

HOUSE BILL NO. 429

AMENDMENT IN THE NATURE OF A SUBSTITUTE

(Proposed by the House Committee on Labor and Commerce

on _____)

(Patron Prior to Substitute—Delegate LeVere Bolling)

A BILL to amend and reenact §§ 56-597, 56-598, and 56-599 of the Code of Virginia, relating to electric utilities; integrated resource plans; State Corporation Commission; Commission on Electric Utility Regulation; work group; report.

Be it enacted by the General Assembly of Virginia:**1. That §§ 56-597, 56-598, and 56-599 of the Code of Virginia are amended and reenacted as follows:****§ 56-597. Definitions.**

As used in this chapter:

"Advanced conductors" means high-temperature low-sag hardware technology that can conduct electricity across transmission lines and that demonstrates enhanced performance over traditional conductor products.

"Advanced conductors" includes aluminum conductor composite core, aluminum conductor steel supported, aluminum conductor composite reinforced, thermal-resistant aluminum alloy conductor, and any similar technologies.

"Affiliate" means a person that controls, is controlled by, or is under common control with an electric utility.

"Electric utility" means any investor-owned public utility that provides electric energy for use by retail customers; ~~except investor-owned utilities subject to the provisions of § 56-585.8.~~

"Grid-enhancing technologies" means a set of technologies that maximize the transmission of electricity across the electric distribution *and transmission* grid in a manner that ensures grid reliability and safeguards the cybersecurity and physical security of the electric distribution grid, including storage as a transmission asset, dynamic line rating, power flow control, and topology optimization.

"Integrated resource plan" ~~or "IRP"~~ means a document developed by an electric utility that provides a forecast of its load obligations and a plan to meet those obligations by supply side and demand side resources *and transmission and distribution infrastructure* over the ensuing ~~15~~ 20 years to promote reasonable prices, reliable service, energy independence, and environmental responsibility.

"Phase I Utility" and "Phase II Utility" have the same meanings as provided in subdivision A 1 of § 56-585.1.

"Retail customer" means any person that purchases retail electric energy for its own consumption at one or more metering points or non-metered points of delivery located in the Commonwealth.

"Surplus interconnection service" means an unutilized portion of interconnection service capacity at a specific point of interconnection, such as a substation, that (i) is established in a large generator interconnection agreement between an original interconnection customer and the utility providing interconnection service and (ii) is unutilized due to one or more generation resources functioning intermittently or periodically.

§ 56-598. Contents of integrated resource plans.

An ~~IRP should~~ *integrated resource plan shall:*

1. Integrate, over the planning period, the electric utility's forecast of demand for electric generation supply with recommended plans to meet that forecasted demand and assure adequate and sufficient reliability of service, including:

a. Generating electricity from generation facilities that it currently operates or intends to construct or purchase;

b. Purchasing electricity from affiliates and third parties;

c. Reducing load growth and peak demand growth through cost-effective demand reduction programs, *including the incorporation of such programs into virtual power plant aggregation; and*

d. *Meeting the total energy savings targets required by subsection B of § 56-596.2; and*

e. Utilizing energy storage facilities to help meet forecasted demand and assure adequate and sufficient reliability of service;

2. Identify a *single preferred* portfolio of electric generation *and non-generation* supply resources, including purchased and self-generated electric power, *that best serves the public interest and that:*

a. Consistent with § 56-585.1, is most likely to provide the electric generation supply needed to meet the forecasted demand, net of any reductions from demand side programs *and applicable grid-enhancing technologies*, so that *over the long term* the utility will continue to provide reliable service at reasonable prices ~~over the long term~~ *that take into consideration the social cost of carbon; and*

b. Will consider low cost energy/capacity available from short-term or spot market transactions, consistent with a reasonable assessment of risk with respect to both price and generation supply availability over the term of the plan;

c. *Relies on reputable long-term future cost projections for all fuels and technology types that reflect*

reasonable cost changes over the study period;

d. Includes the social cost of carbon as a component of generation operating costs for any facility emitting carbon dioxide as a byproduct of generation. Notwithstanding any national carbon dioxide pricing, the best estimate social cost of carbon shadow price shall not be less than the cost of carbon determined by the Commission pursuant to subdivision A 6 of § 56-585.1; and

e. Will meet the requirements for (i) the renewable portfolio standards program established under subsection C of § 56-585.5 and (ii) the retirement of electrical generating units that emit carbon as a byproduct of combusting fuel under subsection B of § 56-585.5;

3. Identify one or more least-cost portfolios of electric generation supply, demand-side, and grid-dispersed resources, including purchased and self-generated electric power, for the purposes of cost comparison that rely on reputable long-term future cost projections for all fuels and technology types that reflect reasonable cost changes over the study period, including the National Renewable Energy Laboratory's Annual Technology Baseline publications. The least-cost portfolio may include one or more modeling scenarios that would require the utility to petition the Commission for relief under subdivision B 3 of § 56-585.5;

4. Include only modeling scenarios that meet the total energy savings targets required by subsection B of § 56-596.2. The integrated resource plan shall also include at least one modeling scenario, consistent with § 56-585.5, that exceeds such energy savings targets through maximized energy efficiency upgrades to homes and businesses; dynamic pricing to shift energy use to off-peak; battery storage, both utility and distributed; transmission line upgrades; grid-enhancing technology; virtual power plants that utilize aggregated demand response or storage; managed electric vehicle charging and vehicle-to-grid power; home and business electrification for enhanced grid utilization and associated revenue; known data center efficiency efforts and innovative data center tariffs approved by the Commission or offsetting investments in offsite energy efficiency upgrades; and optimized use of the interstate electric grid through long-term transmission planning;

5. Reflect a diversity of electric generation supply and cost-effective demand reduction contracts and services so as to reduce the risks associated with an over-reliance on any particular fuel or type of generation demand and supply resources and be consistent with the Commonwealth's energy policies as set forth in § 45.2-1706.1; and

4. 6. Include a detailed description of the reasons for any annual or cumulative limit that a utility places on the amount of new electric generation supply from a specific type of technology in any provided modeling

93 *scenario, including technological or socioeconomic factors; and*

94 7. Include such additional information as the Commission requests pertaining to how the electric utility
95 intends to meet its obligation to provide electric generation service for use by its retail customers over the
96 planning period, *which shall include at least three modeling scenarios for energy capacity, supply, and*
97 *demand over the planning period.*

98 **§ 56-599. Integrated resource plan required.**

99 A. ~~Each~~ *Beginning in 2027 for a Phase II Utility and in 2028 for a Phase I Utility, and triennially*
100 *thereafter, each electric utility shall file an updated integrated resource plan by October 15; in each year*
101 ~~immediately preceding the year the utility is subject to a biennial review of rates for generation and~~
102 ~~distribution services filing.~~ *The year after a Phase I or Phase II Utility files such updated integrated resource*
103 *plan, such Phase I or Phase II Utility shall not be required to file a plan pursuant to subdivision D 4 of §*
104 *56-585.5. A copy of each integrated resource plan shall be provided to the ~~Chairman~~ Chairs of the House*
105 *Committee on Labor and Commerce, the ~~Chairman~~ of the Senate Committee on Commerce and Labor, and*
106 *the ~~Chairman~~ of the Commission on Electric Utility Regulation. After January 1, 2024, each* ~~Each~~ *electric*
107 *utility not subject to an annual review shall file provide the Commission an annual update to the integrated*
108 *resource plan by October 15; in each year that the utility is subject to review of rates for generation and*
109 ~~distribution services filing.~~ *Each annual update shall include an update to the electric utility's base planning*
110 *assumptions relative to its most recently accepted integrated resource plan, including energy and demand*
111 *forecasts, commodity fuel price inputs, energy efficiency and demand-side management forecasts, changes to*
112 *projected retirement dates of existing units, and other inputs, as determined by the Commission. Such annual*
113 *update shall describe the impact of the updated base planning assumptions on the most recently approved*
114 *resource plan. The Commission shall include a summary of each utility's annual update in its report required*
115 *by subsection B of § 56-596.*

116 ~~All updated integrated resource plans shall comply with the provisions of any relevant order of the~~
117 ~~Commission establishing guidelines for the format and contents of updated and revised integrated resource~~
118 ~~plans.~~ *Each integrated resource plan shall (i) identify a single preferred portfolio of generation, transmission,*
119 *and distribution infrastructure and energy efficiency programs and measures needed to ensure a reliable,*
120 *affordable, and carbon-free electric grid and (ii) consider options for maintaining and enhancing rate*
121 *stability, energy independence, economic development including retention and expansion of energy-intensive*
122 *industries, and service reliability.*

123 B. In preparing an integrated resource plan, each electric utility shall systematically evaluate and may

124 propose:

- 125 1. Entering into short-term and long-term electric power purchase contracts;
- 126 2. Owning and operating electric power generation facilities;
- 127 3. Building new generation facilities;
- 128 4. Relying on purchases from the short term or spot markets;
- 129 5. Making investments in demand-side resources, including energy efficiency and demand-side
- 130 management services;
- 131 6. Taking such other actions, as the Commission may approve, to diversify its generation supply portfolio
- 132 and ensure that the electric utility is able to implement an approved plan;
- 133 7. The methods by which the electric utility proposes to acquire the supply and demand resources
- 134 identified in its proposed integrated resource plan;
- 135 8. The effect of current and pending state and federal environmental regulations upon the continued
- 136 operation of existing electric generation facilities or options for construction of new electric generation
- 137 facilities;
- 138 9. The most cost effective means of complying with current and pending state and federal environmental
- 139 regulations, including *a single compliance options to minimize plan that minimizes the effects on customer*
- 140 rates of such regulations;
- 141 10. *Building new or upgrading existing distribution and transmission infrastructure;*
- 142 11. Long-term electric distribution *and transmission* grid planning and proposed electric ~~distribution~~ grid
- 143 transformation projects, ~~including a comprehensive assessment of the potential application of that use~~
- 144 grid-enhancing technologies ~~and advanced conductors~~ in a manner that ensures grid reliability and safeguards
- 145 ~~the~~ cybersecurity and physical security, *including advanced conductors, dynamic line ratings, advanced*
- 146 *power flow controllers, transmission switching, and any other available technologies that have the potential*
- 147 *to improve the efficiency and performance of the electric distribution grid or transmission grid, including*
- 148 *virtual power plants or aggregated distributed energy resource management systems, non-wire solutions, and*
- 149 *battery energy storage systems. An electric utility that does not include grid-enhancing technologies or*
- 150 ~~advanced conductors in an integrated resource plan~~ *anticipates building new infrastructure in its integrated*
- 151 *resource plan shall consider grid-enhancing technologies and shall include a detailed explanation of why*
- 152 *such grid-enhancing technologies or conductors are not included in such plan sufficient to eliminate or defer*
- 153 *the need for new transmission infrastructure;*

154 ~~12.~~ 12. Developing a long-term plan for energy efficiency measures to accomplish policy goals of
155 reduction in customer bills, particularly for low-income, elderly, and disabled customers; reduction in
156 emissions; and reduction in carbon intensity; ~~and~~

157 ~~13.~~ 13. Developing a long-term plan to integrate new energy storage facilities into existing generation and
158 distribution assets to assist with grid transformation; *and*

159 14. *Using surplus interconnection service to add new electric generation projects and energy storage*
160 *resources to the grid, to enable expedited addition of clean electric generation supply to the grid, up to the*
161 *interconnection service capacity limit at any specific point of interconnection, and to facilitate the maximum*
162 *use of existing transmission capacity.*

163 C. As part of preparing any integrated resource plan pursuant to this section, each utility shall conduct a
164 facility retirement study for owned facilities located in the Commonwealth that emit carbon dioxide as a
165 byproduct of combusting fuel and shall include the study results in its integrated resource plan. Upon filing
166 the integrated resource plan with the Commission, the utility shall contemporaneously disclose the study
167 results to each planning district commission, county board of supervisors, and city and town council where
168 such electric generation unit is located, the Department of Energy, the Department of Housing and
169 Community Development, the Virginia Employment Commission, and the Virginia Council on
170 Environmental Justice. The disclosure shall include (i) the driving factors of the decision to retire and (ii) the
171 anticipated retirement year of any electric generation unit included in the plan. Any electric generating
172 facility with an anticipated retirement date that meets the criteria of § 45.2-1701.1 shall comply with the
173 public disclosure requirements therein.

174 D. As part of preparing any integrated resource plan pursuant to this section, each utility shall *annually*
175 conduct outreach to engage the public in a stakeholder review process and provide opportunities for the
176 public to contribute information, input, and ideas on the utility's integrated resource plan, including the plan's
177 development methodology, modeling inputs, and assumptions, as well as the ability for the public to make
178 relevant inquiries, to the utility when formulating its integrated resource plan. Each utility shall report its
179 public outreach efforts to the Commission. The stakeholder review process *shall be facilitated by a third-*
180 *party facilitator selected by the Commission from a list of potential facilitators submitted by the utility and*
181 *shall include representatives from multiple interest groups, including residential and industrial classes of*
182 *ratepayers. Such facilitator shall be compensated by the utility and shall coordinate input from interest*
183 *groups and ensure the utility provides meaningful responses to questions and recommendations from interest*
184 *groups.* Each utility shall, at the time of the filing of its integrated resource plan, report on any stakeholder

meetings that have occurred prior to the filing date.

Prior to being selected by the Commission, any third-party facilitator shall demonstrate, to the satisfaction of the Commission and in a form and manner determined by the Commission, (i) sufficient independence from the utility and its affiliates, which shall include submission of a statement of economic interests that is consistent with the disclosure required by § 2.2-3114, and (ii) the qualifications, expertise, and experience to perform the functions of a facilitator. After being selected, the facilitator shall notify the Commission of any perceived or actual conflicts that arise during the planning process.

As part of the stakeholder review process, the utility shall provide stakeholders with reasonable access to the same modeling software, modeling assumptions, modeling inputs, and data used by the utility to evaluate supply and demand resources in its integrated resource plan. Such access shall enable stakeholders to create modeling scenarios for the utility's consideration during the development of its integrated resource plan. Any such scenarios, including all inputs, assumptions, results, and a narrative description of the scenario, shall be submitted to the utility no later than June 1. The utility may require a stakeholder to enter into a confidentiality agreement prior to providing the stakeholder with such access. If the utility requires such an agreement, the utility shall not be required to provide such access to any stakeholder who does not enter into the confidentiality agreement.

E. The Commission shall analyze and review an integrated resource plan and, after giving notice and opportunity to be heard, the Commission shall make a determination within nine months after the date of filing as to whether such an integrated resource plan is reasonable and is in the public interest.

F. The Commission shall establish guidelines that ensure that utilities develop comprehensive integrated resource plans, provide meaningful public engagement and maximum transparency during the planning process, and meet the requirements of this chapter. Each electric utility shall comply with any relevant Commission order establishing guidelines for the integrated resource plan planning process and for the format and contents of integrated resource plans.

G. By July 1, 2027, and at least once every five years thereafter, the Commission shall conduct a proceeding to identify and review each of its existing orders relevant to integrated resource plans to determine if such orders remain necessary and effective and are not overly burdensome.

2. That the State Corporation Commission (the Commission), in coordination with the Commission on Electric Utility Regulation, shall convene a stakeholder work group to make recommendations to the Commission regarding the integrated resource plan guidelines the Commission is required to establish pursuant to subsection F of § 56-599 of the Code of Virginia, as amended by this act. Such

recommendations shall include recommendations regarding (i) the contents of an integrated resource plan that comprehensively addresses generation, transmission, and distribution planning; (ii) integrating transmission planning into the integrated resource plan in a manner that does not violate any standards or requirements of the Federal Energy Regulatory Commission; (iii) the modeling software that best enables utilities to incorporate transmission and distribution planning, including by modeling regional nodes at various levels of granularity and modeling location-specific information, to the extent that sharing such information would not create a security threat; (iv) appropriate procedures and timeframes for an electric utility to share with interest groups the modeling software, assumptions, inputs, and data used by an electric utility to develop its integrated resource plan; (v) the use of confidentiality agreements where necessary to protect proprietary information; (vi) training for interest groups on using the modeling software, assumptions, inputs, and data; (vii) a reasonable number of modeling software licenses that the electric utility is required to provide; (viii) the use of a public institution of higher education to conduct modeling on behalf of interest groups that do not wish to conduct modeling on their own; (ix) the availability of subject matter experts from each utility to provide timely and meaningful information in response to questions and recommendations from interest groups; and (x) any other issues the Commission deems relevant to ensure that utilities develop comprehensive integrated resource plans and provide meaningful public engagement and maximum transparency during the planning process. The stakeholder work group shall include Commission staff, staff from the Commission on Electric Utility Regulation, and representatives from the Office of the Attorney General, investor-owned utilities, electric cooperatives, clean or advanced energy business associations, environmental advocacy groups, environmental justice organizations, and consumer advocates, as well as other interested stakeholders. The work group shall report its findings and recommendations to the Commission, the Commission on Electric Utility Regulation, the House Committee on Labor and Commerce, and the Senate Committee on Commerce and Labor by October 1, 2026. The Commission shall establish by regulation integrated resource plan guidelines required pursuant to subsection F of § 56-599 of the Code of Virginia, as amended by this act, that comply with the provisions of this act and reflect recommendations of the work group no later than March 1, 2027.

3. That the Commission on Electric Utility Regulation (the Commission) shall convene a stakeholder work group to develop recommendations related to planning for grid stability and reliability and energy affordability between certain cooperatives and generation and transmission services providers, system owners, and wholesale power providers. In developing such recommendations, the work group

shall review and examine (i) short-term and long-term term projected growth in energy demand in electric cooperative service territories in the Commonwealth, including demand growth attributable to the addition and expansion of large electric load customers; (ii) planning processes of electric cooperatives designed to meet the generation, distribution, and transmission needs of new and existing customers; (iii) coordination between electric cooperatives and generation and transmission services providers, including Phase I and Phase II Utilities and the regional transmission entity, as well as other system owners and wholesale power suppliers; (iv) methods used by Phase I and Phase II Utilities and electric cooperatives to make accurate predictions regarding energy demand growth, including which methods should be implemented to most accurately convert the pipeline of projects seeking to interconnect to the electric grid into load forecasts for the purposes of resource planning and maintaining and improving grid infrastructure; (v) an appropriate threshold for determining which electric cooperatives, if any, should participate in planning and coordination with generation and transmission services providers, including Phase I and Phase II Utilities and the regional transmission entity, as well as other system owners and wholesale power suppliers; and (vi) any other related factors, as determined by the Commission. The work group shall include representatives from the Commission; the State Corporation Commission; electric cooperatives; Phase I and Phase II Utilities; the Office of the Attorney General's Division of Consumer Counsel; the regional transmission entity; the Virginia, Maryland, and Delaware regional association of electric cooperatives; the Virginia Association of Counties; the Virginia Economic Developers Association; the Data Center Coalition; environmental justice organizations; and consumer advocates, as well as any other stakeholders deemed interested and appropriate by the State Corporation Commission and the Commission. For the purposes of this enactment, "Phase I Utility" and "Phase II Utility" have the same meaning as provided in subdivision A 1 of § 56-585.1 of the Code of Virginia. The work group shall submit a report of its findings and recommendations to the State Corporation Commission, the Commission, the House Committee on Labor and Commerce, and the Senate Committee on Commerce and Labor no later than October 1, 2026.