

Three Empire State Plaza, Albany, NY 12223-1350 www.dps.ny.gov

Public Service Commission

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January 28, 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:

The presentations from the virtual technical conference on the Coordinated Grid Planning Process held on January 27, 2022 are enclosed. As staff discussed in the conference, stakeholders who are interested in participating in future working group meetings concerning the development of the process should send their expressions of interest, contact information, and any feedback on the format of such meetings by February 3, 2022 to Jalila.Aissi@dps.ny.gov.

Sincerely,

Jalila Aissi Assistant Counsel

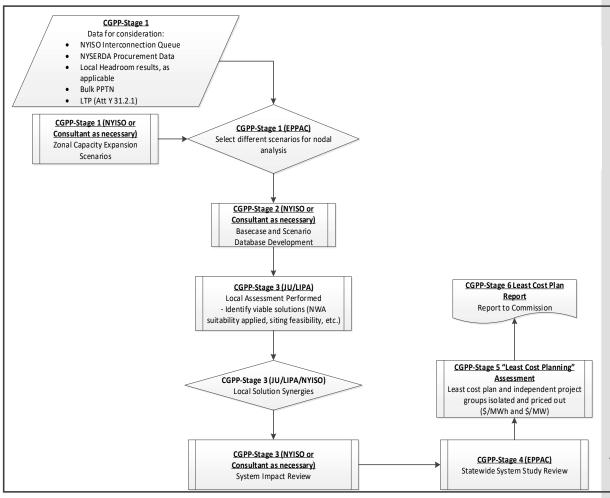
Technical Conference on Coordinated Grid Planning Process

Introduction: Tammy Mitchell, Department of Public Service

Questions:

- Webex: Use the chat feature in Webex to share your name and question.
- <u>Phone-Only</u>: After we have addressed the questions shared by chat, we will invite those participating only by phone to ask questions. You can then unmute your line by dialing *6.



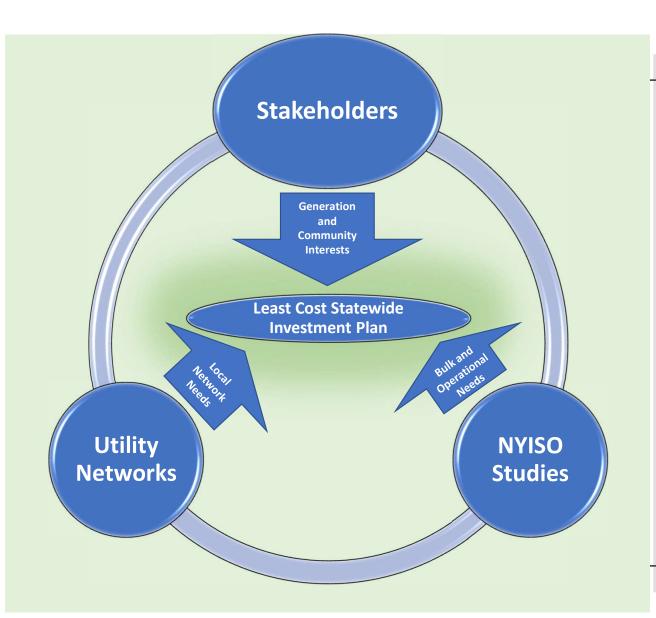


Coordinated Grid Planning Process ("CGPP")

Utilities will develop a wholistic planning procedure to enable New York's clean energy transition for submission by end of 2022.

CGPP will facilitate NYSERDA procurement and harmonize individual system studies.

CGPP produces a least cost Statewide investment plan for rate payers.



Collaboration & Engagement

Consistent study *inputs* will provide consistent study *outputs*

Study Assumptions.

- NYISO and Stakeholders consulted
 - Load and Generation buildout scenarios
 - Critical modeling assumptions
 - Community interest

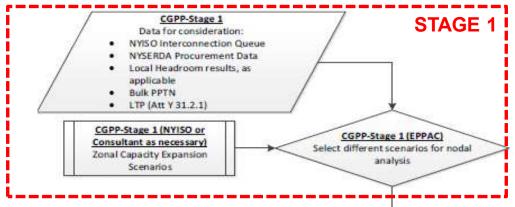
Outputs:

- Local needs collectively reviewed and addressed by utilities; "on-ramps" and "off ramps"
- NYISO bulk system impacts reviewed
- Preserves NYISO planning responsibility

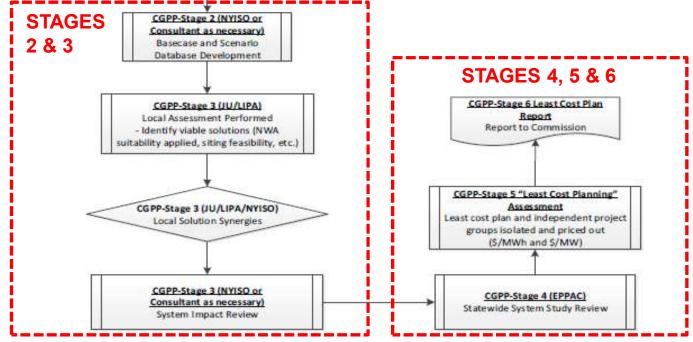
CGPP will inform the market and policy makers on cost and viability of future interconnections.

Coordinated Grid Planning Process

- CGPP will be a repeatable, end-to-end planning process for evaluating local transmission and distribution system needs
- CGPP will improve the coordination among individual utility plans and analyses conducted by the NYISO
- CGPP will identify a cost-effective transmission investment plan for achieving the CLCPA
 - Considers tradeoffs among generation, transmission, and non-wires alternatives (NWAs)

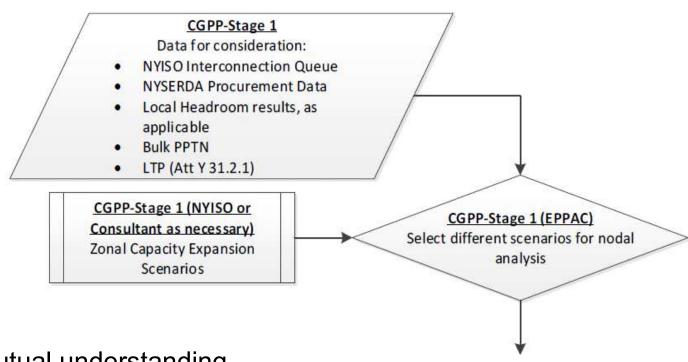


Conceptual Coordinated Grid Planning Process



CGPP – Stage 1

- Generation build-out scenarios will be reviewed with EPPAC
- Most up to date information and forecasts will be considered



 EPPAC will facilitate mutual understanding of power system characteristics and individual project development

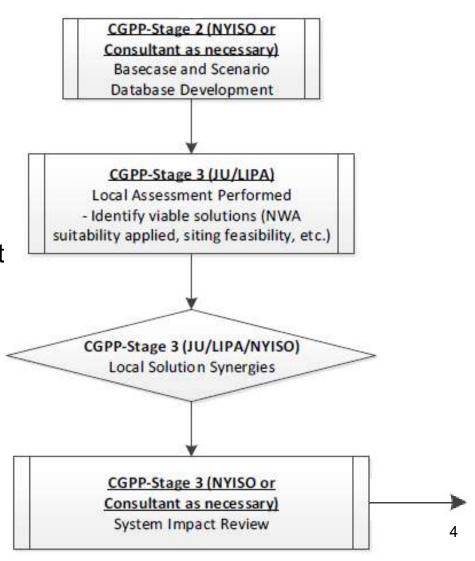
CGPP – Stages 2 & 3

 Scenario database development for short circuit, power flow, and stability models

 Each Utility to perform local assessment and identify solutions

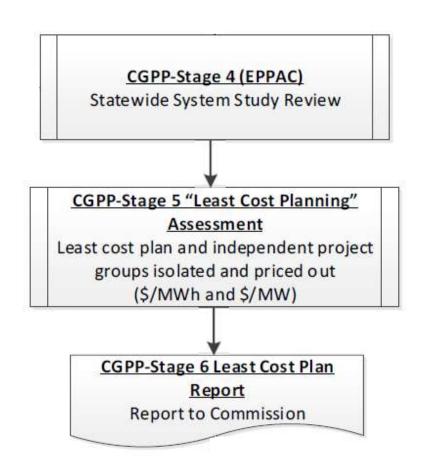
Solutions will be reviewed for synergies

 Adverse impact on BPS will be addressed



CGPP – Stages 4, 5 & 6

- Results and findings will be reviewed with EPPAC
- Transmission solution sets will be reviewed for their cost effectiveness
- The CGPP Report will provide actionable information to the Commission, Market Participants, Policy Makers, and other key Stakeholders



Thank you!



Comprehensive System Planning Process

Zach Smith
Vice President, System & Resource Planning

PSC Technical Conference – January 27, 2022

Comprehensively Plan

system & resources to elicit marketbased and regulated infrastructure investments to maintain system reliability, improve market efficiency, and fulfill public policy needs

Reliably Interconnect

competitive generation, load and transmission projects to the New York grid

NYISO System & Resource Planning

Accurately Forecast

short-term and long-term electricity demand for grid & market operations, system planning, and NYISO budgeting

Independently Provide

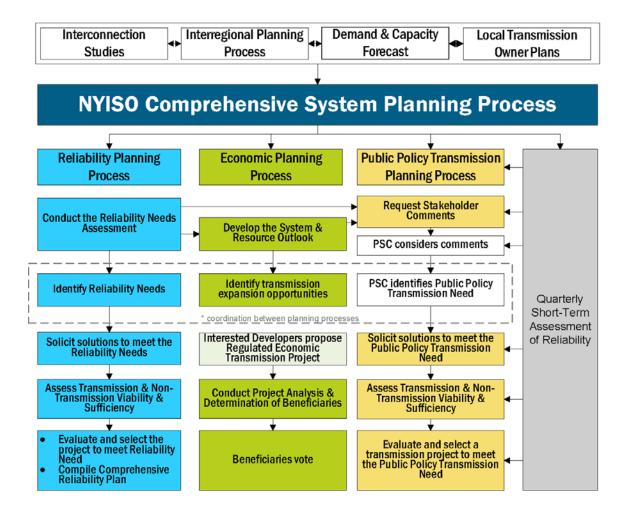
authoritative information to promote economic and environmental improvements in balance with reliability requirements



Comprehensive System Planning Process

- The Comprehensive System Planning Process (CSPP) under OATT Attachment Y is comprised of :
 - 1. Local Transmission Owner Planning Process (LTPP)
 - 2. Reliability Planning Process (RPP)
 - 3. Economic Planning Process (EPP)
 - 4. Public Policy Transmission Planning Process (PPTPP)
 - 5. Interregional Planning
- CSPP receives inputs from the Short-Term Reliability Planning Process







Local Transmission Owner Planning Process



LTPP: Overview

- The NYISO and the Transmission Owners share planning responsibilities for the New York Control Area:
 - The Transmission Owners are responsible for planning their local transmission systems for their transmission districts and developing their respective Local Transmission Owner Plans (LTPs).
 - The NYISO has the responsibility to plan for the Bulk Power Transmission Facilities for the New York Control Area.
 - FERC requires the Transmission Owners and the NYISO to comply with requirements of Order No. 890 and Order No. 1000 in carrying out local and bulk power system transmission planning.
 - Variations from approved tariffs would require FERC acceptance or approval that the proposed changes meet FERC planning principles and are consistent with or superior to current requirements.



LTPP: Transmission Owner Responsibilities

- Identify and evaluate solutions to identified transmission needs, including transmission solutions proposed by market participants and other parties for inclusion in its LTP.
- Determine whether there are transmission needs driven by a public policy requirement for which local transmission solutions should be evaluated, after considering input provided by the DPS and any information provided by a market participant or other party.
- Present draft LTPs, including planning criteria and assumptions, and a list of applicable software and/or analytical tools for comments in the NYISO stakeholder process.
- Any local solution identified by a Transmission Owner to address an identified transmission need, including those driven by public policy requirements, will be reviewed with stakeholders. Formal solicitation of solutions is not required, but Transmission Owners must evaluate transmission solutions proposed by market participants and other parties for inclusion in its LTP.



LTPP: Applications in CSPP

LTPs provided by Transmission Owners:

- Serve as input into the compilation of NYISO's annual Load & Capacity Data Report (Gold Book)
- Included in the unified planning model for the New York State
 Transmission System, and used as the foundation of CSPP
 - Transmission Owners actively participate in all elements and are responsible for compiling the system representation for their service territories.
 - The models include all system transmission facilities from 765 kV and can include distribution facilities down to 11 kV.



Reliability Planning Process



Reliability Planning Objectives

- Identify Reliability Needs of the Bulk Power Transmission Facilities pursuant to applicable reliability criteria (NERC, NPCC, NYSRC);
- Identify, through the development of appropriate scenarios, factors and issues that might adversely impact the reliability of the bulk system;
- Provide an open and transparent process whereby solutions to identified needs are proposed, evaluated on a comparable basis, selected (as applicable), and implemented in a timely manner to ensure the reliability of the system;
- Provide an opportunity first for the implementation of market-based solutions while providing for the reliability of the bulk system;
- Coordinate the NYISO's reliability assessments with local utilities and neighboring control areas.



Reliability Planning Studies

Short Term Assessments of Reliability (STARs)

- Conducted quarterly in direct collaboration with Transmission Owners
- Five-year study, with a focus on addressing needs arising in the first three years

Reliability Needs Assessment (RNA)

- Conducted biennially to identify long term reliability needs in years 4-10
- Considers all Transmission Owner LTPs and updates throughout the process
- If reliability needs are identified, the NYISO issues a competitive solicitation for solutions, and TOs are required to propose Regulated Backstop Solutions

Comprehensive Reliability Plan (CRP)

- Biennial report that documents the plans for a reliable grid over the 10-year planning horizon
- Includes evaluation and selection of transmission solutions to reliability needs in years 4-10



Economic Planning Process



Economic Planning Process Studies

1. System & Resource Outlook, "The Outlook"

- 20-year study of system & congestion
- 2021-2040 System & Resource Outlook kicked off in May 2021

2. Economic Transmission Project Evaluation (ETPE)

- Study of actual transmission project proposals
- No active project evaluation

3. Requested Economic Planning Study (REPS)

Stakeholder or other interested party requested study



System & Resource Outlook Scope

Model Development

Congestion Assessment

Renewable Pocket Formation Projected
Operations
& Market
Impact
Analysis

Reference cases

Sensitives and Scenarios Historic & Future Transmission Congestion

Congestion Relief Analysis Energy Deliverability Assessment



Public Policy Planning



Public Policy Transmission Planning Process

Solicitation of Transmission Needs by the NYISO

60-day period

Determination of Transmission Need by the PSC

SAPA notice seeking comments

Solicitation of Solutions by the NYISO

- NYISO conducts baseline analysis
- NYISO holds technical conference
- Issue project solicitation
- 60-day window

Viability and Sufficiency Assessment by the NYISO

 Project review and additional information request if necessary

Evaluation & Selection

- 10 categories of metrics, 30-year database
- Consider interconnection studies
- Stakeholder review
- NYISO Board of Directors review and action

Blue: NYISO steps

Green: PSC steps

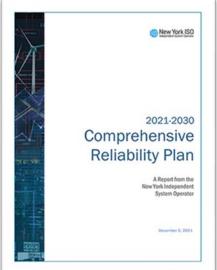


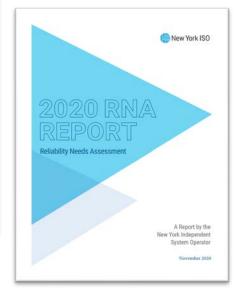
Reference Material



NYISO Report Links









More material at **Electric System Planning Working Group**



Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policymakers, stakeholders and investors in the power system





Questions from Conference Participants

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Stakeholder Engagement Options

Facilitator: Elizabeth Grisaru, Department of Public Service

