

REC 16-836-375

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: March 27, 2017

AT (OFFICE): NHPUC

FROM: Barbara Bernstein, Energy Analyst *BA*

SUBJECT: REC 16-836 AlsoEnergy Request for Waiver of Puc 2505.09(i)(1), Puc 2505.09(a), and Puc 2505.09(g) Requirements for Independent Monitors

TO: Martin P. Honigberg, Chairman
Robert R. Scott, Commissioner
Kathryn M. Bailey, Commissioner
Debra A. Howland, Executive Director and Secretary

CC: Karen Cramton, Director, Sustainable Energy Division *KC*
David K. Wiesner, Staff Attorney

On October 17, 2016, the Commission received an application from AlsoEnergy requesting approval as an independent monitor under the Puc 2500 rules regarding the Renewable Portfolio Standard (RPS). AlsoEnergy proposes to implement a remote monitoring and reporting process that varies in certain respects from the process contemplated by the Puc 2500 RPS rules. Staff reviewed the application and recommended that AlsoEnergy provide a letter requesting waiver requests for specified rules as discussed in more detail below. AlsoEnergy submitted a letter requesting waivers from three specific rules on December 19, 2016, and, provided clarifying information in subsequent email communications. The rule waiver requests have been docketed and Staff recommends that rule waivers be granted for all three rules to permit AlsoEnergy to implement its remote electronic monitoring process in New Hampshire.

AlsoEnergy Independent Monitoring Model

AlsoEnergy states it provides an independent monitoring and reporting service that delivers comprehensive monitoring and control solutions with a focus on solar PV monitoring using PowerTrack remote solar monitoring software and sophisticated performance modeling. AlsoEnergy states that the company works closely with the contracted installer and/or the end user to integrate their data acquisition system (DAS) to monitor and report production directly to the NEEPOOL-GIS. Essentially, production data used for REC reporting is collected by the DAS from the production meter and stored in the PowerTrack monitoring software. If the customer purchases inverter level monitoring, inverter production is stored separately from meter production and will not be used for REC reporting.

Monthly, the PowerTrack software runs an automated production reporting process of the energy recorded by the production meter. Each report is assigned to its unique GIS identifier and meter(s) tied to the PV system. When the report runs, it goes through a rigorous validation process and determines the energy produced for the given month. This report automatically exports a file designed to fit the data upload formatting requirements set by NEPOOL-GIS so there are no human errors during upload.

AlsoEnergy states that an integral part of its role as independent monitor is to provide system performance information and automated alerts to its customers. The AlsoEnergy PowerTrack system detects anomalies in meter data including, but not limited to, mismatches in meter phases, wiring problems, hardware failure, device communication, data spikes, and data gaps. If the system detects an anomaly, it generates an alert which is sent to the customer. If the issue is related to the hardware or internet connection, AlsoEnergy technical support works with the installer to resolve the issue. Anomalies such as data spikes and meter resets can be corrected through AlsoEnergy software. AlsoEnergy states that generation data is not uploaded to NEPOOL-GIS until the issue is resolved and the reporting team confirms data are valid. AlsoEnergy accesses and collects energy production through the production meter taking measurements directly from the system's AC current lines. This data then passes through modbus/RS485, TCP/IP, or FTP push protocols to a compatible data logging gateway device.

Within the NEPOOL-GIS tracking registry, AlsoEnergy currently provides independent monitoring services for projects in Massachusetts, Connecticut, Vermont, and Rhode Island.

Rules Waiver Requests for RPS Independent Monitor Approval

Puc 2505.09(i)(1) - the duties of the independent monitor shall be to perform an initial inspection of the source's meters for accuracy and capability to measure the electricity or useful thermal energy produced, unless the meter is owned by a distribution utility that has already inspected it pursuant to Puc 305.

This rule states that one of the duties of the independent monitor is to perform an initial on-site inspection of the installed meter to confirm its accuracy and verify that it is capable of accurately measuring production data to be provided to NEPOOL-GIS. AlsoEnergy only employs revenue-grade meters that meet the standards for minimum meter accuracy set forth in Part 2 of the NEPOOL-GIS Operating Rules. AlsoEnergy states that, when the PV system comes online, the onsite technician is required to contact AlsoEnergy support to perform a validation process that enables the company to certify the site. This validation process enables AlsoEnergy to confirm the location of the installed DAS through the Datalogger Serial Number/MAC ID and perform standardized diagnostics with the onsite technician to ensure equipment is installed correctly and data are valid. Data reporting to NEPOOL-GIS commences only after the site has been AlsoEnergy-certified.

Staff's review has determined that the AlsoEnergy electronic validation process provides an adequate alternative to the initial on-site inspection required under the rule. Staff therefore recommends that the Commission approve the AlsoEnergy request for this rule waiver.

Puc 2505.09(g) - No customer-sited source or source producing useful thermal energy shall use an independent monitor who is a member of the immediate family of the owner of the source, holds a direct or indirect ownership interest in the source, or who sold or installed the renewable energy system and associated equipment;

This rule requires that the independent monitor have no vested interest in the production of renewable energy certificates (RECs) from any monitored renewable energy source. AlsoEnergy states that while the company sells its DAS, including metering equipment and software used in conjunction with the PV system, it does not hold a direct or indirect ownership in the renewable energy source itself, nor will it receive compensation for monitoring services that is a function of the number of RECs issued.

Staff recommends that the Commission approve the AlsoEnergy request for a waiver of this rule because the mere fact of its sale of certain facility equipment and monitoring services seems unlikely to compromise its independence with respect to the production monitoring and reporting functions it performs remotely.

*Puc 2505.09(a) - An independent monitor shall verify the electricity production of a customer-sited source or the production of useful thermal energy from an eligible source and report such production and REC calculation to the GIS. A customer-sited source or a source producing useful thermal energy shall **retain the services of an independent monitor directly.***

This rule requires that the customer-sited renewable energy source owner retain the services of an independent monitor directly. In the case of AlsoEnergy, the company initially coordinates communication with the facility owner through the system installer. The commitment to provide remote electronic system production monitoring and reporting services is provided for a term of five years for a flat fee of \$400 as contracted by either the installer or the system owner. At the end of the five years, AlsoEnergy offers the system owner a renewal of monitoring and reporting services with AlsoEnergy. This transactional model provides PV system owners a reasonable alternative means of obtaining independent monitoring services to measure, verify, and report their PV system production to create RECs. Electronic systems serve to reduce or eliminate potential data entry errors and improve reporting efficiency. Staff therefore recommends that the Commission also approve the AlsoEnergy request for a waiver of this rule provision.

Staff further observes that, if the Commission were to approve the aforementioned rules waivers, it would be more likely that the State can attract additional independent monitors that also utilize electronic monitoring platforms. An increase in approved and active independent monitors would help alleviate the current shortage of qualified and

active independent monitors. Staff understands that such electronic monitoring is prevalent in neighboring states where similar data verification is required.

In conclusion, Staff recommends that the Commission grant the requested rules waivers under Puc 201.05, based on a finding that the waivers will not disrupt the orderly and efficient resolution of matters before the Commission and will serve the public interest, where compliance with the rules would be onerous given the circumstances and the purpose of the rules would be satisfied by the alternative method proposed.

SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED

Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.

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FILING INSTRUCTIONS:

- a) Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with:
- DEBRA A HOWLAND
EXECUTIVE DIRECTOR
NHPUC
21 S. FRUIT ST, SUITE 10
CONCORD NH 03301-2429
- b) Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.
- c) Serve a written copy on each person on the service list not able to receive electronic mail.