

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of

PUBLIC UTILITY DISTRICT No. 1 OF
CHELAN COUNTY, WASHINGTON

Petitioner,

Petition for Declaratory Order Regarding
Application of WAC 480-109-200

DOCKET _____

**CHELAN PUD'S PETITION FOR
DECLARATORY ORDER**

I. INTRODUCTION

1. In accordance with RCW 34.05.240, WAC 480-07-370, and WAC 480-07-930, Public Utility District No. 1 of Chelan County petitions the Washington Utilities and Transportation Commission for a declaratory order approving the generation from incremental efficiency gains at Chelan PUD's hydroelectric projects as eligible renewable resources, as defined in RCW 19.285.030, for purposes of WAC 480-109-200.

2. Chelan PUD is a municipal corporation organized under Title 54 of the Revised Code of Washington and authorized to engage in the business of generating, transmitting, and distributing electric energy. Its contacts for this proceeding are:

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3. The following statutes and rules may be at issue in this proceeding:
RCW 34.05.240, WAC 194-37-130, WAC 480-07-370, WAC 480-07-930, and
WAC 480-109-200.

II. BACKGROUND AND FACTS

4. Washington’s Energy Independence Act requires qualifying utilities to “use eligible renewable resources or acquire equivalent renewable energy credits, or any combination of them,” to meet a portion of their load.¹ The Act defines eligible renewable resources to include “[i]ncremental electricity produced as a result of efficiency improvements completed after March 31, 1999, to hydroelectric generation projects owned by a qualifying utility and located in the Pacific Northwest where the additional generation does not result in new water diversions or impoundments[.]”²

5. Chelan PUD has made many efficiency improvements at its hydroelectric projects since 1999. As a consumer-owned utility, Chelan PUD must document for the Washington Department of Commerce that the incremental electricity from these improvements qualifies as an eligible renewable resource.³ Commerce developed three methodologies for performing an engineering analysis on efficiency improvements when a utility cannot directly measure the level of improvement.⁴

6. Chelan PUD uses Commerce’s “Method two – Percentage Generation” to perform its engineering analysis:

(A) A utility using method two must prepare an analysis establishing the expected amount of incremental generation based on stream flows available to the hydroelectric generation project, adjusted for any known and measurable changes to stream flows due to environmental regulations or other factors, during a historical study period.

(B) The historical study period used in method two must be reasonably representative of the stream flows that would have been available to the hydroelectric project over the period of time for which stream flow records are readily available. A historical study period meets the requirements of this

¹ RCW 19.285.040(2)

² RCW 19.285.030(12)(b)

³ WAC 194-37-130

⁴ WAC 194-37-130(3)(c)

subsection if it includes the most recent readily available stream flow records and consists of a consecutive record of stream flow records at least five years in length.

(C) The amount of incremental generation using method two is calculated by multiplying the actual generation in megawatt-hours in the target year by a percentage amount equal to the difference between the calculated average generation over the historical study period with the hydropower efficiency improvement and the calculated average generation over the historical study period without the hydropower efficiency improvement, divided by the calculated average generation over the historical study period without the hydropower efficiency improvement.⁵

7. Under this method, Chelan PUD uses 79 consecutive years of re-regulated average monthly Wells Dam outflows (Wells Dam is the project immediately upstream from Chelan PUD's projects), as well as sideflow data to develop a long-term average water year. Using the long-term average water year, Chelan PUD then runs a base case (before equipment and operational upgrades) and a current case (after equipment and operational upgrades). Chelan PUD uses the results of those two model runs to calculate the efficiency gain.

8. On March 27, 2017, Commerce issued Advisory Opinions designating Rocky Reach and Rock Island Hydroelectric Projects as eligible renewable resources in WREGIS.⁶ Commerce recognized 14.73 percent of total generation at Rocky Reach and 9.67 percent of total generation at Rock Island as eligible renewable resources. Attachment A is a copy of the Advisory Opinion for Rocky Reach, and Attachment B is a copy of the Advisory Opinion for Rock Island. A copy of the engineering report for both projects is appended to the Advisory Opinions (beginning at page 74 of Attachment A and page 87 of Attachment B).

⁵ WAC 194-37-130(3)(c)(ii)

⁶ WREGIS is "the Western Renewable Energy Generation Information System. WREGIS is an independent, renewable energy registry and tracking system for the region covered by the Western Interconnection. WREGIS creates renewable energy certificates, WREGIS certificates, for verifiable renewable generation from units that register in the registry and tracking system." WAC 194-37-040(16).

9. The Commission also developed three different methods to calculate the amount of incremental electricity produced by efficiency upgrades at hydroelectric projects. The Commission's method two, like Commerce's, is based on calculating a percentage improvement in total production:

Method two. An annual application of a percentage to total production performed by:

- (i) Determining the river discharge for the facility over a historical period of at least five consecutive years;
- (ii) Using power curve-based production models to calculate the facility's generation under the river discharge of each year in the historical period for the pre-upgrade state and the post-upgrade state;
- (iii) Calculating the arithmetic mean of generation in both the pre-upgrade and post-upgrade states over the historical period;
- (iv) Calculating a factor by dividing the arithmetic mean post-upgrade generation by the arithmetic mean pre-upgrade generation and subtracting one; and
- (v) Multiplying the facility's observed generation in the target year by the factor calculated in (c)(iv) of this subsection to determine the share of the facility's observed generation that may be reported as eligible renewable energy.⁷

10. Electric utilities subject to the Commission's jurisdiction must use one of these methods for "any hydropower facility, regardless of ownership, that is used to meet the annual targets of this section."⁸

III. ARGUMENT

11. The Commission should approve Chelan PUD's engineering analysis, and the resulting percentage for calculating incremental hydropower production, as meeting the Commission's requirements under WAC 480-109-200(7)(c).

⁷ WAC 480-109-200(7)(b)

⁸ WAC 480-109-200(7)(a)

12. The Commission's and Commerce's methodologies are substantively identical. Both require using hydrological data from a historical study period of at least five consecutive years.⁹ Both require determining the average generation during the study period with and without the efficiency upgrades.¹⁰ And both use the difference between the average generation in the pre-upgrade and post-upgrade cases to determine the percentage of generation that qualifies as an eligible renewable resource.¹¹

13. The engineering analysis Chelan PUD developed and submitted to Commerce also satisfies the Commission's methodology. Chelan PUD's 79-consecutive-year study period far exceeds the Commission's five-year requirement, and Chelan PUD compares the average historical production with and without the efficiency upgrades to develop its qualifying percentage. Although Chelan PUD does not perform individual before-and-after study runs on each year in the historical period, analyzing the before-and-after cases using the long-term average water year of the entire historical period yields the same result. Accordingly, Chelan PUD's engineering analysis satisfies both methodologies.

14. Under RCW 34.05.240(1) and WAC 480-07-370, the Commission may appropriately issue a declaratory order granting Chelan PUD's request. The facts described in this petition make the showing required by RCW 34.05.240(1).¹² Specifically:

⁹ Compare WAC 480-109-200(7)(c)(i) with WAC 194-37-130(A)-(B)

¹⁰ Compare WAC 480-109-200(7)(c)(ii)-(iii) with WAC 194-37-130(C)

¹¹ Compare WAC 480-109-200(7)(c)(iv) with WAC 194-37-130(C)

¹² "The petition shall set forth facts and reasons on which the petitioner relies to show: (a) That uncertainty necessitating resolution exists; (b) That there is actual controversy arising from the uncertainty such that a declaratory order will not be merely an advisory opinion; (c) That the uncertainty adversely affects the petitioner; (d) That the adverse effect of uncertainty on the petitioner outweighs any adverse effects on others or on the general public that may likely arise from the order requested; and (e) That the petition complies with any additional requirements established by the agency under subsection (2) of this section."

- a. It is uncertain whether Chelan PUD's engineering analysis, approved by Commerce, satisfies the Commission's requirements for certifying the eligibility of incremental hydropower gains.
- b. Chelan PUD seeks a declaratory order regarding the actual engineering analysis it has already performed, not merely an advisory opinion about the applicable regulations. If Chelan PUD provides updated information to Commerce, it will provide that information to the Commission as well.
- c. Without a declaration from the Commission, Chelan PUD cannot sell its surplus eligible renewable resources to investor-owned utilities in Washington for their renewable resource requirements under WAC 480-109-200. Additionally, the declaratory order would eliminate the undue burden of Chelan PUD performing two separate engineering analyses to arrive at the same result.
- d. The requested order should not adversely affect any parties or the general public. Moreover, the order would allow investor-owned utilities to access an additional source of low-cost, eligible renewable resources for their compliance obligations, providing benefits to consumers.

IV. CONCLUSION

15. For the reasons stated in this petition and supported by the accompanying documentation, the Commission should issue an order declaring that the incremental hydropower at Chelan PUD's Rocky Reach and Rock Island hydroelectric projects may be used for compliance with WAC 480-109-200. The Commission's order should also declare that the eligible amounts are 14.73 percent of total production at Rocky Reach and 9.67 percent of total

production at Rock Island. Finally, the Commission's order should declare that these percentages will be updated as Chelan PUD provides updated supporting information.

Respectfully submitted this 26th day of July, 2017.

/s/ Robert D. Davis, Jr. _____

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