

NYISO Economic Planning Process

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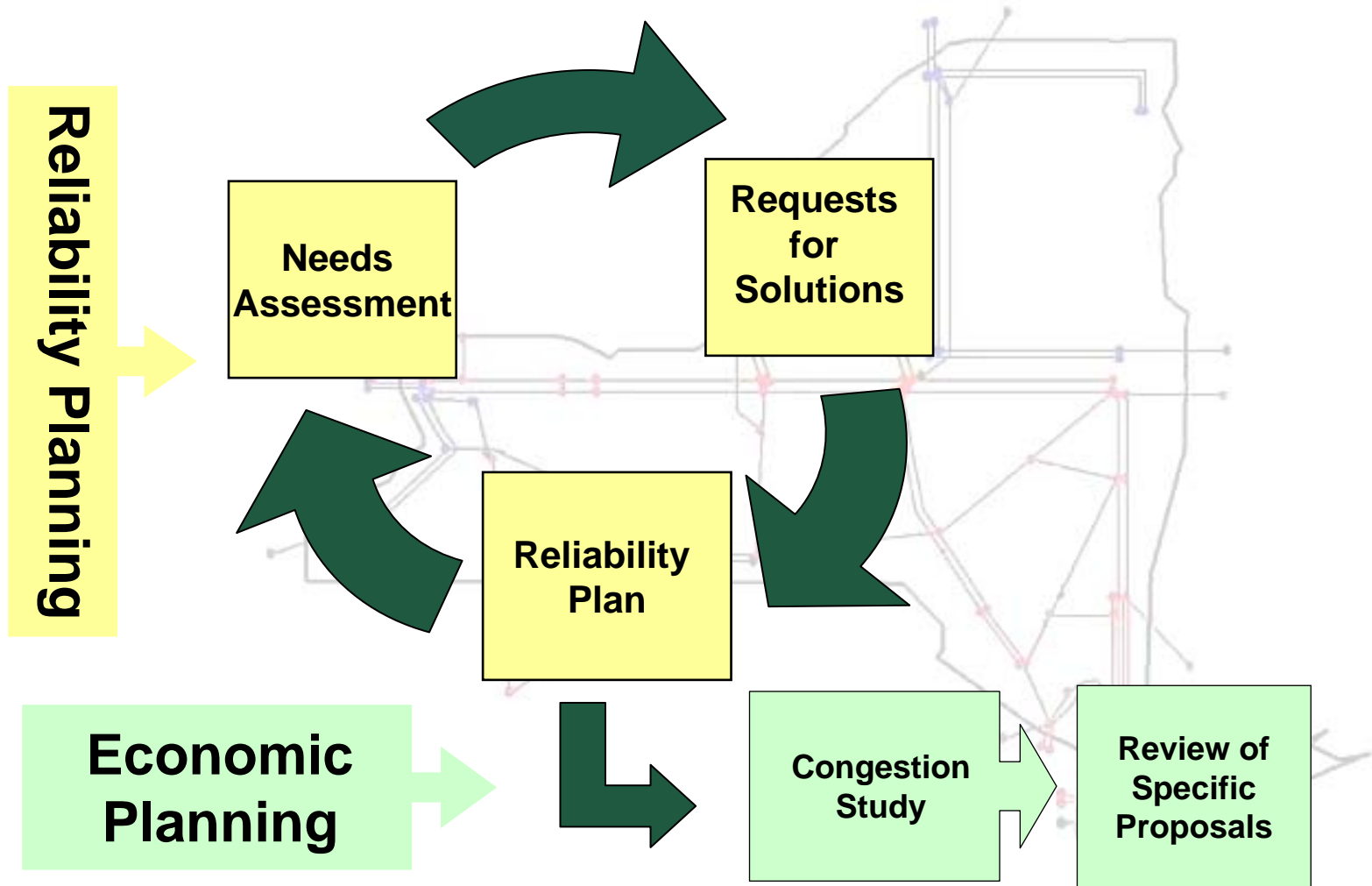
NYISO Planning

- ◆ **NYISO is the transmission service provider for the New York Control Area in accordance with its FERC-approved OATT**
- ◆ **NYISO administers a Comprehensive System Planning Process (CSPP)**
 - *Phase I: Reliability Needs (CRPP – Comprehensive Reliability Planning Process)*
 - *Phase II: Economic Considerations (CARIS – Congestion Analysis and Resource Integration Studies)*
- ◆ **NYISO administers the interconnection process for all generation and transmission interconnections to the New York State transmission system**

Market-Based Approach

- ◆ **NYISO planning was established with a commitment to markets and strives to achieve market-based solutions when possible, through:**
 - *Market design & rules*
 - *Planning process*
- ◆ **This approach has been generally supported by the NYS PSC and most other stakeholders and market participants**
 - *NYISO utilizes an open and transparent process for stakeholder participation*
- ◆ **NYISO markets and LMP pricing signals provide the benefits of competition while achieving the intended results**
 - *Except for wind power, almost all of the new merchant generation & transmission has been built or is proposed for development in Eastern and Southeastern NY*

NYISO Planning



Comprehensive Reliability Planning Process (CRPP)

- ◆ **A formal, transparent, long-term (10-year) planning process for the NYISO**
 - ***Provides for both market-based & regulated backstop solutions***
 - All resources are considered on a comparable basis (Transmission, Generation & Demand Response)
 - Preference is given to market-based solutions
 - ***Two-step process:***
 - Reliability Needs Assessment (RNA)
 - Comprehensive Reliability Plan (CRP)
 - ***Transparency throughout the process:***
 - Input Assumptions
 - Stakeholder review and vote on RNA & CRP
 - ***Addresses roles of NYISO, FERC and NYS PSC***
 - ***Addresses cost allocation and cost recovery issues***
 - ***Provides a commitment to investigate cause of potential market failure and to modify market rules as needed***

Congestion Analysis and Resource Integration Study (CARIS)

- ◆ **A formal, transparent, long-term (10-year) process based on the Comprehensive Reliability Plan**
- ◆ **CARIS is conducted in two phases**
 - ***Study Phase***
 - Identification of congested elements/paths
 - Potential resource solutions are evaluated to mitigate congestion
 - All resources are considered on a comparable basis (Transmission, Generation & Demand Response)
 - ***Specific Project evaluation phase***
 - Applies to Economic Transmission projects
 - Includes C/B analysis, cost allocation & recovery

CARIS – Phase 1 Study Phase - 2009

Base Case Assumptions:
Most recently approved CRP

May 19
2009

**Congestion Assessment: Historic and
10-year forecast**

Identification of three most congested
Paths/Elements

May-
June
2009

Cost/Benefit Analysis

Three studies selected and agreed upon by
stakeholders
Additional studies paid for by stakeholders

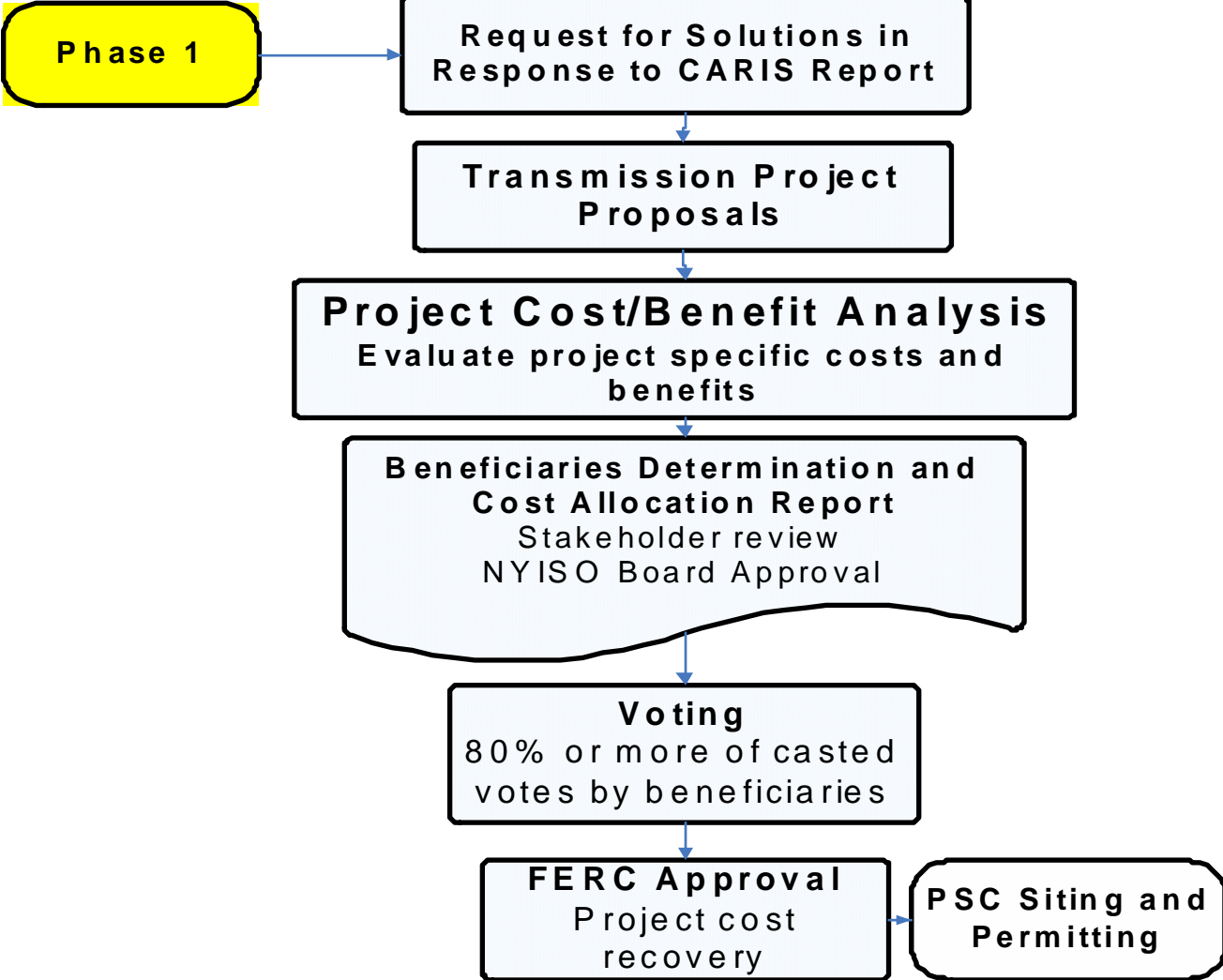
July -
August
2009

CARIS Report

Stakeholder reviews
NYISO Board Approval

September -
November
2009

CARIS – Phase 2
Transmission Project Phase - 2010



Selection of Three CARIS Studies

- ◆ Step 1 – Calculate congestion costs over most congested paths/elements
- ◆ Step 2 – Rank unweighted present value of congestion for the most congested elements, historic 5 years, and 10-year forecasts
- ◆ Step 3 – Select the three CARIS Studies based on largest production cost savings among the congested transmission elements analyzed.

Three most congested elements are assessed iteratively to consider additional elements that may surface as the top three constrained elements are mitigated. The assessed element groupings will then be ranked based on change in production cost. The top three groupings with the largest change in production cost will be selected as the three CARIS studies.

Process for Additional CARIS Studies

- ◆ Any NYISO stakeholder (requestor) is eligible to request additional CARIS studies
- ◆ Requestor is responsible for all reasonable actual costs incurred
- ◆ Cost sharing of similar or overlapping study requests from different parties is allowed if the parties agree
- ◆ NYISO posts the additional study requests on its website
- ◆ Results will NOT be posted or otherwise released by the NYISO except:
 - *otherwise expressed by the requestor*
 - *a requestor seeks regulated cost recovery based upon the results of such studies*

Additional Metrics for CARIS Studies, Methodology and Models

- ◆ Additional benefit metrics will be used in addition to the principal benefit metric (NYCA-wide production costs):
 - *LBMP load costs*
 - *Generator payments*
 - *Reduction in losses*
 - *TCC payments*
 - *Emission metrics*
 - *ICAP costs*
- ◆ Will estimate the benefits of the potential solutions to the congestion identified
- ◆ Will be used for information purposes only

CARIS Studies, Key Parameters

PARAMETER	REQUIREMENTS
B/C Evaluation Period	10 Years from project in-service date
Eligible Transmission Facilities	NYCA bulk power facilities
Minimum Project Cost Threshold	\$25 Million
B/C Metric For Initial Eligibility	B/C NYCA-wide production cost savings >1
Multiplier	None
Benefit Metric for Cost Allocation	NPV of zonal LBMP load savings (computed over all zones which have a net savings—net of TCC revenues & bilaterals); B/C > 1
Allocation	NYCA-wide socialization: None Zonal: proportional to load LBMP savings Intra-zonal: proportional to LSE MWhrs
Beneficiary Voting	80% of voting beneficiaries must approve

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 reliability and resource planning for the state's bulk electricity system.

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