



## **WHAT IS THE CURRENT PROJECT STATUS AND TIMELINE?**

Alabama Solar is proposed to begin construction in 2027 and become operational by the end of 2028, so there is still much to be finalized.

Our next big milestone is submitting our Article VIII Application to the NYS Office of Renewable Energy Siting and Electric Transmission (ORES), which is required for renewable energy facilities over 25 megawatts. This is a robust process that requires public meetings, state and local consultations, and environmental reviews. We are aiming to submit our application by the end of this year, which would likely mean a determination in late 2026.

These timelines are our best estimates and may change. There will also be public engagement and educational opportunities throughout the application process and through construction. Our team will be attending various community events as well.

## **YOU'VE BEEN TALKING ABOUT THIS PROJECT FOR YEARS. WHY IS IT MOVING FORWARD NOW?**

EDP spent years developing this project, acquiring land and conducting baseline environmental and cultural resources surveys. Those surveys identified some cultural resources on parcels in the northwestern portion of the town of Alabama, and as such, EDP adjusted the siting of our project area to areas with fewer cultural resources. With these changes, the layout of the project has been designed to reduce impacts to wetland and cultural resources and is ready to begin the permitting process. EDP is currently aiming to submit Alabama Solar's application to ORES (the main permitting entity) by the end of this year, which would likely mean a determination in late 2026.

## **WHY WAS THIS LAND CHOSEN?**

The primary factor in deciding where a solar project could be developed is its proximity to the electrical transmission grid – essentially a place to plug it in. Identifying the possible locations to add power to the existing electrical grid is a years-long process overseen by the regional grid operator – in this case, New York Independent System Operator (NYISO). To avoid needing to construct additional transmission lines and to optimally get the power onto the grid, we began working with landowners near the closest potential interconnection point to the existing electrical transmission system in the area – the 115kV Lockport to Batavia Transmission Line.

The second biggest factor is finding local landowners who are interested in leasing their land to host the project. We have been very fortunate to find great landowner partners in the towns of Alabama, Oakfield, Batavia and Pembroke who see the solar site as the best long-term choice for their property and family. The proximity to existing transmission lines allows the Alabama Solar Park to provide reliable, homegrown energy to the local area's electrical grid.





Adequate sunlight is also a factor of course, and with the advanced technology in modern solar panels, the areas of the country that have sufficient sunlight to merit a solar park have increased, meaning solar parks can be a great energy producer in areas outside of the traditional sunbelt, including western New York. Solar production is extremely predictable, which makes it possible to have certainty that an area will generate enough power to be worth adding a solar park to harness it and strengthen the local grid with its energy.

### **WHY ARE YOU USING AGRICULTURAL LAND?**

Agricultural land can be a good fit for solar since it is typically relatively flat with minimal clearing requirements, which means less impact on the land. The land has already been disturbed by farming operations, so the impact on the environment and local ecology is lower. All the land leased for this project is leased to us from local landowners who are interested in hosting this project on their property.

It comes down to property owners choosing what to do with their private property. Solar parks provide stable, reliable income that landowners can reinvest into their agricultural operations, expand their business, hedge against the ups and downs of the industry, and supplement their personal finances for things like retirement, supporting family members, or taking a vacation.

The panels are mounted on galvanized steel piles driven into the ground, which makes for relatively simple decommissioning at the end of the project's 35-year operating life. EDPR, per our legally binding project leases, is required to return the land to its original use, including farming, grazing, or wildlife habitat. Giving the land a break for a generation allows nutrients to replenish, boosting soil quality and increasing local biodiversity, leaving the land recovered and ready to serve future generations.

### **WILL EXISTING DRAINAGE TILE LINES BE REPAIRED IF DAMAGED DURING CONSTRUCTION?**

Yes. EDPR will proactively work with landowners to understand drain tile layouts and locations to avoid as much damage as possible. However, if damage were to occur, EDPR will repair the tile, returning it to its original condition or better.

### **WHERE WILL THE PANELS COME FROM?**

EDPR will secure panels from solar panel manufacturers in the United States to develop the Alabama Solar Park.

More solar panel manufacturers are bringing new facilities to the U.S., and our team is working to procure these American-made panels for future projects. EDPR NA does not use Chinese solar panels. EDPR NA supports the rapid growth of American-made solar panels and uses





them whenever feasible. We are constantly updating our procurement relationships and strategy to remain on the cutting edge of the best, most cost-effective state-of-the-art panels as domestic supply increases.

### **WHAT ARE PANELS MADE OF? CAN TOXIC MATERIALS LEACH OUT?**

By weight, the panels are 90% glass and aluminum. The remainder are regular household technology materials like copper, and semiconductor materials like silicon, which is the second most common element on earth. Panels do not contain any liquids, so there is nothing to leak out even when cracked. Behind the glass is encapsulant material, which is typically a type of polymer. Inside the encapsulant is the silicon solar cell itself, and copper to wire the cells together. The underside of the panel is either a foil backing or a second sheet of glass.

Solar panels use a fully sealed technology that prevents trace metals from entering surrounding soils. In the event the panels are damaged, the glass stays together because of the encapsulant, similar to a phone screen or car windshield, again preventing anything from leaching out of the panel. In the rare case that really extreme, heavy damage were to occur, there still isn't enough concerning material inside the panels for leaching to be an environmental risk. During the construction and operations of the solar park, if a panel is broken, it would be picked up immediately upon discovery and, in most cases, sent for recycling and replaced by our on-site Construction or Operations team.

Solar manufacturers are required by EDPR to provide studies to analyze what exactly would happen if a pulverized panel was left in extreme conditions, similar to a landfill over many decades. Broken panels in a field are not exposed to this level of harsh conditions. EDP has very robust recycling commitments in order to minimize the chance of broken panels ending up in a landfill.

### **HOW DO SOLAR PANELS FARE IN SEVERE WEATHER?**

Solar panels are built to withstand all kinds of harsh weather and conditions outdoors for 35 years – they are built to be tough. Of course, natural disasters can impact any built structure, and nothing is completely damage-proof. All of EDPR NA's projects are monitored by the Remote Operations Control Center (ROCC), a 24/7 staffed monitoring bay in our Houston, Texas headquarters. The ROCC receives nearly real-time data from every wind turbine and solar inverter in our fleet, monitoring for anything outside normal levels or sensor triggers. They also constantly monitor weather conditions and communicate closely with the local Operations team staffing the site on the ground to prepare the project as best as possible for incoming weather.

When it comes to hail, all panels are tested to meet a minimum threshold of hail resistance — 11





impacts of 1-inch hailstones. EDPR additionally tests for 11 impacts of 2.2-inch hailstones without breaking. EDPR projects are designed to withstand forces from hail up to 2 inches across. Thus far across our operational fleet, EDPR has identified zero instances of damaged panels in our fleet due to hail. There simply haven't been any extreme enough hailstorms to do so, as the hailstones need to be even bigger than a golf ball and heavy enough of a storm to have about a dozen of these giant hailstones hit a single panel.

The panels that EDPR procures can also tolerate heavy snow loads, and in some cases, actually generate more power whenever snow is present. Alabama Solar's panels would be designed to withstand about 64lbs of snow per foot, which is roughly 2.5–6.4 feet of snow depending on the snowfall density. The minimal heat that the panels capture from the sun can warm the snow and help it slide off the panels. The panels are also bifacial, meaning they have photovoltaic cells on both the top side of the panel and the bottom. Because of this, light that bounces off the ground can increase generation. Because snow is so reflective, it can increase generation by about 30%.

If extreme damage were to occur, the projects are insured and would be repaired appropriately. The project only generates revenue by generating power, so EDPR NA is financially incentivized to swiftly clean up and replace any damaged asset. EDPR NA is responsible for the removal of any and all waste from the site throughout the project life. This includes construction, maintenance, and decommissioning efforts on the site.

### **WHAT WILL THE PROJECT LOOK LIKE FROM THE ROAD AND NEIGHBORING PROPERTIES?**

The site will consist of dark-colored panels mounted upon metal piles in horizontal rows, fixed at a roughly 30-degree angle, facing south, and totaling about 10' tall. The panels will be inside a fence, most likely chain link.

Since solar panels are mounted on top of metal piles driven into the ground, the vast majority of the ground within a solar park is covered in well-maintained vegetation, meaning plenty of green space around and between the panel rows. There will be some gravel access roads for use by the on-site maintenance technicians.

### **WILL THE CONSTRUCTION TEAR UP OUR ROADS?**

EDPR NA is responsible for ensuring that all public roads used during the construction and operation of the project are properly maintained and, if necessary, restored. This includes conducting thorough pre- and post-construction surveys to document the condition of the roads and committing to repair any damage caused by project-related activities. In addition,





EDPR NA is required to obtain all relevant permits and comply with applicable local, state, and federal regulations governing road use and transportation.

To protect public interests, EDPR NA must maintain adequate insurance coverage and indemnify the County against any claims or damages resulting from its use of the roads.

The company is also expected to maintain open communication with county officials, providing advance notice of construction schedules and major transport activities, and designating a point of contact for any road-related concerns. Finally, EDPR NA must provide financial assurance, such as a bond or other security, to cover the costs of any necessary road repairs or restoration, ensuring that public infrastructure is not adversely affected by the project.

### **HOW FAR AWAY ARE THE PANELS FROM ROADWAYS AND HOUSES?**

EDPR has designed the project to abide by all local and state setback requirements from roadways and residences to the extent feasible. Each municipality has varying setback requirements, and as such the setbacks are not uniform across the entire project.

EDPR was able to maintain a minimum setback of 100 feet from the roadway throughout the project. The town of Alabama and Batavia both have a setback requirement of 200-feet from public roadways, and EDPR has worked to accommodate to the extent feasible. However, in the Town of Alabama, there are a few site-specific locations that due to other constraints, EDPR was unable to meet the town's minimum setback.

Panels have been sited at least 200 feet from residential structures, and a minimum of 250 feet from non-participating residences, in alignment with State regulations. However, the Town of Alabama has more stringent requirements and as such EDPR has sited panels a minimum of 500 feet from the front and side of non-participating residences, to the extent feasible.

EDPR will be requesting a waiver from ORES for all the site-specific locations where the town's setbacks cannot be met, but are in alignment with the State regulations.

### **HOW LOUD ARE SOLAR PROJECTS?**

Solar parks make for nearly silent neighbors. Inverters may produce a quiet, ambient hum during the day, but it typically can only be heard from within the project fence, well away from anyone outside of the site itself. For the solar technicians working on-site who regularly hear the project sounds, it is comparable to an air conditioner, and they are able to carry on a conversation at normal volume directly beside it.



## **WHAT IMPACTS WILL THE SOLAR PARK HAVE ON PROPERTY VALUE?**

Research from multiple academic institutions, and project-specific assessments have shown little to no negative property value impacts from projects like Alabama Solar Park.

Some studies have shown a slight decrease in value for homes closest to a solar park in suburban areas only. In rural communities, the same studies showed there was no impact on property values. Yet other studies have found that solar panels can have a neutral or even a positive impact on home values.

Property value experts agree upon criteria that typically correlate with decreases in property value are increased noise, odor, and traffic—none of which result from having a solar park as a neighbor. Solar parks are very quiet facilities that do not emit odor or pollution, and once construction is complete, they have minimal impact on traffic in the area.

What helps improve property values – high-quality schools, roads, and local services – are further strengthened by the project's \$25+ million going into the tax base of the three municipalities and Genesee County.

Visual appearance also plays a role. This is one area where solar parks could have an impact, depending on neighbors' preferences, as we are visually changing the landscape. However, we have a lot of tools to mitigate visual impact, which a lot of thought and resources go into when designing the project and are also subject to town and state regulations around visual impact, which include setbacks and visual screening.

## **HOW WILL THE PROJECT AFFECT NON-PARTICIPATING LANDOWNERS' PROPERTY TAXES?**

There is no direct mechanism associated with the project that would trigger any sort of tax increase for neighbors. The project is adding millions of dollars to the town and county budgets through tax payments, but that has no direct bearing on how they choose to set property tax rates.

## **WILL THE PANELS MAKE THE AIR TEMPERATURE HOTTER?**

Vegetation beneath panels helps cool an area and stabilize temperatures, which will be the case for Alabama Solar. As the Ohio Department of Public Health has found, "Information to date does not indicate a public health burden from heat generated by PV panels or from the heat island effect."

Solar photovoltaic (PV) "heat island effect" refers to a limited increase in air temperature in and around solar facilities at certain times of the day and/or year, potentially depending on other conditions, such as wind speed and cloud cover. This phenomenon is conceptually like the

“urban heat island” effect that has been observed in which heat-absorbing elements of cities, such as concrete, increase the temperature when compared to surrounding areas.

It is important to note that current research has been conducted on sites in the desert that do not have planted vegetation underneath panels, which is not representative of solar PV facilities in many parts of the country and certainly not Genesee County.

### **DOES THE PROJECT POSE A RISK FOR STRAY VOLTAGE?**

Sometimes we hear concerns about stray voltage in relation to solar projects and livestock, but that is not a concern here.

Stray voltage occurs when an electrical system is improperly grounded, which is prevented by building and operating systems to meet electrical code and best engineering practices. Given that utility-scale solar plants operate using three-phase DC/AC inverters and produce no current in-balance, it is very unlikely or impossible that the solar park could produce the common causes of stray voltage – unbalanced or single-phase loads.

The solar park's construction and operation is subject to safety codes, and numerous credentialed professionals are involved at every step to ensure the solar park's compliance to ensure a safe environment. Additionally, all the wiring, collection cables, and junction boxes are sealed to be both waterproof and insulated.

### **WILL THE PANELS CREATE GLARE?**

The panels are constructed of dark, light-absorbing materials designed to capture as much sunlight as possible to generate maximum energy, as any glare reflecting off would just be wasted potential energy. Because of that, they are designed to not have much glare. They are made of non-reflective glass which is typically less reflective than windows.

In fact, utility-scale solar parks are installed at dozens of airports in the U.S. and were some of the first locations to site them. The Federal Aviation Administration continues to allow panels to be installed at many airports across the country. If the glare was an issue, they would not continue to do so.

We are required to complete a glint and glare study as part of Article VIII application through the state, which will evaluate the potential for glint/glare impacts to aircraft, air traffic controllers, local residents, and road users. If any impacts are identified, EDPR will further refine mitigation measures to minimize any impact to the area.

### **HOW WILL THE AREA WILDLIFE BE AFFECTED?**

The solar panel fencing will have enough clearance underneath for smaller animals, such as





rabbits, raccoons, and foxes to easily pass through the site without issue. Larger animals, like deer or coyotes, would be routed around the site. Importantly, the solar project is not one contiguous block of solar panels within a single fence line – it is made up of multiple smaller sections that are individually fenced off, meaning there are ample areas for wildlife to navigate around them. If anything unusual were to occur with wildlife getting stuck at the site, the local Operations team would coordinate with the relevant authorities to safely remove the animal.

### **AREN'T PANELS MADE USING FOSSIL FUELS?**

Sure, it is a manufactured good. Factories use whatever energy is currently on the grid, which is the result of myriad factors. We wouldn't be able to manufacture goods with exclusively renewable energy until there is enough renewable energy on the grid to do so. Renewable energy is one piece of a strong, diverse, all-of-the-above energy grid. The important thing to keep in mind here is that solar projects' Energy Payback Time is a small fraction of its overall operational life. On average, it takes only 6 to 14 months for a typical 100 MW utility-scale solar park to generate the amount of energy that was used for its materials sourcing, manufacturing, transporting, constructing, and decommissioning. For the rest of the project's 35+ year operational life, it is generating fossil fuel-free energy onto the grid to power America's economy.

### **WHAT IS THE OWNERSHIP STRUCTURE OF EDP RENEWABLES NORTH AMERICA?**

EDP Renewables North America (EDPR NA), the company developing Alabama Solar Park, is an American company based in Houston, TX, and is led by its own executive team and CEO based in the United States. EDPR NA directly oversees all of U.S., Canadian, and Mexican assets as the long-term owner-operator. EDP is EDPR NA's parent company and is based in Portugal. EDP is a publicly traded global energy company traded on the European stock market. Just like any publicly traded company, any individual or company can buy stock in it; therefore, there are shareholders from all over the world.

Thousands of other everyday companies in the U.S. have some amount of foreign ownership, including: Samsung – the smartphone in many Americans' pockets is from a South Korean company; Case IH – owned by CNH International (Italian-American multinational), which is owned by Exor N.V., which is Dutch; Syngenta AG – Swiss corporation owned by ChemChina, a Chinese state-owned enterprise; and Nestlé – Swiss; the world's largest food & beverage company.

### **IS THIS PROJECT FUNDED BY THE GOVERNMENT?**

No deposits, grants, or checks are issued from the government to build this project, or any EDP projects. The project will be built using private funds, after which it will qualify for certain energy tax credits, for which all forms of energy generation may qualify. For context,







historically, fossil fuels have enjoyed significantly more of these benefits than renewables. The energy industry—not just renewables—is heavily incentivized by the US and state governments because energy security is so important for the country. The tax incentives that we receive for building projects drive down the overall cost of electricity, which is something that benefits everyone.

### **HOW WILL THE SOLAR PARK BE MONITORED?**

All EDPR solar projects have local operations staff responsible for maintaining the site, coordinating with contractors, and communicating with project landowners and neighbors. We also have a 24-hour, 7-days-a-week staffed Remote Operations Control Center in our Houston headquarters that has constant, real-time data coming in from every wind turbine and solar inverter in our portfolio, ensuring continuous monitoring and the ability to respond appropriately to events at all times.

### **WHAT COORDINATION OCCURS WITH LOCAL FIRST RESPONDERS?**

EDPR has a dedicated Health & Safety Department that works with local first responders to establish and update an Emergency Response Plan during the project's development. They facilitate both written and on-site procedures and drills for every project. Drills are repeated every 6 months during construction, and every year during operations to ensure teams are up to date with the most effective protocols and procedures.

### **IN THE EVENT OF FIRE, HOW WILL FIRE RESPONSE OCCUR?**

Before our site begins commercial operations, we will work with local first responders to collaboratively develop and implement a plan on how to safely contain and extinguish any fire that occurs inside the solar facilities. Like all power-generating facilities, these are live electric-producing sites, so some special precautions are needed to ensure first responders remain safe. It is a key part of the later-stage project development to ensure everyone is on the same page about emergency response protocol and procedures for contacting one another.

### **WHAT HAPPENS AT THE END OF A PROJECT'S LIFE?**

ORES requires applicants to submit a "Decommissioning Plan" as part of the state Article VIII permitting process. The plan will contain a detailed assessment of what it will take to remove the project and recycle or safely dispose of its components, as well as financial assurances in an amount equal to 100% of the cost to decommission the project, excluding salvage value. The cost estimate must be completed by a 3<sup>rd</sup> party engineer firm, and updated every 5 years, with additional funds added to the financial assurance (bond, letter of credit). The financial assurance must be put in place prior to initiating construction and must be issued to the host municipalities, so they have control over the funds until the project has been fully decommissioned.





As required by our lease agreements (and in many jurisdictions, the local ordinances), after a project is decommissioned, the equipment will be removed and the land can return to its original use, including farming, ranching, or recreation. Our leases state Decommissioning must be complete within 12 months after a project is no longer operational.

### **WHAT HAPPENS IF EDPR GOES OUT OF BUSINESS?**

This is an extremely unlikely scenario because EDPR NA and its parent company, EDP, are large, stable companies with a long, multi-decade track record of success. If that unlikely event were to occur, there are legal protections and practical protections. Each solar park constitutes a large upfront investment. The payoff for that investment occurs by operating the project over many years to recoup the cost of construction and eventually earn a profit. Because most of the costs are upfront, the projects retain a substantial value and would likely be acquired by another power company that can continue the project and continue the revenue stream without having to incur all of the upfront costs.

It is also possible, in a worst-case scenario, that the project would have to be shut down. Even in this situation, the land has protections. The lease we have with the participating landowners contains requirements regarding the removal of equipment and the restoration of the land. As detailed above, the State requires we post either a bond, letter of credit, or cash fund, updated every 5 years to perform the removal and restoration required in the lease, even if EDPR NA was not able to complete that work directly, such as in this hypothetical scenario.

The permits we receive through local/state/federal agencies often have requirements regarding removal, restoration, and financial security in addition to what the lease requires. The financial security under the leases and the permits provides a source of funds so that the landowner can get the equipment off of the property and move on without EDPR NA.

### **If you have any remaining questions, please contact the project team:**

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