

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

Docket DE 16-576

Development of New Alternative Net Metering Tariffs and/or
Other Regulatory Mechanisms and Tariffs for Customer-Generators

Response to Eversource Energy's Data Requests to The Alliance for Solar Choice - Set 1

Request Received: November 4, 2016

Response Date: November 14, 2016

Request No. Eversource 1-31

Witness: R. Thomas Beach

REQUEST:

Reference page 22, Table 2. In the ISO-NE market, what entities are responsible for compliance with NOX, SOX and CO2 compliance? Are generator owners required to obtain sufficient emission allowances based on their production?

TASC RESPONSE:

Yes, generators are responsible for compliance through obtaining emission allowances based on their production and emissions, and they will seek to pass these costs through to their customers.

Response Provided By: R. THOMAS BEACH

Date: November 14, 2016

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Response to Eversource Energy's Data Requests to The Alliance for Solar Choice - Set 1

Request Received: November 4, 2016

Response Date: November 14, 2016

Request No. Eversource 1-32

Witness: R. Thomas Beach

REQUEST:

Reference page 22, Table 2. How are the costs of compliance with NOX, SOX and CO2 emissions ultimately reflected on the utility bill for an Eversource customer? Is it a separate line item on the bill or is it captured in the energy service charge?

TASC RESPONSE:

I am not personally aware of Eversource's bill presentation in regard to these elements.

I would expect that compliance costs for RGGI CO₂ costs are captured in the energy service charge. The full societal costs of emissions, however, are not included in the energy service charge. Our analysis of the societal CO₂ benefits looks at the incremental benefit to society of reducing CO₂ emissions and avoiding the harm from climate change, above the avoided carbon costs in the RGGI market (which are included in avoided energy costs).

Response Provided By: R. THOMAS BEACH

Date: November 14, 2016

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Response to Eversource Energy's Data Requests to The Alliance for Solar Choice - Set 1

Request Received: November 4, 2016

Response Date: November 14, 2016

Request No. Eversource 1-30

Witness: R. Thomas Beach

REQUEST:

Reference page 22, Table 2. Please list the benefit categories that are not captured as part of the cost for a load-serving entity to provide Default Energy Service.

TASC RESPONSE:

Default Energy Service rates reflect an average cost of generation for the entire portfolio served by the load serving entity. Table 2 lists avoided costs, which correspond to marginal, not average costs. With that clarification, the benefit categories corresponding to default energy service are avoided energy, emissions, and generation capacity, adjusted for losses.

Response Provided By: R. THOMAS BEACH

Date: November 14, 2016

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Request Received: November 4, 2016

Response Date: November 14, 2016

Request No. Eversource 1-33

Witness: R. Thomas Beach

REQUEST:

Reference page 23, Table 2. In the ISO-NE market, what types of participants engage in fuel hedging? Do transmission owners engage in fuel hedging? Do distribution owners engage in fuel hedging? Do load-serving entities (i.e. those that provide energy service) engage in fuel hedging?

TASC RESPONSE:

Fuel hedging would be done by primarily by market participants that have fuel costs. Those costs are passed through to all types of market participants, e.g. a load serving entity's avoided costs would be affected. A load-serving entity that hedges its cost in the electric market also may be engaging in fuel hedging indirectly.

Response Provided By: __R. THOMAS BEACH__

Date: ____November 14, 2016

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Response to Eversource Energy's Data Requeststo The Alliance for Solar Choice - Set 1

Request Received: November 4, 2016

Response Date: November 14, 2016

Request No. Eversource 1-64

Witness: R. Thomas Beach

REQUEST:

In Tables D-12 you include \$38.24 \$/MWh as a societal benefit based on your estimated "total local soft costs" (from Tables D-9 and D-10). Have you determined and quantified the equivalent societal benefit of non-DG alternatives? Has the \$38.24 been reduced such that it only reflects the incremental benefit of DG vs. non-DG?

TASC RESPONSE:

No, we have not quantified the equivalent societal benefit of non-DG alternatives, although those alternative benefits may be zero if the alternative resources are not built in New Hampshire. See response to Eversource 1-63.

Response Provided By: __R. THOMAS BEACH__

Date: __November 14, 2016__

STATE OF NEW HAMPSHIRE
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Docket DE 16-576

Development of New Alternative Net Metering Tariffs and/or
Other Regulatory Mechanisms and Tariffs for Customer-Generators
Response to Unitil's Data Requests to The Alliance for Solar Choice - Set 1

Request Received: November 4, 2016

Response Date: November 14, 2016

Request No. Unitil 1-55

Witness: R. Thomas Beach

REQUEST:

Reference Beach Testimony, Appendix D, Page D-7 – Reference the statement “Finally, these hourly avoided distribution costs are applied to the hourly output profile of solar DG to calculate avoided distribution capacity costs.”

- a. How are the hourly avoided distribution costs applied to the hourly output profile of solar DG to calculate avoided distribution capacity costs?
- b. Is the hourly profile of incremental DG treated the same as the hourly profile of incremental load for purposes of calculating avoided capacity costs?

TASC RESPONSE:

- a. Please refer to the workpapers “Distribution Loads – Liberty.xlsx” and “Distribution Loads – Eversource.xlsx.” A weighted average of the hourly solar-profile is calculated, weighting the hours by an allocation based on Top 100 distribution system loads. See the “Top Load Hours” tab of the spreadsheets.
- b. Hourly loads are simply used to determine which hours are in the top 100. An average solar capacity factor is determined over these hours. In this sense, the two profiles are not treated the same.

Please note that a correction is needed to Appendix D, as a PCAF allocation was not used. Instead, we used a uniform (i.e. each hour weighed equally) distribution over the top 100 hours. We note however, that a PCAF allocation produces essentially the same results (i.e. a 22.6 % load match for Eversource using PCAF vs. a 22.3% load match for Eversource using a uniform distribution, and a 28.7% load match for Liberty using PCAF vs. a 27.2% load match using a uniform distribution). Also please note that the Unitil load match was set equal to the average result for Eversource and Liberty, as we did not receive workable distribution load data for Unitil.

Response Provided By: R. THOMAS BEACH

Date: November 14, 2016

Docket No. 15-576
Development of New Alternative Net Metering Tariffs and/or Other Regulatory
Mechanisms and Tariffs for Customer-Generators

OCA Responses to Eversource

Date Request Received: 11/04/16
Request Number: Eversource 1-33
Witness: Lon Huber

Date of Response: 11/14/2016
Page 1 of 1

Data Request:

Reference page 47, Table 5. The row labelled “RPS”. Is that the avoided costs of RPS compliance (i.e. the reduce cost for a load serving entity whose load obligation is reduced by one kWh) or the cost of an actual REC?

Response:

It is based on the forecasted cost of a REC, which could be used either to avoid the cost of RPS compliance in New Hampshire or sold to another jurisdiction.