CERTIFICATION OF ENROLLMENT

ENGROSSED SECOND SUBSTITUTE HOUSE BILL 1287

67th Legislature 2021 Regular Session

Passed by the House April 14, 2021 Yeas 54 Nays 43

Speaker of the House of Representatives

Passed by the Senate April 10, 2021 Yeas 25 Nays 23

CERTIFICATE

I, Bernard Dean, Chief Clerk of the House of Representatives of the State of Washington, do hereby certify that the attached is ENGROSSED SECOND SUBSTITUTE HOUSE BILL 1287 as passed by the House of Representatives and the Senate on the dates hereon set forth.

Chief Clerk

President of the Senate

Approved

FILED

Secretary of State State of Washington

Governor of the State of Washington

ENGROSSED SECOND SUBSTITUTE HOUSE BILL 1287

AS AMENDED BY THE SENATE

Passed Legislature - 2021 Regular Session

State of Washington 67th Legislature 2021 Regular Session

By House Transportation (originally sponsored by Representatives Ramel, Hackney, Bateman, Fitzgibbon, Berry, Goodman, Santos, Kloba, Macri, Bergquist, Ormsby, and Pollet)

READ FIRST TIME 02/22/21.

1 AN ACT Relating to preparedness for a zero emissions 2 transportation future; amending RCW 19.280.030, 19.27.540, and 3 82.44.200; adding a new section to chapter 47.01 RCW; adding a new 4 chapter to Title 70A RCW; and creating a new section.

5 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

6 <u>NEW SECTION.</u> Sec. 1. (1) Motor vehicles are a significant 7 source of air pollution, including greenhouse gas emissions, in 8 Washington. The transportation sector accounts for nearly one-half of 9 greenhouse gas emissions in Washington, and on-road vehicle emissions 10 are responsible for the vast majority of the transportation sector 11 emissions.

12 The widespread adoption of zero emissions vehicles (2)is achievement of the state 13 essential to the emissions limits 14 established in RCW 70A.45.020, which, by 2050, requires a reduction 15 of greenhouse gas emissions to 5,000,000 metric tons and the 16 achievement of net zero greenhouse gas emissions. The rapid uptake of 17 zero emissions vehicles is also an essential component of the state 18 energy strategy, which calls for the phase out of vehicles powered by 19 qasoline or diesel by mid-century. To ensure that the necessary 20 infrastructure is in place to facilitate zero emissions vehicle 21 adoption, the state energy strategy calls for the establishment of

building codes that require installation of the conduit, wiring, and panel capacity necessary to support electric vehicle charging in new and retrofitted buildings.

4 (3) In 2005, Washington first took action to adopt some of the 5 motor vehicle emissions standards of the state of California, which 6 are more protective of human health and the environment than federal 7 motor vehicle emissions standards. In 2020, the legislature directed 8 the department of ecology to adopt all of California's motor vehicle 9 emissions standards, including California's zero emissions vehicles 10 program.

11 (4) A Washington state transition to a zero emissions 12 transportation future requires accurate forecasting of zero emissions vehicle adoption rates, comprehensive planning for the necessary 13 vehicle charging 14 electric and green hydrogen production infrastructure, including the siting of infrastructure in desirable 15 16 locations with amenities, such as near convenience stores, gas stations, and other small retailers, and managing the load of 17 charging and green hydrogen production and refueling infrastructure 18 19 as a dynamic energy service to the electric grid.

20 (5) To ensure that the transition to a zero emissions 21 transportation future proceeds efficiently and conveniently for users 22 and operators of the multimodal transportation system, it is the 23 intent of the legislature to:

(a) Require state government to provide resources that facilitate
the planning and deployment of electric vehicle charging and
refueling infrastructure in a transparent, effective, and equitable
manner across the state;

(b) Ensure utility resource planning analyzes the impacts on
 electricity generation and delivery from growing adoption and usage
 of electric vehicles; and

31 (c) Require state building codes that support the anticipated 32 levels of zero emissions vehicle use that result from the program 33 requirements in chapter 70A.30 RCW and that achieve emissions 34 reductions consistent with RCW 70A.45.020.

35 <u>NEW SECTION.</u> Sec. 2. A new section is added to chapter 47.01 36 RCW to read as follows:

37 (1) The department, through the department's public-private 38 partnership office and in consultation with the department of 39 ecology, the department of commerce, and the office of equity, must

develop and maintain a publicly available mapping and forecasting tool that provides locations and essential information of charging and refueling infrastructure to support forecasted levels of electric vehicle adoption, travel, and usage across Washington state.

5 (2)(a) The publicly available mapping and forecasting tool must 6 be designed to enable coordinated, effective, efficient, and timely 7 deployment of charging and refueling infrastructure necessary to 8 support statewide and local transportation electrification efforts 9 that result in emissions reductions consistent with RCW 70A.45.020.

10 (b) The tool must:

11 (i) Initially prioritize on-road transportation;

12 (ii) To the greatest extent possible, maintain the latest data; 13 (iii) Model charging and refueling infrastructure that may be 14 used by owners and operators of light, medium, and heavy-duty 15 vehicles; and

16 (iv) Incorporate the department's traffic data for passenger and 17 freight vehicles.

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(c) The tool must, if feasible:

(i) Provide the data necessary to support programs by state agencies that directly or indirectly support transportation electrification efforts;

22 (ii) Evolve over time to support future transportation 23 electrification programs;

(iii) Provide data at a scale that supports electric utility
planning for the impacts of transportation electrification both
systemwide and on specific components of the distribution system; and

(iv) Forecast statewide zero emissions vehicle use that would achieve the emissions reductions consistent with RCW 70A.45.020. The department may reference existing zero emissions vehicle use forecasts, such as that established in the state energy strategy.

31 (3) The department, in consultation with the department of 32 commerce, the department of ecology, and the office of equity, may 33 elect to include other transportation charging and refueling 34 infrastructure, such as maritime, public transportation, and aviation 35 in the mapping and forecasting tool.

36 (4) The tool must include, to the extent feasible, the following 37 elements:

(a) The amount, type, location, and year of installation forelectric vehicle supply equipment that is expected to be necessary to

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support forecasted electric vehicle penetration and usage within the state;

3 (b) Electric vehicle adoption, usage, technological profiles, and 4 any other characteristics necessary to model future electric vehicle 5 penetration levels and use cases that impact electric vehicle supply 6 equipment needs within the state;

7 (c) The estimated energy and capacity demand based on inputs from8 (b) of this subsection;

9 (d) Boundaries of political subdivisions including, but not 10 limited to:

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(i) Retail electricity suppliers;

12 (ii) Public transportation agency boundaries;

13 (iii) Municipalities;

14 (iv) Counties; and

15 (v) Federally recognized tribal governments;

16 (e) Existing and known publicly or privately owned level 2, 17 direct current fast charge, and refueling infrastructure. The 18 department must identify gas stations, convenience stores, and other 19 small retailers that are colocated with existing and known electric 20 vehicle charging infrastructure identified under this subsection;

(f) A public interface designed to provide any user the ability to determine the forecasted charging and refueling infrastructure needs within a provided geographic boundary, including those listed under (d) of this subsection; and

(g) The ability for all data tracked within the tool to be downloadable or usable within a separate mapping and forecasting tool.

28 29 (5) The tool must, if feasible, integrate scenarios including:

(a) Varying levels of public transportation utilization;

30 (b) Varying levels of active transportation usage, such as biking 31 or walking;

32 33 (c) Vehicle miles traveled amounts above and below the baseline;

(d) Adoption of autonomous and shared mobility services; and

34 (e) Forecasts capturing each utility service area's relative 35 level of zero emissions vehicle use that would achieve each utility 36 service area's relative emissions reductions consistent with RCW 37 70A.45.020.

38 (6) To support highly impacted communities and vulnerable 39 populations disproportionately burdened by transportation-related 40 emissions and to ensure economic and mobility benefits flow to

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1 communities that have historically received less investment in infrastructure, the mapping and forecasting tool must integrate 2 population, health, environmental, and socioeconomic data on a census 3 tract basis. The department may use existing data used by other state 4 or federal agencies. The department must consult with the department 5 6 of health, the office of equity, the department of ecology, and other agencies as necessary in order to ensure the tool properly integrates 7 cumulative impact analyses best practices and to ensure that the tool 8 coordination with other state 9 is developed in government 10 administrative efforts to identify disproportionately impacted 11 communities.

12 (7) The mapping and forecasting tool must, to the extent appropriate, integrate related analyses, such as the department of 13 14 commerce's state energy strategy, the joint transportation 15 committee's public fleet electrification study, the west coast 16 collaborative's alternative fuel infrastructure corridor coalition 17 report, and other related electric vehicle supply equipment 18 assessments as deemed appropriate. To the extent that the mapping and 19 forecasting tool is used by the department as the basis for the identification of recommended future electric vehicle charging sites, 20 21 the department must consider recommending sites that are colocated 22 with small retailers, including gas stations and convenience stores, 23 and other amenities.

(8) Where appropriate and feasible, the mapping and forecasting
 tool must incorporate infrastructure located at or near the border in
 neighboring state and provincial jurisdictions.

(9) In designing the mapping and forecasting tool, the department must coordinate with the department of commerce, the department of ecology, the utilities and transportation commission, and other state agencies as needed in order to ensure the mapping and forecasting tool is able to successfully facilitate other state agency programs that involve deployment of electric vehicle supply equipment.

(10) The department must conduct a stakeholder process in developing the mapping and forecasting tool to ensure the tool supports the needs of communities, public agencies, and relevant private organizations. The stakeholder process must involve stakeholders, including but not limited to electric utilities, early in the development of the tool.

(11) The department may contract with the department of commerceor consultants, or both, to develop and implement all or portions of

1 the mapping and forecasting tool. The department may rely on or, to 2 the extent necessary, contract for privately maintained data 3 sufficient to develop the elements specified in subsection (4) of 4 this section.

5 (12) The definitions in this subsection apply throughout this 6 section unless the context clearly requires otherwise:

7 (a) "Charging infrastructure" means a unit of fueling 8 infrastructure that supplies electric energy for the recharging of 9 battery electric vehicles.

10 (b) "Direct current fast charger" means infrastructure that 11 supplies electricity to battery electric vehicles at capacities no 12 less than 50 kilowatts, typically using 208/408 volt three-phase 13 direct current electricity.

14 (c) "Electric vehicle" means any craft, vessel, automobile, 15 public transportation vehicle, or equipment that transports people or 16 goods and operates, either partially or exclusively, on electrical 17 energy from an off-board source that is stored onboard for motive 18 purpose.

19 (d) "Electric vehicle supply equipment" means charging20 infrastructure and hydrogen refueling infrastructure.

(e) "Level 2 charger" means infrastructure that supplies
 electricity to battery electric vehicles at 240 volts and equal to or
 less than 80 amps.

(f) "Refueling infrastructure" means a unit of fueling infrastructure that supplies hydrogen for the resupply of hydrogen fuel cell electric vehicles.

27 Sec. 3. RCW 19.280.030 and 2019 c 288 s 14 are each amended to 28 read as follows:

Each electric utility must develop a plan consistent with this section.

31 (1) Utilities with more than twenty-five thousand customers that are not full requirements customers must develop or update an 32 integrated resource plan by September 1, 2008. At a minimum, progress 33 reports reflecting changing conditions and the progress of the 34 35 integrated resource plan must be produced every two years thereafter. An updated integrated resource plan must be developed at least every 36 four years subsequent to the 2008 integrated resource plan. The 37 38 integrated resource plan, at a minimum, must include:

(a) A range of forecasts, for at least the next ten years or
 longer, of projected customer demand which takes into account
 econometric data and customer usage;

(b) An assessment of commercially available conservation and 4 efficiency resources, as informed, as applicable, by the assessment 5 6 for conservation potential under RCW 19.285.040 for the planning horizon consistent with (a) of this subsection. Such assessment may 7 include, as appropriate, opportunities for development of combined 8 heat and power as an energy and capacity resource, demand response 9 and load management programs, and currently employed and new policies 10 11 and programs needed to obtain the conservation and efficiency 12 resources;

13 (c) An assessment of commercially available, utility scale 14 renewable and nonrenewable generating technologies including a 15 comparison of the benefits and risks of purchasing power or building 16 new resources;

17 (d) A comparative evaluation of renewable and nonrenewable 18 generating resources, including transmission and distribution 19 delivery costs, and conservation and efficiency resources using 20 "lowest reasonable cost" as a criterion;

(e) An assessment of methods, commercially available
technologies, or facilities for integrating renewable resources,
including but not limited to battery storage and pumped storage, and
addressing overgeneration events, if applicable to the utility's
resource portfolio;

26 (f) An assessment and ten-year forecast of the availability of 27 regional generation and transmission capacity on which the utility 28 may rely to provide and deliver electricity to its customers;

(g) A determination of resource adequacy metrics for the resourceplan consistent with the forecasts;

31 (h) A forecast of distributed energy resources that may be 32 installed by the utility's customers and an assessment of their 33 effect on the utility's load and operations;

(i) An identification of an appropriate resource adequacy
 requirement and measurement metric consistent with prudent utility
 practice in implementing RCW 19.405.030 through 19.405.050;

(j) The integration of the demand forecasts, resource evaluations, and resource adequacy requirement into a long-range assessment describing the mix of supply side generating resources and conservation and efficiency resources that will meet current and

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1 projected needs, including mitigating overgeneration events and 2 implementing RCW 19.405.030 through 19.405.050, at the lowest 3 reasonable cost and risk to the utility and its customers, while 4 maintaining and protecting the safety, reliable operation, and 5 balancing of its electric system;

6 (k) An assessment, informed by the cumulative impact analysis 7 conducted under RCW 19.405.140, of: Energy and nonenergy benefits and 8 reductions of burdens to vulnerable populations and highly impacted 9 communities; long-term and short-term public health and environmental 10 benefits, costs, and risks; and energy security and risk; ((and))

(1) A ten-year clean energy action plan for implementing RCW 12 19.405.030 through 19.405.050 at the lowest reasonable cost, and at 13 an acceptable resource adequacy standard, that identifies the 14 specific actions to be taken by the utility consistent with the 15 long-range integrated resource plan; and

16

(m) An analysis of how the plan accounts for:

17 <u>(i) Modeled load forecast scenarios that consider the anticipated</u> 18 <u>levels of zero emissions vehicle use in a utility's service area,</u> 19 <u>including anticipated levels of zero emissions vehicle use in the</u> 20 <u>utility's service area provided in section 2 of this act, if</u> 21 <u>feasible;</u>

(ii) Analysis, research, findings, recommendations, actions, and any other relevant information found in the electrification of transportation plans submitted under RCW 35.92.450, 54.16.430, and 80.28.365; and

26 (iii) Assumed use case forecasts and the associated energy 27 impacts. Electric utilities may, but are not required to, use the 28 forecasts generated by the mapping and forecasting tool created in 29 section 2 of this act. This subsection (1)(m)(iii) applies only to 30 plans due to be filed after September 1, 2023.

31 (2) For an investor-owned utility, the clean energy action plan 32 must: (a) Identify and be informed by the utility's ten-year cost-33 effective conservation potential assessment as determined under RCW 34 19.285.040, if applicable; (b) establish a resource adequacy requirement; (c) identify the potential cost-effective demand 35 response and load management programs that may be acquired; (d) 36 identify renewable resources, nonemitting electric generation, and 37 distributed energy resources that may be acquired and evaluate how 38 39 each identified resource may be expected to contribute to meeting the 40 utility's resource adequacy requirement; (e) identify any need to

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develop new, or expand or upgrade existing, bulk transmission and distribution facilities; and (f) identify the nature and possible extent to which the utility may need to rely on alternative compliance options under RCW 19.405.040(1)(b), if appropriate.

5 (3)(a) An electric utility shall consider the social cost of 6 greenhouse gas emissions, as determined by the commission for 7 investor-owned utilities pursuant to RCW 80.28.405 and the department 8 for consumer-owned utilities, when developing integrated resource 9 plans and clean energy action plans. An electric utility must 10 incorporate the social cost of greenhouse gas emissions as a cost 11 adder when:

12 (i) Evaluating and selecting conservation policies, programs, and13 targets;

14 (ii) Developing integrated resource plans and clean energy action 15 plans; and

16 (iii) Evaluating and selecting intermediate term and long-term 17 resource options.

(b) For the purposes of this subsection (3): (i) Gas consisting largely of methane and other hydrocarbons derived from the decomposition of organic material in landfills, wastewater treatment facilities, and anaerobic digesters must be considered a nonemitting resource; and (ii) qualified biomass energy must be considered a nonemitting resource.

(4) To facilitate broad, equitable, and efficient implementation of chapter 288, Laws of 2019, a consumer-owned energy utility may enter into an agreement with a joint operating agency organized under chapter 43.52 RCW or other nonprofit organization to develop and implement a joint clean energy action plan in collaboration with other utilities.

30 (5) All other utilities may elect to develop a full integrated 31 resource plan as set forth in subsection (1) of this section or, at a 32 minimum, shall develop a resource plan that:

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(a) Estimates loads for the next five and ten years;

34 (b) Enumerates the resources that will be maintained and/or 35 acquired to serve those loads;

36 (c) Explains why the resources in (b) of this subsection were 37 chosen and, if the resources chosen are not: (i) Renewable resources; 38 (ii) methods, commercially available technologies, or facilities for 39 integrating renewable resources, including addressing any

1 overgeneration event; or (iii) conservation and efficiency resources, 2 why such a decision was made; ((and))

3 (d) By December 31, 2020, and in every resource plan thereafter,
4 identifies how the utility plans over a ten-year period to implement
5 RCW 19.405.040 and 19.405.050; and

6 (e) Accounts for:

7 <u>(i) Modeled load forecast scenarios that consider the anticipated</u> 8 <u>levels of zero emissions vehicle use in a utility's service area,</u> 9 <u>including anticipated levels of zero emissions vehicle use in the</u> 10 <u>utility's service area provided in section 2 of this act, if</u> 11 <u>feasible;</u>

12 (ii) Analysis, research, findings, recommendations, actions, and 13 any other relevant information found in the electrification of 14 transportation plans submitted under RCW 35.92.450, 54.16.430, and 15 80.28.365; and

16 (iii) Assumed use case forecasts and the associated energy 17 impacts. Electric utilities may, but are not required to, use the 18 forecasts generated by the mapping and forecasting tool created in 19 section 2 of this act. This subsection (5)(e)(iii) applies only to 20 plans due to be filed after September 1, 2023.

(6) Assessments for demand side resources included in an integrated resource plan may include combined heat and power systems as one of the measures in a conservation supply curve. The value of recoverable waste heat resulting from combined heat and power must be reflected in analyses of cost-effectiveness under this subsection.

26 (7) An electric utility that is required to develop a resource 27 plan under this section must complete its initial plan by September 28 1, 2008.

(8) Plans developed under this section must be updated on a
 regular basis, on intervals approved by the commission or the
 department, or at a minimum on intervals of two years.

32 (9) Plans shall not be a basis to bring legal action against33 electric utilities.

(10) (a) To maximize transparency, the commission, for investorowned utilities, or the governing body, for consumer-owned utilities, may require an electric utility to make the utility's data input files available in a native format. Each electric utility shall publish its final plan either as part of an annual report or as a separate document available to the public. The report may be in an electronic form.

1 (b) Nothing in this subsection limits the protection of records 2 containing commercial information under RCW 80.04.095.

3 (11) By December 31, 2021, the department and the commission must 4 adopt rules establishing the requirements for incorporating the 5 cumulative impact analysis developed under RCW 19.405.140 into the 6 criteria for developing clean energy action plans under this section.

7 Sec. 4. RCW 19.27.540 and 2019 c 285 s 18 are each amended to 8 read as follows:

9 (1) The building code council shall adopt rules for electric 10 vehicle infrastructure requirements. Rules adopted by the state 11 building code council must consider applicable national and 12 international standards and be consistent with rules adopted under 13 RCW 19.28.281.

(2) (a) Except as provided in (b) of this subsection, the rules 14 15 adopted under this section must require electric vehicle charging 16 capability at all new buildings that provide on-site parking. Where parking is provided, the greater of one parking space or ten percent 17 18 of parking spaces, rounded to the next whole number, must be provided with wiring or raceway sized to accommodate 208/240 V 40-amp or 19 20 equivalent electric vehicle charging. Electrical rooms serving buildings with on-site parking must be sized to accommodate the 21 22 potential for electrical equipment and distribution required to serve a minimum of twenty percent of the total parking spaces with 208/240 23 24 V 40-amp or equivalent electric vehicle charging. Load management infrastructure may be used to adjust the size and capacity of the 25 required building electric service equipment and circuits on the 26 27 facilities, as well as electric utility-owned customer infrastructure, as allowed by applicable local 28 and national electrical code. For accessible parking spaces, the greater of one 29 30 parking space or ten percent of accessible parking spaces, rounded to 31 the next whole number, must be provided with electric vehicle charging infrastructure that may also serve adjacent parking spaces 32 not designated as accessible parking. 33

34 (b) For occupancies classified as assembly, education, or 35 mercantile, the requirements of this section apply only to employee 36 parking spaces. The requirements of this section do not apply to 37 occupancies classified as $((residential R-3_r))$ utility $((_r))$ or 38 miscellaneous.

1 (c) ((The)) Except for rules related to residential R-3, the 2 required rules required under this subsection must be implemented by 3 July 1, 2021. The rules required under this subsection for 4 occupancies classified as residential R-3 must be implemented by July 5 <u>1, 2024.</u>

6 <u>(3)(a) The rules adopted under this section must exceed the</u> 7 specific minimum requirements established under subsection (2) of 8 this section for all types of residential and commercial buildings to 9 the extent necessary to support the anticipated levels of zero 10 emissions vehicle use that result from the zero emissions vehicle 11 program requirements in chapter 70A.30 RCW and that result in 12 emissions reductions consistent with RCW 70A.45.020.

13 (b) The rules required under this subsection must be implemented 14 by July 1, 2024, and may be periodically updated thereafter.

15 Sec. 5. RCW 82.44.200 and 2019 c 287 s 15 are each amended to 16 read as follows:

The electric vehicle account is created in the transportation 17 18 infrastructure account. Proceeds from the principal and interest payments made on loans from the account must be deposited into the 19 20 account. Expenditures from the account may be used only for the purposes specified in RCW 47.04.350, 82.08.9999, and 82.12.9999, and 21 22 the support of other transportation electrification and alternative fuel related purposes, including section 2 of this act. Moneys in the 23 24 account may be spent only after appropriation.

25 NEW SECTION. Sec. 6. (1) Once a road usage charge, or 26 equivalent fee or tax based on vehicle miles traveled, is in effect in the state of Washington with at least 75 percent of the registered 27 passenger and light duty vehicles in the state participating, then a 28 goal is established for the state that all publicly owned and 29 30 privately owned passenger and light duty vehicles of model year 2030 31 or later that are sold, purchased, or registered in Washington state 32 be electric vehicles. The department of licensing shall provide notice to the secretary of the senate and the chief clerk of the 33 house of representatives, and the office of the governor when the 34 35 road usage charge is in effect and the required number of registered 36 vehicles are participating.

1 (2) The goal established in this section does not supersede any 2 other law, and the other law controls if inconsistent with the goal 3 established in this section.

4 (3) For purposes of this section:

5 (a) "Electric vehicles" are vehicles that use energy stored in 6 rechargeable battery packs or in hydrogen and which rely solely on 7 electric motors for propulsion.

8 (b) "Passenger and light duty vehicles" are on-road motor 9 vehicles with a scale weight of up to 10,000 pounds and three or more 10 wheels. Emergency services vehicles are not passenger and light duty 11 vehicles.

12 (4) Nothing in this section:

(a) Authorizes any state agency to restrict the purchase, sale,or registration of vehicles that are not electric vehicles; or

(b) Changes or affects the directive to the department of ecology to implement the zero emission vehicle program required under RCW 70A.30.010.

18 <u>NEW SECTION.</u> Sec. 7. Section 6 of this act constitutes a new 19 chapter in Title 70A RCW.

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