

GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2019

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HOUSE BILL 329  
Senate Agriculture/Environment/Natural Resources Committee Substitute Adopted  
6/20/19

Short Title: Renewable Energy Amends.

(Public)

Sponsors:

Referred to:

March 12, 2019

A BILL TO BE ENTITLED

1 AN ACT TO (I) EXEMPT ELECTRIC VEHICLE CHARGING STATIONS FROM  
2 REGULATION AS PUBLIC UTILITIES, (II) REQUIRE THE ENVIRONMENTAL  
3 MANAGEMENT COMMISSION TO ADOPT RULES TO ESTABLISH A  
4 REGULATORY PROGRAM TO GOVERN THE MANAGEMENT OF END-OF-LIFE  
5 PHOTOVOLTAIC MODULES AND ENERGY STORAGE SYSTEM BATTERIES, AND  
6 DECOMMISSIONING OF UTILITY-SCALE SOLAR PROJECTS AND WIND ENERGY  
7 FACILITIES, AND REQUIRE THE DEPARTMENT OF ENVIRONMENTAL QUALITY  
8 TO ESTABLISH A STAKEHOLDER PROCESS TO SUPPORT DEVELOPMENT OF  
9 THE RULES, AND (III) PROVIDE SMALL HYDROELECTRIC POWER FACILITIES  
10 CERTAIN TREATMENT SIMILAR TO THAT GIVEN TO SMALL POWER  
11 PRODUCERS THAT PRODUCE ENERGY FROM SWINE AND POULTRY WASTE.  
12

13 The General Assembly of North Carolina enacts:

14 **SECTION 1.** G.S. 62-3(23) is amended by adding a new sub-subdivision to read:

15 "n. The term "public utility" shall not include a person who uses an electric  
16 vehicle charging station to resell electricity to the public for  
17 compensation, provided that all of the following apply:

- 18 1. The reseller has procured the electricity from an electric power  
19 supplier, as defined in G.S. 62-133.8(a)(3), that is authorized  
20 to engage in the retail sale of electricity within the territory in  
21 which the electric vehicle charging service is provided.
- 22 2. All resales are exclusively for the charging of plug-in electric  
23 vehicles, as defined in G.S. 20-4.01(28a).
- 24 3. The charging station is immobile.
- 25 4. Utility service to an electric vehicle charging station shall be  
26 provided subject to the electric power supplier's terms and  
27 conditions.

28 Nothing in this sub-subdivision shall be construed to limit the ability  
29 of an electric power supplier to use electric vehicle charging stations  
30 to furnish electricity for charging electric vehicles. Any increases in  
31 customer demand or energy consumption associated with  
32 transportation electrification shall not constitute found revenues for an  
33 electric public utility."

34 **SECTION 2.(a)** No later than January 1, 2022, the Environmental Management  
35 Commission shall adopt rules to establish a regulatory program to govern (i) the management of



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1 end-of-life photovoltaic modules and energy storage system batteries and (ii) decommissioning  
2 of utility-scale solar projects and wind energy facilities. In the development of these rules, the  
3 Department of Environmental Quality shall consider all of the following matters:

- 4 (1) Whether or not any photovoltaic modules, energy storage system batteries, or  
5 the constituent materials thereof, or other equipment used in utility-scale solar  
6 projects or wind energy facilities, exhibit any of the characteristics of  
7 hazardous waste identified in 40 C.F.R. Part 261, or under rules adopted  
8 pursuant to G.S. 130A-294(c), or whether or not any such equipment is  
9 properly characterized as solid waste under State and federal law.
- 10 (2) Preferred methods to responsibly manage end-of-life photovoltaic modules,  
11 energy storage system batteries, or the constituent materials thereof, or other  
12 equipment used in utility-scale solar projects or wind energy facilities,  
13 including the extent to which such equipment may be:
  - 14 a. Reused, if not damaged or in need of repair, for a similar purpose.
  - 15 b. Refurbished, if not substantially damaged, and reused for a similar  
16 purpose.
  - 17 c. Recycled with recovery of materials for similar or other purposes.
  - 18 d. Safely disposed of in construction and demolition or municipal solid  
19 waste landfills for material that does not exhibit any of the  
20 characteristics of hazardous waste under State or federal law.
  - 21 e. Safely disposed of in accordance with State and federal requirements  
22 governing hazardous waste for materials that exhibit any of the  
23 characteristics of hazardous waste under State or federal law.
- 24 (3) Economic and environmental costs and benefits associated with each method  
25 identified in subdivision (2) of this section to manage end-of-life photovoltaic  
26 modules, energy storage system batteries, or the constituent materials thereof,  
27 and other equipment used in utility-scale solar projects or wind energy  
28 facilities.
- 29 (4) The data-based expected economically productive life cycle of various types  
30 of photovoltaic modules, wind turbines, and energy storage system batteries  
31 currently in use in the State.
- 32 (5) The volume of photovoltaic modules, wind turbines, and energy storage  
33 system batteries currently in use in the State, and projections, based upon the  
34 data on life cycle identified in subdivision (2) of this section, on impacts that  
35 may be expected to the State's landfill capacity if landfill disposal is permitted  
36 for such equipment at end-of-life.
- 37 (6) A survey of federal and other states' and countries' regulatory requirements  
38 relating to (i) management of end-of-life photovoltaic modules, energy  
39 storage system batteries, and other equipment used in utility-scale solar  
40 projects and wind energy projects, including identification of states' laws  
41 governing reuse, refurbishment, disposal, or recycling of such equipment, (ii)  
42 decommissioning of utility-scale solar projects and wind energy facilities, and  
43 (iii) financial assurance to be established by owners or operators of  
44 utility-scale solar projects and wind energy facilities to ensure responsible  
45 decommissioning.
- 46 (7) Whether or not adequate financial assurance requirements are necessary to  
47 ensure proper decommissioning of utility-scale solar projects upon cessation  
48 of operations.
- 49 (8) Infrastructure that may be needed to develop a practical, effective, and  
50 cost-efficient means to collect and transport end-of-life photovoltaic modules,  
51 energy storage system batteries, and other equipment used in utility-scale solar

1 projects and wind energy facilities, for reuse, refurbishment, recycling, or  
2 disposal.

- 3 (9) Whether or not manufacturer stewardship programs for the recycling of  
4 end-of-life photovoltaic modules and energy storage system batteries not  
5 otherwise addressed by utility-scale solar project decommissioning rules  
6 adopted by the Commission should be established for applications other than  
7 utility-scale solar project installations, and if so, fees that should be  
8 established for manufacturers that sell such photovoltaic modules, or energy  
9 storage system batteries, in or into the State, in an amount adequate to support  
10 the implementation of such requirements.

11 **SECTION 2.(b)** For purposes of this act, the following definitions apply:

- 12 (1) "End-of-life" means photovoltaic modules, energy storage system batteries,  
13 and other equipment used in utility-scale solar and wind energy projects that  
14 are removed and taken out of service, that will not be reused.
- 15 (2) "Energy storage system battery" means a battery that is part of a system used  
16 to store chemical energy that was once electrical energy, for use in a process  
17 that contributes to end user demand management or grid operation and  
18 reliability. The term does not include energy storage system batteries: (i) that  
19 are part of a consumer electronic device for which it provides electricity  
20 needed to make the consumer electronic device function or (ii) that are part of  
21 a plug-in electric vehicle as defined in G.S. 20-4.01(28a), or an alternative  
22 fuel vehicle (AFV) as that term is defined in G.S. 143-58.4(a)(1).
- 23 (3) "Photovoltaic module" means the smallest nondivisible, environmentally  
24 protected assembly of photovoltaic cells or other photovoltaic collector  
25 technology and ancillary parts intended to generate electrical power under  
26 sunlight, except that "photovoltaic module" does not include a photovoltaic  
27 cell that is part of a consumer electronic device for which it provides  
28 electricity needed to make the consumer electronic device function.  
29 "Photovoltaic module" includes interconnections, terminals, and protective  
30 devices such as diodes that: (i) are installed on, connected to, or integral with  
31 buildings or (ii) are used as components of freestanding, off-grid, power  
32 generation systems, such as for powering water pumping stations, electric  
33 vehicle charging stations, fencing, street and signage lights, and other  
34 commercial or agricultural purposes.
- 35 (4) "Utility-scale solar project" means a ground-mounted photovoltaic (PV),  
36 concentrating photovoltaic (CPV), or concentrating solar power (CSP or solar  
37 thermal) project directly connected to the electrical grid that generates  
38 electricity for sale. The term includes the solar arrays, accessory buildings,  
39 transmission facilities, and any other infrastructure necessary for the operation  
40 of the project. The term does not include renewable energy facilities owned  
41 or leased by a retail electric customer intended primarily for the customer's  
42 own use to offset the customer's own retail electrical energy consumption at  
43 the premises.
- 44 (5) "Wind energy facility" means the turbines, accessory buildings, transmission  
45 facilities, and any other equipment necessary for the operation of the facility  
46 that cumulatively, with any other wind energy facility whose turbines are  
47 located within one-half mile of one another, have a rated capacity of one  
48 megawatt or more of energy.

49 **SECTION 2.(c)** The Department shall, within 60 days following the effective date  
50 of this act, establish a stakeholder process for development of the regulatory program required  
51 pursuant to Section 2(a) of this act.

1           **SECTION 2.(d)** The Department and the Commission shall submit joint interim  
2 reports on activities conducted pursuant to this act on a quarterly basis beginning December 1,  
3 2019, and shall submit a joint final report with findings, including stakeholder input, to the  
4 Environmental Review Commission and the General Assembly no later than January 1, 2021.  
5 The interim report due April 1, 2020, shall include a recommendation to the General Assembly  
6 regarding the resources needed to implement the requirements of this act.

7           **SECTION 3.** G.S. 62-156(b)(3) reads as rewritten:

8           "(b) At least every two years, the Commission shall determine the standard contract  
9 avoided cost rates to be included within the tariffs of each electric public utility and paid by  
10 electric public utilities for power purchased from small power producers, according to the  
11 following standards:

12           ...  
13           (3) Availability and Reliability of Power. – The rates to be paid by electric public  
14 utilities for capacity purchased from a small power producer shall be  
15 established with consideration of the reliability and availability of the power.  
16 A future capacity need shall only be avoided in a year where the utility's most  
17 recent biennial integrated resource plan filed with the Commission pursuant  
18 to G.S. 62-110.1(c) has identified a projected capacity need to serve system  
19 load and the identified need can be met by the type of small power producer  
20 resource based upon its availability and reliability of power, ~~other than~~ other than  
21 for (i) swine or poultry waste for which a need is established consistent with  
22 G.S. 62-133.8(e) and ~~(f)~~(f) and (ii) hydropower small power producers with  
23 power purchase agreements with an electric public utility in effect as of July  
24 27, 2017, and the renewal of such a power purchase agreement, if the  
25 hydroelectric small power producer's facility total capacity is equal to or less  
26 than five megawatts (MW)."

27           **SECTION 4.** This act is effective when it becomes law.