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## HOUSE BILL 1096

State of Washington 64th Legislature 2015 Regular Session

By Representatives Morris and Hudgins

Prefiled 01/09/15. Read first time 01/12/15. Referred to Committee on Technology & Economic Development.

- 1 AN ACT Relating to promoting a more efficient and reliable
- 2 electric distribution system; and adding a new chapter to Title 80
- 3 RCW.

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- 4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:
- 5 NEW SECTION. Sec. 1. The legislature finds and declares that:
- 6 (1) Rapidly changing market conditions are occurring in our 7 electric utility sector and 2012 may well be the peak year for per capita energy consumption. When combined with Washington state 8 9 citizens' desire for energy independence and self-electricity utilities are finding less revenue in the current 10 generation, 11 volumetric rate system they utilize recovery to pay 12 infrastructure costs.
  - (2) Washington state needs healthy utilities. The rapid build-out of electricity generation owned by consumers who both produce and consume electricity, known as prosumers, is challenging and rendering obsolete the careful balance of values established by our current net metering law. The state needs to adopt intermediate tools in order to ensure the health of our utilities.

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NEW SECTION. Sec. 2. The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

- (1) "Avoided environmental costs" means the costs of compliance with state and federal environmental regulations and also the savings and external environmental benefits, such as mitigation of environmental damage including but not limited to sulfur dioxide emissions, water contamination, and soil erosion, from operating the distributed generation asset instead of operating a natural gas combined cycle turbine with an emissions output equivalent to the average as determined under RCW 80.80.050.
- (2) "Avoided fuel cost" means the five-year rolling average cost of natural gas fuel at the Sumas index price of the quantity that would have to be purchased for a combined cycle gas turbine plant operating on the margin to meet electric load and related transmission and distribution losses. Whether the utility receives the fuel cost savings directly by avoiding fuel purchases, or indirectly by reducing wholesale power purchases, the method of calculating the avoided fuel cost value is the same.
- (3) "Avoided generation capacity cost" means the effective load-carrying capability of the fleet of photovoltaic systems or other distributed generation assets, as determined in the case of photovoltaic systems through an analysis of hourly photovoltaic output relative to overall utility load.
- (4) "Avoided operation and maintenance cost" means the operations and maintenance costs not incurred for operating a combined cycle gas turbine.
- (5) "Avoided reserve capacity cost" means the difference in planning margin required to ensure reliability of the transmission and distribution grid.
- 31 (6) "Avoided transmission and distribution capacity costs" means 32 the financial savings resulting from deferring capacity additions.
  - (7) "Consumer-owned utility" means, where such entity is engaged in the business of distributing electricity to one or more retail electric customers in the state, a municipal electric utility formed under Title 35 RCW, a public utility district formed under Title 54 RCW, an irrigation district formed under chapter 87.03 RCW, a cooperative formed under chapter 23.86 RCW, a mutual corporation or association formed under chapter 24.06 RCW, a port district formed

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under Title 53 RCW, or a water-sewer district formed under Title 57 RCW.

- (8) "Electric utility" has the same meaning as in RCW 80.60.010.
- (9) "Governing board" means the board of directors or legislative authority of a consumer-owned utility.
- (10) "New customer" means an electric utility customer who is establishing service for the first time at a new meter connected to a utility's distribution system.
- (11) "Prosumer" means:

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- (a) A customer-generator as defined in RCW 80.60.010;
- 11 (b) An electric utility customer with a production meter 12 connected to a utility's distribution system that measures production 13 of electricity generated on the customer's premises intended to 14 offset part or all of the customer's electricity requirements; or
- 15 (c) A utility customer who enters into a special arrangement with 16 a utility to:
- 17 (i) Obtain premium services, such as enhanced reliability or 18 voltage control, requiring extraordinary capital investment; or
- 19 (ii) Provide premium services, such as demand response, energy 20 storage, and load management.
  - NEW SECTION. Sec. 3. (1) After the cumulative generating capacity of net metering systems connected to an electric utility's distribution grid equals fifty percent or more of a utility's peak 1996 demand, an electric utility may elect, in lieu of charging customer-generators the minimum monthly fee charged to all customers of the same rate class provided in RCW 80.60.020(1)(c), to adopt an alternative to net metering valuation mechanism, as provided in one of the following sections of this chapter: The fixed charge established in section 4 of this act, the value of distributed generation tariff established in section 7 of this act, or the long-term contract established in section 9 of this act.
  - (2) An alternative to net metering valuation mechanism adopted under authority of this chapter must:
- 34 (a) Be approved by the utilities and transportation commission, 35 in the case of an electrical company; or
- 36 (b) Be approved by the governing board, in the case of a 37 consumer-owned utility.

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- 1 (3) The commission or governing board must approve the 2 alternative to net metering valuation mechanism if it determines that 3 adopting the alternative mechanism would:
  - (a) Reasonably reflect an appropriate apportionment of the different costs of serving large and small customers;
- 6 (b) Not impair incentives for conservation and energy efficiency; 7 and
- 8 (c) Not overburden low-income customers.

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- 9 <u>NEW SECTION.</u> **Sec. 4.** (1) An electric utility may assess the alternative to net metering mechanism authorized under section 3 of this act as a fixed charge to all new customers as provided in this section.
- 13 (2) The fixed charge may be assessed on a monthly or annual basis 14 or at a billing cycle interval that is intermediate between monthly 15 and annually, at the electric utility's option.
  - (3) The fixed charge may be assessed beginning with the first billing period that a new meter has been interconnected to the utility and for a duration not to exceed the amount of time that the electric utility amortizes the capital investments necessitated by servicing the new customer.
  - (4) The amount of fixed charge that may be assessed to a new customer is equal to but not greater than the amount necessary to avoid cost shifting to existing customers, as established in this subsection. The commission, in the case of an electrical company, or the governing body, in the case of a consumer-owned 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, including the following:
- 29 (a) Additional operation and maintenance costs incurred in 30 servicing the customer, including personnel costs;
- 31 (b) Costs attributable to the customer associated with 32 installing, maintaining, or upgrading wires, transformers, meters, 33 and substations; and
- 34 (c) Incremental additional costs incurred from the need to 35 provide meter reading, billing, customer service, and service drop 36 response to the customer.
- 37 (5) An electric utility may charge a new prosumer a fixed charge 38 that is greater than the fixed charge assessed to new customers in

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the same rate class who are not prosumers only as provided in this subsection.

- (a) The electric utility may assess the incremental additional cost of providing new service to a new customer, as calculated under subsection (4) of this section and as assessed to all new customers.
- (b) The electric utility may assess a charge to a new prosumer that is calculated by multiplying: (i) The percentage of the prosumer's annual electricity requirements at the meter that the prosumer meets through its own generation as a customer-generator; by (ii) the additional cost charged to a new customer, as determined in subsection (4) of this section. For example, a prosumer who generates fifty percent of the prosumer's own electricity requirements may be assessed an additional fixed charge that is fifty percent greater than the fixed charge assessed to a new customer who is not a prosumer.
- NEW SECTION. Sec. 5. The legislature finds and declares that it is desirable to develop a fair and transparent value of distributed generation tariff that accounts for the real value of customer-generated electricity and the real value of services that utilities provide to customer generators. A fair and transparent value of distributed generation tariff will provide market signals promoting the adoption of technologies that enhance the value of electricity from distributed generation sources, such as advanced inverters that provide voltage regulation benefits.
  - NEW SECTION. Sec. 6. (1) The commission must conduct a rule making to establish a methodology for determining a tariff that compensates prosumers for the value to the electrical company and its customers of installing and operating distributed generation resources interconnected to the utility system.
  - (2) The methodology must include at a minimum a method for calculating the following eight component values of a distributed generation asset, as compared to the comparable cost of generating electricity by operating a combined cycle natural gas turbine:
    - (a) Avoided fuel cost;

- (b) Avoided operation and maintenance fixed and variable costs;
- (c) Avoided generation capacity cost;
- (d) Avoided reserve capacity cost;
  - (e) Avoided transmission and distribution capacity costs; and

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(f) Avoided environmental costs.

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- 2 (3) In addition to the component values listed in subsection (2) 3 of this section, the commission must develop a methodology for 4 measuring:
  - (a) The value of voltage regulation service, if such service is provided by a utility; and
- 7 (b) The costs of integrating service to new customers into 8 existing service.
  - (4) As part of the rule making, the commission must publish a calculation table that an electrical company filing for a value of distributed generation tariff may populate with relevant data, as provided in section 7 of this act.
    - (5) A governing board of a consumer-owned utility may:
- 14 (a) Adopt the methodologies in the value of distributed 15 generation tariff adopted by the commission under subsections (1) 16 through (4) of this section; or
- 17 (b) Convene a public work group to develop its own value of 18 distributed generation tariff, which must include the minimum avoided 19 cost components outlined in subsections (2) and (3) of this section.
- NEW SECTION. Sec. 7. (1) An electrical company may apply to the commission for approval of a value of distributed generation tariff as an alternative to net metering arrangement authorized under section 3 of this act, as provided in this section.
  - (2) The tariff applies for a term of seven years to all new interconnections established over the one-year period following the date of the tariff's approval.
  - (3)(a) A prosumer must be billed for all electricity usage at the same rate that all customers of that rate class are billed. Energy derived from distributed generation assets may not be used to offset net usage prior to calculating this charge.
- 31 (b) The prosumer must receive a credit for the gross customer-32 generated electricity produced by the distributed generation asset at 33 the rate determined under the methodology developed by rule pursuant 34 to section 6 of this act.
- 35 (c) An electrical company implementing a tariff as provided under 36 this section may not assess a standby charge to prosumers.
- 37 (4) The commission shall after notice and opportunity for public 38 comment approve the value of distributed generation tariff if it 39 determines that the electrical company has appropriately applied the

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1 methodology established by the commission under section 6 of this 2 act.

- (5) An electrical company that elects to utilize a value of a distributed generation tariff must recalculate the tariff on an annual cycle and must file the recalculated tariff with the commission for approval. The annual recalculation may account for changes, including but not limited to increased or decreased fuel prices or modified hourly utility load profiles. If approved by the commission, the recalculated value of distributed generation rate applies, for a term of seven years to all prosumers entering the tariff for a one-year period from the date of approval.
- (6) The governing body of a consumer-owned utility that has developed a value of distributed generation tariff as provided in section 6(5) of this act may implement the tariff and bill prosumers for electricity usage as provided in subsections (2) and (3) of this section, and must recalculate the tariff annually as provided in subsection (5) of this section.

## 18 <u>NEW SECTION.</u> **Sec. 8.** The legislature finds and declares that:

- (1) The state, national, and global shift toward energy independence and local resiliency is driving a change in transmission and distribution of electricity that requires a network of prosumers who both produce and consume electricity according to their individual profiles, thus giving rise to flows of electricity that continuously vary in magnitude and direction.
- (2) Such continuous bidirectional fluctuations pose unique challenges to transmission and distribution utilities, but also open up a space for those companies and individuals interested in making long-term investment decisions related to the acquisition of generation or storage capacity and in exploring short-term strategies on trading electricity as an asset.
- (3) It is desirable to adopt market changes that empower prosumers to act in the electricity market not simply as a producer or essentially price-indifferent consumer, but instead in a manner that maximizes efficiency and allows prosumers and utilities together to act more profitably.
- (4) The first step towards such market transformation is enacting a policy that allows a prosumer to enter a long-term contract as an alternative net metering agreement. In this long-term contract, the prosumer projects its electricity production for a set period of

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- 1 time, and the utility measures the prosumer's actual electricity
- 2 production, compensating or charging the prosumer for the difference
- 3 between what actually was produced by the prosumer and what the
- 4 prosumer agreed with the utility that the prosumer would produce.
- NEW SECTION. Sec. 9. (1) An electric utility may adopt a longterm contract mechanism as an alternative to the net metering valuation mechanism authorized under section 3 of this act, as provided in this section.
- 9 (2) The electric utility and the prosumer shall enter into a 10 long-term contract in which the prosumer is guaranteed a fixed price 11 payment at a retail rate for a certain level of electricity that the 12 prosumer commits to generating over a specific interval of time.
- 13 (a) The interval at which a prosumer's electricity generation 14 must be projected and measured must be at least on a quarterly basis 15 and ideally on an annual basis, as designated in the long-term 16 contract.
- 17 (b) The utility shall measure the prosumer's actual electricity 18 production and perform a paper calculation that compensates the 19 prosumer at the spot market price for electricity generated in excess 20 of the amount specified in the contract over the designated time 21 interval.
- (c) If there is a deficit between the prosumer's projected and actual electricity production, the utility shall charge the prosumer for the difference, at the spot market price, for electricity that the prosumer failed to generate over the designated time interval.
- 26 (3) For purposes of this section, the spot market price is the 27 Mid-Columbia (Mid-C) daily spot price averaged over the designated 28 time interval.
- NEW SECTION. Sec. 10. Sections 1 through 9 of this act constitute a new chapter in Title 80 RCW.

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