

M271: Coordinated Grid Planning Process Support Project

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Agenda

- Coordinated Grid Planning Process Overview
- M271 Project Scope of Work
- 2023 Project Timeline



Coordinated Grid Planning Process Overview



Coordinated Grid Planning Process Overview

In Case No. 20-E-0197,* the New York State Public Service Commission ("PSC") issued an order on September 9, 2021 that identified the minimum objectives of a Coordinated Grid Planning Process ("CGPP") as follows:

- Improve planning processes to better coordinate the studies performed by the Utilities with the NYISO's bulk power system planning and generation interconnection processes.
- Improve the integration of Local Transmission and Distribution ("LT&D") and bulk system studies with NYSERDA's renewable generation and storage procurements.
- Improve forecasting of renewable generation development for specific locations on the LT&D and bulk transmission grid.

* 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



"Utilities"

As referenced in the PSC Order, the "Utilities" include the Long Island Power Authority ("LIPA") and the following the Joint Utilities ("JU"):

- Central Hudson Gas & Electric Corporation ("Central Hudson")
- Consolidated Edison Company of New York, Inc. ("CECONY")
- Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid")
- New York State Electric & Gas Corporation ("NYSEG")
- Orange & Rockland Utilities, Inc. ("O&R")
- Rochester Gas and Electric Corporation ("RG&E")



Case 20-E-0197: CGPP Relevant Timeline

There is an enormous number of orders, filings, and comments in Case No. 20-E-0197. Here are a few selected entries relevant to today's CGPP discussion:

- May 14, 2020: PSC the initiating order in this proceeding in response to environmental policy objectives and related requirements set forth in the CLCPA and the Accelerated Renewable Energy Growth and Community Benefit Act September 9, 2021: PSC issued the order on Local Transmission and Distribution Planning Process and Phase 2 Project Proposals, including the development of CGPP and the minimum objectives
- December 17, 2021: the Utilities-filed an initial framework for CGPP
- DPS Staff hosted a series of nine technical conferences at which the Utilities explained the various steps and analyses included in the proposed CGPP and engaged in dialogue with stakeholders
- December 27, 2022: Utilities filed the updated CGPP
- August 17, 2023: PSC issued an order approving the CGPP, with modifications, that will enable the PSC and the Utilities to identify transmission investments needed to meet the objectives of the CLCPA



Brief Description of the Stages of CGPP

Utilities proposed 6 stages of CGPP:

- Data Collection and Determination of Scenarios;
- Network Model Development;
- Local Assessments;
- Review of Preferred Solutions;
- Least Cost Planning Assessment; and
- Least Cost Plan Report

Notes:

- The details of the stages can be found in the filing on Dec. 27, 2022. It is posted at <u>https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={45BD5A1F-9FDA-473F-8FCF-E5CE7A11A880}</u>
- PSC Order on August 17, 2023 approved the revised CGPP proposal with modification. The order is posted at <u>https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={101C058A-0000-C45D-9CD3-A87E49DF7A99}</u>



Energy Policy Planning Advisory Council ("EPPAC") - Responsibilities

- EPPAC will represent stakeholder interests from across New York State, and provide input and feedback on assumptions and the technical approach used in the CGPP analysis. Tasks include:
 - Provide input into any lessons learned from prior CGPP cycles for incorporation in future CGPP revisions.
 - Provide guidance to the Utilities in the selection of up to three distinct generation build-out scenarios
 - Inform the need for analysis of sensitivities that may be run on each of the three principal scenarios that may influence the generation build-out required to achieve CLCPA targets
 - Provide feedback on the input modeling assumptions used to design the electric system to achieve State objectives
 - Preview CGPP final report as it is being completed to ensure that any stakeholder perspectives that must be explained are captured appropriately



EPPAC Members as of October 11, 2023

- Alliance for Clean Energy New York
- Central Hudson Gas & Electric Corporation
- Consolidated Edison Company of New York, Inc.
- Energy Justice Law and Policy Center
- Environmental Defense Fund
- Grid United
- Independent Power Producers of New York, Inc.
- Long Island Power Authority
- LS Power Grid New York
- Municipal Electric Utilities Association
- National Grid Ventures
- New York Association of Public Power
- New York Battery and Energy Storage Technology Consortium
- New York City
- New York Department of State Utility Intervention Unit

- New York Independent System Operator, Inc.
- New York Offshore Wind Alliance
- New York Power Authority
- New York Solar Energy Industries Association
- New York State Department of Public Service
- New York State Electric & Gas Corporation
- New York State Energy Research and Development Authority
- New York State Office of Renewable Energy Siting
- New York Transco LLC
- NextEra Energy Transmission New York, Inc.
- Niagara Mohawk Power Corporation d/b/a National Grid
- Orange and Rockland Utilities, Inc.
- Rochester Gas & Electric Corporation
- Transource Energy, LLC



NYISO's Participation to Date:

- Participated in discussions with DPS staff, Utilities, and NYSERDA, including routine meetings and technical conferences held by DPS to discuss stages of the CGPP proposal
- Participated in discussion with DPS staff, Utilities, and NYSERDA on the development of capacity expansion model for the State Scenario
- Participated in EPPAC meetings on 9/19, 9/28, and 10/16
- Kicked off Project M271 (more details to follow)
- Proposed additional headcounts in 2024 for Transmission Planning Advisor and Long Term Planning Assessment Engineer



M271 Project Scope of Work



Business Need for the Project M271

The Utilities developed, and the PSC approved, the CGPP to identify and approve both bulk and local transmission needed to achieve the CLCPA goals.

Recognizing NYISO's role in planning for the New York Control Area, the PSC has also directed the Utilities to work with the NYISO in developing the CGPP, along with DPS Staff and NYSERDA.

The CGPP requires alignment with NYISO's Comprehensive System Planning Process, which may include, but not limited to:

- consideration of resource availability to support the CGPP;
- expansion of NYISO's tariff and manuals, if applicable; and
- utilization of NYISO databases



M271: CGPP Support Project

2023 project milestone: Issue Discovery

 Identify resources and process changes required to assist the state agencies and Utilities to complete CGPP

2024 project milestone: Define Study

- Adjust project scope according to the Utilities' upcoming filing in mid-2023
- Propose tariff and manual revisions to address the changes if required



Preliminarily Identified Areas for NYISO Participation in CGPP

- Participate as a member of EPPAC
- Conduct capacity expansion analysis
- Compile network model for each of the three scenarios under the CGPP
 - Total 36 power flow cases and three short circuit cases: 12 power flow cases for each scenario, including summer/winter/spring/light load for 2030, 2035, and year 20, and Short circuit system representation
 - JU plan to utilize a consultant for the first round, and then NYISO will compile the cases if we have resources
- Provide production cost simulation results of the State Scenario
- Administer Public Policy Transmission Planning Process
 - When PSC issues a PPTN, solicit, evaluate, and select a more efficient or cost-effective transmission solution
- Conduct Interconnection Studies in applicable NYISO Procedure



Scope of Work

In each CGPP stage, identify the following:

- Anticipated completion date (if stated in the PSC order)
- NYISO's participation
- NYISO planning process and/or study mechanism
- NYISO deliveries
- Estimated labor
- Tariff or Manual Revision, if applicable



Sample findings for Stage 1:

Anticipated completion date: June 30, 2024 for the first CGPP cycle, as stated in the PSC order

• NYISO's participation:

- Provide feedback on the selection of appropriate study scenarios as part of EPPAC
- Develop the capacity expansion model for the "State Scenario" based on the assumptions received from DPS staff and EPPAC and conduct model assessment.
- Following EPPAC's determination of the remaining two scenarios, the NYISO will develop the capacity expansion models, and conduct model assessment
- NYISO Planning process and study mechanism: Economic Planning Process. The State Scenario development is included in the System & Resource Outlook, while the remaining two scenarios would be conducted through Requested Economic Planning Studies
- NYISO deliveries: feedback to the scenarios and capacity expansion results
- Tariff revision: not required
- Manual revision: under consideration
- Estimated additional labor:
 - Capacity expansion model development and assessment for two additional CGPP scenarios
- Estimated labor: XX hours



	Description	NYISO's participation	NYISO Planning process and Study Mechanism	NYISO Deliveries	Estimated labor	Estimated process change
EPPAC						
Stage 1: Data Collection and Determination of Scenarios			n þ			
Stage 2: Network Model Development		50		-02		
Stage 3: Local Assessments				nic		
Stage 4: Review of Preferred Solutions		G				
Stage 5: Least Cost Planning Assessment		9		10		
Stage 6: Least Cost Plan Report			ral			
Total			101			



2023 Project Timeline



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2023 Anticipated Project Timeline

- Kickoff: Oct 24 ESPWG
- Preliminary findings: November 21 ESPWG
- Final presentation: December 19 ESPWG



Questions, Comments, & Feedback?

Email additional feedback to: YLin@nyiso.com



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Our Mission & Vision

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Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

