

RESOLUTION - 2022- 01

To: The Chair and Supervisors of the Town of Morgan

Re: Regulating Industrial Solar sites within the Town of Morgan

WHEREAS, Wisconsin State Statute 66.0401 (1) ***Regulation relating to solar and wind energy systems*** does grant an authority (the town) to restrict systems based upon that it *"serves to preserve or protect the public health or safety, or that it does not significantly increase the cost of the system or significantly decrease its efficiency."*

WHEREAS, the Town of Morgan Plan Commission and/or the Town of Morgan Board of Supervisors has had multiple discussions with the public identifying their concerns regarding health and safety along with conditions that might address those concerns without significantly increasing the cost of the proposed solar project or decreasing its efficiency.

WHEREAS, the Town of Morgan has a Plan Commission which designed a 20 year Comprehensive plan (**Resolution of Adoption 2020-10**) and (**Ordinance to Adopt an Amendment and Update to the Town of Morgan 20-Year Comprehensive Plan 2020-10**) by the Town of Morgan Board of Supervisors after public comment and public hearing which concisely identifies their preferred development strategy for the Town of Morgan and the properties within its boundaries.

WHEREAS, the Town of Morgan Plan Commission is authorized and directed to make consideration and report before a final action is taken by the Town of Morgan Board of Supervisors including the location, extension, abandonment or authorization for any public utility whether publicly or privately owned under State Statute 62.23 (5) Matters referred to Plan Commission and has done so by drafting this resolution.

WHEREAS, the Town of Morgan has a publicly adopted Vision Statement articulating the importance of health, safety, environmental protection, rural living... *"The Town of Morgan is home to people who value a rural place to live and work. Healthy natural areas contribute positively to the scenic beauty of the town, promote an abundance of wildlife, offer a variety of recreational outlets, and maintain clean ground and surface water. People in Morgan understand the fact that the land is the heart of the town's economic livelihood and promote sustainable land use practices through the implementation of this comprehensive plan for future generations to enjoy."*

NOW, THEREFORE, BE IT RESOLVED, the Town of Morgan Board of Supervisors does hereby approve this resolution for ***regulating industrial solar energy systems/sites within the Town of Morgan***, in order to promote health and safety and to address public concern regarding unknowns such as, but not limited to, groundwater contamination, water runoff, soil erosion, surface glare, noise and hours of operation and to promote economic protections safeguarding adjacent and nearby investments, property values, tax limits, and to promote public service protection such as adequate fire related services without adding significant costs to the system or decreasing its efficiency.

NOW, THEREFORE, BE IT FURTHER RESOLVED, the Town of Morgan Board of Supervisors does hereby approve the need to establish ordinances and to pursue any and all legal options afforded to a town to regulate industrial solar including a joint agreement of operation with the merchant or utility, whether privately or publicly owned, on industrial solar sites to address the health and safety, economics and protective services of the Town of Morgan and thus requires the following be provided by any and all owner(s) and operator(s) of industrial solar sites:

- (1) Setbacks - no machinery, equipment or structures of any kind shall be located closer than 300 feet from the property line including solar panels and any other solar equipment such as inverters or batteries; to provide fire breaks, noise absorption and to limit adverse impacts to views.
- (2) Prohibition of the use of any CDC evidenced based contaminant including Per-and Polyfluoroalkyl Substance (PFAS) in solar panels or any other equipment or materials upon the site including underground equipment and materials.
- (3) Requirements for aesthetically conforming and botanically appropriate berms, at the expense of the industrial solar merchant or utility, in and around solar panels and equipment including batteries and inverters; to provide fire breaks, noise absorption and to limit adverse impacts to views.
- (4) At the expense of the industrial solar merchant or utility, provide 365-24x7 emergency fire services to the Town of Morgan to extinguish, suppress and/or contain any fire including but not limited to fires caused by electrical issues on or around the industrial solar site.
- (5) Conduct a joint study with Green Valley-Morgan Fire Department and other surrounding fire departments that have joint protective services agreements in place to determine the types of equipment needed to extinguish, suppress and/or contain fire based upon the scenario of the entire industrial solar site being engulfed. Based upon the results of the joint study, at the expense of the industrial solar

merchant or utility, provide the training and equipment necessary to extinguish, suppress and/or contain said fire.

- (6) At the expense of the industrial solar merchant or utility, provide for well water tests of all residential and farm wells for contaminants, including ground water, prior to any construction to establish a base data set and then yearly tests thereafter for the life of the project for properties up to 1,000 feet from the site.
- (7) At the expense of the industrial solar merchant or utility, protect against and remediate any negative impacts to water sheds and soil erosion caused by the industrial solar installation, implementation, operation and/or maintenance.
- (8) Requirement to repair and/or replace, at the expense of the industrial solar merchant or utility, all damage caused by the industrial solar merchant or utility or their agents to town, county or state roads, culverts, bridges, signage, overhead and underground utilities, trees, right of ways, section corners, as well as, any damage to private property.
- (9) Requirement to decommission the industrial solar installation at the expense of the industrial solar merchant or utility within 12 months of when the industrial solar installation can reasonably be considered abandoned. The decommission includes but is not limited to the dismantling, removal and disposal of all solar related equipment and materials, structures, buildings, cabling, electrical components, roads, foundations, and other associated facilities. A permit from the Town of Morgan Board of Supervisors to start the decommissioning work and the determination of the decommission being satisfactorily completed is subject to the approval of the Town of Morgan Board of Supervisors.
- (10) At the expense of the industrial solar merchant or utility, all electric components of any kind used in the industrial solar installation, implementation, operation and maintenance are required to have Underwriters Laboratories (UL) approval.
- (11) At the expense of the industrial solar merchant or utility, the solar layout, design, installation, implementation, operation and ongoing maintenance shall conform to applicable industry standards including but not limited to those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), the Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing and Laboratory (ETL), Florida Solar Energy Center (FSEC), National Electrical Code (NEC) and the State of Wisconsin Electrical Code or other similar certifying organizations and shall comply with the Wisconsin Uniform Construction Code.
- (12) At the expense of the industrial solar merchant or utility, provide funding to the Town of Morgan Board of Supervisors for a qualified (as determined by the Town of Morgan Board of Supervisors) third party to provide an Environmental Impact Study and Report. All negative findings shall be further investigated and mitigated at the cost of the industrial solar merchant or utility.

(13) Requirement to prohibit Utility Scale Renewable Energy Storage Batteries, also known as Battery Energy Storage System (BESS), in the Town of Morgan.

A battery energy storage system (BESS) is an electrochemical device that charges (or collects energy) from the grid or a power plant and then discharges that energy at a later time to provide electricity or other grid services when needed. Several battery chemistries are available or under investigation for grid-scale applications, including lithium-ion, lead-acid, redox flow, and molten salt (including sodium-based chemistries). Unfortunately, these lithium cells can experience thermal runaway which causes them to release very hot flammable, toxic gases. In large storage systems, failure of one lithium cell can cascade to include hundreds of individual cells. The hot flammable gases can result in an explosion, or a very difficult to extinguish fire. The issue is, when thermal runaway occurs in lithium-ion batteries and the battery cells burn, hydrogen fluoride, a dangerous and potentially deadly gas, is released.

<https://emergency.cdc.gov/agent/hydrofluoricacid/basics/facts.asp#:~:text=Fingertip%20injuries%20from%20hydrogen%20fluoride,damage%20the%20esophagus%20and%20stomach.>

Long-term health effects of acute exposure to hydrogen fluoride

People who survive after being severely injured by breathing in hydrogen fluoride may suffer lingering chronic lung disease.

Skin damage caused by concentrated hydrogen fluoride may take a long time to heal and may result in severe scarring.

Fingertip injuries from hydrogen fluoride may result in persistent pain, bone loss, and injury to the nail bed.

Eye exposure to hydrogen fluoride may cause prolonged or permanent visual defects, blindness, or total destruction of the eye.

Swallowing hydrogen fluoride can damage the esophagus and stomach. The damage may progress for several weeks, resulting in gradual and lingering narrowing of the esophagus.

Submitted this 26th day of September 2022.

By: Town of Morgan Plan Commission Chair



Lori Witthuhn

9-26-22

Vote by the Town of Morgan Plan Commission for submission/recommendation to the Morgan Town Board of Supervisors

5 Ayes, 0 Nays, ___ Absent, ___ Abstain, ___ Vacant