# SENATE BILL REPORT E2SSB 5769

As Amended by House, April 11, 2011

**Title**: An act relating to coal-fired electric generation facilities.

**Brief Description**: Regarding coal-fired electric generation facilities.

**Sponsors**: Senate Committee on Ways & Means (originally sponsored by Senators Rockefeller, Pridemore, Kohl-Welles, White, Chase, Murray, Ranker, Regala, Fraser, Shin and Kline).

## **Brief History:**

Committee Activity: Environment, Water & Energy: 2/11/11, 2/18/11 [DPS-WM, DNP].

Ways & Means: 2/24/11, 2/25/11 [DP2S, DNP, w/oRec].

Passed Senate: 3/05/11, 36-13. Passed House: 4/11/11, 87-9.

# **Brief Summary of Engrossed Second Substitute Bill**

- Applies the following schedule for imposing an emissions standard on a coal-fired baseload electric generation facility in Washington that emitted more than 1 million tons of green house gases in calendar year 2005: one boiler by December 2020 and any other boilers by 2025.
- Requires the Governor to enter into a memorandum of agreement with such a facility to enforce the emissions standard and schedule, to require the installation of specified pollution control technology, and to require \$55 million in economic mitigation for the affected local community.
- Amends the current emissions performance law to allow an electric utility to enter into long-term power purchase agreements with such a facility and creates a process to allow the utility to recover the cost of the agreements in its rates.

### SENATE COMMITTEE ON ENVIRONMENT, WATER & ENERGY

**Majority Report**: That Substitute Senate Bill No. 5769 be substituted therefor, and the substitute bill do pass and be referred to Committee on Ways & Means.

Signed by Senators Rockefeller, Chair; Nelson, Vice Chair; Chase, Fraser and Ranker.

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.

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# **Minority Report**: Do not pass.

Signed by Senators Honeyford, Ranking Minority Member; Delvin, Holmquist Newbry and Morton.

**Staff**: William Bridges (786-7416)

#### SENATE COMMITTEE ON WAYS & MEANS

**Majority Report**: That Second Substitute Senate Bill No. 5769 be substituted therefor, and the second substitute bill do pass.

Signed by Senators Murray, Chair; Kilmer, Vice Chair, Capital Budget Chair; Brown, Conway, Fraser, Kastama, Keiser, Kohl-Welles, Pridemore, Regala, Rockefeller and Tom.

# **Minority Report**: Do not pass.

Signed by Senators Zarelli, Ranking Minority Member; Baxter, Hewitt, Holmquist Newbry, Honeyford and Schoesler.

**Minority Report**: That it be referred without recommendation.

Signed by Senators Parlette, Ranking Minority Member Capital; Baumgartner and Pflug.

Staff: Chris Godwin (786-7441)

**Background**: Greenhouse Gas (GHG) Emission Reductions. The state is required to achieve the following statewide GHG emission reductions:

- by 2020 reduce overall GHG emissions in the state to 1990 levels;
- by 2035 reduce overall GHG emissions in the state to 25 percent below 1990 levels; and
- by 2050 reduce overall GHG emissions in the state to 50 percent below 1990 levels, or 70 percent below the state's expected GHG emissions that year.

GHG Emissions Performance Standard (EPS) 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 GHG per megawatt (MW)-hour; or
- the average available GHG emissions output as updated by Commerce.

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 (1) either a new ownership interest in baseload electric generation or an upgrade to a baseload electric generation facility; or (2) 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.

<u>Executive Order.</u> In 2009 the Governor issued an executive order directing the Department of Ecology (Ecology) to work with the existing coal-fired plant within Washington that burns over 1 million tons of coal per year, TransAlta Centralia Generation LLC, to establish an agreed order to apply the EPS to the facility by no later than December 31, 2025. The agreed

order must include a schedule of major decision making and resource investment milestones. Discussions between Ecology and TransAlta are continuing.

<u>Senate Work Sessions.</u> On January 19, 2011, the Senate Environment, Water & Energy Committee held a work session on the role of coal in meeting Washington's electric needs. On January 21, 2011, the same committee held a work session on the environmental and health impacts of coal power.

Energy Facility Site Evaluation Council (EFSEC). EFSEC is the permitting and certificating authority for the siting of major energy facilities in Washington, such as thermal electric power plants 350 megawatts or greater. In addition, energy facilities of any size that exclusively use alternative energy resources (wind, solar, geothermal, landfill gas, wave or tidal action, or biomass energy) can opt-in to the EFSEC process. EFSEC must generally process an application within 12 months of receipt; however, it can be as short as 180 days under an expedited siting process.

<u>Community Economic Revitalization Board (CERB).</u> Comprised of 20 members appointed by the Governor, CERB funds public infrastructure improvements, such as the acquisition, construction, or repair of water and sewer systems, bridges, railroad spurs, telecommunication systems, roads, structures, and port facilities.

<u>Public Works Board.</u> Comprised of 13 members appointed by the Governor, the Public Works Board administers the public works assistance account to provide loans to local governments and special purpose districts with infrastructure projects.

<u>Sales and Use Tax Exemptions for Coal.</u> Purchases of coal used at a thermal electric generating facility placed in operation after 1969 and before July 1, 1997, are exempt from retail sales and use taxes. The exemptions are contingent upon owners of the plant demonstrating to Ecology that progress is being made to install the necessary air pollution control devices and that the facility has emitted no more than 10,000 tons of sulfur dioxide during the previous 12 months.

<u>Technology to Control Emissions of Nitrogen Oxides (NOx).</u> Selective Catalytic Reduction (SCR) is a technology for capturing NOx emissions from industrial boilers such as coal fired power plants. It uses a combination of ammonia injection and a catalyst to capture NOx emissions. Selective Noncatalytic Reduction (SNCR) is also a NOx control technology for industrial boilers. It is similar to SCR but only uses injected ammonia without a catalyst. According to Ecology, SCR may capture up to 90 percent of NOx emissions from a large coal-fired plant while SNCR may capture up to 25 percent, but SCR is substantially more expensive than SNCR.

Washington Utilities and Transportation Commission (WUTC). The WUTC is a three-member commission that has broad authority to regulate the rates, services, and practices of investor-owned electric utilities, among other industries. Under general rate-making principles, an electric utility may recover the full cost of a power purchase contract in rates, with no additional premium, if the contract is approved by the WUTC. An electric utility may recover the full cost of an investment in a new generating facility in rates, with an

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additional return to reflect the risk of the investment, if the investment is approved by the WUTC.

<u>Integrated Resource Plan (IRP).</u> All investor-owned and consumer-owned electric utilities in the state, with more than 25,000 customers, must develop IRPs. All other 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.

An IRP must describe the mix of generating resources and conservation and efficiency resources that will meet current and projected needs at the lowest reasonable cost to the utility and its ratepayers. When determining the lowest reasonable cost for resources identified in its IRP, a utility must consider state and federal policies regarding resource preference, among other factors.

Carbon Dioxide Mitigation for Fossil-Fueled Energy Facilities. Under state law, certain fossil-fueled thermal power facilities with a generating capacity of 25 MW or more must mitigate their carbon dioxide (CO2) emissions. The requirement applies to new electric generating facilities seeking site certification from EFSEC or an order of approval under the Washington Clean Air Act. The requirement also applies to existing facilities between 25 and 350 MW that increase their generating capacity by at least 25 MW or their emissions production of CO2 by 15 percent or more.

Mitigation is required for 20 percent of the CO2 emissions produced by a facility over a 30-year period, and must include one or a combination of the following options: (1) payments to an independent qualified organization; (2) direct purchase of permanent carbon credits; or (3) direct investment in CO2 mitigation projects, including qualified alternative energy resources and cogeneration.

Summary of Engrossed Second Substitute Bill: Applying the EPS to Specified Facilities. A coal-fired baseload electric generation facility in Washington that emitted more than 1 million tons of GHG in calendar year 2005 (qualifying facility) must meet the lower of the following emissions standards such that one generating boiler is in compliance by December 31, 2020, and any other generating boiler is in compliance by December 31, 2025:

- 1100 pounds of GHG per MW-hour; or
- the average available GHG emissions output as updated by Commerce, whichever is lower.

The emission standard does not apply to a coal-fired baseload electric generating facility if Ecology determines as a requirement of state or federal law or regulation that selective catalytic reduction technology must be installed on any of its boilers.

Requiring a Memorandum of Agreement (MOA). By January 1, 2012, the Governor on behalf of the state must enter into an MOA with the owners of a qualifying facility for achieving the specified emissions reductions. The MOA must include a number of terms, such as binding commitments to install SNCR pollution control technology by January 1, 2013. The MOA terminates if the Department of Ecology (Ecology) determines federal law or regulation requires the installation of SCR technology. If the MOA is not signed by

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January 1, 2012, the Governor must implement the requirement concerning the installation of SNCR technology.

The MOA must also require the facility to provide the following financial assistance to the affected community: (1) \$30 million for economic development and energy efficiency and weatherization; and (2) \$25 million for energy technologies with the potential to create considerable energy, economic development, and air quality, haze, or other environmental benefits. The MOA must specify the accounts where the funds are to be deposited, individuals who may approve expenditures from the accounts, and the schedule for disbursing the funds. Financial assistance is no longer required if the sales and use tax exemptions on coal are repealed.

If an MOA is reached, no state agency or political subdivision of the state may adopt or impose additional or inconsistent GHG emission standards.

Recognizing Coal Transition Power in the EPS and in WUTC Rate Proceedings. The EPS is amended to allow long-term contracts for the output of a qualifying facility, called coal transition power (transition power). In addition, a process is created to allow an electric utility to petition the WUTC for approval of a power purchase agreement for transition power. If approved, the utility may treat the purchase as an investment entitled to a portion of the premium it would receive if it constructed a facility with an equivalent generation capacity.

<u>Recognizing Carbon Reductions.</u> An MOA may include provisions recognizing such reductions in state policies and programs relating to GHG emissions, and advocating for such reductions in all established and emerging regional, national, or international GHG frameworks. The Governor may recommend actions to the Legislature concerning the recognition of investments in early emissions reductions.

Requiring Expedited EFSEC Processing. EFSEC must use its expedited process for siting generating facilities meeting the EPS if the facility is to be sited in the county where a qualifying facility is located, and if the siting application is filed before December 31, 2025.

Requiring a Decommissioning Plan. A qualifying facility subject to closure must provide Ecology with a plan for the closure and postclosure of the facility at least 24 months prior to closure. Among other things, the plan must include financial assurances to fund required activities and the preparation of a decommissioning and site restoration plan. The decommissioning plan as well as any significant changes to it are subject to Ecology's approval.

Requiring Financial Assistance Guarantees in the Decommissioning Plan. A qualifying facility subject to closure must guarantee funds are available to perform all activities in the decommissioning plan. The guarantee may be accomplished with an Ecology approved letter of credit, surety bond, or other means acceptable to Ecology.

<u>Providing for Community Economic Development.</u> CERB and the Public Works Board must each solicit projects to attract new industrial and commercial projects to areas affected by the closure or potential closure of a qualifying facility. Project awards must be consistent with

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applicable community redevelopment plans for the area, including planning for future industrial activities associated with reuse of reclaimed coal mine lands. Funding allocations from CERB and the Public Works Board are progressively increased from a total of \$500,000 in 2011-2013 to \$4 million in the 2021-2023 biennium.

Amending the Lowest Reasonable Cost Analysis for IRPs. When determining the lowest reasonable cost for resources in its IRP, a utility must also consider state policies to reduce GHG from thermal electric generation facilities in the long term by temporarily exempting certain of those facilities from the EPS. In addition, a utility must compare the benefits and risks of purchasing power from existing resources or building new resources.

Exempting Certain Fossil-Fueled Facilities from Carbon Mitigation. An applicant for siting a natural gas-fired generation plant to be constructed in a county with qualifying facility is exempt from state carbon mitigation requirements, if the application is filed before December 31, 2025.

Adopting Findings, Expressing Legislative Intent, and Adding a Severability Clause. Various findings are adopted, including the harmful effects of emissions from the combustion of coal; the contribution of coal-powered electricity generation as a large source of the state's GHG emissions; the need for the deliberate development of replacement generation to maintain grid stability and reliability; and the necessity to ensure substantial planning and funding for the closure and postclosure activities of coal-fired electric generation facilities. No civil liability based on any finding may be imposed upon the state.

Among other things, the Legislature intends to provide for the reduction of GHG emissions from large coal-fired electric power generation facilities; to ensure appropriate cleanup and site restoration upon decommissioning of any facilities in the state; and to provide assistance to host communities planning for new economic development and mitigating the economic impacts of the closure of these facilities.

A severability clause is added, stating that if any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

**Appropriation**: None.

Fiscal Note: Available.

[OFM requested ten-year cost projection pursuant to I-960.]

Committee/Commission/Task Force Created: No.

Effective Date: The bill contains several effective dates. Please refer to the bill.

**Staff Summary of Public Testimony on Original Bill (Environment, Water & Energy)**: PRO: Coal power poses risks to the dignity and sacredness of human life, so it should be phased out by 2015. The combustion of coal poses health risks, and CO2 contributes to climate change, which will cause heat waves, infectious diseases, food shortages, and asthma for children and the elderly. Mercury from the burning of coal is a toxin that causes serious

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long-term chronic health problems. The life of coal-fired plants keeps on getting extended but the pollution continues. Colorado is shutting down its plants in 2017, Oregon in 2020, and Canada will shut down all plants older than 45 years. To allow TransAlta to continue operating will amount to pollution equal to millions of cars on the road or ten Lake Washingtons poisoned with mercury. The environmental community shares the same concerns for the economic well-being of TransAlta workers, understands the importance of grid stability, and wants a feasible and successful transition to cleaner fuels. Transition fuels need to be defined. The provisions in the bill need to be aligned with the federal Clean Air Act, and the 2020 deadline should not be extendable. The degradation of the environment needs to stop in favor of more sustainable alternatives.

CON: TransAlta is a company with a social conscience that has contributed millions of dollars to the local community, including assistance after the flood of 2007 and the development of an industrial park. Closing TransAlta would be worse than the closure of Boeing for King or Snohomish counties. If TransAlta is going to close, it should be done in a systematic fashion; the community is not prepared for a premature shutdown. There are multiple taxing districts that rely on TransAlta and its closure would result in a loss of millions of dollars. The loss of tax revenues would be devastating for a county with 13 percent unemployment, an average wage of \$33,000 a year, and that is still recovering from the flood of 2007. The employees at TransAlta are hard working people trying to make a living, and many are environmentalists but they recognize that carbon-free is not cost-free. Unlike the Boardman Plant in Oregon, TransAlta has invested in modern pollution control equipment, so it should at least be allowed to run to 2025 as outlined in the Governor's executive order. Shutting down TransAlta will jeopardize the electrical grid and produce higher electricity prices. TransAlta employs 278 workers and about 400 contractors and the average TransAlta wage is \$88,000 a year. If TransAlta shuts down, there would be no comparable jobs in Lewis County. Shutting down TransAlta would have no appreciable effect on global GHG levels. The plant should be used as a template for how older plants can be equipped with modern pollution-controlling technology. China will reap the benefits if coal is not burned here. TransAlta is not a good citizen, as demonstrated by laying-off 600 miners. The tax exemptions for coal should be repealed immediately, the advisory board should be started in 2011, and the plant should be closed in 2015. TransAlta gets its coal from Wyoming, sends its electricity to California, its profits to Canada, and leaves the pollution here. The provision allowing a five-year extension creates too much uncertainty for utilities who may want to enter long-term contracts. Interested parties need to be part of the memorandum of agreement. There needs to be a concrete transition plan. The bill sends the signal that if the government does not like a business, it will target it for closure.

OTHER: Centralia coal-fired facility faces several near- and medium-term regulatory obligations: EPA requirements for nitrogen oxide, mercury, coal ash, and cooling water beginning in 2011; and EPA ambient air quality standards for ozone and fine particles by 2014. Low natural gas prices have displaced coal in other parts of the U.S. Other countries, such as Canada, have shut down old coal plants. Energy efficiency and renewable resource polices are also contributing to the transition from coal to cleaner fuels.

**Persons Testifying (Environment, Water & Energy)**: PRO: Steven Gilbert, Institute of Neurotoxicology and Neurological Disorders; Terri Glaberson, Cool Mom; Nancy Hirsh, NW Energy Coalition; Doug Howell, Sierra Club; Sister Mimi Maloney, Sisters of the Holy

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Names, Earth Ministry; Carol McKinley, WA State Unitarian Universalist Voices for Justice; Joelle Puccio, RN, BSN; Cliff Traisman, WA Environmental Council; Dawn Vyvyan, Yakama Nation.

CON: Ron Averill, Lewis County Board of County Commissioners; Matt Briggs, Daniel Fugate, TransAlta, IBEW Local 125; Debbie Campbell, United Way of Lewis County; Dianne Dorey, Lewis County Assessor; David Gibson, Express Employment Professionals; Bob Guenther, IBEW 77; Ken Johnson, Puget Sound Energy; Robert Johnson, Lewis County Community Development; Bill Lotto, Industrial Park at TransAlta; Chris McCabe, Association of Washington Business; Bill Moyer, Backbone Campaign; Marcy Putman, IBEW Local 125; Anil Puri, Steve Ward; Lou Florence, Larry Webster, TransAlta; Randy Robbins, Boiler Makers Local 502; Jennifer Williams, Climb Against Coal.

OTHER: Christopher James, Regulatory Assistance Project.

Staff Summary of Public Testimony on Recommended First Substitute (Ways & Means): PRO: Stakeholders have been negotiating in good faith to balance the needs of the people employed by the TransAlta plant in Centralia with the need to reduce greenhouse gas emissions and safeguard the environment in the state. We encourage the passage of the bill and endorse Senator Rockefeller's proposed amendment. Since TransAlta purchased the plant in Centralia they have always monitored the air quality and will continue to do so. The TransAlta plant is an economic driver in the regional economy. Operating the plant until 2025 would allow the plant and the community to stably transition away from coal-fired generation. The Governor is still committed to transition off of coal to cleaner sources of electricity in a way that is practicable and stable and equitable. The Governor also endorses Senator Rockefeller's proposed substitute. Please continue the conversation, as there are equity concerns about language in the bill that requires facilities to finance decommissioning but only requires CERB and the Public Works Board to expend funds as available.

**Persons Testifying (Ways & Means)**: PRO: Clifford Traisman, Washington Environmental Coalition, Washington Conservation Voters; Bob Guenther, International Brotherhood of Electrical Workers Local 77, TransAlta; Keith Phillips, Governor Gregoire's Office; Dick Larman, Matt Stevenwalt.

### **House Amendment(s)**:

- Several findings relating to coal pollutants, damage to native American culture, GHG emissions, and site restoration are removed or modified.
- The definition of "coal transition power," the emissions performance standard for specified coal-fired baseload electric generation facilities, and the requirements for a memorandum of agreement with a coal-fired baseload facility are modified.
- A coal-fired generation facility subject to the GHG emissions performance standard must provide Ecology with a plan for the closure and postclosure of the facility at least 24 months before closure or decommissioning, whichever is earlier.
- Various requirements relating to surety bonds and letters of credit are clarified.
- The specified funding amounts from the Public Works Board and the CERB to areas affected by a coal facility closure are removed and replaced with provisions that require each board to give priority consideration to funding projects in such areas.

- The provisions relating to the WUTC's review of power purchase agreements for coal transition power are modified to address several issues, such as the protection of ratepayers, the process for reviewing agreements for purchasing transition power, and determining the rate recovery for transition power.
- When assessing the available generating technology as part of the integrated resource planning process, a utility must compare the benefits and risks of purchasing power or building new resources.
- The exemption from CO2 mitigation requirements is limited to the owner of an affected coal-fired electric plant and an expiration date is specified.
- The section specifying that no civil liability may be imposed by legislative findings is removed.
- Various technical changes are made.

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