

INTERIM STUDY PROPOSAL 2021-124

1 State of Arkansas  
2 93rd General Assembly  
3 Regular Session, 2021

**A Bill**

SENATE BILL 675

4 By: Senator G. Leding  
5 By: Representative Ennett

6 Filed with: Arkansas Legislative Council  
7 pursuant to A.C.A. §10-3-217.

**For An Act To Be Entitled**

8 AN ACT TO ESTABLISH THE CLEAN ELECTRICITY REPORTING  
9 ACT; TO REQUIRE ELECTRIC UTILITY COMPANIES TO CALCULATE  
10 AND REPORT CARBON INTENSITY; AND FOR OTHER PURPOSES.

**Subtitle**

11 TO ESTABLISH THE CLEAN ELECTRICITY  
12 REPORTING ACT; AND TO REQUIRE ELECTRIC  
13 UTILITY COMPANIES TO CALCULATE AND REPORT  
14 CARBON INTENSITY.

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23 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

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25 SECTION 1. Arkansas Code Title 8 is amended to add an additional chapter to read as follows:

26 Chapter 16

27 CLEAN ELECTRICITY REPORTING ACT

28  
29 8-16-101. Title.

30 This chapter shall be known and may be cited as the "Clean Electricity Reporting Act".

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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;

1           (2) Many electric utility companies are voluntarily announcing their intentions to be  
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.

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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,  
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                           (i) Mining;

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 (gCO<sub>2</sub>e/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  
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<sub>2</sub>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                   8-16-105. Report.

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  
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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