AMENDMENT TO THE REFERENCE UNIT AMORTIZATION PERIOD

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NEPGA PROPOSES A 15-YEAR AMORTIZATION PERIOD TO ACCOUNT FOR ECONOMIC OBSOLESCENCE

- NEPGA proposes to amend the amortization period for the Reference Unit from 20 years to 15 years. A 20-year amortization period fails to reflect the several economic and market risks faced by developers, which risks create a finite period concluding in economic obsolescence.

- In the 2014 Net CONE reset process, Brattle explained that "developers face threats to expected cash flows that may not be accounted for in our analysis" including:
  - Market risks, such as new technologies entering the market that could reduce expected net revenues below those accounted for the in the "level-real" assumption;
  - Potential reductions in system load, given the region's commitment to energy efficiency; and
  - The risk of market intervention by states or other entities.

- For these reasons, Brattle defaulted to the 20-year economic life notwithstanding the potential physical life of a resource.

TECHNOLOGY RISKS

Technology Risk:

- As an example, PJM selected a frame-sized GT simple cycle in both 2014 and 2018; however, in the intervening 4 years the reference technology efficiency increased by 10%.
- When the fuel costs represent the bulk of production costs, the efficiency improvement created an amount of economic obsolescence in only 4 years.
- This principle has also manifested in other technologies. As an example, wind turbines have doubled in single-unit output in less than a decade, which reduces the overnight installation costs, reduces the ongoing operation and maintenance costs, and increases their ability to capture previously uncaptured wind energy.
- Technology obsolescence occurs rapidly and is a concern regardless of technology.

RISK OF REDUCTION IN SYSTEM DEMAND

Risk of Reduction in System Demand:

- **The New England states lead the nation in energy efficiency measures which has had the intended effect of reducing system load.**

- **The ISO-NE markets provide revenue streams for incremental measures to be deployed creating a positive feedback loop for these EE measures and their deployment is expected to continue.**

REGULATORY RISK

- **Regulatory Risk:**
  - **NYISO recently reduced the economic life of the reference unit to 17 years in recognition of the impacts NY state law and policy will have on the economic life of the reference unit (like here, a simple-cycle gas unit).**
  - **In New England, most states have increasing, statutory Renewable Portfolio Standards (RPS) requirements that require the procurement of energy from non-emitting Resources.**
  - **By 2045, the 20th year of the reference unit's economic life, those requirements will represent a significant percentage of the electricity consumed in the region. Additionally, many states have issued executive orders to accelerate the trend toward low- or zero-carbon economies.**
  - **The three states that represent almost 3/4ths of the load have legislative mandates to achieve 80% reduction in greenhouse gas (GHG) emissions by 2050. Clearly, if states' mandates are to be met the resource mix in the near future will be much different than anticipated by a 20-year amortization period.**
  - **Under current market rules this transition would be expected to reduce energy and ancillary services revenue opportunities for the reference unit.**

ALL FACTORS POINT TO A SHORTER ECONOMIC LIFE FOR THE REFERENCE UNIT

- **Stakeholders have suggested that these considerations should be ignored and more reliance should be placed on physical life. NEPGA disagrees.**

- **There has been no evidence provided that the reference unit would be able to sustain its annual cash flows in real dollars terms for 20 years, let alone beyond the current economic life.**

- **The risk factors and trends Brattle enumerated in 2014 have accelerated, increasing the pressure on developers, calling for a reduction in economic life.**

- **NEPGA thus proposes to amend the assumed amortization period for the Reference Unit from 20 years to 15 years.**

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Questions?

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