Wood County Solar Project in Wisconsin Earns an Envision Platinum Award for Sustainable Infrastructure

April 18, 2023 — ISI has awarded Envision Platinum to Alliant Energy's Wood County Solar Project, highlighting its contributions to sustainable development and clean and renewable energy.

Located in Saratoga, Wisconsin, the Wood County Solar Project, built by EPC contractor Burns & McDonnell, will produce approximately 300 GWh of electricity annually. Pre-project analysis carried out by Alliant Energy underlined the long-term economic, community, and environmental value of developing new utility-scale solar while retiring its coal-fired facilities in Wisconsin. This project is part of Alliant Energy's solar program that includes adding nearly 1,100 MW of solar power into Wisconsin's power grid by the summer of 2024.

The project scope includes nearly 390,000 solar panels on approximately 1,200 acres, a collector substation, and an approximately 3.8-mile, 138-kilovolt (kV) overhead transmission line interconnect (Gen-Tie). With its operations regulated by the Public Service Commission of Wisconsin (PSC) and the Midcontinent Independent System Operator (MISO), the now-complete, 150-megawatt (MW) solar installation produces enough energy to power approximately 40,000 homes annually.

"Guided by our purpose to serve our customers and build stronger communities, we are proud to be recognized with the Envision Platinum award for our Wood County Solar Project," said Barbara Tormaschy, Senior Vice President of Sustainability and Regulatory Strategy at Alliant Energy. "We know it's important

to build projects with sustainability in mind because of what it means for our customers. We're able to create a healthier environment while producing reliable, clean energy for the next 30 years."

Melissa Peneycad, ISI Managing Director, said: "ISI congratulates Alliant Energy and the project partners on achieving Envision Platinum for an outstanding project that advances clean and renewable energy in Wisconsin. The independent, third-party verification process using the Envision Framework determined that this project attained the highest award level possible, with significant accomplishments that will benefit the local community and environmental sustainability for decades to come."

VERIFIED RESULTS

Cleaner air quality. In comparison to fossil-fuel generation, this project will result in a 99.998% reduction of criteria air pollutant emissions, including CO, NO_x, VOC, PM_{10}, $PM_{2.5}$, and SO_2. Solar energy systems lack the stationary source activities that produce air pollutants during operations unlike fossil fuel generation facilities. The only minor source of air pollutants during operation will be from the vehicles of maintenance personnel visiting the site.

Protection of wetlands and habitats. Alliant Energy and Burns & McDonnell demonstrated its commitment to environmental stewardship by identifying wetlands and waterbodies close to the project and protecting their functionalities through avoidance and on-site controls during construction. Prior to construction, the project implemented groundwater monitoring, floodplain mapping/analysis for 100- and 500-year flood events, controls to prevent and minimize off-site sediment migration, and trained personnel on best management practices. In addition, post-construction revegetation includes a customized seed mix to establish previously unavailable meadow habitat for the Karner Blue Butterfly and other pollinator species.

Well-planned resource management. Careful management of construction materials was emphasized, resulting in 99.8 percent of C&D materials being recycled, reused, or salvaged. The materials generated from the project site were closely tracked and all materials that could be reasonably recycled were sent to the appropriate recycling or mulching facility. Unusable solar panels that were damaged during transport were sent to a dedicated solar panel recycling facility in Upper Sandusky, Ohio.

Beneficial use of timber. The selected site was formerly operated as a commercial tree farm. To make the area suitable for solar arrays, the project team partnered with local lumber contractors and mills to implement a sustainable harvesting program. Money from any wood sold was dedicated toward partnering with area non-profits for beneficial projects and communication outreach efforts. Nonsaleable wood, such as small trees, limbs, and stumps, were chipped into usable mulch and donated to local citizens and the Town of Saratoga.

Reduced impacts during the construction phase. Burns & McDonnell worked with Alliant Energy to implement measures to minimize negative impacts to the surrounding community during construction. These policies and measures were informed by environmental and social due diligence studies and public input. They included construction work schedule limitations, designated traffic routes, and a proactive roadway maintenance program.

Supports integration and greater efficiency in the infrastructure system. Within the context of a new generation facility that will be part of a regional power grid, this project contributes significantly to the larger infrastructure system beyond the project boundary. Because of the high volume of data required to maintain service as per the system's design, fiber optic networks will be used to transmit data regarding monitoring and maintenance of the system.

Project Details At-a-Glance	
Envision-verified project:	Wood County Solar Project
Location:	Saratoga, Wisconsin
Lead Envision Firm:	Burns & McDonnell
Envision Rating:	Platinum
Award Date:	April 18, 2023
Project Owner:	Alliant Energy
Project Phase:	Completed (late 2022)
Total Cost of Project:	$194.2 M
Project Delivery Model:	EPC Design-Build
For more information:	Visit the project website at: www.alliantenergy.com/woodcountysolar

Additional Photos:

Bottom right: Securing PV panels to the tracker system during construction.