

# FINAL BILL REPORT

## SHB 2172

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Synopsis as Enacted

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

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

**House Committee on Technology, Telecommunications & Energy**  
**Senate Committee on Natural Resources, Energy & Water**

### **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 (CO<sub>2</sub>). 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 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 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:**

State agencies, when planning for capital construction or renovation, must consider the

use of fuel cells and renewable or alternative energy sources as the primary source of power for applications that require an uninterruptible power source. State agencies must also consider these energy sources when purchasing back-up or emergency power sources.

The Department of General Administration is directed to develop a criteria to assist agencies in identifying fuel cell applications in state facilities.

**Votes on Final Passage:**

House 94 0  
Senate 48 0 (Senate amended)  
House (House refused to concur)  
Senate 46 0 (Senate amended)  
House 98 0 (House concurred)

**Effective:** July 27, 2003