



Department of Public Service

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August 31, 2022

Hon. Michelle Phillips
Secretary to the Commission
New York State Public Service Commission
Three Empire State Plaza
Albany, NY 12223-1350

Re: 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.

Dear Secretary Phillips:

Materials from the virtual technical conference held on August 30, 2022 are enclosed. A recording of the conference is available at <https://youtu.be/gij8oc8oEqM>. A link to the presentation and recording of the conference will also be available on the Coordinated Grid Planning Working Group webpage: <https://on.ny.gov/3LOMzy5>.

Sincerely,

Jalila Aissi
Assistant Counsel



UTILITIES OF NEW YORK

Coordinated Grid Planning Process (CGPP): Solutions Development and Selection

August 30, 2022, 1:00pm



nationalgrid

 **Orange & Rockland**
Rockland Electric Company

 **conEdison**

 **PSEG** **LONG ISLAND**

 **Central Hudson**
A FORTIS COMPANY



Agenda

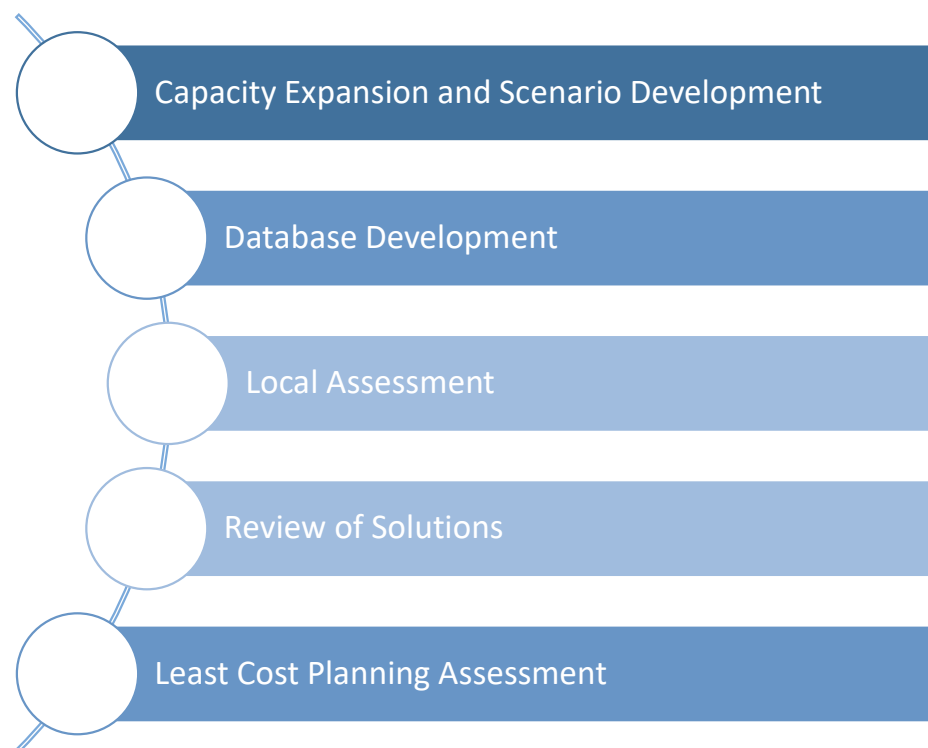
- Context Setting (CGPP Overview)
- CGPP Objective
- CGPP Timeline
- Overview of Solution Development Process
- Need Identification and Solution Development
- Coordinated Review of Solutions
- Least Cost Planning Assessment
- Submission of Recommendations
- Next Steps, Q&A

Context Setting: The Utilities welcome feedback from stakeholders

- The Utilities' plans for the CGPP remain in development
- This Technical Conference (and others in the series) present a valuable opportunity to gather stakeholder input and feedback
- The slides presented in today's discussion represent the Utilities' plans and thinking as of today and are not final
- Today's discussion will focus on Solutions Development and Selection in the CGPP process
- *Note:*
 - The period for submitting comments re: the CGPP is open through December 21, 2022
 - The Utilities plan to submit a revised plan for the CGPP on January 1, 2023

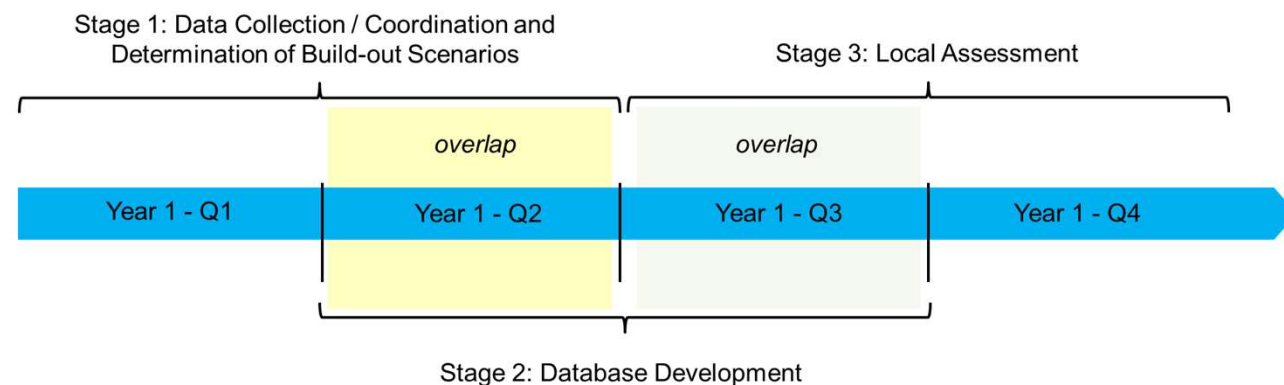
Recap: Objectives of the CGPP

- The goal of the Coordinated Grid Planning Process (CGPP) is to identify expansion of the local transmission and distribution systems that can help unlock renewable capacity and energy for the purpose of meeting New York State clean energy goals (*i.e.*, the CLCPA mandates)
- CGPP will serve as the basis for the statewide integrated resource planning process

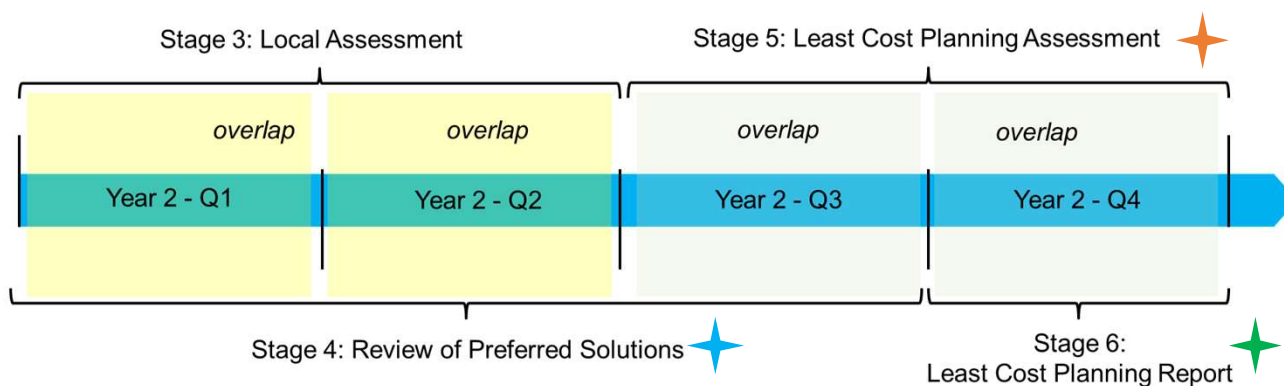


Timing of Solution Development and Selection

Year 1



Year 2



- The Utilities are currently developing the timing of the CGPP
- The schedule is subject to change

Overview of Solution Development Process

- Solution development will occur as three steps, summarized below and described in more detail on the following slides:
 1. Using coordinated power flow cases, each utility will identify beneficial projects
 2. Power flow models will be developed that include all projects identified by all of the utilities to screen for overlap or negative interaction at the local level, with project adjustments as needed
 3. Updated power flow models including all projects will be used to screen for negative impacts to the bulk power system and evaluate whether a regional transmission solution could satisfy the identified needs
- Once the review of the portfolio of projects is complete, a least cost planning assessment will be performed to identify and rank the projects necessary to achieve the state mandates

Need Identification and Solution Development

- Using the scenarios and power flow databases developed in the previous CGPP stages, local, regional and national planning standards would be applied to identify limitations on the local systems ability to support the CLCPA targets
- All options to address the constraints will be considered, with the goal of identifying the most cost-effective upgrades, including:
 - Local T&D infrastructure, Bulk transmission, Non-Wires Solutions, Energy storage, Other advanced technologies (GET identified by ATWG) and hybrid approaches
- Initially solutions would be developed individually by each utility considering the needs of the CLCPA. Initial consideration would evaluate:
 - Ability to address the need with consideration of the amount of additional capability (headroom) created
 - Commonality of solutions across scenarios

Need Identification and Solution Development (2)

- Solution development would follow similar process to other planning efforts and would consider
 - Cost (targeting +50/-25 percent estimate accuracy)
 - Constructability (property rights, environmental impact, permitting, outages)
 - Schedule, ability to meet required in service date
 - Operability
 - Expandability
 - Impacts on customer reliability and resiliency
 - Impacts/synergies with broader capital planning efforts

Coordinated Review of Potential Local System Impact or Alternatives

- The purpose of this step is to optimize across the portfolio looking for economies and unintended impacts from the local system perspective
- Building on the collaboration between the utilities occurring throughout the process up to this point, once each utility has individually identified the potential solutions in each generation pocket, additional power flow screenings occur.
 - Negative Interaction Screen: Proposed solutions will be added to the scenario power flow cases and a review of the local systems will be performed to identify potential interactions or conflicts, with projects modified or removed if necessary
 - Project Overlap Screen: Utilities will review the local system solution set and identify any potential to combine projects into more cost-effective solutions. This is particularly appropriate in areas where the local systems of more than one utility are closely tied.

Coordinated Review of Potential Bulk System Impact or Alternatives

- Continuing from the previous step, this step expands the review of the proposed solutions to assess the impact on the bulk system.
- Using power flow analysis that combines all proposed projects and leveraging the support of consultants to minimize the impact on the overall CGPP schedule, two additional screenings occur
 - Bulk System No Harm Screen: This is to confirm that the inclusion of the group of projects does not have any adverse impacts on the bulk system
 - Bulk Alternative Screen: Evaluate whether a regional transmission solution could satisfy the identified needs across multiple generation pockets, utility systems or regions more efficiently or more cost-effectively than the local solutions

Least Cost Planning Assessment

- This stage will be a final iteration of the capacity expansion model to integrate the headroom benefits and cost of proposed projects into the zonal model assumptions
- The models developed in the early stages of the CGPP will be rerun respecting headroom limitations on generation that can connect in each zone
- The model will be able to add energy and capacity headroom, but at a cost equal to that of the local T&D projects that must be completed to add the headroom
- The generation build-out may change if the cost of adding headroom is less than the cost to move generation to less cost-effective locations
- The projects that reduce the overall cost of achieving the CLCPA objectives will be proposed as the portfolio of solutions

Submission of Recommendations

- The Final CGPP Report will provide accurate and actionable information to the Commission, market participants, policy makers, and other stakeholders
 - The Report will identify and rank portfolios of solutions needed to ensure the timely and cost-effective attainment of CLCPA across the various generation build-out scenarios studied
 - The Report will identify Bulk System Needs for the Commission to consider addressing through the NYISO Public Policy Transmission Planning Process or in the NYPA Priority Transmission Process
- A comment period would be available for interested stakeholders to comment on the report
- Once comments have been considered the PSC may issue one or more orders

Q&A

