## STATE OF NEW YORK PUBLIC SERVICE COMMISSION

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In the Matter of Proactive Planning for Upgraded Electric Grid Infrastructure Case 24-E-0364

### JOINT UTILITIES' LONG-TERM PROACTIVE PLANNING FRAMEWORK

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#### I. Introduction and Guiding Principles

On August 15, 2024, the New York Public Service Commission ("Commission") directed the Joint Utilities<sup>1</sup> to propose a long-term Proactive Planning Framework to support transportation, building, and industrial electrification ("electrification"), as well as economic development.<sup>2</sup> This coordinated and orderly approach will help to address the emergent electrification needs of utility customers in a timely manner to support the achievement of New York State's ("State") ambitious clean energy policy goals. This filing proposes for Commission approval an annual Proactive Planning process, guided by five principles:

- Support customer needs in a timely manner without adverse impacts: Utilities are expected to serve customer electrification loads on time despite uncertainty about the precise point in time those loads will materialize. The Proactive Planning process must account for the inherent timing mismatch where customer electrification loads seek to be added to the grid in just months, while buildout of the grid to support these loads can take up to ten years. All the while, utilities must accommodate emergent electrification requests without compromising grid operations, such as reliability and resiliency.
- Support achievement of objectives in policies, laws, and regulations: A Proactive Planning Framework should enable the expected accelerated customer adoption of electrification to achieve ambitious State and local policy goals and regulatory compliance.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> The Joint Utilities are Central Hudson Gas & Electric Corp. (Central Hudson); Consolidated Edison Company of New York, Inc. (Con Edison); Niagara Mohawk Power Corporation d/b/a National Grid (National Grid); New York State Electric & Gas Corporation (NYSEG); Orange & Rockland Utilities, Inc. (O&R); and Rochester Gas and Electric Corporation (RG&E).

<sup>&</sup>lt;sup>2</sup> Case 24-E-0364, *In the Matter of Proactive Planning for Upgraded Electric Grid Infrastructure* (Proactive Planning Proceeding), Order Establishing Proactive Planning Proceeding (issued August 15, 2024) (Order).

<sup>&</sup>lt;sup>3</sup> The State has adopted ambitious statewide electrification targets, including enacting requirements for light-duty vehicle (LDV) and medium and heavy-duty vehicle (MHDV) decarbonization through the Advanced Clean Trucks (ACT) rule enacted in 2021, Advanced Clean Cars II (ACC-II) enacted in 2022, and the Zero-Emission School Bus requirement enacted in 2023. Similarly, New York City has adopted a number of policies including the Green Rides rule in 2023, New York City Council passed Local Law 154 in December 2021, which took effect in 2024 for low-rise buildings and 2027 for high-rise buildings. Local Law 154 bans fossil fuel heating in newly constructed buildings, accelerating heating electrification in new construction projects. Local Law 97 also took into effect in 2024 and will impose fines on buildings above a certain size with greenhouse gas emissions in excess of increasingly more stringent requirements. Local Law 32 requires more stringent Leadership in Energy and Environmental Design (LEED) design and other designated standards for city-funded capital projects (amendments to Local Law 85 of 2005).

- **Cost efficiency**: Planning approaches and solution designs should seek to maximize the value of grid investments and manage risks related to over- or under-building. This includes but is not limited to, building for long-term needs where forecast confidence is high to prevent costly sequential investment, creating expandable and phased designs, integrating advanced technologies to maximize value, and accounting for benefits that will lead to lower costs over time as well as a more reliable and resilient grid.
- Flexible planning and authorization: Planning and regulatory processes should accommodate fast-evolving markets and policies by balancing a nimble and agile process with appropriate guardrails.
- Complement other regulatory processes: A Proactive Planning process must effectively coordinate with other regulatory proceedings in a way that either enhances or does not interfere with those processes, without adversely impacting the objectives of Proactive Planning.

Needs driving electrification projects will vary by service territory and evolve over time with the changing market and policy environment. Meeting customer needs across a variety of electrification use cases will require flexible approaches such that utilities serving the diverse regions across the State can effectively support increased electrification demands. As a result, the Joint Utilities developed a Proactive Planning Framework that addresses immediate electrification requirements, anticipates future demands, and supports sustainable economic growth. This comprehensive and flexible approach, proposed herein, will help the grid adapt to meet the evolving energy needs of the State's residents and businesses.

#### A. Scope of the Proactive Planning Framework

Proactive Planning projects in this proceeding are defined by three main elements of scope:

- Electrification Scope: For the purposes of this proceeding, and consistent with the Order, electrification includes the following:
  - **Transportation Electrification**: All light-, medium-, and heavy-duty, on- and off-road vehicles, such as personal cars, public transit, school buses,

maintenance and construction vehicles, and marine, aviation, and rail applications.

- **Building Electrification**: Heating systems and all other electric buildingrelated energy uses and systems, such as cooking and water heating.
- Other Electrification: Non-transport and non-building electrification, such as industrial or economic development projects.<sup>4</sup>
- **Policy Scope**: The Proactive Planning Framework will identify grid infrastructure investments necessary to achieve relevant State policy related to customer electrification, such as infrastructure upgrades required to facilitate the achievement of ACC-II and ACT. That is, the Framework will consider full State policy compliance with any near-, mid-, or long-term regulations and goals.
- **Planning Scope**: The planning activities under this Framework are expected to identify needs with greater granularity than processes in other proceedings.

#### **II. Summary of Proactive Planning Framework**

The Joint Utilities request that the Commission approve the proposed Proactive Planning process. This process includes four stages: (1) load assessment;<sup>5</sup> (2) planning and solution design; (3) project eligibility and prioritization criteria; and (4) proposal and authorization of eligible projects. Together, the four stages comprise the Proactive Planning process "Cycle." The first Cycle (Cycle 1) is estimated to result in proposals in Q4 2025.<sup>6</sup>

In early 2025, prior to Cycle 1, the Joint Utilities will conduct an initial activity to establish: (1) a coordinated set of assumptions for Proactive Planning projects; and (2) analytical methodologies and data sets utilities expect to employ to study granular load growth from electrification, including sharing best practices, and coordination of load assessment outputs across service areas.<sup>7</sup> The Joint Utilities will align assumptions where possible, with flexibility to

<sup>&</sup>lt;sup>4</sup> Proactive Planning Proceeding, Order, p. 8.

<sup>&</sup>lt;sup>5</sup> The term "load assessment" refers to a forward-looking dataset of anticipated electric loads developed to be used in conjunction with utility forecasts.

<sup>&</sup>lt;sup>6</sup> This assumes the Commission approves this Framework by mid-2025. Proposed timelines are subject to the timeline of approval of this Framework.

<sup>&</sup>lt;sup>7</sup> The Statewide view is particularly important for assessing transportation electrification needs at areas near utility service territory boundaries, given electric vehicles are not stationary loads.

account for differences between the utilities' services territories (e.g., geographic size, population density, electric grid characteristics, and evolving electrification markets and local policies). Section IV.A. details the Joint Utilities' early 2025 work to coordinate assumptions and methodologies for studying Proactive Planning needs. This coordination work can allow the individual utility electrification load assessment to inform statewide processes, such as the Coordinated Grid Planning Process ("CGPP"). The Joint Utilities propose to share and receive feedback on this work in a Pre-Cycle Technical Conference led by the Department of Public Service ("DPS").<sup>8</sup>

#### **A. Proactive Planning Process**

Figure 1 below illustrates the components of the annual Proactive Planning Cycle, which includes load assessment, planning and solution design, project eligibility and prioritization criteria, project proposal, and authorization decisions for Proactive Planning projects. The timeline for each Cycle will remain annual, but the timing of specific activities may be adjusted based on, among other things, lessons learned from previous Cycles and market and policy evolutions, while still remaining an annual process.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> The Joint Utilities propose that all Technical Conferences would be led by DPS Staff and posted for stakeholder engagement through Case 24-E-0364.

<sup>&</sup>lt;sup>9</sup> The timeline also allows the Joint Utilities to provide inputs and outputs of the Proactive Planning process at the start of the next CGPP cycle, as required in the Order (p. 10), estimated to commence in mid-2026.



4. Public Service Commission (PSC)

Figure 1: Long-term Process Cycles, Stages, and Overview (shows initial Cycles of Proactive Planning process)<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> The timelines above are specific to the Proactive Planning process and do not reflect other utility processes. For example, the timing for load assessment shown here may be different from each utility's system forecast timeline. This is necessary because, as described in Section IV.A, the utility system forecasts are one tool to forecast for proactive planning.

**Load Assessment:** The utilities are in various phases of developing analytical methodologies to identify areas with the potential for clustered electrification to develop rapidly. Over time, the utilities' forecasting approaches will evolve with experience to incorporate new industry best practices as well as market and policy shifts. To identify Proactive Planning infrastructure investments necessary to enable the State to achieve its electrification policies, the Joint Utilities propose using three primary sources: (1) load forecasts developed in other regulatory contexts – such as utility electric peak demand forecasts used in electric base rate cases, New York Independent System Operator ("NYISO") studies (e.g., annual load and capacity data), or forecasts developed for the CGPP<sup>11</sup> depending on their applicability to the loads in scope for this proceeding; (2) granular utility load studies<sup>12</sup> to assess local conditions and identify hotspots<sup>13</sup> or clusters of load growth consistent with policies, laws, and regulations;<sup>14</sup> and (3) customer information and other sources (e.g., studies performed by State agencies).

Regardless of forecast sources used, each utility will employ a holistic approach to include all load types<sup>15</sup> to account for aggregated impacts on the grid. Since transportation loads are mobile, utilities will also coordinate to address capacity needs for transportation loads to appropriately account for charging needs for vehicles traveling between utility service territories, such as on major thoroughfares. Load assessment can occur within a single Cycle or last across multiple Cycles. Moreover, load assessment performed in one Cycle may inform projects proposed in a future Cycle. The load assessment stage includes an Annual Stakeholder Technical Conference where utilities will share areas of focus and customers and stakeholders can share information that may inform load assessments (supplementing information from customers).

Planning and Solution Design: The utilities will assess infrastructure needs by considering the output of load assessments and existing grid conditions. To address any

<sup>&</sup>lt;sup>11</sup> See, Case 20-E-0197, Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act (Local T&D Planning Proceeding). This coordination would apply to the second and following CGPP cycles given that the first cycle is already underway.

<sup>&</sup>lt;sup>12</sup> The term "load study" refers to an activity performed to develop, or improve upon, a load assessment.

<sup>&</sup>lt;sup>13</sup> Hotspots are localized load areas, ranging between a few city blocks to a few square miles, where one or more large customers are positioned to drive load growth through electrification. Granular load projections can be used to identify hotspot locations.

<sup>&</sup>lt;sup>14</sup> Utilizing load projections consistent with State policy achievement is the basis for the subsequent stages.

<sup>&</sup>lt;sup>15</sup> Considering all load types means that even if a utility conducts a granular load study for a specific use case, for example for EV load along corridors or for building electrification, the utility will consider that load along with other projected new business loads when designing solutions.

identified constraints, the utilities will employ their respective planning processes and relevant best practices (discussed further below in Section IV.B), to develop Proactive Planning projects while considering long-term planning, expandable designs, project phasing, alternative technologies, and optionality.

**Project Eligibility and Prioritization Criteria:** Any projects considered within the Proactive Planning process must satisfy the Project Eligibility Criteria to be considered eligible; full details on Project Eligibility Criteria for the long-term Proactive Planning Framework are provided in Section IV.C. Project Eligibility Criteria for a given Cycle include:

- Whether an upgrade is required to enable electrification;<sup>16</sup> and
- Needs to begin Construction-related Activities<sup>17</sup> urgently.

While the Project Eligibility Criteria determines the eligibility of projects, the Joint Utilities propose the following Prioritization Criteria to further evaluate and prioritize projects:

- Degree of certainty;
- Consideration of risks related to forecast timing, location, and magnitude and plans for mitigation, including phasing and expandability potential;
- Consistency with the objectives of State laws, such as the Climate Leadership and Community Protection Act ("CLCPA") regarding greenhouse gas emissions reductions, impacts to Disadvantaged Communities,<sup>18</sup> and State electrification policies;
- Qualitative and/or quantitative project benefits, both direct and indirect, including enabling electrification consistent with policy, as well as improvements in resiliency and reliability;
- Project costs;

<sup>&</sup>lt;sup>16</sup> Definition of electrification provided in Section I.A.

<sup>&</sup>lt;sup>17</sup> Construction-related Activities include incurring expenses such as preliminary or detailed engineering and design activities, initiating procurement activities, beginning site preparation, among other items. For a full definition of this term, please see Proactive Planning Proceeding, Joint Utilities' Proactive Planning Urgent Upgrade Projects Evaluation and Funding Proposal (November 13, 2024), pp. 6-8.

<sup>&</sup>lt;sup>18</sup> Disadvantaged Communities are "communities that bear burdens of negative public-health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high concentrations of low- and moderate-income households…" Environmental Conservation Law § 75-0101(5). See also: https://www.nyserda.ny.gov/ny/Disadvantaged-Communities

- Availability of alternative designs, advanced technologies, or bridge-to-wires solutions;<sup>19</sup>
- Locations and site types; and
- Project timelines and financials.

The Joint Utilities' proposed Project Eligibility and Prioritization Criteria are consistent with, and establish for the longer-term, the Joint Utilities' Urgent Projects Evaluation Criteria filing.<sup>20</sup>

**Proposal and Project Authorization:** After completing the first three stages, individual utilities may identify projects to be proposed in a given Cycle. For projects that are identified, the Joint Utilities propose a two-category approach to authorize such investments. The categories are: (1) a Large Project Category for investments above a certain threshold;<sup>21</sup> and (2) a Small Project Category for a portfolio of smaller upgrades. Annually, utilities may file projects in the Large Projects Category, with Commission review similar to the Urgent Projects Filing process.<sup>22</sup> The Small Project Category will operate on a biennial budget cycle. The two-category approach allows for more nimble responses to changing policies and market conditions by optimizing stakeholder efforts and balancing timely, efficient infrastructure development with appropriate guardrails.

## III. Coordination with Other Proceedings

Other proceedings and forecasts have distinct roles in determining the development of utility infrastructure, however they are not coordinated across the State. The Order noted that

<sup>&</sup>lt;sup>19</sup> The Joint Utilities proposed a Bridge-to-Wires (BTW) mechanism under the Energy Storage Deployment Program proceeding (Case 18-E-0130). The proposed BTW mechanism intends to target energy storage development in specific areas of each utility's service territory, add capacity when and where needed, and relocate the energy storage resource as needed and appropriate to aid in the electrification of other areas. Case 18-E-0130, *In the Matter of Energy Storage Deployment Program*, Joint Utilities' Study of Non-Market Transmission and Distribution Energy Storage Use Cases and Related Process Proposals (filed October 29, 2024) (Energy Storage Framework Filing).

<sup>&</sup>lt;sup>20</sup> Proactive Planning Proceeding, Joint Utilities' Proactive Planning Urgent Upgrade Projects Evaluation and Funding Proposal (November 13, 2024), pp. 2-6.

<sup>&</sup>lt;sup>21</sup> Large Project investment threshold should be scaled for each utility's size, such as a percentage of the annual revenue requirement.

<sup>&</sup>lt;sup>22</sup> As this approach complements utilities' existing robust planning and rate case processes, a utility may not identify a need for projects to be proposed and approved through this proceeding. If projects are not identified, a given utility would not make a filing in that Cycle.

"New York's utilities do not all conduct ... planning studies on the same timeline and may not use the same assumptions, input data, or methods, thereby making it difficult to compare and evaluate appropriate utility investments statewide."<sup>23</sup> Taken together, the CGPP, rate case, and Proactive Planning processes can support the achievement of State policy goals. These processes can function most effectively if they focus on specific objectives while remaining closely coordinated, primarily through the alignment of assumptions, inputs, and outputs at critical milestones.

The proposed Proactive Planning Framework seeks to support emergent localized spot or clustered loads on a timeline necessary to satisfy market and policy development while considering lead times to develop supporting infrastructure. The proposed process is designed to support statewide coordination for forecasting, planning, evaluation, and approval of investments to support timely and efficient infrastructure buildout to enable electrification.

Although rate cases address infrastructure needs more broadly, they typically span five years<sup>24</sup> and cannot address rapidly emerging loads. The Joint Utilities applaud the Commission for recognizing the need for a new dedicated Proactive Planning proceeding that can complement rate cases to (1) directly address the timeline mismatch between customer electrification projects and grid infrastructure buildout, and the need to build ahead of time before customer load requests; (2) establish a consistent timeframe for a coordinated statewide process for load study, planning, investment proposal, and authorization of electrification-driven projects to support efficient and synchronized consideration of investments; and (3) provide a singular focus on electrification infrastructure needs that enables stakeholders to focus their resources and efforts accordingly.

Proactive Planning is also distinct from the CGPP. The CGPP has a three-year timeline because it requires detailed bulk power system modeling and complex coordination between the NYISO, utilities, and developers, to meet long-term transmission needs for integrating clean generation. The CGPP does not address hyper-localized grid infrastructure needs driven by the electrification of customers. Nor does the CGPP provide the flexibility to pursue the development of urgent electrification projects that require the commencement of design and

<sup>&</sup>lt;sup>23</sup> Proactive Planning Proceeding, Order, pp. 4-5.

<sup>&</sup>lt;sup>24</sup> Utilities typically file a rate case every three years. However, load forecasting and planning begin two years in advance. Thus, grid upgrades approved in rate cases have a five-year cycle.

construction in the very near term or outside of the CGPP's multi-year cycle. However, inputs between the CGPP and Proactive Planning processes should be closely coordinated and therefore better inform each process's outputs.

An annual Proactive Planning process can enable straightforward timing coordination with the CGPP, such that the CGPP can use assumptions and outputs<sup>25</sup> from the latest completed Proactive Planning annual cycle. Regarding coordinated assumptions, the Joint Utilities propose that Proactive Planning will provide electrification policy assumptions (inputs to the Proactive Planning process) to inform modeling in the CGPP's Stage 1, such as load forecasts or the interpretation of electric car sales policies for modeling purposes. By aligning transportationrelated or other load assessments among Proactive Planning and the CGPP, scenarios of the CGPP can consider load assessments from the Proactive Planning Proceeding to (1) inform annual zonal load growth in the CGPP's Stage 1, and (2) disaggregate zonal load to nodes (including potential spot loads)<sup>26</sup> in the CGPP's Stage 2. Regarding outputs, approved Proactive Planning investments would be inputs for planning and solution design in the CGPP's Stages 2 and 3, and the projects approved in the CGPP would be inputs in the planning and solution design in this Proactive Planning proceeding.

Appendix 2 details these interactions. By maintaining distinct processes that are closely coordinated, utility planning efforts will be robust, transparent, and effective in meeting specific policy goals and market demands, and well-coordinated across the State.

Finally, the Joint Utilities propose to consult with DPS Staff and stakeholders to assess the coordination between the Proactive Planning process and other proceedings, identify lessons learned, and develop process improvements.

#### **IV.** Proactive Planning Process

The Joint Utilities propose an annual four-stage process to study, plan, prioritize, and propose Proactive Planning projects.

<sup>&</sup>lt;sup>25</sup> The CGPP will only include Commission-approved Proactive Planning projects in its processes.

<sup>&</sup>lt;sup>26</sup> For instance, Proactive Planning projects may enable clusters of future MHDV Make-ready program (Case 23-E-0070) requests or be informed by stakeholder input or research offered through that proceeding. Case 23-E-0070, Proceeding on Motion of the Commission to Address Barriers to Medium- and Heavy-Duty Electric Vehicle Charging Infrastructure (MHD Proceeding).

#### A. Stage 1 – Load Assessment

The Commission directed the Joint Utilities to "begin the planning process to identify potential electric grid upgrades to support electrification across a number of sectors." The Commission further directed the utilities to compare different options for forecast development, consider publicly available data, align assumptions and methods for needs identification, and account for loads beyond transportation electrification. In this section, the Joint Utilities describe and compare options (A.1), assess how to best use the options (A.2), and, as a result, propose a comprehensive and iterative process for coordinating needs identification (A.3).<sup>27</sup>

This Framework aligns utilities in assumptions and approaches for identifying grid impacts specific to this proceeding within individual utility contexts. The proposed approach is iterative and allows utilities to incorporate immediate and long-term customer needs, new data sources, and lessons learned while responding to evolving markets and policy environments. Below, the Joint Utilities indicate how this Framework fulfills the requirements of the Order and provides a common coordinated approach to identify and evaluate Proactive Planning projects.

## A.1 Options for Load Assessment

The Order requires the Joint Utilities to propose a planning and study framework that "shall include at least two options related to load forecast development." The Joint Utilities discuss load assessments using three sources of information below, including the benefits and drawbacks of each source, and alternative methods of developing near- and long-term load projections. Each utility will choose to use the source, or combination of sources, that is most appropriate for evaluating the impacts of load on their electric systems based on factors, such as data availability and forecast certainty.

## Source 1: Load Forecasts Developed in Other Proceedings

The Order directs that the "Joint Utilities must consider the option of relying on load forecasts developed in other proceedings."<sup>28</sup> Such forecasts could include:

<sup>&</sup>lt;sup>27</sup> Needs identification refers to the output of the forecasting and grid impact analyses.

<sup>&</sup>lt;sup>28</sup> Proactive Planning Proceeding, Order, p. 8.

- Utility electric load forecasts. These "traditional" forecasts (also known as system forecasts) utilize both "top-down" and "bottom-up" approaches<sup>29</sup> and inform infrastructure investments proposed in rate cases. These forecasts may provide, to differing degrees, a bottom-up forecast of localized electric demands.
- NYISO-level forecasts. The NYISO's transmission-level forecast provides a "topdown" forecast for each of the eleven NYISO load zones across the State. The NYISO provides forecasts for multiple electrification scenarios.
- Work produced by the CGPP. This process uses a similar "top-down" forecast as the NYISO forecast. The CGPP forecast is zonal and considers multiple electrification scenarios.

## Source 2: Utility-Developed Bottom-Up Projections of Granular Electric Demands

The Order directs that the Joint Utilities must also consider the "option of developing their own bottom-up forecast of granular electric demands."<sup>30</sup>

- **Granular load studies** incorporate customer site or location-specific load curves and expectations, using customer information, vehicle telematics, or other data sources that provide enhanced visibility of future customer demands in a specific geography. They provide increased precision in understanding localized needs within a specific area of the distribution system. Granular load studies can be used in conjunction with traditional utility electric load forecasts.
- Utility electric load forecasts also provide feeder-level forecasts that stem from feeder allocations of loads based on scaling or other factors. These forecasts may include granular information, such as specific customer electrification requests.

## Source 3: Customer Information and Other Sources

In addition to forecasting methodologies, there are other data sources and studies that may be valuable for identifying load growth and necessary Proactive Planning projects. Each of these may already be incorporated into existing utility electric load forecasts to varying degrees and may inform future utility electric load forecasts.

<sup>&</sup>lt;sup>29</sup> For instance, a "bottom-up" approach could include using data at the distribution or customer level, whereas a "top-down" approach could include using data at the State or zonal level.

<sup>&</sup>lt;sup>30</sup> Proactive Planning Proceeding, Order, p. 8.

- **Customer requests or electrification plans** provide input for electrification needs but are only available for a small subset of customers and do not reflect the full electrification needs of a given area.
- State agency and municipal data and plans include information from State agencies or local authorities, including information on government fleets and industrial loads related to economic development.
- Other granular load studies include load studies performed by an entity other than the utility proposing a project, such as the International Council on Clean Transportation report in 2023<sup>31</sup> or Electric Power Research Institute's ("EPRI") EVs2Scale2030.<sup>32</sup>

Appendix 1 outlines the benefits and drawbacks of each source.

## A.2 Employing Sources for Load Assessment

Given the benefits and drawbacks of the various forecasts and data sources, the selected approach for forecasting the dynamic nature of concentrated electric load growth should leverage the best available source or a combination of sources. Various sources may be suitable to plan for different load types and levels in the system. In addition, the work undertaken through this proceeding should complement, but not interfere with, well-established processes (such as a utility's current process for system forecast development).

The Joint Utilities propose that the sources outlined in Section A.1 could be used to inform grid needs as outlined in Table 1 below. There is no "one-size-fits-all" solution to identifying Proactive Planning needs, and utilities should leverage multiple forecast sources to best identify capacity constraints and future infrastructure needs. Different sources provide different levels of information that can be primary drivers of identifying infrastructure needs or be used to cross-check other sources.

<sup>&</sup>lt;sup>31</sup> https://theicct.org/publication/infrastructure-deployment-mhdv-may23/

<sup>&</sup>lt;sup>32</sup> https://msites.epri.com/evs2scale2030

Source	How it could be used in Proactive Planning Process
Forecasts	• Utility electric load forecasts: Since this forecast provides the most
developed in other proceedings	comprehensive view of load growth across a service area with a moderate
1 0	level of granularity, it can inform investments at all levels but may not
	necessarily have full visibility into granular needs. These forecasts may
	include varying levels of electrification policy achievement.
	• NYISO forecast: Given its coarse granularity, this forecast is most
	appropriate for informing transmission needs, though it may be useful for
	distribution planning purposes when used in conjunction with utility electric
	load forecasts.
	• The CGPP: Incorporating Proactive Planning assumptions and projects/spot
	loads into the CGPP will facilitate visibility and evaluation across both
	processes.
Granular bottom-	• Utility granular load studies: These studies can be used to identify grid
up projections	needs at the most localized levels. Since these load studies are typically
	limited to a subset of load types, such as transportation or building
	electrification, these studies may also be used in conjunction with utility
	electric load forecasts to inform grid needs at all levels in the system.
Customer	• Customer requests or electrification plans, State agency data and plans,
information and other sources	and other granular load studies: Can be used to inform utility granular
	load studies, and may identify the need for distribution level investments,
	such as new business or primary feeder upgrades, as well as investments
	upstream depending on the size of the customer load and local grid
	constraints.

## Table 1: Applications for Load Projections to Inform Proactive Planning Process

The utilities' respective Urgent Projects Filings provide an initial foundation and demonstration of how these approaches can be used jointly to identify necessary projects. In the immediate term, each utility plans to use the various approaches described below to conduct new studies and/or update existing projections with new data or scenarios.

- Central Hudson accounts for EVs and electrification load within its current electric load forecast based on historical existing customer load along with additional factors, such as registration data for EVs and heat pump rebates. Central Hudson develops propensities for each circuit and substation area which rolls up to the system-level forecast providing a case that aligns with the top-down NYISO forecast. Electrification loads are currently forecast based on existing customer data and do not currently consider granular load studies.<sup>33</sup>
- Con Edison conducted a Granular EV Load Projection study in 2024 and will update it to reflect any new relevant policies that are adopted, as well as incorporate new customer information (e.g., private fleets' electrification plans, studies released by the New York City Metropolitan Transport Authority, New York City Taxi and Limousine Commission, data obtained by New York City agencies, etc.). It will also continue to use EPRI's EVs2Scale2030 outputs to cross-check high-density load pockets or hotspots. Con Edison plans to conduct a similar study for building electrification.
- National Grid conducted granular studies in specific areas, including major New York highways and high-priority fleet "clusters," which will inform needs identification and project selection. They are seeking to identify other areas in need of granular load study and will use granular customer information and electrification plans, in addition to policy-driven growth identified through National Grid's electric load forecast, to identify other hotspots.
- NYSEG/RG&E are completing a comprehensive medium- and heavy-duty EV adoption and load forecast in 2024 and will update that forecast in the future as additional data becomes available.
- O&R conducted an EV granular load study in 2021 that it will update in 2025 to reflect any new policy mandates and new customer information and will also continue to utilize outputs from EPRI studies to inform load hotspots. O&R has not yet conducted a similar study for building electrification and plans to do so.

<sup>&</sup>lt;sup>33</sup> Central Hudson will seek cost recovery for initial granular load study efforts in a separate filing in this proceeding.

In Section B.1, the Joint Utilities describe an approach to coordinate load assessments across utility borders and the State.

#### A.3 Comprehensive and Iterative Process for Coordinating Load Assessments

The Joint Utilities propose a process for coordinating load assessments for Proactive Planning projects. Iteration is key to allowing analytical methodologies and data sources to evolve (e.g., to improve identification of granular load growth resulting from State policy and customer adoption), and to be tailored to specific characteristics of each service area. In 2025, utilities will conduct an initial activity to align assumptions and methodologies, where appropriate. Then, within each Cycle, each utility will conduct a three-step process: (1) individual utility load assessment review, (2) coordinated review, culminating in an Annual Stakeholder Technical Conference, and (3) finalize utility load assessments. The initial activity and three-step process are discussed in more detail in this section.

## Initial Activity: Establish Coordinated Assumptions and Analytical Methodologies<sup>34</sup>

Prior to the planning and solution design activities (i.e., Stage 2) of Cycle 1 of the Proactive Planning process, utilities will conduct a coordinated effort to determine (1) which assumptions can be aligned among utilities for Proactive Planning projects, and (2) analytical methodologies utilities expect to employ to identify Proactive Planning loads. This effort will evolve and build on approaches used for the Urgent Projects Filings.

- Timing: Q1 2025 (dependent on the timing of Order on the framework and Urgent Projects Filings)
- Milestone: Utilities will present at a Pre-Cycle Technical Conference<sup>35</sup>

The Joint Utilities will develop a list of common assumptions to support well-coordinated forecasts.<sup>36</sup> This list will be presented at the Pre-Cycle Technical Conference, with the presentation material shared through the State's Document and Matter Management system

<sup>&</sup>lt;sup>34</sup> While this is an initial activity for the proceeding, it could be repeated when merited (e.g., if or when new policies, regulations, or mandates are adopted across the State).

<sup>&</sup>lt;sup>35</sup> Approximate timing is consistent with the timeline shown in Appendix 3.

<sup>&</sup>lt;sup>36</sup> The Joint Utilities will coordinate with the Long Island Power Authority in the establishment of coordinated assumptions and analytical methods.

(DMM). Common assumptions will, at a minimum, include how load assessments will be consistent with State laws and regulations.

Some granular load study assumptions may differ by utility service territory due to local conditions, such as customer density (e.g., more dense and constrained service territory downstate), regional differences (urban versus rural), local policies,<sup>37</sup> and customer or technology assumptions (e.g., differences in building stock). While specific assumptions may be tailored to service territories, utilities will seek to employ similar analytical frameworks and best practices to their service territories. For example, average annual vehicle-miles-traveled ("VMT") differs across vehicle classes and utility territories, but VMT may still be a useful statewide metric to convert vehicle stock counts to energy need calculations.

Utilities will share best practices across service territories, identify where incremental resources (including data and budget) may be required, and identify areas requiring cross-territory coordination (e.g., at utility territory borders). Utilities will coordinate across several areas:

- **Granular load studies:** Utilities will share areas of interest for potential granular load studies and their proposed methodology.
- External studies and data used: Utilities will identify options for external studies and data which may be utilized to additionally substantiate needs for Proactive Planning projects. Consistent with the Order, utilities will specifically perform a review of publicly available data from studies issued by State or Federal agencies, publicly or privately available data from customers, and public studies available from relevant initiatives (e.g., EPRI's EVs2Scale2030) or relevant studies of corridor charging needs.
- Forecasts developed in other proceedings: Utilities will detail how forecasts developed in other proceedings will be used. An approach for coordination with the CGPP is detailed in Section III. Utilities may detail how they will use their existing utility electric load forecast to identify electrification loads.

<sup>&</sup>lt;sup>37</sup> See, e.g., Local Law 97 in New York City.

- **Cross-territory coordination:** Utilities will assess when cross-territory coordination is required. For example, this will include a review of how utilities can increase coordination on identification of highway charging needs, or how vehicle depots near utility service territory boundaries should be addressed.
- **Future scope:** The utilities expect methodologies will need to continue to develop for the broader scope of the proceeding beyond transportation electrification. Where new methodologies are developed, utilities would expect to share at a subsequent technical conference or filing.

## Regular Cadence: Three-Step Process for Load Assessment

Load assessments for Proactive Planning will occur annually in three steps within Stage 1, as outlined in Figure 1.

- Step 1: Individual Utility Current Load Assessment Review. Each utility will review the utility's most recent electric load forecast, granular load study, and/or other relevant information (such as recent customer requests) to (1) identify where significant electrification load is expected, and (2) where further study or data is merited. While this review will take place annually, not all forecasts or data sources are updated on an annual basis.
- Step 2: Coordinated Review, Culminating in an Annual Stakeholder Technical Conference.<sup>38</sup> Utilities will convene a coordinated review of their load assessments. Following this coordination, the Joint Utilities will present at an Annual Stakeholder Technical Conference a comprehensive Statewide view of: (1) Proactive Planning projects approved to date (including Urgent Projects), and the type and magnitude of load addressed by approved projects; (2) priority areas where infrastructure investment may be needed in the current Cycle based on existing load assessments; and (3) priority areas for future study.<sup>39</sup> This will provide a comprehensive view of

<sup>39</sup> One such example of utility coordinated review that is occurring across multiple states is the Northeast Freight Corridor Charging Plan. Through grant funding from the U.S. Department of Energy (DOE), National Grid is leading a two-year study to map out truck charging needs across nearly 3,000 miles of major highways in the U.S. Northeast. The study is estimated to be complete in the fall of 2025.

<sup>&</sup>lt;sup>38</sup> Coordination activities in Step 2 will include Long Island Power Authority.

https://www.nationalgridus.com/News/2023/10/Readying-the-Northeastern-U-S-for-Electric-Trucks-National-Grid-to-Build-DOE-Funded-Roadmap/

previously addressed needs *and* future needs across utility service territories, building on the initial activity outlined above to identify areas requiring cross-territory coordination. The timing for this Annual Stakeholder Technical Conference is purposefully proposed in the middle of the load assessment timeline to allow utilities sufficient time to incorporate input into proposals.

• Step 3: Finalize Utility Load Assessments. Utilities will finalize studies and/or data collection. This will include incorporating learnings from the Annual Stakeholder Technical Conference in Step 2. Final details of studies, including assumptions and methodologies, will be included in relevant project filings and will inform future stakeholder engagement (e.g., results from Cycle 1 will inform the Annual Stakeholder Technical Conference in Cycle 2).

While this process repeats on an annual basis, study efforts may continue across multiple Cycles.

#### **B.** Stage 2 – Planning and Solution Design

Under this Stage, the Joint Utilities will evaluate potential impacts from the load assessments and initiate planning activities to adjust existing plans or design solutions to address grid infrastructure needs accordingly. Each utility will evaluate the impacts of the forecasted load using its existing planning procedures and tools to identify constraints on its respective electric system including, but not limited to, transmission load areas and substations, distribution substations, distribution networks, and radial areas, and more concentrated localized load pockets such as at the individual customer level.

The electric systems of the Joint Utilities are similar, but different in critical ways (e.g., voltages, age, overhead vs. underground). The utilities' system planning procedures also have similarities, but there are material differences that must be accounted for in any shared Framework. As such, each utility will choose the option, or combination of options, that is most appropriate for their system. The utilities will identify viable solutions to address constraints, following a similar process to the utility's other planning efforts. This may include consideration of equipment ratings, estimated costs, constructability, schedule, operability, impacts on

customer reliability and resiliency, alternatives (such as expandability and advanced technologies), and impacts or synergies with broader capital planning efforts.<sup>40</sup>

## **B.1** Coordination Across Utilities

The utilities will use their granular load studies and forecasting data, as well as crossterritory coordination efforts,<sup>41</sup> to anticipate the likely location of charging needs and avoid duplicative efforts. This is important for upgrades supporting transportation electrification at areas on the border of utility territories. Coordination between two adjacent utilities will safeguard them from over- or under-estimating charging needs and/or designing duplicative solutions on either side of a utility service territory border. Similarly, it will also safeguard from creating a gap in necessary charging stations if neither utility designs a solution where charging needs have been identified. For example, the Joint Utilities collaborated on the corridor vehicle charging needs of key corridors prior to submitting their Urgent Projects Filings.

## B.2 Best Practices for Planning in an Era of Rapid Load Growth

The Order requires that the Joint Utilities consider "the value of expandability, alternate technologies, phasing approaches, and optionality in proposed projects."<sup>42</sup> The considerations listed below are a selection of best practices for long-term utility electrification planning as the State enters an era of rapid load growth anticipated to persist for decades.

- Long-term design: Planning with an appropriately long time horizon<sup>43</sup> avoids short-term piecemeal solutions and results in long-term cost savings for customers.<sup>44</sup> It allows the utilities to minimize disruption to communities and provide a critical signal to the market that the grid will be ready when they electrify.
- **Expandability and Phasing**: Developing scalable solutions allows grid buildout as demand increases and maximizes the usefulness of initial investments. Expandability also

<sup>&</sup>lt;sup>40</sup> Aligned with the process outlined in the approved Coordinated Grid Planning Process Proposal. See, Local T&D Planning Proceeding, Coordinated Grid Planning Process Proposal (December 27, 2022), p. 27.

<sup>&</sup>lt;sup>41</sup> For one potential example, see *supra*, Note 39.

<sup>&</sup>lt;sup>42</sup> Proactive Planning Proceeding, Order, p. 11.

<sup>&</sup>lt;sup>43</sup> I.e., planning a number of years into the future commensurate with the timescales addressed in long-term policy targets for all electrification market sectors in aggregate as well as other loads outside the scope of this proceeding (e.g., non-electrification load growth).

<sup>&</sup>lt;sup>44</sup> Environmental Defense Fund, *Pro-Active Grid Investment Assessment*, November 6, 2024.

reinforces the idea that initial solution design should consider the long-term need and will spread costs over time, which mitigates risk by allowing for adjustments as load materializes.

- **Right-sizing**: Proactively preparing the electric system for load growth and interconnection requests supports customers seeking to electrify in phases, such as a fleet that will electrify as their vehicles reach end-of-life or a building that might electrify heating today but will install EV chargers in the future. This can help avoid disruptive sequential investments, contain costs, and support timely customer electrification.<sup>45</sup>
- Alternative technologies: Incorporating alternative technologies can provide innovative solutions to serving grid needs, optimize grid performance, and reduce costs or delays where applicable. Alternative technologies include advanced technologies, such as managed charging, load management, and energy storage. Section IV.B.3 explains how utilities will consider alternative technologies.
- **Optionality**: Designing solutions with multiple pathways and choices. For example, a new substation that is capable of expanding capacity and/or integrating energy storage to enhance flexibility and adaptability. This optionality is essential to accommodate technological advancements, regulatory changes, or shifts in demand and mitigates risks if conditions change.

These best practices align with the guiding principles of this proposed Framework by developing cost-efficient solutions that prioritize supporting customers today while working towards a long-term solution. Proactive Planning improves construction planning and avoids the higher costs associated with reactive and piecemeal sequential construction activities. For infrastructure projects, many costs are civil engineering-related, such as excavation and laying conduits. Constructing projects "just in time" as customers submit load letters can lead to repeated street excavation, increasing costs and causing customer and community impacts. A "dig once" design philosophy can help mitigate those cost inefficiencies and disruptions.

<sup>&</sup>lt;sup>45</sup> For further information, refer to research from the Electric Power Research Institute. Designing Distribution Systems to Enable Deep Decarbonization: An Introduction to Right-sizing the Distribution System to Meet Future Needs. August 2024. Accessed at https://www.epri.com/research/products/000000003002030782

These best practices also support the Project Eligibility Criteria in Section IV.C to address risks of over- or underbuilding, minimizing risks of delayed action, and maximizing benefits of early action.

#### B.3 Considering Alternatives in the Solutions Development Process

The Commission directed the Joint Utilities to consider "alternatives in the solutions development process to final plans [so that plans] are developed at least cost to ratepayers."<sup>46</sup> Existing utility planning and solution development processes include consideration of alternative solutions, such as alternative and advanced technologies. Leveraging alternative technologies may provide additional value, such as the potential for energy storage to support renewables integration. The utilities will consider alternatives to traditional grid infrastructure solutions that meet the utility's planning criteria – such as energy storage, other advanced technologies, and non-wire alternatives (NWAs) – to mitigate the risk of inadequate infrastructure. These alternative approaches may also provide a near-term solution to complement a long-term solution, such as interim planning requirements, including the bridge-to-wires approach.

Utilities will evaluate advanced technology opportunities prior to finalizing their solutions to address grid constraints. The utilities will employ the framework proposed in the Joint Utilities' Energy Storage Framework Filing when proposing solutions that incorporate utility-integrated storage. As they gain the needed experience, the utilities may incorporate additional planning considerations, such as future flexible demand programs<sup>47</sup> and flexible interconnection.<sup>48</sup>

<sup>&</sup>lt;sup>46</sup> Proactive Planning Proceeding, Order, p. 11.

<sup>&</sup>lt;sup>47</sup> While managed charging shows promise as an effective load management tool, there is extremely limited data on EV charging patterns by vehicle class and use cases in the State, especially for the limited number of MHDVs on the road today since the Joint Utilities have only just begun to collect charging data on a 24-hour basis for customer commercial managed charging as part of programs launched in 2024. However, customer load management solutions have been demonstrated as effective tools to speed interconnection timelines.

<sup>&</sup>lt;sup>48</sup> See Case 24-E-0165, *Proceeding on Motion of the Commission Regarding the Grid of the Future*, for more information on how DPS Staff is engaging stakeholders to develop a plan for the deployment of flexible grid resources.

#### **B.4 Managing Risks and Realizing Benefits**

The Commission requests that the Joint Utilities "provide input on the magnitude of the risk of potentially stranded or underutilized assets, as well as approaches to manage this risk."<sup>49</sup>

There are risks in both building early as well as building late. However, the risks are asymmetric: although the likelihood of load increasing earlier or later than expected may be similar, the negative impacts of delayed action are worse than those of early action. Where infrastructure is needed, building it early is better than not building it early enough. Late action risks delay in serving customer electrification and achieving policy goals, sometimes by years (given major substation upgrades can take up to ten years to complete from project initiation).<sup>50</sup> This has negative consequences for the customers who have to delay their projects, which in some instances may result in loss of government funding commitments or fines for non-compliance with mandated targets. Delays can also slow progress towards policy goals and signal to the market that the grid will not be ready to support electrification load. Delayed action to support load can also result in higher-cost piecemeal investments. For example, without adequate lead time to implement holistic solutions with a "dig-once" approach, utilities may be required to implement less optimal, sometimes short-lived, near-term solutions that are faster to implement, but subsequently need to build additional infrastructure to serve longer-term loads. An example of this is noted in Con Edison's Urgent Projects Filing.<sup>51</sup>

Alternatively, early action impacts will be positive since infrastructure will go into service when complete and can signal to customers and the market that they can confidently electrify. Early action can also increase capacity for other loads or create other benefits like improved reliability, resiliency, and integration of energy storage and renewables. The incremental cost of building early is ultimately offset by the benefits provided by preparing the grid for electrification. Additionally, as noted by many stakeholders,<sup>52</sup> grid capacity will be

<sup>&</sup>lt;sup>49</sup> Proactive Planning Proceeding, Order, p. 9.

<sup>&</sup>lt;sup>50</sup> Significant delays have resulted due to rapidly increasing electrification loads. For example, commercial customer load interconnections were paused in the Netherlands in 2023, in part due to the rapid rise of electrification loads. (https://www.woodmac.com/news/opinion/netherlands-gridlock/)

<sup>&</sup>lt;sup>51</sup> To address growing loads in the Southeast Bronx network fed by the Parkchester No. 1 substation, Con Edison elected to advance substation upgrades rather than implementing a load transfer in the near term since the substation upgrades would still be required in the long term. With a "just-in-time" planning approach, there would not be adequate time to implement the substation upgrades, and both the load transfer and substation work would be needed to serve near- and long-term loads.

<sup>&</sup>lt;sup>52</sup> Proactive Planning Proceeding, Order, Appendix p. 11.

attractive to many customers, including those engaged in economic development activities, as electrification technologies and State and local regulations evolve.

Building on the criteria in the Joint Utilities' Urgent Projects Evaluation Criteria filing<sup>53</sup> and the best practices detailed above, the utilities intend to use several approaches to manage risks:

- Directing customers to areas with capacity while building in areas where capacity will be constrained through strategies like advisory services, preliminary site assessments, and publishing hosting capacity maps.
- Leveraging robust granular load forecasts and early customer engagement to optimize investment timing.
- Load-sensitivity planning, considering which infrastructure is most impacted by increases in load.
- Phasing projects, when possible, with expandable designs.
- Building to a long-term solution, rather than with piecemeal sequential investments, when confidence in need is high.
- Leveraging mitigation solutions to provide near-term capacity and inform the long-term solution where possible (e.g., advanced technologies).
- Promoting projects and/or locations that have multiple benefit streams (e.g., improving reliability and resiliency, serving Disadvantaged Communities).
- Conforming to concrete State mandates, regulations, or laws, and regularly reviewing relevant State policies that inform assumptions (see Section IV.A) and requirements informing Planning and Solution Design.

## C. Stage 3 – Project Eligibility and Prioritization Criteria

The Commission directed that the Proactive Planning proposal shall "propose criteria by which projects shall be evaluated,"<sup>54</sup> and "include details such as the cost, urgency, certainty, location, site type, alignment with CLCPA objectives, primary driver of upgrade, and

<sup>&</sup>lt;sup>53</sup> Proactive Planning Proceeding, Joint Utilities' Proactive Planning Urgent Upgrade Projects Evaluation and Funding Proposal (November 13, 2024), pp. 5-6.

<sup>&</sup>lt;sup>54</sup> Proactive Planning Proceeding, Order, p. 12.

expandability potential." The Commission also required the inclusion of criteria to "incorporate and prioritize impacts to disadvantaged communities and consistency with the State's greenhouse gas emissions reduction objectives."<sup>55</sup> Table 2 summarizes the Project Eligibility Criteria that any project must meet to be eligible for consideration in this proceeding. Additional criteria that will support the prioritization of projects are shown in Table 3. This Joint Utilities' proposal builds off the Joint Utilities' Urgent Project Evaluation Criteria filing submitted in November; examples of how utilities may demonstrate criteria compliance are included in that filing.<sup>56</sup>

## C.1 Project Eligibility Criteria

Proactive Planning Project Eligibility Criteria	Description
Upgrade Required to Support Electrification	Demonstrate that an upgrade project is required to serve anticipated electrification load from transportation, buildings, industrial load, or economic development. Eligible projects will include those enabling achievement of laws and regulations requiring electrification. These requirements can be demonstrated by one or a combination of the load assessments discussed in Section IV.A. <sup>57</sup>
Need to Begin Construction- Related Activities Urgently	Demonstrate that Construction-related Activities <sup>58</sup> must commence within 18 months of filing date (i.e., before approval of projects in the next Proactive Planning Cycle) to avoid the risk of delay for customer electric load connection.

#### **Table 2: Proactive Planning Project Eligibility Criteria**

<sup>&</sup>lt;sup>55</sup> Proactive Planning Proceeding, Order, p. 12.

<sup>&</sup>lt;sup>56</sup> Proactive Planning Proceeding, Joint Utilities' Proactive Planning Urgent Upgrade Projects Evaluation and Funding Proposal (November 13, 2024), pp. 2-6.

<sup>&</sup>lt;sup>57</sup> This replicates the approach used for the Joint Utilities' Urgent Project Criteria Filing, in which the utilities described how system forecasts, granular load studies, and customer information could be used to identify needs.

<sup>&</sup>lt;sup>58</sup> See Note 16, *supra*.

## C.2 Prioritization Criteria

Proactive Planning	Description		
Prioritization Criteria			
Degree of Certainty	Demonstrate an appropriate degree of certainty of the need for each project based on location, magnitude, and timing of expected load. Utilities will seek to forecast load aligning with concrete policy mandates.		
Consideration of Risks and Benefits	Demonstrate how a Proactive Planning project (1) is appropriately sized to address risks related to forecast uncertainty and (2) minimizes risks of delayed action and/or considers benefits of early action in making proposed upgrades. This criterion includes information such as a project's phasing and expandability potential.		
Alignment with State Law Objectives	Demonstrate consistency with the objectives of State laws, such as the CLCPA regarding greenhouse gas emissions reductions, impacts to Disadvantaged Communities, and State electrification policies. Where projects will affect one or more Disadvantaged Communities, proposals will discuss how projects will impact and benefit those communities (e.g., through capacity created for beneficial electrification, localized reductions in emissions, and noise pollution abatement).		
Qualitative and/or Quantitative Benefits	Demonstrate direct and indirect project benefits, including enabling electrification consistent with policy and improvements in resiliency and reliability.		
Costs	Assess costs, including initial capital and operating expenditures.		
Availability of Alternatives	Assess inclusion of alternative designs, advanced technologies, or bridge-to-wires solutions.		
Locations or Site Types	Leverage stakeholder engagement throughout this proceeding, including Annual Stakeholder Technical Conferences, to provide qualitative input into areas or site types to prioritize (e.g., Industrial Business Zones in New York City may be priority locations within Con Edison's territory, based on input from the City of New York) <sup>59</sup> to supplement utility planning and solution design.		
Project Timelines and Financials	Assess project timelines and financials (e.g., revenue requirement over time).		

## **Table 3: Proactive Planning Prioritization Criteria**

<sup>&</sup>lt;sup>59</sup> MHD Proceeding, Comments of the City of New York (filed June 5, 2023), pp. 5-7.

#### D. Stage 4 – Proposal and Project Authorization

In the Order, the Commission directed the Joint Utilities to propose a "procedural approach for the Commission's consideration of transmission and distribution upgrade investments, which shall evaluate options for requesting approval outside of rate case proceedings."<sup>60</sup> To support customers, policy achievement, and allow flexibility needed as load increases rapidly, the Joint Utilities propose a two-category procedural approach to pursue investments outside of the rate case process.<sup>61</sup>

## D.1 Flexible Approval Process Benefits Customers and Policy Achievement

Infrastructure upgrades needed to support electrification vary widely in scope, schedule, cost, and urgency. A flexible approval process that is tailored to the diversity of infrastructure projects that utilities will propose can balance the need for a nimble process with the need for appropriate transparency, stakeholder engagement, and regulatory oversight of utility investments.

The Joint Utilities propose a two-category approach to support timely execution and optimization of the approval process, with appropriate oversight and transparency on all projects, including a significant focus on the larger projects. These categories, illustrated in Figure 2, below, include a: (1) Large Project Category; and a (2) Small Project Category. Utilities will have an annual opportunity to file project proposals in the Large Project Category (when needs arise), with Commission review and decision on those filings. For projects in the Small Project Category, utilities may propose a two-year budget for Commission authorization. All projects, regardless of authorization mechanism, would be subject to the Project Eligibility Criteria, as defined in Section IV.C.

<sup>&</sup>lt;sup>60</sup> Proactive Planning Proceeding, Order, p. 9.

<sup>&</sup>lt;sup>61</sup> To allow for coordination with rate cases, utilities will include in future rate case filings a reference to Proactive Planning utility filings and Commission orders.



## Figure 2: Two-category Project Authorization Process

The Large Project Category<sup>62</sup> would follow an annual standard review process, giving utilities an opportunity to propose projects during a single annual filing window, similar to the Urgent Projects Filings submitted in this proceeding.<sup>63</sup> The proposals in the first Cycle filing are estimated to occur in Q4 2025, illustrated in Figure 1. Utilities will have the option, but not the obligation, to submit project proposals in any given Cycle. As outlined in Section IV.C, the filings will detail how each project meets the Project Eligibility Criteria and aligns with the Prioritization Criteria, including an evaluation of risks and benefits, and the required characteristics, such as evaluation of alternatives considered. The following example projects are typical of what would be included in the Large Project Category:

- Extending or building new primary feeders to a hotspot;
- Area substation or sub-transmission upgrades; or

<sup>&</sup>lt;sup>62</sup> For example, some projects from Con Edison's Urgent Projects Filing as part of this proceeding that meet the criteria for the Large Project Category include: Zerega Avenue Electrification Hotspot, Hunts Point Electrification Hotspot, Steinway (LGA) Electrification Hotspot, East New York Electrification Hotspot, Parkchester No. 1 Area Station upgrades, Parkchester No. 2 Area Station upgrades, and Mott Haven Area Station upgrades.

<sup>&</sup>lt;sup>63</sup> As stated in the Order, if needs emerge that cannot wait until the next cycle, utilities may make filings off-cycle. The Joint Utilities propose commission approval within 120 days of filing.

### • A new substation.

The Large Project Category allows for Commission and stakeholder review of significant infrastructure investments. When submitting Cycle 1 proposals, the Joint Utilities will propose a threshold (e.g., where project costs exceed a certain percentage of a utility's revenue requirement), which will allow scaling across various utility contexts. A single timeframe for Commission approval of projects across the utilities allows for the necessary coordinated approach to holistically address electrification needs across the State at once.

The **Small Project Category**<sup>64</sup> operates in the same way as a programmatic budget. As shown in Figure 1, in Q4 2025, the utilities will have the opportunity to propose a two-year Small Project Category Budget. The Joint Utilities propose that Commission authorization for a utility's Small Project Category Budget could occur concurrently with a Commission decision on Cycle 1 projects for the Large Projects Category (i.e., in the same Order). Small Project Category Budget proposals will include a description of the specific types of projects and programs that would qualify for authorization under this budget and demonstrate budget expenditures are not already authorized under another proceeding.

The following illustrative examples demonstrate certain types of projects or programs that qualify under the Small Projects Category:

• *Incremental New Business:* Increase in new business expenditure (in line with utilities' obligation to serve customers) relative to a utility's authorized budget under its rate case. For instance, this could include incremental expenditure to accommodate new customer plans in response to new policy mandates or other market trends, or requirements for higher-voltage service not reflected in historical new business budgets. Additionally, this could include *future-proofing new business requests* to accommodate phased customer electrification over time, such as fleets electrifying through vehicle replacement schedules.<sup>65</sup>

<sup>&</sup>lt;sup>64</sup> For example, projects from Con Edison's Urgent Projects Filing as part of this proceeding that meet the criteria for the Small Project Category include: New Business Capital Urgent Proactive Funding and Proactive Planning Transformer Program.

<sup>&</sup>lt;sup>65</sup> As an example, the Metropolitan Transportation Authority (MTA) describes their replacement schedule in the document 2024 MTA Zero Emission Transition Plan, p 52. https://new.mta.info/document/138261

- *Equipment Right-Sizing:* Right-sizing equipment with higher capacity to create appropriate additional capacity for future needs during planned equipment replacements (e.g., service transformers);
- Preliminary engineering; or
- Granular load studies and data.<sup>66</sup>

The Joint Utilities propose a two-pronged approach to provide regulatory oversight of the Small Project Category. First, a utility using a Small Project Category budget would file an annual program status report with the Commission. The program status report would include a summary of funds spent, projects in progress and completed, and indicate if a change to the next two-year program budget is required.<sup>67</sup> Second, if a utility identifies a need to use the Small Project Category budget for projects or programs outside the specific types proposed in its two-year budget filing, they will submit a filing letter to DPS Staff justifying the need. The letter would describe the work planned, including the scope, cost, and timeline, and how the projects meet Project Eligibility Criteria. If DPS Staff does not respond to the filing letter within 30 days, the utility may proceed with the new project or program.

## D.21 Cost Allocation

The Joint Utilities propose maintaining cost allocation principles consistent with mechanisms under each utility's respective Commission rate case cost recovery requirements and/or tariffs. Each utility will provide more specific cost allocation details or updates to individual utility cost allocation proposals or principles as needed in its company-specific projects filing.

## D.3 Cost Recovery

The Joint Utilities respectfully request that, no later than 120 days after a utility submits a project proposal through the Large Project Category, the Commission authorize cost recovery for the development and construction of the proposed project(s). Without timely and appropriate approval, utilities may not be able to start development for these electrification projects.

<sup>&</sup>lt;sup>66</sup> Cost treatment for recovery of infrastructure projects and of load studies will be determined through standard utility accounting practices, as outlined in Section IV.D.3.

<sup>&</sup>lt;sup>67</sup> The Small Project Category Budget will remain the same in the next two-year period if a utility does not request a change.

Consequently, customers' electrification requirements may not be met. Pre-determined timelines for stakeholder input and Commission action provide the utilities with the appropriate assurances to begin and deliver projects in a timely manner.

The Joint Utilities propose to recover the incremental revenue requirement associated with projects approved in this proceeding through a company-specific surcharge.<sup>68</sup> Each utility would then incorporate the revenue requirement of the remaining costs, inclusive of prior costs not yet recovered via surcharge, into base rates when the utility's rates are reset.<sup>69</sup> Utilities will file tariff revisions, if needed, to implement the relevant surcharge mechanism. The Joint Utilities also propose to have the option to either (1) include 100 percent of Construction Work in Progress (CWIP) in rate base on a current basis (i.e., as capital is spent), or (2) accrue Allowance for Funds Used During Construction (AFUDC).<sup>70</sup> If seeking CWIP in rate base on a current basis, a utility will provide sufficient justification for doing so.

Cost treatment of expenditures, and associated recovery as capital or operations and maintenance (O&M), would be determined through the standard utility accounting practices.

#### D.4 Additional Revenue Requirement and Incremental Revenues

Evaluation of project costs and potential customer impacts should consider the timing of cost recovery and positive contributions from incremental delivery revenues as customers electrify. For an approved project, cost recovery (incremental revenue requirement) would begin when the project has been placed into service or as construction progresses, depending on the authorized cost recovery mechanism. While the capital expenditures for an approved project occur across roughly one to ten years, the incremental revenue requirement would be collected over the book life of the project asset(s) – typically several decades.

<sup>&</sup>lt;sup>68</sup> Each utility will propose a surcharge mechanism. Project costs will be reflected in base rates either in the rate case following a project filing or the rate case following the year in which assets are placed in service.

<sup>&</sup>lt;sup>69</sup> Consistent with current utility practices, once a project's revenue requirement is integrated into base delivery rates, the impact of any incremental delivery revenues would be accounted for through the Revenue Decoupling Mechanism (RDM). Base delivery rate revenues are reconciled through the RDM surcharge. This surcharge is used to reconcile the delivery revenues that a utility collects from customers to the delivery targets approved in the utility's rate case. If a utility collects more revenue than its delivery targets, then the utility would return the excess to the customers through an RDM credit. If the utility collects less revenue than its delivery targets, then the utility would charge the difference to customers through the RDM as a surcharge. This reconciliation is performed annually.

<sup>&</sup>lt;sup>70</sup> For utilities that choose to accrue AFUDC until the project enters service, the surcharge magnitude will be limited and likely only needed for smaller projects that go into service within a single rate period.

Incremental delivery revenues associated with customers connecting the new electrified load to the grid would be realized over a similar timeframe and help offset customer bill impacts from utility infrastructure projects to support electrification. Given the rapid rate at which electrification loads are expected to materialize, the timing of incremental revenues is a unique benefit to infrastructure projects that support customer electrification, such as those contemplated in this proceeding. However, incremental revenues should not be used as a planning or project evaluation criteria, consistent with other infrastructure investments utilities make. The Joint Utilities propose that filings seeking authorization of Large Projects would include an analysis of incremental revenue requirement and incremental revenue to provide a better understanding of customer bill impacts and likely offsets.<sup>71</sup> Utilities will develop a methodology for assessing the incremental revenue requirement and revenues in consultation with DPS Staff.

Budget proposals for Small Projects, however, would not include the level of specificity needed to estimate project revenue requirement or incremental delivery revenues (e.g., project capital expenditure, in-service date, incremental electricity consumption).

#### V. Stakeholder and Community Engagement

The Joint Utilities propose a stakeholder engagement process that incorporates lessons learned and best practices from past experiences and applies them to the needs of the Proactive Planning Proceeding.<sup>72</sup> The objective is to create a process that keeps stakeholders well-informed and engaged, and provides opportunities for input in each cycle while maintaining the pace needed to satisfy customers' electrification timelines and urgent needs.

For stakeholders interested in engaging with this proceeding, the Joint Utilities propose an Annual Stakeholder Technical Conference during Stage 1 – the load assessment stage – of each cycle. The Joint Utilities propose to develop the agenda in collaboration with DPS Staff. The Annual Stakeholder Technical Conference would address the evolving electrification needs of the State and stakeholder feedback. An agenda for the first Annual Stakeholder Technical Conference in Q2 2025, as well as an agenda for future cycles, may focus on the topics listed in

<sup>&</sup>lt;sup>71</sup> Depending on data availability, analyses may be more appropriate or feasible at the portfolio level.

<sup>&</sup>lt;sup>72</sup> See either National Grid's Upstate Upgrade or Con Edison's Idlewild substation for examples of communications and community engagement efforts relating to utility projects. They can be accessed at https://upstateupgrade.nationalgrid.com/ and https://www.coned.com/en/our-energy-future/our-energyvision/where-we-are-going/idlewild-project

Appendix 3. The Annual Stakeholder Technical Conference would also serve as another opportunity for customers to share electrification plans with the Joint Utilities to help identify possible hotspot areas for future study.

This proceeding will directly benefit communities by enabling electrification. Utilities additionally have best practices for community engagement in project development,<sup>73</sup> such as engaging with local representatives, community boards, government agencies, civic associations, businesses, and residents during the project development process, which also includes necessary communications through a variety of channels such as websites and mailings.

#### VI. Conclusion

The Joint Utilities appreciate the opportunity to submit this *Joint Utilities Long-Term Proactive Planning Framework* proposal and request the Commission to approve the proposal as discussed herein such that necessary activities may occur on the timeline proposed in 2025. Dated: December 13, 2024

Respectfully submitted,

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<sup>&</sup>lt;sup>73</sup> *Ibid*.

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# VII. Appendices

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Appendix 1	Characteristics,	Benefits, and	l Drawbacks of	Various Load	Assessments and 1	Data Sources
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Load Assessment	<b>Granularity</b> ("High" is preferred for Proactive Planning)	Level of the system being forecasted	Assumes full State policy compliance? ("Yes" is preferred for Proactive Planning)	Other Benefits for Proactive Planning	Other Drawbacks for Proactive Planning
Source 1: Load	Forecasts Develo	pped in Other Pr	oceedings	-	·
Utility electric load forecast	Medium to High	Distribution and Transmission <sup>74</sup>	May vary	Methodology refined over decades	
NYISO	Low (zonal)	Transmission	Varies by scenario <sup>75</sup>	Consistent with forecast driving transmission reliability and capacity projects	
Outputs of the CGPP	Low (zonal)	Generation and Transmission	Yes (i.e., three policy-compliant scenarios)	Consistent with forecasts identifying transmission, local transmission, and distribution projects to deliver clean energy	New process; forecast not yet available Updated every three years

<sup>&</sup>lt;sup>74</sup> Use of the utility electric load forecast for transmission planning varies across utilities. While this forecast identifies loads that could impact both the transmission and/or distribution level of the system other than local transmission operator plans, transmission needs are largely informed by the NYISO forecast and the CGPP.

<sup>&</sup>lt;sup>75</sup> The NYISO and the utilities generally use the NYISO's Baseline forecast, which does not assume full State policy compliance, for system planning purposes. The NYISO provides a forecast of a Policy Scenario that is meant to reflect achievement of state policy targets, and may be more appropriate for Proactive Planning.

Load Assessment	<b>Granularity</b> ("High" is preferred for Proactive Planning)	Level of the system being forecasted	Assumes full State policy compliance? ("Yes" is preferred for Proactive Planning)	Other Benefits for Proactive Planning	Other Drawbacks for Proactive Planning
Source 2: Botton	n-Up Forecast oj	f Granular Electi	ric Demands		
Utility granular load studies	High	Distribution	Yes	Can be tailored to use cases or geographies in need of additional study	Scalability may vary (e.g., across a utility's service territory) Bottom-up forecasting methodologies are more data- and labor-intensive than top- down forecasting. Such forecasts generally cannot be developed system- wide on an annual basis, as is the case with traditional forecasts. Use case-specific studies do not consider all load types. Methodologies may necessarily vary (e.g., depending on the use case or geography)
Source 3: Custo	mer Information	and Other Sourc	es		
Customer requests or electrification plans	High	Individual services	Varies	Establishes increased certainty of existing and future loads May identify areas where utilities should prioritize future granular load studies	Difficult to obtain ahead of time to address proactively <sup>76</sup> Not scalable as few customers have detailed plans Plans have less firm commitments than interconnection requests, requiring additional utility validation May not consider all load types

<sup>76</sup> Experience to date across the Joint Utilities shows customers typically provide load requests or plans when the capacity will be connected imminently; even the most sophisticated customers have not developed well-formed multi-year electrification plans.

Load Assessment	<b>Granularity</b> ("High" is preferred for Proactive Planning)	Level of the system being forecasted	Assumes full State policy compliance? ("Yes" is preferred for Proactive Planning)	Other Benefits for Proactive Planning	Other Drawbacks for Proactive Planning
State agency data and plans	Medium	n/a	Varies	May identify areas where utilities should prioritize future granular load studies	Availability limited May not consider all load types
Non-utility granular load studies	Medium to High	n/a	Varies	May identify areas where utilities should prioritize future granular load studies	May lack context from specific utility service territories May have limited visibility to methodology/data May not consider all load types

#### Appendix 2 The Proactive Planning Process and Interactions with the CGPP

A full framework proactive planning process and the CGPP will share load projections and grid models where investments approved in one process are considered in the planning and solution design in the other:



One-Time: Pre-Cycle Technical Conference (proposed for Q1 2025)	<ul> <li>Topics such as:</li> <li>How this long-term planning process will be implemented</li> <li>Project considerations in advance of utility Large Project filings, such as benefits to communities</li> <li>Forecasting methodologies and sharing best practices</li> </ul>
Annual: Stakeholder Technical Conferences (proposed Q2 of each year starting in 2025)	<ul> <li>Topics such as:</li> <li>Granular load study results</li> <li>Hotspot identification</li> <li>Coordination across utility boundaries</li> <li>Building electrification needs</li> <li>Updates on construction progress</li> <li>Benefits to communities</li> </ul>

## Appendix 3Preliminary Technical Conference Agendas