

MEADE COUNTY SOLAR ENERGY FACILITY ORDINANCE ORDINANCE 57

PURPOSE FOR ENACTMENT

Meade County in accordance with established ordinances and the Comprehensive Plan that sets forth preserving the health, safety, and welfare of the citizens of Meade County by promoting the safe, effective, and efficient use of solar energy systems which will promote efficient investment, promote better management of public infrastructure, which will further support smart and planned development and growth of the county to better serve current and future generations.

ARTICLE I. – DEFINITIONS

Acreage Coverage - means the total acres covered by blocks of photovoltaic panels including spaces between panels, buildings, inverters, substation, battery storage, ancillary equipment, and fencing around these items but excluding wildlife corridors, mandated setbacks, wetlands, and other avoided natural or cultural features outside of the security fencing on the project site.

Applicant - means the person or entity who submits an application to the County for consideration of a siting permit under this ordinance.

Battery Energy Storage System - means a physical container or structure providing secondary containment to battery cells that is equipped with cooling, ventilation, fire suppression, and a battery management system.

Battery Management System - means an electronic regulator that manages a battery energy storage system by monitoring individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fireground fault and DC surge, and door access and providing controls to prevent operation outside safe limits.

Decommissioning Report - means a report with a plan to disconnect, remove and properly dispose of equipment, facilities, or devices with detailed costs for the complete removal including land restoration costs.

Operator - means the person responsible for the overall operation and management of a facility.

Owner - means the person or entity who owns all or a portion of a facility.

Photovoltaic or "PV" - means materials and devices that absorb sunlight and convert it directly into electricity.

Photovoltaic Nameplate Capacity – means output of the photovoltaic system rating expressed in watt-peak.

Rated capacity - means the maximum capacity of a solar facility based on the sum total of each photovoltaic system's nameplate capacity.

Solar Energy Facility – means a series of solar panels, or array composed of multiple solar panels, on ground- mounted racks or poles which is the primary use(s) for the parcel of land on which it is located within Meade County, or any solar energy system that has a primary purpose of generating electricity from sunlight for wholesale or retail sale of electricity.

ARTICLE II

Section 1.0 STANDARDS AND RULES

1.1 Applicable System Rules

1.1.1 Any Solar Energy Facility not regulated under the South Dakota Facility Permit Act, SDCL49-41B, is completely regulated by this Ordinance.

1.1.2 Solar Energy Facilities that are regulated under the South Dakota Facility Permit Act, SDCL49-41B are regulated under the South Dakota Public Utilities Commission and are required to obtain a siting permit from the South Dakota Public Utilities Commission.

1.1.3 All applicable sections within this Ordinance must be followed by all Solar Energy Facilities within Meade County and a Building Permit must be obtained for the entire cost of the project in accordance with the Fee Schedule set by Resolution of the Meade County Commission.

1.1.4 All Solar Energy Facilities must comply with

1.2 Proposed Locations

1.2.1 Solar Energy Facilities shall only be considered on properties that are 40 acres or more in size.

1.2.2 The proposed applicant(s) of a proposed Solar Energy Facility are required to schedule a pre-application meeting with the Meade County Commission at one of their regularly scheduled meetings, to discuss the location, scale, and nature of the proposed project and what will be expected during the process.

Section 2.0 DESIGN STANDARDS

2.1 Requirements

2.1.1 A South Dakota Licensed Professional engineer shall certify that the design of all the foundations on the project, including foundations for the solar arrays, is within accepted professional standards, given local soil and climate conditions.

2.1.2 All Solar Energy Facilities shall be in compliance with this Ordinance and Ordinance 34, 9 and 52 along with other applicable Meade County ordinances and the state of South Dakota Public Utilities Commission, federal regulatory standards, and the electric code as adopted by South Dakota Electrical Commission.

2.1.3 Power and Communication Lines – Power and communication lines running between the inverters to electric substations or interconnections with buildings shall be buried underground. Exemptions or variances may be granted in instances where shallow bedrock, water courses, or other elements of natural landscape interfere with the ability to bury lines.

2.1.4 Height – Systems, equipment and structures shall not exceed 25 feet in height when ground mounted. Excluded from this height requirement are electric transmission lines, utility poles, substations, step up transformers, cameras, and security lights.

- 2.1.5 Setbacks – Ground mounted solar energy systems and equipment as part of a Solar Energy Facility shall have a minimum of a 50 foot setback from either edge of an improved public right-of-way, a 25 foot setback from either edge of an unimproved public right-of-way and/or fence however, the solar energy system setback shall be 500 feet from an existing residential home with the setback distance to be measured from the property line of the Solar Energy Facility to the closest wall of the existing residential home.
- 2.1.6 Solar Energy Facility Perimeter Fencing – System equipment and structures shall be fully enclosed and secured by a fence with locked gates. The Solar Energy Facility Perimeter Fencing must follow the requirements of the National Electrical Code (NEC) and must facilitate movement of wildlife and pollinators. Lock or Knox boxes and keys shall be provided at locked entrances for emergency personnel access. Entrances must be provided every ½ mile along the perimeter of entire fenced portion of the Solar Energy Facility. Fencing must be maintained in good condition until the Solar Energy Facility is decommissioned. Snow fence must be installed along roads where drifting may occur.
- 2.1.7 Lighting – If lighting is provided for security at the site, lighting shall be shielded and downcast so light does not spill onto adjacent land and constitute a nuisance to the public.
- 2.1.8 Noise - when located adjacent to an existing residence or residential area, noise levels measured at the property line of the Solar Energy Facility shall not exceed 55 decibels.
- 2.1.9 Signage – Appropriate warning signs shall be provided at the entrances to the facility and along the perimeter of the Solar Energy Facility project. The signs at the entrance to the facility shall include the name and contact information of the utility, the facility's 911 address, include a 24-hour emergency contact number.
- 2.1.10 Outdoor storage - Only the outdoor storage of materials, vehicles, and equipment that directly support the operation and maintenance of the Solar Energy Facility shall be allowed.

Equalization & Planning Office along with the Emergency Manager and by the local fire department and must be approved by the Commission, for the construction and the operation of the facility, including 24-hour emergency access to the site.

2.1.12 The Solar Energy Facility must manage vegetation throughout the life of the project. Site-wide mowing is required to a height of 6 inches when vegetation reaches a height of 18 inches. Care must be taken during the nesting season (April 1 to August 1) to not destroy nests of upland grassland birds. Once the permit is issued, site-wide mowing must be completed every year during the first week of June to control invasive species. To prevent the spread of invasive species, spot herbicide treatment must be utilized applied by a South Dakota Licensed Applicator. Broadcast or drilled seeding methods must be implemented with mixed grass seed in accordance with the South Dakota State Seed Laws and Regulations to maintain vegetation. During High or Extreme Fire Rating Conditions, the local fire department must be contacted prior to any planned mowing activities and Meade County requires their recommendations to be followed.

2.1.13 For consideration of potential impacts to low altitude military flight paths, notification of intent to construct the Solar Energy Facility shall be sent to the city within 5 miles of a municipal airport and Ellsworth AFB. The latest version of the Solar Glare Hazard Analysis Tool (SGHAT) or equivalent shall be used per its user's manual to evaluate the solar glare aviation hazard.

2.1.14 The Solar Energy Facility must be properly maintained and be kept free from all hazards, including but not limited to faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety, or general welfare. In the event of a violation of any of the foregoing provisions, the Code Enforcement Officer shall give written notice specifying the violation to the owner of Solar Energy Facility.

2.1.15 The Solar Energy Facility owner and/or operator shall maintain a phone number and identify a person responsible for the public to contact with inquiries and complaints throughout the life of the project and provide this information to Meade County. The Solar Energy Facility owner and/or operator shall make reasonable efforts to respond to the public's inquiries and complaints.

2.1.16 The Solar Energy Facility layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), and shall comply with the current International Building Code as enforced by Meade County, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the building permit application.

2.1.17 All routes on either County, Political Townships or road district roads that will be used for construction or maintenance purposes shall be identified on the site plan. All routes for either ingress or egress must be shown. The routing in the unincorporated boundaries of the County shall be approved subject to the approval of the Meade County Highway Superintendent and the Road District or Political Township (if applicable). The Solar Energy Facility applicant/owner must enter into a road hall agreement and provide a preconstruction baseline survey mutually agreed upon with the Meade County Highway Superintendent, for construction activities involving the use of public roads, until the Solar Energy Facility is decommissioned, to determine the existing public road conditions for assessing potential future damage due to development related construction traffic. The developer shall provide a road repair plan for any damaged public road(s) to ameliorate any and all damages, installation, or replacement of roads that might be required. The applicant/owner shall provide an irrevocable letter of credit or surety bond upon submittal of the building permit application, in an amount and form approved by the Highway Superintendent and the Meade County Commission. Upon the completion of said construction activities, a final inspection and approval of any impacted public roads will be completed by the Meade County Highway Superintendent, a Release of the Bond or Irrevocable Letter of Credit at that time may be issued by Meade County.

2.1.18 Battery energy storage systems, if required, shall be installed with industry best practices including a Battery Management System (BMS) with 24/7 monitoring and automated fire suppression. Battery Energy Storage System

must have a secondary containment to battery cells that is equipped with cooling, ventilation, and a battery management system.

Section 3.0 APPLICATION AND SITING PERMIT

3.1 Application Requirements

3.1.1 Due to the unique nature and special requirements of Solar Energy Facilities and their potential impacts to adjoining properties and government services, proposed Solar Energy Facilities that are completely regulated by this ordinance shall be required to submit an Application Package and appear before the Meade County Planning Board for their recommendation and to the Commission, with the final approval of the Siting Permit by the Commission, (except for proposed Solar Energy Facilities regulated under the South Dakota Facility Permit Act, SDCL49-41B are regulated under the South Dakota Public Utilities Commission). The applicant shall provide all applicable and required submittals to the Equalization and Planning Office with the application as an Application Package. The Commission will base their decision to issue a permit based on the entire application package including the required submittals meeting the technical requirements of this ordinance.

3.1.2 A completed application and a site plan with existing conditions shall contain the following:

3.1.2.1 Existing property lines and showing a 100-foot buffer from the exterior boundaries, including the names of adjacent property owners and current land use of those properties.

3.1.2.2 Existing public and private roads and rights-of-way, showing widths of the roads and any associated easements.

3.1.2.3 Location and size of any water wells and all on-site wastewater treatment systems.

3.1.2.4 Location of existing substations.

3.1.2.5 Existing buildings and any impervious surfaces.

3.1.2.6 A contour map showing topography with 10-foot contours, including

adjacent properties.

- 3.1.2.7 Waterways, watercourses, stock ponds and public water wetlands.
- 3.1.2.8 Any delineated wetland boundaries.
- 3.1.2.9 If available, the current FEMA FIRM map which shows the subject property.
- 3.1.2.10 Surface water drainage patterns.
- 3.1.2.11 The location of any underground utilities or pipes.
- 3.1.2.12 An estimated construction schedule.
- 3.1.2.13 A copy of the interconnect agreement with the appropriate electric utility, (which does not need to be fully executed until issuance of the building permit). The electric utility company that executes the interconnect agreement shall meet with the Equalization and Planning Director and/or the Commission on or before the building permit is issued.
- 3.1.2.14 The Decommissioning Report signed by the responsible party for decommissioning, as well as by the landowner, acknowledging that they have received a copy of the Decommissioning Report from the responsible party/owner of the Solar Energy Facility.
- 3.1.2.15 The Decommissioning Report includes detailed costs of decommissioning, prepared by a South Dakota Professional Engineering Company. (See Section 4)

3.2 Solar Energy Facility Plan -Additional Document Submittal Requirements

- 3.2.2 Location and spacing of solar panels.
- 3.2.3 Location of access roads and proposed approaches.
- 3.2.4 Planned location of substations, electrical cabling from the solar facility systems to the substations, ancillary equipment, structures including property lines and setbacks.

- 3.2.4.1 Complete layout plan including the solar arrays, electrical equipment and buildings including a scaled elevation view of the property and other supporting drawings, photographs of the proposed site, photo or other realistic simulations or modeling of the proposed project from potentially sensitive locations as deemed necessary by Meade County to assess the visual impact of the project, landscaping and screening plan, coverage map, internal roads, points of ingress/egress and additional information that may be necessary for a technical review of the proposal.
- 3.2.4.2 Weed/Grass control- An acceptable weed/grass control plan for property inside and outside fenced area. The operating company must maintain the fence and adhere to the weed/grass control plan in accordance with Section 2.1.12. Prior to the issuance of a building permit, the applicant shall submit an executed agreement between the Solar Energy Facility, the County Highway Department or if applicable, the road district authorities with infrastructure affected by the Solar Energy Facility to include haul routes.
- 3.2.4.3 Stormwater management and erosion controls must be met for the entire Solar Energy Facility site in accordance with Ordinance 52 and the SDDANR. A stormwater plan must be submitted, and Ordinance 52 shall apply to all Solar Energy Facilities in its entirety with no Ag exemption.
- 3.2.4.4 Manufacturer's specifications and recommended installation methods for all major equipment, including solar panels, mounting systems and foundations for poles or racks. Copy of foundation engineering must be submitted with the building permit application along with manufactures installation methods documentation.
- 3.2.4.5 An itemized engineers estimate for the construction costs of the entire project prepared by a South Dakota Professional Engineer.
- 3.2.4.6 A description of the method to connect the solar array to a building or substation.
- 3.2.4.7 The manufacture of the inverters including the expected noise level of the inverters.
- 3.2.4.8 Acreage Coverage including the total Photovoltaic with the number of solar

panels proposed.

3.2.4.9 Before a permit is issued, the applicant/owner shall provide an environmental and cultural review conducted by a qualified professional third-party company to determine if there are potential significant issues. If the environmental and cultural review determines there are no significant issues, no further action is required. Recommendations from the qualified professional third-party company must be followed.

3.3 Application Fees

3.3.1 Application Siting Permit Fees along with the Building Permit Fees shall be set by Resolution by the Meade County Commission.

3.4 Bonding Requirements

3.4.1 The applicant must file a Decommissioning Bond prior to being issued a building permit per Section 4.

3.5 Notification of Area Landowners

3.5.1 The applicant shall notify by Certified Mail 14 days minimum in advance twice, once before the scheduled Planning Meeting and then before the scheduled public hearing of the Commission Meeting (which will be scheduled after the Planning Meeting), to the owner of record of any landowner that is within 1,000 feet, measured from the edge of the property of the proposed site where the facility is to be constructed, including the date and time of the public hearing before the Meade County Commission. The notice shall contain a description of the nature and location of the facility, including the date and time of the Meade County Commissioners meeting. The Planning Board will initially review the application package at a regularly scheduled Planning Meeting, previous to the public hearing of the Commission. Upon action taken by the Planning Board, the Planning Board will send their recommendation to the Meade County Commission. The Meade County Commission will schedule a Public Hearing(s) during their regularly scheduled meeting(s) to consider the application and the Siting Permit. The applicant or their representative must be present at all the scheduled meetings.

3.6 Third Party Review

3.6.1 The Meade County Commission reserves the right to choose and hire a third-party expert to review the Decommissioning Report and the Decommissioning Bond to ensure that the proposed Decommissioning Report and Bond covers the entire decommissioning process, at the Applicant's expense with a mutual agreement on the cost and the preferred third-party company, between the county and the applicant.

3.7 Siting Permit

3.7.1 Upon the approval of the application package by the Meade County Commission a Siting Permit will be issued to the Applicant. Construction activities must start within 4 years of the date the permit was issued. Failure to start construction activities within four years of the issuance of the Siting Permit will cause the permit to be voided and a new Application Package must be submitted.

3.7.2 Siting Permit Fee is set by Resolution of the Commission.

Section 4.0 DECOMMISSIONING

4.1 Decommission Report & Financial Security (Decommissioning Bond)

4.1.1 A Decommissioning Report shall be required to ensure that facilities are properly removed after their useful life. Decommissioning of solar panels must occur in the event they are not in use for twelve consecutive months. The operating company and/or landowner at the end of the twelve consecutive months shall have six months to complete the decommissioning, or the County will take the necessary decommission steps at the operating company and/or landowner's expense. The Decommissioning Report shall be certified by a South Dakota Professional Engineer including provisions for removal of all improvements including equipment, fencing, foundations, and roads, and restoration of soil and vegetation. Also, the detailed Decommissioning Report shall include:

4.1.1.1 The anticipated life of the project.

4.1.1.2 The estimated decommissioning cost, in current dollars.

4.1.1.3 How the estimate was determined.

4.1.1.4 The method of ensuring that funds will be available for decommissioning and removal, and how decommissioning costs will be kept current.

4.1.1.5 The proposed report on how the project will be decommissioned, and the site restored.

4.1.2 Decommissioning security bonding shall be required upon the issuance of the building permit to assure the proper decommissioning of the site. A South Dakota Professional Engineering Company shall prepare a detailed Decommissioning Report with all costs to complete the decommissioning of all the infrastructure and shall include a mechanism for calculating increased removal costs due to inflation and without any reduction for salvage value that will be utilized to determine the amount of the Decommissioning Bond. The Decommission Report, completed by a South Dakota Professional Engineering Company, must be updated every 5 years of the on-going operation of the Decommissioning Bond and must be in place throughout the life of the Solar Energy Facility. The Decommissioning Bond must be at 105% of the total decommissioning costs (not including the salvage value of equipment), based on the Decommissioning Report or updates thereof. The Decommissioning Report, the Bond and the updates thereof must be presented to and accepted and approved by the regulating authority prior to the issuance of a building permit for the facility. (The Siting Permit Fee issued by the County will be set by Resolution of the Commission).

4.1.3 The county reserves the right to require additional information or components to the Decommissioning Report as deemed necessary, to ensure that an adequate proposal is in place to decommission the facility in its entirety with adequate funds available.

4.1.4 The County is granted the right to seek injunctive relief to effect or complete decommissioning, as well as the county's right to seek reimbursement from applicant or applicant's successor for decommissioning costs in excess of the amount bonded.

4.1.4.1 The applicant, owner, and/or operator of the Solar Energy Facility shall defend, indemnify, and hold harmless the County of Meade and its officials from and against any and all claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses, and liabilities whatsoever, including attorney's fees,

without limitation, arising out of acts or omissions of the applicant, owner, and/or operator associated with the construction and/or operation of the Solar Energy Facility.

4.1.4.2 The owner and/or operator of the Solar Energy Facility shall maintain a current general liability policy covering bodily injury and property damage with limits of at least two million dollars (\$2,000,000) per occurrence and five million (\$5,000,000) in aggregate with a deductible of no more than five thousand dollars (\$5,000). Any loss of coverage must be reported within three (3) working days of loss. Failure to maintain coverage shall be considered a cessation of operations.

4.1.5 The Meade County Commission must be immediately notified in writing and in person of any change in ownership or management of the Solar Energy Facility with proof that the Decommission Bond is in place within 30 days of such a change.

4.1.6 The owner or operator shall notify the Meade County Commission by certified mail and in person of the proposed date of discontinued operations and plans for removal.

Section 5.0 MAINTENANCE OF SOLAR ENERGY FACILITIES

5.1 Maintenance Requirements

5.1.1 The owner or operator shall maintain the solar facility in good condition. Such maintenance shall include, but not be limited to, painting, structural integrity of the equipment and structures, as applicable, and maintenance of the buffer areas and landscaping. Site access shall be maintained to a level acceptable to the County. The project owner shall be responsible for the cost of maintaining the solar facility and access approaches/roads, and the cost of repairing damage to Meade County roads because of construction and operation.

5.1.2 Broken or waste solar panels will need to be removed from the Solar Energy System Facility site and shall not be stored on site for more than 60 days of being taken out of service.

5.1.3 No signage of any type may be placed on the facility other than notices, warnings, and identification information required by this Ordinance, in Section 2.1.9 and South Dakota State law.

Section 6.0 PENALTIES FOR VIOLATIONS OF THIS ORDINANCE

6.1 Code Enforcement

6.1.1 The provisions of this ordinance shall be administered and enforced by a County Ordinance Enforcement Officer appointed by the Commission, who shall have the power to make inspections necessary to carry out duties in enforcement of the ordinance.

6.1.1.1 The County Ordinance Enforcement Officer, with approval of the Director of Equalization and Planning, shall have the power to appoint deputies to assist in duties.

6.1.1.2 The County Ordinance Enforcement Officer and any deputies appointed shall have authority to issue ordinance violation notices (ticket/summons) which shall specify, in addition to other information at discretion of such officer, the following:

6.1.1.2.1 The date of violation.

6.1.1.2.2 The nature of violation.

6.1.1.2.3 The amount of penalty or fine associated with the violation.

6.1.1.2.4 The date the individual is required to appear in court unless the designated fine is paid prior thereto; and

6.1.1.2.5 The signature, or noted refusal to sign, of the violator.

6.1.1.3 An ordinance violation notice issued under authority of this ordinance shall be enforced as a civil proceeding before a magistrate court. The maximum penalty which may be imposed is \$500 per violation. Each day may be considered a separate violation.

6.1.1.4 Violations of this ordinance may also be subject to an action for injunctive relief brought by Meade County.

6.1.1.5 In addition to the penalty set forth above, the Commission may immediately seek injunctive relief for permit(s) to the Solar Energy Facility which do not meet the requirements of the Meade County Ordinances in force at the time the application was approved.

6.1.1.6 In addition to the penalty set forth above, an enforcement officer or law enforcement officer may issue a “stop-work” or “stop-operation” order upon the Solar Energy Facility. Such order shall state the life, safety or health of the public reasons for such order. The order shall further provide the date and time when the Commission will consider whether to enjoin the operation of the Solar Energy Facility. Such hearing shall be conducted within 45 days of the issuance of an order. The Solar Energy Facility shall have the opportunity to be heard at such hearing.

Section 7.0 VARIANCE CONDITIONS

7.1 Variance Request

7.1.1 A variance application and fee (which is set by Resolution of the Commission), is required to be completed and submitted to the Equalization & Planning Office when a variance to this Ordinance is requested.

7.1.2 Applications for a variance request will be reviewed and acted upon by the Board of Adjustment at the Planning Board’s regularly scheduled meetings.

7.1.3 The applicant shall mail a Certified Letter informing all adjacent landowners of their specific request for a variance and shall state the date, time, and place of the meeting with the Board of Adjustment, at least 14 days in advance of the scheduled meeting. The applicant must also place a Variance Sign, provided by the Equalization and Planning Office, at least 14 days in advance of the scheduled meeting, on the subject property facing the road with the highest traffic volume. The sign requires a deposit set by resolution of the Commission.

7.1.4 The applicant requesting the Variance has the burden of showing:

- 7.1.4.1 That the granting of the variance will not be contrary to the public interest,
or
- 7.1.4.2 That the literal enforcement of the Ordinance will result in unnecessary
hardship, or
- 7.1.4.3 That by granting the Variance contrary to the provisions of the Ordinance
the spirit of the ordinance will be observed or
- 7.1.4.4 That by granting the Variance, substantial justice will be done.

Section 8.0 SEVERABILITY AND SEPARABILITY

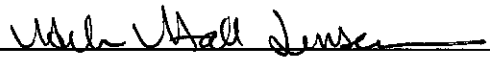
8.1 Should any Article, Section, Sub-section, or Provision of this Ordinance be declared by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not affect the validity or constitutionality of this ordinance as a whole or any part thereof other than the part so declared to be invalid or unconstitutional. Any portion of this ordinance stricken by a court of competent jurisdiction shall be immediately regarded as having been modified in accordance with any limitations imposed by the court.

Section 9.0 EFFECTIVE DATE

Ordinance 57, Solar Energy Facility Ordinance, shall take effect and be in force from and after 20 days from the date of completed publication after adoption of this Ordinance, heretofore adopted are hereby repealed. Adopted this 14th day of March 2023.

Dated at Sturgis, South Dakota, this 14th day of March 2023.

Commission Chairman of the Board: 
Ted Seaman, Chairman

Attested: 
Helen Hall Jensen, Meade County Auditor



First Reading: December 20th, 2022, January 24th, 2023 & February 14th, 2023
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