FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY

OKOLONA SOLAR
CHICKASAW COUNTY, MISSISSIPPI

The Tennessee Valley Authority (TVA) has entered into a power purchase agreement (PPA) with Okolona Solar, LLC (Okolona Solar), a wholly owned subsidiary of NextEra Energy Resources (NEER), to purchase the power generated by the proposed Okolona Solar Project in Chickasaw County, Mississippi (Project), subject to satisfactory completion of all environmental reviews.

The proposed action of constructing the Okolona Solar Project is anticipated to provide up to 145 megawatts (MW) alternating current (AC) in generating capacity at the Point of Interconnection (POI) with TVA's substation, which is located to the northeast of the site. The proposed 1,700-acre Project site is located approximately one mile south of the City of Okolona and approximately 2.5 miles north of Egypt, Mississippi. While design of the facility is being finalized, the conceptual plan includes 373,000 PV modules being placed within the 950 fenced acres. Approximately 20 acres of access roads would be constructed or improved to access project components, of which, approximately 18.3 acres would be located within the areas to be fenced-in and approximately 1.8 acres of access roads would be outside the fenced-in panel areas. Portions outside of development plans would not be disturbed.

Okolona Solar would connect the solar facility to TVA's existing electrical grid via a new, approximately 1.25-mile-long, single-circuit Okolona Solar 161-kilovolt (kV) dedicated transmission line (TL), called a generation tie (gen-tie) line, from a proposed on-site collection substation, also built by Okolona Solar, to the existing TVA switching station, northeast of the solar facility site. In addition to purchasing the electric output under the PPA with Okolona Solar, TVA also proposes to perform upgrades to TLs within the existing project boundaries to consist of adding one TL structure. The environmental review for the proposed project also evaluates the potential addition of a battery energy storage system (BESS) to be located within an approximately 15-acre area within the proposed Project footprint, near the southern end of the proposed new TL and northeast of the proposed solar installation.

In June 2019, TVA completed an Integrated Resource Plan (IRP) and associated Environmental Impact Statement. The IRP identified the various resources that TVA intends to use to meet the energy needs of the TVA region over the 20-year planning period while achieving TVA's objectives to deliver reliable, low-cost, and cleaner energy while reducing environmental impacts. The 2019 IRP anticipates growth of solar in all scenarios analyzed, with most scenarios anticipating 5,000-8,000 MW and one anticipating up to 14,000 MW.

Alternatives

The Environmental Assessment (EA) evaluates two alternatives: the No Action Alternative and the Proposed Action Alternative (Proposed Action). Under the No Action Alternative, TVA would not purchase power through a 20-year PPA with Okolona Solar. Existing conditions (e.g., land use, natural resources, visual resources, physical resources, and socioeconomics) at the Project Site would not change as a result of selecting the No Action Alternative, and agricultural activities

would likely continue. TVA would continue to rely on other sources of generation described in the 2019 IRP to ensure an adequate energy supply.

Under the Proposed Action Alternative, Okolona Solar would construct and operate the proposed 145 MW AC solar facility and would sell the power onto the TVA system. The Proposed Action includes installing the solar panels on single-axis tracker structures supported by steel pilings and connecting them with underground cables.

Site preparation would involve surveying and staking, removing tall vegetation and small trees, light grading and clearing, installing the security fence, implementing erosion control Best Management Practices (BMPs), and preparing construction laydown areas.

During the construction of the solar facility, approximately 200 workers would be present at the site from 7 am to 5 pm, up to six days a week (Monday through Saturday) for approximately 14-18 months. More than half of the workers would likely come from the local or regional area; 25 to 50 percent of the workforce would likely come from out-of-state. If necessary, workers from outside the area would stay in hotels in Tupelo, Mississippi, 19 miles north of the Project Site or in a surrounding rural community. Workers would either drive their vehicles or carpool to the Project Site. Parking would be on the site during the day. Some work teams may visit local restaurants and businesses during work hours.

Operations and Decommissioning

During operation of the solar facility, no major physical disturbance would occur. Routine maintenance would include periodic motor replacement, inverter air filter replacement, fence repair, vegetation control, and periodic array inspection, repairs, and maintenance. Traditional trimming and mowing would be performed periodically (about four mowing events per year) to maintain the vegetation at a height ranging from 6 inches to 2 feet. Selective use of herbicides may also be employed around structures to control weeds. Products would be used per state and federal regulations. To minimize any possibility of runoff or drift when using herbicides, care would be taken to follow manufacturer's directions and avoid herbicide application prior to predicted rainfall events or high winds.

Following the expiration of the 20-year PPA with TVA, Okolona Solar would reassess the site operation and determine whether to cease operation or attempt to enter a new PPA or another arrangement. If TVA or another entity is willing to enter into such an agreement, the Project could continue operating. If no commercial arrangement is possible, and if TVA opts not to exercise its option for purchase at the end of the 20-year term, the facilities would be decommissioned and dismantled, and the Project Site restored.

In general, most decommissioned equipment and materials would be recycled. Materials that cannot be recycled would be disposed of at approved facilities in accordance with local, state, and federal laws and regulations.

General decommissioning and reclamation activities are described below. Decommissioning activities would typically include:

- Dismantling and removal of above-ground equipment (solar panels, panel supports, transformers, substation, etc.)

- Removal of below-ground electrical connections
- Removal of posts
- Break-up and removal of concrete pads and foundations
- Abandonment of underground utilities
- Stabilization of site soils per NPDES construction permit (if required for decommissioning activities)
- Scarification of compacted areas within and contiguous to the solar facility

Impacts Assessment

The Okolona Solar EA describes the potential impacts and mitigation of the Proposed Action in detail. Overall, the work performed may have some minor, temporary impacts during construction but would not, with one minor exception, result in any long-term or permanent adverse impacts to any of the resources described below or to anyone living near the Project Site. All required permits would be obtained, and any required mitigation would be implemented.

Land Use

Implementing the Proposed Action Alternative would result in minor direct adverse impacts to the Project Site. Land use on the Project Site would change from agricultural to industrial. As a relatively small portion of a very large land use category in the vicinity would be lost, the Proposed Action would have an overall minor adverse impact.

Geology, Soils and Prime Farmland

During construction there would be minor direct impacts to geology resulting from placement of the steel piles that support the solar arrays. Hazards resulting from geological conditions would be minor because the Project Site is in a relatively stable geologic setting.

Minor disturbance to soils would occur during construction and operation of the Proposed Action Alternative. The creation of new impervious surfaces, in the form of panel footings and the foundations for the inverter stations and substations would result in a minor increase in stormwater runoff and potentially increase soil erosion. The use of BMPs such as soil erosion and sediment control measures would minimize the potential for increased soil erosion and runoff. Following construction, implementation of soil stabilization and vegetation management measures would reduce the potential for erosion impacts during site operations. While in operation, adverse impacts to soils would be offset by beneficial effects of vegetation management.

No permanent or irreversible conversion of prime farmland would occur. While agricultural production would not be possible where panels are placed on the Project Site, adhering to BMPs during construction and operation of the solar facility, including installing erosion control devices (ECDs) during stockpiling events, would preserve topsoil and limit erosion, resulting in negligible impacts to prime farmland. If the solar panels were removed at the end of the 20-year PPA, the land could be returned to agricultural production.

Water Resources

Groundwater

Direct and indirect impacts on local aquifers and groundwater are not anticipated due to the limited ground disturbance required for initial construction, operation, maintenance, or decommissioning and closure. During construction, hazardous materials would be onsite that could potentially contaminate groundwater resources, including petroleum products for fuel and lubrication of construction equipment, hydraulic fluids, and various other chemicals commonly used for general construction. Appropriate BMPs would be followed, and a Spill Prevention, Countermeasure and Control (SPCC) Plan would be prepared to minimize the potential for leaks or spills to occur and provide countermeasures for spill response.

If functioning groundwater wells are present, water may be used to control fugitive dust. An analysis of the well's capacity to provide sufficient water would be done prior to using the water. If groundwater from the project site is available and is used, the volume extracted would not exceed a level that would impact groundwater availability or quantity. Thus, no indirect impacts to groundwater are anticipated.

Surface Water

Based on current site plans, minor impacts to ephemeral, intermittent, and perennial streams are anticipated. Minor adverse impacts may occur to approximately 258.95 linear feet of jurisdictional streams and 287.67 linear feet of potentially non-jurisdictional streams for installation of culverts at crossings and access road construction. Approximately 16,016.55 total linear feet of ephemeral streams would be filled to install solar panels. Proposed stream impacts may require Clean Water Act (CWA) §404 permit authorizations from the USACE and/or 401 Water Quality Certification from the Mississippi Department of Environmental Quality (MDEQ).

There would be limited ground disturbance required for initial construction, operation, maintenance, or decommissioning. With implementation of mitigation measures, there would be only minor impacts on floodplains and their natural and beneficial values. Establishing buffers as specified in the SWPPP will help improve water quality and habitat conditions.

During construction, runoff of sediment and pollutants could temporarily impact surface water quality on the Project Site. The use of BMPs for controlling soil erosion and runoff would minimize these potential impacts to surface water. Additionally, construction of onsite stormwater detention basins would allow sediments to settle out prior to release.

Floodplains

Of the proposed facilities, structures, and activities, only four (4) transmission poles and tree clearing would be performed within the 100-year floodplain. Tree-clearing would be an agricultural use, which is considered a repetitive action in the 100-year floodplain, as well as transmission line construction, and therefore these would be consistent with Executive Order 11988, Floodplain Management.

Wetlands

Based on current site design, 7.65 acres of wetlands will be impacted due to tree removal. Proposed wetland impacts (tree clearing in wetlands) may require permit authorizations for CWA §404 from the USACE and/or 401 Water Quality Certification from the MDEQ, and potential compensatory mitigation for wetland and/or tree clearing impacts, which would be obtained prior to construction if necessary. Tree clearing in forested areas, including potentially jurisdictional forested wetlands and/or floodplains would be mechanized. Contours would be restored to pre-clearing elevation and native soil returned.

Any wetland impacts would be subject to the terms and conditions of a general or individual permit pursuant to Section 401 of the (CWA) and possibly a CWA Section 404 permit from the U.S. Army Corps of Engineers (USACE) for jurisdictional wetlands impacted by the Project. With implementation of appropriate BMPs and obtainment of required compensatory mitigation credits, impacts to wetlands would be insignificant as a result of the construction and operation of the Project.

State and Federal Concurrence

Until the USACE issues its final jurisdictional determination, it is not known if a USACE permit pursuant to Section 404 of the CWA (33 U.S.C. § 1251 et seq.) would be required. Okolona Solar would obtain the necessary permit(s) and follow the permit requirements to minimize impacts to wetlands before construction begins. Additionally, with implementation of appropriate BMPs, along with permitting requirements and any required mitigation, impacts to wetlands would be insignificant during construction and no long-term adverse impacts or indirect impacts are anticipated.

Biological Resources

Vegetation

Vegetation impacts would be minor. Conversion of 950-acres of farmland to native and non-invasive herbaceous vegetation may result in some improvement for wildlife. Up to 51.44 acres of forested vegetation within the Project Site would be cleared and maintained in herbaceous vegetation, representing a relatively small loss of forested land.

Wildlife

Overall, there would be minor direct and indirect impacts on wildlife. Wildlife present at the time of construction would be impacted, particularly when heavy machinery is used for vegetation clearing and driving piles as it would displace any wildlife currently using the area. Mobile species would be able to leave the area and would not be impacted. Direct effects to some individuals may occur if those individuals are immobile during the time of habitat removal. Upon completion of construction, the site would be revegetated using a mixture of certified weed-free, low-growing native or non-invasive grass seed. Those animals able to use early-successional habitats could return to the site upon completion of the Project if they are able to access the new habitats. Tree clearing would be conducted only during the winter window (October 1 – March 14); thus, implementing the Proposed Action would avoid potential impacts to roosting bats and minimize impacts to nesting birds.

Threatened and Endangered Species

Four species listed as federally endangered, threatened, candidate, proposed, or experimental non-essential under the Endangered Species Act (ESA), or a bird of conservation concern (BCC) under the Migratory Bird Treaty Act, have the potential to occur within the Project area in Chickasaw County, Mississippi. These species include the monarch butterfly (proposed threatened), Bewick's wren (BCC), tricolored bat (TCB) (proposed endangered), and the alligator snapping turtle (proposed threatened).

Roosting habitat for tricolored bat is present within the Project Site. No individuals were collected during the mist-net survey conducted in May 2024, following federal survey guidelines.

BMPs would be used around all streams and wetlands not proposed for impact to minimize potential impacts to bat foraging habitats. On December 19, 2023, in Section 7 consultation under the Endangered Species Act, the U.S. Fish and Wildlife Service (USFWS) concurred with TVA's determination that the proposed actions are not likely to jeopardize the continued existence of the tricolored bat, alligator snapping turtle, and monarch butterfly. Additionally, no listed species were identified as having potential to occur and none were captured during surveys.

Visual Resources

Temporary, minor direct impacts on visual resources would be anticipated during the construction phase due to increased traffic and alteration of the Project Site. Construction on the Project Site would convert farmland to commercial/industrial land use and alter the visual character of the Project Site. Heavy machinery would be present during construction and would change the visual characteristics from vantage points surrounding the project site. When operational, minor visual impacts of the panels would be visible from the roads that border the Project. If adverse visual impacts to nearby residences are reported or subsequently identified, Okolona Solar will address the impacts with the landowners. If buffers are required by the county or state, Okolona Solar would install landscape buffers along the Project Site boundary to minimize visual impacts from the proposed solar facility. The use of downward-facing and timer- and/or motion-activated lighting would minimize impacts to surrounding areas.

Noise

Construction noise would cause temporary and short-term adverse impacts to the ambient sound environment near the Project Site. Nearby residents could experience elevated noise caused by construction equipment. Construction equipment typically results in a maximum noise level of 80-90 dBA, dropping to 71-81 dBA at 300 feet, and 50-60 dBA at 1,000 feet. Most construction-related noise such as delivery trucks, dump trucks, water trucks, service trucks, bulldozers, chain saws, bush hogs, and other large mowers for tree clearing would remain under 65 dBA for nearby residences due to their distance from the sound source. Additionally, most of the proposed equipment would not be operating on the site for the entire construction period or at one time but would be phased in and out based on Project progress.

Following completion of the solar facility, the ambient sound environment is anticipated to return to existing noise levels or below by eliminating some of the seasonal use of agricultural equipment. The proposed inverters would produce minimal noise for residences more than 1,000 feet from the proposed inverters. A typical inverter, such as a Power Electronics 3510kVA model, has noise levels of less than 79 dB measured at 1 meter from the back of the unit. Maintenance

activities, primarily mowing, would result in noise periodically; however, this noise would be similar to existing noises near the Project Site.

Air Quality and Climate Change

Under the Proposed Action Alternative, minor impacts to air quality would occur during the construction of the solar facility. Only minimal air impacts would be expected, as construction might result in localized dust and fumes from equipment. The construction would involve using diesel-powered machinery and thereby create small amounts of airborne dust and debris. Internal combustion engines' emissions associated with diesel fuels would generate local emissions, including carbon monoxide, nitrogen oxides, and sulfur dioxide, during construction. Also, during clearing, trees may be burned and result in a minor temporary decrease in local air quality. The impacts on air quality would be expected to be minimal and short-lived and would remain well below the applicable ambient air quality standard. The operation of the solar facility would result in negligible impacts due to maintenance activities such as facility inspections and periodic mowing.

Cultural Resources

Based on the results of the Phase I cultural resources survey, Terracon recommended that the proposed Project would have no effect on 17 archaeological sites, two isolated finds, and four built resources identified within the Area of Potential Effects (APE), because these resources have been recommended not National Register of Historic Places (NRHP) eligible and would not be considered historic properties. Terracon recommended that the proposed Project would result in adverse physical and visual effects on the recommended NRHP eligible Okolona Battlefield Study Area (OBSA) by introducing new landscape features that are generally inconsistent with the integrity of the resource's overall setting and feeling. Terracon separately recommended that the proposed Project would have no adverse effect on Site 22CS1348 or Resource ID 34 (the Mobile and Ohio Railroad), which are recommended NRHP eligible as contributing resources to the OBSA, because the proposed Project would not diminish their significance as contributing resources to the OBSA under Criterion A.

TVA, through consultation with the Mississippi Department of Archives & History (MDAH), determined that the proposed undertaking would have an adverse effect on Site 22CS1348, which is a contributing resource to the OBSA under Criterion A. TVA and MDAH also agreed that Site 22CS1348 lacked integrity and that it is not eligible under Criterion D. As such, avoidance and/or additional archaeological investigations are not required to mitigate an adverse effect on the site. TVA and MDAH agreed with the remaining effect recommendations provided by Terracon. Pursuant to 36 CFR § 800.6(a)(1), TVA notified the Advisory Council on Historic Preservation of the adverse effect and provided the documentation specified in 36 CFR § 800.11(e). Pursuant to 36 CFR Part 800.6(c), TVA proposed to enter a Memorandum of Agreement (MOA) with the MDAH to mitigate the adverse effects of the undertaking (the proposed Project/Preferred Alternative) on the recommended NRHP eligible OBSA and Site 22CS1348.

In letters dated December 11, 2024, and March 3, 2025, TVA consulted with the MDAH regarding the Okolona Solar Project. TVA determined that the proposed undertaking would result in an adverse effect to the OBSA and Site 22CS1348 and invited the MDAH to participate in the development of an MOA to mitigate the adverse effects to the resource; the MDAH office

concurred with TVA's findings and agreed to participate in the MOA process in a response letter dated April 1, 2025. TVA also invited the federally recognized Tribes with an interest in Chickasaw County, the Friends of the Battle of Okolona through the Okolona Chamber of Commerce, and the Chickasaw County Historical Society to participate as consulting parties in the development of the MOA. TVA received no interest in participating in the development of the MOA from these parties.

By letter request submitted on April 8, 2025, TVA submitted a draft MOA to the MDAH for review. The MOA included mitigation for adverse effects on the NRHP-eligible OBSA and Site 22CS1348 that include the development and placement of permanent interpretive signage and the development of a traveling education display by Okolona Solar, LLC. The final MOA was signed by TVA on May 21, 2025, MDAH on May 27, 2025, and Okolona Solar, LLC. on June 4, 2025 (Appendix C).

Natural Areas and Recreation

Natural areas are managed areas such as National Wildlife Refuges, Natural Areas listed by the State of Mississippi, ecologically significant sites, and river segments listed in the Nationwide Rivers Inventory. Within a 5-mile radius of the Project Site, there are no natural or recreation areas. Thus, implementing the proposed action would not affect natural areas.

Utilities

Utilities include electrical service, natural gas, water supply, and communications. Electrical service to the Project Site is available from the Okolona Electric Department (OED). A service drop would be installed during construction to provide construction power. Given the low-level of electric demand during construction and operation, no changes to the OED distribution system would be expected, and there would be no impact to the local utility or its customers. No impacts to utilities would be anticipated as a result of the implementation of the Proposed Action.

Waste Management

During construction, operation, maintenance, and decommissioning, small amounts of hazardous waste would be generated. Hazardous waste that may be generated during construction and decommissioning includes hydraulic fluids, used oil, paint and paint thinner, other petroleum-based fluids, and any materials saturated with these fluids. To the extent possible, hazardous waste would be disposed of at an approved landfill in accordance with federal, state, and local laws and regulations. BMPs would be implemented to minimize the potential of a spill and to instruct onsite workers on how to contain and clean up spills.

Non-hazardous solid waste including worn or broken metal and machine parts, defective or broken electrical materials, other scrap metal and plastic, broken down module boxes, empty containers, paper, glass, and other miscellaneous solid waste would be generated throughout all phases of the proposed Project. Waste would be disposed of utilizing contracted refuse collection and recycling services in accordance with local, state, and federal laws and regulations. Bulk chemicals would be stored in storage tanks or returnable delivery containers.

Overall, by implementing BMPs, minimal direct impacts from hazardous and non-hazardous waste are anticipated. Additionally, no indirect impacts from hazardous or non-hazardous waste are anticipated.

Public and Occupational Health and Safety

Okolona Solar will implement BMPs to reduce public and occupational health and safety during construction, operation, and decommissioning. Under the Proposed Action Alternative, workers on the Project Site would have an increased safety risk during construction. However, standard construction site practice includes the establishment and maintenance of health and safety plans to comply with Occupational Safety and Health Administration (OSHA) regulations. An SPCC plan would be developed and implemented to minimize the potential of a spill and to provide detailed instructions for onsite personnel on how to contain and clean up any potential spills.

The Project is not anticipated to cause electromagnetic interference levels such that there will be impacts on nearby residents. Okolona Solar intends to design, construct, and operate the electrical systems of the proposed Project using standard industry practices with sufficient setbacks to reduce or eliminate electromagnetic frequency and interference exposure to adjacent property owners.

Transportation

No long-term or permanent impacts to transportation are anticipated from the proposed Project. Traffic flow around the work site would be heaviest at the beginning of the workday, at lunch, and at the end of the workday, resulting in minor temporary impacts. The proposed solar facility would not be staffed during operation but would be inspected weekly. Maintenance would be required quarterly for equipment failures and would require minimal personnel. Therefore, the operation of the solar facility would not have a noticeable impact on local roadways.

Socioeconomics

200 workers would be present at the site from 7 am to 5 pm, up to six days a week (Monday through Saturday) for approximately 14-18 months. Construction of the proposed facility could have short-term beneficial economic impacts due to the purchase of materials, equipment, and services and a temporary increase in employment, income, and population. Operation of the facility would not increase local employment as no workers would be needed for day-to-day operation of the solar facility.

Overall, socioeconomic impacts for the operation of the Project are anticipated to be positive and long-term, although small relative to the total economy of the region. Although it is too early to quantify, the Project would benefit the local tax base through the increased property taxes due to site improvements.

Summary

Possible impacts include a change in the visual effects arising from conversion of the land from agricultural to industrial use. Any adverse visual impacts would be offset by using existing vegetation to reduce or eliminate the visibility of the panels from public and private access points and would be supplemented with fencing and planting new vegetation if necessary.

Constructing the Project does not result in a long-term increase to air pollution, noise, hazardous materials, or traffic. The Project will not result in a permanent change to the socioeconomics of the area or create undo impacts on solid waste and utilities. No recognized natural areas or recreational facilities will be impacted. The Project will result in minor impacts to surface and groundwater, and biological; however, these impacts are offset by buffers protecting the resources and will not have an adverse impact on the local community.

Persons living adjacent to the Project Site may experience short-term impacts from an increase in traffic and noise during construction along with minor short-term direct and indirect air quality impacts resulting from localized dust and exhaust fumes from equipment during construction, but these impacts will end once construction is completed. Some minor long-term beneficial impact may result from the decreased use of pesticides and fertilizers on farmland that is converted to solar panels.

Public and Intergovernmental Review

Okolona Solar announced the proposed Okolona Solar Project through various means, providing opportunity for public comment. Federal, state, and local agencies, interested federally recognized Native American Tribes, elected officials, and other stakeholders were sent notification announcing the availability of the draft EA for review and comment for a 30-day period.

During the 30-day public review and comment period of the draft EA, a total of 12 responses from the public were received. Responses to the comments are included in Appendix A of the EA.

Mitigation Measures

Okolona Solar would implement the following minimization and mitigation measures in relation to potentially affected resources:

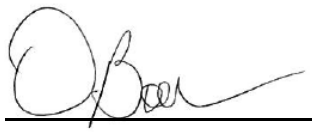
- Geology and Soils
    - Utilize standard BMPs, as described in A Guide for Environmental Protection and Best Management Practices for Tennessee Valley Authority Construction and Maintenance Activities – Revision 4 (TVA, 2022), to minimize erosion during construction, operation, and maintenance activities.
    - Install silt fences, sedimentation basins, and other appropriate controls as needed to minimize erosion and sedimentation.
    - Implement other soil stabilization and vegetation management to minimize soil exposure and limit soil erosion from the project site.
    - Make an effort to balance cut-and-fill quantities to alleviate the transportation of soils offsite during construction if necessary.
- Water Resources
    - Comply with the terms of the Stormwater Pollution Prevention Plan (SWPPP) prepared as part of the MDEQ permitting process.
    - Maintain existing landscape and visual buffers as needed.
    - Implement other routine BMPs as necessary, such as nonmechanical tree removal, placement of silt fences and sediment traps along buffer edges, selective herbicide treatment to restrict application near receiving water features, and proper vehicle maintenance to reduce the potential for adverse impacts to surface water and groundwater as identified by TVA.

  - Use only U.S. Environmental Protection Agency (USEPA)-registered and TVA-approved herbicides per label directions designed to restrict applications near receiving waters and prevent unacceptable aquatic impacts in areas requiring chemical treatment.
  - Design the final layout to minimize direct and indirect impacts on aquatic features.
  - Comply with the conditions of the MDEQ Section 401 and USACE 404 of the CWA (33 U.S.C. § 1251 et seq.) permits and required compensatory mitigation, as applicable.
  - Protect intermittent streams by implementing Standard Stream Protection (Category A), Protection of Important Steams, Springs, and Sinkholes (Category B), or Protection of Unique Habitat (Category C) as defined by TVA (2017b).
  - Any manual tree cutting in wetlands will leave the stumps in place to preserve hydric soils.
  - Ensure construction and maintenance activities occur during dry periods as much as possible.
  - Transmission line construction in 100-year floodplains would adhere to the transmission line location in floodplains subclass review criteria
  - If hauled offsite for disposal when the facility is decommissioned and dismantled, excavated material and debris would be spoiled outside 100-year floodways.
  - The solar panels would be elevated at least one foot above the 100-year flood elevation.
- Biological Resources
  - Revegetate with native and/or noninvasive vegetation to reintroduce habitat, reduce erosion, and limit the spread of invasive species consistent with EO 13112 (Invasive Species) for revegetating with noninvasive plant species as defined by TVA (2017a).
  - Follow USFWS recommendations regarding biological resources, including pollinator species.
  - Use downward facing and timer- and/or motion-activated lighting to limit attracting wildlife, particularly migratory birds and bats.
  - Instruct personnel on wildlife resource protection measures, including (1) applicable federal and state laws such as those that prohibit animal disturbance, collection, or removal, (2) the importance of protecting wildlife resources, and (3) avoiding vegetation disturbance in undisturbed and buffer areas.
  - Conduct tree clearing only during the winter window (October 1 – March 14) when federally protected bats are not present and bird nesting activity is reduced.
- Cultural Resources
  - The MOA established and executed for mitigation of adverse effects on the NRHP-eligible OBSA and Site 22CS1348.
  - Mitigation includes development and placement of permanent interpretive signage and the development of a traveling education display by Okolona Solar, LLC, within 1-year of Commercial Operation Date (COD).
- Visual Resources
  - If buffers are required by the county or state, Okolona Solar would install landscape buffers along the Project Site boundary to minimize visual impacts from the proposed solar facility.
  - Use downward-facing and timer- and/or motion-activated lighting to minimize impacts to surrounding areas.
- Noise

  - Limit construction activities primarily to daytime hours and ensure that heavy equipment, machinery and vehicles utilized at the Project Site meet all federal, state, and local noise requirements.
- Air Quality and GHG Emissions
  - Comply with the conditions of the Mississippi Forestry Commission (MFC) burn permits if burning of vegetative debris is required, and use BMPs such as periodic watering, covering open-body trucks, and establishing a speed limit to mitigate fugitive dust.
- Waste Management
  - Develop and implement various plans and programs to ensure the safe handling, storage, and use of hazardous materials.
- Public and Occupational Health and Safety
  - Implement BMPs for site safety management to minimize potential risks to workers.
- Transportation
  - Implement staggered work shifts during daylight hours to manage traffic flow near the Project Site if needed.

Conclusions and Findings

Based upon the analyses documented in the EA, TVA concludes that the Proposed Action Alternative of the construction and operation of the solar generating facility and TVA's purchase of the electric output pursuant to the PPA with Okolona Solar would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



9/4/2025

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Date Signed