

Operations Reactive Studies Voltage Support Service 2004 Update



*NYISO Business Issues Committee
Status Report – September 2004*

Operations Reactive Studies

- 2004 – Updated TB #91 and #103 VSS test report forms to improve ease of reporting cross-compound or combined cycle generators
- Completed Phase 1 load power factor assessment (draft report to SOAS)
- Developed issues and discussion for Voltage Support Ancillary Service consideration



VSS Testing Review

- **Operations Engineering was assigned the lead role in the review of the annual testing**
 - *Work with Market Services to follow up deficiencies in testing*
 - *Provide Confirmation to Grid Accounting*
- **Reviews of Operating issues**
 - *Response to NYISO requests*
 - *Real-time voltage support issues*



VSS Testing Review

	Suppliers	Gross MVA_r Capability
2001	242	12418
2002	254	13902
2003	275	14975



VSS Issues for Consideration

- Clarification of Testing Requirements
- Six-year Test Requirement
- Reactive Capability
- Gross vs. Net Capability
- Compensation Rate
- Compensation for non-generator resources
- Interconnection Requirements
- Compensation for FACTS-type devices
- Two-tier voltage support service



Address immediately

- **Clarification of Testing Requirements**
 - *Monitor VSS test reports, comments from MPs*
 - *Update test report form and TBs*
- **Six-year test requirement**
 - *Continue Waiver of 6-year test requirement*
 - *Monitor NERC Standards process and Blackout Recommendations*
 - *Propose new comprehensive testing requirement when NERC develops new standard and compliance template*



Near-term Issues

- **Reactive capability range of control**
 - *Consider lagging and leading capability*
- **Gross vs. Net Reactive capability**
 - *Net capability is a better indication of the contribution to the system and consistent with ICAP and metering*
- **Compensation rate**
 - *Annual review of rate should consider any changes in the accounting method or service considerations*



Longer Term Issues

- **Compensation for non-generator resources**
 - *Synchronous Condensers – work with owners and other interested stakeholders to develop a proposal for compensation*
- **Interconnection requirements**
- **FACTS devices**
- **Two-tier voltage support**



Staff Proposal to address Near-term

- **1. Reactive power metered as net MVAR (consistent with MW metering for ICAP DMNC and energy)**
- **2. Capability basis for compensation be the full demonstrated range – lagging and leading net MVAR capability as determined by actual test**
- **3. All generators participating will be required to test lagging MVAR capability during Summer Capability Period**
- **4. Compensation rate be adjusted to reflect the new basis for compensation (net) and range of control (lag & lead)**
- **5. Application of the adjusted compensation rate for the 2005 payment cycle**



Compensation Rate for 2005

- **Recalculation of current (2004) rate of \$3919 with due consideration of:**
 - ***Account for change in metering from Gross to Net MVA_r***
 - ***Account for change in capability to include both net lagging and net leading capability***
 - ***Will maintain suppliers “revenue neutral” assuming leading capability is proportional to lagging capability***

