FINDING OF NO SIGNIFICANT IMPACT FOR THE ENVIRONMENTAL ASSESSMENT FOR THE HOPI TRIBE TURQUOISE TRAIL SITE HYBRID MICROGRID PROJECT, NAVAJO COUNTY, ARIZONA (DOE/EA-2325)

U.S. Department of Energy (DOE)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: The U.S. Department of Energy (DOE) has prepared the *Environmental Assessment for the Hopi Tribe Turquoise Trail Site Hybrid Microgrid Project at the Turquoise Trail Municipal Complex in Navajo County, Arizona* (DOE/EA-2325) [referred to as the EA and is incorporated by reference into this Finding of No Significant Impact (FONSI)], which analyzed the potential impacts of the Proposed Action. DOE's Proposed Action is to authorize the expenditure of federal funding by Arizona State University (ASU) to support the construction and operation of the hybrid microgrid for Turquoise Trail Municipal Complex (TTMC) on Hopi Partitioned Lands in Navajo County, Arizona (AZ). The Project is proposed by the Hopi Tribe (Tribe) in partnership with the Hopi Utilities Corporation (HUC), ASU, and BoxPower.

The Hopi Tribe Turquoise Trail Site Hybrid Microgrid Project was competitively selected for a DOE financial assistance award under the "Energy Improvements in Rural or Remote Areas Program" funding opportunities, DE-FOA-0002970. The Project and awards would assist the Tribe to plan, develop, permit, construct, and commission a hybrid microgrid consisting of a 1,250-kilowatt (kW) solar photovoltaic (PV) array, battery storage system, and 130 kW of existing back-up diesel generation. This EA was prepared pursuant to National Environmental Policy Act (NEPA) and covers the activities planned for the TTMC.

The EA evaluated two alternatives to address ASU's request for financial assistance to construct and operate the hybrid microgrid to support the TTMC in Navajo County, AZ. The two alternatives are: a No Action Alternative and the Proposed Action to provide federal funding in support of the hybrid microgrid. The Proposed Action is the Preferred Alternative; it would meet the purpose and need for the Proposed Action and would also be protective of human health and the environment.

Based on the analysis in the EA, DOE determined that the Preferred Alternative would not constitute a major Federal action significantly affecting the quality of human health and the environment within the meaning of NEPA. Therefore, the preparation of an Environmental Impact Statement (EIS) is not required, and DOE is selecting the Proposed Action and issuing this Finding of No Significant Impact (FONSI).

PROPOSED ACTION: The Proposed Action involves authorizing the expenditure of federal funding by ASU to support the construction and operation of the hybrid microgrid for the TTMC on Hopi Partitioned Lands (the Proposed Project). Under the Proposed Action, ASU and the Hopi Tribe would be constructed on approximately five acres of land and site preparation for the construction, and operation of a hybrid microgrid consisting of a 1,250-kW solar PV array, 4,000/900 kWh/kW battery, and 130 kW of existing back-up diesel generation. The proposed

system includes a microgrid controller and distribution infrastructure to power the Tribe's administrative center, which comprises 21 modular buildings on the TTMC site, located directly adjacent to the proposed Project site. At present, the TTMC is powered by seven 130-kW generators; however, due to the age of the generators, only three have been operational at any given time, which requires restrictions to current building operations. Such restrictions create IT challenges and leave the Tribe vulnerable to emergencies, as the Incident Command Center goes without power half of each day. It is expected that some of the current diesel-fired generators would be repaired and kept onsite temporarily for economic reasons.

The Proposed Action considers two microgrid options. In the first, the microgrid would be electrically isolated (i.e., off-grid) and would function as an auxiliary / onsite power system for the TTMC. In this scenario, the TTMC remains grid-served, and the proposed microgrid provides backup power to the TTMC but does not export power to the grid. Under a second option, the proposed microgrid would be connected to the existing power grid, but only to offload excess power that is generated. In this scenario, the microgrid would serve the TTMC and could push excess power generation back to the utility, but there would be no new distribution lines. Under both options, the proposed Project footprint and associated impacts would be the same.

ALTERNATIVES EVALUATED: DOE evaluated two alternatives in the EA. Under the No-Action Alternative, DOE would not authorize the expenditure of federal funds by ASU in support of the Proposed Project. For purposes of analysis, DOE assumed the Proposed Project would not proceed if DOE does not authorize the expenditure of federal funds. The No Action Alternative was evaluated to provide a baseline for comparison with the Proposed Action Alternative, which is the Preferred Alternative. The Proposed Action (the Preferred Alternative) consists of authorizing the expenditure of federal funding by ASU to support the construction and operation of the hybrid microgrid for the TTMC on Hopi Partitioned Lands.

Two alternatives were considered but eliminated for further analysis, see Section 2.3 of the EA. It was determined that the potential additional location and alternative technologies would not be economically feasible for the Tribe.

ENVIRONMENTAL CONSEQUENCES: The affected environment for the following resources at the project site were evaluated for potential impacts from the No Action Alternative and the Proposed Action (the Preferred Alternative):

- Wildlife and Habitat
- Air Quality

Under the No-Action Alternative, the solar PV and BESS would not be constructed, and all resources areas would remain unchanged when compared to existing conditions.

The Proposed Action (the Preferred Alternative) would have short and long-term, negligible to minor impacts to resources from construction and operation activities (Table 1).

Table 1. Summary of Impacts

Resource Area	Level of Expected Impact
Wildlife and Habitat	Negligible, Short-term and Long-term impacts
Air Quality	Negligible, Short-term Adverse Impacts Moderate, Long-term Beneficial Impacts

Applicant committed measures are listed in Section 2.6 of the EA and include items to reduce potential impacts from the Proposed Project. Measures cover the following resource areas: biological resources and hydrology.

CONSULTATIONS: DOE made a determination of *no effect* for threatened and endangered species under Section 7 of the Endangered Species Act. On November 17, 2025, the Hopi Tribal Council entered into a special land use assignment agreement with the Hopi Utilities Corporation (HUC) for the microgrid project which includes concurrence on the proposed project on a determination of *no significant impact and no adverse effect* from the Tribal Historic Preservation Officer (Exhibit C) issued on September 11, 2025.

COOPERATING AGENCIES: DOE did not have any federal agencies or Tribes as cooperating agencies for this project.

CERTIFICATIONS: DOE certifies that the agency has considered the factors mandated by NEPA; that the environmental assessment represents DOE's good-faith effort to prioritize documentation of the most important considerations required by the statute within the Congressionally mandated page limits; that this prioritization reflects DOE's expert judgment; and that any considerations addressed briefly or left unaddressed were, in DOE's judgment, comparatively not of a substantive nature that meaningfully informed the consideration of environmental effects and the resulting decision.

DOE certifies that the resulting environmental assessment represents DOE's good-faith effort to fulfill NEPA's requirements within the Congressional timeline; that such effort is substantially complete; that, in DOE's expert opinion, the analysis contained therein is adequate to inform and reasonably explain DOE's decision regarding the proposed action.

PUBLIC AVAILABILITY AND CONTACT INFORMATION: This FONSI and EA are available at the following website: https://www.energy.gov/nepa/doe-environmental-assessments

For more information about this FONSI or EA:
Department of Energy
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DETERMINATION: Based on the information and analysis in the EA, DOE has determined that the Proposed Action would not constitute a major Federal action significantly affecting the

quality of human health or the environment in accordance with NEPA, 42 U.S.C. §§ 4321 et seq and any relevant implementing regulations. Therefore, the preparation of an EIS is not required.

DOE selects the Proposed Action from the *Environmental Assessment for the Hopi Tribe Turquoise Trail Site Hybrid Microgrid Project at the Turquoise Trail Municipal Complex in Navajo County, Arizona* (DOE/EA-2325) and is issuing this FONSI.

VINCENT QUARLES

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Office of Clean Energy Demonstrations

U.S. Department of Energy