

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2017

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HOUSE BILL 745

Short Title: NC Energy Ratepayers Protection Act. (Public)

Sponsors: Representatives Millis, Cleveland, Collins, and McElraft (Primary Sponsors).
For a complete list of sponsors, refer to the North Carolina General Assembly web site.

Referred to: Energy and Public Utilities, if favorable, Regulatory Reform

April 13, 2017

1 A BILL TO BE ENTITLED
2 AN ACT TO AMEND VARIOUS PROVISIONS OF THE GENERAL STATUTES
3 RELATED TO DISTRIBUTED GENERATION AND TO DIRECT THE UTILITIES
4 COMMISSION TO PERFORM AN ASSESSMENT OF THE COSTS AND BENEFITS
5 OF DISTRIBUTED GENERATION.

6 The General Assembly of North Carolina enacts:

7
8 **PART I. CLARIFY DISTRIBUTED GENERATION MUST BE CONSIDERED IN**
9 **RESOURCE PLANNING**

10 **SECTION 1.** G.S. 62-2(a) reads as rewritten:

11 "(a) Upon investigation, it has been determined that the rates, services and operations of
12 public utilities as defined herein, are affected with the public interest and that the availability of
13 an adequate and reliable supply of electric power and natural gas to the people, economy and
14 government of North Carolina is a matter of public policy. It is hereby declared to be the policy
15 of the State of North Carolina:

16 ...
17 (10) To promote the development of renewable energy and energy efficiency ~~the~~
18 ~~implementation of a Renewable Energy and Energy Efficiency Portfolio~~
19 ~~Standard (REPS) that will do all of the following:~~in a manner that is
20 consistent with the development of the least cost mix of generation.

- 21 a. ~~Diversify the resources used to reliably meet the energy needs of~~
22 ~~consumers in the State.~~
23 b. ~~Provide greater energy security through the use of indigenous energy~~
24 ~~resources available within the State.~~
25 e. ~~Encourage private investment in renewable energy and energy~~
26 ~~efficiency.~~
27 d. ~~Provide improved air quality and other benefits to energy consumers~~
28 ~~and citizens of the State.~~

29 (11) To ensure that the development of renewable energy facilities does not result
30 in stranded costs for existing generating units, including the relicensing of
31 existing nuclear power facilities."

32
33 **PART II. AMEND CONTRACTS FOR QUALIFYING FACILITIES AND CLARIFY**
34 **AVOIDED COST REQUIREMENTS**

35 **SECTION 2.(a)** G.S. 62-3(27a) reads as rewritten:



1 "(27a) "Small power producer" means a person or corporation owning or operating
2 an electrical power production facility ~~with a power production capacity~~
3 ~~which, together with any other facilities located at the same site, does not~~
4 ~~exceed 80 megawatts of electricity and which depends upon renewable~~
5 ~~resources for its primary source of energy. For the purposes of this section,~~
6 ~~renewable resources shall mean: hydroelectric power. A small power~~
7 ~~producer shall not include persons primarily engaged in the generation or~~
8 ~~sale of electricity from other than small power production facilities.~~that
9 qualifies as a "small power production facility" under 16 U.S.C. § 796, as
10 amended."

11 **SECTION 2.(b)** G.S. 62-156 reads as rewritten:

12 **"§ 62-156. Power sales by small power producers to public utilities.**

13 (a) In the event that a small power producer and an electric utility are unable to
14 mutually agree to a contract for the sale of electricity or to a price for the electricity purchased
15 by the electric utility, the commission shall require the utility to purchase the power, under
16 rates and terms established as provided in ~~subsection (b) of this section.~~

17 (b) No later than March 1, 1981, and at least every two years thereafter, the ~~commission~~
18 Commission shall determine the rates to be paid by electric utilities for power purchased from
19 small power producers, according to the following standards:

20 (1) ~~Term of Terms of the Standard Contract. – Long term contracts for the~~
21 ~~purchase of electricity by the utility from small power producers shall be~~
22 ~~encouraged in order to enhance the economic feasibility of small power~~
23 ~~production facilities.~~The Commission shall approve standard contracts up to
24 two years in duration for the purchase of power from small power producers
25 for facilities that do not exceed 100 kilowatts of capacity. The standard
26 contract shall allow the public utility to curtail power generated by the small
27 power producer as needed to maintain economic dispatch and system
28 reliability.

29 (2) ~~Avoided Cost of Energy to the Utility. – The rates paid by a utility to a small~~
30 ~~power producer shall not exceed, over the term of the purchase power~~
31 ~~contract, the incremental cost to the electric utility of the electric energy~~
32 ~~which, but for the purchase from a small power producer, the utility would~~
33 ~~generate or purchase from another source. A determination of the avoided~~
34 ~~energy costs to the utility shall include a consideration of the following~~
35 ~~factors over the term of the power contracts: the known and measurable~~
36 ~~expected costs of the additional or existing generating capacity which could~~
37 ~~be displaced, the known and measurable expected cost of fuel and other~~
38 ~~operating expenses of electric energy production which a utility would~~
39 ~~otherwise incur in generating or purchasing power from another source, and~~
40 ~~the expected security of the supply of fuel for the utilities' alternative power~~
41 ~~sources.~~

42 (3) ~~Availability and Reliability of Power. – The rates to be paid by electric~~
43 ~~utilities for power purchased from a small power producer shall be~~
44 ~~established with consideration of the reliability and availability of~~reliability,
45 availability, and need for the power.

46 (4) ~~Avoided Cost of Capacity. – The contract shall not require payment for~~
47 ~~capacity to the extent the electric utility lacks a capacity need during the~~
48 ~~term of the contract, as demonstrated through the electric public utility's~~
49 ~~most recent integrated resource plan approved by the Commission under~~
50 ~~G.S. 62-110.1(c)."~~G.S. 62-110.1(c)."

1 **SECTION 2.(c)** This section becomes effective July 1, 2017, and applies to rates
2 approved by the Commission on or after that date.

3
4 **PART III. AMEND REPS COMPLIANCE**

5 **SECTION 3.(a)** G.S. 62-133.8(a)(8) reads as rewritten:

6 "(8) "Renewable energy resource" means a solar electric, solar thermal, wind,
7 hydropower, geothermal, or ocean current or wave energy resource; a
8 biomass resource, ~~including resource limited to agricultural waste, animal~~
9 ~~waste, wood waste, spent pulping liquors, combustible residues, combustible~~
10 ~~liquids, combustible gases, energy crops, or landfill methane; waste heat~~
11 ~~derived from a renewable energy resource and used to produce electricity or~~
12 ~~useful, measurable thermal energy at a retail electric customer's facility; or~~
13 ~~hydrogen derived from a renewable energy resource. "Renewable energy~~
14 ~~resource" does not include peat, a fossil fuel, or nuclear energy~~
15 ~~resource. wood waste, or tire-derived fuel."~~

16 **SECTION 3.(b)** G.S. 62-133.8(b)(2)c. reads as rewritten:

17 "c. Reduce energy consumption through the implementation of ~~an~~
18 ~~energy efficiency measure; provided, however, an electric public~~
19 ~~utility subject to the provisions of this subsection may meet up to~~
20 ~~twenty five percent (25%) of the requirements of this section through~~
21 ~~savings due to implementation of cost-effective energy efficiency~~
22 ~~measures. Beginning in calendar year 2021 and each year thereafter,~~
23 ~~an electric public utility may meet up to forty percent (40%) of the~~
24 ~~requirements of this section through savings due to implementation~~
25 ~~of energy efficiency measures. measures or verifiable energy~~
26 ~~efficiency certificates."~~

27 **SECTION 3.(c)** G.S. 62-133.8(b)(2)e. reads as rewritten:

28 "e. Purchase renewable energy certificates derived from in-State or
29 out-of-state new renewable energy facilities. ~~Certificates derived~~
30 ~~from out of state new renewable energy facilities shall not be used to~~
31 ~~meet more than twenty five percent (25%) of the requirements of this~~
32 ~~section, provided that this limitation shall not apply to an electric~~
33 ~~public utility with less than 150,000 North Carolina retail~~
34 ~~jurisdictional customers as of December 31, 2006."~~

35 **SECTION 3.(d)** G.S. 62-133.8(h)(1)c. reads as rewritten:

36 "c. Comply All reasonable and prudent costs to comply with 16 U.S.C. §
37 824a-3 or with any federal mandate that is similar to the
38 requirements of subsections (b), (c), (d), (e), and (f) of this section
39 that exceed the costs that the electric power supplier would have
40 incurred under those subsections in the absence of the federal
41 mandate."

42 **SECTION 3.(e)** This section becomes effective July 1, 2017.

43
44 **PART IV. AMEND COST CAPS FOR REPS COMPLIANCE**

45 **SECTION 4.(a)** G.S. 62-133.8(h)(4) reads as rewritten;

46 "(4) An electric power supplier shall be allowed to recover the incremental costs
47 incurred to comply with the requirements of subsections (b), (c), (d), (e), and
48 (f) of this section and fund research as provided in subdivision (1) of this
49 subsection through an annual rider not to exceed the following per-account
50 annual charges:

51 **2015 and**

Customer Class	2008-2011	2012-2014 and thereafter	thereafter
Residential per account	\$10.00	\$12.00	\$34.00
Commercial per account	\$50.00	\$150.00	\$150.00
Industrial per account	\$500.00	\$1,000.00	\$1,000.00"

SECTION 4.(b) This section becomes effective July 1, 2017, and applies to cost recovery proceedings that are initiated on or after that date.

PART V. FREEZE REPS REQUIREMENTS

SECTION 5. G.S. 62-133.8 reads as rewritten:

"§ 62-133.8. Renewable Energy and Energy Efficiency Portfolio Standard (REPS).

(b) Renewable Energy and Energy Efficiency Standards (REPS) for Electric Public Utilities. –

(1) Each electric public utility in the State shall be subject to a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) according to the following schedule:

Calendar Year	REPS Requirement
2012	3% of 2011 North Carolina retail sales
2015 and thereafter	6% of 2014 North Carolina retail sales
2018	10% of 2017 North Carolina retail sales
2021 and thereafter	12.5% of 2020 North Carolina retail sales

(c) Renewable Energy and Energy Efficiency Standards (REPS) for Electric Membership Corporations and Municipalities. –

(1) Each electric membership corporation or municipality that sells electric power to retail electric power customers in the State shall be subject to a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) according to the following schedule:

Calendar Year	REPS Requirement
2012	3% of 2011 North Carolina retail sales
2015 and thereafter	6% of 2014 North Carolina retail sales
2018 and thereafter	10% of 2017 North Carolina retail sales

(d) Compliance With REPS Requirement Through Use of Solar Energy Resources. – For calendar year ~~2018-2015~~ and for each calendar year thereafter, at least ~~two tenths~~ fourteen hundredths of one percent (~~0.2%~~) (0.14%) of the total electric power in kilowatt hours sold to retail electric customers in the State, or an equivalent amount of energy, shall be supplied by a combination of new solar electric facilities and new metered solar thermal energy facilities that use one or more of the following applications: solar hot water, solar absorption cooling, solar dehumidification, solar thermally driven refrigeration, and solar industrial process heat. The terms of any contract entered into between an electric power supplier and a new solar electric facility or new metered solar thermal energy facility shall be of sufficient length to stimulate development of solar energy; provided, the Commission shall develop a procedure to determine if an electric power supplier is in compliance with the provisions of this subsection if a new solar electric facility or a new metered solar thermal energy facility fails to meet the terms of its contract with the electric power supplier. As used in this subsection, "new" means a facility that was first placed into service on or after January 1, 2007. The electric power suppliers shall comply with the requirements of this subsection according to the following schedule:

Calendar Year	Requirement for Solar Energy Resources
2010	0.02%

1	2012	0.07%
2	2015 <u>and thereafter</u>	0.14%
3	2018	0.20%

4 (e) Compliance With REPS Requirement Through Use of Swine Waste Resources. –
 5 For calendar year ~~2018 and for each calendar year thereafter, 2015,~~ at least ~~two tenths fourteen~~
 6 ~~hundredths~~ of one percent ~~(0.2%)-(0.14%)~~ of the total electric power in kilowatt hours sold to
 7 retail electric customers in the State shall be supplied, or contracted for supply in each year, by
 8 swine waste. The electric power suppliers, in the aggregate, shall comply with the requirements
 9 of this subsection according to the following schedule:

10		Requirement for Swine
11	Calendar Year	Waste Resources
12	2012	0.07%
13	2015 <u>and thereafter</u>	0.14%
14	2018	0.20%

15 (f) Compliance With REPS Requirement Through Use of Poultry Waste Resources. –
 16 For calendar year 2014 and for each calendar year thereafter, at least ~~900,000-360,000~~
 17 megawatt hours of the total electric power sold to retail electric customers in the State or an
 18 equivalent amount of energy shall be supplied, or contracted for supply in each year, by poultry
 19 waste combined with wood shavings, straw, rice hulls, or other bedding material. The electric
 20 power suppliers, in the aggregate, shall comply with the requirements of this subsection
 21 according to the following schedule:

22		Requirement for Poultry
23	Calendar Year	Waste Resources
24	2012	170,000-68,000 megawatt hours
25	2013	700,000-280,000 megawatt hours
26	2014 <u>and thereafter</u>	900,000-360,000 megawatt hours

27"

29 **PART VI. REPEAL PROPERTY TAX EXCLUSION FOR SOLAR ENERGY**
 30 **ELECTRIC SYSTEMS**

31 **SECTION 6.(a)** G.S. 105-275(45) is repealed.
 32 **SECTION 6.(b)** This section is effective for taxable years beginning on or after
 33 July 1, 2017.

35 **PART VII. COST RECOVERY HOLD HARMLESS**

36 **SECTION 7.** The reasonable and prudent incremental costs incurred by an electric
 37 power supplier prior to July 1, 2017, to comply with any requirement repealed or amended by
 38 this act may be recovered as provided in G.S. 62-133.8(h), as amended by this act. In
 39 determining cost recovery of incremental costs incurred prior to July 1, 2017, the Utilities
 40 Commission shall consider whether reasonable steps were taken to mitigate costs in response to
 41 the changes enacted in this act. For the purposes of cost recovery under this act, costs incurred
 42 prior to July 1, 2017, include all of the following:

- 43 (1) Costs under purchase contracts for renewable energy entered into prior to
 44 July 1, 2017, for the purpose of complying with REPS requirements repealed
 45 or amended by this act.
- 46 (2) The costs of renewable energy facilities built by a public utility for which a
 47 certificate of public convenience and necessity has been issued by the
 48 Commission prior to July 1, 2017, for the purpose of complying with REPS
 49 requirements repealed or amended by this act.

- 1 (3) Other costs the Utilities Commission determines are reasonable and prudent
2 costs incurred prior to July 1, 2017, to comply with the REPS requirements
3 repealed or amended by this act.
4

5 **PART VIII. TO PROVIDE A COMPREHENSIVE STUDY OF THE COSTS AND**
6 **BENEFITS OF DISTRIBUTED GENERATION**

7 **SECTION 8.(a)** No later than May 1, 2018, the Utilities Commission, in
8 consultation with the Public Staff and the Department of Environmental Quality, shall provide
9 to the Joint Legislative Commission on Energy Policy a comprehensive assessment of known
10 and measurable costs and benefits to the electrical grid of distributed generation, including the
11 comprehensive costs and benefits of net metering from distributed solar generation in this State.

12 The assessment shall include an analysis of, and recommendations with respect to,
13 the following:

- 14 (1) The impact of current and future nondispatchable distributed generation on
15 the affordability, reliability, resiliency, and safety of North Carolina's
16 electric grid.
17 (2) The impact of current and future nondispatchable distributed generation on
18 the overall emission rate of each criteria pollutant per unit of electric power
19 generated in the State.
20 (3) Whether changes to existing State law, regulations, policies, and incentives
21 are appropriate considering the cost and operational impacts of current and
22 future nondispatchable resources, including distributed generation, on
23 North Carolina's electric grid.
24 (4) Whether standby, generation, transmission, or other charges and credits are
25 necessary to recognize the costs and benefits associated with
26 nondispatchable distributed generation to ensure the protection of North
27 Carolina electric customers from cost shifting or cross-subsidization.
28 (5) The costs and benefits of net metered solar distributed generation to the
29 State, customer-generators who participate in net metering, customers of a
30 utility who do not participate in net metering, and each utility that offers net
31 metering. The costs and benefits of net metered distributed solar generation
32 considered in the study shall include all of the following to the extent they
33 are known and measurable:
34 a. Value of energy at the time and location of generation.
35 b. Market price effects on other fuel sources for energy production.
36 c. Operational effects on utility delivery systems, generation capacity,
37 transmission capacity, and transmission and distribution line losses.
38 d. Environmental impacts of energy production.
39 e. Effects on reliability of the electric system.
40 f. Any fixed and variable generation, transmission, and distribution
41 costs that the utility recovers from its customers on a volumetric
42 basis.
43 g. Any other relevant issues the Utilities Commission believes are
44 appropriate.
45 (6) Whether a fixed charge should be assessed in rates of customer-generators
46 who participate in net metering to ensure such customers pay their portion of
47 utility system fixed costs and the amount of the fixed charge.

48 **SECTION 8.(b)** Each public utility, electric membership corporation, and
49 municipality that distributes electricity in this State shall to the fullest extent possible cooperate
50 with the Utilities Commission and furnish the Utilities Commission with any information it
51 requests in the course of completing the assessment provided for in this act.

1 **SECTION 8.(c)** There is appropriated from the General Fund to the Utilities
2 Commission three hundred thousand dollars (\$300,000) for the 2017-2018 fiscal year to
3 contract with an independent research organization to conduct the assessment required by this
4 section.

5
6 **PART IX. DECOMMISSIONING REQUIREMENTS FOR UTILITY-SCALE SOLAR**
7 **PROJECTS**

8 **SECTION 9.(a)** Article 17 of Chapter 62 of the General Statutes is amended by
9 adding a new section to read:

10 **"§ 62-351. Decommissioning and reclamation of utility-scale solar projects; financial**
11 **assurance requirements.**

12 (a) The owner or operator of a utility-scale solar project shall be responsible for proper
13 decommissioning of the project upon cessation of activities, and reclamation of the property to
14 its condition prior to commencement of activities on the site, no later than two years following
15 completion of the operations.

16 (b) Prior to commencement of construction of a utility-scale solar project, the owner or
17 operator of the project shall establish financial assurance in an amount acceptable to the
18 Department of Environmental Quality that will ensure that sufficient funds are available for
19 decommissioning of the facility and reclamation of the property to its condition prior to
20 commencement of activities on the site, even if the owner or operator becomes insolvent or
21 ceases to reside, be incorporated, do business, or maintain assets in the State. To establish
22 sufficient availability of funds under this section, the owner or operator of a utility-scale solar
23 project may use insurance, financial tests, third-party guarantees by persons who can pass the
24 financial test, guarantees by corporate parents who can pass the financial test, irrevocable
25 letters of credit, trusts, surety bonds, or any other financial device, or any combination of the
26 foregoing, shown to provide protection equivalent to the financial protection that would be
27 provided by insurance if insurance were the only mechanism used.

28 (c) For purposes of this section, the term "utility-scale solar project" means a
29 ground-mounted photovoltaic (PV), concentrating photovoltaic (CPV), or concentrating solar
30 power (CSP or solar thermal) project capable of generating one megawatt (MW) directly
31 connected to the electrical grid for sale to wholesale customers. The term includes the solar
32 arrays, accessory buildings, transmission facilities, and any other infrastructure necessary for
33 the operation of the project.

34 (d) The Department of Environmental Quality shall adopt rules establishing criteria to
35 set the amount of financial assurance required for utility-scale solar projects, which rules shall
36 consider, at a minimum, the solar technology to be employed, i.e., PV, CPV, or CSP; the
37 approximate number and size of solar panels included in the solar arrays to be constructed; any
38 ancillary facilities to be constructed in association with the project; the condition of the
39 property prior to construction of a utility-scale solar project; the amount of acreage that would
40 be impacted by the proposed project; and any other factors designed to enable establishment of
41 adequate financial assurance for decommissioning and reclamation on a site-by-site basis."

42 **SECTION 9.(b)** This section is effective when it becomes law and applies to
43 utility-scale solar projects for which construction is initiated on or after that date.

44
45 **PART X. SEVERABILITY CLAUSE AND EFFECTIVE DATE**

46 **SECTION 10.(a)** If any provision of this act or its application is held invalid, the
47 invalidity does not affect other provisions or applications of this act that can be given effect
48 without the invalid provisions or application, and, to this end, the provisions of this act are
49 severable.

50 **SECTION 10.(b)** Unless otherwise provided, this act is effective when it becomes
51 law.