
IRP COMPLIANCE WITH WASHINGTON STATE REQUIREMENTS

1 194-37 WAC & 19.280 RCW

The following WAC and RCW standards were reviewed as to their applicability to Tacoma Power's 2015 IRP.

Chapter 194-37 WAC – Energy Independence Act

The following sections rely on documentation provided by the 2016-2035 Tacoma Power Conservation Potential Assessment (CPA). The 2015 Tacoma Power Integrated Resource Plan is in accordance with the CPA. Other sections were determined to be not-applicable to Tacoma Power.

- 194-37-050 Documentation and timelines
- 194-37-060 Conservation reporting requirements
- 194-37-070 Development of conservation potential and biennial conservation targets
- 194-37-080 Documentation of conservation savings

The following sections rely on documentation provided in the State Auditor's Report on I-937 Renewable Energy Compliance. For a copy of this report, please contact Bill Dickens.

- 194-37-110 Renewable resource energy reporting
- 194-37-120 Documentation of use of eligible renewable resources and RECs for compliance
- 194-37-130 Documentation of incremental hydro
- 194-37-135 Documentation of multi-fuel biomass energy and qualified biomass
- 194-37-136 Documentation of apprentice labor and distributed generation multipliers
- 194-37-140 Documentation of renewable resource financial path for no-load growth utilities
- 194-37-150 Financial documentation of annual revenue requirement
- 194-37-160 Documentation of financial cost cap - Current information and timeline
- 194-37-170 Documentation for financial path- Levelization of costs
- 194-37-180 Documentation of financial path – Delivered cost
- 194-37-190 Documentation of financial path – Substitute resource and resource equivalence
- 194-37-200 Financial documentation path using renewable energy credits
- 194-37-210 Renewable energy credit tracking system

2 2015 IRP COMPLIANCE WITH WASHINGTON STATE RCW 19.280.030 STANDARD

2.1 19.280.030: DEVELOPMENT OF A RESOURCE PLAN—REQUIREMENTS OF A RESOURCE PLAN.

Each electric utility must develop a plan consistent with this section.

(1) Utilities with more than twenty-five thousand customers that are not full requirements customers shall develop or update an integrated resource plan by September 1, 2008. At a minimum, progress reports reflecting changing conditions and the progress of the integrated resource plan must be produced every two years thereafter. An updated integrated resource plan must be developed at least every four years subsequent to the 2008 integrated resource plan. The integrated resource plan, at a minimum, must include:

(a) A range of forecasts, for at least the next ten years or longer, of projected customer demand which takes into account econometric data and customer usage;

Customer demand forecasts for the twenty year period of 2016-2035 were generated based on economic, political, technological, and climate change factors. These forecasts were based on historical data and time series forecasting processes and then combined with variable temperature data to create unique simulations of the future. See IRP section “step 4, develop planning scenarios”.

(b) An assessment of commercially available conservation and efficiency resources. Such assessment may include, as appropriate, opportunities for development of combined heat and power as an energy and capacity resource, demand response and load management programs, and currently employed and new policies and programs needed to obtain the conservation and efficiency resources;

All of the evaluated resource strategies included the minimum 20 year economically achievable energy conservation that was developed in the 2016 Conservation Potential Assessment. Additional conservation measures and the acceleration of conservation measures were also considered but were rejected because they were found to be strategically unnecessary at this time. Likewise, demand response projects were also considered and modeled but not found to be economically cost-effective. Forecasts of resource adequacy and capacity sufficiency for the next 20 years were within planning criteria. See IRP section “Portfolio Analysis: energy conservation.”

(c) An assessment of commercially available, utility scale renewable and nonrenewable generating technologies including a comparison of the benefits and risks of purchasing power or building new resources;

Many resource technologies were considered, including purchased power alternatives. Some generation technologies were eliminated from consideration due to their size, lack of regional availability, the uncertainty of fuel supply, environmental risk. Six remaining resource strategies were examined extensively and were ranked based on the criteria of cost and benefits, risk, environmental impact, flexibility and fit, and customer equity. See IRP section “Step 3 – evaluate resource alternatives”.

(d) A comparative evaluation of renewable and nonrenewable generating resources, including transmission and distribution delivery costs, and conservation and efficiency resources using "lowest reasonable cost" as a criterion;

IRP section “Step 5 – analyze resource performance” lists the scores of selected renewable and nonrenewable generating resources and conservation after they were evaluated with the Plexos model. Resource costs were levelized, which includes transmission, distribution and delivery costs along with estimates for fuel costs, carbon regulation costs, fixed and variable operations and management costs, etc.

(e) An assessment of methods, commercially available technologies, or facilities for integrating renewable resources, and addressing over-generation events, if applicable to the utility's resource portfolio;

N/A, Tacoma Power does not currently have nor is it projected to need renewable resources as defined by 19.280.020(14) that require additional integration.

(f) The integration of the demand forecasts and resource evaluations into a long-range assessment describing the mix of supply side generating resources and conservation and efficiency resources that will meet current and projected needs, including mitigating over-generation events, at the lowest reasonable cost and risk to the utility and its ratepayers; and

See IRP section “Step 6 long-term resource strategy & action plan”

(g) A short-term plan identifying the specific actions to be taken by the utility consistent with the long-range integrated resource plan.

A list of action items was identified in the “Executive Summary” section of the IRP.

(2) All other utilities may elect to develop a full integrated resource plan as set forth in subsection (1) of this section or, at a minimum, shall develop a resource plan that...

Section 2 is not applicable to Tacoma Power

(3) Assessments for demand side resources included in an integrated resource plan may include combined heat and power systems as one of the measures in a conservation supply curve. The value of recoverable waste heat resulting from combined heat and power must be reflected in analyses of cost-effectiveness under this subsection.

Combined heat and power system opportunities are found in areas with a high concentration of industrial and commercial activities and are cost-effective with comparatively high electricity prices. This resource was not evaluated at a specific location because one does not exist within Tacoma Power's service area.

(4) An electric utility that is required to develop a resource plan under this section must complete its initial plan by September 1, 2008.

N/A

(5) Resource plans developed under this section must be updated on a regular basis, at a minimum on intervals of two years.

This IRP was completed in December of 2015 and follows the last IRP which was completed in December of 2013.

(6) Plans shall not be a basis to bring legal action against electric utilities.

N/A

(7) Each electric utility shall publish its final plan either as part of an annual report or as a separate document available to the public. The report may be in an electronic form.

This IRP was published in December and is available to the public electronically via Tacoma Power's website. www.mytpu.org/IRP

2.2 RCW 19.280.070: COMBINED HEAT AND POWER SYSTEMS—VALUATION—ASSESSMENT.

(1) The legislature finds that combined heat and power systems provide both energy and capacity resources. Failure to assess the electric output of combined heat and power systems as both an energy and a capacity resource may result in a failure to account for the total benefits of that output in its posted price.

(2) Electric utilities with over twenty-five thousand customers in the state of Washington must value, pursuant to RCW [19.280.030](#), combined heat and power as having both energy and

capacity value by December 31, 2016, for the purposes of setting the value of power under the federal public utility regulatory policies act, establishing rates for power purchase agreements, and integrated resource planning only if an assessment of combined heat and power identifies opportunities for combined heat and power that are dispatchable and that may provide capacity value.

N/A, Tacoma Power is not projected to be short of capacity.