**Washington State**
**House of Representatives**
**Office of Program Research**

# BILL ANALYSIS

# Technology, Energy & Communications Committee

# ESSB 6001

**Brief Description:** Mitigating the impacts of climate change.

**Sponsors:** Senate Committee on Water, Energy & Telecommunications (originally sponsored by Senators Pridemore, Poulsen, Rockefeller, Brown, Eide, Oemig, Hargrove, Marr, Fraser, Kohl-Welles, Keiser, Regala, Franklin, Fairley, Jacobsen, Shin, Haugen, Berkey, Spanel, Kline and Weinstein).

**Brief Summary of Engrossed Substitute Bill**

- Establishes state goals to reduce greenhouse gases emissions.
- Establishes a greenhouse gases emissions performance standard for electric utilities operating in the state.
- Authorizes the Department of General Administration to purchase 100 plug-in hybrid vehicles when commercially available.
- Authorizes municipal electric utilities, public utility districts, and counties to mitigate greenhouse gases emissions from their power generating operations and purchases.
- Creates the Office of Washington State Climatologist.

**Hearing Date:** 3/27/07

**Staff:** Scott Richards (786-7156).

**Background:**

**Climate Change and Greenhouse Gases (GHG)**: The term "climate change" refers to any significant change in measures of climate, such as temperature, which last for decades or longer. Climate change may result from natural causes or human activities. The National Academy of

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*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.*

Sciences, The Inter-Governmental Panel on Climate Change, and The U.S. Climate Change Science Program have concluded that human activities, such as GHG production, are the likely cause of climate change during the last several decades.

**GHG Emissions Targets**: According to the Pew Center on Global Climate Change, 12 states have set GHG emissions targets, including Arizona, California, New Mexico, and Oregon. Most of the targets have been set by agencies or by executive order and typically use a 1990 baseline to measure reductions. The targets are usually characterized as "goals."

**Governor Gregoire's Executive Order Setting GHG Emissions Goals**: On February 7, 2007, the Governor issued an executive order establishing goals for GHG reductions, for increasing clean energy sector jobs, and for reducing expenditures on imported fuel. The executive order also directs the Department of Ecology (DOE) and the Department of Community, Trade, and Economic Development (CTED) to lead stakeholders in a process that will consider a full range of policies and strategies to achieve the emissions goals.

**GHG Emission Performance Standards**: In 2006, the California Legislature enacted a law to require that all new long-term commitments for baseload generation to serve California consumers be with power plants that have emissions no greater than a combined cycle gas turbine plant. The law prohibits electric utilities from making or renewing contracts of five years or longer for the purchase of baseload generation that does not comply with the GHG emission performance standard established by the California Public Utilities Commission (PUC). In January 2007, the PUC adopted GHG Emissions Performance Standards of 1,100 pounds of CO2 per megawatt-hour.

**Okeson v. City of Seattle**: In January 2007, the Washington Supreme Court ruled in *Okeson v. City of Seattle*, No. 77888-4 (Jan. 18, 2007), that Seattle City Light lacked the authority to use ratepayer money for greenhouse gases offset contracts because the contracts were neither proprietary in nature nor sufficiently related to the purpose of supplying electricity. In reaching its conclusion, the court first concluded that Seattle City Light did not have the express statutory authority to pay other entities to reduce their greenhouse gases emissions. Second, it concluded that Seattle City Light did not act within its implied or incidental powers because Seattle City Light's offset contracts are: (1) not proprietary in nature; and (2) not within the object and purpose of the utility's enabling statute.

**Additional Rate of Return for Conservation & Renewable Resources**: In 1980, the Legislature established an incentive program to encourage investor-owned utility investments in conservation, renewable resources, and cogeneration. The program included an additional 2 percent higher rate of return on the common equity portion of qualifying investments initiated after June 12, 1980, and before January 1, 1990.

**State Climatologist**: According to DOE, Washington had a federally-funded state climatologist until the funding stopped in 1971. Since then, the position has either been vacant or filled by volunteers.

**Summary of Bill:**

**I. Greenhouse Gas Emissions Reduction and Economic Goals**

Greenhouse gases emissions reduction and clean energy economy goals are established for Washington. These goals are:

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

**Clean Energy Sector Job Growth and Imported Fuel Expenditures Goals**
There are additional goals related to clean energy sector job growth and imported fuel expenditures. These goals are:
- by 2020, increase the number of clean energy sector jobs to 25,000 from the 8,400 jobs the state had in 2004; and
- by 2020, reduce expenditures by 20 percent on fuel imported into the state by developing Washington resources and supporting efficient energy use.

**Governor's Executive Order No. 07-02**
The Governor's Executive Order No. 07-02 establishes these goals and provides the mechanisms for identifying the policies and strategies necessary to achieve the economic and emission reduction goals.

**Reporting Requirements**
By December 31st of each even-numbered year beginning in 2010, the DOE and CTED shall report to the Governor and the appropriate committees of the Legislature the total GHG emissions for the preceding two years, and totals in each major source sector.

**Legislative Findings**
Various legislative findings are made, including the existence of climate change, the vulnerability of Washington's economy and environment to climate change, and the value of forests in mitigating climate change.

## II. Greenhouse Gases Emissions Performance Standards

Beginning July 1, 2008, the GHG emissions performance standard for all baseload electric generation for which electric utilities enter into long-term financial commitments is:
- the lower of 1,100 pounds of GHGs per megawatt-hour; or
- the rate of emissions of GHGs for a commercially available combined-cycle natural gas thermal electric generation facility that provides baseload electric generation.

**Key GHG Emissions Performance Standard Definitions**
"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.

"Electric utility" means an electrical company or a consumer-owned utility.
A "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.

"Commercially available" means that at least 100 plants of substantially the same design, specifications, and performance characteristics have been in commercial operation for at least three years.

**Baseload Electric Generation Facilities in Operation**
All baseload electric generation facilities in operation as of June 30, 2008, are deemed to be in compliance with the GHG emissions performance standard until the facilities are the subject of long-term financial commitments, even if an electric utilities actual emissions are higher than the GHG emissions performance standard.

**Long-term Investments in Baseload Electric Generation**
Electric utilities may not make or renew long-term investments in baseload electric generation that do not comply with the performance standard. All such investments must be reviewed by the Washington Utilities and Transportation Commission (WUTC), or by the governing board of a consumer-owned utility, whichever is appropriate. The WUTC or governing board may exempt a utility from the performance standard for such things as unanticipated electric system reliability needs, catastrophic events, or significant financial harm arising from unforeseen circumstances.

**Net Emissions**
In determining the rate of emissions of greenhouse gases for baseload electric generation, the net emissions resulting from the production of electricity by the baseload electric generation shall be included.

**Cogeneration Facilities**
For cogeneration facilities, the DOE will establish an output-based methodology to ensure that the calculation of emissions of GHGs recognizes the total usable energy output of the process, and includes all GHGs emitted by the facility in the production of both electrical and thermal energy.

**Carbon Dioxide Sequestration**
Carbon dioxide that is injected permanently in geological formations may not be counted as emissions of the power plant in determining compliance with the GHG emissions performance standard.

**Adoption of Rules**
By June 30, 2008, the DOE shall adopt rules to enforce the GHG emissions performance standard and procedures to verify the emissions of GHG from any baseload electric generation. Also, the DOE shall include criteria to be applied in evaluating the carbon sequestration plan.

**Consultation**
In adopting and implementing the greenhouse gases emissions performance standard, the DOE, in consultation with the commission, the Bonneville Power Administration, the Western Electricity Coordination Council, electric utilities, public interest representatives, and consumer representatives shall consider the effects of the greenhouse gases emissions performance standard on system reliability and overall costs to electricity customers.

**Authorizing Investor-Owned Utilities to Seek Pre-Determinations by the WUTC**
Before making decisions to acquire electric generation or to purchase electricity that complies with the performance standards, investor-owned electric utilities may seek determinations from the WUTC, which must determine the need and the appropriateness of a proposed resource. The WUTC must consider such factors as the utility's forecasted loads and power plant technology. In addition, the WUTC must provide for the recovery of prudently incurred costs of these resources, among other things. Furthermore, the utilities may defer costs associated with the long-term commitments.

**Allowing an Additional Rate of Return**
The WUTC must adopt policies allowing an additional rate of return for investor-owned electric utility to encourage investments in distributed generation and certain energy efficiency measures. The policies must include a 2 percent increment to the rate of return on common equity, which must be allowed for at least seven years but not more than 30 years.

**Enforcing the Performance Standards**
The WUTC enforces any requirements with respect to investor-owned utilities. For consumer-owned utilities, the State Auditor is responsible for auditing their compliance, while the Attorney General is responsible for enforcing that compliance. The WUTC must adopt rules to carry out its assigned duties by June 30, 2008.

**Findings**
Various legislative findings are made, including the unequivocal evidence of the warming climate, the encouragement of environmentally-sound energy resources, and the reduction of future reliability problems in electricity supplies.

**III. Plug-In Electric Hybrid Vehicles**
During the biennium ending June 30, 2009, the Department of General Administration (GA) is authorized to purchase at least 100 plug-in electric hybrid vehicles, when commercially available at comparable life costs to other vehicles. GA must assign the vehicles to departments and job functions that average the most driving miles. The use of the hybrid vehicles must include an economic analysis of their total life-cycle cost.

**IV. GHG Mitigation by Municipal Utilities, Public Utility Districts, and Counties**
Eligible utilities and counties may mitigate their power generation emissions by any mechanism recognized by independent, qualified organizations with proven experience in emissions mitigation activities. Mitigation mechanisms may include the purchase, trade, and banking of carbon offsets or credits. Any carbon offset or credit purchased after the effective date of this act must be recognized by any GHG registry developed by the state.

**V. Office of Washington State Climatologist**
The Office of Washington State Climatologist (Office) is created. The Office consists of the Director, who is the State Climatologist, and appropriate staff and administrative support as necessary to carry out the powers and duties of the Office. The Director is appointed jointly by the President of Washington State University and the President of the University of Washington. The Office is administered as determined jointly by these two presidents. The State Climatologist's duties include serving as an expert source of climate and weather information for state and local decision makers and representing the state in all climatological and meteorological matters.

**Appropriation:** None.

**Fiscal Note:** Preliminary fiscal note available.

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