

OVERVIEW OF REQUEST

This request is broken into two parts, with the second being conditional upon the outcome of the first. If, in Part 1, the Commission agrees with our interpretation that “equipment” in Proposed Puc 2505.09(g) (Docket DRM 14-095) is referring to “thermal equipment” and there is no prohibition for an Independent Monitor to both sell meter equipment and provide independent monitoring services to the same facility, then the Conditional Request for Waiver, in Part 2, is moot. If, on the other hand, the Commission interprets Proposed Puc 2505.09(g) so as to prohibit the Independent Monitor from participating in the selling of the metering equipment, then we request the Commission consider the Request for Waiver in Part 2.

1. REQUEST FOR CLARIFICATION OF Proposed Puc 2505.09(g)

Proposed Puc 2505.09(g) prohibits the Independent Monitor from having “sold or installed the equipment used by the source”¹. As noted in the rulemaking process², the reference to “equipment” is ambiguous and the ambiguity should be addressed in the final rules. Because the rulemaking process has yet to provide such clarification, we ask the Commission to clarify the rule so that the pending application (DE14-237) can be properly evaluated.

The ambiguity of “equipment” arises because it can be interpreted as: (1) thermal energy producing equipment, (2) metering equipment, or (3) both energy producing and metering equipment. Because 2505.09(g) is a new rule that refers specifically to the independent monitor for sources producing useful thermal energy, we focus on the use of the term “equipment” as it pertains to sources producing useful thermal energy. In each instance, when “equipment” is not specifically qualified as “thermal equipment”, it is either used distinctly from metering equipment or has an unambiguous interpretation as “thermal equipment”.

- a) In 2505.02(d)(3), “equipment” is used separately from “meters used to measure useful thermal energy” and therefore refers to equipment used for production of thermal energy.

2505.02(d)(3) A description of the equipment and meters used to measure useful thermal energy including the manufacturer, model, placement of the sensors in the energy production system, temperature operating range, flow operating range, thermal energy operating range, and pressure operating range, if applicable;

- b) In 2505.02(d)(7), information is requested for the installer of the “thermal biomass facility, solar thermal technology, or geothermal system”. In this instance, “equipment” is used to include any of the three types of energy producing equipment.

¹ 2505.09(g). “No customer-site 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 equipment used by the source.”

² See written testimony submitted by the New England Geothermal Professionals Association pertaining to Docket DRM14-095.

2505.02(d)(7) The name, license number, if applicable, and contact information of the installer of thermal biomass facility, solar thermal technology, or geothermal system, or a statement that the equipment was installed directly by the owner;

c) In 2505.02(d)(8), “equipment” is specifically referred to as “thermal equipment”.

2505.02(d)(8) The name and contact information of the seller of the thermal equipment;

The intent of Proposed Puc 2505.09(g) is to prohibit the Independent Monitor from having interests that may conflict with the Independent Monitor’s responsibility to report accurate and unbiased energy production to the NEPOOL-GIS, and specifically prohibits the Independent Monitor from having “sold or installed the equipment used by the source”. As referenced 2505.02(d)(8), the *seller of the equipment* is specifically referring to the “seller of thermal equipment”. Similarly, as referenced in 2505.02(d) (7), the *installer of equipment* is clearly referring to the “installer of thermal biomass, solar thermal technology, or geothermal system”.

Interpreting “equipment” in Proposed Puc 2505.09(g) as “thermal equipment” is consistent with the remainder of Proposed Puc 2505 and does not violate the intent of Proposed Puc 2505.09(g). While the seller or installer of energy producing equipment may make claims of energy production that could create a potential conflict of interest in reporting such production, the seller or installer of metering equipment makes no such claims of energy production. Instead, the seller/installer of metering equipment warrants that the meter(s) will operate according to specifications, thus supporting the veracity of energy production reported by the Independent Monitor.

Additionally, the interpretation of “equipment” in Proposed Puc 2505.09(g) as “thermal equipment” would be consistent with the rules for Third Party Meter Readers in other states participating in the NEPOOL-GIS. For example, in the Commonwealth of Massachusetts, the application to become registered as an Independent Verifier requests that the applicant provide a statement of “circumstances the Independent Verifier would not be considered sufficiently independent of an individual Generation Unit” where independence is defined as:

Reasons for ruling that an Independent Verifier is not sufficiently independent include, but are not limited to: i) If one entity owns, directly or indirectly, or if a natural person so owns, 10% or more of the voting stock or other equity interest in the other entity; ii) If 10% or more of the voting stock or other equity interests in both entities are owned, directly or indirectly, by the same entity or a natural person; or iii) If one entity is a natural person, and such entity or a member of such entity’s immediate family is an officer, director, partner, employee or representative of the other entity.

Clearly, the ‘independence’ of concern in Massachusetts, is between the Independent Verifier and the Generation Unit, not the Independent Verifier and the metering equipment. In fact, several of the Independent Verifiers in Massachusetts (i.e., Deck Monitoring, Also Energy, Locus Energy) also sell the metering equipment.

In conclusion, the word “equipment” in Proposed Puc 2505.09(g) should be interpreted to mean only thermal equipment, and not include metering equipment. Such an interpretation would be consistent with language of the rest of the chapter and would not be counter to the intent of the regulation.

2. CONDITIONAL REQUEST FOR WAIVER

If the Commission determines that “equipment” in Proposed Puc 2505.09(g) refers to both the energy producing equipment and the metering equipment, then pursuant to Puc 201.05(c), the applicant, Ground Energy Support LLC (GES), hereby requests a waiver of Proposed Puc 2505.09(g) to allow GES to both sell thermal metering equipment and provide Independent Monitoring services for the same facility.

Even though Proposed Puc 2500 is in the PUC rulemaking process (Docket DRM 14-095), Puc Order 12,678 issued on June 19, 2014 ordered that:

Commission Staff shall accept applications for certification of thermal REC-eligible facilities, and shall base recommendations for approval upon proposed Puc 2505.02(e)(2), proposed Puc 2506.04, and proposed Puc 2506.06 until such time as a final rule is adopted by the Commission.

Proposed Puc 2506.04(b) states that sources shall retain an Independent Monitor to verify the useful thermal energy produced. Because an Independent Monitor to verify thermal energy is not included in Puc 2500, Proposed Puc 2505.09 is the effective rule for the Commission in considering applications for sites that produce useful thermal energy and executing Order 12,678.

Puc 201.05 states that the Commission shall waive the provisions of any of its rules if the Commission finds that the waiver serves the public interest³ and will not disrupt the orderly and efficient resolution of matters before the Commission⁴.

Serves the Public Interest

Proposed Puc 2505.09(g) prohibits the Independent Monitor from having “sold or installed the equipment used by the source”. The purpose of the rule appears to be to prohibit the Independent Monitor from having interests that may conflict with their responsibility to report accurate and unbiased energy production to the NEPOOL-GIS.

The criterion for determining public interest in Puc 201.05(b) is either that compliance with the rule would be onerous or inapplicable given the circumstances of the affected person⁵; or the purpose of the rule would be satisfied by the alternative method proposed⁶.

We argue both that (1) the rule is onerous to the applicant (GES) and (2) the purpose of the rule would be satisfied by the alternative of allowing GES to both sell metering equipment and serve as Independent Monitor.

Onerous to the applicant

The applicant has invested considerable effort and expense in developing an affordable commercial product that satisfies the runtime metering method for geothermal systems pursuant to Proposed Puc 2506.04(i), enabling owners of small geothermal systems to participate in the Program. We have also completed the IGSHPA training and certification process to qualify as Independent Monitors pursuant to

³ Puc 201.05(a)(1)

⁴ Puc 201.05(a)(2)

⁵ Puc 201.05(b)(1)

⁶ Puc 201.05(b)(2)

Proposed Puc 2505.09(d)(3). Our Independent Monitor services are reasonably priced for the small geothermal system. The prohibited relationship is an onerous burden to GES because we cannot sell our metering system if customers cannot reasonably expect to hire an Independent Monitor to report the data.

To prohibit a relationship between the meter seller and the Independent Monitor also creates a burden of requiring GES, when serving as Independent Monitor, to either provide meter specification services at no charge or force the customer to pay for the same service twice. Typically, the seller of a meter will recover the costs associated with their consultation as to the suitability of the meter upon the sale of a meter. If GES is prohibited from participating in the selling of a meter, GES is unable to recover the cost of services through equipment sales and must charge the facility owner separately. The facility owner will be required to purchase a meter at full cost through a separate entity, who will likely not have expertise in the Proposed Puc 2506 requirements nor any obligation to the facility owner that the meter will comply with the requirements. We are currently working as a consultant to provide meter specifications to a facility owner who is purchasing the meter separately (because of uncertainty in the Commission's interpretation of Proposed Puc 2505.09(g)). This process has proven to be very inefficient, illustrating numerous opportunities for errors, and unnecessarily increasing the cost to facility owner. This burden would be easily remedied if the Independent Monitor were allowed to consult with facility owners and sell them a meter that will meet the requirements of Proposed Puc 2506.

Purpose of the rule would be satisfied by alternative

The proposed alternative of allowing GES to both sell metering equipment and provide Independent Monitoring services satisfies the rule as it assures that accurate and unbiased energy production will be reported to the NEPOOL-GIS. As noted previously, while the seller or installer of energy producing equipment may make claims of energy production that could create a potential conflict of interest in reporting such production, the seller or installer of metering equipment makes no such claims of energy production. Instead, the seller/installer of metering equipment warrants that the meter(s) will operate according to specifications, thus supporting the veracity of energy production reported by the Independent Monitor. Neither the meter seller nor the Independent Monitor has a financial interest in the quantity of thermal energy measured or reported.

The Commission has worked hard to develop rules that will both honor the legislation and enable participation; however complying with the metering requirements of useful thermal energy remains a challenge, for both small and large systems. Whether using the runtime method or a heat meter, the metering of thermal energy requires the collection of nearly continuous point sensor data and processing that sensor data into computed useful thermal energy. The Independent Monitor must take all necessary steps to insure the accuracy of computed useful thermal energy that is reported to the NEPOOL-GIS which requires developing an appropriate level of expertise in metering methods and equipment. The proposed alternative will facilitate the efficient implementation of Proposed Puc 2500 for both large and small geothermal systems.

As Independent Monitors, GES supports any commercially available metering equipment that can (1) meet the requirements of the program, (2) be subjected to standard QA/QC measures; and (3) be secure from tampering or modification by facility owner or installer of thermal equipment. In addition to the

equipment we sell (the GxTracker), we have also developed the capability to support the Ecobee Smart thermostat⁷ as a heating-mode runtime meter and any BTU meter that meets the accuracy requirements of Puc 2506.04. Our pricing of independent monitoring services is consistent with the level of service provided and is separate from all equipment sales.

The required attestation of a Professional Engineer continues to provide a sufficient level of professional oversight, assuring the facility owner, the Commission, and the NEPOOL-GIS that the metering equipment, its installation, and methods of computing useful thermal energy comply with Puc 2500.

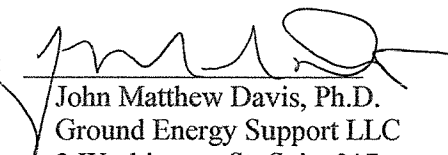
Non disruptive to resolution of matters before commission.

We suggest that approval of the waiver will not be disruptive to resolution of matters before the Commission. If fact, granting the waiver will improve the efficiency with which potential sources generating energy from eligible geothermal sources can successfully apply for certification and begin metering and reporting thermal energy produced.

In order for the Independent Monitor to fulfill their duty to inspect and approve the meter as stipulated in Proposed Puc 2505.09(i)(1), the Independent Monitor must have detailed knowledge of the individual sensors, their placement, and the methods by which runtimes and/or useful thermal energy are computed. By allowing the Independent Monitor to participate in the specification and selling of metering equipment, the facility owner is assured that the equipment will meet requirements. If the Independent Monitor is prohibited from specifying or selling the equipment, a facility owner may easily purchase a non-compliant meter from an ill-informed or unscrupulous salesperson.

Respectfully Submitted:

By:


John Matthew Davis, Ph.D.
Ground Energy Support LLC
2 Washington St Suite 217
Dover NH 03824
(603) 867-9762

⁷ Equipped with Remote Sensor Module and necessary temperature and current sensors.