1	INTERIM STUDY PROPOSAL 2021-124	
2	State of Arkansas	
3	93rd General Assembly A B111	
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.	
21		
22		
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;	

.

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.
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,
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.
20	
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 ₂ 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 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.
24	
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
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.
11	
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.
19	
20	
21	Referred by Senator G. Leding
22	Prepared by: CRH/CRH
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	