

Docket No. 4780
Second Set of Data Requests of the
Sierra Club, People's Power & Light and
Natural Resources Defense Council
March 6, 2018

Storage

- 2-1. Referring to Chapter 7 (Energy Storage), regarding scale of the Company's proposed storage initiative, please provide any analyses the Company consider that indicate the amount of storage and timing needed to achieve of the greenhouse gas reduction targets in the Resilient Rhode Island Act.
- 2-2. In 2016, the Massachusetts Department of Energy Resources produced a [State of Charge](http://www.mass.gov/eea/docs/doer/state-of-charge-report.pdf) report (available at <http://www.mass.gov/eea/docs/doer/state-of-charge-report.pdf>) with a finding that a large-scale (1,766 MW) storage program would produce a BCR of 1.7 to 2.4 accounting for system benefits alone (see pp. 103-104). The report suggested a goal by 2025 of 600 MW. Massachusetts now has a goal of 200 MW of storage by 2020.
 - a. Please identify the basis for the difference between the Benefit Cost Ratio (BCR) found in the Massachusetts report and the BCR of 0.45 indicated in the Company's proposal for Docket No. 4780.
 - b. Please explain whether the Company believes that storage can be cost-effectively implemented on a scale comparable to (i.e., adjusted for load) the scale contemplated in the Massachusetts State of Charge report.
 - c. Please identify whether and how the Company believes that its proposal would place Rhode Island on a path to large-scale deployment of storage by 2025.
- 2-3. Referring to Chapter 7 (Energy Storage), page 137, what does National Grid hope to learn from its 2 MWh of proposed energy storage in Rhode Island that is different from or additive to what it intends to learn from its 15 MWh of energy storage in Massachusetts that it already owns or is in the process of installing?
- 2-4. Referring to Chapter 7 (Energy Storage), does the Company envision applying lessons learned from the storage pilot to programming within the energy efficiency and system reliability plans which are reviewed by the Efficiency Collaborative and Energy Efficiency Resource Management Council? If so, how?
- 2-5. Referring to Chapter 7 (Energy Storage), did the Company consider a program similar to the [Green Mountain Power](#) (Vermont) program coupling PowerWall storage devices with solar? Please explain why the Company did not propose such a configuration.

- 2-6. Referring to Chapter 7 (Energy Storage), did the Company consider coupling storage with Electrical Vehicle Supply Equipment, particularly DC Fast Charging stations? If not, why not?
- 2-7. Referring to Chapter 7 (Energy Storage), for storage developed as part of the Company's proposal, how does the Company plan on sharing control of storage facility with the customer? Would the customer be able to discharge the stored power in their sole discretion to optimize benefits on their side of the meter?

Solar for Income-Eligible

- 2-8. Referring to Chapter 8 (Income Eligible) at page 154 and the BCA in Appendix 2-1, page 63, the Company indicates a benefit of \$1,605,107 for avoided Greenhouse Gas (GHG) Externality Costs. However, according to comments made at the February 21 technical session, the Company stated that it will either use Renewable Energy Credits (RECs) from the projects for compliance with the Renewable Energy Standard or sell the RECs into the compliance market. In either case, all environmental attributes, including GHG reduction, will be attached to the RECs. If the RECs are not retired separately from the compliance market, please clarify why it would be appropriate to account for GHG reductions as a benefit of this program. Please recalculate the BCA for this program with the GHG benefits removed.
- 2-9 Referring to Chapter 8 (Income Eligible) at page 154, Table 8-3, the BCA model assumes a value of \$213,002 for Avoided Renewable Energy Certificate cost. Please provide the assumptions used by the Company to calculate this value, including solar output and market values for RECs over time. Please indicate whether the assumed market values for REC over time are consistent with the Company's plans for complying with the Renewable Energy Standard.

Electric Vehicle Initiative

- 2-10 Please identify the types of incentives the Company believes are most effective to induce consumers to purchase or lease an electric vehicle (EV). Please explain how the Company's proposals in the Electric Transportation Initiative would be effective in inducing consumers to purchase or lease EVs. Specifically identify any aspects of the Company's proposal that would address the barrier of high upfront costs associated with the purchase of EVs at this time.