

**FINDING OF NO SIGNIFICANT IMPACT
LAND ACQUISITION FOR PEAKING PLANT
TINKER AIR FORCE BASE, OKLAHOMA**

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code 4321 et seq.), the President's Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500–1508), and the Department of the Air Force (DAF) Environmental Impact Analysis Process (EIAP) codified at 32 CFR Part 989, Tinker Air Force Base (Tinker AFB, Base) in partnership with the Oklahoma Gas and Electric (OG&E) has prepared an environmental assessment (EA) analyzing the potential environmental consequences associated with constructing and operating a new electric peaking plant. As part of this action, the DAF would acquire and lease land to OG&E.

The OG&E serves more than 871,000 customers in a 30,000 square mile area of Oklahoma and western Arkansas, which includes Tinker AFB. In 1990, OG&E installed two combustion turbines at Tinker AFB creating an electric peaking plant. This peaking plant serves two main purposes. First, this plant provides backup power as well as electrically islanded operations (EIO) to the Base. During an EIO event, Tinker AFB is completely disconnected from the grid. Power is solely provided using the electric peaking plant, which maintains energy resiliency and reduces overall risk to the DAF mission as directed by DAF Instruction (DAFI) 90-1701, *Installation Energy and Water Management*. Second, OG&E routinely operates these units at peak times to maintain regional grid voltage with Tinker AFB being the first customer in line for power. Because these turbines have been in service for 54 years (such units are commonly retired after 30 years of operation), OG&E plans to retire the plant in 2025.

Purpose and Need (EA Sections (§§) 1.4 & 1.5, page 1-5): Tinker AFB in conjunction with OG&E began addressing the retirement of the existing peaking plant and its support of critical missions at the Base. The DAFI 90-1701 identifies primary power generation systems as playing an important role in increasing and maintaining energy resiliency and identifies power purchase agreements with private utilities as a means for obtaining access to power requirements. As such, Tinker AFB and OG&E collaborated in developing a replacement plan for the existing electric peaking plant. Because Tinker AFB relies on OG&E to provide reliable and redundant electricity power to support their operations, the purpose of the Proposed Action is to continue providing an energy resiliency plan and islanding capabilities in support of various DAF missions at the Base. The need for the action is to address OG&E's planned retirement of the current electric peaking plant for 2025.

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action (EA §2.1.2, pages 2-2 to 2-3): Under the Proposed Action, the DAF would acquire a parcel of land neighboring Tinker AFB and lease to OG&E. The OG&E would then construct and operate a new electric peaking plant with a generating capacity of approximately 90 megawatts (MW). Tinker AFB and OG&E identified two adjacent 10-acre parcels located at 5500 S. Douglas Boulevard., Oklahoma City, OK, as a suitable site based on existing electrical loads needed on Base. Both parcels are owned by the Oklahoma Industries Authority and located immediately east of the current peaking plant facility separated by Douglas Boulevard. The combined parcel size allows for flexibility in facility lay out to include associated infrastructure such as site access, parking, etc. and enables future development to meet electric growth demands (EA Figure 2-1, page 2-3). The new peaking plant is anticipated to consist of two simple-cycle combustion turbines, each with an electrical generating capacity of approximately 45 MW. The footprint area needed for the new plant is approximately 6.5 acres. An additional 3.5 acres is needed for the addition of a substation at the site and to meet anti-terrorism/force protection (AT/FP) standoff distances. Total acreage needed to accommodate the new plant, the associated switchyard/substation equipment, and parking/site access is approximately 10 acres. During construction, approximately 6.5 acres of existing vegetation would be removed, and the area graded. Road base or other surface material would be used to stabilize the surface, minimize erosion, and allow for future vegetative growth. Approximately one acre is needed as a set back from Douglas Boulevard. Natural gas lines would be rerouted to the new facility by installing an

underground pipeline approximately ¼ mile in length, and 3-5 feet wide and deep, connecting the site to the existing infrastructure. Afterwards, the area would be fenced to prevent unauthorized access.

The OG&E would operate and maintain the new facility much in the same manner as the existing peaking plant facility. Operations would consist of on-site or remote activation and deactivation of the turbines. General facility maintenance would include lubrication of facility components, replacement of air filters, inspection and general repairs, and site landscape maintenance. The existing peaking plant would be decommissioned and removed once the new plant is brought online. Afterwards the fencing would be removed, and the site returned to Tinker AFB.

No Action Alternative (EA §2.1.3, page 2-5): The No Action Alternative serves as a benchmark against which the effects of the Proposed Action can be evaluated. For this project, the No Action Alternative is defined as not taking any further action with regards to constructing a new peaking plant. The current peaking plant would remain in operation until its retirement in 2025, at which point OG&E would then decommission the facility. Afterwards, the OG&E would likely construct a new peaking plant at another off-base location where Tinker AFB would not be given privileges and priority access to power generation. The No Action Alternative would challenge Tinker AFB's objective of maintaining its energy resiliency plan and islanding capabilities.

Alternatives Considered but Eliminated from Further Consideration (EA §2.1.4, pages 2-6 to 2-7): Three additional alternatives were initially considered: Alternative 1, rebuilding the new peaking plant at the existing location; Alternative 2, building a new peaking plant off the installation; and Alternative 3, using an alternative energy source. While Alternative 1 would construct the new peaking plant at its existing location on DAF property, the existing peaking plant would have to first be removed prior to the new plant being constructed; an 18-month construction duration. During this time, emergency generators could provide backup power for short durations (a few hours to just several days) for individual facility operations. Long-term use of generators over an 18-month period is not practicable. In addition, the existing peaking plant site is landlocked and cannot support any future growth. For these reasons, it was dismissed from further review. Under Alternative 2, OG&E would construct the new peaking plant off-base; however, it was determined there were no available off-base parcels within a five-mile radius of the existing peaking plant (EA Table 2-1, page 2-6). Any distance greater than five miles would require OG&E to perform an interconnection study to determine where appropriate connections can be made to the existing infrastructure. This study takes approximately two years to complete, which extends past the planned retirement year of the existing plant; and therefore, Alternative 2 was eliminated from further review. Under Alternative 3, Tinker AFB and OG&E would use a renewable energy source such as solar and/or wind energy combined with battery storage. A typical 5 MW solar farm required approximately 22 acres while a 90 MW solar farm requires 200 acres. Wind generation requires 75 acres. Due to a lack of available acreage as well as conflicting airfield operations, Alternative 3 was dismissed from further consideration.

ENVIRONMENTAL CONSEQUENCES

Based on the findings within the EA, the Proposed Action would have negligible impact on airspace and floodplains/wetlands/coastal zone management (EA §3.1, page 3-1). The Proposed Action does not bring a new flying mission to Tinker AFB, current airspace setting is unchanged. According to Federal Emergency Management Agency's National Flood Hazard Map, the proposed location of the Peaking Plant is outside both the 100-year and 500-year floodplains. While Soldier Creek and its tributaries lie to the north and east of the proposed site, no wetlands occur within and/or adjacent to the proposed Peaking Plant parcel and there are no coastal zones in or around Tinker AFB or the proposed Peaking Plant site. Therefore, these resource areas were not carried forward for detailed analysis in this EA. Environmental resources analyzed in the EA included Air Quality and Climate Change; Cultural Resources; Biological and Natural Resources; Water Resources; Geology and Soils; Noise and Vibration; Land Use and Aesthetics; Infrastructure and Utilities; Solid and Hazardous Materials/Waste; Transportation and Parking; Safety and Occupational Health; Socioeconomics; Community Services; and Environmental Justice. Based on the analysis, no significant direct, indirect, and/or cumulative environmental impacts associated with implementation of the Proposed Action were identified.

Air Quality and Climate Change (EA §3.2, pages 3-1 to 3-5): The Proposed Action falls within the Central Oklahoma Intrastate Air Quality Control Regions, which U. S. Environmental Protection Agency has designated as in attainment for all criteria pollutants. Estimated emissions from the construction and demolition portions of the Proposed Action were calculated using the DAF's Air Conformity Applicability Model. As shown in EA Table 3-3 page 3-4, the estimated emissions including greenhouse gases would be below de minimis quantities and/or negligible levels. The OG&E as the operator of the proposed peaking plant will be required to evaluate the new stationary source for air permitting requirements (i.e., air quality division operating permit) and submit a construction permit application to the Oklahoma Department of Environmental Quality (ODEQ) for review during design. Overall, there will be no significant impacts to air quality from the Proposed Action.

Cultural Resources (EA §3.3, pages 3-5 to 3-9): There are no buildings or structures located on the parcel that are eligible for listing on the National Register of Historic Places, although a house and several commercial/light industrial buildings were present between 1938 and 2005. Review of historic aerial photographs and satellite imagery along with a site visit conducted in March 2023 indicated majority of the site has been heavily disturbed by construction and demolition activities. No artifacts were observed on the surface and results of shovel-testing of the 20th century homesteads near the parcel revealed heavy subsurface disturbance. Tinker AFB consulted with the Oklahoma Historical Society (Oklahoma State Historic Preservation Officer), the Oklahoma Archaeological Survey, and five federally recognized tribes (Caddo Nation Oklahoma, Muscogee (Creek) Nation, Osage Nation, Seminole nation, and Wichita and Affiliated Tribes). The Oklahoma Historical Society and the Oklahoma Archaeological Society issued a finding of no historic properties affected and determined a preconstruction survey is not required. The Caddo Nation of Oklahoma issued a finding of no effect. The four remaining tribes have not yet responded. Based on this analysis, there will be no significant impacts to cultural resources with implementation of the Proposed Action.

Biological and Natural Resources (EA §3.4, pages 3-10 to 3-14): The proposed site is comprised of three general vegetative cover types including mixed grass prairie, weedy/disturbed, and mixed woodland. The western half is dominated by weedy/disturbed vegetation while the eastern half is dominated by mixed grass prairie and a swath of mixed woodland. The eastern half of the site is not expected to be developed but left undisturbed. This vegetation community provides good foraging areas for a variety of common bird species such as the American robin, Brewer's blackbird, blue jay, and barn swallow. Common mammal species include the white-tailed deer, eastern cottontail, raccoon, striped skunk, woodrat, various mouse species, and coyote. Five federally threatened and/or endangered species were identified as potentially occurring in and around the project area: Tri-colored bat (proposed endangered), piping plover (threatened), red knot (threatened), whooping crane (endangered), and the monarch butterfly (candidate). After consulting with USFWS, Tinker AFB determined the proposed action will have no effect on any of the five listed species identified due to the lack of suitable habitat. Based on this analysis, implementation of the Proposed Action will have no significant impacts to biological resources.

Water Resources (EA §3.5, pages 3-14 to 3-18): The depth to groundwater in this area varies from a few feet below ground surface to about 70 feet below ground surface depending on the local topography. While there is a potential to impact Tinker's aquifer, ground disturbance from underground utility connections will not deep enough to encounter groundwater. Surface drainage at Tinker AFB occurs in three primary drainage basins: 1) Crutcho Creek Drainage Basin, 2) Elm Creek Drainage Basin, and 3) Hog Creek Drainage Basin. The Elm Creek Drainage Basin has been identified as a sensitive watershed as it supplies Lake Stanley Draper, a drinking water supply reservoir for several local communities approximately ½ mile south of Tinker AFB's southeast boundary. There are no surface waters within the immediate project site. Indirect impacts to surface waters from construction activities would result in sediment loads being transported downstream of the Proposed Action. Approximately ten acres of additional impervious surfaces could cause an increase in storm water runoff. Because construction will disturb more than one acre of ground surface, OG&E will be required to obtain and comply with the ODEQ Oklahoma Pollutant Discharge Elimination System General Permit 'OKR10' for stormwater discharges from construction activities within the state of Oklahoma prior to construction. As part of this application, OG&E will

submit a storm water pollution prevention plan for storm water management prior to initiating any field work. This plan provides detailed procedures and best management actions on how they will control storm water runoff during and after construction activities. In addition, OG&E will adhere to the Tinker AFB's Spill Prevention, Control, and Countermeasures Plan. Overall, there will be no impact to water resources with implementation of the Proposed Action with these permits in place.

Geology and Soils (EA §3.6, pages 3-19 to 3-20): The proposed project area is currently undeveloped with soils being stockpiled along the western portion of the site. This activity would cease under the Proposed Action and stockpiled soils spread across the site and graded to level to promote efficient drainage. OG&E will be required to adhere to the Base's storm water pollution prevention plan, which encourages the minimization of construction and demolition related disturbances to protect natural features and soils. The Proposed Action would follow the applicable measures and BMPs as outlined in the plan. Implementation of the Proposed Action would result in a no significant impact to geology and soils.

Noise and Vibration (EA §3.7, pages 3-20 to 3-23): Demolition/construction activities under the Proposed Action would include vibration-producing activities and short-term noticeable increases in ground vibration may result. Activities would be limited to daytime hours to be a minor disturbance to neighboring receptors. Demolition/construction-related noise impacts would be short-term, and potentially moderate in magnitude but consistent with typical urban construction projects. The activities will be scheduled for normal daytime business hours, and proper equipment maintenance and noise shielding will minimize noise level increases from construction activities. Routine operations at Tinker AFB would not significantly increase sound levels from existing background levels. Therefore, implementation of the Proposed Action would not result in significant impacts to noise and vibration.

Land Use and Aesthetics (EA §3.8, pages 3-23 to 3-26): The proposed new peaking plant would be located adjacent to the east side of Tinker AFB in Oklahoma City. This area is zoned as industrial and compatible with the proposed use. The new peaking would also match the aesthetics of the surrounding industrial area. Overall, implementation of the Proposed Action will not have significant impacts to land use or aesthetics.

Infrastructure and Utilities (EA §3.9, pages 3-26 to 3-29): The Proposed Action could cause short-term, negligible, impacts on the electrical system, natural gas, communications, potable water at Tinker AFB during the switch over from the existing to the new peaking plant. The new plant would provide 90 MW of peaking capacity and allow Tinker AFB to maintain first energy rights for backup power and EIO capabilities, creating significant beneficial impacts on the Tinker AFB electrical system. There would be no other significant impacts to infrastructure and utilities from the Proposed Action.

Solid and Hazardous Materials/Wastes (EA §3.10, 3-29 to 3-32): Surface and subsurface soil samples were collected from seven locations across the site to identify any potential contamination resulting from prior on-site operations or from adjacent properties. Concentrations of semi volatile organic compounds (SVOC) in exceedance of industrial regional screening levels (RSL) were detected only in surface soil samples and attributed to the location being adjacent to a heavily trafficked roadway. No VOCs were detected, and significant soil remediation activities are not required. Small amounts of hazardous materials would be used during construction and/or during the removal of the existing peaking plant; no hazardous waste generation is anticipated. Construction and demolition activities are expected to generate solid waste, which will be recycled to the extent practicable or disposed at appropriate disposal facilities. The amount of solid waste generated by new facility operations is expected to remain similar to current operations. Special wastes, such as debris contaminated with asbestos, lead-based paint, or polychlorinated biphenyls generated during demolition would be disposed at appropriate disposal facilities. Implementation of the Proposed Action would not result in significant impacts to Hazardous Waste and Materials.

Transportation and Parking (EA §3.11, pages 3-32 to 3-33): The Proposed Action consists of constructing a relatively small facility and demolishing the current facility, both of which would require a small increase in

construction traffic for material deliveries and the removal of debris. The workforce requirements to complete the peaking plant activities are small and the increase in traffic to and from the new site would not be noticeable. The Proposed Action would not result in significant impacts to transportation and parking.

Safety and Occupational Health (EA §3.12, pages 3-34 to 3-35): The proposed location for the new peaking plant is outside of Tinker AFB but will have a perimeter fence and locked gate to enclose the area and prevent unauthorized access. No aspects of the proposed construction and demolition activities are expected to create new or unique ground safety issues. All activities during construction and operations would continue to be conducted in accordance with applicable regulations, technical orders, Air Force Occupational Safety and Health standards, and Occupational Safety and Health Administration regulations. Therefore, no significant safety or occupational health impacts are expected from implementation of the Proposed Action.

Community Services (EA §3.14, pages 3-36 to 3-37): The Proposed Action would not result in any substantial change in personnel levels or changes to the area's population, income levels, housing, or local tax revenues. Given the large metropolitan area of Oklahoma City, OK, it is assumed the project construction and operation activities could be accomplished with a local workforce, resulting in a minor and short-term localized beneficial impact to socioeconomic resources. Overall, there will be no significant impacts to socioeconomics from the Proposed Action.

Environmental Justice (EA §3.15, pages 3-37 to 3-39): The new facility to be constructed as part of the Proposed Action would use Tinker AFB security forces and fire department services and would not result in an increase in personnel requirements for either response service or expanded use of other public or community services. Therefore, no significant impacts will result from implementation of the Proposed Action.

AGENCY AND PUBLIC COMMENT

As stated in the 32 CFR Part 989, public involvement for an EA may include public engagement during scoping, drafting, and finalizing the EA and FONSI through publication of notices or public meetings. The public involvement process for this EA consisted of publication of a Notice of Availability (NOA) in the local papers announcing the draft EA and draft FONSI availability for public review. The DAF's regulations state the EA process must include at least a 30-day public comment period on both the draft EA and draft FONSI, which starts with the publication of a NOA. The NOA of the draft EA and draft FONSI were published in *The Oklahoman* and in the *Midwest City Beacon* in December 2023. A copy of the draft EA and draft FONSI was made available at the Midwest City Library from December 24, 2023, to January 23, 2024. An electronic version of the draft EA and draft FONSI was also made available on the Tinker AFB website.

FINDING OF NO SIGNIFICANT IMPACT

Based on my review of the facts and analysis summarized above and contained within the findings of the EA, I conclude implementation of the Proposed Action to acquire land, construct and operate a new peaking plant, and decommission and remove the existing peaking plant will not have a significant environmental impact on the natural or human environment. An environmental impact statement is not required for this action. Construction of the new peaking plant will allow Tinker AFB to continue maintaining their energy resiliency plan and islanding capabilities in support of various DAF missions at the Base. In addition, the new plant will be able to support future mission growth in the years to come. This fulfills the analysis required by the NEPA, the President's Council on Environmental Quality, and DAF regulations at 32 CFR Part 989.

RONALD J. ONDERKO, P.E. NH-04, DAF
Command Senior Civil Engineer
Logistics, Civil Engineering, Force Protection
and Nuclear Integration