Washington State House of Representatives Office of Program Research

BILL ANALYSIS

Technology & Economic Development Committee

HB 1096

Brief Description: Promoting a more efficient and reliable electric distribution system.

Sponsors: Representatives Morris and Hudgins.

Brief Summary of Bill

Authorizes an electric utility to adopt an alternative to net metering valuation
mechanism that is a fixed charge, a value of distributed generation tariff, or a longterm contract, after the cumulative generating capacity of net metering systems
connected to the electric utility's distribution grid equals 50 percent or more of a
utility's peak 1996 demand.

Hearing Date: 1/22/15

Staff: Jasmine Vasavada (786-7301).

Background:

Net Metering.

Under Washington's net metering law, both electrical companies and consumer-owned utilities must offer to make net metering available to customer-generators on a first-come, first-serve basis until the cumulative generating capacity available to net metering systems equals 0.5 percent of the utility's 1996 peak demand. "Customer-generators" are utility customers who generate at least a portion of their own electricity with distributed generation technologies such as fuel cells, solar panels, or small wind turbines. "Net metering" means measuring the difference between the electricity supplied by an electric utility and the electricity generated by a customer-generator over the applicable billing period.

Electricity Billing Under Net Metering.

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

"Net metering" allows customer-generators to offset their consumption of purchased electricity with electricity generated by their own small-scale renewable energy generation system, such as solar, wind, or hydropower systems. Under net metering, the customer's small renewable energy system is connected to the utility grid, and electricity produced by the customer's system flows into the utility grid.

Type of Meter Required for Net Metering Systems.

The electricity production must be measured by a single bi-directional meter capable of measuring the electricity flow in two directions, unless the Utilities and Transportation Commission (UTC), in the case of an investor-owned utility, or the governing body, in the case of a consumer-owned utility, determines that requiring an additional meter is necessary and appropriate, and established how the costs of purchasing and installing an additional meter must be allocated between the customer-generator and the utility. At the end of the billing period, the customer is billed for the net electricity supplied by the utility, in accordance with normal metering practices. Any excess electricity generated by the customer during the billing period is credits to the customer's next bill as a kilowatt-hour credit. On April 30 of each calendar year, any remaining unused kilowatt-hour credit accumulated during the previous year shall be granted to the electric utility, without any compensation to the customer-generator.

Net Metering Minimum Monthly Fee.

Electric utilities charge customer-generators a minimum monthly fee that is the same as other customers of the electric utility in the same rate class. A customer-generator is not charged any additional standby, capacity, interconnection, or other fee or charge unless the Utilities and Transportation Commission (UTC), in the case of an electrical company, or the appropriate governing body, in the case of other electric utilities, determines after appropriate notice and opportunity for comment that:

- (1) the electric utility will incur direct costs associated with interconnecting or administering net metering systems that exceed any offsetting benefits associated with these systems; and
- (2) public policy is best served by imposing these costs on the customer-generator rather than allocating these costs among the utility's entire customer base.

The Utilities and Transportation Commission.

The UTC regulates the rates, services, and practices of privately-owned utilities and transportation companies, including electrical companies. The UTC is required to ensure that rates charged are "fair, just and reasonable."

Consumer-Owned Utilities.

"Consumer-owned utility" includes a municipal electric utility, a public utility district, an irrigation district, a cooperative, a mutual corporation or association, a port district, or a water-sewer district that is engaged in the business of distributing electricity to one or more retail electric customers in the state. Consumer-owned utilities are not regulated by the UTC, but instead by their own governing boards, which may be a board of directors or other legislative authority. For certain state environmental and energy laws, the State Auditor has been designated responsible for auditing compliance and enforcement responsibility has been allocated to the Attorney General.

Traditional Regulation of Privately-Owned Utilities.

Under traditional regulation of privately-owned utilities by the UTC, rates are calculated from a utility's rate base and the rate of return allowed on its rate base. A utility's rate base is the total non-depreciated value of its property and equipment used to provide utility service to ratepayers. "Rate of return" is the level of profit and the cost of debt that a utility is allowed to return on its rate base through rates charged to utility customers. Rate components typically include fixed charges and volumetric charges. A fixed charge is a charge that a customer pays regardless of how much electricity or fuel is consumed. A volumetric charge varies based on electricity or fuel consumption and demand. A volumetric charge assessed to a utility customer may include a portion of the utility's fixed costs for maintaining and servicing the utility grid infrastructure.

Mid-Columbia Daily Spot Price.

The Mid-Columbia (Mid-C) is one of the two wholesale electricity trading hubs for the Northwest electric power market. Wholesale electricity markets are markets in which electric power is bought and sold by competitive suppliers and marketers. The "Mid-C daily spot price" is the daily average wholesale electricity price at the Mid-Columbia trading hub.

Summary of Bill:

After the cumulative generating capacity of net metering systems connected to an electric utility's distribution grid equals 50 percent or more of a utility's peak 1996 demand, an electric utility may elect to adopt one of the following rate structures as an alternative to the current net metering requirement that customer-generators be charged the same minimum monthly fee as all customers of the same rate class:

- (1) a fixed charge, applicable to all new customers;
- (2) a value of distributed generation tariff; or
- (3) a long-term contract mechanism.

Approval of the Alternative Mechanism.

The alternative mechanism must be approved by the Utilities and Transportation Commission (UTC), in the case of an investor-owned utility, or the governing board, in the case of a consumer-owned utility, upon a determination that adopting the alternative mechanism would:

- (1) reasonably reflect an appropriate apportionment of the different costs of serving large and small customers;
- (2) not impair incentives for conservation and energy efficiency; and
- (3) not overburden low income customers.

Fixed Charge Mechanism.

The fixed charge must be assessed to all new customers and may be assessed monthly, annually, or at an intermediate interval, as determined by the utility. It may not be assessed for longer than the time it takes to amortize the capital investments caused by servicing the new customer.

Fixed Charge for New Customers Who Are Not Prosumers.

The fixed charge for all new customers may not exceed the amount necessary to avoid cost shifting to existing customers. The UTC or the governing body, depending on the type of utility, must establish a methodology for determining the avoided cost shift. The avoided cost shift must account for the incremental additional cost of providing new service to a new customer.

Fixed Charge for New Prosumers.

New prosumers may be assessed a greater fixed charge than the charge assessed to other new customers. "Prosumer" means: (1) a user of a net metering system; (2) an electric utility customer with a production meter connected to a utility's distribution system that measures production of electricity generated on the customer's premises intended to offset part or all of the customer's electricity requirements; or (3) a utility customer who enters into a special arrangement with a utility to obtain premium services, such as enhanced reliability or voltage control, requiring extraordinary capital investment.

The amount that a new prosumer may be charged is limited by the amount assessed to all new customers, and proportional to the amount of the prosumer's electricity needs that the prosumer is meeting for itself. For example, the maximum amount that could be charged to any new prosumer would be a charge that is double the fixed charge for other new customers. This maximum could be charged to a new prosumer who generates all the prosumer's own electricity requirements.

Value of Distributed Generation Tariff Mechanism.

The UTC must by rule establish a methodology for a value of distributed generation (VODG) tariff. This tariff must compensate prosumers for the value to the electrical company and its customers of installing and operating distributed generation resources interconnected to the utility system. Minimum considerations in a VODG tariff are established, representing costs avoided by utilization of the distributed generation asset as compared to if the electricity were being generated by a combined cycle natural gas turbine. Minimum avoided cost considerations include avoided fuel costs, avoided operation and maintenance costs, and avoided environmental costs.

An electrical company may apply to the UTC for approval of a VODG tariff. Such tariff applies for 7 years, to all new interconnections established during the year following the tariff's approval.

A prosumer must be billed for all electricity usage at the same rate as all customers of that rate class. In existing net metering law, customer-generators offset their consumption of purchased electricity, purchasing at the retail rate only the net electricity they require above the amount they have generated. Under the VODG tariff, first the customer buys at the retail rate from the utility all the electricity needed to meet its load. Then the customer is credited for the gross energy produced by the distributed generation asset, at the rate established by the tariff methodology, which may be higher or lower than the retail rate.

The governing board of a consumer-owned utility may adopt the methodologies developed by the UTC or convene a public work group to develop its own VODG tariff, based on the same minimum considerations.

Long-term Contract Mechanism.

An electric utility may adopt a long-term contract mechanism, by which the utility and the prosumer enter into a long-term contract. The contract must guarantee a fixed price payment to the prosumer at a retail rate for a certain level of electricity. The prosumer must guarantee the amount of electricity it will generate over a specific interval of time.

The specific interval of time must be at least quarterly, and ideally annually, and must be designated in the long-term contract.

The utility must measure the prosumer's actual electricity production and perform a paper calculation that compensates the prosumer at the spot market price for electricity generated in excess of the amount specified in the contract.

If the prosumer generates less electricity than the amount the prosumer guaranteed, the prosumer will be charged the difference at the spot market price. The "spot market price" is the Mid-Columbia (Mid-C) daily spot price averaged over the designated time interval.

Appropriation: None.

Fiscal Note: Available.

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