# Washington State House of Representatives Office of Program Research

### BILL ANALYSIS

## **Technology & Economic Development Committee**

### **HB 1095**

**Brief Description**: Promoting thermal energy efficiency.

**Sponsors**: Representatives Morris and Hudgins.

#### **Brief Summary of Bill**

- Requires energy-consumption analyses for certain public facilities to include critical load analyses and combined heat and power feasibility assessments.
- Incorporates certain valuation and assessment provisions for combined heat and power into Integrated Resource Plans.
- Directs the Utilities and Transportation Commission to establish a voluntary emission reduction program for natural gas companies that encourages investment in thermal energy efficiency projects.
- Directs the Department of Ecology to establish a general permit or permit by rule for stationary natural gas engines used in a combined heat and power system.

Hearing Date: 1/20/15

**Staff**: Nikkole Hughes (786-7156).

#### Background:

Energy Conservation in Design of Public Facilities.

Public agencies are directed by the Legislature to analyze the cost of energy consumption for each major facility to be planned and constructed or renovated after September 8, 1975. A "major facility" is any publicly owned or leased building having 25,000 square feet or more of usable floor space. A life-cycle cost analysis must be prepared during the design phase for each newly constructed or renovated major facility. The life-cycle cost analysis includes an energy-

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consumption analysis of all energy systems of a major facility that must be prepared by a professional engineer or licensed architect. The public agency must approve the major facility's life-cycle cost analysis before commencement of actual construction or renovation.

#### Development of Cogeneration Projects.

The Department of Enterprise Services (DES) is required to identify priorities for cogeneration (combined heat and power) projects at state facilities. Where a cogeneration project is deemed desirable by the DES and the appropriate state agency, the DES must notify the local utility of its intent to conduct a feasibility study at the state facility.

#### Electric Utility Resource Planning.

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

The minimum required components of an IRP include the following:

- an assessment of commercially available conservation and efficiency resources, which may include high efficiency cogeneration (combined heat and power);
- an assessment of commercially available, utility scale renewable and nonrenewable generating technologies; and
- a comparative evaluation of renewable and nonrenewable generating resources.

#### The Utilities and Transportation Commission.

The Utilities and Transportation Commission (UTC) regulates the rates, services, and practices of privately-owned utilities and transportation companies in Washington. Companies providing the following goods or services are regulated by the UTC: electricity, natural gas, certain telecommunications service, water, solid waste collection, commercial ferry service, transportation of household goods, certain auto transportation service, and transportation of petroleum through pipelines. The UTC is required to ensure that rates charged are "fair, just and reasonable."

#### District Thermal Energy Systems.

The UTC has limited regulatory authority over a district thermal energy system owned or operated by a thermal energy company. A "district thermal energy system" is any system that provides thermal energy for space heating, space cooling, or process uses from a central plant and that distributes thermal energy to two or more buildings. A "thermal energy company" is any private person, company, association, partnership, joint venture, or corporation engaged in developing, producing, distributing, or selling to, or for the public, thermal energy services for any beneficial use other than electricity generation.

#### Air Operating Permits.

The Department of Ecology and seven local air quality agencies administer Washington's air operating permit standards under the Washington Clean Air Act. An air operating permit specifies certain requirements for air pollution sources, including permissible emission levels.

#### Boiler Maximum Achievable Control Technology.

Federal major source boiler maximum achievable control technology (boiler MACT) rules (40 C.F.R. 63, Subpart DDDDD) apply to boilers and process heaters in "major sources." A "major source" is an industrial, commercial, or institutional facility that emits 10 tons per year (tpy) or more of any single hazardous air pollutant or 25 tpy or more of total hazardous air pollutants. The boiler MACT rules require affected boilers and process heaters to complete a one-time energy assessment that identifies energy savings opportunities.

#### **Summary of Bill**:

#### Energy Conservation in Design of Public Facilities.

The list of facilities for which analysis of the cost of energy consumption is required by the Legislature is expanded to include critical governmental facilities. A "critical governmental facility" is a publicly-owned building that is expected to:

- be continuously occupied;
- maintain operations for at least 6,000 hours each year;
- have a peak electricity demand exceeding 500 kilowatts (kW); and
- serve a critical public health or public safety function during a natural disaster or other emergency situation that may result in a widespread power outage.

An energy-consumption analysis conducted as part of a life-cycle cost analysis for a major facility or critical governmental facility must include the identification and analysis of critical loads for each energy system and a combined heat and power system feasibility assessment.

#### Electric Utility Resource Planning.

By December 31, 2016, an electric utility with over 25,000 customers in the state must:

- value combined heat and power as having both energy and capacity value for the purposes of setting the value of power under the federal Public Utility Regulatory Policies Act, establishing rates for power purchase agreements, and integrated resource planning:
- offer a minimum term of 15 years for power purchase agreements for the electric output of combined heat and power systems, unless a lesser number is mutually agreed to by both parties; and
- include in its Integrated Resource Plan (IRP) an assessment of existing and potential combined heat and power facilities within its service area.

The Department of Commerce (Commerce) must submit reports of existing and potential combined heat and power facilities in IRPs to the Washington State University Extension Energy Program (WSU Energy Program) for analysis. The WSU Energy Program must submit an annual report electronically to the appropriate legislative committees on the planned and completed combined heat and power facilities in the state.

#### Thermal Energy Systems.

The Utilities and Transportation Commission (UTC) has limited regulatory authority over any thermal energy system owned or operated by a thermal energy company or by a combined heat and power facility engaged in thermal energy services. References to "district" thermal energy systems are removed. A "thermal energy system" is any system that provides thermal energy for space heating, space cooling, or process uses from a central plant or combined heat and power facility, and that distributes the thermal energy to two or more buildings.

#### The Utilities and Transportation Commission.

The UTC is required to establish a voluntary emission reduction program for the purpose of encouraging natural gas companies to invest in projects that reduce emissions, improve thermal energy efficiency, and provide benefits to customers of natural gas companies. The UTC must adopt rules to implement a voluntary emission reduction program by December 31, 2016.

#### Air Operating Permits.

The Department of Ecology (Ecology) must establish a general air operating permit or permit by rule for stationary natural gas engines used in a combined heat and power system. The general permit or permit by rule must establish emission limits for air contaminants released by stationary natural gas engines. In establishing a general permit or permit by rule, Ecology may consider:

- the geographic location in which a stationary natural gas engine may be used, including the proximity to an area designated as a nonattainment area;
- the total annual operating hours of a stationary natural gas engine;
- the technology used by a stationary natural gas engine;
- the types of fuel used to power a stationary natural gas engine; and
- other emission control policies of the state.

#### Boiler Maximum Achievable Control Technology.

An owner or operator of an industrial, commercial, or institutional boiler or process heater required to complete an energy assessment under federal major source boiler maximum achievable control technology (boiler MACT) rules (40 C.F.R. 63, Subpart DDDDD) must:

- by January 31, 2016, submit the energy assessment electronically to Ecology; and
- by January 31, 2020, implement thermal energy efficiency opportunities identified in the energy assessment with an estimated payback period of less than 4 years for site costs.

An energy assessment submitted to Ecology must include a feasibility analysis for combined heat and power projects.

**Appropriation**: None.

Fiscal Note: Requested on January 12, 2015.

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