| 1 | INTERIM STUDY PROPOSAL 2021-124 | |
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| 2 | State of Arkansas | |
| 3 | 93rd General Assembly A Bill | |
| 4 | Regular Session, 2021SENATE BILL 675 | 5 |
| 5 | | |
| 6 | By: Senator G. Leding | |
| 7 | By: Representative Ennett | |
| 8 | Filed with: Arkansas Legislative Counci | 1 |
| 9 | pursuant to A.C.A. §10-3-217 | • |
| 10 | For An Act To Be Entitled | |
| 11 | AN ACT TO ESTABLISH THE CLEAN ELECTRICITY REPORTING | |
| 12 | ACT; TO REQUIRE ELECTRIC UTILITY COMPANIES TO CALCULATE | |
| 13 | AND REPORT CARBON INTENSITY; AND FOR OTHER PURPOSES. | |
| 14 | | |
| 15 | | |
| 16 | Subtitle | |
| 17 | TO ESTABLISH THE CLEAN ELECTRICITY | |
| 18 | REPORTING ACT; AND TO REQUIRE ELECTRIC | |
| 19 | UTILITY COMPANIES TO CALCULATE AND REPORT | |
| 20 | CARBON INTENSITY. | |
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| 23 | BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS: | |
| 24 | | |
| 25 | SECTION 1. Arkansas Code Title 8 is amended to add an additional chapter to read as follows: | |
| 26 | <u>Chapter 16</u> | |
| 27 | CLEAN ELECTRICITY REPORTING ACT | |
| 28 | | |
| 29 | <u>8-16-101. Title.</u> | |
| 30 | This chapter shall be known and may be cited as the "Clean Electricity Reporting Act". | |
| 31 | | |
| 32 | 8-16-102. Legislative findings and purpose. | |
| 33 | (a) The General Assembly finds that: | |
| 34 | (1) There is an increasing national emphasis on reducing electricity system emissions | |
| 35 | due to the harmful public health impacts of criteria air pollutants and the climate forcing effects of | |
| 36 | greenhouse gas emissions; | |

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| 1 | (2) Many electric utility companies are voluntarily announcing their intentions to be |
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| 2 | emission-free by a target date; and |
| 3 | (3) A simple yet meaningful metric of electricity system emissions will: |
| 4 | (A) Give recognition to an electric utility company as it makes progress in |
| 5 | providing clean electricity by working with customers, vendors, and industry partners to promote |
| 6 | strategies and technologies that effectively reduce emissions; and |
| 7 | (B) Provide electricity customers and the public with transparent and useful |
| 8 | information about electricity system emissions that will enable the customers and the public to make |
| 9 | informed decisions and act as partners with electric utility companies in the common goal of reducing |
| 10 | electricity system emissions. |
| 11 | (b) The purpose of this chapter is to avoid confusion and to facilitate meaningful measurement |
| 12 | standards and methods for comparing the progress on reducing electricity system emissions by requiring |
| 13 | all electric utility companies to calculate and report on carbon intensity in an approved and standardized |
| 14 | manner. |
| 15 | |
| 16 | 8-16-103. Definitions. |
| 17 | As used in this chapter: |
| 18 | (1) "Carbon dioxide equivalent" means a metric measure used to compare the emissions |
| 19 | of various greenhouse gases on the basis of global warming potential by converting amounts of other |
| 20 | gases to the equivalent amount of carbon dioxide with the same global warming potential; |
| 21 | (2)(A) "Carbon intensity" means the amount of global warming potential of gases emitted |
| 22 | to produce a given amount of electrical power and measured on an annual basis, including without |
| 23 | limitation the direct emissions and indirect emissions of the full energy chain of each generation resource |
| 24 | in the electric system portfolio. |
| 25 | (B) "Carbon intensity" includes the life cycle emissions for all energy storage and |
| 26 | load balancing generation used to meet electric system reliability requirements; |
| 27 | (3)(A) "Criteria air pollutant" means one (1) of six (6) common air pollutants determined |
| 28 | to be hazardous to human health and regulated under the National Ambient Air Quality Standards. |
| 29 | (B) "Criteria air pollutant" includes carbon monoxide, lead, nitrogen dioxide, |
| 30 | ground-level ozone, sulfur dioxide, and particulate matter; |
| 31 | (4) "Direct emissions" means the carbon intensity of emissions from operation and |
| 32 | maintenance of an energy resource; |
| 33 | (5) "Electric system portfolio" means the energy resources of an electric utility company, |
| 34 | including in-state and out-of-state energy resources; |
| 35 | (6)(A) "Greenhouse gas" means a gas that traps heat in the atmosphere and has a |
| 36 | climate forcing effect. |

| 1 | (B) "Greenhouse gas" includes carbon dioxide, methane, nitrous oxide, |
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| 2 | hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and any other similar gas designated by the |
| 3 | Arkansas Pollution Control and Ecology Commission as a "greenhouse gas"; |
| 4 | (7) "Greenhouse gas content calculation" means a calculation of the life cycle carbon |
| 5 | dioxide equivalent emissions of an energy resource that is expressed as carbon intensity; |
| 6 | (8)(A) "Indirect emissions" means the carbon intensity of the full energy chain for an |
| 7 | energy resource that is exclusive of the direct emissions from operation and maintenance. |
| 8 | (B) "Indirect emissions" includes: |
| 9 | <u>(i) Mining;</u> |
| 10 | (ii) Processing and transportation of materials for energy resource |
| 11 | equipment; |
| 12 | (iii) Manufacturing, transportation, and installation of energy resource |
| 13 | equipment: |
| 14 | (iv) Decommissioning or disposal, or both, of energy resource |
| 15 | equipment; and |
| 16 | (v) Mining, processing, and transportation of combustion fuel; and |
| 17 | (9) "Life cycle emissions" means the sum of direct emissions and indirect emissions for a |
| 18 | given energy resource that is expressed as the energy resource's carbon intensity per unit of energy |
| 19 | generated. |
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| 21 | 8-16-104. Carbon intensity reporting. |
| 22 | (a)(1) An electric utility company shall calculate and report on the carbon intensity of its electric |
| 23 | system portfolio in the manner established by the Arkansas Pollution Control and Ecology Commission at |
| 24 | the end of each calendar year and for each projected year included in the most recent resource planning |
| 25 | of the electric utility company. |
| 26 | (2) The calculation required under subdivision (a)(1) of this section shall include a: |
| 27 | (A) Life cycle greenhouse gas content calculation for each type of energy |
| 28 | resource in the electric utility company's electric system portfolio; and |
| 29 | (B) Weighted average life cycle greenhouse gas content calculation for the |
| 30 | annual electricity production by the electric utility company's electric system portfolio, which is the carbon |
| 31 | intensity of the electric system portfolio for a given year. |
| 32 | (3) The weighted average life cycle greenhouse gas content calculation required under |
| 33 | subdivision (a)(2)(B) of this section shall be calculated as follows: |
| 34 | (A) The carbon intensity in grams carbon dioxide equivalent per kilowatt hour |
| 35 | (gCO2e/kWH) for each energy resource shall be multiplied by the total annual electricity production of that |
| 36 | energy resource to obtain the total grams emitted; and |

| 1 | (B) The sum of emissions from all energy resources in the electric utility |
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| 2 | company's electric system portfolio shall be divided by the total annual electricity production to obtain the |
| 3 | average electric system portfolio carbon intensity in grams carbon dioxide equivalent per kilowatt hour |
| 4 | (gCO ₂ e/kWH). |
| 5 | (b) Each electric utility company shall distribute the annual carbon intensity data required under |
| 6 | subsection (a) of this section to its customers as soon as the annual carbon intensity data is available by |
| 7 | either monthly bills or other mailings to customers or by posting the annual carbon intensity data on the |
| 8 | electric utility company's website. |
| 9 | (c) An electric utility company shall provide the annual carbon intensity data of the electric utility |
| 10 | company to the commission. |
| 11 | (d) The commission shall: |
| 12 | (1) Require an electric utility company to use median values for life cycle emissions of |
| 13 | energy resources as reported by the United States Department of Energy's National Renewable Energy |
| 14 | Laboratory in its Life Cycle Assessment Harmonization Project, as it existed on January 1, 2021; |
| 15 | (2) Monitor developments in life cycle emissions assessments; and |
| 16 | (3) Instruct electric utility companies to use updated values in carbon intensity |
| 17 | calculations if more precise estimates become available. |
| 18 | (e)(1) An electric utility company may request permission from the commission to use an energy |
| 19 | resource carbon intensity value that differs from the value required by the commission under subdivision |
| 20 | (d)(1) of this section. |
| 21 | (2) A request to use a different energy resource carbon intensity value shall be |
| 22 | accompanied by supporting data and calculations that the commission shall review in either approving or |
| 23 | denying the electric utility company's request. |
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| 25 | <u>8-16-105. Report.</u> |
| 26 | (a) The Arkansas Pollution Control and Ecology Commission shall: |
| 27 | (1) Consolidate the annual carbon intensity data obtained under § 8-16-104 from all |
| 28 | electric utility companies; and |
| 29 | (2) Issue a report that details the: |
| 30 | (A) Carbon intensity of the electric system portfolio of each electric utility |
| 31 | company; and |
| 32 | (B) Aggregate carbon intensity for the electric power sector in this state. |
| 33 | (b) The report required under subsection (a) of this section shall include a: |
| 34 | (1) Chart that details past and present electric power sector carbon intensity figures; and |
| 35 | (2) Narrative that describes the benefits of tracking, reducing, and eliminating the direct |
| 36 | emissions and indirect emissions of the electric power sector. |

| 1 | (c) The Arkansas Pollution Control and Ecology Commission shall provide a copy of the report |
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| 2 | required under subsection (a) of this section to the following: |
| 3 | (1) The General Assembly; |
| 4 | (2) The Arkansas Public Service Commission; |
| 5 | (3) The Department of Health; |
| 6 | (4) The Department of Commerce; and |
| 7 | (5) Each electric utility company operating in this state. |
| 8 | (d) The Arkansas Pollution Control and Ecology Commission shall publish the report required |
| 9 | under subsection (a) of this section by press release, website posting, or other effective means for review |
| 10 | by the general public. |
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| 12 | 8-16-106. Technical assistance. |
| 13 | The Arkansas Pollution Control and Ecology Commission and the Arkansas Public Service |
| 14 | Commission shall devise a consistent framework for calculating and reporting the carbon intensity of an |
| 15 | electric system portfolio by: |
| 16 | (1) Collaborating with subject matter experts on carbon intensity; and |
| 17 | (2) Using the best available resources and data related to calculating and reporting |
| 18 | carbon intensity. |
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| 21 | Referred by Senator G. Leding |
| 22 | Prepared by: CRH/CRH |
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