

# Town of Dover Solar Ordinance

Freimark, Krystal

**From:** Da Dubiel <doverpcdd@gmail.com>  
**Sent:** Thursday, February 29, 2024 2:21 PM  
**To:** Freimark, Krystal  
**Subject:** Racine County Draft Solar Ordinance

Comments

COM ITEM #3

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Greetings Krystal,

I am a Plan Commissioner with the Town of Dover's Plan Commission and have reviewed the Racine County Draft Solar Ordinance. Overall I think that this is a very comprehensive document and as such I would like to offer six comments so that the Town of Dover does not have to write any additional Solar Ordinance requirements into our Town Ordinances. I would be happy to discuss any of my comments with you. I look forward to seeing the next iteration of Racine's Solar Ordinance.

1) Page 2, "Solar Energy Systems"... "battery storage equipment, converters, or invertors"  
a spelling error - Inverters

2) Page 6, "10 Noise: All converters and inverters must be located away from adjacent residences."  
I feel that "away" needs some sort of concrete definition. Two examples would be "greater than 50 yards away from all property lines" or "at such a distance that the converter or inverter noise is less than 15 dB from all property lines". I don't know what the actual values should be, just that they should be something measurable.

3) Page 6, "14 Lighting: Lights must be shielded or aimed such that they do not not shine onto adjacent properties."

I think something should be added regarding lighting because the advent of LED lighting is rapidly increasing nighttime skyglow and very bright glaring lights shining onto neighboring properties.

On a separate note, I personally think that Racine's general Lighting Ordinance should also be revisited (and possibly more actively enforced) because I have noticed a huge increase in very bright lighting being used that shines on adjacent properties (health and irritation issues) and roadways (safety issues). The current state of property lighting is now completely different from the old sodium vapour 'farm lights' of the past.

4) Page 8, "8.Fencing: Other than the fencing..."

Our Fire Chief requested verbiage be added regarding a Knox box (Emergency Key Box) for fire department use. We were not sure where this Knox Box reference should be included.

5) Page 10, "13 Road Use:...roads to be used for the Solar Farm."

Does this section cover Town roads? Can verbiage be added to explicitly refer to Town roads and the Town Engineer in a similar fashion that Racine County roads and Engineering Department is referred to?

6) Page 18, "Sec.20-1747. Limitations upon authority" "The Development Services department...the applicant must notify the County, and the Town or Village of Yorkville may reconsider the matter." This sentence is confusing and does not read easily to me. It seems to read that the applicant must notify the County if the applicant thinks that the County has exceeded its authority. Then it goes on to read that the Town or Village of Yorkville will reconsider the matter. I find it odd that the County will not reconsider the matter after notification but the Town or Village of Yorkville will reconsider the matter without being notified.

regards,

David Dubiel

Plan Commissioner

Town of Dover Plan Commission

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## **AMEND Sec. 20-1 – Definitions.**

*Battery Energy Storage Systems (BESS)* shall mean a device that enables stored energy to be released when users need it most.

*Building-integrated Solar Energy Systems* shall mean a solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include but are not limited to photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights and awnings.

*Individual Use Solar Energy System* shall mean a solar energy system, on-grid or off-grid, that generates electricity for the individual property owner with either building mounted or ground mounted solar collectors that are an accessory use for the consumption to the principal use of the property not exceeding the capacity limits of this ordinance.

*Ground-Mount* shall mean a solar energy system mounted on a rack or pole that rests or is attached to the ground. Ground-mount systems can be either accessory or principal uses.

*Large-Scale Solar Energy System* shall mean a commercial solar energy system that converts sunlight into electricity for the primary purpose of wholesale sales of generated energy. A large-scale solar energy system will have a project size greater than 20 acres and is the principal land use for the parcel(s) on which it is located.

*Off-Grid Solar Energy System* shall mean a solar energy system that is not connected to an existing substation or electric transmission infrastructure.

*On-Grid Solar Energy System* shall mean a solar energy system that is connected to an existing substation or electric transmission infrastructure.

*Operation and Maintenance (O&M)* shall mean a plan that details how the solar energy system will be maintained and operated in a manner that maximizes utilization of Racine County's solar energy resources, while also balancing the need for clean renewable energy and protecting the public health, safety, and wellness of the community.

*Reflector or Reflector System* are used in a solar energy system to concentrate sunlight onto the solar structure.

*Roof-mount* a solar energy system mounted on a rack that is fastened to or ballasted on a structure roof. Roof-mount systems are accessory to the principal use.

*Solar Collector* as defined by State Statutes 66.0403(j): a device, structure, or part of a structure whose substantial purpose is to transform solar energy into thermal, mechanical, chemical, or electrical energy.

*Solar Farm* shall mean a solar energy system that generates electricity to serve many customers by wholesale or retail sale and not primarily for consumption on the property on which the system is located and is on-grid. The main land use of the property is to the solar energy system, requiring conditional use approval.

*Solar Energy Systems (SES)* shall mean equipment that directly converts and then transfers solar energy into usable forms of thermal or electrical energy. A solar energy system is either for individual users or a commercial user who develops a solar farm. A solar energy system includes solar collectors, frames, supports, and any mounting hardware, battery storage equipment, converters, or invertors.

*Solar Mounting Devices* shall mean racking, frames, or other devices that allow the mounting of a solar collector onto a roof surface or the ground.

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**AMEND Sec. 20-1115(7) Accessory regulations**

Tower broadcast facilities and, wind energy facilities, and solar energy systems restrictions may be found in articles X, and XI, and XIV respectively.

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**CREATE Sec. 20-1226(19) Uses permitted conditionally**

Solar farms (less than 100MW) in the A-1 and A-2 district as outlined in Article XIV Solar Energy Systems.

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**AMEND Sec 20-1115(a) Accessory regulations**

Except for signs and towers for broadcast facilities and/or wind energy or solar energy systems, which are regulated separately, any detached accessory structure less than thirty-six (36) square feet in area is exempt from the requirement for obtaining a zoning permit. In addition, any temporary, seasonal outdoor above-ground swimming pool, hot tub, or whirlpool bath that does not remain erected on the same lot for more than one hundred twenty (120) consecutive days is exempt from the requirement for obtaining a zoning permit.

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**CREATE 20-1008 (g) Accessory uses and structures**

Solar Energy Systems (SES) restrictions may be found in Article XIV.

# CREATE Article XIV Solar Energy Systems

## Division 1. Generally

### Sec. 20-1740. Intent

It is intended that this article adopts and incorporates the requirements and standards of Wisconsin Statutes 33.0401 and 66.0403 to regulate Solar Energy Systems (SES) for the production of electricity and/or conversion of energy for uses on-site as well as those systems which produce electricity for off-site use and distribution. The regulations of this article have been established to ensure SES are sited, constructed, maintained, operated and decommissioned in a manner that maximizes the utilization of Racine County's solar energy resources, while also balancing the need for clean renewable energy and protecting the public health, safety and welfare of the community, as well as the natural environment.

1. SES equal to 100MW or greater must follow the requirements of the Wisconsin Public Service Commission (PSC) and must enter into a Memorandum of Understanding (MOU) with the County and the Town.
2. Solar Energy Systems less than 100MW designed to provide energy to off-site uses and/or export to the wholesale or retail sale market are considered a commercial use and are subject to the conditional use permit process as described in this article.
3. The Development Services Department (hereinafter referred to as the "Department") will use the most recent industry accepted standards (US Department of Energy) as it relates to average single-family electrical usage, daily watt hours formula, local peak sun hour numbers, or any other related standards for SES determinations.
4. Racine County is not responsible for removing or to force the removal of any structures or vegetation on adjacent properties that may exist at the time of installation or may be constructed/installed in the future to block any portion of the SES.
5. All applications regulated by this article may be subject to additional conditions and restrictions consistent, but no more restrictive than those in Wisconsin Statutes 66.0401(1m). Where such conditions are considered and applied on a case-by-case basis; as well as satisfy one of the following:
  - a. Serves to preserve or protect public health or safety.
  - b. Does not significantly increase the cost of the system or significantly decrease its efficiency.
  - c. Allows for an alternative system of comparable cost and efficiency.
6. This article shall not create a duty or liability on the part of or cause of action against the County, its officers, or employees thereof, for any damages that may result from administration of or reliance on this article. The County is not

responsible for impermissible interference. The owner of the property must release, indemnify and hold harmless the County and its agents and employees from all liability, claims, demands, causes of action, costs, or losses for personal injury, property damage, or loss of life or property resulting from installation and/or use of active SES.

### **Sec. 20-1741. Location**

Solar Energy Systems must not be located in any shoreland, wetland, floodplain or primary environmental corridor.

1. An Individual Uses SES may be located as an accessory use in all zoning districts subject to the requirements, standards, and processes set forth in this article.
  - a. Ground-mount or roof-mounted SES are allowed for Individual Use.
2. A ground-mounted Solar Farm SES may be located in the A-1 and A-2 Districts as a conditional use, subject to the requirements set forth in this article.

### **Sec. 20-1742. Zoning permit required**

1. An owner must obtain the County's approval before constructing a SES or expanding an existing or previously approved SES, and no SES may be installed, constructed, or expanded without a zoning permit issued by the Department under Section 20-61.
2. The owner must pay a permit fee at the time the application is filed with the Department.
3. A zoning permit issued by the Department expires if construction of the SES does not commence within nine (9) months from the date of permit. Permit extensions may be granted if needed, on a case-by-case basis.

### **Sec. 20-1743. Application requirements**

Plan applications for a SES must meet the requirements of Section 20-81 of this Ordinance and contain the information specified in Wisconsin Statutes 66.0401 and 66.0403.

1. Scaled horizontal and vertical (elevation) drawings.
  - a. Include site layout, including the location of property lines, structures, SES, structures on adjacent properties and distance from boundary of SES project, and the total extent of system movements and interconnection points to the electrical grid.
2. Provide the manufacturer name, model number, collector square footage, means of interconnecting with the electrical grid, percentage of land coverage by the SES, and total capacity.

3. Prove the installer name and contact information. All SES must be installed by a North American Board of Certified Energy Practitioners (NABCEP) certified solar installer or other person qualified to perform such work.
4. Provide the legal description and address of the project.
5. For roof-mounted SES (excluding flat roofs), the elevation drawing(s) must show the highest finished slope of the solar collector and the slope of the finished roof surface on which it is mounted.
  - a. For flat roof-mounted SES, a drawing must be submitted showing the following:
    - i. The distance to the roof edge and any parapets on the building and must identify the height of the building on the street frontage side.
    - ii. The proposed distance to property lines, right-of-way, and / or easement.
    - iii. The highest finished height of the solar collector as well as the finished surface of the roof.

**Sec. 20-1744. Requirements for application approval**

1. *Capacity:*

a. Residential Districts:

- i. Less than 1 acre in area, capacity of the SES must not exceed 7 kilowatts in rated capacity.
- ii. Equal to or greater than 1 acre, but less than 10 acres in area, the capacity of SES must not exceed 15 kilowatts in rated capacity.

b. Agricultural, commercial, manufacturing, institutional, park-recreational districts, capacity of the SES must not exceed over 110% of the electricity needs of the property. Property owners must furnish applicable data.

c. Solar Farm: less than 100 MW.

2. *Height:* SES must meet the following height requirements:

- a. Roof-mounted SES must not exceed the maximum allowed building height of the principal structure in assigned zoning district.
- b. Ground or pole mounted SES must not exceed 15 feet in height when oriented at maximum tilt.
- c. Solar Farm as described in Sections 20-1745(3).

3. *Setbacks:*

- a. Roof-mounted SES in addition to the structure setback, the collector surface and mounting devices may not extend beyond the exterior perimeter of the building on which the system is mounted or built.
  - b. Ground or pole mounted SES may not extend into the required yard setbacks for the district when oriented at minimum design tilt.
  - c. Solar Farm as described in Section 20-1745(2)
4. *Coverage:* Roof-mounted SES excluding building-integrated systems, must plan for adequate roof access for fire-fighting purposes to the south-facing or flat roof upon which the panels are mounted.
5. *Grades:* The area of the SES must not be filled artificially to elevate the SES area higher than the existing grades of the property.
6. *Visibility:* SES must be designed to blend into the architecture of the building to the extent such provisions do not diminish solar production or increase costs, consistent with Wisconsin Statutes 66.0401.
7. *Reflectors:* All SES using a reflector to enhance solar production must minimize reflected light from the reflector affecting adjacent or nearby properties. Measures to minimize reflected light include selective placement of the system, screening on the north side of the solar collector, modifying the orientation of the system, reducing use of the reflector system, or other remedies that limit reflected light.
8. *Other Standards and Codes:* All commercial use SES must be in compliance with all applicable local, state, and federal regulatory codes, including the State of Wisconsin Uniform Building Code, as amended, and the National Electric Code, and if necessary, the Wisconsin State Plumbing Code, as amended.
  - a. All roof-mounted and/or integrated SES may only be permitted if it is determined that the additional weight, infrastructure, and/or modifications will not compromise the integrity of the building.
9. *Wires:* All electrical wires associated with a ground mounted SES, other than wires necessary to connect the SES to the tower wiring, the tower wiring to the disconnect junction box, and the grounding wires, must be located underground
10. *Noise:* All converters and inverters must be located away from adjacent residences.
11. *Good Repair:* An owner must construct, operate, repair, maintain, and replace SES facilities as needed to keep the system in good repair and operating condition in a manner that protects the public health, safety, and welfare of the community.
12. *Utility Notification:* All on-grid SES must comply with the interconnection requirements of the electric utility.
13. *Structural Integrity:* The structure upon which a roof-mounted SES is to be



mounted must have the structural integrity to carry the weight and wind loads of the SES.

### **Sec. 20-1745. Solar Farm conditional use requirements**

Every conditional use permit application must be made in writing to the Department on the forms provided by the Department and accompanied by the required filing fee. The application must meet the following requirements:

1. The minimum lot size should be at least 10 acres with at least 300 feet of frontage on a public street.
2. *Setbacks:* as measured from the foundation of any associated system building, the outer edge of battery storage system, convertor or inverter, or from the solar collector extended at full tilt parallel to the ground.
  - a. *Street Yard:* 75 feet (used A-2 requirements)
  - b. *Side Yard:* not less than 50 feet from the property boundary lines of non-participating landowners and 100 feet from any adjacent landowner dwelling unit.
  - c. *Rear Yard:* 25 feet (used A-2 requirements)
  - d. *Shore Yard:* 75 feet
  - e. For adjoining participating landowners, the setback requirement may be established pursuant to mutual agreement between Solar Farm Owner and participating property owners.
3. *Maximum Height for Solar Collectors:* 15 feet in height when oriented at maximum tilt.
4. Any buildings associated with the Solar Farm must meet the building requirements specified in the underlying zoning district related to building size and height.
5. Any Solar Farm that is on-grid must comply with the Public Service Commission of Wisconsin's Rule 119, Rules for Interconnecting Distributed Generation Facilities.
6. *Agreement Exhibits:* The following exhibits must be submitted:
  - a. *Proposed Site Plan:* the proposed plan for above-ground facilities of the Solar Farm
  - b. Solar Farm Equipment Haul Route Map
  - c. Construction Schedule
  - d. Vegetation Management Schedule

- e. Drain Tile Management Plan
  - f. Decommissioning Plan
  - g. Glare Analysis Study
7. *Archeology*: An Archeological Site Assessment must be conducted with review by the Wisconsin State Historical Preservation Office.
8. *Fencing*: Other than the fencing directly surrounding the Solar Farm Substation, O&M, and BESS the Solar Farm's perimeter fencing must consist of "deer fencing" (wire mesh), which can be described in greater detail as a six (6) to ten (10) foot in height woven wire partition with posts. Fences will be set within/inside property lines or rights-of-way edges unless otherwise requested from the landowner.
- a. Installed fencing must be adequately maintained during the Solar Farm operation.
  - b. The depths of the fence posts must be installed per engineering practices based on the height of the fence and the type and slope of the terrain.
  - c. Impairments to either the woven wire or wooden posts must be remedied within two weeks of written notification from the Department. "Leaning" of the fence must not be allowed to exceed  $\pm 10$  degrees of perpendicular. In the event leaning or tilting of the fence does occur, it will be corrected back to perpendicular within two weeks of receiving written notice on the issues.
9. *Visual Considerations*: The Solar Farm must not be used for any type of advertising. The Solar Farm may erect and maintain one Solar Farm identification sign subject to Article IX Signs. The Solar Farm must be minimally lit so as not to disturb neighboring properties and subject to Section 20-1065 lighting requirements. The Solar Farm Owner must provide the Department with a description and/or lighting plan.
10. *Drain Tile*: The Solar Farm Owner must contract with an experienced and qualified drain tile contractor to gather information concerning participating landowner drain tile, avoiding drain tile where commercially reasonable, and mitigate the landowner and non-participating landowners' drainage issues where significant impact is expected because of drain tile alteration. The Solar Farm Owner agrees to discuss, and address identified drain tile concerns at the post-construction meeting to finalize remedies to known drainage issues on either participating or non-participating property. The Solar Farm owner must receive, investigate, and remedy drain tile issues due to the Solar Farm that arise after the post-construction meeting pursuant to the submitted Drain Tile Management Plan.
- a. If drainage infrastructure or systems are damaged by the Solar Farm and the result is reduced drainage performance that adversely affects non-participating landowners, the Solar Farm Owner must restore the

drainage infrastructure or system to pre-existing condition or better in accordance with the Drain Tile Management Plan.

- b. Pre-existing condition must mean the flow capacity existing immediately prior to the Solar Farm beginning construction. If previous flow capacity cannot be determined, the Solar Farm Owner and landowners agree to negotiate an adequate solution in good faith.
- c. The Solar Farm Owner is responsible for all expenses related to repairs, restoration, relocations, reconfigurations and replacements of drainage infrastructure and systems damaged by the Solar Farm as described in the Drain Tile Management Plan.
- d. The intent of this Section is to make landowners whole where drainage infrastructure or systems are damaged by the Solar Farm. For example, if damage to the drainage infrastructure or systems is caused by the Solar Farm on a participating property (Solar Farm-related damage) and the Solar Farm-related damage causes damages to non-participating property owners upstream of the Solar Farm-related damage, including crop loss and/or blowout damage to the drain tile system on the non-participating owner's property, the Solar Farm Owner must reasonably compensate the non-participating owner for crop loss and repairs to the non-participating property owner's drain tile system. The Solar Farm Owner agrees to cooperate with non-participating landowners as outlined in the Drain Tile Management Plan to repair or replace drainage tile affecting their properties to the extent that such work does not interfere with the Solar Farm or its related facilities. The Solar Farm Owner will not unreasonably withhold approval for access to the property that lies outside of any fenced solar collector area, to the extent participating owners also agree to such access.
  - i. For the purposes of this Section, participating landowner or property owner means a property owner who has signed a solar lease and easement agreement, collection easement, or purchase option for the use of his or her property for solar generation, construction access, and/or placement of facilities associated with the Solar Farm.
  - ii. Non-participating landowner or property means a property owner who is not a participating landowner with the Solar Farm facility. A solar lease and easement agreement does not include a good neighbor agreement.

11. *Stormwater Management and Erosion Control*: Solar Farm Owner must comply with all State, County, and/or local stormwater and erosion control regulations.

12. *Ground Cover and Buffer Areas*: The following provisions are related to the clearing of existing vegetation and the establishment of vegetated ground cover. Additional requirements and standards may apply as required by the Racine County Economic Development and Land Use Planning Committee and/or the Department.

- a. Large-scale removal of mature trees on the site is discouraged. Tree or vegetative removal in primary or secondary environmental areas is prohibited. Additional restrictions on tree clearing or mitigation for cleared trees may be required.
  - b. To the greatest extent possible, the topsoil must not be removed during development, unless it is part of a remediation effort.
  - c. Soils must be planted and maintained for the duration of operation in perennial vegetation to prevent soil erosion, manage run off, and improve soil.
  - d. Seeds should include a mix of grasses and wildflowers (pollinator habitats) exclusively native to the region of the Solar Farm site, which will result in a short stature prairie with a diversity of flowering plants that bloom throughout the growing season. Blooming shrubs may be used in buffer areas as visual screening.
  - e. Seed mixes and maintenance practices must be consistent with those recommendations made by the Department and/or the Wisconsin Department of Natural Resources.
  - f. The applicant must submit a financial guarantee in the form of a letter of credit or bond in favor of the County equal to one hundred twenty-five (125) percent of the costs to meet the ground cover and buffer area standard. The financial guarantee must remain in effect until vegetation is 75% established.
  - g. The Solar Farm Owner must contact every owner of residential property immediately adjacent to the solar collector and discuss in good faith a reasonable, strategically located visual buffer of plants that, upon mutual agreement, must be installed at the Solar Farm Owner's expense prior to the completion of construction of the Solar Farm. Where the Solar Farm Owner and the adjacent property owner are unable to agree on the type of visual buffer and the adjacent property owner makes a request in writing to the Solar Farm owner to provide a visual buffer, the Solar Farm owner must install a vegetative buffer on the Solar Farm site equal to the length of the non-participating residence and designed to achieve at least 50% opacity at ground level within 5 years. Proposals and plans for vegetative buffers will be finalized in writing by the pre-construction meeting with the Department.
  - h. Solar Farm Owner must submit a vegetative buffer plan for a visual barrier along all roadways subject to approval by the Department.
13. *Road Use:* The Solar Farm Owners and its successors, assigns, contractors, agents, and representatives may use public roads as part of the construction, operation, maintenance, and repair of the Solar Farm. The Solar Farm Owner acknowledges that in connection with construction, operation, and maintenance of the electric collection lines, communication cables, and other equipment, that Solar Farm facilities may cross road rights-of-way and/or drainage systems. The Solar Farm Owner agrees that it must seek and obtain all permits typically

required of others, such as driveway permits and rights-of-way crossing permits. It is agreed that all road rights-of-way crossing must be by underground borings perpendicular to the right-of-way, plus or minus 30 degrees. All underground borings must commence and terminate outside of the road right-of-way.

- a. The Solar Farm Owner further agrees that the construction process may cause wear, tear, and damage to the roads identified to be used, including the Haul Roads. The Solar Farm Owner agrees, in lieu of seeking repair, restoration, or reconstruction of these roads following the completion of the Solar Farm's construction, that the Solar Farm Owner must provide the County compensation in the form of a lump sum payment in an amount to be determined by the Solar Farm Owner's qualified third party engineer, based on pre-construction and post-construction road condition analysis's following general industry best practices, for the repair or reconstruction of the impacted roads. Pre-construction and post-construction analysis must include review of the surface and subsurface of the road. The Solar Farm Owner's qualified third-party engineer must be selected from a list of Racine County certified engineering consultants. The County must provide the list of County certified engineering consultants at the request of the Solar Farm Owner. If the County elects to forego the lump sum payment, the Solar Farm Owner agree they may also utilize a contractor chosen and managed by the developer to complete necessary road repairs. All road repairs must be inspected and approved by the County's Engineering Department to ensure that the repair meets County standards. The extent of such repair will be negotiated at the post-construction meeting and will be based on the road condition analysis of the third-party engineer. The County must relieve the Solar Farm Owner of any other repair or reconstruction obligations or responsibilities upon receipt of such payment. The County must determine, at its sole discretion, how to utilize those funds for the repair of the impacted roads after their use for construction traffic for the Solar Farm ends. The Solar Farm Owner must negotiate in good faith a similar road use provision related to decommissioning, expansion, or repowering of the Solar Farm.
- b. Throughout the construction of the Solar Farm, the Solar Farm Owner must work cooperatively to maintain public road infrastructure in a safe condition for passage by the public. During the ongoing construction of the Solar Farm, the Solar Farm Owner, at its expense, must repair any significant damage that jeopardizes the safety of the traveling public. The County's Engineering Department must continuously monitor County roads and must notify the Solar Farm Owner of damages that present safety concerns to the travelling public and must require the Solar Farm Owner to carry out the necessary repair to mitigate the unsafe road condition. In the event an unsafe road condition exists that presents a safety hazard to the public use of the road and is not promptly repaired by the Solar Farm Owner within one week after receipt of notice of the unsafe condition, the County may make emergency road repairs or order emergency road repairs to be performed by qualified contractors and the Solar Farm Owner will promptly reimburse the County for reasonable emergency road repairs.
- c. Solar Farm Owners must be responsible for addressing applicable road use issues with other entities to the extent they have jurisdiction over

roads to be used for the Solar Farm.

14. *Foundations*: A qualified engineer must certify, by sealed stamped and signed plans that the foundation and design of the solar panels racking and support is within accepted professional standards, given local soil and climate conditions.
15. *Power and Communication Lines*: Power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings must be buried underground. Exemptions may be granted by the Department in instances where shallow bedrock, water courses, and other elements of the natural landscape interfere with the ability to bury lines, or distance makes undergrounding infeasible, at the discretion of the Development Services Department as shown by adequate soil borings.
16. *Agricultural Protection*: Commercial use SES must comply with site assessment or soil identification standards that are intended to protect agricultural soils.
17. *Aviation Protection*: For Solar Farms located within 1,000 feet of an airport or within approach zones of an airport or landing strip, the applicant must complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy. FAA Review of the Solar Energy Solar Farms on Federally Obligated Airports, or most recent version adopted by the FAA.
18. *Decommissioning*: The Solar Farm Owner must implement the Decommissioning Plan as provided with this application upon permanent cessation of the commercial operation of the Solar Farm. For the purposes of this application, permanent cessation of the commercial operation of the Solar Farm shall mean that the entire Solar Farm has ceased commercial operation for the consecutive period of twelve (12) months for reasons other than a force majeure event. The Solar Farm must be deemed to be in commercial operation if the Solar Farm is under active construction activities including, but not limited to, construction activities in connection with Solar Farm-wide replacements or upgrades.
  - a. The Solar Farm Owner acknowledges that the Decommissioning Plan must be submitted that includes a detailed Decommissioning Cost Analysis and will provide such a plan to the County when the analysis is available. The Solar Farm Owner agrees that the Decommissioning Plan must require the Solar Farm Owner to at a minimum:
    - i. Notify the Racine County Development Services department when permanent cessation has been determined.
    - ii. Remove, at the Solar Farm's expense, all Solar Farm components including, but not limited to, solar collectors and associated facilities to a depth of four (4) feet and properly dismantle all components that must be disposed of at a solid waste disposal facility and/or otherwise in a manner consistent with federal, state and local regulations.
    - iii. Restore the land to a condition reasonably similar to pre-existing conditions, including de-compacting areas where solar farm access

roads were installed and any other areas of substantial soil compaction. The Solar Farm's Access Roads can remain in place if requested by the property owner.

- iv. Prior to issuance of a zoning permit, the Solar Farm owner must post a commercially reasonable financial assurance (bond or letter of credit) in the amount of the difference between the reasonably estimated costs of decommissioning the Solar Farm and the reasonably estimated salvage value of the Solar Farm improvements, as determined by a qualified engineer. The cost of this determination is to be paid by the Solar Farm Owner. The need for and amount of financial assurances must be reviewed by a qualified engineer, and if applicable, updated every five (5) years.
- v. All solar equipment must be decommissioned and disposed of in accordance with Federal, State, and local regulations.

19. *Replacement of Lost Property Tax Revenue*: Properties hosting qualifying utility generating facilities under Chapter 76 Wisconsin Statutes and approved by PSCW are removed from the local property tax roll. The Solar Farm Owner will establish a program ("the Lost Revenue Program") to reimburse the local school district for the lost revenue following completion of the Solar Farm, when the specific, qualified utility properties are identified. The Lost Revenue Program will calculate the amount of lost revenue based on local tax rates for the land at the time of the Solar Farm is placed in service. The payment amount for each taxing authority will be increased annually by two percent (2%). The Solar Farm Owner will execute the Lost Revenue Program only to the extent the amount promised is recoverable by the Solar Farm Owner through approval by the PSCW of rates under Wisconsin Statutes 196.20. The Solar Farm Owner's obligation to make such payments must be suspended if the State adopts or implements a new mechanism to replace the Utility Aid Shared Revenue payments, to the extent that the new payment system provides payments equal to or greater than the payments provided herein. In such case of suspension of payments, the Solar Farm Owner's payment obligations as set forth herein will only be reinstated if such new payment system is eliminated by the Legislature.

## **Sec. 20-1746. Insurance requirements**

### *1. For Individual Use Solar Energy Systems*

#### *a. Owner*

- i.* At all times during construction and operation, the owner must maintain a current liability policy covering bodily injury and property damage in the form of homeowners or other applicable policy providing liability coverage as approved by Racine County.

#### *1.* With the exception of, homeowners' coverage must include:

##### *a.* Commercial General Liability

- i.* \$1,000,000 per occurrence.

- ii.* \$2,000,000 general aggregate.
- iii.* 1,000,000 personal and advertising injury.
- iv.* \$2,000,000 products-completed operations aggregate.
- v.* \$10,000 medical expense.
- vi.* Coverage must list Racine County as additional insured.
- vii.* Coverage must be primary and noncontributory to the insurance of Racine County.
- viii.* Coverage must provide a waiver of subrogation in favor of Racine County.

*b. Contractor*

- i.* At all times during construction and/or maintenance contractor and any subcontractor must maintain insurance policies with the following listed minimum insurance coverages and minimum limits of liability from insurers licensed to do business in the State of Wisconsin and having an A.M. Best rating of A-.

*1. Commercial General Liability*

- a.* \$1,000,000 per occurrence.
- b.* \$2,000,000 general aggregate (on a per project basis).
- c.* \$1,000,000 personal and advertising injury.
- d.* \$2,000,000 products-completed operations aggregate.
- e.* \$10,000 medical expense.
- f.* Coverage must list the owner and Racine County as additional insureds.
- g.* Coverage must be primary and noncontributory to the insurance of the owner and Racine County.
- h.* Coverage must provide a waiver of subrogation in favor of the owner and Racine County.



- i. The products-completed operations coverage must be maintained for the combined period of the limitation and response statutes of the State of Wisconsin.
- j. Policies may not contain any residential exclusions or limitations on height of work.

2. Automobile Liability

- a. \$1,000,000 Combined Single Limit
- b. Coverage must list the owner and Racine County as additional insureds.

3. Workers' Compensation and Employers Liability

- a. Workers' compensation as required by the State of Wisconsin Statute.
- b. \$1,000,000 employers liability for each bodily injury by accident, bodily injury by disease or annual aggregate.
- c. Coverage must provide a waiver of subrogation in favor of the owner and Racine County.

4. Umbrella / Excess Liability

- a. \$5,000,000 each occurrence
- b. \$5,000,000 annual aggregate
- c. \$5,000,000 completed operations aggregate
- d. The policy must follow form to the employer's liability, commercial general liability, and commercial auto liability policies.

5. Pollution Liability

- a. \$1,000,000 per claim
- b. \$1,000,000 annual aggregate
- c. Coverage must list the owner and Racine County as additional insureds

6. Professional Liability

- a. If architectural or engineering services are being performed by the contractor or subcontractor, coverage must include limits of at least \$1,000,000

per claim and \$1,000,000 annual aggregate.

7. Unmanned Aircraft / Drone Liability

- a. If a drone is used with respect of construction and/or maintenance of the system, coverage must include a limit of at least \$1,000,000.

2. For Solar Farms

a. Owner

- i. At all times during construction and operation, the owner must maintain:

1. Commercial General Liability

- a. \$1,000,000 per occurrence.
- b. \$2,000,000 general aggregate.
- c. 1,000,000 personal and advertising injury.
- d. \$2,000,000 products-completed operations aggregate.
- e. \$10,000 medical expense.
- f. Coverage must list Racine County as additional insured.
- g. Coverage must be primary and noncontributory to the insurance of Racine County.
- h. Coverage must provide a waiver of subrogation in favor of Racine County.

2. Umbrella / Excess Liability

- a. \$1,000,000 each occurrence.
- b. \$1,000,000 annual aggregate.
- c. \$1,000,000 completed operations aggregate.
- d. The policy must follow form to the commercial general liability policy.

b. Contractor

- i. At all times during construction and/or maintenance contractor and any subcontractor must maintain insurance policies with the

following listed minimum insurance coverages and minimum limits of liability from insurers licensed to do business in the State of Wisconsin and having an A.M. Best rating of A-.

1. Commercial General Liability

- a. \$1,000,000 per occurrence.
- b. \$2,000,000 general aggregate (on a per project basis).
- c. \$1,000,000 personal and advertising injury.
- d. \$2,000,000 products-completed operations aggregate.
- e. \$10,000 medical expense.
- f. Coverage must list the owner and Racine County as additional insureds.
- g. Coverage must be primary and noncontributory to the insurance of the owner and Racine County.
- h. Coverage must provide a waiver of subrogation in favor of the owner and Racine County.
- i. The products-completed operations coverage must be maintained for the combined period of the limitation and response statutes of the State of Wisconsin.
- j. Policies may not contain any residential exclusions or limitations on height of work.

2. Automobile Liability

- a. \$1,000,000 combined single limit
- b. Coverage must list the owner and Racine County as additional insureds.

3. Workers' Compensation and Employers Liability

- a. Workers' compensation as required by the State of Wisconsin Statute.
- b. \$1,000,000 employers liability for each bodily injury by accident, bodily injury by disease and annual aggregate.
- c. Coverage must provide a waiver of subrogation in favor of the owner and Racine County.

4. Umbrella / Excess Liability

- a. \$10,000,000 each occurrence
- b. \$10,000,000 annual aggregate
- c. \$10,000,000 completed operations aggregate
- d. The policy must follow form to the employer's liability, commercial general liability and commercial auto liability policies.

5. Pollution Liability

- a. \$2,000,000 per claim
- b. \$2,000,000 annual aggregate
- c. Coverage must list the owner and Racine County as additional insureds

6. Professional Liability

- a. \$2,000,000 per claim
- b. \$2,000,000 annual aggregate
- c. Coverage must list the owner and Racine County as additional insureds

7. Unmanned Aircraft / Drone Liability

- a. If a drone is used with respect to construction and/or maintenance of the system, coverage must include a limit of at least \$1,000,000

**Sec. 20-1747. Limitations upon authority**

The Development Services department review and action in the matter must be subject to the limitations imposed by Section 66.0401, Wis. Stats. In the event the applicant believe the County has exceeded its authority in this regard, the applicant must notify the County, and the Town or Village of Yorkville may reconsider the matter. In the event, the applicable permit authority of the County may modify the requirements of this section as applied to this application, on a case-by-case basis if, and only to the extent such modification is necessary to ensure that applicable laws are followed. This section is intended to allow case-by-case consideration of the standards of Section 66.0401(1m), Wis. Stats., as needed.

**Secs. 20-1748 – 20-1760. Reserved.**