

SENATE BILL REPORT

E2SSB 5116

As Passed Senate, March 1, 2019

Title: An act relating to supporting Washington's clean energy economy and transitioning to a clean, affordable, and reliable energy future.

Brief Description: Supporting Washington's clean energy economy and transitioning to a clean, affordable, and reliable energy future.

Sponsors: Senate Committee on Ways & Means (originally sponsored by Senators Carlyle, Palumbo, McCoy, Pedersen, Wellman, Das, Rolfes, Frockt, Wilson, C., Kuderer, Nguyen, Keiser, Lias, Hunt, Saldaña, Darneille and Billig; by request of Governor Inslee).

Brief History:

Committee Activity: Environment, Energy & Technology: 1/17/19, 1/29/19 [DPS-WM, DNP, w/oRec].

Ways & Means: 2/12/19, 2/18/19 [DP2S, w/oRec, DNP].

Floor Activity:

Passed Senate: 3/01/19, 28-19.

Brief Summary of Engrossed Second Substitute Bill

- Requires all electric utilities to eliminate from their allocation of electricity coal-fired resources by December 31, 2025.
- Requires each electric utility to make all retail sales of electricity greenhouse gas neutral by January 1, 2030.
- Sets a standard for each electric utility to meet 100 percent of its retail electric load using non-emitting and renewable resources by January 1, 2045.
- Establishes an administrative penalty equal to \$60 for each megawatt-hour for noncompliance, adjusted for inflation.
- Amends the Utilities and Transportation Commission's ratemaking authority to include consideration of property acquired or constructed during the rate-effective period.
- Requires electrical and gas companies to use the social cost of carbon for planning, evaluating, and acquiring all resources.
- Amends and extends sales and use tax exemptions.

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

- Adds federal incremental hydroelectricity as an eligible renewable resource under Initiative 937.

SENATE COMMITTEE ON ENVIRONMENT, ENERGY & TECHNOLOGY

Majority Report: That Substitute Senate Bill No. 5116 be substituted therefor, and the substitute bill do pass and be referred to Committee on Ways & Means.

Signed by Senators Carlyle, Chair; Palumbo, Vice Chair; Sheldon, Assistant Ranking Member, Energy & Technology; Billig, Das, Liias, McCoy, Nguyen and Wellman.

Minority Report: Do not pass.

Signed by Senators Ericksen, Ranking Member; Brown, Rivers and Short.

Minority Report: That it be referred without recommendation.

Signed by Senator Fortunato, Assistant Ranking Member, Environment.

Staff: Kimberly Cushing (786-7421)

SENATE COMMITTEE ON WAYS & MEANS

Majority Report: That Second Substitute Senate Bill No. 5116 be substituted therefor, and the second substitute bill do pass.

Signed by Senators Rolfes, Chair; Frockt, Vice Chair, Operating, Capital Lead; Mullet, Capital Budget Cabinet; Billig, Carlyle, Conway, Darneille, Hasegawa, Hunt, Keiser, Liias, Palumbo, Pedersen and Van De Wege.

Minority Report: That it be referred without recommendation.

Signed by Senators Braun, Ranking Member; Rivers.

Minority Report: Do not pass.

Signed by Senators Brown, Assistant Ranking Member, Operating; Honeyford, Assistant Ranking Member, Capital; Bailey, Becker, Wagoner and Warnick.

Staff: Jed Herman (786-7346)

Background: Initiative 937. Initiative 937, also called the Energy Independence Act, requires electric utilities with 25,000 or more customers to meet targets for energy conservation and for using eligible renewable resources.

Greenhouse Gas Emissions Performance Standard for Electric Generation Plants. Electric utilities may not enter into a long-term financial commitment for baseload electric generation on or after July 1, 2008, unless the generating plant's emissions are the lower of:

- 1100 pounds of greenhouse gas (GHG) per megawatt-hour (MWh); or
- the average available GHG output as updated by the Department of Commerce (Commerce), which is currently set at 970 pounds per MWh.

Baseload electric generation means electric generation from a power plant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent. Long-term financial commitment means:

- either a new ownership interest in baseload electric generation or an upgrade to a baseload electric generation facility; or
- a new or renewed contract for baseload electric generation with a term of five or more years for the provision of retail power or wholesale power to end-use customers in this state.

Greenhouse Gas Emissions Performance Standard and Coal Transition Power. In 2011, the Legislature established a schedule for applying the Greenhouse Gas Emissions Performance Standard (EPS) to the Centralia coal-fired electric generation facility. In addition, the EPS was amended to allow long-term contracts for Centralia's generated electricity, called coal transition power. A process was created to allow electric investor-owned utilities (IOUs) to petition the Utilities and Transportation Commission (UTC) for approval of a power purchase agreement for coal transition power.

Integrated Resource Plans. All investor-owned and consumer-owned electric utilities in the state with more than 25,000 customers must develop integrated resource plans (IRPs). All other electric utilities in the state, including those that essentially receive all their power from the Bonneville Power Administration, must file either an IRP or a less-detailed resource plan (RP).

IRPs and RPs must be updated every two years. IOUs must submit their plans to the UTC. Consumer-owned utilities must file a copy of their plans with Commerce every two years.

Summary of Engrossed Second Substitute Bill: Coal Phase-Out Standard by 2026. By December 31, 2025, all electric utilities must eliminate from their allocation of electricity coal-fired resources. The cost of delivering power does not include the costs associated with decommissioning and remediation of the facilities.

For IOUs, the UTC is required to accelerate depreciation for any coal-fired resource owned by an IOU and is allowed to accelerate depreciation for any qualified transmission line to no later than December 31, 2025. The UTC must allow in rates prudently incurred undepreciated investments in a fossil-fuel generating resource that has been retired from service under specific conditions.

Carbon Neutral Standard by 2030. By January 1, 2030, each electric utility must make all retail sales of electricity to Washington customers GHG neutral. To achieve compliance with this standard, an electric utility must:

- use all cost-effective, reliable, and feasible conservation and efficiency resources and demand response resources to reduce or manage electric retail load; and
- use electricity from renewable resources and non-emitting electric generation in an amount equal to 100 percent of the utility's average annual retail electric load.

All renewable resources used to meet the compliance obligation must be verified using renewable energy credits (RECs), and must be tracked and retired in the tracking system selected by Commerce. Non-emitting generation resources used to meet the obligation must

be generated during the compliance year and must be verified by documentation that the utility owns the nonpower attributes of the electricity. Commerce must adopt rules providing for the measuring and tracking of thermal renewable energy credits that may be used for compliance with this standard.

An electric utility may satisfy up to 20 percent of the standard with an alternative compliance option through December 31, 2044. An alternative compliance option includes any combination of the following:

- making an alternative compliance payment;
- purchasing unbundled RECs;
- investing in energy transformation projects; or
- using electricity from an energy recovery facility constructed prior to 1992 using municipal solid waste as the principal fuel source.

Energy transformation projects must meet criteria and quality standards developed by the Department of Ecology (DOE), in consultation with Commerce and the UTC. Criteria for emissions reductions must be met.

Energy transformation projects must be associated with the consumption of energy in Washington. Any compliance obligation fulfilled through investment in such a project is only eligible for use by the entity that makes the investment: an electric utility; a preference customer of Bonneville Power Administration (BPA); or a member of a joint operating agency under current law.

Beginning January 1, 2030, a qualifying utility will be in compliance with the annual targets for eligible renewable resources under the EIA if the utility uses electricity from renewable resources, non-emitting electric generation, and RECs, in an amount equal to 100 percent of the utility's average annual retail electric load.

One Hundred Percent Clean Standard by 2045. By January 1, 2045, each electric utility must meet 100 percent of its retail electric load to Washington customers using non-emitting electric generation and electricity from renewable resources. UTC, Commerce, the Energy Facility Site Evaluation Council, DOE, and all other state agencies must incorporate this standard into all relevant planning and use all statutory programs to achieve it.

For meeting interim targets under the carbon neutral and the 100 percent clean energy standards, an electric utility must pursue all cost-effective, reliable, and feasible conservation efficiency resources, and demand response. In making new investments, an electric utility must, and to the maximum extent feasible, achieve targets at the lowest reasonable cost; consider acquisition of surplus renewable resources, and in the acquisition of new resources rely on renewable resources and energy storage.

Administrative Penalty. An electric utility that fails to comply with the coal-elimination or carbon neutral standards must pay an administrative penalty equal to \$60 for each MWh of emitting or unspecified electric generation used to meet an electric utility's retail electric load. The penalty is adjusted for inflation, beginning in 2027. Beginning in 2040, the UTC may increase the penalty for IOUs to accelerate compliance.

An electric utility may elect to pay an amount equal to the administrative penalty as an alternative compliance option.

The UTC or the attorney general is authorized to waive a penalty if it finds that a utility's compliance with this chapter is likely to: (1) result in conflicts with or compromises to its obligation to comply with NERC reliability standards, (2) violate prudent utility practice for assuring resource adequacy, (3) compromise the power quality or integrity of its system, or (4) due to factors reasonably outside the utility's control. The UTC or the attorney general are also authorized to temporarily suspend the standards, and require the utility to submit a progress report and a plan for meeting the standards within 6 months. A utility can request an extension of the temporary suspension. Additionally, the Governor may waive a penalty by declaring an energy emergency under current law.

The UTC for an IOU or the attorney general for a COU, may relieve the utility of its penalty obligation if it finds that the utility had no choice but to use electric generation from an emitting resource to maintain the reliability and safety of the grid.

Monies collected must be deposited into existing low-income weatherization and structural rehabilitation assistance accounts. The standard is enforced by the UTC for IOUs and the state auditor's office for COUs.

Each electric utility must disclose the GHG content inherent in its electricity supply. For unspecified electricity, the utility must use an emissions rate determined by Commerce. BPA may exclude from its fuel mix reported to Commerce any purchases of electric generation for serving customers outside of Washington State.

The average annual incremental cost of compliance with the carbon-neutral and 100 percent clean standards for each year identified in the clean energy implementation plan may not exceed a 2 percent increase of:

- a utility's weather-adjusted sales to customers for IOUs; or
- the retail revenue requirement above the previous year for COUs.

For a COU with less than 250,000 customers that owns a natural gas-fired generation facility in Washington, the auditor may consider the utility to be in compliance with the EIT if it meets specific requirements and demonstrates its incremental cost of compliance exceeds 5 percent of the utility's annual retail revenue.

For an asset acquired or used to comply with this act that is condemned by a COU, compensation must include the stranded cost plus the greater of the book value or the fair market value of the asset.

Joint Report. By January 1, 2021, and every two years thereafter, the UTC and Commerce must report to the Legislature a review of the three standards focused on technologies, forecasts, existing transmission, environmental and public safety, affordability, and reliability. The report must include an evaluation of impacts or costs and benefits on system reliability and utilities, and assess the policy impacts on middle-income families, small businesses, manufacturers, and low-income customers and vulnerable communities. Additionally, if the joint report indicates adverse system reliability impacts from implementation of the

standards, the Governor may suspend or delay implementation until system reliability impacts can be addressed.

Progress Reports. Commerce must establish annual reporting requirements for electric utilities to demonstrate compliance with the three standards. Electric utilities must make the reports publicly available. The IOUs must also report to the UTC.

Rulemaking Authority. By January 1, 2021, UTC for IOUs and Commerce for COUs may adopt rules. Nothing restricts rate-making authority of the governing bodies of COUs unless otherwise provided by law. UTC and Commerce are encouraged to coordinate and consult with other agencies in developing rules.

The requirements of this act do not replace or modify the requirements of the EIA.

Integrated Resource Plans and Clean Energy Action Plans. An IOU must develop: (1) a 10-year clean energy action plan and strategy 4-year clean energy implementation plan identifying specific actions with long-ranging integrated resource planning and resource adequacy requirements, and proposing interim targets for implementing the coal phase out and carbon-neutral standards at the lowest reasonable cost; and (2) a 20-year clean energy transformation plan identifying the lowest reasonable cost pathways to meet the 100 percent clean standard. Specific requirements are set for the clean energy action plan and compliance strategy.

All electric utilities under 25,000 customers must develop in concert with their resource plan the following:

- by December 31, 2020, identify how the utility plans over a 10-year period to meet the carbon neutral standard; and
- by December 31, 2025, identify how the utility plans over a 20-year period to meet the 100 percent clean standard.

Carbon Adder. Electrical and gas companies must use the social cost of carbon for planning, evaluating, and acquiring all resources. The cost of GHG emissions resulting from the generation of electricity is equal to the cost per metric ton of carbon dioxide equivalent emissions, using the 2.5 percent discount rate published by the Interagency Working Group on Social Cost of GHGs of the United States government.

Utilities and Transportation Commission Property Valuation and Authority. UTC's authority to determine the fair value of property for rate making purposes is amended to include the consideration of property acquired or constructed by or during the rate effective period, including the reasonable costs of construction work in progress, to the extent UTC finds that the inclusion is in the public interest and will yield fair, just, reasonable, and sufficient rates. UTC is authorized to approve changes to these rates for up to 48 months, and must establish a process to identify, review, and approve property that becomes used and useful after the rate effective date.

The UTC's authority to consider and implement performance and incentive-based regulation, multiyear rate plans, and other flexible regulatory mechanisms is clarified.

By December 31, 2020, the UTC and Commerce must investigate and complete a study on the feasibility, need, and potential costs and benefits of participation of electric utilities in interstate organized energy markets.

Deferral of Costs. An electric utility may apply to the UTC to defer for later consideration costs incurred in connection with the acquisition or development of resources identified in the utility's clean energy implementation plan. The deferral begins on the date the resource begins commercial operation or on the effective date of a power purchase agreement and continues for up to 24 months, unless a general rate case or other proceeding for the recovery of such costs ensues.

The costs that a utility may account for and defer for later consideration by the UTC include all operating and maintenance costs, depreciation, taxes, costs of capital associated with the applicable resources, or the execution of a power purchase agreement. Costs of capital include the utility's authorized return on equity for any resource acquired or development, or a rate of return no less than the authorized cost of debt and no greater than the authorized rate of return of the company for a power purchase agreement.

Low-income Assistance. Electric utilities must make funding available for low-income bill assistance by July 31, 2021; disclose information biennially about the amount of funding available and need for assistance in their service territory; and submit to Commerce an assessment and plans to improve low-income bill assistance in their service area and the mechanisms to meet specified targets based on energy burden.

Electricity Market Work Group. Commerce and UTC must convene a stakeholder work group to examine the efficient and consistent integration of this act and transactions with carbon and electricity markets outside Washington and compatibility with a linked cap-and-trade program. The work group must report to the Legislature recommendations for improving the carbon transparency and market liquidity in electricity markets by December 1, 2020.

Energy Strategy Advisory Committee. Commerce must review the state energy strategy in order to align it with the purposes of this act and Ecology's recommended GHG emission reductions by December 31, 2020, and at least once every eight years thereafter, subject to funding. A specified 26-member state energy advisory committee must be established for each review.

Energy and Climate Policy Advisory Committee. A policy advisory committee is created to develop recommendations to the Legislature to examine costs and benefits of energy-related policies and to conduct other energy-related studies as directed, to be reported by December 31, 2020, subject to funding. Membership includes Washington's four-year institutions of higher education, the Pacific Northwest National Laboratory, and the Washington State Institute of Public Policy.

Cumulative Impact Analysis. By December 31, 2020, the Department of Health must conduct or adopt a cumulative impact analysis to designate the communities highly impacted by fossil fuel pollution and climate change in Washington. By December 31, 2021,

Commerce and UTC must establish requirements for incorporating the cumulative impact analysis into the clean energy action plans and clean energy transformation plans.

Transmission Work Group. The Energy Facility Site Evaluation Council must convene an inter-agency transmission workgroup to look at the need for transmission and strategies for designating transmission corridors and improving coordination in siting transmission.

Extending Sales & Use Tax Exemptions. Extends the expiration date from January 1, 2020, to December 31, 2030, for the sales and use tax exemptions for alternative energy machinery and equipment.

A purchaser, as well as the consumer, who have paid tax on machinery and equipment used to generate electricity consistent with the purposes of the act is entitled to an exemption of state and local taxes, in the form of a remittance of:

- 50 percent if the procurement and contract was from an organization owned by women, minorities or veterans;
- 75 percent if workers on the project were compensated at prevailing wages determined by local collective bargaining; or
- 100 percent if the project is developed under a community workforce agreement or project labor agreement.

Allowances are provided for good faith efforts to meet one of the above requirements, given certain conditions.

Community workforce agreements and project labor agreements are defined. The Department of Labor and Industries is responsible for administering the provisions of the labor standards used in this section of the bill and is directed to conduct emergency rule making, to be completed by December 1, 2019.

Adding Federal Incremental Hydroelectricity as an Eligible Renewable Resource Under I-937. Beginning January 1, 2020, a qualifying utility may use the following as eligible renewable resources to comply with Initiative 937 (I-937):

- incremental electricity produced as a result of efficiency improvements to hydroelectric generation projects whose energy output is marketed by BPA, if the improvements are completed after March 31, 1999, and the additional generation does not result in new water diversions or impoundments; and
- the environmental attributes of incremental hydroelectricity, including RECs, allocated to IOUs pursuant to the residential exchange program (REP) as an eligible renewable resource to comply with I-937.

A qualifying utility may not transfer or sell this incremental electricity or RECs allocated under the REP to another qualifying utility for compliance purposes under I-937.

Appropriation: The bill contains a section or sections to limit implementation to the availability of amounts appropriated for that specific purpose.

Fiscal Note: Available.

Creates Committee/Commission/Task Force that includes Legislative members: Yes.

Effective Date: The bill contains an emergency clause and takes effect immediately.

Staff Summary of Public Testimony on Original Bill (Environment, Energy & Technology): *The committee recommended a different version of the bill than what was heard.* PRO: We have an entrepreneurial economy that can move toward a clean energy economy. Solar and wind is our future. We will get out of coal in a responsible way. This bill provides a common sense framework for bold actions toward a carbon-free electricity. The regional forecast shows utilities are already planning to build wind and large solar projects. Hydro is a flexible resource, and the bill recognizes power generation for existing dams as renewable resources. Customers are demanding 100 percent clean energy. Cities, counties, and large companies are already committing to 100 percent clean energy, but state level action is essential. California and Hawaii are on this path and it is time for Washington to catch up. Runaway climate change impacts the most vulnerable people in society. We want universal energy assistance—not all utilities provide this and those that do only meet a fraction of the need of energy costs. Energy assistance is necessary no matter how clean the electricity is. This policy could drive down energy costs in new and existing buildings. Climate change is the number one threat to birds. A clean grid is the cornerstone to an effort to de-carbonize, and the transition would save household costs. Business as usual approach will be economically devastating. We must move as rapidly as possible to reduce emissions, and need to ensure provisions to eliminate coal remain in the bill and are strengthened not weakened. The 2030 limit on fossil fuel will address new natural gas, we cannot dig that hole deeper. Clean energy jobs are the fastest growing sector across the country. The policy includes extension to sales tax exemptions which keeps in-state projects competitive with Oregon, Montana, and other states. The policies are achievable and will preserve a reliable grid. Large scale energy storage will be an essential component to the energy grid, which is good for the rural economy. When utilities make resource decisions they take a long-term perspective. Resources built today will be in place for a long time and will ensure our legacy will be strong for those who follow. The climate is more sensitive to GHG than scientists predicted. Renewable energy keeps our air and water clean. We want to expand clean energy on public lands. This is a good path to a cleaner, more flexible system.

CON: Our concerns with the 100 percent mandate in 2045 is that costs are born by customers. We cannot count on intermittent resources for reliability.

OTHER: Transformational change is not without risk and challenges. We must be sensitive to rate impacts. We would like a more forward looking approach to maintain reliability and not penalize or ask for forgiveness after the fact. We need appropriate regulatory tools to protect assets and workers and communities beyond Washington. How reliable can hydro-free generation be? Is 2045 feasible to ensure system reliability? We need to appropriately control costs to customers. The definition of renewable gas requires pipeline standards which conflicts with other state law. We need language to create a just transition component and to help with job loss. The bill may raise the cost of energy in Washington which makes companies less competitive. We need a compromise between cleaner electricity and protecting affordability and reliability of the grid. We support carbon reduction at reasonable costs and propose a cost cap to protect customers. We can meet 80 percent of our load with renewable and nonemitting resources. Bonneville Power Administration customers receive

electricity that is 97 percent emissions free. Unknown resources are treated as coming from emitting resources, but they might not be. More transmission is a priority for a reliable grid. We need to address the needs of low-income communities. Maintaining lower energy costs makes it cheaper to use electric cars. Paying too much is counterproductive to finding cheaper carbon reductions elsewhere. The bill limits small modular reactors. Please consider looking at advanced models like cap and trade.

Persons Testifying (Environment, Energy & Technology): PRO: Senator Reuven Carlyle, Prime Sponsor; Kirsten Smith, American Institute of Architects Washington; Joe Kendo, Washington State Labor Council; Samantha Grad, UFCW 21; Megan Smith, King County; Nancy Tosta, Councilmember, Burien City; Bruce Bassett, Councilmember, Mercer Island City; Dave Warren, Silfab Solar, Inc; Elyette Weinstein, Washington State League of Women Voters; Bourtai Hargrove, citizen; Matthew Hepner, IBEW; Clifford Traisman, Washington Environmental Council and Washington Conservation Voters; Adam Maxwell, Audubon Washington; Doug Howell, Sierra Club; Vlad Gutman, Climate Solutions; Dave Van't Hof, National Grid; Nicole Hughes, Renewable Northwest; Tom Starrs, SunPower; Joni Bosh, NW Energy Coalition; Jeff Bissonnette, Union of Concerned Scientists; Thad Curtz, Carbon Washington; Lauren McCloy, Governor's Office; Mendy Droke, Seattle City Light; Patricia Holm, Sunrise Movement; Barak Gale, Green Team, Temple Beth Tfilloh, Olympia; Shawn Collins, Opportunity Council; Allison Arnold, Solar Installers of Washington; Kristy Royce, Sun Path Electric; Joanna Eide, Legislative Director, DNR; Rebecca Canright, citizen.

CON: Cindy Alia, Citizens Alliance for Property Rights; Tim Boyd, Alliance of Western Energy Consumers.

OTHER: Marian Dacca, Tacoma Public Utilities; Peter Godlewski, Association of Washington Business; Brandon Houskeeper, Puget Sound Energy; John Rothlin, Avista; Kathleen Collins, PacifiCorp; Neil Hartman, Washington State Building and Construction Trades Council; David Mendoza, Front & Centered; Dave Warren, Klickitat PUD; Dave Arbaugh, Public Generating Pool; Jane Van Dyke, Commissioner, Clark Public Utilities; Kent Lopez, Washington Rural Electric Cooperative Association; Nicolas Garcia, WPUA; Isaac Kastama, Low Carbon Prosperity Institute, Benton PUD, and Franklin PUD.

Persons Signed In To Testify But Not Testifying (Environment, Energy & Technology):
PRO: Jessica Zimmerle, Earth Ministry.

Staff Summary of Public Testimony on Second Substitute (Ways & Means): PRO: This bill is a responsible step forward. It will have Washington's electrical grid carbon-free by 2025. We need to decarbonize the grid. Good to see support for family wage jobs. We need a cleaner and more equitable grid. Section 6 providing equitable distribution is necessary. Keeps jobs viable, without the sale tax exemption jobs will be lost. We support the labor standard in sections 19 and 20.

CON: Opposed to sections 19 and 20. Equipment is only 25 percent of costs. Costs are far higher than the tax savings.

OTHER: Continued work on this bill is needed. More alignment is needed due to multi-state compacts. Parity is needed to apply provisions across the state. Some carbon power

will have to continue in the background to ensure reliability. We acknowledge progress in the bill draft, committed to improving it. Need to keep an eye on cost and reliability. Bill is almost there, details still need to be worked out. Still has work to be done on the bill. Need collaborative efforts. We need a cost cap, I-937 has lots of costs. We need to use renewable energy credits. Applaud efforts to date. We need R.E.C. banking. The state is 70 percent hydro, need to modify sections 19 and 20. Legislation is improving, harmonizing with the initiative is appreciated. Cost cap is important for protecting consumers, propose using a different rate analysis; transformation comes with risk. Need a regulatory model. Investor-owned utilities will have to buy carbon free power on the open market.

Persons Testifying (Ways & Means): PRO: Senator Reuven Carlyle, Prime Sponsor; Vlad Gutman-Britten, Climate Solutions; David Mendoza, Front & Centered; Nicole Hughes, Renewables Northwest; Jeff DeLuca, Washington Community Action Partnership; Neil Hartman, Washington State Building and Construction Trades Council.

CON: Jerry VanderWood, Associated General Contractors.

OTHER: Marian Dacca, Tacoma Public Utilities; Brandon Houskeeper, Puget Sound Energy; Tim Boyd, Alliance of Western Energy Consumers; Kent Lopez, Washington Rural Electric Cooperative Association; Clark McIsaac, Snohomish PUD; Isaac Kastama, Benton PUD, Franklin PUD, Low Carbon Prosperity Institute; Al Aldrich, Grant County PUD; Nicolas Garcia, Washington Public Utility Districts Association; Jane Van Dyke, Clark Public Utilities; Dave Arbaugh, Public Generating Pool, Chelan PUD; Kathleen Collins, Pacific Power; John Rothlin, Avista.

Persons Signed In To Testify But Not Testifying (Ways & Means): No one.