

Large Scale Renewables Program
Purchase of Offshore Wind and Tier 1
Renewable Energy Certificates
Request for Information LSRRFI22-1 (Capacity Accreditation)
Question & Answers Released July 28, 2022

## Questions:

Q1. Can NYSERDA provide an example of applying the proposed Capacity Accreditation formula to a representative solar and wind project? This would assist us in better understanding how it would be used in a contract.

A: Using the same example inputs as the tables presented in Section 3 of the RFI (Index REC Strike Price of \$60.00/MWh, Reference Energy Price of \$15.00/MWh, Reference UCAP Price of \$5.00/kW-month) and 50% capacity factor, the calculation of the Reference Capacity Price and REC Price for representative wind and solar projects under the current and NYSERDA's current understanding of how the new NYISO rules will be implemented would be as follows (calculations are illustrative only and not meant to represent expected values).

## Representative Solar Project

Assumptions: Installed Capacity of 20 MW, Summer UCAP Production Factor of 50% (slightly higher than value in the NYISO ICAP Manual), monthly production of 7,200 MWh (50% capacity factor across all hours).

Current Reference Capacity Price Formula

$$Reference\ Capacity\ Price = \frac{\frac{\$5.00}{kw - month} \times 50\% \times 20\ MW \times 1,000}{7,200\ MWh} = \frac{\$6.94}{MWh}$$
 
$$REC\ Price = \frac{\$60.00}{MWh} - \frac{\$15.00}{MWh} - \frac{\$6.94}{MWh} = \frac{\$38.06}{MWh}$$

Proposed Reference Capacity Price Formula to align with new NYISO Capacity Accreditation rules

Assumptions: Capacity Accreditation Factor of 20%, (estimated summer value associated with 5,000 MW of installed solar capacity in NYISO from the figure on page 3 of the RFI), Representative Unit capacity factor of 46% (estimated based on current Peak Load Window, consistent with NYISO UCAP Percentage).

$$Reference\ Capacity\ Price = \frac{\$5.00}{\overline{kw-month}} \times 50\% \times 20\ MW \times 1,000}{7,200\ MWh} \times \frac{20\%}{46\%} = \frac{\$3.02}{MWh}$$

$$REC\ Price = \frac{\$60.00}{MWh} - \frac{\$15.00}{MWh} - \frac{\$3.02}{MWh} = \frac{\$41.98}{MWh}$$

## Representative Wind Project

Assumptions: Installed Capacity of 100 MW, Summer UCAP Production Factor of 20% (slightly higher than value in the NYISO ICAP Manual), monthly production of 36,000 MWh (50% capacity factor across all hours).

Current Reference Capacity Price Formula

Reference Capacity Price = 
$$\frac{\frac{\$5.00}{kw - month} \times 20\% \times 100 \ MW \times 1,000}{36,000 \ MWh} = \frac{\$2.78}{MWh}$$

$$REC \ Price = \frac{\$60.00}{MWh} - \frac{\$15.00}{MWh} - \frac{\$2.78}{MWh} = \frac{\$42.22}{MWh}$$

Proposed Reference Capacity Price Formula to align with new NYISO Capacity Accreditation rules

Assumptions: Capacity Accreditation Factor of 8% (estimated summer value associated with 5,000 MW of installed onshore wind capacity in NYISO from the figure on page 3 of the RFI), Representative Unit capacity factor of 16% (estimated based on current Peak Load Window, consistent with NYISO UCAP Percentage).

$$Reference\ Capacity\ Price = \frac{\frac{\$5.00}{kw - month} \times 20\% \times 100\ MW \times 1,000}{36,000\ MWh} \times \frac{8\%}{16\%} = \frac{\$1.39}{MWh}$$
 
$$REC\ Price = \frac{\$60.00}{MWh} - \frac{\$15.00}{MWh} - \frac{\$1.39}{MWh} = \frac{\$43.61}{MWh}$$

Q2. In the RFI, NYSERDA cites the "average peak load window capacity factor of the representative unit". How is this going to be calculated? Is this going to be static at the time of contract signature or is it a factor that is going to change over time?

NYISO reported in the May 24, 2022 presentation to the ICAP Working Group that Capacity Accreditation Resource Classes, Capacity Accreditation Factors and the Peak Load window will be established annually. NYSERDA's understanding is that NYISO will also set the average Peak Load Window capacity factor of the Representative Unit annually. We note, however, that the NYISO has not finalized the details of the capacity accreditation calculations and therefore some aspects of the calculations may change once the NYISO's capacity accreditation details have been finalized.

Q3. Is the average peak load window capacity factor of the representative unit calculated the same as the default value today? Are these the same thing?

NYSERDA's understanding is that the current NYISO Initial UCAP Percentages are representative of how the Peak Load Window capacity factor for the Representative Unit will be calculated. We note, however, that the NYISO has not finalized the details of the capacity accreditation calculations and therefore some aspects of the calculations may change once the NYISO's capacity accreditation details have been finalized.

Q4. Please confirm that the "Representative Unit" is as will be defined by the NYISO?

Yes, NYISO will determine the Capacity Accreditation Resource Classes and the Representative Unit values for each Class.

Q5. Is the referenced future link with consolidated sources of NYISO information on capacity accreditation available?

Yes, the link with consolidated sources of NYISO information on capacity accreditation is: <a href="http://www.nyiso.com/accreditation">http://www.nyiso.com/accreditation</a>

Q6. Regarding Footnote 7 of the Capacity Accreditation RFI - Is NYSERDA able to share how it made the determination that 46% is the representative average Representative Unit performance during PLW hours of the previous year's Summer Capability Period?

The value of 46% used for the Representative Unit PLW Capacity Factor in the example calculation is the Summer value for the Unforced Capacity Percentage for a solar tracking array project as stated on page 60 of the current NYISO ICAP Manual. This value is simply used as an example, not a forecast.

Q7. On page 7, the RFI states that "the UCAP Production Factors Selected by Proposers (or Suppliers, in the case of voluntary Indexed REC modifications) represent a proxy for the Applicable Production Factor, or capacity factor during Capability Period PLW hours, under the current rules." Is it NYSERDA's expectation that Proposers submit UCAP Production Factors that are in line with Project Applicable Production Factors?

Proposers are free to submit any value between 0 and 1 for UCAP Production Factors. The quoted statement was intended to mean that the UCAP Production Factor takes the place of the Applicable Production Factor in the NYISO formula that calculates UCAP, not that the value

submitted for the UCAP Production Factors are representative of each Project's seasonal Applicable Production Factors.