STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

IN RE: OFFICE OF ENERGY RESOURCES:2022 FUNDING REQUEST:SOLAR QUALITY ASSURANCE STUDY:

COMMISSION'S FIRST SET OF DATA REQUESTS DIRECTED TO RHODE ISLAND OFFICE OF ENERGY RESOURCES (Issued January 14, 2022)

1-1. OER/DG Board provided the totals spent under Quality Assurance work for each of the past five years. Please provide an estimate of the additional expenses OER/DG Board expects to charge to the previously approved budget for 2021 work with a brief explanation (e.g., final report, presentation to DG Board, etc.). Please update the final 2021 spend when available.

For the 2017 Cadmus Solar Quality Assurance Study, the total cost was \$120,750.

For the 2018 Cadmus Solar Quality Assurance Study, the total cost was \$138,722.

For the 2019 Cadmus Solar Quality Assurance Study, the total cost was \$134,675.

For the 2020 Natural Power Solar Quality Assurance Study, the total cost has been \$142,227 through January 31, 2022. On February 2, 2022, OER received an invoice for \$4,000 associated with the completion of the final report deliverable. This invoice is now being reviewed and processed. When paid, the total cost will be \$146,227. At this time, we do not anticipate any further invoices unless additional work is required or otherwise requested as a part of this proceeding.

1-2. Please explain why Natural Power has recommended reducing the number of medium scale inspections.

Natural Power recommended reducing the number of medium sized inspections based on the small volume of developers installing projects in the medium scale range of the REG program. As a result, the relatively small number of developers can be represented in a smaller sample size. Also, in order to incorporate several small scale + battery storage projects into the sample for the 2022 program year and not significantly increase Natural Power's budget, the medium scale inspections was determined to be the best place to reduce inspections.

1-3. How is the training course different from the one required by National Grid's RE Growth Tariffs/Enrollment Rules for new installers? Will the course be offered only in person or will it be accessible remotely (whether live or on demand)?

The training course required by National Grid is for new installers or self-installers participating in the Small Scale REG program. It covers the basics of the installation requirements as well as the unique interconnection requirements of the program. The proposed training course, which is designed to support existing installers in the field, encompasses the findings and results from the 2021 quality assurance study as well as past reports. Also, Rhode Island recently adopted National Electric Code 2020, which includes new requirements for solar PV installations. The training will also cover updates to NEC20 for installer awareness. Natural Power will be updating their inspection protocol for the 2022 program year to include code updates to NEC20.

The training course would be offered in person and, if possible, recorded so it can be viewed virtually. This training course would allow for any issues that were heavily noted in the study to be discussed in training for installers and their subcontractors currently participating in the program.

1-4. How will Natural Power/OER choose the sampling of installations to inspect?

Natural Power and OER will choose a sampling of installations similar to the process conducted during the 2021 quality assurance work. In 2021, Natural Power prepared a sample of inspections across technologies and installers. Inspections were recommended for all installers, with an average sample of 1 to 5 inspections per installer. Table 4.1 of the final 2021 report sampling methodology outlines the summary of inspections and installers by technology.

Inspections	Projected Number of Inspections	Projected Number of Installers	Actual Number of Inspections	Actual Number of Installers
Small Solar Inspections	90	34	90	32
Medium Solar Inspections	20	7	19	6
Large Solar Inspections	4	3	4	3

Table 4.1: REG Quality Study Sample Selection

For small-scale solar installations, Natural Power selected sites randomly, in proportion to the number of operational sites per installer. The sample targeted inspecting all installers with operational sites enrolled in the REG program for the most recent REG tariff years. More details about the Study Methodology can be found in the final 2021 report sampling methodology, Section 4, found on page 7.

1-5. When does Natural Power expect the final 2021 Quality Assurance Study to be complete?

The 2021 Quality Assurance Study was completed and presented to OER and the DG Board on January 24, 2022. The final report is included as Exhibit 1 to this data request.

- 1-6. Commencing with the 2019 Program Year, at the recommendation of the DG Board, National Grid included new language in its Tariffs/Enrollment Rules such that participants who do not make their facilities available for inspection within 90 days from the date of an OER request for inspection will have their payments suspended until inspection is allowed. Continued failure to allow the facility to be inspected may result in termination of the certificate of eligibility after 180 days from the date OER requested the inspection. In Docket No. 5202, in its response to PUC 1-6.c.i stated, "The Company contacted the OER about this question and learned that twelve customers failed to make their facilities available for inspection in 2021, during in the initial round of customer outreach. The OER and its consultant found twelve replacement facilities to ensure adequate sample size for the quality assurance assessment." In its response to PUC 1-6.c.ii, National Grid indicated it had not been asked to enforce the provision in its tariff related to the suspension of payments.
 - a. Does OER agree with National Grid's quoted statements?

Yes.

b. Why did OER or Natural Power choose to find other installations rather than enforce the tariff language?

The information regarding interconnected projects, customer names and contact information is provided by National Grid and shared with OER and Natural Power per a memorandum of understanding. Natural Power prepared alternative sites for the small-scale technology, as not all participants were able to be contacted due to not in service numbers and calls not being answered based on data in National Grid's dataset. Fifteen participants were unable to be contacted, and 2 homeowners were not comfortable with having inspection. The use of alternate sites allows for the quality assurance study to be completed in a timely manner (while still aligning closely with the original sample distribution) when contact cannot be made with the small-scale participant.

c. How did OER or Natural Power choose the replacement facilities?

Natural Power chose replacement sites based on available sites per installer. Natural Power maintained the sample by installer to the extent possible. For sites that were not able to be contacted and there were no additional sites for the given installer, alternate sites for other installers with a low sample number were chosen.

d. Were the replacement facilities in the same classes as the originally chosen ones? Please indicate how many in each size class had customers decline inspection.

Overall, one installer in the small-scale sample was not inspected as the homeowner was unable to be reached and there were no alternate sites to replace the inspection with the same installer. This inspection was moved to another low volume installer. Two small scale participants declined inspection. One of the declined inspections was replaced with an alternate site with the same installer, and the second was replaced with a different low-volume installer site as there were no alternate sites with the same installer. The sample for other small-scale installers was maintained with the use of alternate sites when homeowners were unable to be reached. No inspections were declined, and no replacements were used for medium and large-scale projects.

e. Did OER or Natural Power determine whether the customers who declined inspection had their installations done by the same installer(s)?

The participants that declined inspection had different installers.

f. How many inspections (and what percentage of the total) were done on facilities installed by first-time installers in Rhode Island?

There were no new self-installers in this quality assurance study. Twenty-two inspections (19%) were completed for first time installers for this quality assurance study.

1-7. If OER or Natural Power simply chose to find replacement installations where inspection was declined, is the language sill needed in the Tariff/Enrollment Rules? Why or why not?

The language in the enrollment rules is still necessary because it helps explain to customers, when scheduling inspection appointments, why an inspection is being scheduled. This was particularly useful on a few occasions in 2021 to schedule medium scale inspections. The replacement installations are mainly used for the small-scale installations as contact was not able to be made with some participants.

1-8. How does allowing customers to decline inspections strengthen or weaken the quality assurance work? Please explain.

Inspections were declined by two small scale participants, which was a small fraction of the overall sample size. One declined inspection was moved to an alternate site for another low volume installer as this installer had no alternate sites, and the other declined inspection was moved to an alternate site for the same installer.

Projects receive a local inspection before being allowed to energize to ensure safety of the system. The quality assurance study inspections are conducted to understand overall safety, conformance, and requirement compliance of the REG program. Granting the ability for customers to decline the quality assurance inspection, while also finding alternative projects to inspect, balances the need to collect representative data with the privacy wishes of property owners. Additionally, Natural Power recognized that the quality assurance study took place during the Covid-19 pandemic, and respected those participants who declined, even if no contact would be made.

1-9. In the past, the Commission has been asked to approve a Quality Assurance budget on a not-to-exceed basis with the understanding that if the funds were not needed, they would be returned to ratepayers through the reconciliation process. Is this request consistent with those past requests?

Yes.