

**Minutes—Public Hearing Regarding a
Draft Environmental Assessment for the
Middleton Solar Project at Middleton Municipal Airport**
(on a portion of Parcel #070803255082 in Dane County, Wisconsin)

Date: June 20, 2019, at 6:00 p.m.

Location: City Council Chambers, Middleton City Hall, 7426 Hubbard Avenue, Middleton, WI 53562

Hearing notice description: OneEnergy Development, LLC proposes to construct the Middleton Solar Project, which, once installed, will produce electricity for distribution from the Project location throughout the Madison Gas & Electric (MG&E) service territory. The project will consist of solar modules mounted on racking secured to the top of steel piers that have been driven into the ground and connected by a series of wires, which will be collected to a central point where they will tie into a series of inverters, transformers and other electrical equipment. A gravel access road will be installed to enable access from the nearest road to this electrical equipment. An underground electrical line will connect this equipment to the existing MG&E distribution feeder to the southeast of the Project on the north side of Airport Road. The Project will create solar electricity for the customers of MG&E.

OneEnergy Development, LLC prepared an environmental assessment for FAA that describes the project, assesses the proposed project's environmental impacts, and summarizes as applicable any mitigation measures used to minimize environmental effects. FAA has conducted an independent evaluation of the environmental assessment and believes that it accurately assesses the impacts of the proposed project. The proposed project is anticipated to encroach on a floodplain, however the encroachment is not anticipated to have any negative impacts on the floodplain. No other significant impacts are expected as a result of the construction of the project.

Any final action by FAA related to the proposed project will be subject to, and contingent upon, compliance with all relevant Federal environmental laws and regulations and completion of environmental review procedures as prescribed by 7 CFR Part 1970, Environmental Policies and Procedures. A general location map of the proposal is shown below.

Hearing Attendees: Mike Barnett, Dan Bolden, Bartlett Durand, Sherrie Gruder, Leif Hubbard, Todd Montevideo, Richard Morey, Charles Nahn, Don Peterson, Eric Udelhofen, Mark Warshauer

Staff present:
Jeremy Crosby, Mike Davis, Mark Opitz

City Administrator Mike Davis convened the meeting and opened the public hearing at 6:08 p.m.

Davis explained that the purpose of the hearing, summarizing the notice to the public and stating that the notice was published in the Times-Tribune (the City's official newspaper) for the preceding three weeks. He stated that City officials are supportive of the project because the City has established a 100% renewable energy goal by 2035 and this will help the City achieve 50% of its goal. He asked the project sponsor to provide background information before proceeding with taking public testimony.

Eric Udelhofen, OneEnergy Renewables, stated that his company is an independent developer of utility-scale energy projects. He briefly described several other projects his company has pursued in Wisconsin. Udelhofen traced the evolution of this project, noting it has been reviewed before city committees on 15 occasions since early 2017. He addressed project details including:

- Purpose and need.
- Site location and access: The installation will avoid conflicts with airspace and navigation surfaces.
- The solar panels contain no hazardous materials and will be placed in rows running north-south with single-axis tracking operations allowing the panels to tip over a 90 degree spectrum to increase energy production. The more than 16,000 solar panels are expected to produce 9 million kilowatt hours per year of local renewable energy
- Steel I-Beam or Cee-Channel posts will be driven 6 to 8 feet into the ground about every 20 feet.
- An underground electrical wire will connect the system to the grid along Airport Rd.
- Construction is anticipated begin in August and last 4-5 months.
- Noise: Aside from temporary noise associated with construction (including pile-driving during the daytime over a 15 day period in late summer), the inverters will be the only noise emanating from the project. The inverters are expected to generate an output of 66 decibels at 100% load (when sun is at maximum elevation) measured at a distance of 25 ft., but inaudible at 500 ft. The nearest residence is approximately 1,400 ft. from the eastern edge of the array complex.
- Cultural resources: no historic properties, archeological records, or known burial sites.
- Ecological resources: Planting of low-growing prairie mix between and around panels will reduce mowing frequency, increase water infiltration, and reduce agricultural runoff. The seed mix will be designed in coordination with U.S. Fish & Wildlife and be appropriate for use at an airport.
- Floodplain: Nahn and Associates carried out a floodplain analysis review showing that the existence of the piles within the floodplain would not impact base flood elevations on adjacent properties, and WisDNR has concurred with this analysis. All electrical equipment will be installed above the base flood elevation.
- Groundwater: The selected pile-installation method will minimize disturbance and opportunities for storm water to enter groundwater.
- Light emissions and visual effects: There will be no lighting installed, the panels have anti-reflective coating and are designed to absorb sunlight, and the project is designed to minimize glare to both airport users and adjacent homes and businesses.

Udelhofen concluded by noting that 10% of the array's output will address City energy needs, 20% is going to the Middleton-Cross Plains Area School District, and 70% is going to MGE's Shared Solar program.

Mark Warshauer, a member of the Airport Master Plan Advisory Committee who lives at 6333 Stonefield Road and is a pilot, asked several questions:

- How would a flood like the one the City experienced last August affect the solar array installation? Chuck Nahn responded that he analyzed the impact of a 100-year flood, which is based on a 6.6 inch rainfall in 24 hours. He said he did not study one that entailed 15 inches falling in 24 hours, which he called the heaviest rainfall event in Wisconsin history. Davis stated that there is some threat to the solar panels of a 1,000-year-plus event but the risk is light.
- Might the electrical equipment have an impact on pilot communications? Udelhofen replied that there have been no reports of communications problems caused by large solar installations at 15 large U.S. airports.
- Will construction of the service road impact stormwater flow? Udelhofen responded that the project will entail a WisDNR-approved, at-grade road design that will minimize surface water flow and not alter existing flows.

Sherrie Gruder, UW-Madison Extension and a Middleton resident who has subscribed to the Shared Solar program, stated that she runs the "Energy on Wisconsin" program that helps move communities to energy independence. She said she is happy this project is moving forward and entails planting a prairie mix that will benefit pollinators. She asked about planting and maintenance plans. Udelhofen responded that he is developing a plan based on WisDNR's guidebook to implement best practices for disturbed areas as part of the stormwater permitting process. He said that the goal is to install a ground cover that stabilizes the soil and is pollinator-friendly, although mowing will need to occur more frequently in the beginning. He noted that MGE, as project owner, will hire a vegetation management contractor.

Gruder cited the City's resilience planning and emphasized the need to plan for more frequent, significant flooding events due to climate change. Referring to the elevation of electrical equipment, she asked whether the project design is taking climate change into account. Udelhofen responded that the amount of water that can accumulate beneath the inverters is influenced by the runway elevation and that at some point water will cross the runway, relieving flood storage in the array area. He said that final engineering related to the height of electrical equipment is still subject to MGE approval. Don Peterson, Madison Gas & Electric, described how wires and inverters will be at least 6 feet above ground level with the transformer and electrical equipment located outside of the 1% annual floodplain area.

Gruder asked whether the project includes plans to store energy locally in the event the electrical grid goes down. Peterson replied that the project is constrained by the amount of available land, but that storage could be added if additional land were acquired. Udelhofen said it is unlikely to happen in the near term based on his interactions with neighbors, but he noted that the storage doesn't have to be immediately adjacent to the panels. Peterson said that storage could be located closer to Airport Road, for example.

Richard Morey, airport manager and a member of Airport Master Plan Advisory Committee, asked whether there could be lead leaching from the solar panels. Udelhofen explained that the panels will consist of crystalline silicon wafers and not contain any lead or other hazardous materials. Morey noted that the recent flood did not completely overtop the runway, although it did take out part of the weather reporting station which was lower to the ground.

Morey asked about plans for removing existing vegetation in the area. Udelhofen replied that the final plans have not been filed with the DNR, but it is best to leave existing vegetation in place to minimize soil disturbance until the start of the next growing season, when one could either do a close mow with inter-seeding or use herbicide to remove undesirable vegetation. Morey favored the close mow approach and recommended utilizing the services of Larry Wagner, who currently maintains this part of the airport for the city.

Morey asked why the electrical lines are not going to run north to Schneider Road instead of cutting through airport property. Udelhofen responded that the existing transmission lines along Schneider Road lack capacity due to the bio digester but the lines along Airport Road have adequate capacity.

Bartlett Durand, 2515 Sand Pearl Trail, stated that he works for Sand County Foundation but is speaking for himself. He said he spoke with a certified wildlife biologist at USDA who agrees with the prairie approach because it will pose the same or less wildlife hazard while benefitting water quality and infiltration. Durand said the project could provide the city with a significant nutrient reduction credit through the Yahara Watershed Improvement Network (“Yahara WINS”) adaptive management initiative.

Mike Barnett, a mechanical engineer at HGA, 7475 Hubbard Ave. #201, stated that his firm has rooftop solar panels that provide 100% of the electricity for their office. He said his company has installed a 500 Kw solar project at Appleton’s airport without any issues. He said this project should not be a contentious issue, noting that most of the region’s power is coming from coal plants located near Portage and south of Milwaukee with far greater environmental impacts.

Don Peterson, MGE, reported that the Wisconsin Public Service Commission has approved the shared solar rate and will review in July the renewable energy rider in which the city and school district are participating.

There being no other questions or comments, Mike Davis closed the hearing at 6:59 p.m.

Video of meeting available at: https://www.youtube.com/watch?v=c_9O-SP3h5k

Minutes of meeting prepared by Mark Opitz, Assistant Planning Director, City of Middleton

