NYISO Electric System Planning Process

Input Data, Assumptions, and Variable Lists

Revised 7/3/03

Draft for Discussion

Situational Input Assumptions

- **Economic Outlook (R & C)***
  - *GSP growth*
  - *Employment Growth*
  - *Base, High and Low Scenarios*
  - *Use Economy.Com*
- **Fuel Prices (C)***
  - *Coal, Oil, Gas and Nuclear*
  - *Basis Difference – i.e., transportation costs*
  - *Use DOE EIA*

** NOTE: R = Relaibility analysis; C = Congestion projection*

Situational Input Assumptions (cont.)

- **New Resources (R & C)**
  - *Generating – include TO and class year projects*
  - *Transmission - include TO and class year projects*
  - *Demand Response – PRLWG*
  - *Alternative Scenarios – Criteria?*
- **Resource Retirements (R & C)**
  - *Planned*
  - *Alternative Scenarios - Criteria?*

Situational Input Assumptions (cont.)

- **Neighboring Control Areas (R & C)**
  - *Imports/Exports*
    - Border charges (C)
    - Levels (R & C)
  - *Develop Planning Coordination Protocols with neighboring control areas (R & C)*
    - Data exchange protocols
    - Future assumptions
    - Coordination of analyses

Data and Modeling Inputs

- **Load Forecast (R & C)**
  - *Base, High, Low Scenarios - LFWG*
  - *Load Forecast Uncertainty – Weather and forecast error*
- **Generator Data (R & C)**
  - *Availability statistics – GADS & Generic (R & C)*
  - *Heat-rate curves – MAPS/Platts-RDI (C)*
  - *Emission rates – MAPS/Platts-RDI (R & C)*
  - *Bidding Assumption – "The perfect competition assumption" (C)*
    - I.E., generators bid marginal cost which is essentially their fuel cost

Data and Modeling Inputs (cont.)

- **Transmission (R & C)**
  - *Network Topology*
    - New York
    - Neighboring systems
  - *PAR settings*
  - *Interface Definitions*
  - *Contingency Lists*
  - *Availability*
  - *Transfer Limits*
    - Normal
    - Emergency

Data and Modeling Inputs (cont.)

- **Demand response (R & C)**
  - *As Percent of Peak, Load Modifier, etc – PRLWG*
    - Price Responsive
    - Emergency response
    - Energy efficiency programs
- **Operational (R & C)**
  - *EOPs*
  - *Lines normally operated open etc*
- **Reliability Criteria and Standards (R)**
  - *NERC/NPPC*
  - *NYSRC*
  - *Local Reliability Rules*