REASONABLE INPUT VARIABLES FOR THE REFERENCE UNIT NET CONE CALCULATION

BRUCE ANDERSON NEW ENGLAND POWER GENERATORS ASSOCIATION, INC. SEPTEMBER 9, 2020, NEPOOL MARKETS COMMITTEE MEETING

#### INPUT VALUES MUST BE REASONABLE

- The Concentric Energy Advisors (CEA)/Mott MacDonald (MM) Net CONE proposal has been vetted through the NEPOOL process over the course of now several meetings.
- NEPGA appreciates ISO-NE's, CEA's and MM's responsiveness to the questions, requests for data, and other issues raised by NEPGA Members to date, which has helped improve Members' understanding of the many inputs into the Net CONE calculation.
- This deeper understanding of the inputs and assumptions has led NEPGA to find that several of those material to the Net CONE value are unreasonable and should be replaced with a reasonable value.
- NEPGA identifies those inputs and assumptions in the following slides and provides explanations for its findings that the inputs and assumptions, without modification, are unreasonable.

# EAS OFFSET INPUTS

#### Intra-day Gas Costs

- CEA/MM Proposal: No intraday premium based on no observed premium on average over all hours.
- NEPGA: Use historical premium during those hours when the reference peaker unit is actually dispatched in real-time.
- Available Gas Transportation to Dispatch in Real-Time
  - CEA/MM Proposal: No firm, no-notice, or proxy cost for firm delivery of gas.
  - NEPGA: A SC peaker nominates gas intra-day, not day-ahead, and thus must incur the cost of firm delivery for intra-day nomination or be subject to gas sellback costs and imbalance charges for gas nominated but not consumed.

### EAS OFFSET INPUTS

- <u>Turbine Heat Rate Competitiveness and Capacity Value</u>
  - Proposal: LHV value for the nominal heat rate.
  - NEPGA: HHV is the reasonable nominal heat rate value, in that gas is priced according to the HHV.
- Hours of Capacity Scarcity Condition
  - Proposal: Based on GE-MARS model run that assumes zero economic imports of energy over ties (aside from that backed by firm capacity) until a Capacity Scarcity Condition occurs - i.e., the system planning standard - and no contribution from resources that participate as energy only resources.
  - NEPGA: Use historical import energy flows (incremental to those backed by firm capacity) over the ties when economic, including due to price signals that precede a deficiency in operating reserves.

### **GROSS CONE INPUTS**

- Infrastructure for Gas Delivery
  - Proposal: No compression or E-lateral upgrade costs.
  - NEPGA: Compression and E-lateral upgrades necessary based on dispatch schedule implicit in CEA modeling, the pressure specifications for the reference turbine, Algonquin and E-Lateral pressure characteristics, and that the Algonquin E-Lateral is fully subscribed.
- Location of Reference Unit
  - Proposal: Located in New London County, CT, within 2 miles of interstate gas pipeline and 345 kW transmission system for interconnection.
  - NEPGA: No greenfield sites within or adjacent to industrial usepermitted cites that meet the 2 mile / 2 mile criteria. Extend the lateral and radial lengths to 5 miles to more reasonably accommodate the search for suitable parcels.

# **GROSS CONE INPUTS**

#### Monetization of Bonus Depreciation

- **Proposal:** Assumes proposed Net CONE value is sufficient incentive for a sale-lease back financing agreement or other tax equity financing arrangement.
- NEPGA: Concrete analysis demonstrates that the costs outweigh the benefits, so eliminate the bonus depreciation benefit.

#### <u>Debt/Equity Ratio</u>

- Proposal: Based on two-year average debt weighting for peer group.
- NEPGA: Should be modified based on the ratio of certain revenues (i.e., 7-year price lock) and those at risk (EAS margin) relative to the ratio underlying Net CONE in other RTOs.

### **GROSS CONE INPUTS**

- Owner's Cost and Contingency
  - Proposal: Omits Owner's cost and contingency.
  - NEPGA: Substitute reasonable estimates of Owner's cost and contingency.