

## Chapter 194-37 WAC

### ENERGY INDEPENDENCE

#### NEW SECTION

**WAC 194-37-010 Purpose and scope.** The purpose of this chapter is to implement the requirements of the Energy Independence Act, chapter 19.285 RCW.

#### NEW SECTION

**WAC 194-37-020 Applicability.** The provisions of this chapter apply to consumer-owned electric utilities that provide electrical service to more than twenty-five thousand retail customers in the state of Washington.

#### NEW SECTION

**WAC 194-37-030 Severability.** If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of the chapter or the application of the provision to other persons or circumstances is not affected.

#### NEW SECTION

**WAC 194-37-040 Definitions.** The definitions in chapter 19.285 RCW apply throughout this chapter. Some of those definitions are included here, in addition to rule-specific definitions, to assist in understanding this chapter.

(1) "Auditor" means:

(a) The Washington state auditor's office or its designee for consumer-owned utilities under its jurisdiction, such as a public utility district formed under Title 54 RCW, a municipal electric utility formed under Title 35 RCW, or any other public entity authorized by law to sell electricity for retail use, the Washington state auditor's office or its designee;

(b) An independent auditor selected by a utility that is not under the jurisdiction of the state auditor, such as a cooperative formed under chapter 23.86 RCW or an electric mutual corporation or association formed under chapter 24.06 RCW, an independent auditor selected by such a utility.

(2) "Annual revenue requirement" means that portion of a utility's annual budget approved by its governing body for the target year that is intended to be recovered through retail electricity sales in the state of Washington in the target year, or as otherwise documented by the utility pursuant to WAC 194-37-150.

(3) "Average water generation" means the average megawatt-hours of generation from a hydroelectric project over a period of ten consecutive years or more, taking into account differences in water flows from year to year.

(4) "Biennial target" means a utility's biennial conservation target.

(5) "BPA" means the Bonneville Power Administration.

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

(7) "Conservation calculator" means a spreadsheet or piece of software developed and maintained by the NWPC to approximate a utility's ten-year potential. The conservation calculator will use methodologies consistent with the most recently published *Power Plan*. It is available at [www.nwcouncil.org](http://www.nwcouncil.org).

(8) "Cost-effective" means, as defined in 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.

(c) For purposes of this paragraph, the term "system cost" means 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.

(9) "Council" means the Washington state apprenticeship and training council within the department of labor and industries.

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

(11) "Department" means the department of community, trade,

and economic development.

(12) "Distributed generation" means an eligible renewable resource where the facility or any integrated cluster of generating units has a generating capacity of not more than five megawatts. If several five-megawatt or smaller projects are located in the same immediate area but are owned or controlled by different developers, each qualifies as a separate, independent distributed generation project. For the purposes of this rule, an eligible resource or group of similar eligible resources cannot be subdivided into amounts less than five megawatts solely to be considered distributed generation.

(13) "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 (an eligible renewable resource within the Pacific Northwest may receive integration, shaping, storage or other services from sources outside the Pacific Northwest and remain eligible to count towards a utility's renewable resource target); or

(b) Incremental electricity produced as a result of efficiency improvements completed after March 31, 1999, to a hydroelectric generation project owned by one or more qualifying utilities (see definition of qualifying utility in chapter 19.285 RCW) and located in the Pacific Northwest or to hydroelectric generation in irrigation pipes and canals located in the Pacific Northwest, where the additional electricity generated in either case is not a result of new water diversions or impoundments.

(14) "Fifth power plan" means *The Fifth Northwest Electric Power and Conservation Plan* produced by the NWPCC. The power plan is available at [www.nwcouncil.org](http://www.nwcouncil.org).

(15) "Incremental hydropower" means the incremental amount of kilowatt-hours of electricity generated from a base or constant amount of water.

(16) "Integrated cluster" of eligible renewable resources means colocated projects owned or controlled by the same entity that feed into the same substation.

(17) "Load" means the amount of kilowatt-hours of electricity delivered in the most recently completed year by a utility to its Washington retail customers.

(18) "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.

(19) "NWPCC" means Pacific Northwest Electric Power and

Conservation Planning Council also known as the Northwest Power and Conservation Council. Its calculation of avoided costs and publications are available at [www.nwcouncil.org](http://www.nwcouncil.org).

(20) "Pacific Northwest" means the area consisting of:

(a) The states of Oregon, Washington, and Idaho, the portion of the state of Montana west of the Continental Divide, and such portions of the states of Nevada, Utah, and Wyoming as are within the Columbia River drainage basin; and

(b) Any contiguous areas, not in excess of seventy-five air miles from the area referred to in (a) of this subsection, which are a part of the service area of a rural electric cooperative customer served by the BPA on December 5, 1980, which has a distribution system from which it serves both within and without such region.

(21) "Qualified incremental hydropower efficiency improvements" means the installation or modification of equipment and structures, or operating protocols that increase the amount of electricity generated from the same amount of water. These may include rewinding of existing generators, replacing turbines with more efficient units and changing control systems to optimize electricity generation, and improvements to hydraulic conveyance systems that decrease head loss. They do not include additions to capacity by increasing pondage or elevation head, or diverting additional water into the project.

(22) "Qualifying utility" means an electric utility, as the term "electric utility" is defined in RCW 19.29A.010, that serves more than twenty-five thousand customers in the state of Washington.

(23) "Regional technical forum" or "RTF" means a voluntary advisory committee that reports to the executive director of the NWPCC and whose members are appointed by the NWPCC's chair.

(24) "Renewable energy credit" or "REC" 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 megawatt-hour of electricity, and the certificate is verified by the Western Renewable Energy Generation Information System.

(25) "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; and

(i) Biomass energy based on animal waste or solid organic fuels from wood, forest, or field residues, or dedicated energy

crops that do not include:

- (i) Wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol;
- (ii) Black liquor by-product from paper production;
- (iii) Wood from old growth forests; or
- (iv) Municipal solid waste.

(26) "Substitute resource" means reasonably available electricity or generating facilities, of the same contract length or facility life as the eligible renewable resource the utility invested in to comply with chapter 19.285 RCW requirements, that otherwise would have been used to serve a utility's retail load in the absence of chapter 19.285 RCW requirements to serve that retail load with eligible renewable resources.

(27) "Target year" means the specific year for which a renewable energy target must be met.

(28) "Ten-year potential" means the ten-year cost effective conservation resource potential.

(29) "Utility" means an electric consumer-owned electric utility, as the term consumer-owned utility is defined in RCW 19.29A.010, that serves more than twenty-five thousand retail customers in the state of Washington. The number of customers served shall be based on data reported by a utility in Form EIA - 861, "Annual Electric Power Industry Report," filed with the Energy Information Administration, United States Department of Energy.

A consumer-owned electric utility whose number of retail customers grows beyond twenty-five thousand over the course of a year shall be subject to the requirements of this chapter, or per chapter 19.285 RCW shall become a qualifying utility, starting January 1 of the following year. All applicable target dates, per chapter 19.285 RCW will be delayed by the same number of years as there are between January 1, 2007, and the year in which the utility becomes a qualifying utility.

(30) "Weather-adjusted load" means load calculated after variations in peak and average temperatures from year to year are taken into account.

(31) "WREGIS" means the Western Renewable Energy Generation Information System. WREGIS is an independent, renewable energy data base 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 data base. The department selects WREGIS as the renewable energy credit tracking system to issue verified RECs per RCW 19.285.030(17).

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

NEW SECTION

**WAC 194-37-050 Documentation and auditing timelines.**

Utilities will maintain all records necessary to document their compliance with the Energy Independence Act, as described in WAC 194-37-070, 194-37-080, 194-37-090, 194-37-100, 194-37-120, 194-37-130, 194-37-140, 194-37-150, 194-37-160, 194-37-170, 194-37-180, 194-37-190, and 194-37-200. Utilities that are not under the jurisdiction of the Washington state auditor must be audited for compliance with the Energy Independence Act by an independent auditor at least every twenty-four months.

NEW SECTION

**WAC 194-37-060 Conservation reporting requirements.**

Each utility shall submit an annual conservation report to the department by June 1 beginning in 2012. The conservation report shall document the utility's progress in meeting the conservation targets established in RCW 19.285.040 and shall include the following:

(1) A summary of the data the utility reports to the "planning, tracking and reporting system." The summary shall include total electricity savings by customer sector - residential, commercial, industrial, and agricultural, by production efficiencies, and by distribution efficiencies. To create this summary report, each utility will report their annual conservation achievements using the NWPCC's regional technical forum "planning, tracking and reporting system," or an alternative reporting system approved, in advance of the reporting year, by the department. Each utility can report using the default values embedded in the NWPCC's planning, tracking and reporting system or the utility may use its own inputs as documented per WAC 194-37-080 (8) and (9).

(2) If the utility counts towards its biennial target any electricity savings from local, regional, state, or federal market transformation programs, or local, state or federal codes or standards, the utility shall include copies of reports of the annual electricity savings for the utility's service territory as estimated and recorded by entities such as the department, the NWPCC, regional market transformation organizations, or the utility.

(3) A brief description of the methodology used to establish the utility's ten-year potential and biennial target to capture cost-effective conservation, including the share of this target to be captured by efficiency improvements in customer measures, and, if any, in distribution measures and production measures.

(4) The utility's total expenditures for conservation reported by customer conservation broken down by residential sector, commercial sector, industrial sector, and agricultural sector, and,

if any, production efficiency and distribution efficiency.

(5) The most recent final audit report(s), if any, that evaluate(s) the utility's compliance with chapter 19.285 RCW and the information the utility reported per this chapter.

(6) In even years this report must include the following information categorized by customer conservation savings, and if any, total distribution efficiency savings, and total production efficiency savings:

(a) The utility's achievement in meeting its preceding biennial target; and

(b) The utility's current ten-year potential and biennial target.

#### NEW SECTION

**WAC 194-37-070 Documenting development of conservation targets.** (1) Ten-year potential. By January 1, 2010, each utility shall establish its ten-year cost-effective conservation resource potential. At least every two years thereafter, the public utility shall review and update this assessment for the subsequent ten-year period.

(2) Biennial target. In January 2010, and each two years thereafter, each utility shall establish and make public a biennial conservation target. The utility's biennial target shall be no less than its pro rata share of its ten-year potential.

(3) To document that the utility has established its ten-year potential and biennial target using methodologies consistent with those in the fifth power plan, the utility shall choose one of the documentation procedures set forth in subsection (4), (5), or (6) of this section, subject to the following conditions:

(a) If a utility uses the conservation calculator, or the modified conservation calculator to determine its customer conservation ten-year potential, it must use the utility analysis option per subsection (6) of this section to compute any additional ten-year potential for production and distribution efficiencies.

(b) If a portion of a utility's ten-year potential and biennial target includes calculations of efficiency gains from utility production and/or distribution efficiency measures, that portion of the ten-year potential or biennial target shall carry the stamp of a registered professional engineer licensed by the Washington department of licensing.

(c) If a utility includes production and/or distribution efficiencies in its target, then a utility's ten-year potential shall be the combined total of all cost effective achievable conservation in customer, distribution, and production efficiency measures available to that utility.

(d) A utility will hold a noticed public meeting, which provides an opportunity for public comment, regarding its

assessment of conservation potential. The utility will adopt the ten-year potential and the two-year conservation targets by action of the utility's governing board in a public meeting. Such public meeting may be conducted separately, or as part of public meetings conducted for resource planning, budget setting, or other related processes. The public notice will indicate that the hearing agenda includes the establishment of the utility's ten-year and biennial targets.

(4) Conservation calculator option.

(a) A utility that chooses this option will document its calculation of its pro rata biennial conservation targets based on its share of regional annual megawatt-hour retail sales using the NWPCC's conservation calculator. If the NWPCC updates its conservation calculator within twelve months of an even-numbered year, a utility may choose to use the NWPCC's most recent conservation calculator or the immediately preceding version.

(b) Any utility that publishes a ten-year potential and biennial target with the customer sector portion of its biennial target equal to or higher than its target calculated using the conservation calculator has effectively documented its biennial target setting requirement for customer conservation.

(c) Starting in 2010, a utility that uses the conservation calculator to establish its ten-year potential and biennial target may deduct its biennial customer sector conservation achievement that meets the criteria in WAC 194-37-080(2) from its share of the NWPCC's conservation resource potential.

(5) Modified conservation calculator option.

A utility that chooses this option will document consistency with the NWPCC's methodologies by modifying its ten-year potential and biennial target as identified through the use of the conservation calculator by making the following adjustments to the NWPCC's analysis in the NWPCC's most recently published power plan:

(a) Deduct conservation measures in the NWPCC's list not applicable to the utility's service territory;

(b) Add conservation measures, that are not included in the NWPCC's list, but are applicable to the utility's service territory;

(c) Modify the number or ratio of applicable units, such as the ratio of electrically heated houses or square footage of commercial space, if the utility has data surveys indicating that their data on applicable units varies from the NWPCC's;

(d) Increase and/or reduce the per unit incremental resource savings for conservation measures, relative to the NWPCC's data for savings per unit;

(e) Increase and/or reduce forecasted program costs;

(f) Increase or decrease retail sales growth rates; and

(g) Increase or decrease avoided distribution capacity cost savings.

(6) Utility analysis option.

(a) The NWPCC's analytical methodology for establishing the conservation resource potential and conservation targets for the Northwest power system is outlined in procedures (a)(i) through

(xv) of this subsection. A utility that chooses this option will document that it established a ten-year potential using an analytical methodology consistent with these NWPCC procedures (a)(i) through (xv) of this subsection:

(i) Analyze a broad range of energy efficiency measures considered technically feasible;

(ii) Perform a life-cycle cost analysis of measures or programs, including the incremental savings and incremental costs of measures and replacement measures where resources or measures have different measure lifetimes;

(iii) Set avoided costs equal to a forecast of market prices, which represents the cost of the next increment of available and reliable power supply available to the utility for the life of the energy efficiency measures to which it is compared;

(iv) Calculate the value of the energy saved based on when it is saved. In performing this calculation, use time differentiated avoided costs to conduct the analysis that determines the financial value of energy saved through conservation;

(v) Conduct a total resource cost analysis that assesses all costs and all benefits of conservation measures regardless of who pays the costs or receives the benefits. The NWPCC identifies conservation measures that pass the total resource cost test as economically achievable;

(vi) Identify conservation measures that pass the total resource cost test, by having a benefit/cost ratio of one or greater as economically achievable;

(vii) Include the increase or decrease in annual or periodic operations and maintenance costs due to conservation measures;

(viii) Include deferred capacity expansion benefits for transmission and distribution systems in its cost-effectiveness analysis;

(ix) Include all nonpower benefits that a resource or measure may provide that can be quantified and monetized;

(x) Include an estimate of program administrative costs;

(xi) Discount future costs and benefits at a discount rate based on a weighted, after-tax, cost of capital for utilities and their customers for the measure lifetime;

(xii) Include estimates of the achievable customer conservation penetration rates for retrofit measures and for lost-opportunity (long-lived) measures. The NWPCC's twenty-year achievable penetration rates are eighty-five percent for retrofit measures and sixty-five percent for lost opportunity measures achieved through a mix of utility programs and local, state and federal codes and standards. The NWPCC's ten-year achievable penetration rates are sixty-four percent for nonlost opportunity measures and twenty-three percent for lost-opportunity measures; the weighted average of the two is a forty-six percent ten-year achievable penetration rate;

(xiii) Include a ten percent bonus for conservation measures as defined in 16 U.S.C. § 839a of the Pacific Northwest Electric Power Planning and Conservation Act;

(xiv) Analyze the results of multiple scenarios. This

includes testing scenarios that accelerate the rate of conservation acquisition in the earlier years; and

(xv) Analyze the costs of estimated future environmental externalities in the multiple scenarios that estimate costs and risks.

(b) In addition to the requirements in subsection (6) of this section, the utility may document any variable listed in subsection (5) of this section to indicate that its conservation resource assessment methodology is consistent with the NWPCC's but results in unique conservation resource assessment outcomes.

#### NEW SECTION

##### **WAC 194-37-080 Documentation of conservation savings. (1)**

The utility shall document:

(a) That it achieved its biennial conservation target;  
(b) The total savings in customer efficiency measures; and  
(c) If included in the target, the savings in the production and distribution sectors.

(2) A conservation measure or program counts towards a utility biennial target if it meets the following criteria:

(a) The conservation has a measure life of at least two years, or, if the measure life is less than two years the utility can verify that it has acquired the conservation for the entire biennium;

(b) It meets the definitions of conservation and cost effective as contained in WAC 194-37-040; and

(c) The NWPCC includes the measure or program in its power plan, or the measure or program is not identified by the NWPCC but it meets the definitions in RCW 19.285.030.

(3) The utility shall count the total first year savings of a conservation measure in the year during which either the measure was installed or the utility paid for it.

(4) Each utility may count towards its biennial conservation targets the proportionate share of savings resulting in its service territory from the following conservation efforts during the one biennium in which either the measure or program was placed in service or the utility paid for the measure:

(a) End-use savings from region-wide conservation projects that are centrally funded by BPA and for which the utility shared in the funding through their BPA rates.

(b) Savings from regional market transformation efforts if the NWPCC includes the program measures in its most recently published *Power Plan's* conservation resource potential or, as a newly emerging technology, the measure has yet to be included in the NWPCC's resource potential. Each utility will report a proportion of savings from these programs using established distribution methods, based on each utility's relative share of funding the

regional market transformation effort through both direct funding and indirect funding through their BPA rates.

(c) Savings from improved federal minimum energy efficiency standards or Washington state building energy code improvements or improved state appliance codes and standards in the biennium in which they become effective, as proportionate to the utility's service territory. After that biennium, a utility may no longer include savings from those specific code and or standards in its next ten-year potential.

(5) Utilities may count savings from more stringent local building and/or local equipment codes and standards, including utility new service or connection standards, towards meeting their biennial conservation target in the biennium in which they become effective and in each biennium the local standards continue to be enforced and achieve incremental savings above minimum state energy codes or minimum federal energy standards.

(6) A utility cannot count the loss of load due to curtailments or matters outside of the utility's control (such as a facility shut-down) as achievement towards its conservation targets. However, such losses of load may change the level of current and future targets to the extent that they reduce the conservation potential available to the utility.

(7) The energy savings from an increase in distribution efficiencies are described, documented and counted under WAC 194-37-090. The energy savings from an increase in production efficiencies are described, documented and counted under WAC 194-37-100.

(8) Conservation savings from utility programs beginning in 2010 for measures for which the NWPCC and the regional technical forum have established per unit energy savings values will be based on the per unit savings set by the NWPCC's regional technical forum "planning, tracking and reporting system," unless the utility documents its variations in electricity saving estimates from the regional technical forum.

(9) Conservation savings from utility programs beginning in 2010 for custom measures shall be developed pursuant to the NWPCC's custom requirements available through the regional technical forum's "planning, tracking and reporting system" or through a similar analytical framework.

(10) A utility may count towards the utility's biennial end-use conservation target, twelve individual months' worth of conservation during the first twelve months of the high efficiency cogeneration facility's operations. The high efficiency cogeneration shall be owned and used by a retail electric consumer to meet that consumer's heat and power needs. In order to count this in its conservation target, the utility shall prepare the following documentation, certified by a registered professional engineer licensed by the Washington department of licensing:

(a) That the cogeneration system has a useful thermal energy output of no less than thirty-three percent of the total energy output; and

(b) An analysis that indicates the reduction in annual

electricity consumption due to high efficiency cogeneration. This reduction is calculated as the net facility's annual electrical energy production times the ratio of the fuel chargeable to power heat rate of the cogeneration facility divided by the heat rate on a new and clean basis of a best-commercially available technology combined-cycle natural gas-fired combustion turbine.

#### NEW SECTION

**WAC 194-37-090 Additional documentation of efficiency from distribution system loss reduction improvements, including peak demand management and voltage regulation.** (1) To the extent a utility can document a distribution system upgrade or management practice results in lower line losses and/or transformation losses, the avoided energy supply requirement to serve customers may be included in the utility's assessment of its ten-year resource potential and may count as conservation achievement towards the utility's biennial target.

(2) A utility that counts distribution system improvements in meeting its obligations under RCW 19.285.040 shall document these savings on either a component-performance basis or a system-analysis basis and shall indicate these savings distinctly from end-use and production efficiency savings.

(a) Component-performance basis. A utility that implements the component-performance basis for documenting distribution system improvements shall identify the components of the distribution system that were replaced, and the savings from replacement. The calculation shall be prepared under the direction of, and carry the stamp of a registered professional electrical engineer licensed by the Washington department of licensing.

(b) System-analysis basis. A utility that implements the system analysis basis for documenting conservation savings from distribution system improvements shall provide the following:

(i) For distribution system upgrades, the utility will prepare a distribution flow analysis to compare the annual energy losses of the system being replaced or upgraded to the final system as installed.

(ii) For conservation voltage regulation, the utility will prepare a distribution flow analysis to compare the annual energy losses of the system before and after the implementation of a voltage regulation program. The difference in annual kilowatt-hour requirement at the utility point(s) of receipt (for distribution utilities) or net energy for load for generating utilities may be counted as conservation savings.

(iii) For peak demand management, the utility will prepare a distribution flow analysis to compare the annual energy losses of the system before and after implementation of the peak demand management program. The change in net energy losses may be counted

as conservation savings. Any net reduction in energy sales (economic curtailment) shall not be included in conservation savings.

(iv) The distribution flow analysis conducted for (b)(i), (ii), or (iii) of this subsection shall be prepared under the direction of, and carry the stamp of a registered professional electrical engineer licensed by the Washington department of licensing.

#### NEW SECTION

**WAC 194-37-100 Additional documentation of improved efficiency from production facilities.** (1) A utility will measure production efficiency improvements as the fraction of fuel savings achieved by the utility. The percentage reduction in fuel use per kilowatt-hour will be applied to the annual generation to determine the amount that is to be reported as conservation.

(2) A utility that includes production efficiency improvements in its annual report pursuant to RCW 19.285.070 shall document the electricity savings for each generating unit with the following information certified by a registered professional engineer licensed by the Washington state department of licensing:

(a) The first twelve-month electricity savings that the utility is counting towards its biennial target;

(b) A description of the efficiency improvements made to the generating unit;

(c) Annual fuel use for three preceding years, in quantity units and million British thermal units;

(d) Annual electrical output for three preceding years, in kilowatt-hours;

(e) The amount of capital investment and/or annual operating expenditure associated with the efficiency improvements;

(f) The cost-effectiveness analysis prepared by the utility in planning the efficiency improvement(s);

(g) Any post-retrofit analysis prepared by the utility in evaluating the performance and/or cost-effectiveness of the efficiency improvement(s);

(h) A simple calculation showing the fuel use per kilowatt-hour before the efficiency improvement, the fuel use per kilowatt-hour after the efficiency improvement, and the amount of energy conservation being reported as the product of the percentage improvement in fuel use per kilowatt-hour and the number of kilowatt-hours generated; and

(i) If efficiency improvements are installed at the same time as pollution control equipment that may itself affect efficiency, the utility may provide documentation of the effect of the efficiency improvements alone on the fuel consumption per kilowatt-hour of the production facility. In this situation, the utility

shall provide a description of the changes made, the capital cost expended for both efficiency changes and pollution control equipment, and an analysis of the impact of each on the fuel use per kilowatt-hour of the production facility.

(3) A utility shall not count towards its biennial conservation target the results from efficiency improvements made to hydropower facilities that are qualified incremental hydropower efficiency improvements and are counted towards any utility's renewable energy targets under RCW 19.285.040 or 19.285.050.

#### NEW SECTION

**WAC 194-37-110 Renewable resource energy reporting.** Each utility shall submit a renewable resource energy report to the department by June 1 of each year, beginning in 2012. Reporting requirements vary, as follows, depending upon how the utility elects to comply with chapter 19.285 RCW.

(1) Universal renewable energy reporting requirements. The renewable resource energy report shall include the following information:

(a) The utility's annual load for the two years preceding each renewable energy target year and the average load for those two years.

(b) The amount of megawatt-hours needed to meet the utility's annual renewable energy targets identified in RCW 19.285.040. These annual targets are established as a percentage of the utility's average retail load for the two years prior to the renewable energy target year: Three percent of each year 2012 through 2015; nine percent of each year 2016 through 2019; and fifteen percent for year 2020 and each year thereafter.

(c) The names of the eligible renewable resource facilities and/or the vintage (year in which associated power was generated) of renewable energy credits by generator that the utility owns or with which the utility has a contract dated no later than January 1 of the target year; and the estimated annual quantity (megawatt-hours) of eligible renewable resources or RECs that will be produced, or has been produced, through these resources or contracts to meet its annual targets.

(i) A utility may count any purchases of:

(A) Electricity from BPA that are generated by eligible renewable resources, for which no RECs have been created or, if RECs have been created, for which the RECs have been or will be retired by BPA on behalf of the utility; or

(B) RECs from the BPA generated by eligible renewable resources to meet all or any portion of its annual eligible renewable resource targets.

To document the annual amount of power supplied by BPA from eligible renewable resources, the utility may rely on BPA's

determination of the portion of its power supply provided by eligible renewable resources during a calendar year for which no RECs have been created, or, if RECs have been created, that the RECs have been or will be retired by BPA on behalf of the utility.

(ii) The list of resources will identify any resource that both commenced operations after December 31, 2005, and meets the apprenticeship construction practice standards as adopted by the council per WAC 194-37-120(1), thereby earning a 1.2 multiplier credit on its electricity output.

(iii) The list of resources will identify any resource that meets the definition of distributed generation and that the utility owns or contracts for the associated REC, thereby earning a 2.0 multiplier credit on the electricity output.

(d) A utility that does not meet the renewable energy requirements in RCW 19.285.040(2), the financial requirements in RCW 19.285.050, or the financial requirements in RCW 19.285.040 (2)(d) shall include the following information in its June 1 report of each year beginning in 2014:

(i) The quantity of eligible renewable resources acquired by December 31 of the target year;

(ii) RECs from the target year, the year prior or the year subsequent to the target year; or

(iii) The combination of (d)(i) and (ii) of this subsection.

(e) The most recent final audit report(s), if any, that evaluate(s) the utility's compliance with chapter 19.285 RCW and the information reported per this chapter.

(2) Renewable energy target reporting.

(a) A utility that meets the renewable energy requirements in RCW 19.285.040(2) shall include the following in its June 1 report of each year beginning in 2014.

(i) Demonstration that it acquired:

(A) Megawatt-hours of eligible renewable resources by December 31 of the target year;

(B) RECs produced during the target year, the year prior or the year subsequent to the target year; or

(C) Any combination of (a)(i)(A) and (B) of this subsection, in amounts sufficient to meet the percent of load target for the calendar year two years prior. The utility may demonstrate that it acquired RECs in the subsequent year to make up for any performance deficiency and for nonmaterial under-estimates in load projections.

(ii) Documentation of the amount of megawatt-hours purchased or generated, the amount of WREGIS-certified RECs purchased and the names of the respective eligible renewable facilities that produced the associated power, specified by the year it was generated.

(b) The utility may, in addition, submit a copy of its fuel mix report, per chapter 19.29A RCW, for each target year.

(3) Resource cost reporting.

Each year that a utility does not meet the renewable energy target requirements in RCW 19.285.040, but meets the financial requirements in RCW 19.285.050, the utility shall include the following information in its June 1 report of that year:

(a) Its annual revenue requirement for the target year;

(b) The annual levelized delivered cost of its eligible renewable resource(s) reported separately for each resource;

(c) The annual levelized delivered cost of its substitute resources and the eligible renewable resource with which it is being compared;

(d) The total cost of renewable energy credits to be applied in the reporting year;

(e) The percentage of its annual revenue requirement invested in the incremental cost of eligible renewable resources and the cost of RECs; and

(f) The most current information required by WAC 194-37-160 used for this financial demonstration.

(4) Nonload growing utility reporting.

Each year that a utility does not meet the renewable energy target requirements in RCW 19.285.040 (2)(a), but meets the financial requirements in RCW 19.285.040 (2)(d), the utility shall report to the department each June 1 its:

(a) Annual revenue requirement for the target year;

(b) Weather-adjusted load for each of three years prior to the target year;

(c) Delivered cost of its eligible renewable resource(s), RECs or a combination of both for the target year to be applied to the one percent of annual revenue requirement, reported separately for each resource;

(d) Quantity of megawatt-hours for each target year for which the utility:

(i) Commenced or renewed ownership of nonrenewable resources after December 7, 2006; or

(ii) Made electricity purchases from nonrenewable energy resources, incremental to its annual electricity purchases made or contracted for prior to December 7, 2006. Sources of power for daily spot market purchases are not counted; and

(e) List of RECs that the utility acquired, in addition to any RECs purchased in (c) of this subsection, to offset nonrenewable purchases listed in (d) of this subsection.

(5) Reporting of uncontrollable events.

For any target year that a utility demonstrates to the auditor that it did not meet the annual renewable resource requirements in chapter 19.285 RCW due to events beyond the reasonable control of the utility per RCW 19.285.040 (2)(i), the utility shall summarize these events in its June 1 report to the department immediately following the target year.

#### NEW SECTION

##### **WAC 194-37-120 Documentation of renewable energy achievement.**

Each utility shall provide the auditor access to contracts indicating purchases of or documentation indicating ownership of

RECs and/or megawatt-hours from eligible renewable/ resources equal to or exceeding the annual percentage standard for the target year. The megawatt-hours from owned eligible renewable resources count towards the percentage annual renewable energy target as long as the associated nonpower attributes, or RECs, if any have been created, are not owned by a separate entity or have not been used in an optional pricing program. A utility's power purchase contract, for eligible renewable resources, provides documentation for this section if the contract specifies that the nonpower attributes, or RECs if any have been created, associated with the power from the eligible renewable resources have been acquired by the utility.

(1) Each utility that claims a 1.2 multiplier credit for the electricity output from an eligible renewable resource per RCW 19.285.040 (2) (h) (i) shall provide a copy of written documentation from the council that the facility met the apprenticeship labor standard of fifteen percent of the total labor hours used in its construction.

(2) A utility may provide a copy of documentation from the BPA indicating a quantity of power that BPA sold to the utility for the target year that was supplied by an eligible renewable resource.

(3) Each utility that claims a 2.0 multiplier credit for the electricity output from an eligible renewable resource per RCW 19.285.040 (2) (b) shall provide documentation that the REC applied in that year, associated with the distributed generation resource, is owned by the utility.

#### NEW SECTION

**WAC 194-37-130 Documentation of incremental hydropower.** (1) Utilities may count toward their annual renewable resource targets incremental power acquired from qualified incremental hydropower efficiency improvements made at the following facilities since 1999:

(a) Hydropower facilities in the Pacific Northwest owned by a qualifying utility where the new generation does not result in new water diversions or impoundments.

(b) Hydroelectric generation facilities in irrigation pipes and canals located in the Pacific Northwest, where the additional generation does not result in new water diversions or impoundments.

(2) The utility shall calculate renewable resource power from incremental hydropower as the increase in annual megawatt-hours of generation attributable to the qualified incremental hydropower efficiency improvements under average water generation.

(3) The increase in annual megawatt-hours of generation attributable to the qualified incremental hydropower efficiency improvements shall be documented by engineering studies or with before and after generation data. The documentation shall clearly

explain:

- (a) Where the facility is located;
- (b) When the improvements were made;
- (c) How the amount of generation in "average water generation" was calculated;
- (d) What other factors may have caused an increase in electricity production and how the amount "attributable to the qualified improvements" was extracted from the total increase;
- (e) How and why the "qualified improvements" increased hydropower production; and
- (f) How the utility came to acquire the incremental output associated with the qualified improvements.

NEW SECTION

**WAC 194-37-140 Documentation of renewable resource financial path for no-load growth utilities.** For each year that a utility meets the renewable energy financial cost cap, associated with no load growth, identified in RCW 19.285.040 (2)(d), the utility must document the following by January 1:

- (1) That it used a consistent methodology from year to year to weather-adjust its retail load;
- (2) That its weather-adjusted load for the most recent prior year is lower than the third year prior;
- (3) That it invested at least one-percent of its total annual revenue requirement in each target year on eligible renewable resources, RECs, or a combination of both;
- (4) That it executed contracts, dated no later than January 1 of the target year, for power purchases of eligible renewable resources and/or RECs;
- (5) The quantity of megawatt-hours for each target year for which the utility:
  - (a) Commenced or renewed ownership of nonrenewable resources after December 7, 2006; or
  - (b) Made electricity purchases from nonrenewable energy resources, incremental to its annual electricity purchases made or contracted for before December 7, 2006.Sources of power for daily spot market purchases are not included in this calculation;
- (6) The RECs the utility acquired, in addition to any RECs acquired for subsection (3) of this section, to offset nonrenewable power purchases listed in subsection (5) of this section; and
- (7) Annual revenue requirement for the target year.

NEW SECTION

**WAC 194-37-150 Financial documentation of annual revenue requirement.** (1) For purposes of the report filed pursuant to RCW 19.285.070, a utility shall document its annual revenue requirement.

(2) A utility that uses a different basis for the determination of its annual revenue requirement for purposes of calculating what it expects to recover or actually recovers through retail electricity sales in the state of Washington in that year may use that number in the calculation of the cost cap and must provide documentation to support this alternative approach.

NEW SECTION

**WAC 194-37-160 Documentation of financial cost cap--Current information and timeline.** By January 1 of the first target year that a utility fulfills its renewable energy requirements under RCW 19.285.050, the utility shall select one of the following methodologies for calculating the incremental cost of all eligible renewable resources acquired thereafter by that utility:

(1) Annual update methodology. In each year that a utility fulfills its renewable energy requirements by complying with the cost cap identified in RCW 19.285.050 it must document its calculations no later than January 1 of the target year. The utility will use the most current information available to the utility within twelve months prior to the initial documentation of the cost cap pursuant to WAC 194-37-170 through 194-37-190. The utility will update this documentation in its June 1 report submitted pursuant to RCW 19.285.070. These annual updates of costs, based on the most current information available, apply to both the renewable resource and the substitute resource.

(2) Permanent one-time methodology. For each specific renewable resource investment, a utility shall perform a one-time calculation of the levelized incremental cost pursuant to WAC 194-37-170 through 194-37-190. The levelized incremental cost may be a single annual value or a stream of annual values. However, the levelized incremental cost, identified through this one-time analysis, shall remain unchanged over the life of the renewable resource after the initial calculation. The utility will include a determination of incremental cost for each renewable resource investment in its June 1 report submitted pursuant to RCW 19.285.070, beginning in the year the utility complies with the cost cap identified in RCW 19.285.050.

NEW SECTION

**WAC 194-37-170 Documentation for financial path--Levelization of costs.** (1) Each utility must document its calculation of the levelized annual incremental cost of eligible renewable resources. Utilities are encouraged, but not obligated, to use the following methodology:

**Step 1:** Calculate the net present value of the cost of the utility's eligible renewable resource and substitute resource over an equivalent contract length or facility life.

**Step 2:** Calculate equal nominal values over the appropriate contract length or facility life that have a net present value equal to those calculated in Step 1, using the same discount rate.

**Step 3:** Calculate the annual difference between the levelized delivered cost for the eligible renewable resource and the substitute resource to determine the levelized incremental cost of the eligible renewable resource.

A utility that uses the annual update methodology must document the basis for any change to the levelization methodology used in a prior June 1 report to levelize the costs of an eligible renewable resource and its associated substitute resource.

(2) Regardless of the methodology chosen to levelize costs, utilities must document the basis for their chosen method for levelizing costs.

(3) Utilities must document the basis for the discount rate used in its levelized cost calculations.

(4) Utilities must document how the discount rate used to perform the levelized cost calculations is consistent with the inflationary assumptions incorporated into the delivered cost projections for the eligible renewable resource and substitute resource.

(5) Utilities must document how the method and assumptions used to levelize delivered costs for the eligible renewable resource are consistent with those used to levelize the delivered cost of the associated substitute resource.

NEW SECTION

**WAC 194-37-180 Documentation of financial path--Delivered cost.** (1) The delivered cost of a resource includes all direct and indirect costs associated with that resource being delivered to the distribution system of a utility over the contract length or facility life of the delivered resource. Direct and indirect costs may include operating and capital expenses related to the delivered resource.

(2) Using the Uniform System of Accounts of the Federal Energy Regulatory Commission (FERC) as an illustration, the reported resource costs are expected to generally fall within, but not

necessarily be limited to, the following cost accounts:

*Operating Expenses*

Accounts 500-557: Production Expense  
Account 565: Wholesale Wheeling Expense  
Accounts 920-935: Administrative and General  
Expense  
Account 408.1: Taxes Other than Federal Income  
Taxes

*Capital Expenses*

Accounts 403-407: Depreciation and Amortization  
Expense  
Accounts 427-431: Interest-Related Expenses

(3) A utility may include actual costs in order to equitably compare the costs of eligible renewable resources and substitute resources. This may include the actual costs of transmission, firming, shaping, integration, and project specific development costs.

(4) Utilities are encouraged to use the FERC system of accounts to document the delivered cost of resources. Regardless of the accounting convention used, utilities must document the delivered cost estimates for eligible renewable resources and their associated substitute resources in a manner consistent with generally accepted accounting standards.

NEW SECTION

**WAC 194-37-190 Documentation of financial path--Substitute resource and resource equivalence.** (1) In support of its annual filings to the department under RCW 19.285.070, utilities must document the type, availability, and cost of the reasonably available substitute resource used to calculate the incremental cost of an eligible renewable resource.

(a) In documenting the incremental cost under RCW 19.285.050 (1)(b), a utility is encouraged to identify substitute resources using its integrated resource planning process, if one is available. If a utility elects to choose a substitute resource from a different source other than its most recently published integrated resource plan, it must document the basis for this decision. Documentation of the cost of a substitute resource may include, but is not limited to, formal offers for the sale of electricity, or published cost projections from reputable third-party sources.

(b) In its selection of a substitute resource, the utility

shall develop documentation demonstrating that the substitute resource satisfies the requirements set forth in RCW 19.285.050. The requirements are:

(i) Equivalence between the eligible renewable resource and the substitute resource by demonstrating the equivalence in the amount of energy produced by each resource;

(ii) Equivalence between the eligible renewable resource and the substitute resource by demonstrating the same contract length or facility life of each resource;

(iii) The substitute resource is reasonably available to the utility; and

(iv) The substitute resource does not qualify as an eligible renewable resource.

(c) Only supply-side substitute resources shall be used by utilities in the calculation of the incremental cost of eligible renewable resources.

(d) When the renewable requirements under RCW 19.285.040(2) result in a utility having resources in excess of its load, the utility may use that excess resource or a forecast of projected market prices as the substitute resource if the substitute resource requirements of (b) of this subsection are otherwise satisfied. The utility will document the resale revenues, net of transaction costs, received through the sale of excess resources or the purchase price for the sale of the excess facility sold as a result of the requirement to acquire eligible renewable resources. A utility that uses a value other than the documented resale revenue in the determination of the levelized delivered cost of the substitute resource must provide documentation to support this alternative approach.

(e) A utility may use foregone power purchases from BPA, plus any billing credit obtained for reducing its purchases from BPA, as the basis for the cost of the substitute resource if:

(i) The substitute resource requirements of (b) of this subsection are otherwise satisfied;

(ii) It is entitled under its BPA power sales contract to have the BPA meet its net power requirements for the expected life of an eligible renewable resource or eligible renewable resource purchase; and

(iii) As a result of meeting the renewable requirements under RCW 19.285.040(2), it foregoes part of its BPA entitlement in order to obtain that eligible renewable resource.

(2) For an eligible renewable resource acquired prior to the passage of chapter 19.285 RCW, November 7, 2006, a utility must support the selection of the related substitute resource used in the determination of the incremental cost under RCW 19.285.050 with documentation that was available at the time of the utility's decision to acquire the eligible renewable resource. If no such documentation is available, the incremental cost of an eligible renewable resource acquired prior to the passage of chapter 19.285 RCW will be assumed equal to zero.

NEW SECTION

**WAC 194-37-200 Financial documentation path using renewable energy credits.** A utility may elect to invest in RECs to meet any portion of, or the entirety of, each annual renewable resource target in RCW 19.285.040(2) or 19.285.050(1). If the cost of the RECs and the incremental cost of acquired renewable resources, as documented according to WAC 194-37-150 through 194-37-190, for any one year meets or exceeds four percent of the utility's annual revenue requirement, the utility shall document that the utility achieved the four percent cost cap alternative compliance path in RCW 19.285.050(1). The documentation must include copies of its WREGIS RECs, copies of purchase contracts, and its annual revenue requirement.