

Hearing Officer Report

To: Energy Planning and Innovation Division, Oregon Department of Energy

From: Wendy Simons, Hearing Officer

Date: November 2, 2016

Subject: Senate Bill 1547 Implementation Rulemaking for Thermal Renewable Energy

Certificates (T-RECs)

<u>Hearing Date and Location</u>: November 2, 2016, 10:00 a.m., Oregon Department of Energy, 625 Marion Street NE, Salem, OR, 97301

<u>Title of Proposed Rule</u>: Establishes process to issue renewable energy certificates for thermal energy from biomass-based electricity generation.

Background: The Oregon Department of Energy proposed draft rules to implement Sections 15 and 16 of Senate Bill 1547 (2016), Oregon Laws 2016 chapter 28, which requires the Department to establish a system for issuing renewable energy certificates for facilities generating electricity using biomass that also generate thermal energy for a secondary purpose. The proposed rule changes add new sections and amend existing sections of Oregon Administrative Rule Division 160, governing the Renewable Portfolio Standard program. The proposed rule changes add definitions related to thermal renewable energy certificates; specify eligible facilities and qualifying thermal energy; and provide requirements for metering, monitoring and reporting of qualifying thermal energy.

The department filed a Notice of Proposed Rulemaking and Hearing on September 15, 2016, with the Oregon Secretary of State. The notice was published in the October 2016 Oregon Bulletin. The department emailed notice of the hearing to the agency's lists of people who have requested to be notified about rulemaking activities regarding the Renewable Portfolio Standard and Biomass.

This report summarizes the testimony and public input received during the public hearing and written comment period as required under ORS Chapter 183.

Comments Received

Oral comments received at the public hearing:

- Linc Cannon, Oregon Forest Industries Council
- Michael O'Brien, Renewable Northwest



Written comments received:

- Michael O'Brien, Renewable Northwest (written version of oral comments delivered at the public hearing)
- Eric Hiaasen, Clatskanie People's Utility District
- Brendan McCarthy, Portland General Electric (PGE)

Summary of November 2, 2016 Public Hearing:

Before opening the hearing, the hearing officer asked persons attending in person and on the phone to identify themselves and then offered attendees the opportunity to ask clarifying questions of ODOE staff. No questions were asked. The rulemaking hearing convened at 10:08 a.m. with one member of the public attending in person and six members of the public attending by phone. Five department staff attended in person. Attendees represented the following organizations: Oregon Forest Industries Council; Renewable Northwest; Western Renewable Energy Generation Information System (WREGIS); Western Electricity Coordinating Council; Clatskanie People's Utility District; Energy Trust of Oregon; and the City of Gresham.

Summary of Oral Comments Received at the Hearing:

Linc Cannon, Oregon Forest & Industry Council (OFIC)

Mr. Cannon commented that this had been a very good process and that the rules as they are currently written achieve the intent of the legislation. He said that department staff have arrived at a good result and did not recommend any further changes to the proposed rules.

Michael O'Brien, Renewable Northwest

Mr. O'Brien echoed comments that the process was well-managed by department staff and though the stakeholders brought various different viewpoints and expertise, there was a constructive tone and it was clear that stakeholders were trying to understand each other.

Mr. O'Brien indicated that his comments were in reference to both the proposed rules as well as the "companion document" that department staff published with the proposed rules, specifically Issues 1, 4, and 5, as identified in the companion document.

For Issue 1, the definition of "secondary purpose," Mr. O'Brien indicated that Renewable Northwest is of the opinion that the secondary purpose must displace electricity consumption and not fuel consumption. While Renewable Northwest is sympathetic to the department's argument that the addition of thermal energy to the REC system necessitates some accommodation of the technical differences between thermal energy and electricity, Mr. O'Brien made the following points:



- Renewable Northwest does not agree with the department's argument that "secondary purpose" should be extended to fuel displacement because some facilities use thermal energy for a secondary purpose for which electricity would never be substituted.
- Renewable Northwest does not agree with the department's position that requiring
 displacement of only electricity at facilities located in Oregon would represent the
 displacement of a relatively renewable power source. The department's website reports
 that 47% of electricity consumed in the state comes from the combustion of fossil fuels,
 namely coal and gas. A T-REC generated by the displacement of fuel and used for RPS
 compliance would displace demand for a REC generated by an RPS-eligible electricity
 resource, thus displacing demand for that renewable resource.
- The primary intent of the RPS is to encourage the development of new renewable electricity. Program rules should not be modified to accommodate existing biomass cogeneration facilities.

ODOE Response: ODOE shares Renewable Northwest's concern that the addition of T-RECs to Oregon's RPS could have unintended consequences for the demand for renewable electricity. However, ODOE has been directed by legislation to allow for crediting for thermal energy, and in studying how thermal energy is used in Oregon and in other states, it is clear that the great majority of end uses for which thermal energy would be viable are not those that typically use electricity. Many facilities currently use natural gas, propane, biogas, etc., to power such end uses because these fuels provide the greatest efficiency or cost benefit. Thus, to allow generation of T-RECs only for end uses displacing electricity would effectively render most facilities ineligible. ODOE, as well as the majority of stakeholders participating in the rulemaking, is uneasy about disqualifying whole industries from eligibility for using the most effective fuel type for their processes. Additionally, while nearly half of Oregon's electricity resource mix is comprised of fossil fuels, the non-electricity resources that useful thermal energy would be displacing at facilities in Oregon are predominantly fossil fuels – natural gas or propane – with only a few facilities using renewable biogas.

Mr. O'Brien then argued that T-RECs should not be exempt from the 20% limit on unbundled RECs in the RPS, which falls under Issues 4 and 5 from the companion document – the definition of a T-REC and the geographical boundaries for T-REC generation. While Renewable Northwest understands department staff's rationale for defining a T-REC as a subcategory of REC (i.e., ensuring even application of banking rules), they believe this creates interactions between how unbundled RECs and unbundled T-RECs are treated based on existing law. ORS 469A.145 (3)



allows that the 20% limit on the use of unbundled RECs for RPS compliance does not apply to unbundled RECs issued for electricity from Oregon PURPA facilities. Mr. O'Brien argued that any equivalence of T-RECs with RECs for banking restrictions does not change the characteristics T-RECs inherit upon their creation and that any T-RECs generated at PURPA facilities in Oregon should not be exempt from the 20% limit on unbundled RECs.

odde Response: SB 1547 (2016) directs ODOE to "provide... renewable energy certificates" for the "generation of the thermal energy" and provides a conversion factor for Btus to MWhs, the standard unit of measurement for RECs. While ODOE proposed to use the differentiating nomenclature of "T-REC" to provide some administrative ease when referring to RECs generated from thermal energy, there are no provisions in the legislation that specifically direct ODOE to treat RECs generated from renewable electricity differently than RECs generated from renewable thermal energy once those RECs are created. Thus, ODOE does not see a clear pathway for excluding T-RECs from the 20% compliance cap exception. However, ODOE shares Renewable Northwest's concern that this could have potentially negative effects on the RPS in the future if there is a significant increase in the level of T-RECs generated at PURPA facilities in Oregon, and the department will monitor the impact of these Oregongenerated T-RECs on RPS compliance and renewable energy generation.

Linc Cannon, Oregon Forest & Industry Council (OFIC)

Mr. Cannon followed up on the comments from Renewable Northwest, noting that the issues that Mr. O'Brien raised were discussed in great detail by stakeholders during the rulemaking process and that OFIC felt department staff had dealt correctly with these issues in the proposed rules. Mr. Cannon went on to add that while renewable energy advocates have long said that the RPS was only meant to promote new renewable energy, he found the recent changes in law to indicate that the RPS promotes renewable energy, period, including any biomass energy co-generation, regardless of the age of the facility.

ODOE response: The question of whether the RPS was intended to promote new or existing renewable energy is not relevant to this rulemaking and so the department has no response regarding that issue.

At the conclusion of the hearing, the hearing officer stated that written comments would be accepted until 5 p.m. on Wednesday, November 2. The hearing ended at 10:21 a.m.



Summary of Written Comments:

Eric Hiaasen, Clatskanie People's Utility District

Mr. Hiaasen commented that the original intent of the RPS (SB 838) was to reduce fossil fuel consumption in the electric utility sector and that as such, the T-RECs rules must allow for secondary thermal energy that displaces fossil fuels. He added that Clatskanie PUD has no strong objection to expanding the secondary purpose definition to include displacement of electricity but feels that this is not consistent with the RPS policy goal of reducing reliance on fossil fuels.

Mr. Hiaasen asked for clarification on 330-161-0080(2)(d) of the proposed rules: "The facility's electric generator must have a rated capacity of at least 10 percent of the energy content of the fuel input." He raised the issue of converting a generator rated capacity to the energy content of a fuel input and asked what time interval would be used and how the department wanted facilities to measure the energy content of the biomass feedstock used to generate electricity. While clear that this portion of the proposed rules is to ensure the primary generation of electricity, Mr. Hiaasen suggested that the proposed rules as written are problematic and that 330-161-0080(2)(d) should be stricken and replaced with language requiring a maximum 10:1 ratio between the T-RECs and the RECs generated by a facility in any given month.

ODOE Response: The application process for facilities to receive certification for generation of T-RECs will include submission of a thermal energy management plan, which will be reviewed by staff engineers. The department's application will address the difference in units of measurement and will allow for calculation of the ratio in a single set of units. The application also provides standard conversion factors.

Mr. Hiaasen indicated that Clatskanie supported the proposed rules on the following issues:

- Exclusion of thermal energy used to process fuel for on-site consumption from eligible secondary purposes but inclusion of processing fuel for sale.
- Treatment of T-RECs consistent with unbundled RECs.

Brendan McCarthy, Portland General Electric (PGE)

Though he thanked the department for a well-constructed process of stakeholder engagement in developing the proposed rules, Mr. McCarthy raised concerns with one provision of the proposed rules. The provision in question is the exclusion of processing fuel for on-site combustion as an eligible secondary purpose. He reminded the department that PGE had provided written and oral comments during the stakeholder process asking the department to



allow processing of fuel as a creditable end use of thermal energy and went on to elaborate his reservations on this provision with the following points:

- The intent of SB 1547 was to encourage greater efficiencies in the generation of electricity by providing credit for using what would otherwise be waste heat.
- This exclusion is not consistent with the majority of other states that allow T-RECs for use in RPS compliance. PGE counts eight other states that allow for T-RECs and notes that the proposed rules align with only three of these eight states.
- This exclusion is not consistent with the majority of public comment received by the department.
- The eligibility of thermal energy used to create a fuel for sale while excluding as eligible thermal energy used to create a fuel for on-site combustion is discriminatory, inconsistent, and provides no environmental gain. Mr. McCarthy provides the following example in support of PGE's argument: PGE would not be eligible to receive T-RECs if it used thermal energy to torrefy biomass for on-site combustion at its Boardman facility, yet a separate legal entity at the same site that used thermal energy to torrefy biomass but sold it to PGE for on-site combustion would be eligible to receive T-RECs.

ODOE Response: While ODOE agrees with PGE that one of the goals of SB 1547 is to encourage more efficiency in the generation of power, the idea of station service, or parasitic load, is an accepted concept for parsing what portion of generation is eligible for crediting. In defining the boundary for station service for T-RECs, ODOE looked at best practices from the Federal Energy Regulatory Commission, WREGIS, the California Energy Commission, and states with rules for thermal energy crediting. While a minority of states consider on-site fuel processing to be station service, the states that disallow crediting for on-site fuel processing are those that have the most complete and robust thermal energy programs and crediting rules. ODOE looked to these states where the greatest amount of time and resources had been deployed to consider the unique challenges of integrating thermal energy into an RPS. Both Massachusetts and New Hampshire were able to hire outside technical consultants as well as draw on numerous technical expert workgroups, and their rules are the most robust from a technical standpoint.

Additionally, the issue was discussed in two of the three stakeholder workshops and ODOE listened closely to feedback from stakeholders. Stakeholders were split on the issue, with PGE, NWESI, and ICNU suggesting that any and all end uses be eligible for T-RECs, while OFIC and Wellons made clear they wanted to see a strong boundary on eligible thermal energy versus station service. In their written



comments submitted on 10/26/16, Clatskanie PUD supported the exclusion of onsite fuel processing from eligible thermal energy end uses. Renewable Northwest did not comment explicitly on this issue.

The department does not agree that the eligibility of thermal energy used to create a fuel for sale while excluding as eligible thermal energy used to create a fuel for on-site combustion is discriminatory, inconsistent, and provides no environmental gain. While a separate legal entity could use thermal energy to torrefy biomass and sell it to PGE, that entity could not generate a T-REC from the thermal energy unless it was generated as a secondary purpose from electricity generation not associated with the PGE facility using the torrefied biomass. Thus the requirement is consistent regardless of who uses the thermal energy to process fuel and provides environmental gain by limiting T-REC generation to the net thermal energy produced.

Michael O'Brien, Renewable Northwest

Mr. O'Brien followed up his oral comments with written comments that amplified the same concerns:

- An eligible secondary purpose for the generation of T-RECs should only represent the
 displacement of electricity and not fuel, in keeping with the legislative intent of the RPS,
 as stated in SB 838 (2007) as encouraging development of "new renewable electricity."
- T-RECs generated from a PURPA facility located in Oregon should not be exempt from
 the 20% limit on the use of unbundled RECs for RPS compliance as T-RECs do not meet
 the criteria for this exemption. ORS 469A.145 (3) states that this 20% exemption does
 not apply to "renewable energy certificates issued for electricity..." and thus should not
 include RECs issued for thermal energy.

ODOE Response: See prior response to Renewable Northwest's oral comments.