



ELECTRIC SYSTEM & UTILITIES

2SSB 5116: The Washington Clean Energy Transformation Act

The intent of the legislation is to transition to 100% clean electricity in Washington state by building on our legacy hydropower, continuing robust energy efficiency gains, modernizing the grid system, promoting renewables, creating jobs and ensuring the equitable sharing of clean energy benefits.

Key provisions of the bill:

Eliminating Coal

- 1) Each utility must eliminate coal-fired resources from its allocation of electricity by the end of 2025. Coal-fired resource depreciation schedules shall be reconfigured to meet the 2025 date; this can include qualified transmission lines that will no longer be used once coal resources are not being used. (Section 3(2))
- 2) Coal retired prior to 2025 by a multi-state electric utility with less than 250,000 customers (Pacific Power) may apply the total amount of coal megawatt hours (MWhs) eliminated as an equivalent number of MWhs of non-emitting generation needed to comply with the clean energy standard targets before 2035. The utility must demonstrate for every MWh of early action compliance credit there is a real permanent reduction in GHG emission in the Western Interconnection directly associated with that credit. (Section 4 (11))
- 3) RCW 80.84.010, which authorizes creation of a retirement account to hold funds to cover decommissioning and remediation costs for coal units, is amended to be allowable for any coal-fired electric generator that, in whole or part, serves customers in Washington. (Section 16)
- 4) Failure to eliminate coal after 2025 will result in an administrative penalty of \$150/MWh for non-complying power. (Section 9(1)(a)(i))

2030 Clean Energy Standard (Section 4, unless otherwise noted)

By January 1, 2030, all electric utilities' retail sales of electricity must be greenhouse gas neutral. All utilities must:

- 1) Pursue all cost-effective, reliable and feasible conservation, efficiency and demand response (DR), consistent with current law if applicable, to reduce or manage the retail electric load, and
- 2) Use electricity from a combination of renewable and non-emitting resources equal to at least 80% of each utility's retail electric load over sequential, four-year compliance periods starting January 1, 2030. All renewable energy resources used for compliance must be documented by renewable energy credits (RECs) and must be retired in the tracking system, while non-emitting resources must be generated during each compliance period and verified by documentation that shows any related non-energy attributes are owned by the claiming utility. Existing hydropower and new pumped storage may be used to meet the standard.
- 3) Match the remaining 20% of retail load with alternative compliance options, via:
 - a) the acquisition and retirement of unbundled renewable energy credits (includes thermal RECs from biomass),
 - b) alternative compliance payments,

- c) investments in energy transformation projects (ETPs) which must be associated with consumption of energy in Washington, result in a net reduction in GHG emissions, and must not
- d) electricity from an energy recovery municipal waste facility constructed prior to 1992, provided that a finding of net reduction of GHG's is made for the facility by both Commerce and Ecology.
- 4) Utilities subject to current Renewable Portfolio Standard (RPS) law must continue to comply with that law. (Section 11) The Washington Utilities and Transportation Commission (UTC) and Commerce must adopt rules to streamline implementation of 5116 with RCW 19.285. (Section 10)
- 5) All utilities must ensure that all customers benefit from the transition to renewable energy (RE) and non-emitting (NE) resources.
- 6) New market customers must meet the clean energy standard.
- 7) If new investments are necessary, an electric utility must "to the maximum extent feasible":
 - a. Achieve targets at the lowest reasonable cost, considering risk,
 - b. Consider acquisition of existing renewable resources and
 - c. If acquiring new resources constructed after the effective date of this section, rely on renewable resources and energy storage, as long as they are lowest reasonable cost, considering risk.

2045 as an Energy Standard (Section 5)

- 1) From January 1, 2045, going forward, the requirements for cost effective, reliable and feasible conservation, efficiency and demand response continue to apply.
- 2) A utility must use only non-emitting resources and renewable resources to meet 100% of retail load, with existing hydro and new pumped storage allowed, as above, and must acquire new resources in the same order as specified in Section 4, but alternative compliance options, including incinerator generated electricity, no longer apply.
- 3) This standard must be incorporated into all relevant planning and resource acquisitions by the utilities and state agencies.
- 4) This section also applies to new market customers.

Penalties (Section 9)

- 1) A utility or market customer that fails to meet the standards for 2030-2044 or fails to eliminate coal must pay an administrative penalty of \$100/MWh for non-complying power.
- 2) That penalty is increased by 50% for any coal-fired resources relied upon after January 1, 2025, and proportionally reduced to .84 for peaking power plants or to .6 for combined cycle power plants that a utility might still rely on to serve load.
- 3) Starting in 2027, the penalty must be adjusted upwards biennially, based on inflation and gross domestic product implicit price deflator, as published by the bureau of economic analysis of the United States Department of Commerce or its successor.
- 4) Utilities must inform their customers of an administrative penalty.

- 5) Penalties can be excused by the UTC for Investor Owned Utilities (IOUs) or the auditor for Consumer Owned Utilities (COUs) in situations where North American Electric Reliability Corporation (NERC) standards are compromised, resource adequacy is violated, when power quality or system integrity is compromised, or where non-compliance is beyond the control of the utility.
- 6) Moneys collected through penalties are deposited into the state low-income weatherization and structural rehabilitation assistance account.

Energy Efficiency

- 1) Expands the requirement to all utilities, not just 937 qualified utilities, to pursue all cost-effective, reliable, and feasible conservation and efficiency resources to reduce or manage retail electric load. (Section 4(1)(a)(i))
- 2) Allows additional conservation and efficiency resources beyond what is otherwise required in the law as energy transformation projects. (Section 4(1)(b)(iii))
- 3) By January 1, 2022, and every four years thereafter, each utility must develop a four-year clean energy implementation plan (CEIP) that includes proposed specific targets for energy efficiency, demand response, and renewable energy. (Sections 6(1)(a)(i) and 6(2)(a)(i))

Hydropower

- 1) Explicitly recognizes hydropower variability by instituting four-year compliance periods. (Section 1(7) and Section 6(1)(a) and Section 6(2)(a))
- 2) Allows existing hydroelectric generation to meet the new energy standards, as long as that generation does not create new diversions, impoundments, or expansions of existing reservoirs after the date of the act. (Section 4(1)(d) and Section 5(5)(a))
- 3) Allows energy from new pumped storage that might create new impoundments, diversions or reservoir expansions to meet the new standards, as long as the new pumped storage complies with all existing state or federal fish recovery plans or other laws and regulations. (Section 4(1)(d) and Section 5(5)(a))
- 4) Does not preclude the installation of efficiency measures or other improvements to existing hydroelectric generators or installing generation equipment in pipes, culverts, irrigation canals and other man-made waterways, as long as those improvements comply with all existing state or federal fish recovery plans or other laws and regulations. (Section 4(1)(e) and Section 5(5)(b))
- 5) Adds incremental federal hydro as eligible for ongoing 937 requirements. (Section 28(12)(g) and (h))
- 6) Eligible renewable energy credits used for purposes of RPS compliance and generated by hydropower upgrades may only be used in the year in which the credit was created and must be acquired and retired by the utility. (Section 29(2)(e)(ii) through (iv))

Off Ramps

1) Cost cap: If over a four-year compliance period, the average annual incremental cost of meeting the standards or the interim targets equals a 2% increase in the weather-adjusted sales revenue (as reported by the IOUs via the basis reports or by the COUs last year required revenue), the utility will be considered in compliance with 5116. (Section 6(3)(A) and 6 (4)(a))

- 2) The UTC or a public utility board may issue an order temporarily excusing a utility from the administrative penalty and compliance if complying with the law would compromise reliability standards or is prevented by events beyond the reasonable control of the utility (such as weather, natural disasters, mechanical or resource failure, contractual problems, adverse government actions, insufficient transmission or local prohibitions). (Section 9(3)(A) and 9(5)(a))
- 3) A utility that is not in compliance due to the above reasons has to provide a plan on how it will achieve full compliance, consistent with the finding of the agency report submitted to the legislature in section 8, provide progress reports and may request extensions.
 - a) The UTC enforces the IOU plans; COUs can be subject to civil action by the attorney general if a COU fails to comply with the conditions of a temporary exemption. (Section 9(e)(i) and (ii))
- 4) If the legislative generation sufficiency report required in section 8 demonstrates "adverse system reliability impacts from implementation of Sections 4 and 5", the Governor, consistent with existing emergency power, may suspend or delay implementation of the act or exempt utilities from paying the administrative penalty, until the reliability problem is resolved. (Section 9(11))

937 Related

- 1) Those utilities subject to current RPS law must continue to comply with that law. (Section 11)
- 2) The UTC and Commerce must adopt rules to streamline implementation of 5116 with RCW 19.285 (Section 10)
- 3) Starting in 2020 incremental federal hydro will qualify as an eligible renewable resource under 937. (Section 28(12)(g))
 - a) A REC from incremental federal hydro may only be used in the year it is generated, is retired by the purchasing utility and used only once. (Section 29(2)(e)(ii)(A))
- 4) If a qualifying utility serves 100% of average annual electric load with renewables and/or resources, they are not required to purchase additional eligible renewables beyond that 100%. (Section 29(2)(m))

Planning

- 1) By January 1, 2022 and every four years thereafter, a utility must develop a four-year clean energy implementation plan (CEIP) that includes interim targets for meeting the standards and specific targets for energy efficiency, demand response and renewable resources. The CEIP must be informed by the utility's clean energy action plan (CEAP) (see section 14(1)(1)), identify specific actions to be taken that are consistent with the IRP and resource adequacy, and demonstrate progress toward the standards. (Section 6(1)(b))
- 2) Clean energy implementation plans and interim targets are approved by the Commission for IOU's and adopted by governing board for the COU's. The commission or the board can require more stringent targets, adjust the targets, or expedite the targets if that doesn't delay achievement of the goals, maintains safety and reliability, meets the standards at the lowest reasonable cost and risk and ensures the all customers benefit. (Section 6(1)(c) and 6(2)(b))
- 3) Updates IRP existing requirements (Section 14(1)(b) through (h)):
 - a) Adds pumped storage, battery storage and other options to the assessment of how to integrate renewable resources.

- b) Adds an assessment and ten-year forecast of availability of regional generation and transmission capacity.
- c) Requires utilities to determine resource adequacy metrics for the resource plan consistent with the forecasts.
- d) Adds a forecast of distributed energy resources that may be installed by customers along with an assessment of their effect on load and operations.
- e) Utilities must identify the appropriate resource adequacy requirement and measurement metric consistent with prudent utility practice in implementing sections 3 through 5.
- f) Integrates demand forecasts, resource evaluations and the resource adequacy requirements into a long-range supply and conservation mix at the lowest reasonable cost.
- g) Using the cumulative impact analysis required by section 24, utilities must assess energy/non-energy impacts to vulnerable populations and impacted communities.
- 4) Requires a 10-year clean energy action plan (CEAP) that identifies specific actions that will be taken, consistent with the IRP, to achieve targets/standards. (Section 14(1)(1))
 - a) CEAPs must be informed by the 10-year Conservation Potential Assessment (CPA), establish a resource adequacy requirement, identify potential cost-effective DR and load management programs, identify RE, NE and DER that may be acquired and how each will contribute to meeting resource adequacy, identify needs for new or expanded bulk transmission and distribution facilities and identify how and to what extent the utility might need to rely on alternative compliance options.
- 5) All utilities shall consider the social cost of greenhouse gas (GHG) emissions (SCC) when developing IRPs and CEAPs and must incorporate the SCC as a cost adder when evaluating and selecting conservation policies, programs and targets; developing IPRs and CEAPs; and evaluating and selecting intermediate-term and long-term resource options. (Section 14(3)(a))
- 6) Defines methane and other hydrocarbons derived from landfills, wastewater treatment facilities, anaerobic digesters, and qualified biomass as non-emitting for purposes of applying the SCC. (Section 14(3)(b))
- 7) COUs can join together with a joint operating agency to develop and implement a joint CEAP. (Section 14(4))
- 8) The UTC or the governing body may require a utility to make the planning data input files available in native format. (Section 14(10)(a) and (b))

Low-income Assistance (Section 12)

- 1) All utilities must make programs and funding available for energy assistance to low-income households by July 31, 2021, prioritizing households with higher energy burdens.
- 2) Commerce will collect and aggregate data on energy burden and assistance needs that will be used by the utilities.
- 3) Each utility must disclose information to the department about their assistance programs, participants, and expenditures, from the utility's most recent completed budget.
- 4) Every two years, each utility must submit to Commerce an assessment of its programs to reduce energy burdens of low-income households, the effectiveness of those programs, outreach

to low income households, success of enrollment programs, a summary of cumulative funding and a plan on how to meet 60% of energy burden needs by 2030 and 90% by 2050.

Social Cost of Carbon (SCC) (Section 15)

SCC is defined as the cost per metric ton of CO2 equivalent emissions, "using the 2.5% discount rate, listed in table 2, technical support document; Technical update of the social cost of carbon for regulatory impact analysis under Executive Order No. 12866, published by the Interagency Working Group on the Social Cost of Greenhouse Gases, United States government, August 2016" (the version before Trump administration weakening changes) and must be adjusted for inflation. https://www.epa.gov/sites/production/files/2016-12/documents/sc co2 tsd august 2016.pdf

UTC Authority (Section 20)

- 1) The UTC is authorized to determine the used and useful value of utility property acquired or constructed by or during the rate effective period.
- 2) The UTC may change rates for up to 48 months after the rate effective date to include utility property that becomes used and useful for service after the rate effective date.
- 3) The UTC's authority to consider and implement performance and incentive-based regulation, multi-year rate plans and other flexible regulatory mechanisms is explicitly restated.

Deferrals and Return on Equity for Non-capital Assets (Section 21)

- 1) Utilities are authorized to defer operating and maintenance costs, depreciation, taxes, cost of capital or a power purchase agreement (PPA) incurred in connection with major projects in the CEAP or RFP, starting from the date the resource begins commercial operation or the effective date of a PPA, for up to 36 months.
- 2) For a PPA, the rate of return can fall in a range from the authorized cost of debt to the authorized rate of return, multiplied by the operating expense under the power purchase agreement.

Condemnation/Utility Service (Section 9 (12) and (13))

- 1) Fair market compensation value for assets condemned by a municipal electric utility, PUD or irrigation district must, at minimum, be based on a replacement value approach for capital assets that are part of an original utility's clean energy action plan or implementation plan that are used or acquired after the law goes into effect, or RE or NE assets. Further, a utility may request the court to award damages for severance, separation, replacement or relocation of assets.
- 2) Entities extending service to customers that were served by a utility that is required to comply with the existing 937 regulations, must comply with both this act and 937 requirements when serving those premises, or pay a penalty.

Tax Remittances for Renewables and Solar

1) The renewable machinery, equipment or labor and services sales tax remittances (Section 18) and the renewable machinery, equipment or labor and services use tax remittances (Section 19) exemptions that were scheduled to expire on January 1, 2020, are extended to December 31, 2029, on a new tiered approach. Remittances must be requested after the tax is paid. Exemptions are claimed via an exemption certificate provided by the seller on a form prescribed by the department.

- 2) A purchaser of machinery, equipment, labor or services (the project developer) for projects larger than 500 kw installed on or after January 1, 2020 and completed by December 31, 2029, is eligible, beginning January 1, 2020 through December 31, 2019, for:
 - a) a 50% tax remittance if the project is certified the by the Department of Labor and industries to have demonstrated that it procures from and contracts with women, minority and veteran-owned businesses; contracts with entities that have a history of complying with Federal and state wage and hour laws and regulations; utilizes apprenticeships; and hires local workers, or can show that it made good faith efforts to do so.
 - b) a 75% tax remittance if all the above is met, the purchaser provides a number of pieces of paperwork a contractor's certificate of registration, a current state unified business identifier number, a copy of the proof of industrial insurance coverage for employees, a copy of the employment security number, a state excise tax registration number and documentation of a history of complying with federal and state wage and hour laws and regulations and, finally, workers are compensated at prevailing wage rates certified by the department of labor and industries.
 - c) 100% of the tax remittance if the project is developed under a community workforce agreement or project labor agreement certified by the department of labor and industries.
- 3) If the purchase for a solar energy system that is more than 100 KW but less than 500 KW and installed on or after January 1, 2020 through December 31, 2019, the developer/purchaser is eligible for the following tax remittances from January 1, 2020 through December 31, 2029:
 - a) 50% of the tax exemption, if the Department of Labor and Industries certifies the developer made a good faith effort to or actually procures from and contracts with women, minority or veteran-owned businesses, procures from and contracts with entities that have a history of complying with Federal and state wage and hour laws and regulations; utilizes apprenticeships; and hires local workers, or can show that it made good faith efforts to do so.
 - b) submits a number of pieces of paperwork: a contractor's certificate of registration, a current state unified business identifier number, a copy of the proof of industrial insurance coverage for employees, a copy of the employment security number and a state excise tax registration number and documentation of a history of complying with federal and state wage and hour laws and regulations.
- 4) If the purchase is for machinery, equipment or labor and services used in a solar installation that is less than 100KW, it is eligible for 100% sales tax exemption, beginning July 1, 2019 through December 31, 2029, if:
 - a) the developer installs the material no earlier than July 1, 2019:
 - b) has obtained a certificate of registration and a current state unified business identifier number;
 - c) possesses proof of industrial insurance coverage, and has an employment security number and a state excise tax registration number;
 - d) has not been found in violation of federal or state wage and hour laws and regulations by an administrative agency or a court of competent jurisdiction in the past 24 months.

Rulemaking

1) The UTC will adopt rules regarding the implementation and enforcement of 5116 and align those rules with RCW 19.285 as it applies to IOUs, Commerce will do the same for COUs by January 1, 2021. (Section 10(1))

- 2) Commerce will adopt rules regarding reporting requirements consistent with the fuel mix reports (RCW 19.29A) by January 1, 2021. (Section 10(4))
- 3) The Department of Ecology (Ecology) must, in consultation with the UTC and Commerce, adopt rules regarding energy transformation project investments, verification, etc., by January 1, 2021. (Section 10(7))
- 4) Ecology will determine the emissions rate for unspecified electricity by rule for purposes of this act or a default emissions rate of 0.437 metric tons of CO2 per MWh applies. (Section 7(2))
- 5) Commerce must adopt rules regarding thermal renewable energy credits by January 1, 2021. (Section 10(8))
- 6) By June 30, 2022, Commerce and UTC must adopt rules that define requirements, specifications, verification and reporting requirements for retail electric load met with market purchases and other centralized markets. (Section 13)
- 7) By December 31, 2021, UTC and Commerce must adopt rules for incorporating the cumulative impact analysis under section 24 into the criteria for developing CEAPs. (Section 14(11))
- 8) The Department of Labor and Industries must adopt emergency rules by December 1, 2019 that set requirements for good faith efforts, documentation requirements and certification processes. No date defined in statute for permanent rules. (Section 18(2)(a)(i) and (ii), (b))

Reports/Advisory Groups

- 1) Commerce must, by January 1, 2024 and every four years thereafter, report to the legislature on the statutory standards; evolving technologies and forecasts; transmission issues; affordability/changing costs and system reliability, as well as an evaluation of the regional entity for the Western Interconnection. (Section 8)
- 2) Each utility must report its GHG content calculation to the UTC or Commerce, based on the fuel sources reported in the fuel mix disclosure every year. (Section 7)
- 3) Starting July 31, 2020, Commerce will collect, and update every two years, aggregate data that estimates the energy burden, energy assistance need and current low-income programs, by utility. (Section 12(3))
- 4) Commerce will also submit a report to the legislature every two years presenting aggregated data on low-income programs, their success and suggest program priorities, no report deadline specified. At minimum, the data should estimate the number and demographic characteristics of households served and value of assistance, housing characteristics, efficiency potential, amounts of money passed to third parties and other information by utility. (Section 12(6)(a))
- 5) Each utility must submit to Commerce required information on low income programs from the utility's most recent completed budget period and in a form, timeline, and manner as prescribed by the department. (Section 12(3))
- 6) Each utility must submit to Commerce an assessment of its programs to reduce energy burdens of low-income households, the effectiveness of those programs, outreach to low-income

households, success of enrollment programs, and a plan on how to meet 60% of energy assistance by 2030 and 90% by 2050 every two years. (Section 12(4)(b))

- 7) Commerce and UTC must convene a stakeholder workgroup that will look at integration of this bill and electricity markets outside the state, compatibility with cap and trade programs and other issues, leading to rules being adopted by June 30, 2022. (Section 13)
- 8) By December 31, 2020 and in every IRP thereafter, each utility must identify how it will implement the plan to meet act requirements over the next ten years. (Section 14(5)(d))
- 9) The state energy strategy must be reviewed by December 31, 2020 and at least every eight years thereafter. This is to align the state strategy with 937, this act, and the emission reduction targets under RCW 70.235.040. Calls for establishment of the energy strategy advisory committee with broad representation requirements. (Section 22)
- 10) By January 1, 2020, Commerce must convene an energy and climate policy advisory committee to recommend to the legislature how to coordinate existing resources or establish new ones for examining the costs and benefits of energy related policies, programs, functions, activities and incentives on an ongoing basis. Commerce must submit a report to the legislature by December 31, 2020. This section expires January 1, 2021. (Section 23)
- 11) The Department of Health must develop a cumulative impact analysis to designate communities highly impacted by fossil fuel pollution and climate change by December 31, 2020. (Section 24)
- 12) Requires the energy facility site evaluation council to convene a transmission corridor work group to review the need for upgraded and new transmission and distribution lines and identify where those facilities could be built and what environmental reviews may be required. The work group must report to the legislature by December 31, 2022, and expires the next day. (Section 25)

Implementation

NWEC intends to be fully involved in the rule making and all other actions that will be necessary to fully realize the changes to planning and implementation outlined in 5116.