

Comprehensive System Planning Process

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Comprehensively Plan
system & resources to elicit market-based 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

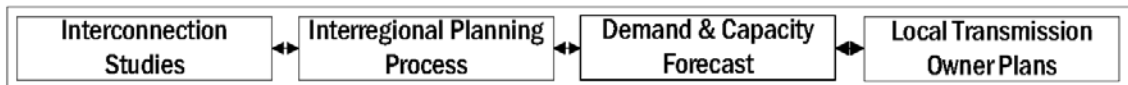
NYISO System & Resource Planning

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

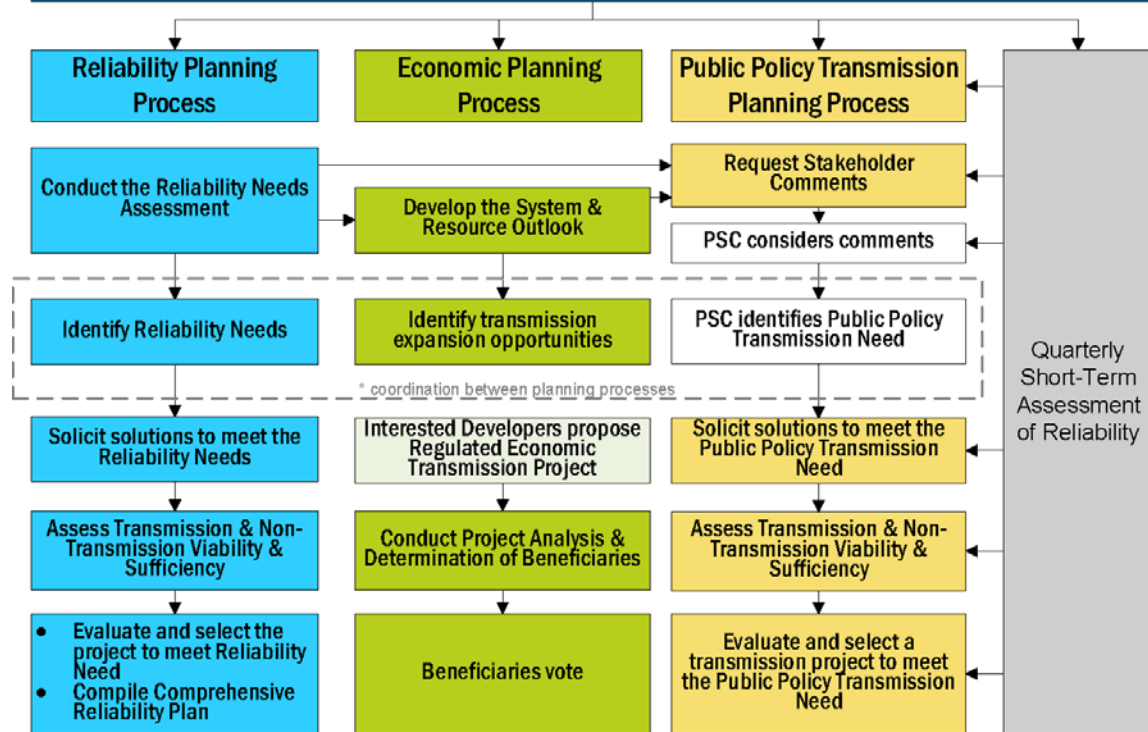
Independently Provide
authoritative information to promote economic and environmental improvements in balance with reliability requirements

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



NYISO Comprehensive System 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

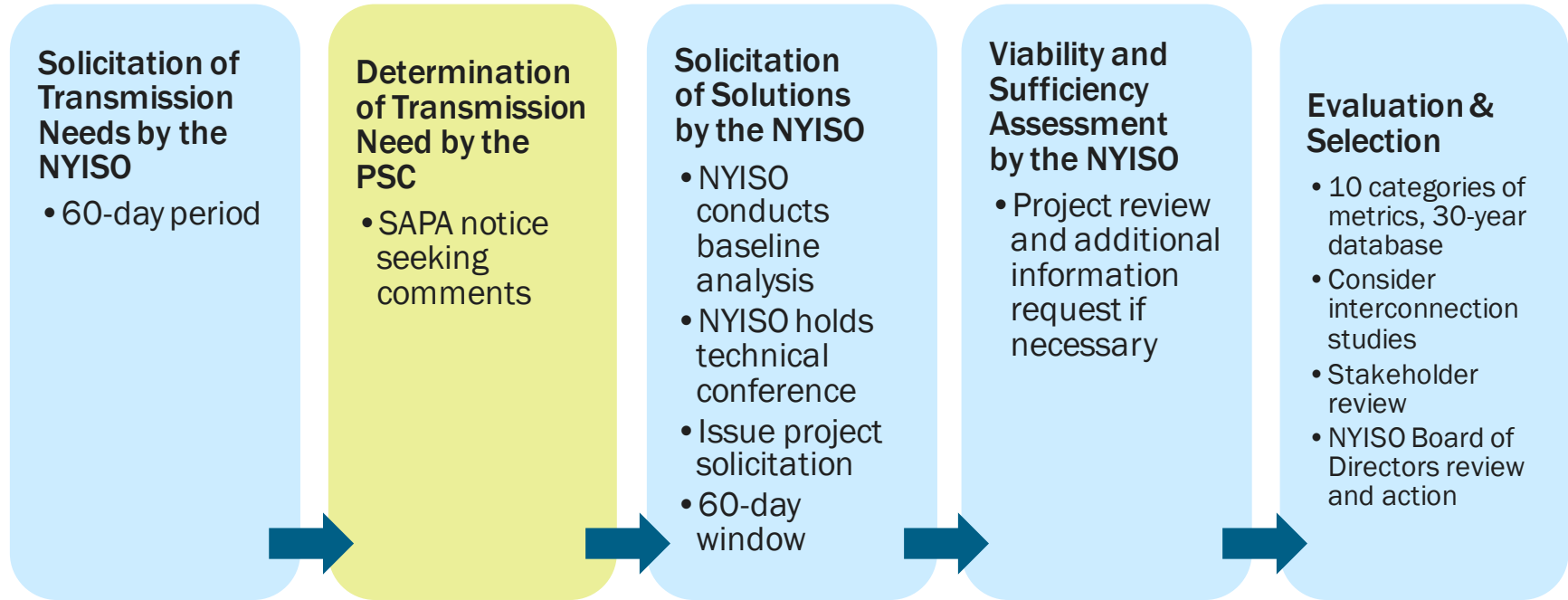
Historic &
Future
Transmission
Congestion

Congestion
Relief
Analysis

**Energy
Deliverability
Assessment**

Public Policy Planning

Public Policy Transmission Planning Process

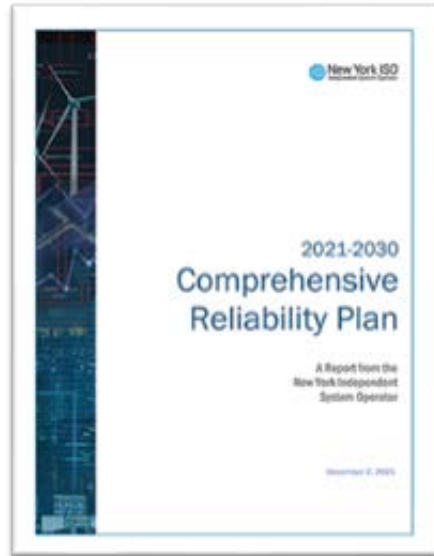
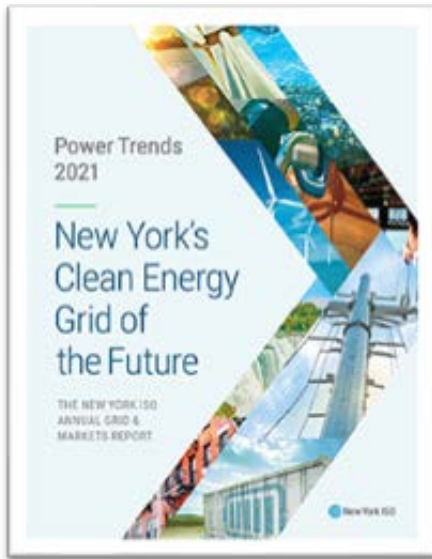


Blue: NYISO steps

Green: PSC steps

Reference Material

NYISO Report Links



More material at:
[New York's 2040 Power Grid](#)
[Electric System Planning Working Group](#)

Questions?

Our Mission & Vision



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