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REVISUED FINDING OF NO SIGNIFICANT IMPACT

July 2022

TENNESSEE VALLEY AUTHORITY

GOLDEN TRIANGLE II SOLAR AND BESS PROJECT
LOWNDES COUNTY, MISSISSIPPI

The Tennessee Valley Authority (TVA) entered into a power purchase agreement (PPA) with MS Solar 6, LLC (referred to herein as "MS Solar 6"), to purchase the power generated by the proposed Golden Triangle II Solar and Battery Energy Storage System (BESS) Facility (Solar Facility) in Lowndes County, Mississippi, subject to the satisfactory completion of all applicable environmental reviews. The Golden Triangle Solar Facility and BESS Project (the Project) would include a Solar Facility, which would be constructed and operated by MS Solar 6 and include up to approximately 150 megawatts (MW) of alternating current (AC) generating capacity with a 50 MW AC – 200-megawatt hour (MWh) BESS. Under the terms of the conditional PPA between TVA and MS Solar 6, dated December 15, 2020, TVA would purchase the electric output generated by the Solar Facility for an initial term of 20 years, subject to satisfactory completion of all applicable environmental requirements.

TVA produces or obtains electricity from a diverse portfolio of energy sources, including solar, hydroelectric, wind, biomass, fossil fuel, and nuclear. In 2019, TVA completed an Integrated Resource Plan (IRP) and associated Environmental Impact Statement (EIS) that identified the 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 clean energy while reducing environmental impacts. The 2019 IRP recommends solar expansion and anticipates growth in all scenarios analyzed, with most scenarios anticipating 5,000-8,000 MW and one anticipating up to 14,000 MW by 2038.

In 2019, customer demand prompted TVA to release a Request for Proposal (RFP) for renewable energy resources. The PPAs that resulted from this RFP would help TVA meet immediate needs for additional renewable generating capacity and fulfill the renewable energy goals established in the IRP. The Proposed Action would provide cost-effective renewable energy consistent with the IRP and TVA goals. The potential effects of TVA's proposed action, including the effects of constructing and operating the solar facility, are described in an environmental assessment (EA) which is incorporated herein by reference.

June 2022 Update

Following the issuance of TVA's May 31, 2022, Finding of No Significant Impact (FONSI) and Final Environmental Assessment (EA) for the Golden Triangle II Solar and BESS Project, the site layout was revised by MS Solar 6 which indicated that additional tree clearing, beyond what was originally expected, would be necessary for installation of the solar arrays. The May 31, 2022, EA and FONSI listed "up to 270 acres of forested upland areas" out of 493 acres studied "could be removed during initial construction." Although the overall project site area has not changed, the areas within the site that will be cleared have been revised. Based on the revised site plan, it is anticipated that up to 493 acres of forested land could be cleared during initial site construction. A revised consultation letter was submitted to the U.S. Fish and Wildlife Service on June 17, 2022.

Alternatives
The subject EA evaluates two alternatives: the No Action Alternative and the Proposed Action Alternative. Under the No Action Alternative, TVA would not execute the PPA with MS Solar 6 for the purchase of power generated by the proposed solar facility and would rely on other sources of generation to meet its renewable energy goals.

Under the Proposed Action Alternative, MS Solar 6 would construct and operate the proposed Solar Facility. The facility would occupy portions of an approximately 1,524-acre Project Site consisting of six individual parcels of predominantly agricultural land and pastureland. The Project Site, which includes the solar array footprints, collection lines, and access roads, is just south and east of Artesia, Mississippi. The Solar Facility would consist of multiple parallel rows of photovoltaic (PV) panels on single-axis tracking structures, along with direct current (DC) and AC inverters and transformers. Site preparation is generally required prior to construction of the Solar Facility and assembly of the solar arrays. Site preparation typically includes: surveying and staking; removal of vegetation/trimming tree branches; light grading, clearing, and grubbing; installation of security fencing around components near one another and not separated by public roads; erosion prevention and sediment control Best Management Practices (BMPs); and preparation of construction laydown areas. Solar array assembly and construction includes driving steel piles into the ground for the tracker support structures, installation of solar panels, and electrical connections and testing/verification. Construction materials would be transported by truck and/or rail to the Project Site, where materials would be staged, assembled, and moved into place. Temporary construction laydown areas for materials, equipment, and parking would be required within the Project Site. With the exception of fence repair, vegetation control, and periodic array inspection, repairs, and maintenance, the Solar Facility would have relatively little human activity during operation.

The Project would connect to the existing TVA network via the recently approved Golden Triangle gen-tie line to TVA's proposed Artesia Switching Station within the existing Artesia Substation.

TVA's preferred alternative is the Proposed Action Alternative. This alternative would fulfill the purpose and need for the action by providing TVA and its customers with additional renewable generating capacity with minor direct and indirect impacts.

Impacts Assessment
TVA identified the following resource areas necessary for analysis within this EA: Land Use (includes Natural Areas and Recreation); Geology, Soils, and Prime Farmland; Water Resources; Biological Resources; Visual Resources; Noise; Air Quality and Greenhouse Gas Emissions; Cultural Resources; Waste Management; Socioeconomics; Environmental Justice; and Transportation. The potential impacts of the proposed action are described in detail in the EA and summarized below.

Implementation of the proposed action would change the land use of the proposed solar facility site from predominantly agricultural and pastureland to industrial. Adjacent land uses are similar with few nearby residents. Most of the site is classified as prime farmland. While the construction and operation of the solar facility would remove the site from agricultural production, there would be little long-term impact on the soil productivity and the impacts on soils would be offset by the beneficial effects to soil health with the use of native and noninvasive vegetation.

Impacts to groundwater, due to the use of a potential new water well during operation of the Solar Facility would be minimal. Direct impacts to federally jurisdictional surface water features due to access road bridges and/or culverts would be authorized under the U.S. Army Corps of Engineers (USACE) Nationwide Permits (NWP) 3 and/or 14. Jurisdictional wetlands would be

avoided at the solar facility to the greatest extent practicable, with only minor indirect impacts from soil erosion and sedimentation during construction. Existing vegetative buffers would be maintained along streams and wetlands, and BMPs would be used during all construction and maintenance activities in accordance with permit requirements. Impacts to water quality, streams, wetlands, and aquatic life would be minor and insignificant, consistent with the requirements of Executive Order 11990 (Protection of Wetlands). Impacts to floodplains would be minimal, as the identified 100-year floodplain follows the riparian zones of two perennial streams and the Project would largely avoid direct impacts to them. The Project layout has been designed to minimize the number of PV panels installed within floodplains. MS Solar 6 is obtaining the appropriate design and elevation certificates from the Lowndes County Floodplain Administrator. Consistent with Executive Order 11988 (Floodplain Management), the installation of underground electric lines and fencing are considered to be repetitive actions in the 100-year floodplain, which would result in minor impacts[1].

More than half of the Project Site is comprised of pastureland and approximately 9 percent is agricultural fields. Up to 493 acres of forested upland areas could be removed during initial construction. No uncommon or rare plant or animal communities are present on the site, and the impacts to vegetation and wildlife would be minor. Two chalk outcrops and two bur oaks were identified within a parcel of land that would be leased to MS Solar 6 as part of the Project; however, these areas would be completely avoided as part of the Project exclusion area. Habitat at the Project Site would be improved for small mammals, songbirds, reptiles and amphibians, and pollinating insects through introduction of native vegetation. Wetlands and streams would be avoided to the greatest extent practicable. BMPs would be used around these bodies of water, minimizing sedimentation, and avoiding changes to hydrology.

Review of the TVA Regional Natural Heritage database and the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website identified three species listed as federally endangered, threatened, candidate, or delisted and monitored under the Endangered Species Act (ESA) that have the potential to occur within the project area in Lowndes County, Mississippi. These species include one plant (Price's potato-bean), one bird (wood stork), and one mammal (northern long-eared bat [NLEB]) that have the potential to occur within Lowndes County based on historic range, proximity to known occurrence records, biological characteristics, and/or physiographic characteristics. Field surveys were conducted from March 7-13, 2021, to collect data on protected species and habitat assessments, yet none of the federally listed species were observed.

No individual Price's potato-bean were observed during field surveys; however, potential habitat for the species was observed within the survey area. Potential habitat would not be developed during project construction or operation; thus, the project will have no effect on Price's potato-bean. Suitable roosting habitat for the wood stork does not exist within the survey area for the project. However, suitable foraging habitat may be present within most of the small and confined ponds throughout the Project. The project footprint includes small and shallow wetland areas (totaling approximately 17 acres). Proposed panel layouts would avoid any impacts on wetlands. There are also large aquaculture/fish farms north of the project that may attract foraging wood storks. The project would not affect fish farms or large open waters outside the immediate project limits. Therefore, TVA concludes no effects to wood storks or wood stork habitat would result from implementation of the proposed action. In March 2022, the USFWS acknowledged TVA's "no effect" determinations for these species.

An acoustic survey was performed throughout the NLEB suitable habitat utilizing acoustic monitors from August 3-5, 2021. This survey followed the 2020 USFWS Range-wide Indiana Bat Survey

[1] Tennessee Valley Authority (TVA). 1981. *Class Review of Repetitive Actions in 100-Year Floodplain.* Federal Register. Vol. 46, No. 76 (22845 – 22846). 21 April 1981

Guidelines as a surrogate protocol for determining presence/absence of the federally threatened NLEB. The acoustic surveys indicated no presence of NLEB within the Project Area. No caves, mines, buildings, bridges, or potential winter roosting structures were identified during field surveys of the project footprint. Suitable summer roosting habitat for the NLEB was observed within 358 acres of forested areas at the project site, and suitable foraging habitat was observed within the perennial stream corridors, fence rows, wetlands, and forests throughout the project site. Forest fragments and forested edges in the project footprint offer additional suitable foraging habitat for NLEBs. There are no known records documenting the presence of NLEB within Lowndes County, Mississippi. No known hibernacula or maternity roosts occur within five miles of the project site. Presence/absence surveys indicated that NLEB is likely absent from the project site. Therefore, TVA initially determined that while removal of suitable roosting habitat could have indirect adverse effects on NLEB and result in "incidental take" as defined in the ESA, but this "incidental take" is excepted from ESA Section 9 Take Prohibitions. Based on the USFWS online Northern Long-Eared Bat 4(d) rule determination key accessed on March 3, 2022, (see verification letter attached, Consultation Code: 2022-0015575), this project may affect NLEB and may rely on the Service's January 5, 2016, Programmatic Biological Opinion (PBO) on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions to fulfill its Section 7(a)(2) consultation obligation. In March 2022, the USFWS concurred with this determination. Modifications to the site layout resulted in the identification of additional tree clearing after USFWS' initial determination. Therefore, TVA prepared and submitted a revised consultation letter to the USFWS on June 17, 2022, which provided additional information regarding increased tree clearing. Due to the high potential for the northern long-eared bat to be re-classified as Endangered under the ESA, TVA revised our determination to "may affect not likely to adversely affect" determination for NLEB. On July 1, 2022, the USFWS concurred with this determination. Accordingly, the requirements of Section 7 of the Endangered Species Act have been met.

Due to TVA's Avoidance Agreements for known National Register of Historic Places (NRHP)-eligible and NRHP-listed sites, no impacts on archaeological resources would occur. Phase I archaeological and historic architecture surveys were performed within the Project Site between June 6 and September 17, 2021. TVA initiated consultations with associated tribes, and none objected to the Proposed Action. Of the accessible resources within the current survey, two properties (the Smith Oaks Plantation former commissary [Resource 02a] and the Oakland Plantation dwelling [Resource 05a]) are recommended for NRHP inclusion, and two individual resources associated with the Oakland Plantation (Resources 05c and 05d) are recommended as contributing. Two additional resources would require additional NRHP analysis to confirm their eligibility status (the Smith Oaks Plantation Cemetery [Resource 02h] and a former African American cemetery [Resource 07]). The resources recommended for NRHP inclusion and of undetermined NRHP eligibility status would not be adversely affected by the Project. Specifically, the resources are removed in distance and shielded by vegetation and other setting intrusions. As a result, construction of the Project would not affect any of the characteristics that qualify the resources for NRHP inclusion.

Archaeological surveys for the Project identified 26 archaeological sites, of which 13 are isolated finds consisting of a single artifact, or a site with three or less similar artifacts. Of the 13 isolated find sites, two are precontact Native American finds and eleven are historic-era finds. None of the isolated find sites are recommended eligible for inclusion in the NRHP, nor are they recommended for avoidance by Project implementation. Of the newly identified, non-isolated find, archaeological sites 10 are historic-era sites, one a multicomponent site consisting of a historic scatter and a single precontact Native American lithic artifact, and two are precontact Native American sites. Site 22LO1100 has been identified as a Late Archaic through Late Woodland period precontact Native American occupation/camp site artifact scatter. Precontact site 22LO1100 is recommended as unevaluated for inclusion in the NRHP and would be avoided by Project implementation as being included in the exclusion area. Two newly identified sites,

22LO1098 and 22LO1114, are historic scatters with intact features. Site 22LO1098 is an occupation site with an intact cistern and small brick lined foundation. Site 22LO1114 was identified through shovel test excavations, with one shovel test revealing a burn feature. Both historic sites are associated with structures depicted on the historic *1911 Soil Map of Lowndes County*. Site 22LO1098 is recommended as eligible for inclusion in the NRHP under Criterion A and D and would be avoided by Project implementation as being included in the exclusion area. An individual archaeological assessment for site 22LI1114 recommends it as unevaluated for inclusion in the NRHP and it would be avoided by the Project as being included in the exclusion area. Site 22LO1117 is an extant portion of the Smith Oaks harness horse racing track. The 0.5-mile dirt track was constructed by Thomas Wilburn II in the late 1940s or early 1950s. Wilburn was a professional Standardbred horse trainer and harness horse racing champion who was inducted into the Illinois Harness Horse Racing Hall of Fame, as well as being the 1991 Mississippi Cattleman of the Year, and is a direct descendant of John McLaughlin Smith, the original Smith Oaks Plantation owner. Site 22LO1117 is recommended for inclusion in the NRHP under Criterion A and B, and the site would be avoided by Project implementation as being included in the exclusion area.

While not recommended NRHP-eligible individually, four of the newly recorded sites (22LO1114, 22LO1115, 22LO1115, and 22LO1119) are recommended as NRHP-eligible as part of an archaeological district. The four sites represent former tenant or sharecropper occupations associated with the Oakland Plantation and are recommended NRHP-eligible under Criterion A. They reflect evidence of historic land use relevant to the context of tenant farming in the region, a group traditionally underrepresented in both the archaeological and archival records. No additional information would likely be gained via additional archaeological investigations of the sites, and they are not recommended eligible under Criterion D. Establishment of a 100-foot buffer around the extent of the sites to protect them from construction activities is recommended. As they are not associated with any other built or landscape features that would contribute to the district, avoidance of physical impacts would avoid adverse effects to the district under Section 106 as being included in the exclusion area.

The remaining six, non-isolated find, archaeological sites, that were not part of the archaeological district assessment, have a NRHP recommendation of not eligible. The Mississippi Department of Archives and History (MDAH) concurred with TVA's findings on May 27, 2022, which concluded the Section 106 consultation process. Accordingly, the requirements of Section 106 of the National Historic Preservation Act have been met.

Construction activities would result in minor and short-term impacts to air quality and transportation. Once operational, the solar facility would generate beneficial impacts to air quality and greenhouse gas emissions. Temporary impacts to greenhouse gas emissions expected during construction would be negligible. Offsetting beneficial effects would also occur due to the power generated by the solar facility, offsetting power that would otherwise need to be generated by the combustion of fossil fuels. Few sensitive noise receptors occur near the proposed facility, and any noise impacts would be minor and short-term. After commercial operation of the Solar Facility, if there are locations near inverters where noise levels exceed 55 A-weighted decibel (dBA), MS Solar 6 would install sound buffers (walls, fences with screening, or vegetation) to minimize the noise levels from operating equipment. Overall visual impacts would be insignificant due to the low profile of the proposed facility, visual obstructions around part of its perimeter, and limited viewing locations accessible to the public. Installation of natural or man-made visual screening to minimize these impacts is being evaluated to address moderate adverse impacts to the viewshed from residential structures along the eastern town limits of Artesia, which is in the immediate Project vicinity.

Construction, operation and decommissioning of the proposed action would result in the generation of hazardous and nonhazardous solid waste in the form of construction debris, grading spoils, packaging materials, and general construction waste. Every effort would be made to minimize the amount of waste generated during and after construction of the Project.

The proposed action would result in beneficial, socioeconomic impacts during construction due to the short-term increase in employment and purchase of materials, equipment, and services. There would be no disproportionate or adverse effects on environmental justice communities with minority or low-income populations. There would be moderate and temporary impacts to transportation resources during construction due to the influx of workers traveling to the job site.

Public and Intergovernmental Review
A draft of the EA was issued for public and agency review. TVA consulted with MDAH and federally recognized Native American tribes on the potential effects to historic properties.

TVA received one comment from the U.S. Environmental Protection Agency on the draft EA which provided suggestions for minimization of air emissions and sedimentation to waters of the U.S. during construction. No other comments were received from any federal or state representative, nor any individuals.

Mitigation
MS Solar 6 would use routine BMPs such as dust suppression, erosion controls, and maintenance of buffers to minimize impacts to air and water resources. Other mitigation measures would include preservation of topsoil during construction, and revegetation with native and/or noninvasive vegetation to reintroduce habitat, reduce erosion, and limit the spread of invasive species and utilize pollinator vegetation where possible.

MS Solar 6 would coordinate with the homeowners, construction contractors, and the array layout designers to determine the most suitable type of buffer to be used in each location where the visual environment for residents has a long-term change due to the Project. For residences that are within 500 feet of an inverter, a pre-construction sound study including an ambient survey would be conducted to quantify the existing ambient environment. After the project reaches commercial operation, MS Solar 6 would measure the sound levels at residential property lines and identify any equipment that generates a day-night average (Ldn) sound level that exceeds 55 dBA at the property line. If there are locations where noise levels exceed that threshold, MS Solar 6 would install sound buffers (walls, fences with screening, or vegetation) to minimize the noise levels from operating equipment.

If traffic flow were to become a problem, MS Solar 6 would consider implementation of staggered work shifts during construction and a flag person along the roadside during heavy commute times to manage the flow of traffic near the Project Site.

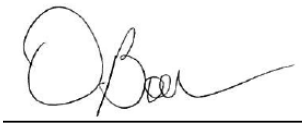
The Project exclusion areas would be avoided and not allow any development, disturbance, or other construction activities associated with the development of the project or future activities associated with the operation and maintenance of the solar facility. Exclusion areas include those identified plant species, jurisdictional wetlands, 100-year floodplains, and cultural resources. Exclusion area cultural resources would be avoided with a 100-foot (ft) buffer if they were identified as eligible or unassessed sites.

One interpretive sign would mark the location of the Thomas Wilburn Harness Horse Racing Track (22Lo1017) discussing the significance of the track to the community. The second interpretive sign will discuss the Oakland Plantation Historic District, the significance of the history of plantations and tenant farms in the region. Prior to finalizing design, TVA will provide the text for MDAH review.

Further measures to minimize adverse impacts to the natural and beneficial values of floodplains include placing temporary laydown areas, construction trailers, and parking areas outside the floodplain during construction. Access roads within 100-year floodplains would be constructed such that upstream flood elevations would not be increased by more than 1.0 foot. The portions of the fencing within the floodplain would be designed to withstand flooding with minimum damage. Any excavated material or debris generated when GT2 is decommissioned and dismantled would be disposed of in an area outside 100-year floodplains. The lowest section of each solar module, at full tilt, is at least one foot above the 100-year base flood elevation. At the end of the Project's useful life, non-recyclable and/or non-reusable debris would be disposed of at an appropriate location outside 100-year floodplains. Any permanent operations and maintenance building(s) will be located outside 100-year floodplains and elevated to at least one foot above the 100-year floodplain at that location.

Conclusion and Findings

Based upon the analyses documented in the EA, and the June 2022 updated described herein, TVA concludes that the proposed action alternative of constructing and operating the Golden Triangle II Solar and BESS Facility by MS Solar 6, as well as the new gen-tie, and TVA's purchase of the electric output pursuant to the PPA with MS Solar 6 would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



07/15/2022

Dawn Booker
Manager
NEPA Program

Date Signed