

Markets & Planning: The NYISO Perspective

Presented to the Harvard Electricity Policy Group Fifty-Second Plenary Session
Transmission Investment Panel Discussion
Chicago, Illinois - October 2, 2008



Stephen G. Whitley
President & CEO
New York Independent System Operator



The Value of Planning




***“You gotta be careful
if you don't know
where you're going...***

***Otherwise you might
not get there.”***

-- Yogi Berra

Overview

- ◆ **NYISO Market-based Orientation**
 - ◆ **Existing Reliability Planning**
 - ◆ **Proposed Economic Planning**
- 
- A faint, semi-transparent map of New York State is overlaid with a complex network of lines representing the power grid. The lines are colored in shades of blue, purple, and red, indicating different transmission lines or planning scenarios. The map shows the state's outline and major cities, with the grid lines connecting various points across the state.

Market-based Orientation

- ◆ **NYISO's focus on market-based solutions**
- ◆ **Approach supported by regulators, stakeholders, and market participants**
- ◆ **Market signals have fostered investment and development**
- ◆ **Market risk / Regulatory risk**

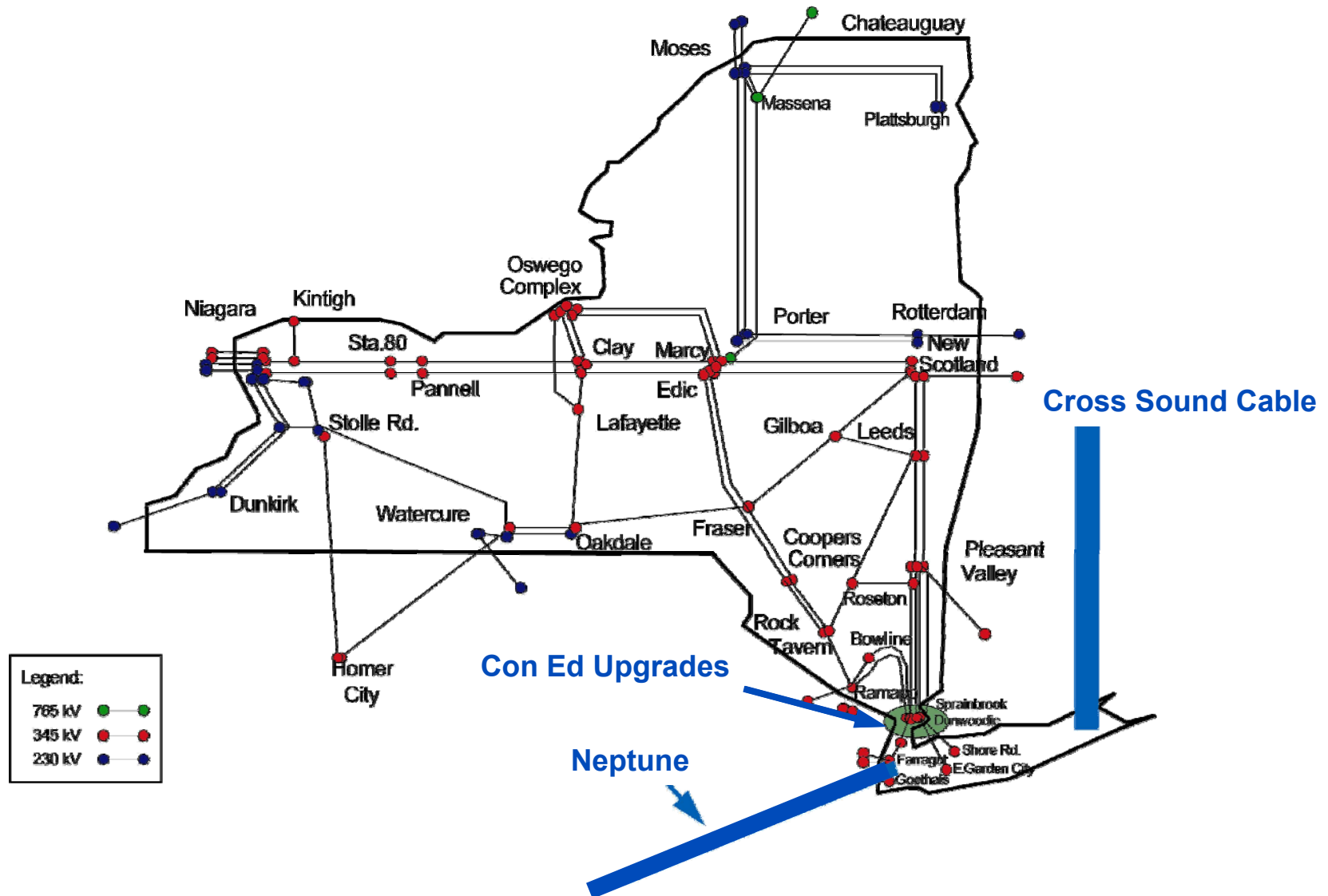
A table of financial data with four columns. The first two columns contain numerical values in yellow and green. The third and fourth columns contain percentage changes in blue and red. The table is tilted slightly to the right.

37.52	17.12	+0.75	1.81%
17.02	42.15	+0.13	0.48%
40.86	27.09	+0.46	2.09%
26.07	22.47	-1.26	-5.12%
21.71	23.37	+12.51	3.30%
22.74	391.66	+0.74	0.78%
377.43	95.61	+0.42	1.69%
93.96	24.74		
25.22			

NYISO Market Success

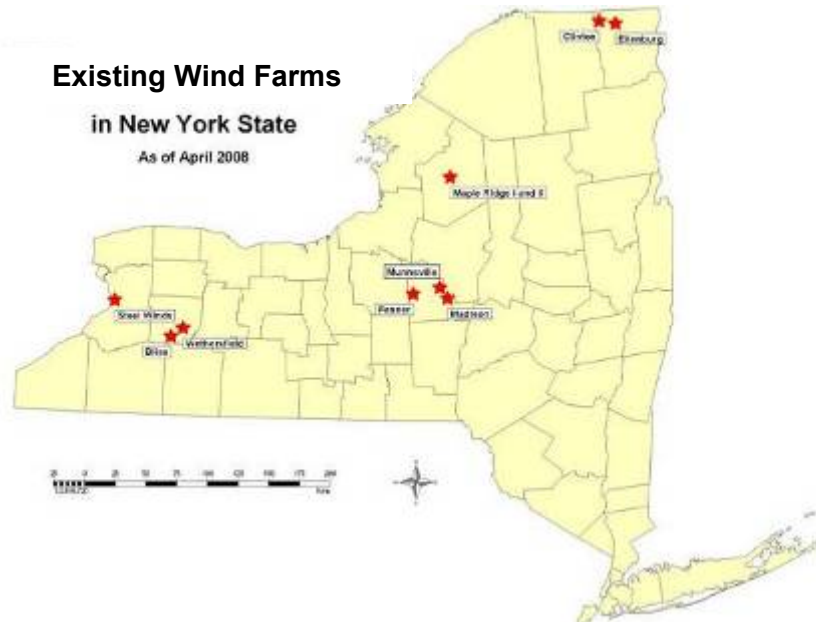
- ◆ **6,500+ MW of generation added since 2000**
- ◆ **Nearly 1,000 MW of merchant transmission developed**
- ◆ **Renewable resources expanding**
- ◆ **Generator availability has increased**
- ◆ **Installed Reserve Margin has been reduced**
- ◆ **Demand-side resources growing**
- ◆ **Reliability planning process has produced market-based resources and avoided need for regulated solutions**

New Transmission

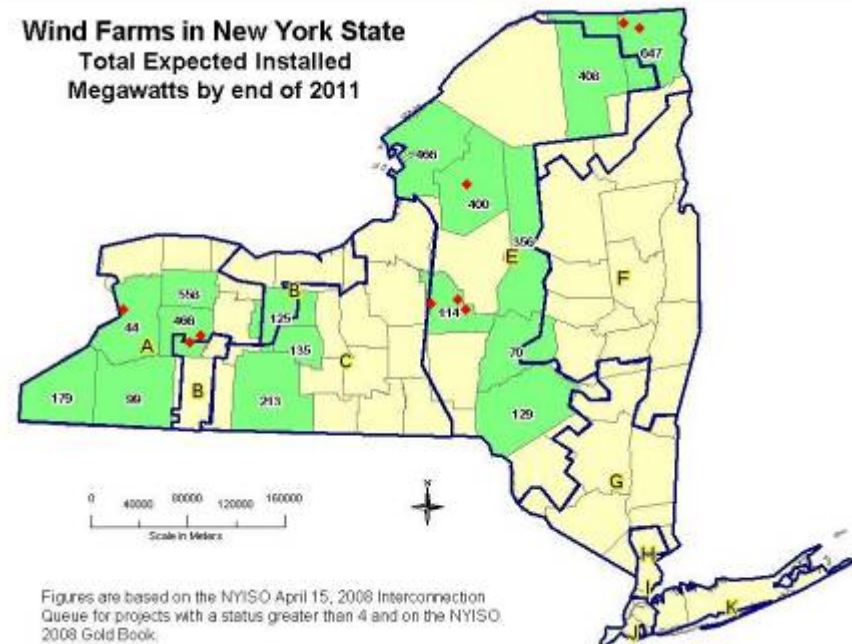


Growing Windpower

**Existing Wind Farms
in New York State**
As of April 2008



**Wind Farms in New York State
Total Expected Installed
Megawatts by end of 2011**

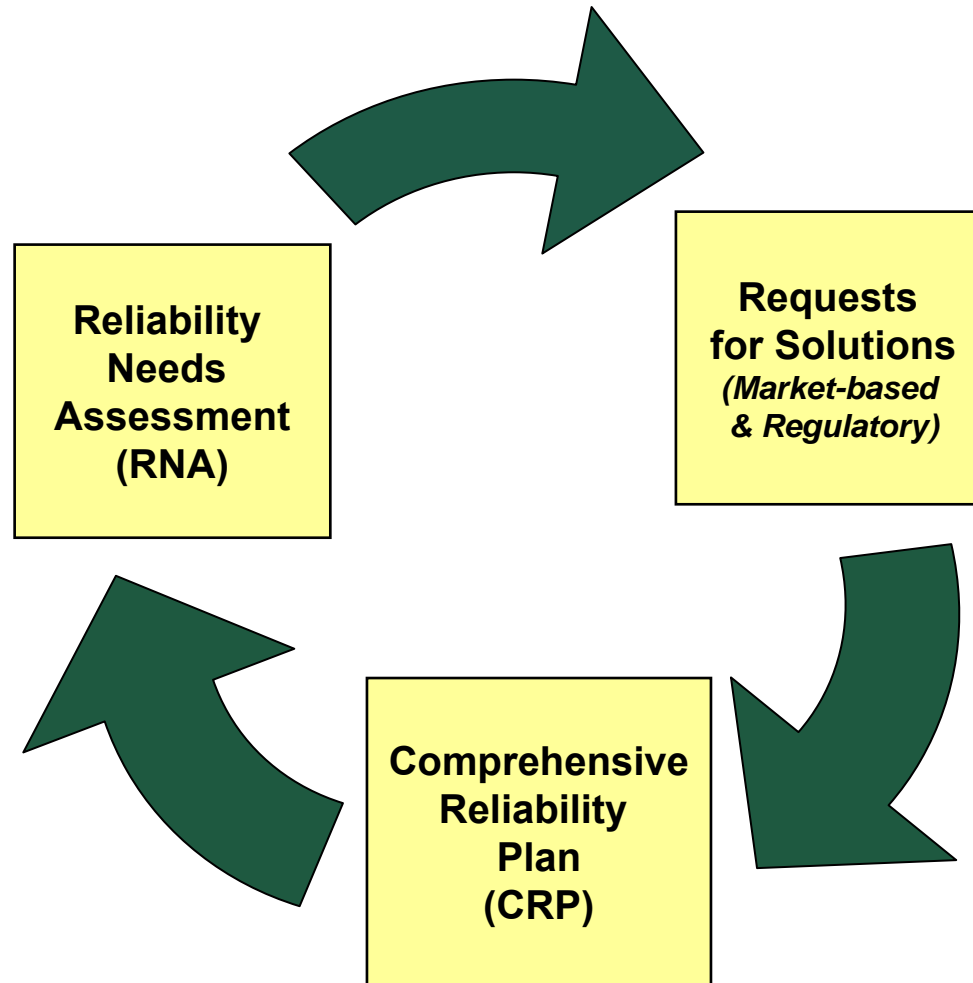


Figures are based on the NYISO April 15, 2008 Interconnection Queue for projects with a status greater than 4 and on the NYISO 2008 Gold Book.

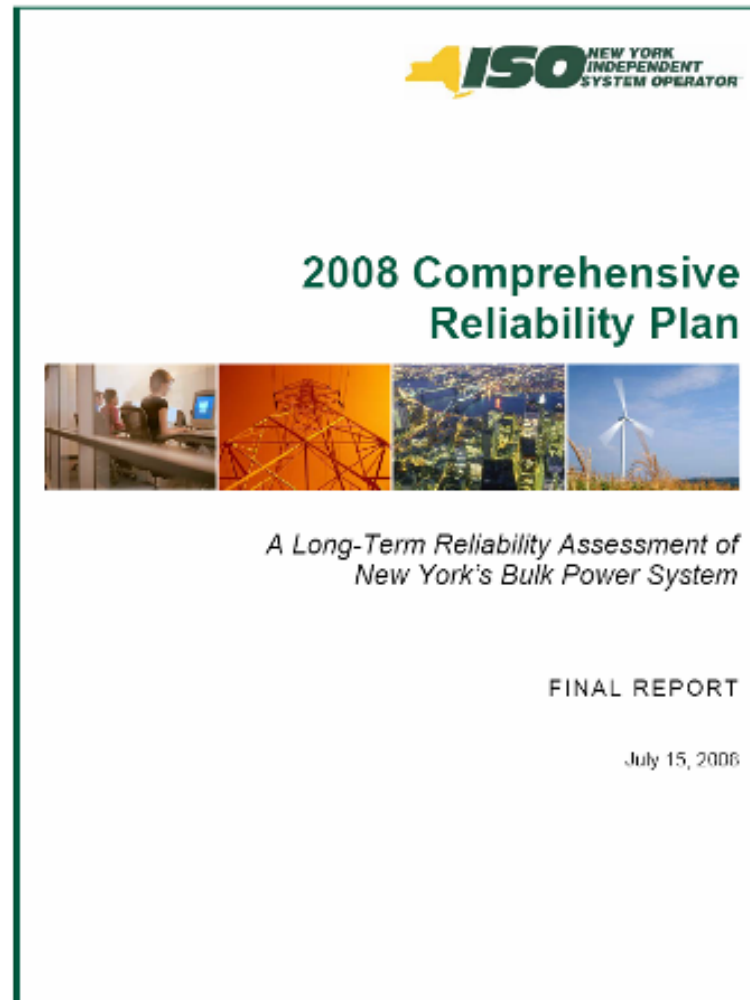
Reliability Planning Process

- ◆ **NYISO Planning Process is anchored in its market-based orientation**
- ◆ **FERC said:**
 - *“It [the NYISO planning process] is certainly a substantial improvement over planning processes that have traditionally depended upon TO-developed regulated solutions.”*

A Multi-staged Process



2008 Reliability Plan



Planning Process Results

- ◆ **The 2008 CRP is the culmination of the NYISO's third planning cycle.** In each cycle, the market has responded with project proposals to meet identified reliability needs.
- ◆ **Approximately 3,000 MW of market-based projects,** submitted during the NYISO's first two planning process cycles, are **moving forward on schedule.**

FERC Order 890: NYISO Response

- ◆ **Congestion Assessment and Resource Integration Study (CARIS)**
- ◆ **Unique feature -- 80% beneficiary voting requirement**
- ◆ **Pending FERC approval, implementation scheduled to begin in the 2009 planning cycle**

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Parts 35 and 37

(Docket Nos. RM05-17-000 and RM05-25-000; Order No. 890)

Preventing Undue Discrimination and Preference in Transmission Service

(Issued February 16, 2007)

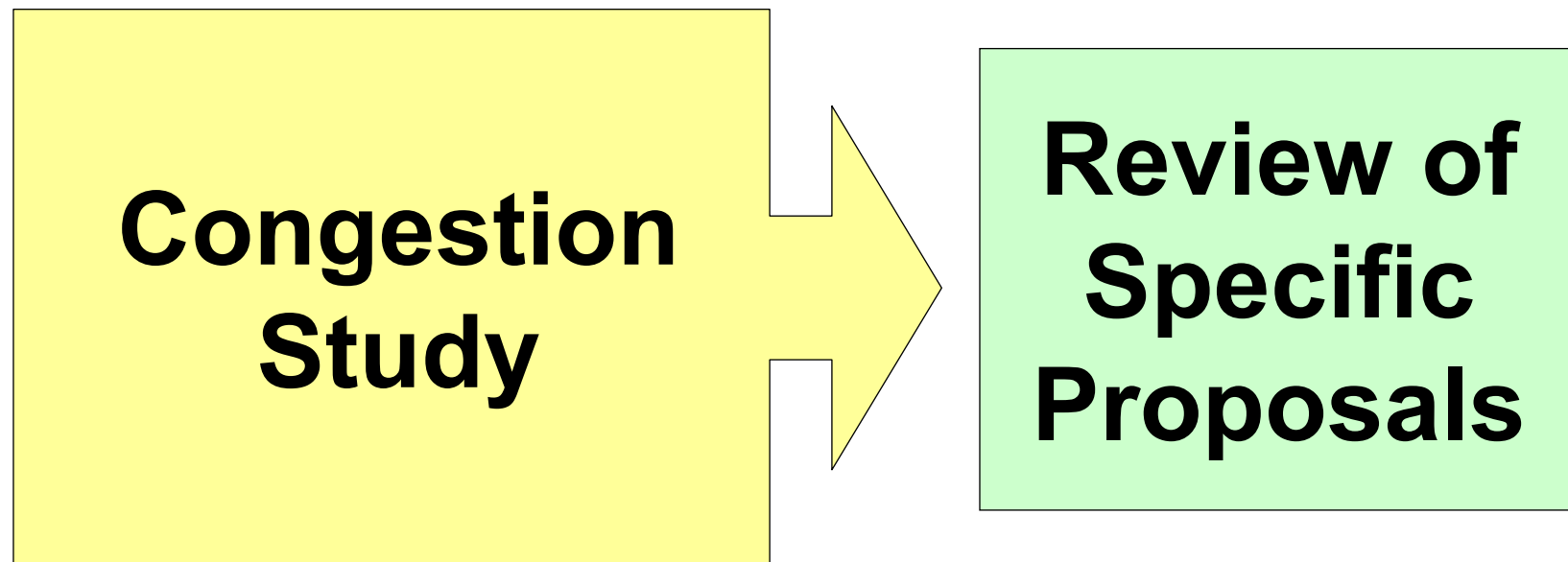
AGENCY: Federal Energy Regulatory Commission.

ACTION: Final Rule

SUMMARY: The Federal Energy Regulatory Commission is amending the regulations and the pro forma open access transmission tariff adopted in Order Nos. 888 and 889 to ensure that transmission services are provided on a basis that is just, reasonable and not unduly discriminatory or preferential. The final rule is designed to: (1) strengthen the pro forma open-access transmission tariff, or OATT, to ensure that it achieves its original purpose of remedying undue discrimination; (2) provide greater specificity to reduce opportunities for undue discrimination and facilitate the Commission's enforcement; and (3) increase transparency in the rules applicable to planning and use of the transmission system.

EFFECTIVE DATE: This rule will become effective [insert date 60 days after publication in the FEDERAL REGISTER].

CARIS: A Two-Step Process



Transmission Assessment

**New York
Transmission
Owners -- State
Transmission
Assessment
and Reliability
Study (STARS)**



Summary

- ◆ **NYISO Comprehensive Reliability Planning Process (CRPP) is established and effective**
- ◆ NYISO is working with stakeholders to implement **economic planning process (CARIS)**
- ◆ NYISO is supporting New York Transmission Owner **long-range assessment of transmission infrastructure**

Planning for the Future



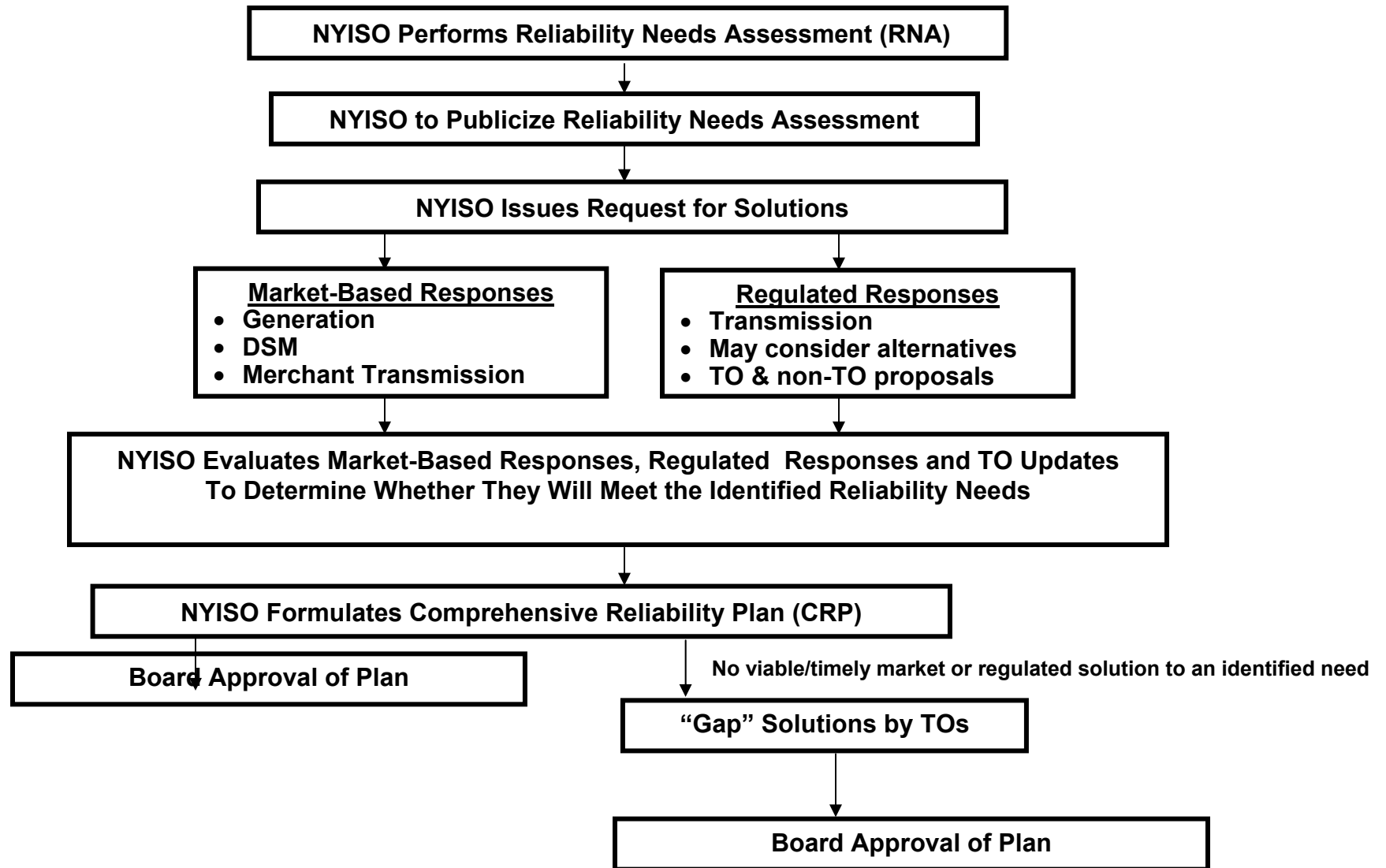
***“It’s difficult to
make predictions...
especially about
the future.”***

-- Yogi Berra

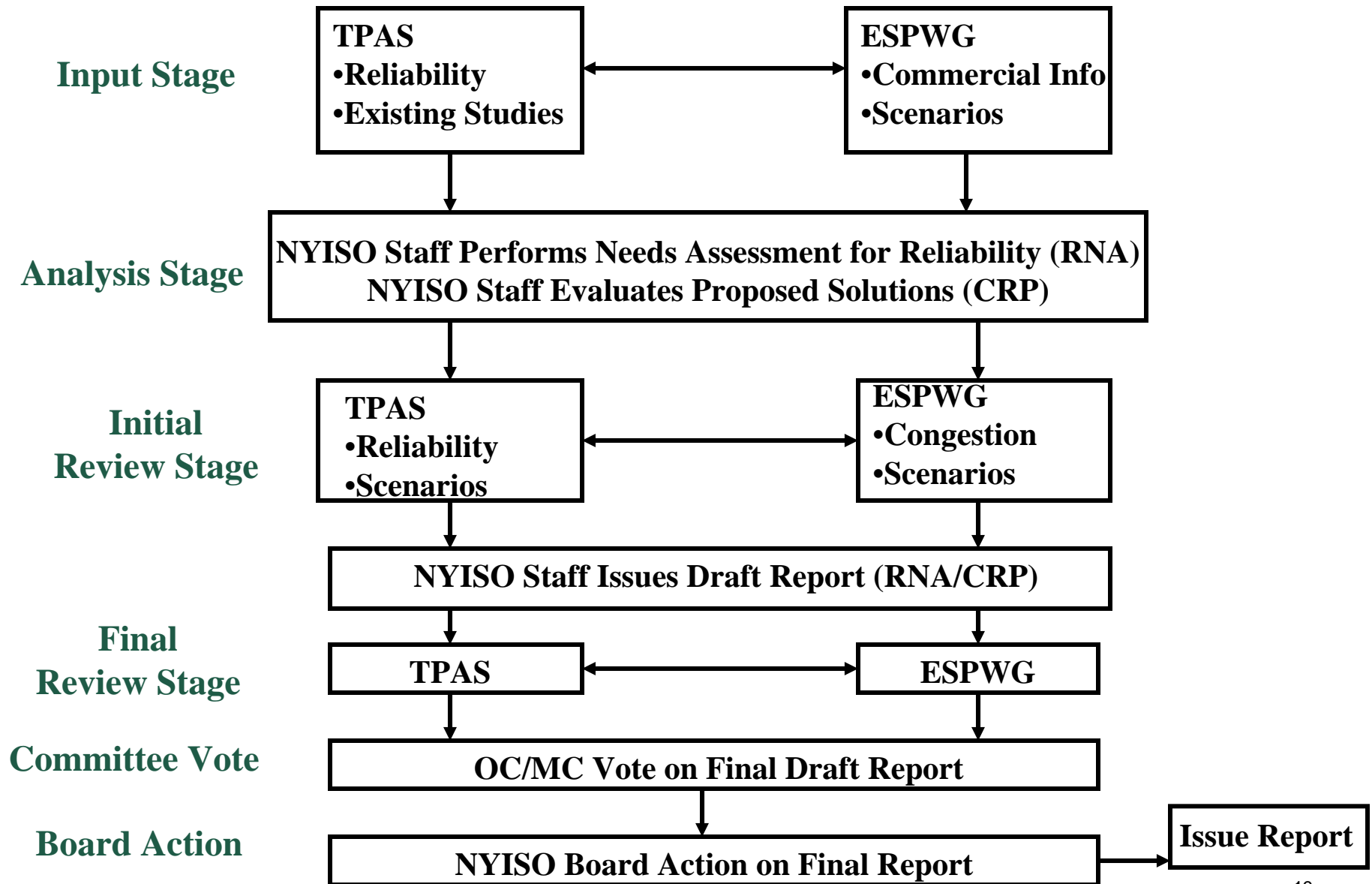
Appendix

- ◆ **Planning Process Flow Charts**
 - *Comprehensive Reliability Planning Process (CRPP)*
 - *CRPP Stakeholder Process*
 - *Proposed Comprehensive System Planning Process (CSPP) Economic Planning Process (CARIS)*
 - *Proposed Economic Cost Allocation Process (For a Specific Economic Transmission Project)*

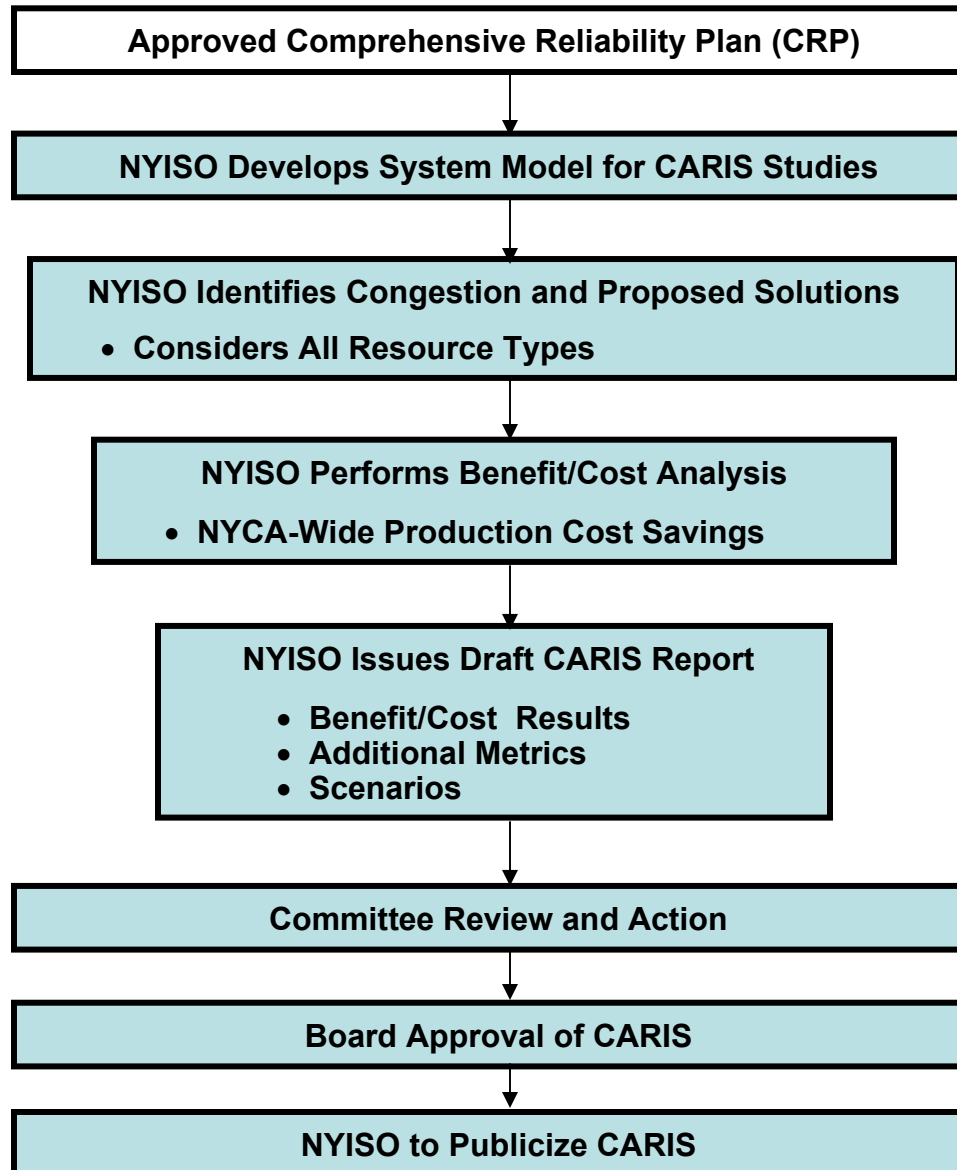
Comprehensive Reliability Planning Process (CRPP)



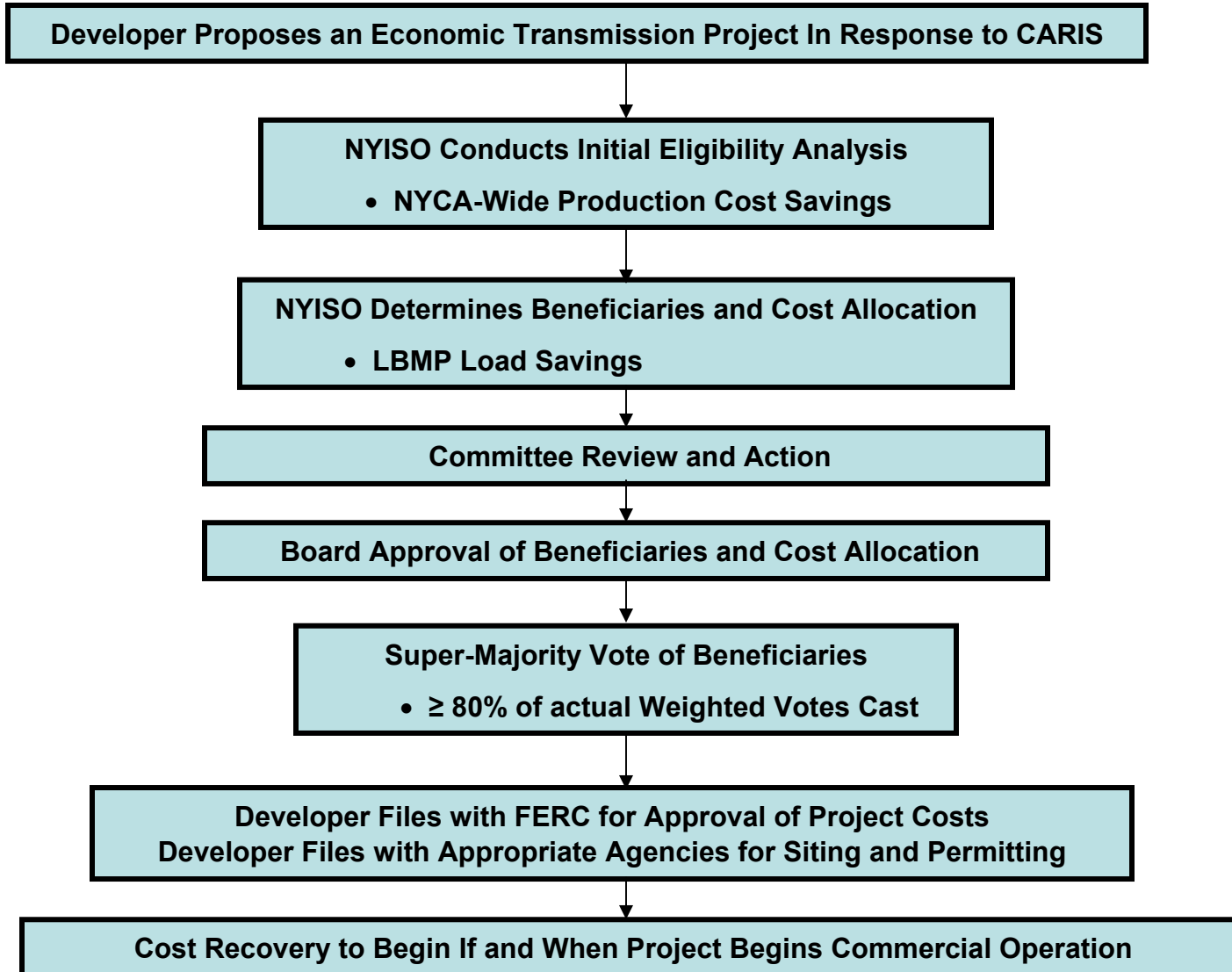
CRPP Stakeholder Participation



Proposed Comprehensive System Planning Process (CSPP) Economic Planning Process (CARIS)



Proposed Economic Cost Allocation Process (For a Specific Economic Transmission Project)



The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and conducts comprehensive reliability planning for the state's bulk electricity system.

www.nyiso.com