646	784	Relay setting and CT ratio changes	
	NGRID	Colton	Browns Fa ls	-	S	2027	115	115	1	573	689	Relay settings and CT ratio changes - th s line rat ng will be further ncreased in 2023 by the Flat Rock upgrades, listed separately.	
	NGRID	Colton	Dennison	-	S	2027	115	115	1	916	1118	Replace Station connect ons. Line #4	
	NGRID	Colton	Dennison	-	S	2027	115	115	1	916	1118	Replace Station connect ons. Line #5	
	NYPA	St. Lawrence 230kV	St. Lawrence 115kV	xfmr	W	2022	230/115	230/115	1	TBD	TBD	Replacement of St. Lawrence AutoTransformer #2	
	NYPA	Plattsburg 230 kV	Plattsburg 115 kV	xfmr	W	2022	230/115	230/115	1	249	288	Replace in kind of Plattsburgh Auto Transformer #1	
	NYPA	Moses-St.Lawrence	Reynolds	Back to Service	W	2022	115	115	1	767	1121	MR3 line back to service to supply loads	
	NYPA	Fraser	Fraser	SVC Control	S	2023	345	345	1	TBD	TBD	Fraser SVC Control Upgrade	
	NYPA	Niagara 345 kV	Niagara 230 kV	xfmr	W	2023	345/230	345/230	1	TBD	TBD	Replacement of Niagara AutoTransformer #3	
	NYPA	Astoria Annex	Astoria Annex	Shunt Reactor	W	2024	345	345	2	TBD	TBD		
	NYPA	Niagara 345 kV	Niagara 230 kV	xfmr	W	2024	345/230	345/230	1	TBD	TBD	Replacement of Niagara AutoTransformer #5	
6	NYPA	Y49 345kV	Y49 345kV	Y49 Reconductoring	S	2023	345	345	1	TBD	TBD	Improvements to Y-49 345 kV circuit	
	NYPA	Marcy 345 kV	Marcy 345 kV	Convertible Static Compensator	W	2024	345	345	1	TBD	TBD	Replacement of Marcy Convertible Static Compensator	
	O & R	Little Tor	-	Cap Bank	S	2021	138	138	1	32 MVAR	32 MVAR	Capacitor bank	
	O & R	Deerpak	Port Jervis	2	S	2021	69	69	1		1604		
	O & R	Westtown	Port Jervis	7	S	2021	69	69	1		1604		
	O & R	Ramapo (NY)	South Mahwah (RECO)	5.50	W	2022	138	138	2	1980	2120	1272 ACSS	
	O & R	Burns	West Nyack	5.00	S	2023	138	138	1	940	940	UG Cable	
6	O & R	Shoemaker	Pocatello	2.00	W	2023	69	69	1	1604	1723	795 ACSS	
	O & R	Ramapo	Sugarloaf	17.00	W	2024	138	138	1	1980	2120	1272 ACSS	
	O & R	Burns	Corporate Drive	5.00	W	2024	138	138	1	1980	2120	1272 ACSS	
	O & R	West Nyack	West Nyack	-	S	2026	138	138	1			Station Reconfiguration	
	O & R	West Nyack (NY)	Harings Corner (RECO)	7.00	W	2026	69	138	1	1604	1723	795 ACSS	
	O & R	West Nyack	Burns	12.00	W	2027	138	130	1	1100	1430	UG CABLE	
	O & R	West Nyack	West Nyack	xfmr	W	2027	138/69	138/69	1	196 MVA	196 MVA	TRANSFORMER	

Table VII: Proposed Transmission Facilities (Cont.)

Number	Note
1	Line Length Miles: Negative values indicate removal of Existing Circuit being tapped
2	S = Summer Peak Period W = Winter Peak Period
3	Equipment (Transformers & Capacitor Banks) is retained on this list for one year after it goes in In-Service, and then it is deleted. A Transmission Line is reflected in Table VI, when it goes In-Service
4	Thermal Ratings in Amperes, except where labeled otherwise
5	Firm projects are those which have been reported by TOs as being sufficiently firm, and either (i) have an Operating Committee approved System Impact Study (if applicable) and, for projects subject to Article VII, have a determination from New York Public Service Commission that the Article VII application is in compliance with Public Service Law § 122, or (ii) is under construction and is scheduled to be in-service prior to June 1 of the current year.
6	Reconductoring of Existing Line
7	Segmentation of Existing Circuit
8	Deleted
9	Upgrade of existing 69 kV to 138 kV operation
10	Deleted
11	Upgrade of existing 69 kV to 115 kV operation
12	Deleted
13	Contingent on future generation resources
14	This transmission upgrade was identified as a System Deliverability Upgrade (SDU) in the Class Year 2011 Study process required to make certain interconnection projects fully deliverable in the Rest of State Capacity Region. Upon the completion of Class Year 2011, the security posted for the SDU constituted greater than 60% of the total estimated costs for the SDUs and thereby "triggered" the SDU for construction.
15	The Class Year Transmission Project, Q#631, includes an elective System Upgrade Facility, an Astoria-Rainey 345kV cable. The Class Year Transmission Project, Q#887, is a 250 MW uprate of Q#631 project.
16	Deleted
17	Deleted
18	This project has a System Reliability Impact Study that has been approved by the NYISO Operating Committee, and therefore is a potential candidate to enter the next Open Class Year study
19	These transmission projects are included in the FERC 715 Report models. Please see FERC 715 report for an explanation of the inclusion criteria.
20	Deleted

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The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.

New York ISO

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