Sec. 50-2.11.4. Large scale solar facilities.

(a) Large scale solar facilities shall be subject to review as a major development pursuant to section 50-9.4.0. In accordance with F.S. § 163.3205, it is determined that electric utility substations are the most similar use to large scale solar facilities.

(b) Large scale solar facilities shall be subject to and shall not exceed the maximum allowable impervious surface ratio for public service uses/facilities within the applicable land use district.

(c) Setbacks. All components of a large scale solar facility shall comply with the setback requirements for electric utility substations as provided in section 50-5.10.1(c).

(d) Buffering. Large scale solar facilities shall comply with the landscape and buffering requirements contained in section 50-5.3.4. Large scale solar facilities shall be considered a "high impact" use for purposes of application of the buffering and landscape requirements contained in section 50-5.3.4.

(e) Lighting and glare.

(1) Lighting is allowed for maintenance structures only and must not shine outward into passing traffic, nearby structures, or adjacent property not under the ownership or control of the operator.

(2) Solar voltaic collector system components shall be designed with an anti-reflective coating or, in the alternative, shall otherwise be designed to avoid producing glare that would constitute a nuisance to occupants of neighboring properties, aircraft, or persons traveling on adjacent or nearby roads.

(f) All outdoor storage of any materials and equipment including, but not limited to, solar panels and support structures not in operation must be located on the inside of the buffered area.

(g) Environmental standards.

(1) See LDC section 4.4.0 for required setbacks from streams, waterbodies and jurisdictional wetlands. Setbacks shall be based on a jurisdictional determination boundary approved by FDEP or the appropriate water management district.

(2) Large scale solar collector systems shall be exempt from the requirements of LDC section 5.3.6, tree protection and native vegetation, in the same manner as the operations of electrical utilities are exempt.

(h) Security. If a security fence is provided around some or all of the perimeter of the facility, it shall not be greater than eight feet in height.

(i) Low impact development. The county encourages the duel use of agricultural opportunities such as, but not limited to, apiaries to provide pollinator benefits to nearby crops and/or vegetation and grazing to reduce vegetation maintenance costs.

(j) Damage. Damaged solar panels shall be removed, repaired or replaced within 90 days of the damage, with one extension at the request of the operator or landowner. The ground shall at all times remain free of debris from damaged solar panels.

(k) Abandonment. A solar collection system shall be considered abandoned if the system ceases to generate electricity for a period of 12 consecutive months. Reports of electrical power production shall be provided to the county upon request. An abandoned solar collection system shall be decommissioned and removed within 180 days from the time it is deemed abandoned as provided herein. The operator may request an extension of time in which to return the solar collection facility to operation, which shall be supported by a plan and proposed timeline for resuming operation, provided however, that no extension of time shall be granted for more than a total of 24 months past the above date for decommissioning due to abandonment.

(l) Decommissioning. The property owner and/or current operator of a large scale solar facility shall be responsible for the decommissioning of such system upon abandonment (as defined herein) or upon revocation of the major development approval. In the event of abandonment of a large scale solar facility, the decommissioning shall be completed within the time period provided in paragraph (k) above. In the event of revocation of major development approval for the large scale solar facility, decommissioning shall be completed within 90 days. With respect to decommissioning, all operators/owners shall comply with the following:

(1) As part of the development review application, a decommissioning plan shall be prepared and submitted which depicts the final site conditions after the large scale solar facility has been removed from the property. Decommissioning plans shall require removal of all solar panels, electrical equipment, poles, piles, foundations and conduits (above and below ground). In the alternative, poles, piles, foundations and other support infrastructure can be shown as remaining in the decommissioning plan if consistent with the planned future beneficial use of the property, as may also be consistent with the allowed uses in the Land Development Code. The decommissioning plan shall include an engineer's estimate, signed and sealed, of the cost of fully implementing the decommissioning plan. The estimated cost of implementing the decommissioning plan shall not be reduced based on cost of removal of poles, piles, foundations or other support infrastructure that are proposed to remain. The estimated cost of implementing the decommissioning plan shall not be reduced based upon the salvage value of any materials or equipment. A new/updated engineer's estimate of costs for implementing the decommissioning plan shall be prepared and submitted to the planning department no less often than once every five years following the original approval date.

(2) Evidence of financial responsibility to implement the decommissioning plan shall be submitted as part of the original application, and shall be updated no less often than once every five years thereafter, as well as upon change of the property owner and/or operator, upon change in the financial responsibility form/mechanism relied upon, or as otherwise required by this code. Evidence of financial responsibility shall be in the form of insurance, surety bond, cash bond, trust fund or letter of credit. The county may require a change in the financial responsibility form/mechanism relied upon should it come to the attention of the county that the evidence of financial responsibility as previously submitted has become deficient. Evidence of financial responsibility shall be in the amount of 150 percent of the engineer's estimated cost to implement the decommissioning plan, which estimated cost shall be updated no less than once every five years after initial submission and each time the evidence of financial responsibility is otherwise updated, as provided herein.

(3) Any transfer of the county approval of a large scale solar facility issued hereunder shall not be deemed complete unless and until the transferee has demonstrated financial responsibility for decommissioning of the facility in the same manner as required for initial approval.

(m) Professional services. In the event that the county deems it necessary to retain the services of a professional to review all or any part of the application for solar collection system approval, or any required periodic update thereto, the applicant shall be responsible for payment of the reasonable costs incurred by the county. Processing of the application, or application update, shall not be completed until all such costs then due to the county have been paid in full.

(n) Stormwater. All applicants for a large scale solar facility shall obtain a valid FDEP ERP Stormwater Permit for the stormwater management system associated with same. In addition, the following requirements shall apply to the stormwater management system associated with any large scale solar facility and the property on which it is located:

(1) The stormwater management system shall be designed by a Florida Registered Professional Engineer and meet all applicable criteria of ERP Applicant's Handbook Volume II in addition to the requirements set forth herein.

(2) The stormwater management system shall meet the criteria for at least one of the best management practices (BMP) types for water quality treatment as listed in Part V of Applicant's Handbook Volume II.

(3) The stormwater management system shall be designed such that post-development runoff shall not exceed the pre-development runoff for a 25 year storm for property located in an open basin, and for a 100 year storm for property located in a closed basin, as established by a Florida Registered Professional Engineer.

(4) The stormwater management system shall be designed to accept at minimum the first 1.25 inches of stormwater from any rainfall event over the entire drainage basin for the property which contains the large scale solar facility, as established by a Florida Registered Professional Engineer.

(5) The applicant shall obtain and submit to the county geo-technical borings for all stormwater retention/detention sites.

(6) The stormwater management system shall not have adverse offsite impacts on neighboring properties.

(7) Fifteen percent of the total surface area of all solar panels on the property shall be considered as impervious area in the design of the stormwater management system and the calculation of the impervious surface ratio for the property.

(8) Channelization shall not occur on the property post-development. Documentation and calculations shall be provided to the planning department by a Florida Registered Professional Engineer demonstrating that channelization of the runoff generated by the property will not occur.

(9) Prior to installation of solar panels, if the entire site is mass graded, the ground shall be fully stabilized.

(10) A minimum of 70 percent of the ground on the property shall contain grass, gravel, or similar pervious covering to prevent erosion.

(11) Each row of solar panels shall be separated by a minimum of 15 feet or 1.5 times the width of the solar panels (whichever is greater) from the next nearest row of solar. The distance shall be measured from edge of panel to edge of panel for panels that are in a fixed orientation. For panels that rotate or track, the distance shall be measured with the panels oriented parallel to the ground.

(12) No stormwater ponds or above ground stormwater conveyance structures shall be located within 20 feet of a solar panel.

(13) No components of the stormwater management system may be located in any required buffer area.

(o) Access. An all-weather access road (or roads) shall be installed on the property sufficient to provide access to all areas of the property by fire and emergency rescue vehicles and equipment. No portion of the road may be within the required buffer area. The road, which may be paved or unpaved, shall be a minimum of 20 feet in width and shall support a minimum 50,000 pound vehicle.

(Ord. No. 2020-091720-01, § 5, 9-17-2020; Ord. No. 2023-07, § 6, 11-16-2023)