
Environment Committee

E2SSB 5769

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 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 an electrical company to recover the cost of the agreements in its rates.

Hearing Date: 3/15/11

Staff: Scott Richards (786-7156).

Background:

State Greenhouse Gas Emissions Reductions.

The state is required to achieve the following statewide Greenhouse Gas (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

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- 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.

Greenhouse Gas Emissions Performance Standard.

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:

- 1,100 pounds of GHG per megawatt-hour; or
- the average available GHG emissions output as updated by the Department of 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.

Executive Order.

In 2009 the Governor issued an executive order directing the Department of Ecology (DOE) to work with the existing coal-fired plant within Washington that burns over 1 million tons of coal per year to establish an agreed order to apply the Greenhouse Gas Emissions Performance Standard (GHG 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.

Energy Facility Site Evaluation Council.

Energy Facility Site Evaluation Council (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.

Sales and Use Tax Exemptions for Coal.

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 the DOE 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.

Technologies to Control Emissions of Nitrogen Oxides.

Selective Catalytic Reduction (SCR) is a technology for capturing Nitrogen Oxides (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 NO_x control technology for industrial boilers. It is similar to SCR but only uses injected ammonia without a catalyst. According to the DOE, SCR may capture up to 90 percent of NO_x emissions from a large coal-fired plant while SNCR may capture up to 25 percent. While SCR is the most effective technology for capturing NO_x emissions, it is substantially more expensive than SNCR.

Utilities and Transportation Commission.

The Utilities and Transportation Commission (UTC) 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 agreement in rates, with no additional premium, if the contract is approved by the UTC. An electric utility may recover the full cost of an investment in a new generating facility in rates, with an additional return to reflect the risk of the investment, if the investment is approved by the UTC.

Integrated Resource Plan.

All investor-owned and consumer-owned electric utilities in the state, with more than 25,000 customers, must develop an Integrated Resource Plan (IRP). 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 provide a detailed and consistent analysis of a wide range of commercially available sources. At a minimum, this analysis must consider resource cost, market-volatility risks, demand-side resource uncertainties, resource dispatchability, resource effect on system operation, the risks imposed on ratepayers, public policies regarding resource preference adopted by Washington state or the federal government and the cost of risks associated with environmental effects including emissions of carbon dioxide.

Carbon Dioxide Mitigation for Fossil-Fueled Energy Facilities.

Under state law, certain fossil-fueled thermal power facilities with a generating capacity of 25 megawatts (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.

Community Economic Revitalization Board.

Comprised of 20 members appointed by the Governor, the Community Economic Revitalization Board (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.

Public Works Board.

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.

Summary of Bill:

Greenhouse Gas Emissions Performance Standard.

A coal-fired baseload electric generation facility in Washington that has emitted more than 1 million tons of GHG in calendar year 2005 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:

- 1,100 pounds of GHG per MW-hour; or
- the average available GHG emissions output as updated by the Department of Commerce.

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

Recognition of Coal Transition Power in the GHG EPS and in UTC Rate Proceedings.

The GHG EPS is amended to allow electric utilities to enter into long-term contracts for coal transition power. Coal transition power is defined as the output of a coal-fired electric generation facility located in Washington that is subject the GHG EPS.

In addition, a process is created to allow an electrical company to petition the UTC for approval of a power purchase agreement for coal transition power. If approved, the electrical company 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.

When a petition is filed, the UTC must provide notice to the public and potentially affected parties and expedite the hearing of that petition. The UTC may require the electrical company to file supporting testimony and exhibits. The UTC must issue a final order that approves or disapproves the acquisition of coal transition power within 180 days after a petition is filed.

The UTC must approve the acquisition of coal transition power if it determines the resource is needed by the electrical company to serve its ratepayers and the resource meets the need in a cost-effective manner as determined under the lowest reasonable cost resource standards. As

part of these determinations, the UTC must consider, among other factors: (1) the long-term economic benefit to the electrical company and its ratepayers of such a long-term purchase; and (2) the environmental benefits attributable to the orderly transition away from coal-fired electric generation power.

Memorandum of Agreement between Governor and Owners of Coal-fired Baseload Facilities.

By January 1, 2012, the Governor, on behalf of the state, must enter into a Memorandum of Agreement (MOA) with the owners of a coal-fired baseload facility in Washington that emitted more than one million tons of greenhouse gases in calendar year 2005 for achieving the specified GHG emissions reductions. The MOA must incorporate by reference the state's GHG EPS and provisions that allow electric utilities to enter into long-term financial agreements for the purchase of coal transition power, and binding commitments to install SNCR pollution control technology by January 1, 2013. The MOA terminates if the DOE determines federal law or regulation requires the installation of SCR technology. If a MOA is not signed by January 1, 2012, the Governor must implement requirements to install selective noncatalytic reduction pollution control technology in any coal-fired generating boilers by January 1, 2013, after discussing the proper use of ammonia in this technology.

The MOA must also require the facility owner 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. Financial assistance investments by the facility owner begin on January 1, 2012 and consist of equal annual payments through December 31, 2023, or until the full amount has been provided. Only funds for energy efficiency and weatherization may be spent prior to December 31, 2015.

The MOA must specify the independent accounts at an appropriate financial institution where the funds are to be deposited, the schedule for disbursing the funds, and which individuals may approve expenditures from the accounts. These individuals must include members representing the Lewis County Economic Development Council, local elected officials, employees at the facility, and the facility owner.

Financial assistance is no longer required if the sales and use tax exemptions on coal are repealed.

Prohibition from Additional State and Local GHG EPS and Other GHG Emissions Limitations.

No state agency or political subdivision of the state may adopt or impose a GHG emission performance standard, or other operating or financial requirement or limitation relating to GHG emissions, on a coal-fired electric generation facility located in Washington or upon an electric utility's long-term purchase of coal transition power, that is inconsistent with or additional to the application of the GHG EPS to a coal-fired baseload facility or the MOA entered into by the Governor and the owner of a coal-fired baseload facility.

Recognition of Carbon Reductions.

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.

Expedited Energy Facility Site Evaluation Council Processing.

The EFSEC must use its expedited certification process for siting generating facilities meeting the GHG EPS if the facility is to be sited in the county where a coal-fired electric generating facility subject to the GHG EPS is located, and if the siting application is filed before December 31, 2025.

Decommissioning Plan Requirement.

A coal-fired baseload electric generation facility subject to GHG EPS or to closure through a MOA between the Governor and the owner of the facility must provide the DOE with a plan for the closure and post-closure 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 that is consistent with rules established by the EFSEC. The decommissioning plan, as well as any significant changes to it, is subject to the DOE's approval.

Financial Assistance Guarantees in the Decommissioning Plan.

A coal-fired baseload electric generation facility subject to GHG EPS or to closure through a MOA between the Governor and the owner of the facility must guarantee funds are available to perform all activities in the decommissioning plan. The guarantee may be accomplished with a DOE approved letter of credit, surety bond, or other means acceptable to the DOE.

Community Economic Development.

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 large coal-fired electric generation facilities. Project awards must be consistent with 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.

Lowest Reasonable Cost Analysis for Integrated Resource Plans.

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 GHG EPS. In addition, when assessing commercially available, utility-scale renewable and nonrenewable generating technologies, a utility must compare the benefits and risks of purchasing power from existing resources or building new resources.

Carbon Mitigation Exemption.

An applicant for siting a natural gas-fired generation plant to be constructed in a county with a coal-fired electric generation facility subject to the GHG EPS is exempt from state carbon mitigation requirements, if the application is filed before December 31, 2025.

Findings, Legislative Intent, and 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 post-closure 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: Requested on 3/14/2011.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is passed.