

1 State of Arkansas
2 93rd General Assembly
3 Regular Session, 2021
4

A Bill

SENATE BILL 675

5 By: Senator G. Leding
6 By: Representative Ennett
7

For An Act To Be Entitled

9 AN ACT TO ESTABLISH THE CLEAN ELECTRICITY REPORTING
10 ACT; TO REQUIRE ELECTRIC UTILITY COMPANIES TO
11 CALCULATE AND REPORT CARBON INTENSITY; AND FOR OTHER
12 PURPOSES.
13

Subtitle

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15 TO ESTABLISH THE CLEAN ELECTRICITY
16 REPORTING ACT; AND TO REQUIRE ELECTRIC
17 UTILITY COMPANIES TO CALCULATE AND REPORT
18 CARBON INTENSITY.
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22 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:
23

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

Chapter 16

CLEAN ELECTRICITY REPORTING ACT

8-16-101. Title.

29
30 This chapter shall be known and may be cited as the "Clean Electricity
31 Reporting Act".
32

8-16-102. Legislative findings and purpose.

(a) The General Assembly finds that:

35 (1) There is an increasing national emphasis on reducing
36 electricity system emissions due to the harmful public health impacts of



1 criteria air pollutants and the climate forcing effects of greenhouse gas
 2 emissions;

3 (2) Many electric utility companies are voluntarily announcing
 4 their intentions to be emission-free by a target date; and

5 (3) A simple yet meaningful metric of electricity system
 6 emissions will:

7 (A) Give recognition to an electric utility company as it
 8 makes progress in providing clean electricity by working with customers,
 9 vendors, and industry partners to promote strategies and technologies that
 10 effectively reduce emissions; and

11 (B) Provide electricity customers and the public with
 12 transparent and useful information about electricity system emissions that
 13 will enable the customers and the public to make informed decisions and act
 14 as partners with electric utility companies in the common goal of reducing
 15 electricity system emissions.

16 (b) The purpose of this chapter is to avoid confusion and to
 17 facilitate meaningful measurement standards and methods for comparing the
 18 progress on reducing electricity system emissions by requiring all electric
 19 utility companies to calculate and report on carbon intensity in an approved
 20 and standardized manner.

21
 22 8-16-103. Definitions.

23 As used in this chapter:

24 (1) "Carbon dioxide equivalent" means a metric measure used to
 25 compare the emissions of various greenhouse gases on the basis of global
 26 warming potential by converting amounts of other gases to the equivalent
 27 amount of carbon dioxide with the same global warming potential;

28 (2)(A) "Carbon intensity" means the amount of global warming
 29 potential of gases emitted to produce a given amount of electrical power and
 30 measured on an annual basis, including without limitation the direct
 31 emissions and indirect emissions of the full energy chain of each generation
 32 resource in the electric system portfolio.

33 (B) "Carbon intensity" includes the life cycle emissions
 34 for all energy storage and load balancing generation used to meet electric
 35 system reliability requirements;

36 (3)(A) "Criteria air pollutant" means one (1) of six (6) common

1 air pollutants determined to be hazardous to human health and regulated under
2 the National Ambient Air Quality Standards.

3 (B) "Criteria air pollutant" includes carbon monoxide,
4 lead, nitrogen dioxide, ground-level ozone, sulfur dioxide, and particulate
5 matter;

6 (4) "Direct emissions" means the carbon intensity of emissions
7 from operation and maintenance of an energy resource;

8 (5) "Electric system portfolio" means the energy resources of an
9 electric utility company, including in-state and out-of-state energy
10 resources;

11 (6)(A) "Greenhouse gas" means a gas that traps heat in the
12 atmosphere and has a climate forcing effect.

13 (B) "Greenhouse gas" includes carbon dioxide, methane,
14 nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and
15 any other similar gas designated by the Arkansas Pollution Control and
16 Ecology Commission as a "greenhouse gas";

17 (7) "Greenhouse gas content calculation" means a calculation of
18 the life cycle carbon dioxide equivalent emissions of an energy resource that
19 is expressed as carbon intensity;

20 (8)(A) "Indirect emissions" means the carbon intensity of the
21 full energy chain for an energy resource that is exclusive of the direct
22 emissions from operation and maintenance.

23 (B) "Indirect emissions" includes:

24 (i) Mining;

25 (ii) Processing and transportation of materials for
26 energy resource equipment;

27 (iii) Manufacturing, transportation, and
28 installation of energy resource equipment;

29 (iv) Decommissioning or disposal, or both, of energy
30 resource equipment; and

31 (v) Mining, processing, and transportation of
32 combustion fuel; and

33 (9) "Life cycle emissions" means the sum of direct emissions and
34 indirect emissions for a given energy resource that is expressed as the
35 energy resource's carbon intensity per unit of energy generated.

36

1 8-16-104. Carbon intensity reporting.

2 (a)(1) An electric utility company shall calculate and report on the
3 carbon intensity of its electric system portfolio in the manner established
4 by the Arkansas Pollution Control and Ecology Commission at the end of each
5 calendar year and for each projected year included in the most recent
6 resource planning of the electric utility company.

7 (2) The calculation required under subdivision (a)(1) of this
8 section shall include a:

9 (A) Life cycle greenhouse gas content calculation for each
10 type of energy resource in the electric utility company’s electric system
11 portfolio; and

12 (B) Weighted average life cycle greenhouse gas content
13 calculation for the annual electricity production by the electric utility
14 company’s electric system portfolio, which is the carbon intensity of the
15 electric system portfolio for a given year.

16 (3) The weighted average life cycle greenhouse gas content
17 calculation required under subdivision (a)(2)(B) of this section shall be
18 calculated as follows:

19 (A) The carbon intensity in grams carbon dioxide
20 equivalent per kilowatt hour (gCO₂e/kWH) for each energy resource shall be
21 multiplied by the total annual electricity production of that energy resource
22 to obtain the total grams emitted; and

23 (B) The sum of emissions from all energy resources in the
24 electric utility company’s electric system portfolio shall be divided by the
25 total annual electricity production to obtain the average electric system
26 portfolio carbon intensity in grams carbon dioxide equivalent per kilowatt
27 hour (gCO₂e/kWH).

28 (b) Each electric utility company shall distribute the annual carbon
29 intensity data required under subsection (a) of this section to its customers
30 as soon as the annual carbon intensity data is available by either monthly
31 bills or other mailings to customers or by posting the annual carbon
32 intensity data on the electric utility company’s website.

33 (c) An electric utility company shall provide the annual carbon
34 intensity data of the electric utility company to the commission.

35 (d) The commission shall:

36 (1) Require an electric utility company to use median values for

1 life cycle emissions of energy resources as reported by the United States
2 Department of Energy's National Renewable Energy Laboratory in its Life Cycle
3 Assessment Harmonization Project, as it existed on January 1, 2021;

4 (2) Monitor developments in life cycle emissions assessments;
5 and

6 (3) Instruct electric utility companies to use updated values in
7 carbon intensity calculations if more precise estimates become available.

8 (e)(1) An electric utility company may request permission from the
9 commission to use an energy resource carbon intensity value that differs from
10 the value required by the commission under subdivision (d)(1) of this
11 section.

12 (2) A request to use a different energy resource carbon
13 intensity value shall be accompanied by supporting data and calculations that
14 the commission shall review in either approving or denying the electric
15 utility company's request.

16
17 8-16-105. Report.

18 (a) The Arkansas Pollution Control and Ecology Commission shall:

19 (1) Consolidate the annual carbon intensity data obtained under
20 § 8-16-104 from all electric utility companies; and

21 (2) Issue a report that details the:

22 (A) Carbon intensity of the electric system portfolio of
23 each electric utility company; and

24 (B) Aggregate carbon intensity for the electric power
25 sector in this state.

26 (b) The report required under subsection (a) of this section shall
27 include a:

28 (1) Chart that details past and present electric power sector
29 carbon intensity figures; and

30 (2) Narrative that describes the benefits of tracking, reducing,
31 and eliminating the direct emissions and indirect emissions of the electric
32 power sector.

33 (c) The Arkansas Pollution Control and Ecology Commission shall
34 provide a copy of the report required under subsection (a) of this section to
35 the following:

36 (1) The General Assembly;

