

## April 2014 Informal Draft Rule Language

### CLEAN VERSION

#### **Chapter 480-109 WAC: Electric companies — acquisition of minimum quantities of conservation and renewable energy as required by the Energy Independence Act (Chapter 19.285 RCW)**

**480-109-001 Purpose and scope.**

No changes.

**480-109-002 Application of rules.**

No changes.

**480-109-003 Exemptions from rules in chapter 480-109 WAC.**

No changes.

**480-109-004 Additional requirements.**

No changes.

**480-109-006 Severability.**

No changes.

**480-109-007 Definitions.** The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) " Annual retail revenue requirement" means the total revenue the commission authorizes a utility an opportunity to recover in Washington rates pursuant to a general rate proceeding or other general rate revision.

(2) "Biomass energy" means:

(a) The electrical energy produced by a generation facility powered by:

- (i) Organic by-products of pulping and the wood manufacturing process;
- (ii) Animal manure;
- (iii) Solid organic fuels from wood;
- (iv) Forest or field residues;
- (v) Untreated wooden demolition or construction debris;
- (vi) Food waste and food processing residuals;
- (vii) Liquors derived from algae;
- (viii) Dedicated energy crops; and
- (ix) Yard waste.

(b) Biomass energy does not include:

- (i) Wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome arsenic;
- (ii) Wood from old growth forests; or

(iii) Municipal solid waste.

(3) "Coal transition power" means the output of a coal-fired electric generation facility that is subject to an obligation to meet the standards contained in RCW 80.80.040(3)(c).

(4) "Commission" means the Washington utilities and transportation commission.

(5) "Conservation" means any reduction in electric power consumption resulting from increases in the efficiency of energy use, production, or distribution.

(6) "Cost-effective" means, consistent with RCW 80.52.030, that a project or resource is forecast:

(a) To be reliable and available within the time it is needed; and

(b) To meet or reduce the electric power demand of the intended consumers at an estimated incremental system cost no greater than that of the least-cost similarly reliable and available alternative project or resource, or any combination thereof.

(7) "Council" means the Northwest Power and Conservation Council.

(8) "Customer" means a person or entity that purchases electricity for ultimate consumption and not for resale.

(9) "Department" means the department of commerce or its successor.

(10) "Distributed generation" means an eligible renewable resource where the generation facility or any integrated cluster of such facilities has a generating capacity of not more than five megawatts.

(11) "Eligible renewable resource" means:

(a) Electricity from a generation facility powered by a renewable resource other than fresh water that commences operation after March 31, 1999, where:

(i) The facility is located in the Pacific Northwest; or

(ii) The electricity from the facility is delivered into Washington state on a real-time basis without shaping, storage, or integration services.

(b) Incremental 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;

(c) Hydroelectric generation from a project completed after March 31, 1999, where the generation facility is located in irrigation pipes, irrigation canals, water pipes whose primary purpose is for conveyance of water for municipal use, and wastewater pipes located in Washington, where the generation does not result in new water diversion or impoundments;

(d) Qualified biomass energy; or

(e) For a qualifying utility that serves customers in other states, electricity from a generation facility powered by a renewable resource other than freshwater that commenced operation after March 31, 1999, where:

(i) The facility is located within a state in which the qualifying utility serves retail electrical customers; and

(ii) The qualifying utility owns the facility in whole or in part or has a long-term contract with the facility of at least twelve months.

(12) "High-efficiency cogeneration" means the sequential production of electricity and useful thermal energy from a common fuel source resulting in a reduction in customer load where under normal operating conditions the useful thermal energy output is no less than thirty-three percent of the total energy output. The reduction in customer load is determined by

multiplying the annual electricity output of the cogeneration facility by a fraction equal to one minus the ratio of:

- (a) The heat rate (in British thermal units per megawatt hour) of the cogeneration facility. The heat rate of the cogeneration facility must be based on the additional fuel requirements attributable to electricity production and excluding the fuel that would be required to produce all other useful energy outputs of the project without cogeneration, divided by
- (b) the heat rate (in British thermal units per megawatt hour) of a combined cycle natural gas-fired combustion turbine. The heat rate of the combustion turbine must be based on a facility using best commercially available technology on a new and clean basis.
- (c) Calculation of the reduction in customer load is made with the following formula:  
Megawatt-hours reductions in customer load =

$$\left( \frac{\text{Annual megawatt-hours of cogen. elect.}}{\text{of cogen. elect.}} \right) \times \left[ 1 - \left( \frac{\text{heat rate based on fuel used for electric portion of cogen.}}{\text{heat rate for a new clean natural gas fired combined cycle combustion turbine using best available commercial technology}} \right) \right]$$

(13) "Incremental cost" means the difference between the levelized delivered cost of an eligible renewable resource, regardless of ownership, compared to the levelized delivered cost of an equivalent amount of reasonably available substitute resources that do not qualify as eligible renewable resources, where the resources being compared have the same contract length or facility life.

(14) "Integrated resource plan" or "IRP" means the filing made every two years by an electric utility in accordance with WAC 480-100-238, integrated resource planning.

(15) "Load" means the amount of kilowatt-hours of electricity delivered in the most recently completed year by a qualifying utility to its Washington retail customers. Load does not include off-system sales or electricity delivered to transmission-only customers.

(16) (a) "Nonpower attributes" means all environmentally related characteristics, exclusive of energy, capacity reliability, and other electrical power service attributes, that are associated with the generation of electricity from a renewable resource, including but not limited to the facility's fuel type, geographic location, vintage, qualification as an eligible renewable resource, and avoided emissions of pollutants to the air, soil, or water, and avoided emissions of carbon dioxide and other greenhouse gases.

(b) "Nonpower attributes" does not include any aspects, claims, characteristics, and benefits associated with the on-site capture and destruction of methane or other greenhouse gases at a facility through a digester system, landfill gas collection system, or other mechanism, which may be separately marketable as greenhouse gas emission reduction credits, offsets, or similar tradable commodities. However, these separate avoided emissions may not result in or otherwise have the effect of attributing greenhouse gas emissions to the electricity.

(17) "Pacific Northwest" has the same meaning as defined for the Bonneville power administration in section 3 of the Pacific Northwest Electric Power Planning and Conservation Act (94 Stat. 2698; 16 U.S.C. Sec. 839a).

(18) "Pro rata" means the calculation dividing the utility's projected ten-year conservation potential into five equal proportions to establish the minimum biennial conservation target.

(19) "Production efficiency" means investments and actions that save electric energy from power consuming equipment and fixtures at an electric generating facility. The installation of electric power production equipment that increases the amount of power generated for the same

energy input is not production efficiency in this chapter or conservation under RCW 19.285.030(4) because no reduction in electric power consumption occurs.

(20) "Pursue all" means an ongoing process of researching and evaluating the range of possible conservation technologies and programs, and implementing all programs which are cost-effective, reliable and feasible.

(21) "Qualified biomass energy" means electricity produced from a biomass energy facility that:

- (a) Commenced operation before March 31, 1999;
- (b) Contributes to the qualifying utility's load; and
- (c) Is owned either by:
  - (i) A qualifying utility; or
  - (ii) An industrial facility that is directly interconnected with electricity facilities that are owned by a qualifying utility and capable of carrying electricity at transmission voltage.

(22) "Regional Technical Forum" means the advisory committee established by the council.

(23) "Renewable energy credit" means a tradable certificate of proof of at least one megawatt-hour of an eligible renewable resource where the generation facility is not powered by fresh water, the certificate includes all of the nonpower attributes associated with that one megawatt-hour of electricity, and the certificate is verified by a renewable energy credit tracking system selected by the department.

(24) "Renewable resource" means:

- (a) Water;
- (b) Wind;
- (c) Solar energy;
- (d) Geothermal energy;
- (e) Landfill gas;
- (f) Wave, ocean, or tidal power;
- (g) Gas from sewage treatment facilities;
- (h) Biodiesel fuel as defined in RCW 82.29A.135 that is not derived from crops raised on land cleared from old growth or first-growth forests where the clearing occurred after December 7, 2006;
- (i) Generation facilities in which fossil and combustible renewable resources are cofired in one generating unit that is located in the Pacific Northwest and in which the cofiring commenced after March 31, 1999. These facilities produce eligible renewable resources in direct proportion to the percentage of the total heat value represented by the heat value of the renewable resources; or
- (j) Biomass energy, where the eligible renewable energy produced by biomass facilities is based on the portion of the fuel supply that is made up of eligible biomass fuels.

(25) "Request for proposal" or "RFP" means the documents describing an electric utility's solicitation of bids for delivering electric capacity, energy, capacity and energy, or conservation.

(26) "River discharge" means the total volume of water passing through, over and around all structural components of a hydroelectric facility over a given time.

(27) "Single large facility conservation savings" means cost-effective conservation savings achieved in a single biennial period at the premises of a single customer of a utility whose

recent annual electricity consumption prior to the conservation savings exceeded five average megawatts.

(28) "System cost" means, consistent with RCW 80.52.030, an estimate of all direct costs of a project or resource over its effective life, including, if applicable, the costs of distribution to the consumer, and, among other factors, waste disposal costs, end-of-cycle costs, and fuel costs (including projected increases), and such quantifiable environmental costs and benefits as are directly attributable to the project or resource.

(29) "Target year" means the twelve-month period commencing January 1 and ending December 31 used for compliance with the renewable portfolio standard requirement in WAC 480-109-020(1).

(30) "Transmission voltage" means an electric line normally operated at or above 100,000 volts.

(31) "Utility" means an electrical company that is subject to the commission's jurisdiction under RCW 80.04.010 and chapter 80.28 RCW.

(32) "WREGIS" means the Western renewable energy generation information system. WREGIS is the renewable energy credit tracking system designated by the Department according to RCW 19.285.030(20).

(33) "Year" means the twelve-month period commencing January 1st and ending December 31st.

[Statutory Authority: RCW 80.01.040, 80.04.160, and chapter 19.285 RCW. 07-24-012 and 08-01-037 (Docket UE-061895, General Order R-546), § 480-109-007, filed 11/27/07 and 12/10/07, effective 12/28/07 and 1/10/08.]

**480-109-010 Conservation and energy efficiency resource standard.**

(1) **Conservation potential.** By January 1, 2010, and every two years thereafter, a utility must project its cumulative ten-year conservation potential.

- (a) This projection must consider all conservation resources that are cost-effective, reliable, and feasible.
- (b) This projection must be derived from the utility's most recent IRP, including any information learned in its subsequent resource acquisition process, or the utility must document the reasons for any differences. When developing this projection, utilities must use methodologies that are consistent with those used by the council's Sixth Northwest Conservation and Electric Power Plan.
- (c) The projection must include a list of each measure used in the potential, its unit energy savings value, and the source of that value.

(2) **Biennial conservation target.** Beginning January 2010, and every two years thereafter, a utility must establish a biennial conservation target.

- (a) The biennial conservation target must identify, and quantify in megawatt-hours, all achievable conservation opportunities.
- (b) The biennial conservation target must be no lower than a pro rata share of the utility's ten-year cumulative achievable conservation potential.
- (c) **Excess conservation.** No more than twenty-five percent of any biennial target may be met with excess conservation savings allowed by this subsection.
  - (i) Beginning January 1, 2014, cost-effective conservation achieved in excess of the biennial conservation target may be used to meet up to twenty percent of each of the subsequent two biennial targets.
  - (ii) Beginning January 1, 2014, a utility may use single large facility conservation savings in excess of its biennial target to meet up to five percent of each of the immediate two subsequent biennial conservation targets.
  - (iii) Beginning January 1, 2012, and until December 31, 2017, a utility with an industrial facility located in a county with a population between ninety-five thousand and one hundred fifteen thousand that is directly interconnected with electricity facilities that are capable of carrying electricity at transmission voltage, may use cost-effective excess conservation savings from that industrial facility to meet the subsequent two biennial conservation targets.

(3) **Biennial conservation plan.** On or before November 1 of every odd-numbered year, a utility must file with the commission a biennial conservation plan.

- (a) The plan must include a request that the commission approve its ten-year achievable conservation potential and biennial conservation target.
- (b) The plan must outline the extent of public participation in the development of the ten-year conservation potential and the biennial conservation target.
- (c) The plan must include, at a minimum, the ten-year conservation potential, the biennial conservation target, program details, program budgets, and cost-effectiveness calculations.
- (d) The plan must describe the technologies, data collection, processes, procedures and assumptions the utility used to develop these figures. This plan must describe and support any changes from the assumptions or methodologies used in the utility's most recent conservation potential assessment or by the council.

(e) The commission and stakeholder review of the biennial conservation plan is described in WAC 480-109-BBB(4).

(4) **Pursue all conservation.** (a) A utility's obligation to pursue all available conservation that is cost-effective, reliable, and feasible includes, but is not limited to the following process:

- (i) **Identify potential.** Identify the cost-effective, reliable, and feasible potential of possible technologies and conservation programs and measures in the utility's service territory.
- (ii) **Develop portfolio.** Develop a conservation portfolio that includes all available, cost-effective, reliable, and feasible potential, as well as pilot programs that are not yet proven to be cost-effective.

- (A) A utility must develop and implement programs to acquire available conservation from all of the types of measures identified in subsection (b) of this section.

- (B) A utility's conservation portfolio must contain programs that are not included in the biennial conservation target and are available, cost-effective, reliable, and feasible.

- (C) A utility may spend up to 10 percent of its biennial conservation budget on pilots and information-only services or programs.

- (iii) **Implement programs.** Implement conservation programs identified in the portfolio to the extent the programs remain cost-effective, reliable, and feasible.

Implementation methods shall not unnecessarily restrict the uptake of conservation and shall be designed to maximize the practical uptake of conservation. Program implementation methods must include, but are not limited to:

- (A) providing market-moving incentives and rebates,

- (B) evaluating the effectiveness of conservation program advertising,

- (C) pursuing multi-channel implementation,

- (D) implementing pilot projects,

- (E) performing research regarding emerging conservation technologies,

- (F) funding regional conservation programs,

- (G) conducting collaborative technical activities, and

- (H) conducting collaborative promotional activities.

- (iv) **Adaptive management.** Continuously manage the conservation portfolio to adapt to changing market conditions and developing technologies, as well as, performing research regarding emerging conservation technologies.

(b) Types of conservation include, but are not limited to:

- (i) end-use efficiency,

- (ii) behavioral programs,

- (iii) code enforcement,

- (iv) high-efficiency cogeneration,

- (A) A utility may count as conservation savings a portion of the electricity output of a high-efficiency cogeneration facility that commences operation in its service territory.

- (B) The high-efficiency cogeneration facility must be owned by a retail electric customer and used by that customer to meet its heat and electricity needs. Heat and electricity output provided to anyone other than the facility owner may not be considered in determining conservation savings.

(C) The utility's documentation of a cogeneration facility's compliance with the definition of "high-efficiency cogeneration" and the conditions for counting as conservation in this subsection must be certified by a registered professional engineer licensed by the Washington department of licensing.

- (v) production efficiency,
- (vi) distribution efficiency, and
- (vii) market transformation.

(5) **Prudence.** A utility retains the responsibility to demonstrate the prudence of all conservation expenditures, as required by RCW 19.285.050(2).

(6) **Energy savings.** A utility must use unit energy savings values and protocols approved by the Regional Technical Forum, unless the utility documents that a specific unit energy savings value or protocol is more appropriate for its service territory.

(7) **Applicable sectors.** A utility must offer conservation programs that are available to all customer sectors.

(8) **Cost-effectiveness evaluation.** A utility must evaluate all types of conservation using cost-effectiveness tests consistent with those used by the council, except low-income conservation programs.

(a) Low-income conservation programs should be evaluated for cost-effectiveness using the Savings-to-Investment Ratio, as described in the department's Weatherization Manual For Managing the Low-Income Weatherization Program.

(b) Low-income conservation programs may be excluded from portfolio-level cost-effectiveness calculations.

(9) **Incentives.** A utility may propose positive incentives to exceed its biennial conservation target as identified in RCW 19.285.060(4). Any proposed incentive must be included in the utility's biennial conservation plan.

[Statutory Authority: RCW 80.01.040, 80.04.160, and chapter 19.285 RCW. 07-24-012 (Docket UE-061895, General Order R-546), § 480-109-010, filed 11/27/07, effective 12/28/07.]



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**480-109-AAA Conservation advisory group.**

(1) **Scope of issues.** A utility must maintain and use an external conservation advisory group of stakeholders to advise the utility on conservation issues, including, but not limited to:

- (a) Updates to the utility's evaluation, measurement, and verification framework.
- (b) Modification of existing, or development of new evaluation, measurement, and verification methods.
- (c) Independent third-party evaluation of portfolio-level biennial conservation achievement.
- (d) Development of conservation potential assessments, as required by RCW 19.285.040(1)(a) and WAC 480-109-010(1).
- (e) The methodology, inputs and calculations for cost-effectiveness.
- (f) The data sources and values used to develop and update supply curves.
- (g) The need for tariff modifications or mid-biennium program corrections.
- (h) The appropriate level of and planning for:
  - (i) marketing conservation programs;
  - (ii) incentives to customers for measures and services; and
  - (iii) impact, market, and process evaluations.
- (i) Programs for low income customers.
- (j) Establishment of the biennial conservation target and actual program achievement results compared to the target.
- (k) Conservation program budgets and actual expenditures compared to budgets.

(2) **Advisory Group Meetings.** A utility must meet with its conservation advisory group at least four times per year. Conservation advisory group members may request additional meetings.

(3) **Advance notification of filings.** A utility must provide its conservation advisory group an electronic copy of all conservation filings that the utility intends to submit to the commission at least 30 days in advance of the filing. The filing cover letter must document the amount of advance notice provided to the conservation advisory group.

(4) **Advance notification of meetings.** A utility must notify its conservation advisory group of public meetings scheduled to address the utility's integrated resource plan, conservation programs, or conservation tariffs.

**480-109-BBB Conservation reporting.**

- (1) **Annual conservation plan.** On or before November 1 of each even-numbered year, a utility must file with the commission, in the same docket as the current biennial conservation plan required in WAC 480-109-010(3), an annual conservation plan containing any changes to program details and annual budget.
- (2) **Annual conservation report.**
  - (a) On or before June 1 of each odd-numbered year, a utility must file with the commission, in the same docket as the current biennial conservation plan required in WAC 480-109-010(3), an annual conservation report regarding its progress in meeting its conservation targets during the preceding year.
  - (b) The annual conservation report must include, but is not limited to:
    - (i) The conservation target for that year.
    - (ii) Expected and actual electricity savings from conservation.
    - (iii) Budgeted and actual expenditures made to acquire conservation.
    - (iv) An evaluation of portfolio- and program-level cost-effectiveness of the actual conservation savings.
    - (v) All program evaluations completed in the preceding year.
- (3) **Biennial conservation report.** On or before June 1 of each even-numbered year, a utility must file with the commission, in the same docket as the current biennial conservation plan required in WAC 480-109-010(3), and with the department, a biennial conservation report regarding its progress in meeting its conservation targets during the preceding two years.
  - (a) The biennial conservation report must include:
    - (i) The conservation target for the preceding two years.
    - (ii) Expected and actual electricity savings from conservation, including a description of the source(s) of any variance(s).
    - (iii) Budgeted and actual expenditures made to acquire conservation.
    - (iv) An evaluation of the cost-effectiveness of the actual electricity savings from conservation.
    - (v) An independent third-party evaluation of portfolio-level biennial conservation savings achievement.
    - (vi) All program evaluations completed in the preceding year.
    - (vii) A discussion of the steps taken to adaptively manage conservation programs throughout the preceding two years.
    - (viii) Any other information needed to justify the conservation savings achievement.
  - (b) A utility must provide a summary of the biennial conservation report to its customers by bill insert or other suitable method within ninety days of the commission's final action on the report.
- (4) **Plan and report review.**
  - (a) Interested persons may file written comments regarding the biennial conservation plan, annual conservation plan, and biennial conservation report within thirty days of the utility's filing.
  - (b) Upon conclusion of the commission review of the utility's report or plan, the commission will issue a decision accepting or rejecting the calculation of the utility's conservation target; or determining whether the utility has acquired enough conservation resources to comply with its conservation target. If the utility does not

meet its biennial conservation target described in WAC 480-109-010(2), the commission will determine the amount in megawatt-hours by which the utility was deficient.

- (c) If a utility revises its annual or biennial conservation reports as a result of the commission review, the utility must submit the revised final report to the department.
- (5) **Publication of reports.** All current and historical plans and reports required in this section must be posted on the utility's web site and a copy of any report must be provided to any person upon request.

**480-109-020 Renewable portfolio standard.**

- (1) **Annual target.** Each utility must meet the following annual targets.
  - (a) By January 1 of each year beginning in 2012 and continuing through 2015, each utility must use sufficient eligible renewable resources, acquire equivalent renewable energy credits, or a combination of both, to supply at least three percent of its two-year average load for the remainder of each target year.
  - (b) By January 1 of each year beginning in 2016 and continuing through 2019, each utility must use sufficient eligible renewable resources, acquire equivalent renewable energy credits, or a combination of both, to supply at least nine percent of its two-year average load for the remainder of each target year.
  - (c) By January 1 of each year beginning in 2020 and continuing each year thereafter, each utility must use sufficient eligible renewable resources, acquire equivalent renewable energy credits, or a combination of both, to supply at least fifteen percent of its two-year average load for the remainder of each target year.
- (2) Renewable energy credits produced during the target year, the preceding year or the subsequent year may be used to comply with this annual renewable resource requirement provided that they were acquired by January 1 of the target year.
- (3) All eligible renewable resource generation and all renewable energy credits used for utility compliance with the renewable energy standards must be registered in WREGIS.
- (4) **Renewable energy credit multipliers.** The multipliers described in this subsection do not create additional renewable energy credits. A utility may count renewable energy resources and credits at:
  - (a) One and two-tenths times the base value where the eligible resource:
    - (i) Commenced operation after December 31, 2005; and
    - (ii) The developer of the facility used apprenticeship programs approved by the Washington state apprenticeship and training council.
  - (b) Two times the base value where the eligible resource was generated by distributed generation and:
    - (i) The utility owns or has contracted for the distributed generation and the associated renewable energy credits; or
    - (ii) The utility has contracted to purchase the associated renewable energy credits.
  - (c) A utility that uses a multiplier described in this subsection for compliance must retire the associated base value renewable energy credit at the same time. A utility may not transact the multipliers described in this subsection independent of the associated base value renewable energy credit.
- (5) In meeting the annual targets of this section, a utility must calculate its annual target based on the average of the utility's load for the previous two years.
- (6) A renewable resource within the Pacific Northwest may receive integration, shaping, storage or other services from sources outside of the Pacific Northwest and remain eligible to count towards a utility's renewable resource target.
- (7) **Incremental hydropower calculation.** A utility must use one of the following methods to calculate the quantity of incremental electricity produced by eligible efficiency upgrades to any hydropower facility, regardless of ownership, that is used to meet the annual targets of this section.
  - (a) **Method one.** An annual calculation performed by:
    - (i) Determining the river discharge for the facility in the target year;

- (ii) Measuring the total amount of electricity produced by the upgraded hydropower facility during the target year;
  - (iii) Using a power curve-based production model to calculate how much energy the pre-upgrade facility would have generated under the same river discharge observed in the target year; and
  - (iv) Subtracting the model output in subsection (iii) from the measurement in subsection (ii) to determine the quantity of eligible renewable energy produced by the facility during the target year.
- (b) **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 XX 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) Calculate a factor by dividing the arithmetic mean post-upgrade generation by the arithmetic mean pre-upgrade generation and subtracting one; and
  - (v) Multiply the facility's observed generation in the target year by the factor calculated in subsection (iv) to determine the share of the facility's observed generation that may be reported as eligible renewable energy.
- (c) **Method three.** A pilot method that a utility may use to demonstrate compliance only for target years 2014 to 2017. Method three is a one-time calculation of the quantity of renewable energy performed by:
- (i) Determining the river discharge for the facility over a historical period of at least XX consecutive years;
  - (ii) Using a production model to calculate the facility's generation in megawatt-hours 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 generation of the pre-upgrade and post-upgrade states over the historical period in megawatt hours; and
  - (iv) Subtracting the arithmetic mean pre-upgrade generation from the arithmetic mean post-upgrade generation to determine the amount of eligible renewable generation for the target year.
  - (v) In the utility's 2017 renewable portfolio standard report, providing an analysis comparing the amount of incremental hydropower the utility reported in the five previous years using method three to the amount of incremental hydropower the utility would have reported over the same period using one of the other two methods. A utility may not use method three to demonstrate compliance for a target year after 2017 unless granted an exemption from this rule by the commission.
- (8) **Qualified biomass energy.** Beginning January 1, 2016, only a utility that owns or is directly interconnected to a qualified biomass energy facility may use qualified biomass energy to meet its annual target obligation.
- (a) A utility may no longer use electricity and associated renewable energy credits from a qualified biomass energy facility if the associated industrial pulping or wood

manufacturing facility ceases operation other than for purposes of maintenance or upgrade.

- (b) A utility may acquire renewable energy credits from a qualified biomass energy resource hosted by an industrial facility only if the facility is directly interconnected to the utility at transmission voltage. The number of renewable energy credits that the utility may acquire from an industrial facility for the utility's target compliance may not be greater than the utility's renewable portfolio standard percentage times the industrial facility load.
- (c) A utility that owns a qualified biomass energy facility may not transfer or sell renewable energy credits associated with qualified biomass energy to another person, entity, or utility.

**480-109-030 Alternatives to the renewable resource requirement.**

Instead of fully meeting its annual renewable resource target in WAC 480-109-020, a utility may make one of three demonstrations.

(1) A utility may invest at least four percent of its total annual retail revenue requirement on the incremental costs of eligible renewable resources, renewable energy credits, or a combination of both.

(2) A utility may demonstrate that events beyond its reasonable control that could not have been reasonably anticipated or ameliorated prevented it from meeting the renewable energy target. Such events may include weather-related damage, mechanical failure, strikes, lockouts, or actions of a governmental authority that adversely affect the generation, transmission, or distribution of an eligible renewable resource owned by or under contract to a qualifying utility.

(3) A utility may demonstrate all of the following:

(a) Its weather-adjusted load for the previous three years prior to the target year on average did not increase.

(b) After December 7, 2006, all new or renewed ownership or purchases of electricity from nonrenewable resources other than coal transition power and daily spot purchases were offset by equivalent renewable energy credits.

(c) It invested at least one percent of its total annual retail revenue requirement that year on eligible renewable resources, renewable energy credits, or a combination of both.

[Statutory Authority: RCW 80.01.040, 80.04.160, and chapter 19.285 RCW. 07-24-012 and 08-01-037 (Docket UE-061895, General Order R-546), § 480-109-030, filed 11/27/07 and 12/10/07, effective 12/28/07 and 1/10/08.]



**480-109-040 Renewable portfolio standard reporting requirements.**

- (1) **Annual report.** On or before every June 1, each utility must file an annual renewable portfolio standard report with the commission and the department detailing the resources the utility has acquired or contracted to acquire to meet its renewable resource obligation for the target year.
- (2) **Annual report contents.** The annual renewable portfolio standard report must include the utility's annual load for the prior two years, the total number of megawatt-hours from eligible renewable resources and/or renewable resource credits the utility needed to meet its annual renewable energy target by January 1 of the target year, the amount (in megawatt-hours) of each type of eligible renewable resource used, and the amount of renewable energy credits acquired. Additionally, the annual renewable portfolio standard report must include the following:
  - (a) **Incremental cost calculation.** To calculate its incremental cost, a utility must:
    - (i) Determine the levelized cost of energy for each eligible resource, including integration costs, expressed in dollars per megawatt hour;
    - (ii) Select and document the lowest-reasonable-cost, non-eligible resource available to the utility. The non-eligible resource may not be a spot market purchase, and must have the same contract length or facility life as the eligible resource;
    - (iii) Determine the levelized cost of energy generated by the non-eligible resource selected in subsection (ii), expressed in dollars per megawatt hour;
    - (iv) Sum the levelized cost of every megawatt-hour of eligible electricity generated during the target year;
    - (v) Determine the energy and capacity costs associated with acquiring the same number of megawatt-hours from the non-eligible resource selected in subsection (ii);
    - (vi) Subtract the total cost of the non-eligible resource calculated in subsection (v) from the total cost of the eligible resources determined in subsection (iv);
    - (vii) Add the cost of any unbundled renewable energy credits purchased for target year compliance to the subtotal determined in subsection (vi); and
    - (viii) Subtract the revenue from the sales of any renewable energy credits from eligible facilities subtotal determined in subsection (vii).
    - (ix) The total calculated in subsection (viii) is the incremental cost of all eligible renewable resources. This total should be presented as a dollar amount, as a percentage of the utility's current revenue requirement, and in dollars per megawatt-hour.
    - (x) Multiply the dollars per megawatt-hour cost calculated in subsection (viii) by the number of megawatt-hours needed for compliance.
  - (b) **Alternative compliance.** State whether the utility is relying upon one of the alternative compliance mechanisms provided in WAC 480-109-030 instead of fully meeting its renewable resource target. A utility using an alternative compliance mechanism must use the incremental cost methodology described in this section and include sufficient data, documentation and other information in its report to demonstrate that it qualifies to use that alternative mechanism.
  - (c) **Compliance Plan.** Describe the steps the utility took to meet the renewable resource requirements for the target year.
  - (d) **Eligible resources.** A list of each eligible renewable resource, for which a utility owns the renewable energy credits or qualifying hydroelectric generation, with an installed

capacity greater than 25 kilowatts. Resources with an installed capacity of less than 25 kilowatts may be reported in terms of aggregate capacity. The list must include:

- (i) Each resource's WREGIS registration status and use of renewable energy credits, whether it be for annual target compliance, a voluntary renewable energy program as provided for in RCW 19.29A.090, or owned by the customer, and
- (ii) Eligible resources being included in the report for the first time and documentation of their eligibility.

(e) **Multi-state allocations.**

- (i) If a utility serves retail customers in more than one state, the utility must allocate renewable energy credits and qualifying hydroelectric generation consistent with the utility's most recent commission-approved interstate cost allocation methodology. The report must show how the utility applied the allocation methodology to arrive at the amount of renewable energy credits and qualifying hydroelectric generation allocated to Washington ratepayers.
- (ii) After documenting the amount of renewable energy credits and qualifying hydroelectric generation allocated to Washington ratepayers, a utility may transfer renewable energy credits or qualifying hydroelectric generation to or from Washington ratepayers. The report must document the compensation provided to each jurisdiction's ratepayers for such transfers.
- (f) **Sales.** If a utility sold renewable energy credits, report the number of credits that it sold, their WREGIS certificate numbers, their source, and the revenues obtained from the sales. If a utility sold eligible hydroelectricity, report the number of megawatt-hours sold, their source, and the revenues obtained from the sales.

(3) **Report review.**

- (a) Interested persons may file written comments regarding a utility's annual renewable portfolio standard report within thirty days of the utility's filing.
- (b) Upon conclusion of the commission review of the utility's annual renewable portfolio standard report, the commission will issue a decision accepting or rejecting the calculation of the utility's renewable resource target; determining whether the utility has generated, acquired or arranged to acquire enough renewable energy credits or qualifying generation to comply with its renewable resource target; and determining the eligibility of new renewable resources pursuant to subsection (2)(d) of this section.
- (c) If a utility revises its annual renewable portfolio standard report as a result of the commission review, the utility must submit the revised final annual renewable portfolio standard report to the department.

(4) **Publication of reports.** All current and historical renewable portfolio standard reports required in this section must be posted on the utility's web site and a copy of any report must be provided to any person upon request.

(5) **Customer notification.** Each utility must provide a summary of its annual renewable portfolio standard report to its customers by bill insert or other suitable method. This summary must be provided within ninety days of final action by the commission on the report.

(6) **Final compliance report.** Within two years following submission of its annual renewable portfolio standard report, a utility must submit, in the same docket, a final renewable portfolio standard compliance report that lists the renewable energy credits that it retired in WREGIS for the target year. If a utility does not meet its annual target described in WAC 480-

109-020, the commission will determine the amount in megawatt-hours by which the utility was deficient.

[Statutory Authority: RCW 80.01.040, 80.04.160, and chapter 19.285 RCW. 07-24-012 (Docket UE-061895, General Order R-546), § 480-109-040, filed 11/27/07, effective 12/28/07.]

**480-109-050 Administrative penalties.**

No changes.

**480-109-999 Adoption by reference.** In this chapter, the commission adopts by reference all, or portions of, the publications identified below. They are available for inspection at the commission branch of the Washington state library. The publications, publication dates, references within this chapter, and availability of the resources are as follows:

- (1) Sixth Northwest Conservation and Electric Power Plan is published by the Northwest Power and Conservation Council.
  - (a) The commission adopts the version published in 2010.
  - (b) This publication is referenced in WAC 480-109-010.
  - (c) Copies of Sixth Northwest Conservation and Electric Power Plan are available from the Northwest Power and Conservation Council at <http://www.nwcouncil.org/energy/powerplan/6/plan/>.
- (2) Weatherization Manual For Managing the Low-Income Weatherization Program is published by the Washington State Department of Commerce.
  - (a) The commission adopts the version published in 2013.
  - (b) This publication is referenced in WAC 480-109-BBB.
  - (c) Copies of Weatherization Manual For Managing the Low-Income Weatherization Program are available from the Washington State Department of Commerce at <http://www.commerce.wa.gov/Programs/services/weatherization/Pages/WeatherizationTechnicalDocuments.aspx>.