
**Technology, Telecommunications
& Energy Committee**

HB 2172

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

Sponsors: Representatives Sullivan, Morris, Benson, Rockefeller, Wood and Hudgins.

Brief Summary of Bill

- Directs state agencies to consider the use of fuel cells as the primary source of power for new state facilities.

Hearing Date: 3/3/03

Staff: Pam Madson (786-7166).

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 (BPA). 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 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 Bill:

When planning for the construction of new state facilities, state agencies must consider implementation and utilization of fuel cell technology as a primary source of energy for a new facility.

Appropriation: None.

Fiscal Note: Not Requested.

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