

# **Report of Recommendations Regarding the Resources Necessary to Establish and Implement a Regulatory Program for the Management and Decommissioning of Renewable Energy Equipment**

**Citation of Law or Resolution:** Section 2.(d) of S.L. 2019-132 (H329)

**Due Date:** April 1, 2020

**Receiving Entities:**

The Environmental Review Commission  
The General Assembly

**Submitting Entity:**

Department of Environmental Quality

# **Report of the Department of Environmental Quality**

## **Executive Summary and Transmittal**

Pursuant to Section 2.(d) of S.L. 2019-132 (H329/Renewable Energy Amends), the North Carolina Department of Environmental Quality (Department or DEQ) and the Environmental Management Commission (Commission), must submit quarterly interim reports as to the activities conducted, including updates on the stakeholder process and the work to adopt rules governing the management of end-of-life (EOL) photovoltaic modules and energy storage battery systems and the decommissioning of utility-scale solar projects and wind energy facilities, to the Environmental Review Commission and the General Assembly. This report of recommendations to the General Assembly regarding the resources needed to implement the requirements of this Act by April 1, 2020, is submitted as directed.

To date, DEQ has allotted at least 2,970 hours towards implementation of Section 2 of H329 since the legislation was enacted in July 2019. This allocation of work efforts is distributed largely across senior staff in the Division of Waste Management (DWM), the Division of Environmental Assistance and Customer Service (DEACS), the State Energy Office (SEO), and the Government Affairs and Policy team. In addition, DWM hired two full-time temporary employees to assist with the research and stakeholder coordination, one of whom left the agency in February to accept full time work in the private sector. All of this work has been conducted using funds already appropriated to the agency – no additional resources have been provided to DEQ to complete this work. The following is a rough estimate of how those hours were distributed across the Department:

- DWM total hours: 2,033
  - Permanent employee hours: 70
  - Temporary staff hours: 1,733
- DEACS total hours: 200
- SEO total hours: 190
- Govt Affairs/Policy total hours: 550

In the most recent Quarterly Report of the Department's activities pursuant to this Section, DEQ reported significant progress in its research and possible rulemaking approaches to address solar PV facility decommissioning and financial assurance practices, as well as refining an approach to managing end-of-life (EOL) PV modules and equipment. As evidenced in the Quarterly Report, the Department has focused much of its work on solar PV due to the scale and scope of the industry in North Carolina as compared to the deployment of utility-scale wind energy facilities (WEFs) and energy storage batteries.

The Department, with stakeholders' assistance, has considerable work ahead in order to: fully research WEFs and batteries, identify the infrastructure necessary for collecting EOL renewable energy equipment, evaluate stewardship programs and their application to and feasibility for this nascent waste stream, and draft the rules necessary to implement a robust, data-driven regulatory management program. That said, DEQ would like to defer submitting official recommendations for additional resources to the General Assembly until later this calendar year. In fourth quarter of 2020, DEQ will have a more informed understanding of the resources necessary to: draft rules; shepherd the rules through the Administrative Procedure Act; and implement and oversee a new regulatory program, as adopted. Any requests made by the Department at this time would be premature.

In the meantime, DEQ expects to submit a legislative request to clarify at least one of the provisions in H329, specifically the definition of "utility-scale solar project." As it is written, the definition excludes projects that are owned or leased by a retail electric customer to offset their own electric consumption without capacity or sizing limitations. If the intent of this rulemaking program is to properly manage the waste generated when solar facilities reach end-of-life, then it stands to reason that this exclusion should apply

only to projects above a certain size threshold where the volume of waste generated would require appropriate EOL management techniques. The Department is working with the NC Utilities Commission Public Staff and the stakeholders to recommend this threshold based on existing North Carolina utility regulations and an assessment of waste generation volume potential based on project size.