SENATE BILL REPORT
SB 5727

As of February 14, 2025

Title: An act relating to incentivizing grid-connected residential battery energy storage systems.

Brief Description: Incentivizing grid-connected residential battery energy storage systems.

Sponsors: Senators Slatter, Shewmake and Cortes.

Brief History:
Committee Activity: Environment, Energy & Technology: 2/14/25.

Brief Summary of Bill

- Requires electric utilities with more than 100,000 electric customers to implement a Residential Battery Energy Storage Program (program) that provides battery incentives to customers and a plan to either allow a time-of-use rate or a virtual power plant.
- Smaller electric utilities may elect to participate in the program.
- Directs the Washington State University Extension Energy Program to administer the program.
- Authorizes battery incentives to be paid from July 1, 2026, through June 30, 2036, and allows utilities providing battery incentives under the program to receive a tax credit equal to the incentives provided, associated expenses, and upgrades.
- Requires the Joint Legislative Audit and Review Committee to review the program's tax preferences as part of its 2030 reviews.

SENATE COMMITTEE ON ENVIRONMENT, ENERGY & TECHNOLOGY

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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.

Background: Washington State University Energy Extension Program. The Washington State University Extension Energy Program (WSU Energy Program) provides program management, technical assistance, analytical tools, applied research, and training related to energy programs. This includes approving applications for programs that provide incentive payments funded by a public utility tax credit, such as the Community Solar Expansion Program, the Annual Production Incentive Certification, and the Renewable Energy System Cost Recovery Program.

Public Utility Tax. The public utility tax (PUT) is imposed on gross income derived from the operation of public and privately owned utilities, including businesses that engage in transportation, communications, and the supply of energy, natural gas, and water. The tax is in lieu of the business and occupation tax. This tax applies only on sales to consumers. There are also varying rates of the PUT, depending on the specific utility activity.

Light and Power Business. Light and power businesses operate plants or systems for the generation, production, or distribution of electrical energy for hire or sale, or for the wheeling of electricity for others, or both.

Summary of Bill: Battery Incentive Program. The WSU Energy Program must administer a Residential Battery Incentive Program (program) for qualified light and power businesses (electric utilities). Electric utilities with more than 100,000 retail electric customers must participate. Smaller electric utilities may choose to implement a program.

Under the program, an electric utility must:

- provide one-time battery incentives to qualified customers, which include residential customers, nonprofit organizations, public entities, tribal governments, or academic institutions. A multifamily housing tax equity investor partnership with a specific controlling partner may participate; and
- have a plan for using the batteries either by:
    1. allowing customers with batteries to be charged time-of-use rates for electricity; or
    2. incorporating the batteries into a utility-operated virtual power plant that financially encourages customers to manage their electricity use to their benefit so the utility can effectively manage the batteries collectively to benefit utility grid operations.

A time-of-use rate means an electricity billing structure where the price of electricity varies based on the time of day it is used to encourage consumers to shift their energy use to less expensive times.

A virtual power plant is an aggregation of connected distributed energy resources that can balance electrical loads and are coordinated to work together to provide utility grid services like a traditional power plant.

To establish a program, electric utilities must submit an application to the WSU Energy Program to evaluate an application based on whether it meets program requirements. An electric utility may start a program if it is approved by the WSU Energy Program. The WSU Energy Program must audit the electric utility's program at least every two years.

Program requirements include:

- at least 40 percent of the program must benefit low- and moderate-income households, low-income service providers, housing authorities, or tribal governments;
- the application for customers to apply for a battery incentive must require income verification for low- and moderate-income customers;
- leases to customers are not allowed;
- the program to lower the customer's annual electric utility expenses;
- all expenses and upgrades proposed for program implementation are documented; and
- electric utilities may not sell or aggregate data from customers in the program for any purpose beyond the direct operation of the program.

An electric utility may establish residential installer partners and equipment specifications.

Qualified customers may apply to their electric utility for a one-time battery incentive payment between July 1, 2026, and June 30, 2036. Customers must be connected to the electric utility's Time-of-Use Rate Program or virtual power plant and provide certain information to receive an incentive payment. The electric utility must notify the applicant within 60 days of receipt of the incentive certification whether the incentive payment will be authorized or denied.

Incentives are for the kilowatt-hours (kWh) of an installed residential battery energy storage system, and may be for up to:

- $765 per kWh, capped at 18 kWh, for low- and moderate-income customers; and
- $450 per kWh, capped at 18 kWh, for all other customers.

Before applying to the electric utility, qualified customers must apply to DOR and the WSU Energy Program for certification, which includes that the battery storage system has been approved for use by the electric utility. DOR must consult with the WSU Energy Program to determine the customer's eligibility and then must notify the customer within 30 days as to whether their system qualifies.

Customers receiving incentive payments must keep records of incentives applied for and received for five years. If it appears that an incentive was paid in excess of the correct amount, the electric utility may assess against the customer the excess incentive amount and must add interest on the amount. The environmental attributes of the renewable energy system belong to the applicant.

The Department of Commerce (Commerce) must produce nonbinding recommendations for electric utilities to help design virtual power plants for the program, and make the

recommendations public on Commerce's website by December 1, 2025.

Electric Utility Tax Credit. An electric utility is allowed a PUT credit equal to:

- the battery incentive payments; and
- expenses and upgrades associated with their program, which must not be more than 20 percent of the total tax credit for any fiscal year, and include advanced metering infrastructure and subscription fees paid by the electric utility to operators of a virtual power plant.

This tax credit may not exceed 1.5 percent of the electric utility's taxable Washington power sales generated in calendar year 2022, and may not exceed the tax that is otherwise due. Expenditures not used to earn a credit in one year may be used in subsequent years. Tax credits may be earned from July 1, 2026, to June 30, 2036, and may not be claimed after June 30, 2038.

Tax Preference Performance Statement. The Legislature's public policy objective is to induce participating utilities to make incentive payments to utility customers who invest in battery energy storage on the customer-side of the meter, reduce the costs associated with installing and operating these storage systems, and create and retain jobs in the clean energy sector.

The Joint Legislative Audit and Review Committee (JLARC) must review this tax preference as part of its 2030 tax preference reviews. The battery incentive achieved its desired outcomes, if JLARC determines:

- 50 megawatt-hours of battery energy storage are installed under the program; and
- battery energy storage-related employment grows from 2025 levels, as evidenced by an increased per capita rate of related jobs in the state and an improved national ranking for battery energy storage-related employment.

The WSU Energy Program must collect information from qualified customers and electric utilities under the program to be able to report on the number of participants, size of systems installed, dollars spent on incentives, and energy storage program load flexibility and demand response events.

Appropriation: None.

Fiscal Note: Available.

Creates Committee/Commission/Task Force that includes Legislative members: No.

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

Staff Summary of Public Testimony: PRO: The two mechanisms that this bill provides will assist in modifying electric utility customer behavior: prescriptive time-of-use rates and

aggregating batteries into a utility-operated virtual power plant. The current system involves "dumb batteries" installed in residential homes which sit unused until a power outage. Unlocking these batteries for full grid interactivity will be an immense benefit for the grid.

OTHER: Electric utilities face numerous challenges when planning to integrate batteries into the grid. Prescriptive time-of-use rates prevent certain utilities from participating, and the value set for solar rates should not be codified before an economic study is complete. Electric utilities should not be locked into time-of-use or virtual power plant models. A mix of both would provide flexibility needed to serve all areas. It is important to incentivize customer behavior that moderates power used at peak times, rather than to sell power back to the grid from batteries.

Persons Testifying: PRO: Senator Vandana Slatter, Prime Sponsor; Gavin Tenold, Northwest Renewables; Bill Will, Washington Solar Energy Industries Association.

OTHER: Maggie Douglas, Puget Sound Energy; Josie Cummings, Avista.

Persons Signed In To Testify But Not Testifying: No one.