
Environment & Energy Committee

HB 1584

Brief Description: Planning for advanced nuclear reactor technology in Washington.

Sponsors: Representatives Barnard, Fitzgibbon, Dye, Donaghy, Lekanoff, Slatter, Ybarra, Couture, Fey, Ryu, Riccelli, Berry, Schmidt, Sandlin and Timmons.

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| <p>Brief Summary of Bill</p> <ul style="list-style-type: none">• Modifies a guiding principle for the development of the State Energy Strategy to include consideration of developing advanced nuclear reactor technology as a cleaner energy source. |
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Hearing Date: 2/7/23

Staff: Andrew Hatt (786-7296) and Megan McPhaden (786-7114).

Background:

Washington State Energy Strategy.

In 2019 legislation was enacted directing the Department of Commerce (Commerce) to revise the State Energy Strategy (SES) to align the strategy with the requirements of the Energy Independence Act, the Clean Energy Transformation Act, and the state's greenhouse gas emissions reduction limits. Commerce updated the SES in 2021 and is required to review the SES once every eight years moving forward.

When reviewing the SES, Commerce is required to establish a 27-member advisory committee to provide guidance regarding the review. Members of the advisory committee include representatives from a variety of public and private entities, including investor-owned utilities, consumer-owned utilities, local governments, environmental organizations, and members of the Legislature.

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.

A successful SES must balance three goals:

- maintaining competitive energy prices that are fair and reasonable for consumers and businesses, and support the state's continued economic success;
- increasing competitiveness by fostering a clean energy economy and jobs through business and workforce development; and
- meeting the state's obligations to reduce greenhouse gas emissions.

Nine principles have been established to guide the development and implementation of the SES in achieving these goals. One of these nine principles directs the state to reduce dependence on fossil fuel energy sources through improved efficiency and development of cleaner energy sources, such as bioenergy, low carbon energy sources, natural gas, and leveraging the indigenous resources of the state to produce clean energy.

Washington's 2021 SES references nuclear energy, noting that research and innovation efforts may yield efficiency gains or cost reductions for several technologies, including nuclear power generation.

Nuclear Energy.

Nuclear energy comes from splitting atoms to produce heat that can be used to generate electricity. As an example, most nuclear reactors operating today heat water and produce steam that is then used to turn a turbine to generate electricity. There are several new types of advanced nuclear reactor technologies currently under development by entities such as the United States Department of Energy, including small modular reactors, advanced water-cooled reactors, non-water-cooled reactors, and fusion reactors. According to the Pacific Northwest National Laboratory, the benefits of small modular reactors and other advanced reactors are expected to help reduce economic, security, technical, perceived safety, and regulatory barriers associated with nuclear power, which could result in the increased establishment of new nuclear power throughout the United States in the future.

Summary of Bill:

Advanced nuclear reactor technology is added to the guiding principles for the State Energy Strategy that focuses on reducing dependence on fossil fuel energy sources, through the development of cleaner energy sources, improved efficiency, and leveraging of the state's indigenous resources.

Appropriation: None.

Fiscal Note: Available.

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