RENVILLE COUNTY LAND USE ORDINANCE

CHAPTER FIFTEEN

RENEWABLE ENERGY REGULATIONS

This chapter of the Renville County Land Use Ordinance shall be known as the Renville County Renewable Energy Regulations except as referred to herein where it shall be known as "this chapter."

INTENT AND PURPOSE

This chapter is established to set forth processes for permitting renewable energy from eligible energy technology as described in Minnesota Statutes, Section 216B.1691, or successor statutes, to promote the health, safety, and general welfare of the citizens of Renville County and shall include, but is not limited to, the following:

1. Wind Energy Conversion Systems (WECS) with a rated capacity of less than 25,000 kilowatts (kW) or 25 megawatts (MW) and to regulate the installation and operation of WECS within Renville County not otherwise subject to siting and oversight by the State of Minnesota pursuant to Minnesota Statutes, Chapter 216F, or successor statutes.

2. Solar Energy Conversion Systems (large and small) and to regulate the installation and operation of solar energy conversion systems within Renville County pursuant to Minnesota Statutes, Chapter 216C and Section 500.30, or successor statutes, and Minnesota Rules, Part 1325.1100, as amended.

3. Energy Storage Systems with a rated capacity of 100 kilowatts (kW) or greater and to establish processes for permitting commercial energy storage systems and to regulate the installation and operation of energy storage systems within Renville County, outside of the incorporated limits of municipalities, pursuant to Minnesota Statutes, Sections 216B.2422 and 216I.08, or successor statutes, and Minnesota Rules, Chapter 1325.1100, as amended.

PART 1
WIND ENERGY CONVERSION SYSTEMS (WECS)

WECS and meteorological towers will be permitted, conditionally permitted, or not permitted based on the following table:

District	Non-Commercial	Commercial	Meteorological Tower
Agricultural	Permitted Use	Conditional Use	Permitted/Conditional Use*
Rural Residential	Not Permitted	Not Permitted	Not Permitted
Urban Expansion	Not Permitted	Not Permitted	Not Permitted
Healthcare/Mixed Use	Not Permitted	Not Permitted	Not Permitted
Commercial/Industrial	Conditional Use	Conditional Use	Conditional Use
Flood Plain	Not Permitted	Not Permitted	Not Permitted
Shoreland	Not Permitted	Not Permitted	Not Permitted
Scenic River	Not Permitted	Not Permitted	Not Permitted
Project River Bend	Not Permitted	Not Permitted	Not Permitted
Airport Zone A	Not Permitted	Not Permitted	Not Permitted
Airport Zone B	Not Permitted	Not Permitted	Not Permitted
Airport Zone C	Not Permitted	Not Permitted	Not Permitted

* Meteorological towers over 200 feet in height in an Agricultural District shall require a Conditional Use Permit.

SECTION 1. GENERAL PROVISIONS

1. All WECS and meteorological towers shall be in compliance with all applicable federal, state, and County regulatory standards including FCC, FAA, EPA, and MPCA permits and regulations and applicable State of Minnesota Code regulations.

2. All required setbacks from a WECS or meteorological tower shall be measured from the base of the tower. Anchors for the guy wires must meet underlying setback requirements and shall be surrounded by a four-foot-high fence.

3. No WECS shall cause interference with a state or County microwave transmission system or any electromagnetic communications including radio, television, telecommunications, or navigation signals. The owner/operator shall be responsible for alleviating any disruption or interference of these services caused by the WECS or any associated facilities.

4. A WECS facility shall be considered abandoned if the use is discontinued (no energy production) for a period of 12 or more consecutive months, unless a plan has been submitted and approved by the Zoning Administrator outlining steps and a schedule for returning the WECS to service. The WECS shall be removed 180 calendar days from the date of abandonment.

5. All WECS facilities shall have a decommissioning plan outlining the anticipated means and cost of removing the WECS turbine, tower (including foundation), and all

other accessory facilities and structures at the end of their serviceable life or at facility abandonment; the disposal of all solid and hazardous waste; and a restoration plan for reuse of the site. The plan shall also address road maintenance during and after completion of the decommissioning. All WECS and their accessory facilities including all foundations shall be removed to four feet below grade within 180 calendar days of abandonment.

6. The owner/operator shall be responsible for immediate repair of damage to public drainage systems stemming from construction, operation, maintenance, or decommissioning of the WECS or a meteorological tower.

7. The owner/operator of a WECS shall be responsible for restoration of all County/township roads and bridges leading to the project site that may be damaged during construction or decommissioning of the WECS or meteorological tower or due to activities involving the WECS operation.

8. A financial guarantee in the form of a performance bond, letter of credit, cash deposit, or other security shall be submitted, prior to commencement of power generation, to cover the cost of decommissioning and to ensure all haul routes and bridges have been repaired/restored to the Road Authority's approval and satisfaction following construction or decommissioning of the WECS. In the event the project owner fails to fully decommission the project, and/or funds earmarked in the decommissioning bond are insufficient to cover the full decommissioning costs, it will be the responsibility of the landowner(s) to provide the additional funds required to fully decommission the project.

9. In the event the project owner and/or landowner(s) fail to fully decommission the project and the funds in the decommissioning bond are insufficient, the County may recover the uncovered decommissioning costs by employing any and all available legal and financial mechanisms including, but not limited to:

    A. Filing a lien(s) against the property(ies).

    B. Civil judgments or other court-ordered remedies against all landowners and the project owner.

    C. Other statutory and Ordinance-based enforcement.

10. The owner/operator shall be responsible for providing a baseline condition of all haul routes, including analysis of all bridges by a registered engineer, to determine their capacity to support oversized vehicles prior to use of the roads during construction or decommissioning of a WECS. The baseline must be submitted to Renville County Environmental Services prior to construction.

11. No WECS facility or meteorological tower shall be erected in any major subdivision platted and zoned for residential use.

12. The owner/operator shall provide proof of bodily injury, property damage, and public liability insurance in the amount of $1,000,000 per occurrence prior to construction.

SECTION 2. PERFORMANCE STANDARDS

1. Structural design of a WECS or meteorological tower and equipment shall be in compliance with industry standards and manufacturer specifications. The structural design plan including turbine, foundation, and tower design shall be approved and certified by a registered State of Minnesota professional engineer.

2. All WECS shall be white, gray, or another non-obtrusive color demonstrated to minimize visibility unless otherwise required by FAA regulations. All finishes shall be matte or non-reflective. Turbine blades may be black in order to facilitate deicing.

3. All WECS and meteorological towers shall be reasonably protected against unauthorized climbing. The bottom of the WECS tower from ground level to 12 feet above ground shall be designed in a manner to preclude unauthorized climbing or shall be enclosed by a six-foot-high chain link fence with a locked gate.

4. All WECS towers shall be a tubular, monopole-type design tower. Exceptions may be made for the use of lattice towers for non-commercial WECS. The use of a guy tower is permitted for meteorological tower construction.

5. Signs shall be posted on the tower, transformer, and substation to warn of high voltage and notice of no trespassing. Signs with emergency contact information shall also be posted on the base of the tower.

6. All solid waste and hazardous waste shall be removed from the site immediately and disposed of in a manner consistent with all federal, state, or County rules and regulations.

7. All WECS facilities and meteorological towers including associated equipment shall comply with federal, state, and County regulatory standards including standards with regard to noise (Minnesota Rules, Chapter 7030, as amended), the National Electrical Code, and Federal Aviation Administration.

8. All WECS feeder lines equal to or less than 34.5 kV, communications cables, and associated electrical equipment shall be buried underground. Allowances by the Zoning Administrator may be provided where shallow bedrock interferes with the ability to bury underground lines. All lines to be placed within public rights-of-way shall be approved by the Road Authority.

9. WECS tower owners shall be required to conduct an annual inspection of their facilities to ensure continuing compliance with this chapter. A copy of the annual

inspection report shall be provided to the Zoning Administrator on or before January 31 of the year following the inspection.

10. In the event of revocation of a permit, the WECS tower and all accessory structures must be removed and the site restored to its original condition within 180 calendar days. Failure to do so may result in the County completing the removal and site restoration, and the County's cost shall be assessed against the property and collected as a portion of the real estate tax.

11. WECS rotor blades or airfoils must maintain at least a 25-foot clearance between their lowest point and the ground.

12. No WECS tower shall have light, reflectors, flashers, daytime strobes, steady nighttime red lights, or other illuminating devices affixed or attached to it unless required by the FAA. All lighting including lighting intensity and frequency shall adhere to but not exceed requirements established by FAA permits and regulations. Security lighting may be allowed at the tower base.

13. No advertising signage shall be placed on WECS or meteorological towers. The manufacturer or owner's company name and/or logo may be placed on the compartment containing the electrical generator of a WECS.

14. All meteorological towers shall comply with the following marking, painting, and lighting requirements set forth in Minnesota Statutes, Section 360.915, or any successor statutes:

    A. Towers shall be painted in equal-width bands of solid color over its entire length, alternating between aviation orange and white so that orange is at the top of the tower and at the base of the tower.

    B. Towers shall have a flashing red obstruction light at the top of the tower that is compatible with a night vision imagining system, as determined by the Commissioner of the Minnesota Department of Transportation. The obstruction light shall be monitored by visual inspection or the use of automated monitoring at least once every 24 hours.

    C. The surface area under the entire footprint of the tower and 15 feet past the outer anchors must be free of vegetation or planted in vegetation that is distinctly different from the vegetation surrounding the tower.

    D. Guy wire towers must have at least three spherical markers attached to each of the highest or outside guy wires that are painted solid aviation orange and placed so that one is within 15 feet of the upper anchor point of the guy wire one in the middle, and 5-10 feet above the tallest crop to be grown in the immediate vicinity.

E. Colored safety sleeves, a minimum of seven feet in height above grade, shall be installed at all guy wire anchor points.

F. The tower owner must give notice to the Commissioner of the Minnesota Department of Transportation at least 30 days prior to erecting a stand-alone meteorological tower. Notice shall also be submitted to Renville County Environmental Services.

SECTION 3. SETBACKS

1. The following minimum setbacks are required for placement of all WECS and meteorological towers:

	Non-Commercial	**Commercial**	**Meteorological Tower**
Project Boundary/ Property Lines	1.1 times total tower height	1.1 times total tower height	1.1 times total tower height
Dwellings and Residential Subdivisions	750 feet or sufficient distance to meet state noise standards, whichever is greater (see 3.2.H for more details)	1,000 feet or sufficient distance to meet state noise standards, whichever is greater (see 3.2.H for more details)	1.1 times total tower height, minimum of 250 feet
Noise Standard	Distance to comply with Minnesota Rules, Chapter 7030, as amended	Distance to comply with Minnesota Rules, Chapter 7030, as amended	N/A
Road Right-of-Way	1.1 times total tower height	1.1 times total tower height	1.1 times total tower height
Other Right-of-Way (Railroads, Power Lines, Recreational Trails)	1.1 times total tower height	1.1 times total tower height	1.1 times total tower height
Drainage Ditch (measure from top of berm)	1.1 times total tower height	1.1 times total tower height	1.1 times total tower height
Public Conservation Lands, Designated Scenic or Natural Area	600 feet	600 feet	600 feet
Wetlands, USFW Types III, IV, and V	600 feet	600 feet	600 feet
Other Structures	1.1 times total tower height	1.1 times total tower height	1.1 times total tower height, minimum of 250 feet
Other Existing WECS and Internal Turbine Spacing	3 Rotor Diameter non-prevailing and 5 Rotor Diameter prevailing	3 Rotor Diameter non-prevailing and 5 Rotor Diameter prevailing	N/A

Minnesota River, DNR-Protected Lake or River	N/A	1,320 feet	N/A
Federal, State, or County Park Boundary, Significant Historic Site	N/A	1,320 feet	N/A

2. Additional Setback Requirements.

A. New residential dwellings and structures must be set back from an existing WECS according to the standards above. New residences built to replace an existing residence on the same site are exempted provided that any new construction does not further encroach into the nonconforming setback.

B. WECS and meteorological tower setbacks do not apply to dilapidated dwellings or other structures.

C. Non-commercial WECS and meteorological tower setbacks do not apply to an applicant's own residence.

D. No WECS, meteorological tower, or associated facilities shall be located so as to create an obstruction to navigable airspace of public or private airports. Setbacks and other limitations are to be determined in accordance with requirements set by the MnDOT Office of Aeronautics and the Federal Aviation Administration.

E. All WECS substations and accessory structures shall comply with the lot and setback requirements as regulated in Chapter Two (Zoning Regulations), Part 2, Section 2, of this Ordinance.

F. All commercial WECS shall comply with all wind access buffer setback (setback from lands and/or wind rights not under permittee's control) standards as regulated by the Minnesota Public Utilities Commission.

G. All WECS shall comply with internal turbine spacing setback standards as regulated by the Minnesota Public Utilities Commission to ensure efficient use of wind resources, long-term energy production, and reliability.

H. All commercial and non-commercial WECS shall comply with noise standards as found in Minnesota Rules, Chapter 7030, as amended, and shall not exceed 50 db(A) when measured from the outside of the nearest residence, business, school, religious institution, or other inhabited structures.

I. WECS and associated facilities shall not be placed in native prairie unless approved in a native prairie protection plan. A native prairie protection plan shall be submitted if native prairie is present. The permittee shall, with the

advice of the DNR and any others selected by the permittee, prepare a native prairie protection plan and submit it to the County and DNR Commissioner 60 days prior to the start of construction.

J. WECS, meteorological towers, and associated facilities shall be prohibited in active sand, gravel, and hard rock operations.

K. No WECS, meteorological towers, or associated facilities shall be located to create an obstruction to navigable airspace of public and private airports in Renville County. Setbacks or other limitations determined in accordance with MnDOT Office of Aeronautics and Federal Aviation Administration (FAA) requirements.

SECTION 4. PERMIT APPLICATION

An application for a permit for a WECS will not be considered or acted upon if a size determination is required pursuant to Minnesota Statutes, Chapter 216I, as amended, to determine what jurisdiction has siting authority to issue, deny, modify, impose conditions upon, or revoke a permit. In addition to the permit requirements required elsewhere in this Ordinance, all proposed WECS and meteorological tower permit applications shall include the following applicable information:

1. The names and addresses of the project applicant, project owner, and owner of the land.

2. Evidence of land ownership or legal control in the form of a deed, easement, or other legal instrument of all property within the project boundary on which the WECS or meteorological tower is to be located.

3. 911 address of the project site.

4. A description of the WECS or meteorological tower project including number, type, and total nameplate generating capacity of turbines, tower height, diameter of turbine rotors, means of interconnecting with the electrical grid, and project timeline.

5. A scaled site plan detailing the location of the project area boundaries (purchased and leased wind rights), property lines, wind turbine or meteorological tower locations, road rights-of-way, tower access drives, transformers, electrical lines, feeder and communications lines, interconnection point with electrical grid, other ancillary facilities or structures, and distance to residential dwellings/structures and other structures.

6. A USGS topographical map (or map of similar data) of the property and surrounding area within 1,320 feet of all proposed WECS and meteorological towers indicating their distance to wetlands; rivers and streams; lakes; scenic and natural areas; significant historic sites; all federal, state, or County parks; any municipality; or residential subdivision.

7. Foundation and tower plans and specifications including an engineering certification from the manufacturer's engineer or another qualified engineer registered in the State of Minnesota that the turbine, foundation, and tower design of the WECS or the meteorological tower foundation and tower design are within accepted professional standards given local soil and climate conditions.

8. A decommissioning plan including anticipated life of the project, the anticipated manner in which the facility is to be decommissioned and the site restored, estimated current cost of decommissioning and site restoration including a method and schedule for updating decommissioning costs, and the method of ensuring that funds will be available for decommissioning and site restoration.

9. The latitude and longitude of individual commercial WECS and meteorological towers.

10. A USGS topographical map (or map of similar data) of the property and surrounding area including identification and description of all other WECS within 10 rotor diameters of the proposed WECS project (commercial WECS only).

11. A map indicating the location of all communication towers within two miles of all proposed WECS.

12. A copy of all permits, studies, or documentation indicating the proposed WECS is in compliance with all federal, state, or County regulatory standards including but not limited to:

    A. Uniform Building Code, as amended.

    B. The National Electrical Code, as amended.

    C. Federal Aviation Administration (FAA) Regulations, as amended.

    D. Minnesota Pollution Control Agency (MPCA)/Environmental Protection Agency (EPA) Regulations including Minnesota Rules, Chapter 7030 (Noise Standards), as amended.

    E. Microwave Beam Path Study.

    F. Flicker Analysis.

    G. Wake Loss Study, if proposed project boundary is within a one-mile radius of another WECS project boundary (commercial WECS projects only).

    H. Preliminary Acoustical Analysis.

    I. Noise Abatement Mitigation Plan.

13. A map identifying all haul routes to be utilized for material transportation and construction activities and the locations of all construction sites and staging areas within Renville County. The applicant must provide written documentation prior to beginning construction that all haul routes have been approved by each of the Road Authorities with jurisdiction through a signed Road Use Agreement and a Development Agreement.

14. Signed power purchase contracts or documentation that the power will be utilized onsite.

15. Location of all public airports within five miles of all proposed WECS and meteorological towers.

16. Written size determination of the project as outlined in Minnesota Statutes, Section 216I, as amended, if required.

17. A signed copy of the interconnection agreement with the local electric utility, or a draft of the interconnection agreement with the local utility that must be signed and submitted prior to construction commencement, or a written explanation outlining why an interconnection agreement is not necessary.

18. A copy of the safety plan and onsite training plan that will be provided to area emergency personnel within two months after the site is constructed and operational.

19. An application fee as established by the Renville County Board of County Commissioners.

20. Any additional information as required by Minnesota Rules, Part 7854.0500 (Site Permit Application Contents), as amended, or as requested by the Zoning Administrator, the Planning Commission, or the Renville County Board of Commissioners.

SECTION 5. INSPECTIONS AND COMPLIANCE MONITORING

1. Renville County employees, within their departmental capacity, or their designated representative, retain the authority to conduct inspections of the project at any time, without prior notice to the landowner or project owner, to verify compliance with this Ordinance and applicable regulatory standards. This authority extends to all areas including those enclosed by fencing.

2. The project owner shall, upon request, provide the County with verification that the project is operating in accordance with its design.

PART 2
SOLAR ENERGY CONVERSION SYSTEMS (SOLAR FARMS)

Solar energy conversion systems will be permitted, conditionally permitted, or not permitted based on the following table:

District	Accessory Use (Non-Commercial) Less than 100 kilowatts Direct Current	Solar Energy Conversion System (Solar Farm) (Commercial) 100 kilowatts or Greater Direct Current
Agricultural	Permitted Use	Conditional Use
Rural Residential	Permitted Use	Not Permitted
Urban Expansion	Permitted Use	Not Permitted
Healthcare/Mixed Use	Permitted Use	Not Permitted
Commercial/Industrial	Permitted Use	Conditional Use
Flood Plain	Not Permitted	Not Permitted
Shoreland	Permitted Use	Not Permitted
Scenic River	Not Permitted	Not Permitted
Project River Bend	Permitted Use	Not Permitted
Airport Zone A	Not Permitted	Not Permitted
Airport Zone B	Not Permitted	Not Permitted
Airport Zone C	Permitted Use	Not Permitted

SECTION 1. PERFORMANCE STANDARDS (ACCESSORY USE)

1. Building, wall, or roof-mounted solar systems shall not exceed the maximum allowed height in any zoning district.

2. Ground or pole-mounted solar systems shall not exceed the maximum allowed height in any zoning district when oriented at maximum tilt.

3. Ground or pole-mounted solar systems shall meet the structure setback allowed in any zoning district.

4. The total collector surface area of a pole or ground-mounted solar system located in a Rural Residential District or an Urban Expansion District shall not exceed one percent of the total lot or building site area.

5. Electric solar system components must have an Underwriters Laboratory (UL) listing.

6. All photovoltaic systems shall comply with the Minnesota State Electrical Code.

7. No grid-intertie photovoltaic system shall be installed until evidence has been given to the Department that the owner has notified the utility company of the customer's intent to install an interconnected customer-owned generator. Off-grid systems are exempt from this requirement.

8. Building, wall, and roof-mounted solar systems must be anchored to a structurally certified building in such a manner to withstand wind speeds so as not to pose a safety hazard.

9. Building, wall, and roof-mounted solar systems located in a Rural Residential District shall be a color that blends into the wall or roof of the building.

SECTION 2. PERFORMANCE STANDARDS (SOLAR FARM)

1. All height requirements of the primary and overlay districts shall be met.

2. The use shall comply with all federal, state, and County rules, regulations, and ordinances.

3. Signs shall comply with the requirements of Chapter Two (Zoning Regulations), Part 3, Section 1.11.

4. A solar farm shall be considered abandoned if the use is discontinued (no energy production) for a period of 12 consecutive months or more unless a plan has been submitted and approved by the Zoning Administrator outlining steps and a schedule for returning the solar farm to service. The solar farm shall be removed 180 calendar days from the date of abandonment.

5. The manufacturer's engineer or another qualified engineer shall certify that the foundation and design of the solar panels are within accepted professional standards given local soil and climate conditions.

6. A solar farm shall be in compliance with any applicable local, state, and federal regulatory standards including the State of Minnesota Uniform Building Code, as amended, and the National and Minnesota Electrical Codes, as amended.

7. Power and communication lines running between banks of solar panels and to electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by Renville County Environmental Services in instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines.

SECTION 3. SETBACKS

1. The following minimum setbacks are required for placement of all solar energy conversion systems:

	Accessory Use (Non-Commercial)	**Solar Energy Conversion System (Solar Farm) (Commercial)**
Participating Dwelling Sites*	N/A	200 feet
Non-Participating Dwelling Sites**	N/A	500 feet***
Municipality	N/A	200 feet
Cemeteries	N/A	200 feet
Road Right-of-Way	67 feet	67 feet
Drainage Ditch	67 feet	67 feet
County Tile Line	N/A	40 feet from centerline (80-foot corridor)
Side Yard Property Line	20 feet	20 feet
Rear Yard Property Line	20 feet	20 feet

* Owner of a dwelling site who owns land adjacent to where the solar project will be constructed.

** Owner of a dwelling site that does not own land adjacent to where the solar project will be constructed.

*** Any setback distance within the 500 feet of a non-participating dwelling owner requires a signed waiver from the non-participating owner. The solar project cannot be closer than 200 feet to any dwelling site. The signed waiver shall be recorded with the Renville County Recorder as part of the Conditional Use Permit.

2. Additional Setback Requirements.

   A. All components of a solar farm, including solar panels, mounting devices, foundations for mounting devices, buildings, and fences, shall meet the setback from dwelling sites. Setbacks do not apply to dilapidated dwellings/structures, the applicant's own residence, or a residence on the farm where the solar farm is located. Setback distances shall be measured and rounded to the nearest foot by measuring a straight line from the closest point of the existing dwelling site to the closest point of the proposed solar farm.

   B. All components of a solar farm, including solar panels, mounting devices, foundations for mounting devices, buildings, and fences, shall meet the setback from the road right-of-way and side and rear property lines. Setback distances shall be measured and rounded to the nearest foot by measuring a straight line from the closest point of the road right-of-way and side and rear property lines to the closest point of the proposed solar farm.

C. All components of a solar farm, including solar panels, mounting devices, foundations for mounting devices, buildings, and fences, shall meet the setback from cemeteries. Setback distances shall be measured and rounded to the nearest foot by measuring a straight line from the closest point of the cemetery to the closest point of the proposed solar farm.

D. All components of a solar farm, including solar panels, mounting devices, foundations for mounting devices, buildings, and fences, shall be measured from the top of the drainage ditch berm.

E. Setback in the U.S. Highway 212 corridor shall be 200 feet from the road centerline.

F. Setbacks may differ in the Shoreland District (reference Chapter Six – Shoreland Management Regulations).

G. County tile line setbacks can be petitioned to reroute the tile lines (reference Minnesota Statutes, Section 103E.227, or successor statutes).

SECTION 4. PERMIT APPLICATION

In addition to the permit requirements required elsewhere in the Renville County Land Use Ordinance, all proposed commercial solar energy conversion system permit applications shall include the following applicable information:

1. The names and addresses of the project applicant, project owner, and owner of the land.

2. Evidence of land ownership or legal control in the form of a deed, easement, or other legal instrument of all property within the project boundary on which the solar farm is to be located.

3. 911 address of the project site.

4. A description of the solar farm project including number, type, and generating capacity of solar panels, overall solar panel height, means of interconnecting with the electrical grid, and project timeline.

5. A site plan of existing conditions showing the following:

   A. Existing property lines and property lines extending 100 feet from the exterior boundaries, including the names of the adjacent landowners and current use of those properties.

   B. Existing public and private roads showing widths of the roads and any associated easements.

C. Location and size of any wells, sewage treatment systems, and dumps.

D. Existing public and private field drainage tile location and size. Must include the proposed method of repair for tiles damaged during and after construction.

E. Existing buildings and any impervious surface.

F. Topography at two-foot intervals and source of contour interval. A contour map of the surrounding properties may also be required.

G. Existing vegetation; i.e., grassland, plowed field, wooded areas, etc.

H. Waterways, watercourses, lakes, and public water wetlands.

I. Delineated wetland boundaries within 100 feet of the energy storage system.

J. The 100-year flood elevation and Regulatory Flood Protection Elevation, if available.

K. Floodway, flood fringe, and/or general flood plain district boundary, if applicable.

L. Mapped soils according to the Renville County Soil Survey.

M. Surface water drainage patterns.

6. A site plan of proposed conditions showing the following:

A. Location and spacing of solar panels.

B. Location of access road.

C. Planned location of underground or overhead power lines connecting the solar energy system to the building, substation, or other electrical load.

D. New electrical equipment other than at the existing building or substation that is the new connection point for the solar energy system.

E. Proposed erosion and sediment control measures.

F. Proposed stormwater management measures.

G. Sketch elevation of the premises accurately depicting the proposed solar energy conversion system and its relationship to structures on adjacent lots (if any).

H. Location of energy storage system, if any.

7. In addition to the site plan of the proposed conditions as required, there shall be a separate plan showing proposed screening and vegetation for the site. A screening barrier will be required and maintained between the solar project and adjacent residences. However, a residential landowner may sign a waiver stating they do not want screening planted adjacent to their residence. Screening may also be required along roadways if the Planning Commission deems it necessary. Screening is required to be planted on the outside of the solar farm's perimeter fence when deemed necessary by the Planning Commission. The Planning Commission may require additional screening between solar farms and adjoining properties. The Planning Commission may create a condition specifying the type of vegetative cover and screening to be used for the project.

8. Perennial vegetation and screening shall be established within 60 days of completion of the project. The solar company and landowner are jointly responsible for proper vegetative and screening maintenance, unless a signed agreement between the solar company and landowner identifies who is responsible for vegetative and screening maintenance and a copy of the agreement is provided to the County.

9. Noxious weeds are prohibited from growing within and outside the fenced area of the solar project including the screening area. The solar company and landowner are jointly responsible for weed control inside and outside the fence, unless a signed agreement between the solar company and landowner identifies who is responsible for weed control and a copy of the agreement is provided to the County.

10. Maintenance plan for the grounds of the system. The plan shall include the seed mix to be used under and around the panels and a mowing plan indicating the frequency of mowing.

11. Manufacturer's specifications and recommended installation methods for all major equipment including solar panels, mounting systems, and foundations for poles or racks.

12. The number of panels to be installed.

13. A description of the method of connecting the array to a building or substation.

14. A signed copy of the interconnection agreement with the local electric utility, or a draft of the interconnection agreement with the local utility that must be signed and submitted prior to construction commencement, or a written explanation outlining why an interconnection agreement is not necessary.

15. A decommissioning plan shall be required to ensure the solar farms are properly removed after their useful life. The plan shall include the anticipated life of the project, the anticipated manner in which the facility is to be decommissioned and the site restored, estimated current cost of decommissioning and site restoration including a method and schedule for updating decommissioning costs, and the method of ensuring that funds will be available for decommissioning and site restoration.

16. A financial guarantee in the form of a performance bond, letter of credit, cash deposit, or other security shall be submitted, prior to commencement of power generation, to cover the cost of decommissioning and to ensure all haul routes and bridges have been repaired/restored to the Road Authority's approval and satisfaction following construction or decommissioning of the solar project. In the event the project owner fails to fully decommission the project, and/or funds earmarked in the decommissioning bond are insufficient to cover the full decommissioning costs, it will be the responsibility of the landowner(s) to provide the additional funds required to fully decommission the project.

17. In the event the project owner and/or landowner(s) fail to fully decommission the project and the funds in the decommissioning bond are insufficient, the County may recover the uncovered decommissioning costs by employing any and all available legal and financial mechanisms including but not limited to:

    A. Filing a lien(s) against the property(ies).

    B. Civil judgments or other court-ordered remedies against all landowners and the project owner.

    C. Other statutory and Ordinance-based enforcement.

18. Identification of all potential haul routes to be utilized for material transportation and construction activities including state, federal, County, township, or private roads within the County. Must provide written documentation prior to construction commencement that all haul routes have been approved by each of the Road Authorities within jurisdiction through a signed Road Use Agreement and a Development Agreement.

19. A copy of the safety plan and onsite training plan that will be provided to area emergency personnel within two months after the site is constructed and operational.

20. Additional information as requested by the Zoning Administrator, the Planning Commission, or the Renville County Board of Commissioners.

SECTION 5. INSPECTIONS AND COMPLIANCE MONITORING

1. Renville County employees, within their departmental capacity, or their designated representative, retain the authority to conduct inspections of the project at any time, without prior notice to the landowner or project owner, to verify compliance with this Ordinance and applicable regulatory standards. This authority extends to all areas including those enclosed by fencing.

2. The project owner shall, upon request, provide the County with verification that the project is operating in accordance with its design.

PART 3
ENERGY STORAGE SYSTEMS

SECTION 1. DEFINITIONS

Energy Storage System – A system or technology that captures energy produced at one time for use at a later time. It stores energy in various forms—such as electrical, chemical, thermal, or mechanical—and releases it when needed to balance supply and demand, improve efficiency, and support grid stability.

Thermal Runaway – The uncontrollable self-heating of a battery cell.

SECTION 2. SITING AND PERMITTED/CONDITIONAL USE

Energy storage systems will be permitted, conditionally permitted, or not permitted based on the following table:

District	Accessory Use (Non-Commercial) Less than 100 kilowatts	Energy Storage Systems (Commercial) 100 kilowatts or Greater
Agricultural	Permitted Use	Conditional Use
Rural Residential	Permitted Use	Not Permitted
Urban Expansion	Permitted Use	Not Permitted
Healthcare/Mixed Use	Not Permitted	Not Permitted
Commercial/Industrial	Permitted Use	Conditional Use
Flood Plain	Not Permitted	Not Permitted
Shoreland	Not Permitted	Not Permitted
Scenic River	Not Permitted	Not Permitted
Project River Bend	Not Permitted	Not Permitted
Airport Zone A	Not Permitted	Not Permitted
Airport Zone B	Not Permitted	Not Permitted
Airport Zone C	Not Permitted	Not Permitted

SECTION 3. PERFORMANCE STANDARDS

1. All height requirements of the primary and overlay districts shall be met.

2. The use shall comply with all federal, state, and County rules, regulations, and ordinances.

3. Signs shall comply with the requirements of Chapter Two (Zoning Regulations), Part 3, Section 1.11.

4. An energy storage system shall be considered abandoned if the use is discontinued (no energy production) for a period of 12 consecutive months or more unless a plan has been submitted and approved by the Zoning Administrator outlining steps and a

schedule for returning the energy storage system to service. The energy storage system shall be removed 180 calendar days from the date of abandonment.

5. Stormwater management and erosion sediment control shall meet the requirements of the MPCA construction stormwater permit requirements.

6. All structures/containers that are part of the energy storage system shall be of the same color; i.e., white, gray, or another non-obtrusive color. All finishes shall be matte or non-reflective.

7. The stacking of energy storage system units is prohibited.

8. All energy storage structures shall be placed/installed in an organized, uniform plan.

9. The energy storage structure shall be placed on a gravel/hard surface area.

10. A non-combustible buffer zone of at least 20 feet must be maintained between the energy storage units and any combustible materials like trees, shrubs, tall grasses, or combustible structures to prevent fire spread.

11. All energy storage structures must be equipped with an automatic fire suppression system. If a clean agent fire suppression system is commercially available and suitable for the specific battery chemistry, it shall be installed and maintained.

12. The energy storage system must:

    A. Undergo bi-annual maintenance and testing to ensure ongoing reliability and readiness. These results must be submitted to Renville County Environmental Services.

    B. Comply with all applicable fire safety standards, including National Fire Protection Association (NFPA 855 or its equivalent).

    C. Be designed to effectively manage fire risks associated with battery storage, particularly thermal runaway.

    D. Incorporate early detection methods (gas, smoke, heat, flame detectors) for automatic activation.

    E. Include provisions for containment to prevent fire spread beyond the battery enclosures.

13. A security fence shall encompass all components of the energy storage structures featuring at least one gate with a locking mechanism on the primary access side. The fence must display appropriate warning signs, which are clearly visible, and 24-hour emergency contact information at points of entry to the fenced area.

14. All energy storage structures shall be in compliance with any applicable local, state, and federal regulatory standards, including the State of Minnesota Uniform Building Code, as amended, and the National Electrical Code, as amended.

SECTION 4. SETBACKS

1. The following minimum setbacks are required for placement of all energy storage systems:

	Accessory Use (Non-Commercial) Less than 100 kilowatts	**Energy Storage Systems (Commercial) 100 kilowatts or Greater**
Participating Dwelling Sites*	N/A	200 feet
Non-Participating Dwelling Sites**	N/A	500 feet***
Municipality	N/A	200 feet
Cemeteries	N/A	200 feet
Road Right-of-Way	67 feet	67 feet
Drainage Ditch	67 feet	100 feet
County Tile Line	N/A	40 feet from centerline (80-foot corridor)
Side Yard Property Line	20 feet	20 feet
Rear Yard Property Line	20 feet	20 feet

* Owner of a dwelling site who owns land adjacent to where the energy storage system will be constructed.

** Owner of a dwelling site that does not own land adjacent to where the energy storage system will be constructed.

*** Any setback distance within the 500 feet of a non-participating dwelling owner requires a signed waiver from the non-participating owner. The energy storage system cannot be closer than 200 feet to any dwelling site. The signed waiver shall be recorded with the Renville County Recorder as part of the Conditional Use Permit.

2. Additional Setback Requirements.

A. All components of an energy storage system, including buildings and fences, shall meet the setback from dwelling sites. Setbacks do not apply to dilapidated dwellings/structures, the applicant's own residence, or a residence on the farm where the energy storage system is located. Setback distances shall be measured and rounded to the nearest foot by measuring a straight line from the closest point of the existing dwelling site to the closest point of the proposed energy storage system.

B. All components of an energy storage system, including buildings and fences, shall meet the setback from the road right-of-way and side and rear property lines. Setback distances shall be measured and rounded to the nearest foot

by measuring a straight line from the closest point of the road right-of-way and side and rear property lines to the closest point of the proposed energy storage system.

C. All components of an energy storage system, including buildings and fences, shall meet the setback from cemeteries. Setback distances shall be measured and rounded to the nearest foot by measuring a straight line from the closest point of the cemetery to the closest point of the proposed energy storage system.

D. All components of an energy storage system, including buildings and fences, shall be measured from the top of the drainage ditch berm.

E. Setback in the U.S. Highway 212 corridor shall be 200 feet from the road centerline.

F. Setbacks may differ in the Shoreland District (reference Chapter Six – Shoreland Management Regulations).

G. County tile line setbacks can be petitioned to reroute the tile lines (reference Minnesota Statutes Section 103E.227, or successor statutes).

SECTION 5. PERMIT APPLICATION

In addition to the permit requirements required elsewhere in the Renville County Land Use Ordinance, all proposed commercial energy storage system permit applications shall include the following applicable information:

1. The names and addresses of the project applicant, project owner, and owner of the land.

2. Evidence of land ownership or legal control in the form of a deed, easement, or other legal instrument of all property within the project boundary on which the energy storage system is to be located.

3. 911 address of the project site.

4. A description of the energy storage system project including generating capacity, overall height, means of interconnecting with the electrical grid, and project timeline.

5. A site plan of existing conditions showing the following:

   A. Existing property lines and property lines extending 100 feet from the exterior boundaries, including the names of the adjacent landowners and current uses of those properties.

   B. Existing public and private roads showing widths of the roads and any associated easements.

   C. Location and size of any wells, sewage treatment systems, and dumps.

   D. Existing public and private field drainage tile location and size. Must include the proposed method of repair for tiles damaged during and after construction.

   E. Existing buildings and any impervious surface.

   F. Topography at two-foot intervals and source of contour interval. A contour map of the surrounding properties may also be required.

   G. Existing vegetation; i.e., grassland, plowed fields, wooded areas, etc.

   H. Waterways, watercourses, lakes, and public water wetlands.

   I. Delineated wetland boundaries within 100 feet of the energy storage system.

   J. The 100-year flood elevation and Regulatory Flood Protection Elevation, if applicable.

   K. Floodway, flood fringe, and/or general flood plain district boundary, if applicable.

   L. Mapped soils according to the Renville County Soil Survey.

   M. Surface water drainage patterns.

6. A site plan of proposed conditions showing the following:

   A. Location of energy storage system.

   B. Location of access road.

   C. Planned location of underground or overhead power lines connecting the energy storage system to the solar energy system, wind energy system, substation, or another electric load.

D. New electrical equipment other than at the existing building or substation that is the new connection point for the energy storage system.

E. Proposed erosion and sediment control measures.

F. Proposed stormwater management measures.

G. Sketch elevation of the premises accurately depicting the proposed energy storage system and its relationship to structures on adjacent lots (if any).

7. In addition to the site plan of the proposed conditions as required, there shall be a separate plan showing proposed screening and vegetation for the site. A screening barrier will be required and maintained between the energy storage system and adjacent residences. However, a residential landowner may sign a waiver stating they do not want screening planted adjacent to their residence. Screening may also be required along roadways if the Planning Commission deems it necessary. Screening is required to be planted on the outside of the energy storage system's perimeter fence when deemed necessary by the Planning Commission. The Planning Commission may require additional screening between energy storage systems and adjoining properties. The Planning Commission may create a condition specifying the type of vegetative cover and screening to be used for the project.

8. Perennial vegetation and screening shall be established within 60 days of completion of the project. The energy storage system owner and landowner are jointly responsible for proper vegetative and screening maintenance, unless a signed agreement between the energy storage system owner and landowner identifies who is responsible for vegetative and screening maintenance and a copy of the agreement is provided to the County.

9. Noxious weeds are prohibited from growing within and outside the fenced area of the energy storage system including the screening area. The energy storage system company and landowner are jointly responsible for weed control inside and outside the fence, unless a signed agreement between the energy storage system company and landowner identifies who is responsible for weed control and a copy of the agreement is provided to the County.

10. Maintenance plan for the grounds of the system. The plan shall include the seed mix to be used under and around the system and a mowing plan indicating the frequency of mowing.

11. Manufacturer's specifications and recommended installation methods of all major equipment of the energy storage system.

12. A signed copy of the interconnection agreement with the local electric utility, or a draft of the interconnection agreement with the local utility that must be signed and submitted prior to construction commencement, or a written explanation outlining why an interconnection agreement is not necessary.

13. A decommissioning plan shall be required to ensure the energy storage system is properly removed after its useful life. The plan shall include the anticipated life of the system, the anticipated manner in which the system is to be decommissioned and the site restored, estimated current cost of decommissioning and site restoration including a method and schedule for updating decommissioning costs, and the method of ensuring that funds will be available for decommissioning and site restoration.

14. A financial guarantee in the form of a performance bond, letter of credit, cash deposit, or other security shall be submitted, prior to commencement of power generation, to cover the cost of decommissioning and to ensure all haul routes and bridges have been repaired/restored to the Road Authority's approval and satisfaction following construction or decommissioning of the energy storage system. In the event the project owner fails to fully decommission the system, and/or funds earmarked in the decommissioning bond are insufficient to cover the full decommissioning costs, it will be the responsibility of the landowner(s) to provide the additional funds required to fully decommission the system.

15. In the event the project owner and/or landowner(s) fail to fully decommission the system and the funds in the decommissioning bond are insufficient, the County may recover the uncovered decommissioning costs by employing any and all available legal and financial mechanisms, including but not limited to:

    A. Filing a lien(s) against the property(ies).

    B. Civil judgments or other court-ordered remedies against all landowners and the energy storage system company.

    C. Other statutory and Ordinance-based enforcement.

16. Identification of all potential haul routes to be utilized for material transportation and construction activities including state, federal, County, township, or private roads within the County. Must provide written documentation prior to construction commencement that all haul routes have been approved by each of the Road Authorities within jurisdiction through a signed Road Use Agreement and a Development Agreement.

17. A copy of the safety plan and onsite training plan that will be provided to area emergency personnel within two months after the site is constructed and operational.

18. Additional information as requested by the Zoning Administrator, the Planning Commission, or the Renville County Board of Commissioners.

SECTION 6. INSPECTIONS AND COMPLIANCE MONITORING

1. Renville County employees, within their departmental capacity, or their designated representative, retain the authority to conduct inspections of the project at any time, without prior notice to the landowner or project owner, to verify compliance with this Ordinance and applicable regulatory standards. This authority extends to all areas, including those enclosed by fencing.

2. The project owner shall, upon request, provide the County with verification that the project is operating in accordance with its design.

PART 4
GENERAL PROVISIONS

SECTION 1. ENFORCEMENT

Enforcement of the Renewable Energy Regulations shall be done in accordance with process and procedures established in Chapter One (Administration), Section 14, of the Renville County Land Use Ordinance.

SECTION 2. SEPARABILITY

Administration of this chapter with regard to interpretation, conflict, and separability shall be done in accordance with policies established in Chapter One (Administration), Section 3 (Separability), of the Renville County Land Use Ordinance.

SECTION 3. EFFECTIVE DATE

The regulations in this chapter shall become effective from and after its publication according to law.