

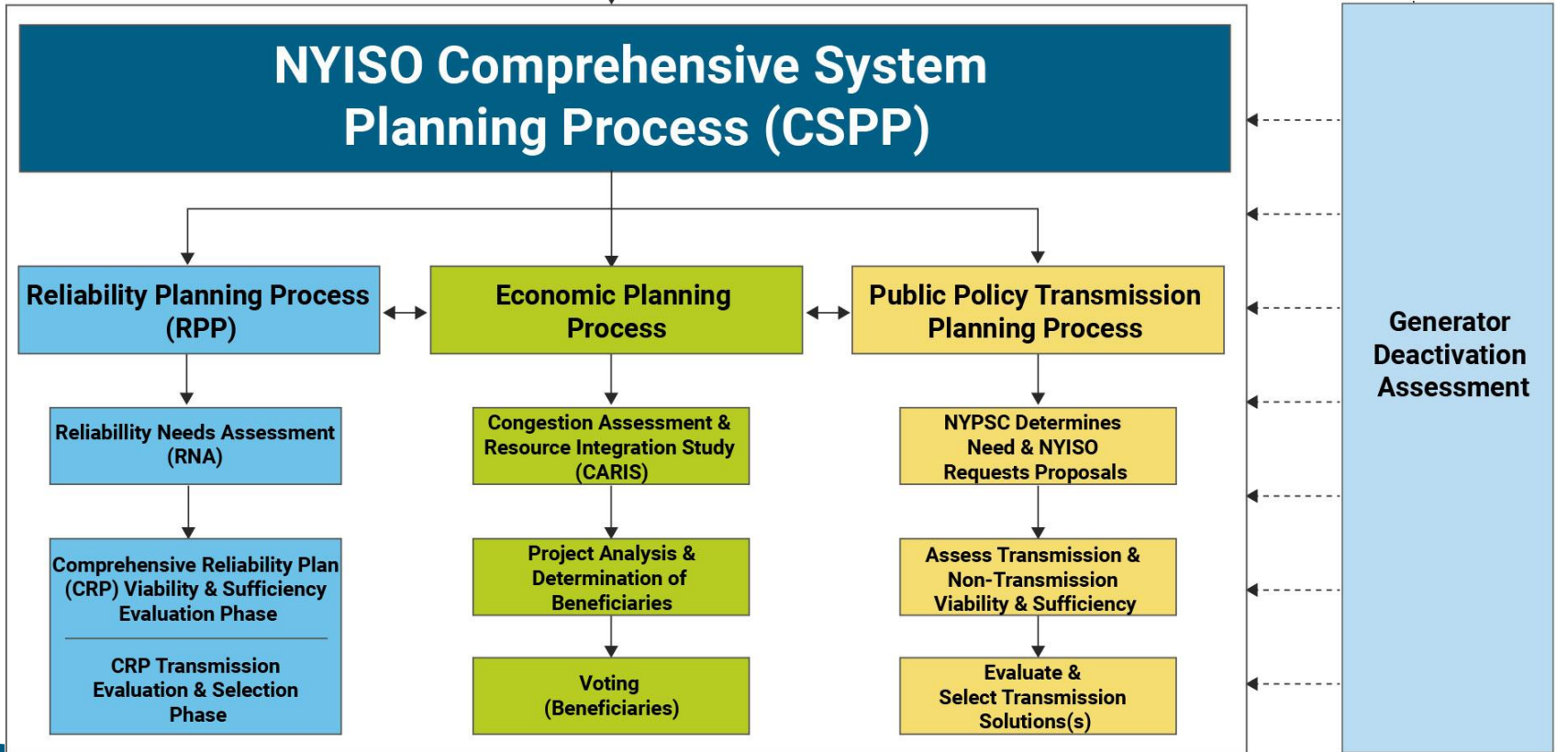
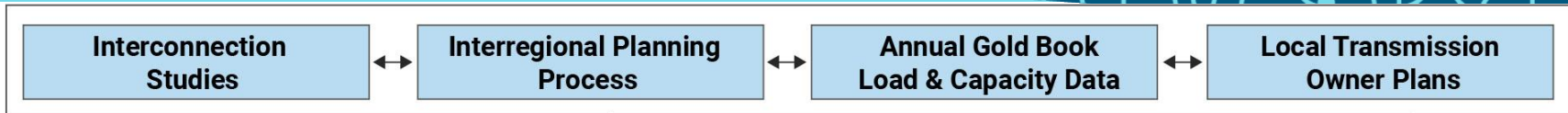
NYISO Comprehensive System Planning Process

Zach Smith

VICE PRESIDENT, SYSTEM & RESOURCE PLANNING

November, 2019





Super-Simplified Overview of Transmission Evaluation and Cost Allocation



Evaluation and Selection

- **Reliability** – Board selects based on cost and reliability metrics
 - Capital cost, cost per MW, expandability, operability, performance, development risk
- **Economic** – **Beneficiary loads vote (80% for approval)**
 - Benefit/Cost ratio > 1.0 ; benefits measured only by production cost savings over 10 years from the baseline case
- **Public Policy** – Board selects based on reliability and economic metrics

Cost Allocation

- **Beneficiaries pay: identified based on the project driver**
- **Reliability – Loads contributing to the reliability violation**
 - Allocation is independent of project; based on loads' relative contribution to the reliability violation
 - Separate allocation methods for resource adequacy, thermal, voltage, dynamic stability, and short circuit
- **Economic – Loads expected to enjoy reduced wholesale electric prices**
 - Allocation based on relative economic benefit
- **Public Policy – All loads statewide are beneficiaries by default**
 - Allocation by load-ratio share
 - Alternate cost allocation methodologies may be defined by the public policy, the Public Service Commission, or the selected developer.

Planning Process Transmission Projects



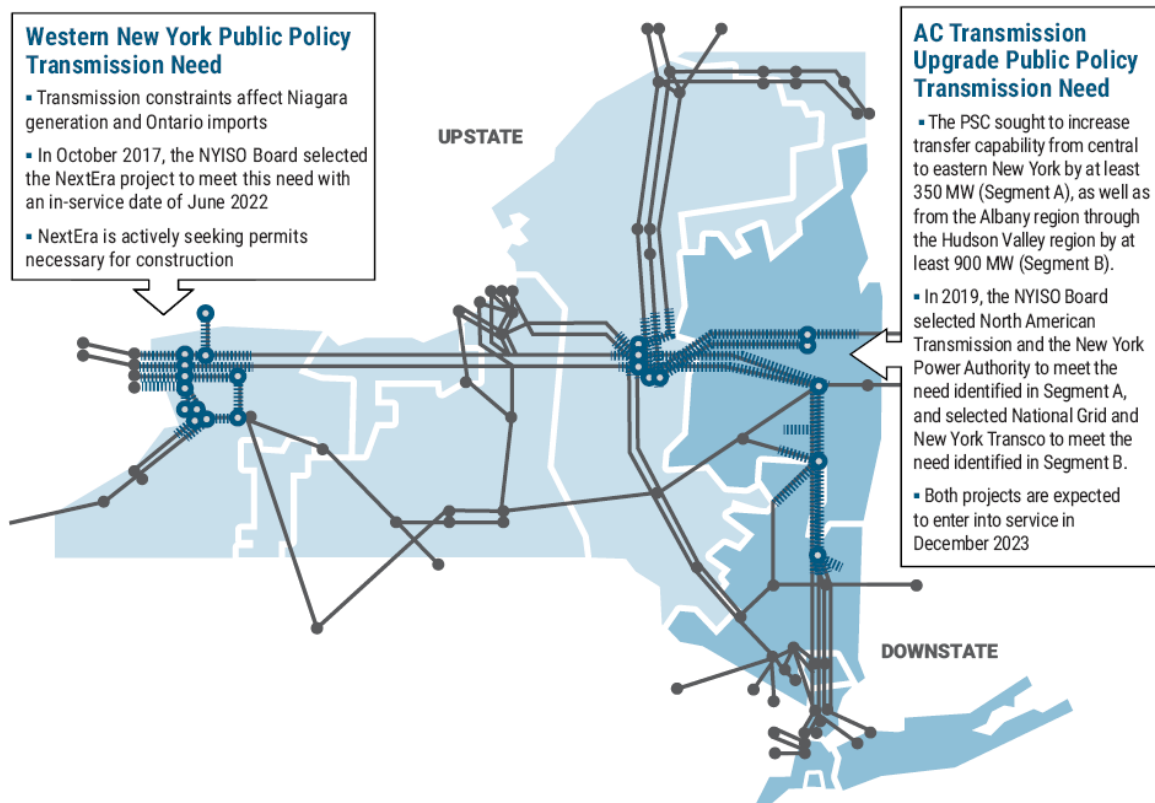
Public Policy Planning

Western New York Public Policy Transmission Need

- Transmission constraints affect Niagara generation and Ontario imports
- In October 2017, the NYISO Board selected the NextEra project to meet this need with an in-service date of June 2022
- NextEra is actively seeking permits necessary for construction

AC Transmission Upgrade Public Policy Transmission Need

- The PSC sought to increase transfer capability from central to eastern New York by at least 350 MW (Segment A), as well as from the Albany region through the Hudson Valley region by at least 900 MW (Segment B).
- In 2019, the NYISO Board selected North American Transmission and the New York Power Authority to meet the need identified in Segment A, and selected National Grid and New York Transco to meet the need identified in Segment B.
- Both projects are expected to enter into service in December 2023



Examining transmission investment needs driven by public policy requirements:

- Needs are identified by the NYS Public Service Commission
- Solutions are solicited by the NYISO

The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits 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 policy makers, stakeholders and investors in the power system



www.nyiso.com