

Planning in a competitive market environment

The New York Story

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Transmission Investment & Markets

The Road To FERC Order 1000

- ◆ **FERC Order 888** - 1996
 - *Open Access*
- ◆ **FERC Order 2000** - 2000
 - *Formation of RTOs*
- ◆ **Energy Policy Act 2005** - 2000
 - *FERC Backstop Transmission Siting Authority*
 - *FERC Incentive Rates for Transmission*
- ◆ **FERC Order 890** - 2007
 - *Regional Planning*
 - *Economic Planning*
- ◆ **FERC Order 1000** - 2011
 - *Inter-regional planning & cost allocation*
 - *Transmission to achieve public policy goals*
 - *Elimination of right-of-first-refusal (ROFR) for incumbent TOs*

Transmission Investments & Markets

◆ Characteristics of Transmission Investments

- *Generally “Lumpy”*
- *Transmission Planning based on a “Horizon Year” – typically 10 to 25 years out in the future*
- *Financial instruments (FTRs, TCCs) provided for transmission expansion*
- *More complicated today, under restructuring, as generation and transmission plans are not integrated*
- *Beneficiaries identified from a reasonable expectation of future system state*

◆ Effect of “Lumpy” Transmission Investments on Markets

- *Elimination of congestion leads to transmission rights (FTRs or TCCs) becoming worthless*
- *Has been characterized as “market failure”*

Hogan's Argentine Model

A framework to incorporate “lumpy” transmission investments into electricity markets*

- ◆ **Major Expansion of Transmission by “Public Contest” Method**
Overcoming market failure without overturning markets
 - *Regulator applies the “Golden Rule” (Cost Benefit Test). Use the same economic cost benefit analysis to identify expected beneficiaries*
 - *30%-30% Rule. At least 30% of beneficiaries must be proponents. No more than 30% of beneficiaries can be opponents.*
 - *Assign costs to beneficiaries with mandatory participant funding*
 - *Award either Auction Revenue Rights or Long Term FTRs to beneficiaries with costs*

* William W. Hogan, 27th USAEE/IAEE North American Conference, Houston, Texas, September 18, 2007

Reliability Needs

- ◆ NYISO proposed a **Comprehensive Reliability Planning Process (CRPP)** for the identification and resolution of reliability needs that was approved by FERC on December 28, 2004
 - *This was a voluntary filing—not under a FERC directive*
- ◆ FERC found the NYISO CRPP:
 - *to “...properly balance..” consideration of market-based and regulated solutions; and that*
 - *“It is certainly a substantial improvement over planning processes that have traditionally depended upon TO-developed regulated solutions.”*

Regulated Backstop Solution Implementation

- ◆ If market-based solutions are insufficient to meet Reliability Needs by need date, then:
 - *NYISO can “trigger” a **regulated backstop solution***
 - *NYISO requests Responsible TO(s) to seek NYS PSC approval of backstop solution*
 - *NYS PSC and other regulatory agencies proceed with their review & approval*

Economic (CARIS) Objectives

- ◆ **Identify congestion on the New York State bulk power transmission system – in response to Order 890**
- ◆ **Phase 1: Select the three CARIS studies**
 - *Develop three generic solutions (transmission, generation, demand response) for each of the three studies to mitigate identified congestion*
 - Provide costs and benefits analysis
 - Provide scenario analysis to determine the impact of uncertainties
 - *Provide the information to interested parties to develop transmission, generation or demand response projects to relieve congestion*
- ◆ **Phase 2: Perform Benefit/Cost analysis of proposed economic transmission project to determine eligibility for cost recovery under NYISO tariff**
 - *For proposed transmission projects, the identified beneficiaries vote to approve cost recovery through the NYISO's Tariff (Only ISO/RTO to adopt elements of Hogan's Argentine Model)*

NYISO Compliance with FERC Order 1000

Regional Planning

Order 1000 Requirements:

- *All transmission providers must have a regional transmission planning process in place that meets Order 890's nine Planning Principles and includes development of a comprehensive system plan*
- *Cost allocation must comply w/Order 1000's Six Principles*

Joint Compliance Filing:

- *NYISO has already been found compliant with Order 890's Planning Principles by the Commission for its reliability and economic planning processes*
- *Compliance demonstrated in October 2012 compliance filing, including references to FERC's Order 890 Compliance Orders*
- *Order 1000 Cost Allocation principles added to tariff*

Non-Incumbent Transmission Providers

Order 1000 Requirements:

- *Final Rule eliminates the right-of-first refusal (“ROFR”) tariff provisions for incumbent transmission providers with respect to building proposed facilities that are included in a regional transmission plan*
 - Several exceptions are granted for local facilities/upgrades /use of existing ROWs

Joint Compliance Filing with New York TOs:

- *NYISO tariff does not have any ROFR provisions*
- *NYISO planning process contains provisions for non-incumbents to participate on an comparable basis*
- *Tariff revisions were made to incorporate:*
 - Non-discriminatory qualification criteria
 - Detailed information requirements for proposed transmission projects
 - Other specific requirements of Order 1000

Public Policy Requirements

Order 1000 Requirements:

- *Local & regional planning processes must consider transmission needs driven by public policy requirements established by state or federal laws or regulations*
- *No requirement to go beyond existing laws or regulations—but permitted on a voluntary basis*
- *Allows for regional flexibility in meeting this requirement*
- *Not intended to infringe on state authority*

Joint Compliance Filing:

- *Proposed PPR process includes:*
 - Identification of transmission needs driven by public policy requirements
 - Opportunity for stakeholders to propose solutions
 - Process for evaluation of proposed solutions
 - Identification of potential impact on competitive markets
 - Consideration of non-transmission solutions –as appropriate
 - Cost allocation methodology utilizing default based on load ratio share
 - Specification of appropriate roles for NYPSC/NYDPS & NYISO

Interregional Planning Compliance Framework

- ◆ **The Northeast ISO/RTO Planning Coordination Protocol (the “Protocol”- among ISO-NE, NYISO & PJM) already meets many of the Inter-regional Planning requirements of the Final Rule**
- ◆ **Some modifications/clarifications were needed**
- ◆ **Revisions to individual tariffs also needed**
- ◆ **Continues an active stakeholder process established under the Protocol (IPSAC)**
- ◆ **ISO-NE, NYISO & PJM held numerous meetings with their stakeholders on these issues since Spring 2012**
- ◆ **Canadian neighbors are already participants in inter-regional planning activities in the Northeast**
- ◆ **DOE-ARRA funded interconnection-wide planning efforts are encouraged by FERC** (*ISO-NE, NYISO and PJM are sponsors and active participants in EIPC*)
- ◆ **Compliance filing on 7/10/13 – awaiting FERC Order**

Transmission Project Proposals in New York

Overview of New York's Aging Electric Infrastructure*

- ◆ 11,600 miles of high voltage transmission statewide
- ◆ Last major cross-state transmission project built in 1980s
- ◆ 40% (4,700 miles) of the existing transmission system will likely need to be replaced over the next 30 years



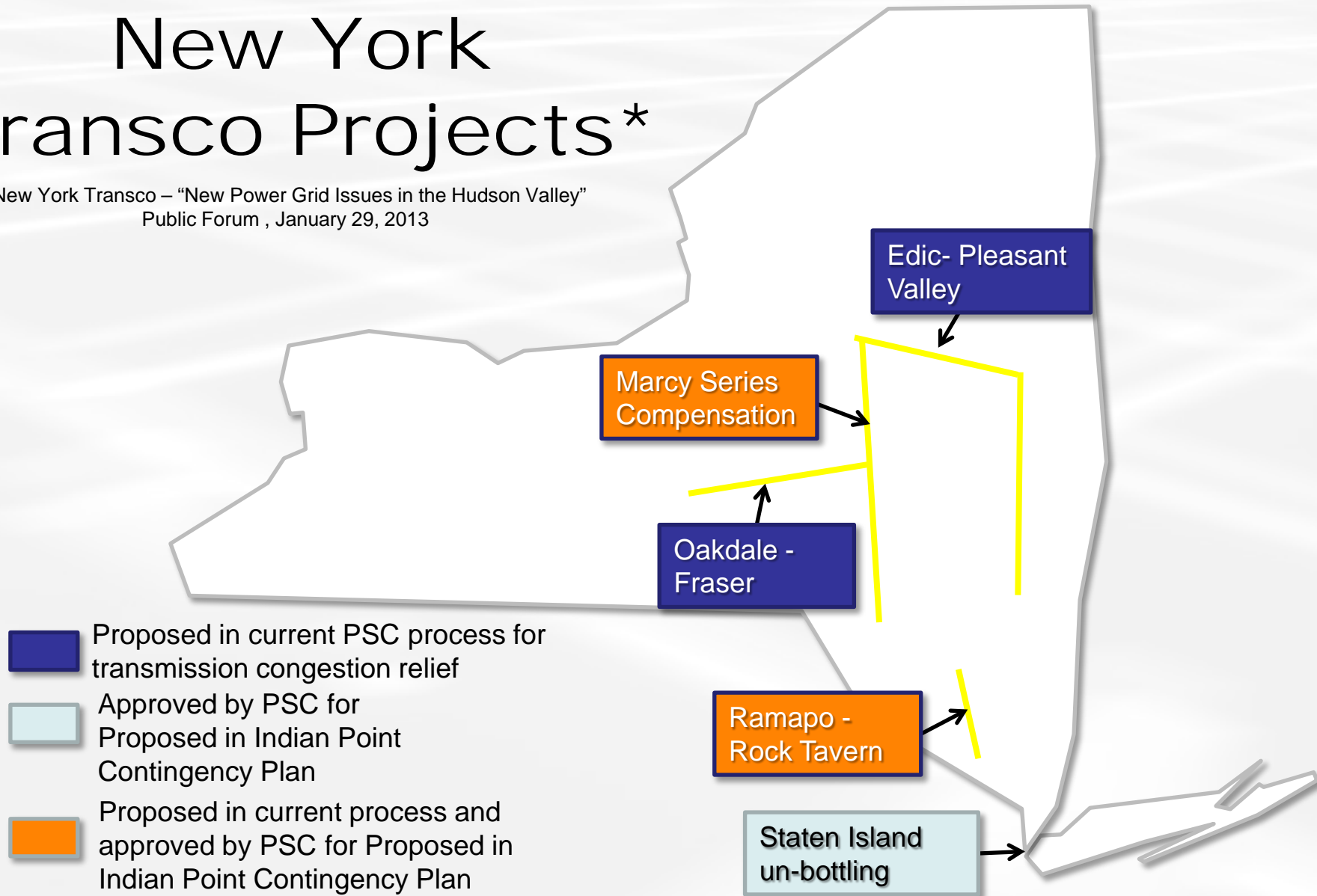
* New York Transco - New Power Grid Issues in the Hudson Valley, Public Forum , January 29, 2013

Current Transmission Proposals in New York

- **Governor's Energy Highway Request for Proposals – Solicitation for Public/Private Investments :**
 - <http://www.dps.ny.gov/ACTransmission/>
 - <http://www.nyenergyhighway.com/Blueprint.html>
- **New York Transmission Owners – Transco Projects:**
 - <http://www.nytransco.com/projects.html>
- **Champlain Hudson Power Express**
 - *500 kV Underwater/underground HVDC Transmission Line from Quebec to NYC*
 - <http://www.chpexpress.com/about.php>
- **NextEra – Transmission Projects:**
 - *148 mile 345 kv Marcy to Pleasant Valley Project*
 - *57 mile 345 kv Oakdale to Fraser Project*
 - <http://www.neetny.com/index.shtml>
- **North America Transmission Projects:**
 - *80 mile 345 kv Edic to Fraser Project*
 - *65 mile 345 kv New Scotland-Leeds-Pleasant Valley Project*
 - <http://www.nat-ny.com/>
- **Boundless Energy Projects:**
 - *Leeds Path West Projects (Overhead/underground 345 projects from Leeds to Hurley to Roseton to East Fishkill)*
 - <http://www.leedspathwest.com/home>

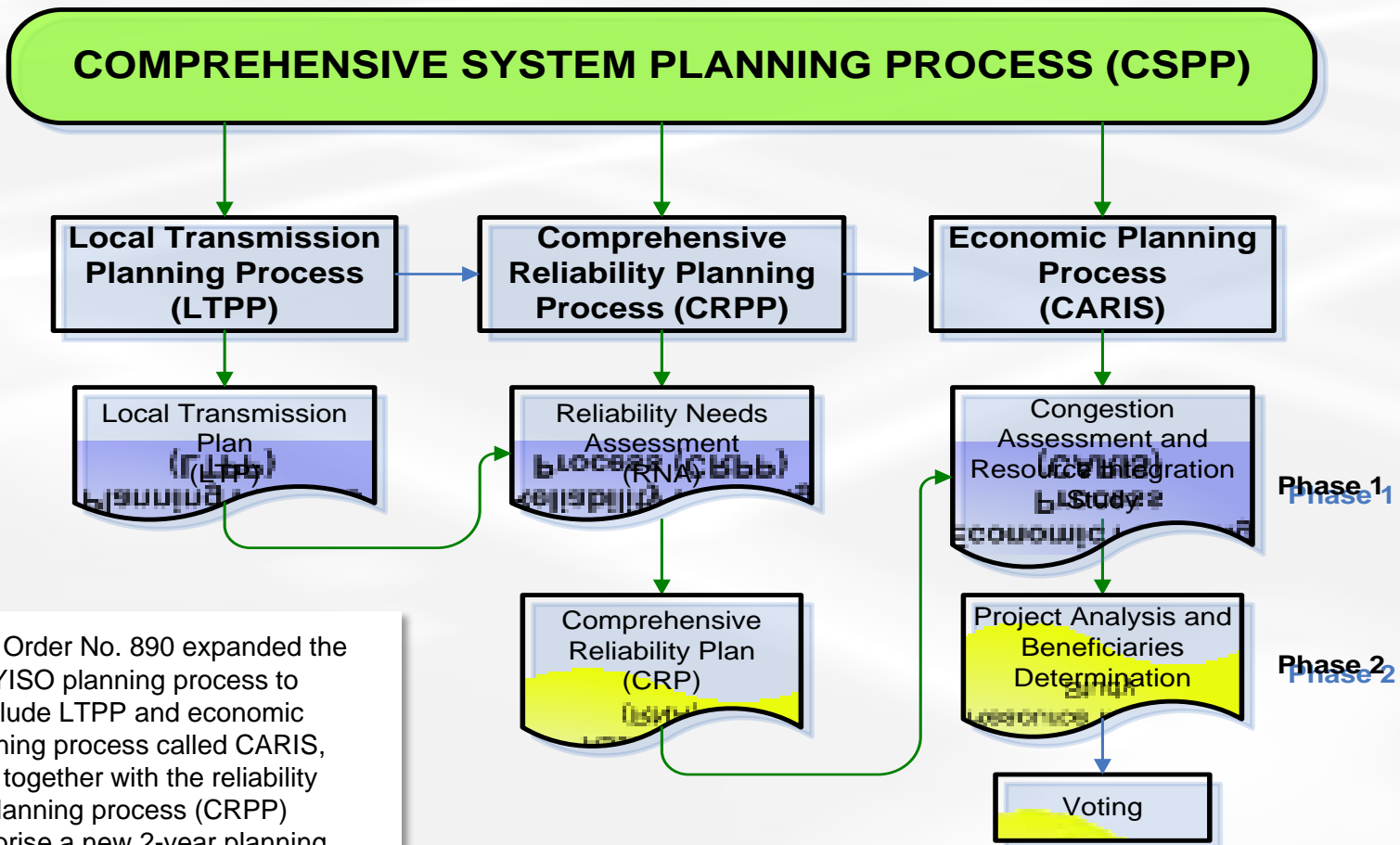
New York Transco Projects*

* New York Transco – “New Power Grid Issues in the Hudson Valley”
Public Forum , January 29, 2013



APPENDIX

Current NYISO Planning Process



FERC Order No. 890 expanded the NYISO planning process to include LTPP and economic planning process called CARIS, that together with the reliability planning process (CRPP) comprise a new 2-year planning process known as CSPP.

Role of NYS PSC* in the NYISO CRPP

- ◆ New York State Public Service Commission (NYS PSC) reviews “regulated alternatives” proposed by IOUs or Other Developers upon request
- ◆ Reviews and screens “gap” solutions
- ◆ Reviews TOs’ backstop solution and alternative regulated solutions when NYISO determines action is necessary to ensure reliability
 - PSC selects the preferred regulated solution
- ◆ PSC generally has final siting & certification authority with respect to backstop solution ultimately selected
- ◆ PSC Staff participation in the NYISO process facilitates necessary approvals to ensure reliability

* Proceeding to Establish a Long Range Electric Resource Plan and Infrastructure Planning Process, NYS PSC Case No. 07-E-1507, *Policy Statement on Backstop Project Approval Process*, Issued February 18, 2009

Order 1000: Background

- ◆ **FERC Order 1000: Final Rule on Transmission Planning & Cost Allocation**

- *Issued on 7/21/11 (Docket RM10-23-000)*
- *Builds on the requirements of Order 2000 and Order 890*

- ◆ **Key Provisions**

- *Establishes a Regional Planning requirement for all FERC jurisdictional Transmission Providers*
- *Requires a public policy transmission planning process*
- *Requires comparable treatment for incumbents & non-incumbents*
- *Requires an expanded inter-regional planning process*
- *Establishes six principles for regional and inter-regional cost allocation*

- ◆ ***This presentation provides a status update on NYISO compliance***

April 18, 2013 Order: Regional Compliance

- ◆ **Required significant changes to the existing reliability planning & proposed public policy planning processes**
 - *NYISO—not the NYPSC—must select the more efficient or cost effective transmission project*
 - *Required comparable evaluation of “all resources” –not just transmission—in the proposed public policy planning process*
 - *Required additional support for the proposed load ratio share default cost allocation for public policy transmission projects*
 - *Required changes and clarifications to the proposed entity qualification and project information requirements*
- ◆ **Required NYISO to advance the proposed effective date to January 2014 -- regardless of whether FERC has issued a final order by that time**

Second Regional Planning Filing

- ◆ **NYISO and NYTOs made a joint further compliance filing on October 15, 2013**
 - *NYISO selects “more efficient or cost effective” transmission projects for cost allocation*
 - For reliability and public policy transmission projects
 - Cost, operability, expandability, and other criteria provided
 - *Developers and TOs can propose cost allocation methodology with default “load ratio share” allocation*
 - *TOs consider public policy in local planning*
 - *Developer and project qualifications specified*
- ◆ **FERC approval pending**
 - ◆ *Not waiting for FERC Order; new reliability planning process started January 1, 2014; public policy planning kicks off in Q4*



The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.

www.nyiso.com