

Update on New External Proxy Activity

Prepared for the
Business Issues Committee
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Update on New External Proxy Activity

- ◆ There are 3 new external proxy busses under development.
 - *Neptune (PJM – NYISO Zone K)*
 - *Cedars (HQT – NYISO Zone D)*
 - *1385 (ISO-NE – NYISO Zone K)*

Neptune

- ◆ Neptune is an HVDC tie between New Jersey and Long Island.
 - *60-660 MW normal operating range (will not operate at less than 60 MW). 750 MW emergency upper operating limit.*
 - *Will operate as a PJM Transmission Owner*
 - *Currently under construction*
- ◆ LIPA purchased the full capacity (import) rights to the Neptune Line.
 - Unused import capability will be subject to release requirements for qualified third party use consistent with FERC orders

Neptune

- ◆ Will be scheduled independent of the existing NYCA/PJM interface.
- ◆ LBMP computed at proxy will be independent of LBMP at existing NYCA/PJM interface.
- ◆ Will initially support only import (to NYCA) transactions (PJM Tariff limitations).
- ◆ Neptune is scheduled to commence live testing (within market constructs) in April 2007 and will become commercial in July 2007.

Neptune—Supporting Tariff Changes

- ◆ Supporting Tariff Changes for Neptune
 - The NYISO must identify the Neptune Line as a Scheduled Line in Section 2.161a of the Services Tariff and Section 1.39d.02 of the OATT and add a defined term “Neptune Scheduled Line” to the Services Tariff and the OATT.
 - Because Neptune will operate based on physical transmission reservations (like CSC), the following tariff revisions will also be necessary:
 - Attachment N to the Services Tariff will need to be modified to address Neptune or a similar, new Attachment will have to be created
 - The reference to Attachment N on Sheet No. 111 of the OATT will require a corresponding revision
 - The DAM and Real-time Market will close 10 minutes prior to normal market close times (like CSC) for Neptune, necessitating changes to the following Tariff sections:
 - Services §§ 2.153a (HAM), 4.2.2(A) (DAM), 4.4.2(B) (HAM), OATT § 1.36d.1 (HAM)

Neptune—Supporting Tariff Changes, Cont.

- Necessary tariff revisions, cont.:
 - The definition of Advance Reservation will need to be modified (or a similar new term will need to be added) to recognize the long term physical rights related to Neptune.
 - Services § 2.1.2., OATT § 1.0b
 - Section 13.6 of the OATT, addressing the in-hour curtailment of transmission service, will need to be modified to reflect the NYISO's intent to curtail Neptune transactions based on the transmission priority (firm/non-firm) of the associated Advance Reservation (like CSC).

Neptune—Special Pricing Rule

- ◆ The NYISO Market Advisor has designated the Neptune Line as being subject to the Special Pricing Rule for Scheduled Lines.
 - See Attachment B to the Services Tariff, Sheet Nos. 335B and 335B.00 and Attachment J to the OATT, Sheet Nos. 475.01 and 475.01a.
 - *When the DA scheduled flow exceeds what is feasible in Real-Time, there will be limited competition to provide relief.*
 - MPs will not initially be able to schedule Real-Time exports to PJM (counterflow).
 - Even after it becomes possible to schedule exports to PJM over Neptune, only entities holding reservations will be eligible to offer to supply the exports. This limits the universe of potential offerors.
 - *Competition from MPs willing to curtail DA imports at Neptune will be limited to transactions scheduled DA.*
 - The owner of firm rights is likely to be pivotal in many cases where DA scheduled imports must be curtailed.

Market Monitoring Data Sharing

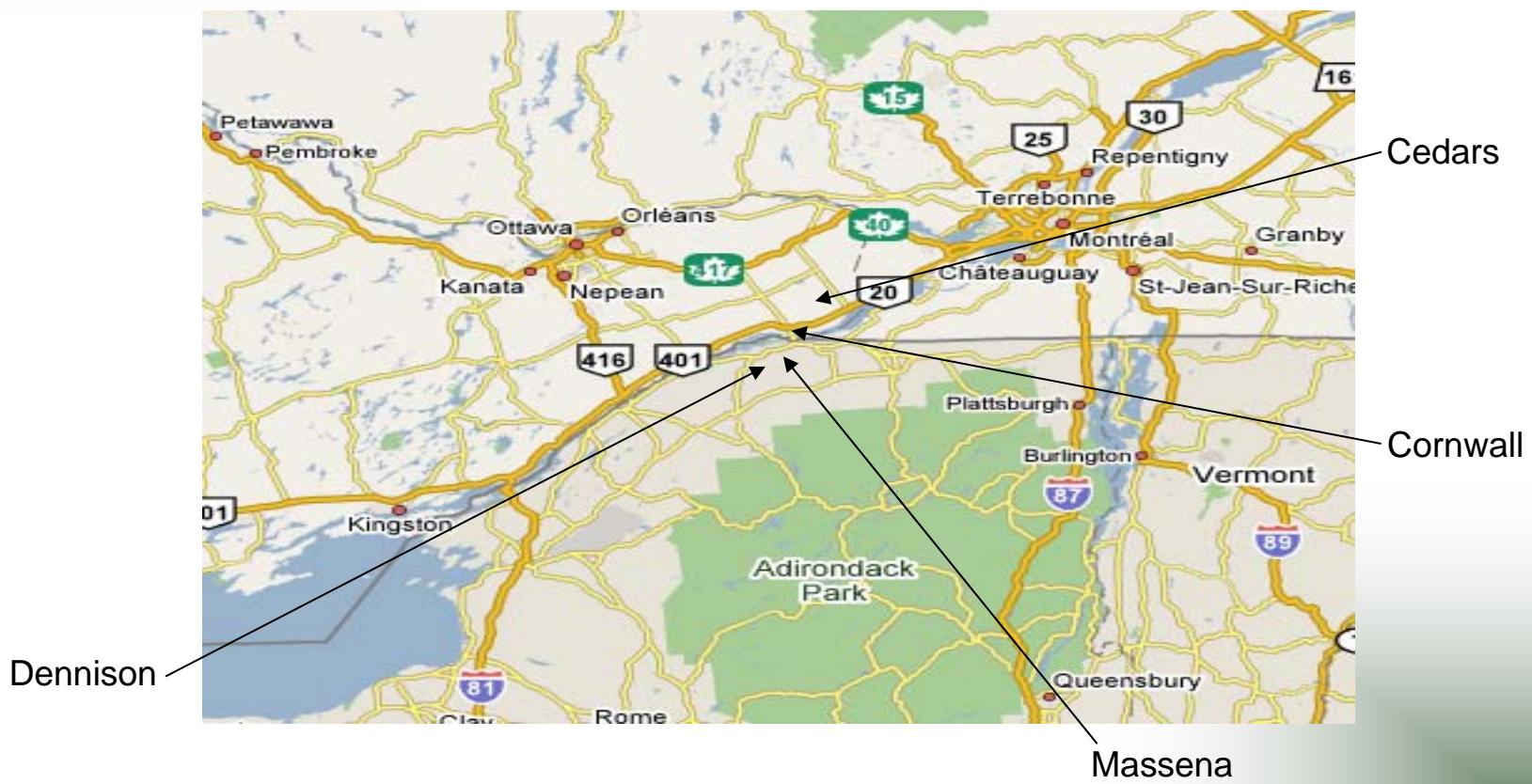
- ◆ Establishment of multiple proxy buses representing the interfaces between two Control Areas may present gaming opportunities
- ◆ To address this concern, the NYISO will seek authority to share information with PJM's Market Monitoring Unit regarding transactions at all PJM proxy buses similar to the authority the NYISO was granted to share data with ISO-NE
- ◆ The NYISO already possesses limited authority to share confidential data with the PJM Market Monitoring Unit
 - *See Market Monitoring Plan § 6.5*
- ◆ The NYISO will require that certain protections be in place before the two market monitoring units begin sharing Confidential or Protected Information
 - *See Market Monitoring Plan § 6.5; OATT Att. F § 4.0 Sheet Nos. 373B, 373B.00, 373B.01*

Cedars

- ◆ New Proxy Bus at Dennison based upon a Scheduled Line between Dennison (NYCA) and Les Cedres (HQT) - the “Cedars Interconnection.”
 - *Controlled via generation at Cedars and a Variable Frequency Transformer (VFT) at Langlois.*
 - *System Impact Study discussed at Feb. 21, 2002 OC meeting.*

Cedars

Where is Dennison?



Cedars

- ◆ Will be scheduled independent of the existing NYCA/HQT interface.
- ◆ LBMP computed at proxy will be independent of LBMP at existing NYCA/HQT interface.
- ◆ Will support import, export and wheel-through transactions.
 - *Cedars is currently modeled as a generator in NYISO systems.*
 - *Exports (from NY) are currently only permitted in an emergency situation.*

Cedars

- ◆ Import capacity will be in addition to the 1200 MW HQT to NYCA limit.
- ◆ Import capacity will be in addition to the current 2755 MW statewide ICAP import limit.
 - *Subject to review / modification in subsequent study periods*
- ◆ The NYISO is working with the affected TO's to determine appropriate import and export limits.
- ◆ Current DOE export regulations limit the NYISO's emergency and inadvertent Energy exports to HQ to 100 MW/hr and 300,000 MWhr/yr at the Cedars Interconnection.
 - *MPs desiring to export power to Canada are responsible for obtaining all necessary permits and complying with the terms and conditions of their permits.*
- ◆ NYISO transactions will be bid/scheduled in the same manner as any external proxy other than the CSC (and Neptune).
- ◆ Implementation planned for late in Q1 2007.

Cedars

- ◆ Supporting Tariff Changes for Cedars
 - *The NYISO must identify the Cedars Interconnection as a Scheduled Line in Section 2.161a of the Services Tariff and Section 1.39d.02 of the OATT.*
 - *The NYISO Market Advisor has determined that the Cedars Proxy should be subject to the Special Pricing Rule for Scheduled Lines.*
 - See Attachment B to the Services Tariff, Sheet Nos. 335B and 335B.00 and Attachment J to the OATT, Sheet Nos. 475.01 and 475.01a.

Cedars – Special Pricing Rule

- ◆ The Special Pricing Rule was originally developed to address pricing anomalies that occurred due to a lack of competition at the HQ (Chateauguay) proxy bus.
 - *Under certain operating conditions, DA scheduled flows exceeded what was feasible in Real-Time (RT).*
 - *The NYISO was forced to schedule RT exports and curtail Day Ahead (DA) scheduled imports in order to relieve the import constraint.*
 - Competition to relieve the RT import constraint at the HQ proxy bus was extremely limited.
 - As a result, the NYISO scheduled RT exports and curtailed DA scheduled imports at extreme negative prices at the HQ proxy bus to relieve the constraint.
- ◆ At a competitive proxy bus, the NYISO can choose from many HA export bids and offers to manage RT flows over the interface.

Cedars – Special Pricing Rule

- ◆ The NYISO has consulted with the Market Advisor and concluded that the Special Pricing Rule should be applied to the Cedars Interconnection.
 - *The Cedars Interconnection will be subject to the same competitive conditions that limit the number of MPs capable of relieving RT import constraints at the HQ proxy bus.*
 - *Historically, market concentration has been much higher at the HQ proxy bus than at other proxy buses.*
- ◆ Competition from MPs willing to schedule RT exports at Cedars will be limited:
 - *On short notice, it may be difficult for MPs to find a buyer in HQ and reserve transmission service on the HQ-side in order to complete a RT export transaction.*
- ◆ Competition from MPs willing to curtail DA imports at Cedars will be limited to transactions scheduled DA.
 - *If a single entity has a high market share, it is likely to be pivotal.*
- ◆ The vast majority of RT exports and DA imports continue to be scheduled by a single entity.

1385

- ◆ 1385 Proxy based upon a PAR controlled underwater cable between Norwalk CT. and Northport NY (Long Island)
 - *Currently modeled as part of the total NY/NE AC interface*
 - *Discussed at MSWG – June 2003*

1385

- ◆ Will be scheduled independent of the existing NY/NE AC interface, the CSC (and Neptune).
- ◆ LBMP computed at proxy will be independent of LBMP at existing NY/NE AC interface, the CSC (and Neptune).
- ◆ Will support import, export, and wheel-through transactions.
- ◆ NYISO transactions will be bid/scheduled in the same manner as any external proxy other than the CSC (and Neptune).
- ◆ Planned for implementation in June 2007.

1385

- ◆ Supporting Tariff Changes for 1385
 - *The NYISO must identify the 1385 cables as a Scheduled Line in Section 2.161a of the Services Tariff and Section 1.39d.02 of the OATT.*
 - *Additional revisions to the Tariffs and certain of the NYISO's Related Agreements may be needed to address issues related to LIPA's tax-exempt financing and right to approve transactions scheduled over the 1385 cables.*
- ◆ The NYISO is not seeking approval for Tariff changes related to 1385 at this time. These Tariff changes will be discussed in greater detail at the WG level at a later date.

Update on New External Proxy Activity

- ◆ Ramp on controllable lines will be subject to NYCA wide ramp limits
- ◆ Model update to support the new controllable lines scheduled for October 2006.
 - *As part of the external proxy bus development process the new external proxy buses will become visible within the MIS prior to their implementation. During this period user fields will be “grayed out” and bidding will not be permitted until each proxy bus is activated.*