

Transmission cost allocation issues for Behind the meter (BTM) generation

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Acronyms used in discussion

- ISO-NE= Independent Operator-New England
- IMM= ISO-NE Internal Market Monitor
- RNL= Regional Network Load
- BTM=Behind the meter

Transmission investment

- Transmission charges rose from \$869M in 2008 to \$2.4B in 2019.
- Transmission is about 20% of electric bill.
- Transmission system is virtually congestion-free.
- Transmission costs are allocated based on monthly peak load.

ISO-NE internal market monitor

- The ISO-NE Internal Market Monitor is responsible for:
 - Adherence for market rules
 - Compliance Open Access Transmission tariff
 - They perform quarterly and yearly assessments

ISO-NE IMM Key takeaways

1. Regional Network Load (RNL) is the allocator of transmission costs among network customers and is required to be grossed up (or reconstituted) to account for BTM generation

2. BTM generation is not a tariff defined term but is a well understood concept in the industry.

–We consider it to generally include generation located behind the retail meter, connected to the distribution system and intended to serve host load

3. There is potential widespread non-compliance with this requirement and/or inconsistent application

4. Under-reporting of RNL results in a lower allocation of transmission costs to the under-reporting network customer, and consequently an over-allocation to others

–The financial impact can be significant for individual projects and network customers, but does not appear to result in significant cost shifting between states (based on BTM photovoltaic estimates)

ISO-NE IMM Key takeaways (cont)

5. BTM generation can have positive impacts in terms of reducing peak load levels and potentially transmission investment, but under the current tariff provisions the benefits should not be monetized through under-reporting load

6. A number of recommendations are included to address issues raised in the assessment, including:

a) Non-compliant PTOs/network customers should change current practices and reconstitute monthly RNL values

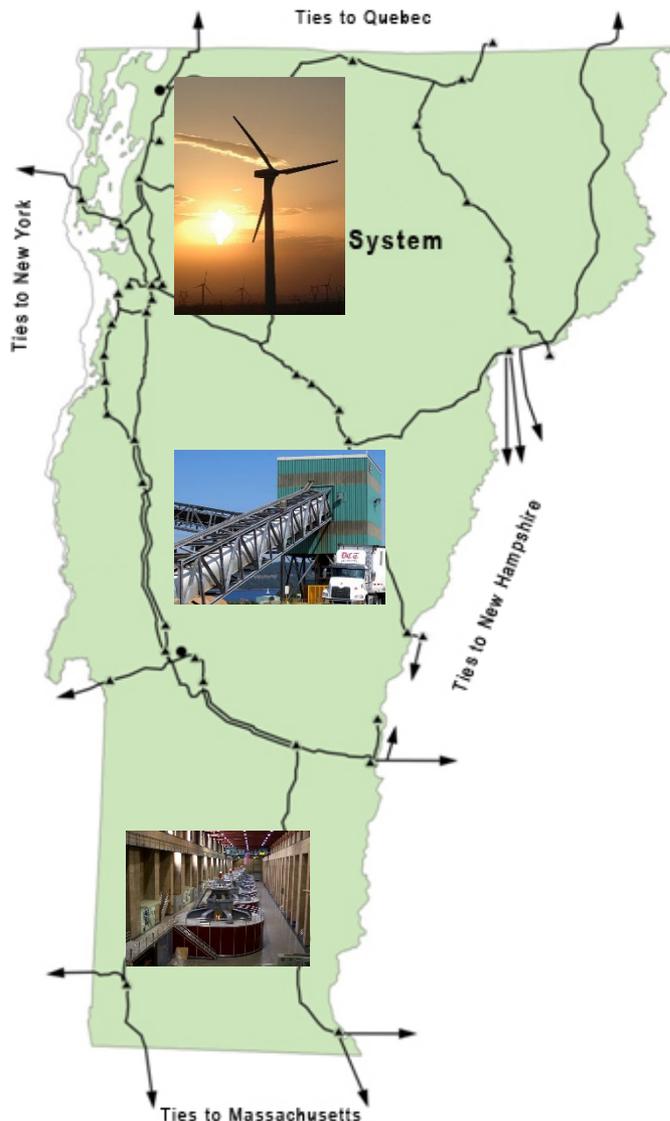
b) Review tariff for potential helpful specificity and clarification [e.g. definitions, determination of peak load hours]

c) Undertake a wider review of the transmission rate structure for consistency with transmission planning process and benefits due to BTM generation

ISO Tariff definition of Regional Network Load includes load served with BTM Generation

• **Regional Network Load** is the load that a Network Customer designates for Regional Network Service under Part II.B of the OATT. The Network Customer's Regional Network Load shall include all load designated by the Network Customer (including losses) and **shall not be credited or reduced for any behind-the-meter generation**. A Network Customer may elect to designate less than its total load as Regional Network Load but may not designate only part of the load at a discrete Point of Delivery. Where a Transmission Customer has elected not to designate a particular load at discrete Points of Delivery as Regional Network Load, the Transmission Customer is responsible for making separate

Regional network load



Key Events

VT load = Sum of tielines
+generation

If you exclude generation
your load will be
understated.

Currently BTM generation
isn't in calculation and
therefore reduces
transmission cost
allocation.

Options under consideration

- Modify tariff language to allow BTM generation to reduce load.
- Define a BTM generator that requires load reconstitution
 - All BTM generators
 - Set a threshold (For example: 1MW)

Next steps

- Work to develop a more complete proposal.
- Find like minded stakeholders to help champion our proposal.
- Bring draft proposal to ISO-NE staff.
- Present and discuss at Transmission committee stakeholder process.
- File amendments as necessary with FERC.

Questions/Comments

