

Attachment RTB-3

Selected Discovery Responses

Public Service Company of New Hampshire d/b/a Eversource Energy
Docket No. DE 22-060

Date Request Received: December 19, 2023
Data Request No. CENH 3-001

Date of Response: January 12, 2024
Page 1 of 5

Request from: Clean Energy NH

Witness: Davis, Edward A.; Coskren, Dawn

Request:

In the direct testimony of Tim Woolf and Eric Borden of Synapse on behalf of the New Hampshire Office of Consumer Advocate (OCA), Mr. Woolf and Mr. Borden advocate for an hourly netting regime for NEM in New Hampshire and a proceeding to figure that regime out. Cf. Woolf and Borden testimony at p. 32.

- a. Is hourly netting feasible for each of the Joint Utilities given current utility systems? Can hourly netting be implemented at a nominal or negligible cost? Please suggest a rough cutoff for how the utility might define nominal or negligible cost.
- b. If hourly netting is not immediately feasible at nominal or negligible cost(s), please explain the utility hardware, software, firmware systems and processes that would require update or replacement to accomplish hourly netting for the Joint Utilities or each utility including but not limited to:
 - i. Customer meters
 - ii. Meter communications systems and relays
 - iii. Customer information storage database(s)
 - iv. Customer information data management and access system(s)
 - v. Customer data information sharing system(s) through either
 1. Customer service representatives, or
 2. Directly through customer data portals,
 3. Or otherwise (please explain)
 - vi. Load settlement system(s)
 - vii. Billing system(s)
 - viii. Other systems or hardware that would require updates or upgrades?
 - ix. If any of these systems or functions would require manual calculation and

**Public Service Company of New Hampshire d/b/a Eversource Energy and
Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Docket No. DE 22-060**

**Date Request Received: December 19, 2023
Data Request No. CENH 3-001**

**Date of Response: January 12, 2024
Page 2 of 5**

dedication of personnel beyond current assignments and functions to accomplish hourly netting, please explain.

- c. Does each utility have any estimated costs for performing the upgrades and updates address in question 1b?
 - i. If no specific estimated costs, do the Joint Utilities or each utility have any order of magnitude cost estimates for individual items explained in the answer to 1b (e.g., is each a six figure or seven figure upgrade or update)?
 - 1. Are there any estimate for accomplished those functions in 1b manually for NEM ratepayers in NH annual or over a multi-year period?
 - ii. Would the utility in its judgement plan any of these update(s) for purposes of the NEM tariff compliance?
- d. Does the utility have any information or data on the customer or system benefits of implementing the hourly netting proposal?

Response:

- a. The answer depends on what Mr. Woolf and Mr. Borden are seeking with hourly netting. If they are only seeking to apply what Eversource does with Large Commercial customers, which is instantaneous netting and involves using net consumed energy from one billing meter channel and net excess generation from another billing meter channel and apply that process to small commercial and residential customer generators, Eversource would not require interval meters. This scenario would be possible to implement with existing meters and supporting systems, and so Eversource could implement this version of hourly netting comparable to what Eversource does for Large Commercial customers through modifications to its C2 billing system.

**Public Service Company of New Hampshire d/b/a Eversource Energy and
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Docket No. DE 22-060**

**Date Request Received: December 19, 2023
Data Request No. CENH 3-001**

**Date of Response: January 12, 2024
Page 3 of 5**

These changes would incur more than nominal costs, as changes to the C2 system are typically complex undertakings. Without having done an actual cost estimate, Eversource can provide an initial assumption that these costs, at an order of magnitude level, would be about six figures, likely mid to high six figures. However, regardless the approach to hourly netting, it is almost certain that some degree of manual intervention would have to be involved and would create ongoing, incremental costs additional to the implementation costs, which have not been estimated at this time. The degree of manual intervention would vary depending on the specifics of the approach to hourly netting (i.e. the need for interval meters, or not), but examples of the types of manual intervention that could be required are: manually tracking account data, creating custom reports to pull the relevant data and then regularly running those reports every billing cycle, and creating and using calculation sheets to manually calculate the net metering credits, if the crediting calculation function cannot be automated. These are examples of manual intervention efforts that are currently applied to the “instantaneous netting” that is done for the small group of Large Power Billing customer generators.

This scenario also assumes that the current compensation structure stays the same, because changes to the compensation structure would necessitate additional modifications to the Eversource billing systems. Any of these changes could not happen overnight and could take a minimum of several months and could take a year or more.

If, however, Messrs. Woolf and Borden are suggesting using hourly data to conduct hourly netting, hourly data would require interval meters, such as AMI technology. For Eversource, hourly net metering is currently not feasible with existing meter or billing systems, or existing AMR meters, which is what approximately 98% of Eversource customers have. Implementing hourly netting in this fashion cannot be done at a nominal or negligible cost, assuming the definition of nominal or negligible to be \$100,000 or less. Given the number of systems implicated, and the need for interval meter installation, the company can state with relative confidence that implementing hourly netting using interval data would be a nine-figure investment.

b.

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**Date Request Received: December 19, 2023
Data Request No. CENH 3-001**

**Date of Response: January 12, 2024
Page 4 of 5**

The systems that would likely need to be modified or replaced wholesale would be the following listed below, in italics. This is the company's best assumption at this time, without a granular proposal to assess.

- i. Customer meters – *yes, customers would need AMI/interval meters installed*
 - ii. Meter communications systems and relays – *for interval time of use cellular meters, existing systems could be used, the meters themselves are just very expensive (approx. \$650 per meter, plus installation and setup – these also have a one-year lead time to obtain). However, to implement AMI, new meter systems able to interface with the new meters would need to be installed, as well as all accompanying software and reading equipment necessary for communication between meters and the corresponding systems. This would also likely entail wholesale replacement of all billing systems.*
 - iii. Customer information storage database(s) – *without a more granular proposal it is unclear what would be needed to satisfy the data storage needs, but it would likely require either considerable changes to existing billing and meter systems to hold exponentially greater interval meter data, or new systems altogether. One factor that would influence this would be how many meters this would apply to for instance.*
 - iv. Customer information data management and access system(s) – *the answer to this would likely parallel or depend upon the answer to iii. Above.*
 - v. Customer data information sharing system(s) through either – *this element would depend on the proposal as well – it is not sufficiently clear what kind of customer contact, education, and service would be expected with hourly netting.*
 1. Customer service representatives, or
 2. Directly through customer data portals,
 3. Or otherwise (please explain)
- c.
- i. If the above were the scope of the changes required to implement hourly metering, which is Eversource's best assumption at this time, this would like be a nine-figure initial investment for Eversource, with additional incremental ongoing operation and maintenance costs. However, if the testimony is suggesting the first example discussed in this response

**Public Service Company of New Hampshire d/b/a Eversource Energy and
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Data Request No. CENH 3-001**

**Date of Response: January 12, 2024
Page 5 of 5**

(mimicking instantaneous netting like is done for Large Commercial Eversource customers), then the costs would likely be more in the range of mid to high six figures.

1. As previously discussed, the first option (instantaneous netting) could be implemented with a degree of manual intervention, using existing systems. If hourly netting would require interval data, the new systems described above would be a necessary condition precedent.

ii. If the question is asking if Eversource would recommend moving to hourly netting as a means of updating the current net metering tariff, in either scenario of hourly netting discussed above, this functionality needs further examination and analysis of a more granular and detailed proposal before the full scope of the needed investments can be determined. Eversource does not believe that compliance with the current NEM tariff requires hourly netting, and believes it is premature to attempt this update without knowing exactly what is being proposed to be implemented and a plan for execution of that implementation is fleshed out.

d.

Eversource is uncertain of any net customer or system benefits resulting from switching to hourly netting once accounting for the upfront investments and ongoing, incremental costs required to implement such an update. It is possible that moving to hourly netting would not result in commensurate system or customer benefits, as it is unknown if the costs to implement hourly netting would outweigh any possible benefits created by more accurate net meter crediting compensation as a result of hourly netting, as is posited in testimony by Messrs. Woolf and Borden.