HOUSE BILL 2135

State of Washington 61st Legislature 2009 Regular Session

By Representative Chase

Read first time 02/11/09. Referred to Committee on Technology, Energy & Communications.

- 1 AN ACT Relating to renewable energy; adding a new chapter to Title
- 2 80 RCW; and declaring an emergency.

biennial basis.

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- 3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:
- 4 NEW SECTION. The legislature finds that the energy Sec. 1. 5 independence act, chapter 19.285 RCW, requires certain electric utilities to pursue the development of eligible renewable resources. 6 The legislature finds that electric utilities are required to employ a least-cost strategy when planning to serve load growth. 8 9 intent of the legislature to establish a methodology available to 10 electric utilities for pursuing above market resources by allowing 11 electric utilities and renewable energy investors to recover these resource costs and a reasonable return on that investment in an 12 13 equitable manner from all ratepayer classes with the exemption of low-14 income customers and intensive industries. It is also the intent of 15 the legislature to establish a cap on the permissible costs for these 16 resources and establish a methodology for reviewing these caps on a
- 18 Further, it is the intent of the legislature to encourage the rapid

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- and sustainable development of renewable energy by the adoption of renewable energy payments for the following purposes:
 - (1) Placing Washington at the forefront of North America's renewable energy revolution;
 - (2) Stimulating the development of new technologies and industry in Washington;
 - (3) Reducing the volatility of future electricity prices;
 - (4) Reducing the long-term costs of electricity;

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- (5) Protecting Washington's citizens from air pollution;
- (6) Protecting Washington's climate from global warming;
- (7) Protecting Washington's natural resources;
- 12 (8) Opening electricity generation from renewable resources to all citizens regardless of their tax status;
- 14 (9) Providing an equitable opportunity for all citizens to help 15 meet the state's renewable energy targets; and
- 16 (10) Simplifying the awarding of contracts for the generation of 17 electricity with renewable energy resources and by doing so increasing 18 the transparency and equity of the electricity generation system.
- 19 <u>NEW SECTION.</u> **Sec. 2.** The definitions in this section apply 20 throughout this chapter unless the context clearly requires otherwise.
 - (1) "Carbon content multiplier" means a decimal value derived from the carbon content of the energy used in production or manufacture of the solar energy systems modules. The carbon content multiplier is the ratio of carbon fuel generated electricity using carbon-free electricity in the nation or state of the manufacturer's energy mix inventory as calculated by the United States energy information administration.
 - (2) "Commission" means the utilities and transportation commission.
 - (3) "Commissioning" means the first time a renewable energy plant is put into operation, following establishment of operational readiness or an efficiency upgrade. An efficiency upgrade must equal at least fifty percent of the investment costs required to build a completely new renewable energy plant including all building structures and installations technically required for its operation.
- 35 (4) "Electric utility" has the same meaning as defined in RCW 36 19.29A.010.

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(5) "Energy intensive industry" means a manufacturing or refining business that produces a product and more than fifty percent of the product's production costs are expenses for electricity.

- (6) "Grid system" means all the interconnected facilities used for the transmission and distribution of electricity for general supply.
- (7) "Renewable energy payment" means the rate paid in dollars per kilowatt-hour of generation delivered to the grid system.
- (8) "Renewable energy plant" means any independent facility producing kilowatts from renewable energy sources, including thermal kilowatts used for commercial, industrial, or residential water heating from renewable energy sources. Multiple renewable energy plants generating electricity from equivalent renewable energy sources, if constructed within the application of this chapter and directly attached to building structures and commonly used installations technically required for operation, are considered as one renewable energy plant. This includes inverters, access ways, and grid system connections, as well as measuring, administrative, and control facilities that are not technically required for such operation.
- (9) "Renewable energy plant capacity" means the effective electrical capacity that a renewable energy plant of no more than five megawatts may technically produce without time restrictions during regular operation irrespective of short-term deviations. When the relevant renewable energy plant capacity is determined to calculate renewable energy payments, the standby capacity may not be considered.
- (10) "Renewable energy plant operator" means anyone who, regardless of ownership, uses the renewable energy plant for the purpose of generating electricity from renewable energy sources.
- (11) "Renewable energy sources" means: (a) Hydropower; (b) wind energy; (c) solar radiation; (d) geothermal energy; (e) energy from biomass including biogas, landfill gas, and sewage treatment plant gas; (f) wave power; (g) tidal power; and (h) geothermal electricity and the biodegradable fraction of municipal and industrial waste that qualifies as a small power production facility under the federal energy regulatory commission rules, 18 CFR part 292, subpart B, as in effect on January 1, 1997.
- (12) "Renewable energy trust account" means the account created in section 10 of this act that is to be used exclusively to reimburse

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utilities for renewable energy payments made to customers under this chapter.

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- (13) "Renewable recovery rates" means the investment cost plus operating cost divided by the expected production over the service life of the renewable energy source equals the compensation per kilowatt hour.
- 7 (14) "Small wind turbine" means any wind turbine with a rotor swept 8 area of no more than one thousand square feet.
- 9 NEW SECTION. Sec. 3. (1) An electric utility shall connect a renewable energy plant to its distribution system within thirty days 10 11 for a renewable energy plant with plant capacity under twenty-five 12 kilowatts, and within sixty days for a renewable energy plant with 13 plant capacity greater than twenty-five kilowatts and fewer than one hundred kilowatts. These renewable energy plants are connected upon 14 the terms and condition set by the commission but in no case may it 15 16 take more than one hundred twenty days after receipt of a request for connection to occur. 17
 - (2) The commission shall establish standards for the interconnection of renewable energy plants with the grid system. The standards must be consistent with generally accepted industry practices and guidelines to ensure the reliability of electric service to all customers and the safety of customers, the grid system operator's employees, and the public.
 - (3) Every kilowatt-hour of electricity generated by the renewable energy plant counts toward the electric utility's annual renewable resource requirements under RCW 19.285.040.
 - (4) An electric utility shall prepare, publish, and apply transparent, objective, and nondiscriminatory rules for connecting renewable energy plants to the grid system, including grid system reinforcement and costs, the sharing of grid system costs between all producers benefiting from them, and allocating grid system capacity.
 - (5) An electric utility shall provide to an eligible renewable energy plant operator a comprehensive and detailed estimate of the costs associated with connection of the renewable energy plant to the grid system.
- 36 (6) The costs associated with the interconnection of renewable 37 energy plants, including both direct interconnection costs,

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- 1 distribution system enhancements, and electric utility compliance
- 2 costs, are recoverable as part of the nonbypassable surcharge under
- 3 section 6 of this act.

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- NEW SECTION. Sec. 4. (1) The commission shall approve a standard contract to be used in all power purchase agreements under this chapter.
- 7 (2) The contract must include the price paid for each kilowatt-hour 8 generated, the duration of the contract, and any adjustments of the 9 price for inflation.
 - (3) For renewable energy plants with a plant capacity under one hundred kilowatts, the commission shall approve simplified standard contracts written in simple, clear language.
 - (4) Contracts under this chapter are transferable.
- 14 (5) No contract for renewable energy plants larger than five 15 megawatts are allowed under this chapter.
- NEW SECTION. Sec. 5. (1) An electric utility shall enter into power purchase agreements to acquire all of the electricity generated by renewable energy plants located in the state for a term of not less than twenty years from the date of commissioning.
- 20 (2) An electric utility shall pay the renewable energy payments as 21 provided in the table in subsection (7) of this section.
 - (3) The renewable energy payment rates provided in the table in subsection (7) of this section must be indexed to one hundred percent of inflation until such time as amended by the legislature, based upon input from the commission as informed by the Washington State University energy extension as provided in subsection (6) of this section.
 - (4) From the date of commissioning of a renewable energy plant, inflation adjusted renewable energy payment rates provided in the table in subsection (7) of this section must be indexed to sixty percent of inflation.
- 32 (5) The renewable energy payments paid for electricity generated by 33 small wind turbines must be based on the cost of generation plus a 34 reasonable profit, based on kilowatt-hours per square meters per year 35 of rotor swept area as described in this subsection (5).

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- (a) Renewable energy payments for all wind generation from year one through five are described as the base wind renewable energy payment as provided in the table in subsection (7) of this section.
- (b) Renewable energy payments for years six through twenty must be based on the average specific yield in kilowatt-hours per square meter of rotor swept area per year that is either under one thousand kilowatt-hours per square meter per year or over one thousand kilowatt-hours per square meter per year, based on measured performance of the system.
- (c) Measured performance is the average of the sum of the first five years of production in kilowatt-hours, less the year of maximum and the year of minimum production, divided by the rotor swept area in square meters.
- (d) Small wind turbines with measured performance under one thousand kilowatt-hours per square meters per year must be paid the base wind renewable energy payment for years six through twenty.
- (e) Small wind turbines with measured performance over one thousand kilowatt-hours per square meters per year must be paid the high wind renewable energy payment for years six through twenty.
- (6) The Washington State University energy extension shall calculate and publish annually a table of state and national carbon content multipliers for use by electric utilities in establishing renewable recovery rates for any renewable energy plant the electric utilities contract for power from or construct.

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26	Renewable energy c	Renewable energy cost recovery rates			
27		Years	Rate		
28	Wind				
29	Land based	1 through 5	0.125		
30	Base wind (<1,000	6 through	0.125		
31	kWhr/m2/yr)	20			
32	High wind (>1,000 kWhr	6 through	0.08		
33	/m2/yr)	20			
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35	Off shore				

Base wind (<1,000 kWhr	6 through	0.125
/m2/yr)	20	
High wind (>1,000 kWhr	6 through	0.08
/m2/yr)	20	
Small wind	20	0.2
Solar		
<30 kW	20	0.40
30 kW to 100 kW	20	0.36
100 kW to 1,000 kW	20	0.30
1,000 kW to 5 MW	20	0.26
Solar thermal	10	.08
Façade cladding	20	0.40
Hydro/current/wave		
<500 kW	20	0.10
500 kW to 5 MW	20	0.08
Biomass/biogas		
<500 kW	20	0.14
500 kW to 5 MW	20	0.12
Geothermal electric		
<500kW	20	0.12
500 kW to 5 MW	20	0.1
	/m2/yr) High wind (>1,000 kWhr /m2/yr) Small wind Solar <30 kW 30 kW to 100 kW 100 kW to 1,000 kW 1,000 kW to 5 MW Solar thermal Façade cladding Hydro/current/wave <500 kW 500 kW to 5 MW Biomass/biogas <500 kW 500 kW to 5 MW	/m2/yr) 20 High wind (>1,000 kWhr /m2/yr) 6 through /m2/yr) Small wind 20 Solar 20 30 kW

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The values in this table are to be multiplied by the appropriate 30 carbon content multiplier based on place of manufacture of technology.

<u>NEW SECTION.</u> **Sec. 6.** (1) The commission shall assess a renewable energy rate recovery fee equal to one percent of the monthly bill per The renewable energy rate recovery fee is a nonbypassable surcharge payable by every customer of an electric utility. All customer classes must pay the surcharge.

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1 (2) The commission shall adjust the surcharge at a level sufficient 2 to pay the costs of electricity purchased under this chapter and any 3 interconnection costs authorized under this chapter. Revenues must be 4 placed in the renewable energy trust account.

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- (3) The commission may adjust or remove the surcharge for energy intensive industries that buy electricity in Washington if an energy intensive industry can prove hardship. In evaluating hardship, the commission shall consider the financial impacts of the surcharge on the competitiveness of an energy intensive industry and weigh similar provisions in other jurisdictions in North America and worldwide, maintaining the competitive position of an energy intensive industry.
- 12 (4) The commission may adjust or remove the surcharge for low-13 income customers of the electric utility.
- NEW SECTION. Sec. 7. Nothing in this chapter is intended to reduce, impede, or conflict with the provisions of chapter 19.285 RCW or RCW 82.16.090 through 82.16.140. It is the intent of the legislature that this chapter operate in parallel with the energy conservation and renewable energy requirements of chapter 19.285 RCW and RCW 82.16.090 through 82.16.140.
- 20 NEW SECTION. Sec. 8. Renewable energy plant operators, qualifying owners that own all or part of a renewable energy plant, and an 21 22 electric utility shall, upon request, provide the commission with any 23 information that may be relevant to the commission performing its 24 duties under this chapter, including but not limited to assessment of 25 project development costs, equipment costs, electricity production costs, interconnection costs, automatic rate adjustments, compliance 26 27 costs, renewable energy plant capacity installed, and electricity 28 generated.
- NEW SECTION. **Sec. 9.** (1) In 2010 and 2011, and every four years thereafter, the commission shall review implementation of this chapter for compliance with the intent of this chapter.
- 32 (2) The commission shall report to the governor and the legislature 33 the following:
- 34 (a) The number of new renewable energy plants in this state and the 35 environmental effects of the addition of those generators;

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(b) The robustness of the program in delivering the renewable energy generation required under Washington's renewable portfolio standard and other renewable energy objectives;

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- (c) Recommendations for changes to this chapter, if any, that may be necessary; and
- (d) Actions taken by the commission to implement this chapter and 6 7 to use the renewable energy payments in this chapter to achieve 8 Washington's renewable energy objectives and renewable portfolio 9 standards. In revising allowable renewable energy payment amounts, the 10 commission shall consider inflation, changes in technology, and the 11 increased or decreased costs of renewable energy generation. 12 commission must ensure that the renewable energy payments 13 sufficient to pay for the costs of generation plus a reasonable profit.
- 14 NEW SECTION. Sec. 10. The renewable energy trust account is created in the custody of the state treasurer. All receipts from the 15 16 renewable energy rate recovery fee imposed under section 6 of this act must be deposited into the account. Expenditures from the account may 17 18 be used only for the reimbursement of utilities for renewable energy payments made to customers under this chapter. Only the commission may 19 20 authorize expenditures from the account. The account is subject to 21 allotment procedures under chapter 43.88 RCW, but an appropriation is 22 not required for expenditures.
- NEW SECTION. Sec. 11. Sections 1 through 10 of this act constitute a new chapter in Title 80 RCW.
- NEW SECTION. Sec. 12. This act is necessary for the immediate preservation of the public peace, health, or safety, or support of the state government and its existing public institutions, and takes effect immediately.

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