

# STATE OF NEW HAMPSHIRE

Inter-Department Communication

NHPUC 14JUL'16AM11:15

DATE: July 14, 2016  
AT (OFFICE): NHPUC

**FROM:** Barbara Bernstein, Sustainable Energy Analyst

**SUBJECT:** DE 10-128 Energy Audits Unlimited, Request for Waivers of Puc 2505.09 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  
David K. Wiesner, Staff Attorney

On July 11, 2016, Energy Audits Unlimited (EAU) filed a letter requesting waivers from certain Puc 2505.09 rules provisions governing independent monitors. EAU was approved as an independent monitor of New Hampshire customer-sited sources generating renewable electricity production in 2010 (Docket DE 10-128). EAU requested waivers from Puc 2505.09(a), Puc 2505.09(i)(2), and Puc 2505.09(j). Approval of these rule waiver requests would enable EAU customers to use the Knollwood Energy of MA LLC (Knollwood) electronic portal to enter renewable energy source production data, which would then be verified and reported by EAU. In addition, EAU requested a waiver from the initial inspection requirement under Puc 2505.09(i)(1), citing the difficulty of meeting the requirements of the rule as currently written. Staff has reviewed the requested rules waivers and recommends that these waivers be approved as reasonable alternatives to the requirements of the specified rules provisions.

## *EAU's Proposed New Independent Monitoring Model*

According to EAU, as photovoltaic (PV) installations have proliferated, the system it developed in 2010 to monitor and verify generation from customer-sited sources has become cumbersome, inefficient, and expensive. In the process of attempting to develop a new, automated service for its customers, EAU encountered several insurmountable challenges. If the Commission were to approve the requested rules waivers, Knollwood would offer its customer portal and data entry system, initially developed for the Generation Attribute Tracking System (GATS) used by Mid-Atlantic States, to EAU's independent monitoring customers. That portal allows customers to enter their generation information; a formula is then applied that identifies and flags any anomalies in production data reported. Knollwood does not manipulate the information; it merely periodically sends the generation data in a spreadsheet, noting any observed data anomalies, to EAU for verification and reporting. EAU verifies the information provided,

investigates and resolves any identified anomalies, and then uploads the verified information directly to the NEPOOL-GIS (GIS) tracking system.

Any customers of both EAU and Knollwood will have the ability to enter their monthly production data using the Knollwood customer portal. Any Knollwood customer who chooses not to use the portal can still provide meter readings directly to EAU. All other customers will continue to provide meter readings directly to EAU.

While EAU's proposed new monitoring system appears to offer a reasonable alternative for monitoring and verification of the electrical output of small PV systems, it is not fully consistent with the obligations of independent monitors as stated in four Puc 2505.09 rule subsections, as discussed below.

***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 calculations to the GIS. A customer-sited source shall retain the services of an independent monitor directly.***

***Puc 2505.09(i)(2) To measure and verify quarterly the source's electricity or useful thermal energy production used to qualify for certificates pursuant to the GIS operating rules.***

These rules require the independent monitor to verify and report to GIS the generation output data of its customers for purposes of creating Renewable Energy Certificates (RECs). According to EAU, it will continue to verify the electricity production of the customer-sited sources it monitors and report such production and REC calculations on a quarterly basis directly to the GIS, based on the source production data collected and reported to it by its customers through Knollwood's portal then provided to it by Knollwood. If the portal application's formula identifies and flags anomalies in production data reported (such as production in excess of reasonably expected system output), then EAU will request that the customer send a picture of the production meter to verify system production. Customers will continue to archive monthly photographs of their production meters to verify data anomalies. As in the past, the contract for independent monitoring services is signed directly between EAU and the customer.

Staff believes that the proposed new monitoring model represents a reasonable alternative approach to independent monitoring that alleviates some of the data collection burden from EAU without compromising the integrity of the verification and reporting functions. The production data collected directly from customers through Knollwood's portal will be subject to analysis to identify any anomalies. The data collected through the portal and any such identified anomalies are then sent to EAU for verification and/or investigation as warranted. EAU Staff will investigate any identified anomalies and verify or correct the data through production meter photos provided by the customers. EAU will then upload the information directly to the GIS tracking system. Since the Knollwood portal offers a secure system for entering the data, Knollwood does not

manipulate the information, and EAU reviews, verifies, and reports the data to GIS, Staff recommends that the Commission approve this request for a waiver.

***Puc 2505.09(j) An independent monitor shall not receive compensation for monitoring services that is a function of the number of certificates issued to any source using the independent monitor.***

EAU will continue to charge its customers a flat rate for independent monitoring services. Knollwood is offering the use of its portal at no charge to its customers to ensure that REC production can be securely and accurately entered into the GIS database. While Knollwood has a financial interest in the production of RECs from those customers' sources, it will receive no compensation for its data collection and reporting activities that is based on the number of RECs produced by these sources. In addition, EAU will continue to bill customers directly for monitoring services with no assistance from Knollwood.

The new monitoring process described by EAU will not result in any compensation to Knollwood for its role in the process that is based on the RECs produced by the monitored sources. Staff therefore recommends that the Commission approve this waiver request, if and to the extent required.

***Puc 2505.09(i)(1): 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.***

According to EAU, the sheer number of systems requesting its independent monitoring services has become so great that it is impossible to complete an initial inspection for each source. In addition, the requirements of this rule may be effectively satisfied by an alternative approach not based on the independent monitor's initial inspection for the following reasons:

- i. The electrician on the site at the time of the PV installation ensures that the meter is correctly installed and functioning, so an additional visit by an independent monitor is unnecessary and redundant; and
- ii. An initial date-stamped photo of the installed meter sent to the independent monitor provides clarification equivalent to an on-site inspection of the meter.

Staff recognizes that the number of PV system installations has proliferated over the past year, as evidenced by the volume of both rebate applications and REC applications, and it is apparent that the requirement to perform an initial inspection of each source's installed meter has become burdensome and is no longer realistic. Staff notes that REC applicants will submit a photograph of the installed production meter to EAU as the independent monitor and the photograph will show the meter serial number. Staff will verify that the installed production meters are compliant with revenue grade

ANSI standards during the REC application review process. If any questions arise, Staff may request that the independent monitor complete an on-site inspection of the installed metering equipment.

In view of Staff's REC application review and approval procedures and the fact that the independent monitor will be provided with a photograph of the installed production meter, Staff recommends approval of this waiver request.

In conclusion, Staff believes that the proposed new independent monitoring, verification, and reporting process described by EAU represents a reasonable alternative to the process otherwise required under Puc 2505.09. The proposed new process is similar in many respects to that implemented for small residential PV installations under the Massachusetts RPS. 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 of the affected person and the purpose of the rules would be satisfied by the alternative method proposed.

**SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED**

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**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.**