SENATE BILL REPORT
SHB 2172

As Reported By Senate Committee On:
Natural Resources, Energy & Water, March 28, 2003

Title: An act relating to promoting the purchase of fuel cells for the use of distributive generation at state-owned facilities.

Brief Description: Promoting the purchase of fuel cells for the use of distributive generation at state-owned facilities.

Sponsors: House Committee on Technology, Telecommunications & Energy (originally sponsored by Representatives Sullivan, Morris, Benson, Rockefeller, Wood and Hudgins).

Brief History:
Committee Activity: Natural Resources, Energy & Water: 3/27/03, 3/28/03 [DPA].

SENATE COMMITTEE ON NATURAL RESOURCES, ENERGY & WATER

Majority Report: Do pass as amended.
Signed by Senators Morton, Chair; Doumit, Fraser, Hargrove, Honeyford, Oke and Regala.

Staff: Richard Rodger (786-7461)

Background: A fuel cell operates like a battery with an external fuel source. It produces electricity through an electrochemical process. Activated by a catalyst, hydrogen and oxygen produce electricity and by-products of water, heat, and small amounts of carbon dioxide (CO2). It does not run down or need recharging as long as fuel is supplied.

A number of fuel cell technologies are under development. The most commercially developed is a phosphoric acid fuel cell (PAFC) and it is being used in hotels, hospitals, and office buildings. The proton-exchange membrane (PEM) fuel cell is currently being tested for commercial application under an energy efficiency program through the Bonneville Power Administration. This fuel cell operates at low temperatures and can vary its output to meet demand. These cells are best candidates for light-duty vehicles, buildings, and smaller applications. Another fuel cell under development is the solid oxide fuel cell (SOFC). This is an option for high-powered applications such as industrial uses or central electricity generating stations.

There are a number of other fuel cell technologies under development for a variety of applications. Fuel cell research is being conducted in Washington State at Pacific Northwest National Laboratories in Richland and Avista Labs in Spokane.

Fuel cells are not yet readily available to consumers but an increasing number of products are being tested for commercial application. Cost is also a factor in availability of fuel cells.

Summary of Amended Bill: When planning for the construction of state facilities that require an uninterruptible source of power, state agencies must consider using fuel cell technology or renewable or alternative energy sources as a primary source of energy for a facility.

State agencies must also consider fuel cells or renewable or alternative energy sources when planning backup power systems and remote power systems.

The Department of General Administration (GA) must assist state agencies in identifying, evaluating, and developing potential fuel cell applications, or renewable or alternative energy sources.

State agencies may use financing contracts to fund the purchase and installation of fuel cells, or renewable or alternative energy sources.

Amended Bill Compared to Original Bill: The bill is expanded to include: renewable or alternative energy sources; backup or standby power; additional duties for GA; and allows financing for certain energy projects.

Appropriation: None.

Fiscal Note: Not requested.

Effective Date: Ninety days after adjournment of session in which bill is passed.

Testimony For: This bill asks state agencies to consider using fuel cells as a primary source of energy when the facility requires an uninterruptible source of power. Washington is becoming an epicenter for the technological development of fuel cells. These types of conversions to fuel cell technology are being done in many areas including: Long Island Power and Light is placing 45 fuel cells in single and multiple family housing, as well as businesses; King County is currently operating a one megawatt test fuel cell in the Renton sewer treatment plant; Double Tree Inn in Spokane is powering its lights and hot water tanks with a fuel cell; and, Burlington Northern is converting its backup power for switching stations to fuel cell power. This bill should also be amended to include smaller projects that require backup or remote systems.

Testimony Against: None.

Testified: Representative Brian Sullivan (prime sponsor); Collins Sprague, Avista Corp. (pro).