

Part 2J. Management of Solar Energy Equipment.

**§ 130A-309.240. Decommissioning and restoration requirements for utility-scale solar projects; recycling of project components required; financial assurance requirements.**

- (a) Definitions. – For purposes of this Part, the following definitions apply:
- (1) "Cessation of operations" means a utility-scale solar project has not produced power for a period of 12 months. This 12-month period shall not, however, include a period in which the (i) project fails to produce power due to an event of force majeure or (ii) owner has retained legal control of the project's footprint and has commenced rebuilding the facility.
  - (2) "Expansion" or "expanded," when used in reference to a utility-scale solar project, means adding 2 megawatts AC (MW AC) or more of directly connected solar energy generating capacity to the local or regional electrical grid with the ability to deliver power to the electrical grid, or increasing the ability of the project to deliver power to the electrical grid by thirty-five percent (35%), whichever is larger.
  - (3) "Photovoltaic module" or "PV module" means the smallest nondivisible, environmentally protected assembly of photovoltaic cells or other photovoltaic collector technology and ancillary parts intended to generate electrical power under sunlight, which is part of a utility-scale solar project.
  - (4) "Rebuild" or "rebuilt" when used in reference to a utility-scale solar project means a utility-scale solar project for which more than fifty percent (50%) of the original photovoltaic modules have been replaced with a different type of photovoltaic module or other fuel source and the project is deemed to be new for income tax purposes.
  - (5) "Recycle" means the processing, including disassembling, dismantling, and shredding of PV modules or other equipment from utility-scale solar projects, or their components, to recover a usable product. Recycle does not include any process that results in the incineration of such equipment. PV modules determined to be hazardous shall comply with applicable hazardous waste requirements even when recycled.
  - (6) "Utility-scale solar project" means a ground-mounted PV, concentrating PV (CPV), or concentrating solar power (CSP or solar thermal) project capable of generating 2 megawatts AC (MW AC) or more directly connected to the local or regional electrical grid with the ability to deliver power to the electrical grid. The term includes the solar arrays, accessory buildings, battery storage facilities, transmission facilities, and any other infrastructure necessary for the operation of the project. For purposes of this section, a utility-scale solar project does not include renewable energy facilities owned or leased by a retail electric customer intended primarily for the customer's own use or to offset the customer's own retail electrical energy consumption at the premises or for net metering.

(b) (For effective date, see note) Decommissioning Requirement. – The owner of a utility-scale solar project shall be responsible for proper decommissioning of the project upon cessation of operations and restoration of the property in compliance with subdivision (3) of this subsection, including all costs associated therewith, no later than one year following cessation of operations. The owner shall notify the Department within 30 days of cessation of operations, which notice shall include a detailed description of the steps to be taken to properly decommission the project and for restoration of the site. At a minimum, an owner shall take all of the following steps in decommissioning a project:

- (1) Disconnect the solar project from the power grid.
- (2) Remove all equipment from the solar project, and collect and ship equipment for reuse, or recycle all of the components thereof practicably capable of being recycled, including the PV modules; the entire solar module racking system; aboveground electrical interconnection and distribution cables that are no longer deemed necessary; subsurface cable no longer deemed necessary; any metal fencing; electrical and electronic devices, including transformers and inverters; and energy storage system batteries, as that term is defined under subsection (a) of this section. Components that will not be shipped for reuse, are incapable of being recycled, and do not meet the definition of hazardous waste shall be properly disposed of in (i) an industrial landfill or (ii) a municipal solid waste landfill. PV modules that meet the definition of a hazardous waste shall comply with hazardous waste requirements for recycling and disposal as applicable.
- (3) Restore the property (i) as nearly as practicable to its condition before the utility-scale solar project was sited or (ii) to an alternative condition agreed upon in a written contract or lease agreement between the landowner and the project owner. A copy of the agreement signed by both parties shall be provided to the Department prior to decommissioning. The condition of the property shall otherwise comply with any applicable statutory requirements, rules adopted thereunder, and requirements in local ordinance. Land that was cleared of trees for the solar project may be revegetated or reforested with seedlings.

(c) (For effective date, see note) Decommissioning Plan. – The owner of a utility-scale solar project shall submit a decommissioning plan to the Department for approval, which shall be prepared, signed, and sealed by a professional engineer licensed in the State and shall contain all of the following information:

- (1) The name, address, and contact information for the owner of the project, and name, address, and contact information for the landowner of the property on which the project is sited, if different than the owner.
- (2) A narrative description of how the decommissioning will be conducted, including the decommissioning sequencing; the disposition of materials to be used upon decommissioning, such as landfilling, reuse, or recycling of project equipment, which shall specifically delineate methods to be used for solid and hazardous waste; and a schedule for completion of the decommissioning activities.
- (3) Information on equipment proposed to be salvaged, including estimated salvage value of the equipment for the purpose of determining financial assurance.
- (4) Information on steps to be taken to restore the property in compliance with subdivision (3) of subsection (b) of this section.
- (5) A cost estimate for decommissioning the project and restoration of the property in compliance with subdivision (3) of subsection (b) of this section.
- (6) The proposed mechanism to satisfy the financial assurance requirements established under subsection (d) of this section, including information on which legal entity will establish the mechanism, when it will be established in accordance with the requirements of this section, and how the Department will access the funds from the mechanism if needed.

(d) (For effective date, see note) Financial Assurance Requirement. –

- (1) The owner of a utility-scale solar project shall establish financial assurance in an amount acceptable to the Department that will ensure that sufficient funds are available for decommissioning of the project and restoration of the property in compliance with subdivision (3) of subsection (b) of this section, even if the owner becomes insolvent or ceases to reside in, be incorporated, do business, or maintain assets in the State. To establish sufficient availability of funds under this section, the owner of a utility-scale solar project may use insurance, financial tests, third-party guarantees by persons who can pass the financial test, guarantees by corporate parents who can pass the financial test, irrevocable letters of credit, trusts, surety bonds, or any other financial device, or any combination of the foregoing, shown to provide protection equivalent to the financial protection that would be provided by insurance if insurance were the only mechanism used.
  - (2) Financial assurance shall be established by an owner of a utility-scale solar project and maintained until such time as the project is decommissioned and restoration of the property has been completed in compliance with this section. Documentation of financial assurance established shall be submitted to the Department at the time of registration and at the time of required update every five years, as required by subsection (e) of this section.
- (e) (For effective date, see note) Registration. – Each owner of a utility-scale solar project shall register with the Department and update such registration every five years. At the time of registration, or periodic required update, the owner shall provide all of the following information:
- (1) Identification of the owner and any other legal entity that will be responsible for (i) decommissioning the project and (ii) establishment of financial assurance, if applicable.
  - (2) Summary of project equipment that will be subject to decommissioning requirements under this section, including the location, size, number, and type of PV modules, as well as identification of any per- and poly-fluoroalkyl substances (PFAS) associated with the project, and a determination as to whether the PV modules are likely to be characterized as hazardous waste upon decommissioning. The hazardous waste determination must be made in compliance with rules adopted by the Department of Environmental Quality or the Environmental Management Commission.
  - (3) Summary of project time line, including actual or anticipated initiation and completion of construction, initiation of operations, and expected service life of the project.
  - (4) Estimates of costs to decommission the project and restore the property.
  - (5) Proposed financial assurance mechanism to be used to meet the requirements of this section, if applicable.
  - (6) Copies of any decommissioning plan executed, or documentation of financial assurance established, pursuant to local government ordinance or agreement with a landowner, prior to registration under this subsection.
  - (7) Any other information the Department may require.
- (f) Annual List. – The Utilities Commission shall develop and maintain a list of all utility-scale solar projects operating within the State and shall provide the Department with an updated list annually on or before July 1 of each year.
- (g) Landowner and Local Authority Not Preempted for Adoption of More Stringent Requirements. – Nothing in this section shall be construed as limiting the authority of any:

- (1) Local government to establish and implement requirements that are more stringent than those set forth in this section for decommissioning and financial assurance for utility-scale solar projects located within its jurisdiction.
- (2) Landowner to enter into an agreement with an owner to lease property on which a utility-scale solar project will be sited that expressly establishes requirements that are more stringent than those set forth in this section for decommissioning and financial assurance for utility-scale solar projects to be located on the landowner's property.

(h) Fees. – The Department shall collect fees from the owner of a utility-scale solar project subject to the requirements of this section at the time of registration and periodic update, as required by subsection (e) of this section. Fees collected under this subsection shall be applied to the Department's cost of administering the program.

(i) Department Report. – Information regarding implementation of the requirements of this section shall be included in the annual report required under G.S. 130A-309.06(c).

(j) Rules Required. – The Department of Environmental Quality shall adopt rules establishing criteria to set the amount of financial assurance required for utility-scale solar projects as set forth in subsection (d) of this section. These rules shall consider, at a minimum, the solar technology to be employed, i.e., PV, CPV, CSP, or other technology; the approximate number and size of PV modules included in the solar arrays to be constructed; any ancillary facilities to be constructed in association with the project; the condition of the property prior to construction of a utility-scale solar project; the amount of acreage that would be impacted by the proposed project; and any other factors designed to enable establishment of adequate financial assurance for decommissioning and restoration on a site-by-site basis. In establishing requirements for financial assurance for a utility-scale solar project, the Department shall consider the salvage value of the project's equipment. The rules shall require periodic updates to be provided by owners with respect to financial assurance maintained. In addition, the Department shall adopt rules as necessary to implement other requirements of this section, including rules to address the following matters:

- (1) Requirements for decommissioning plans, including required information, and processes for submittal and review of plans.
- (2) Fees to be assessed upon registration.
- (3) Any other matter the Department deems necessary. (2023-58, s. 2(a).)