## [6450-01-P]

#### **DEPARTMENT OF ENERGY**

Record of Decision for the Adoption of the U.S. Forest Service's Final Environmental Impact Statement and Mitigation Action Plan for the Thayer Creek Angoon Hydroelectric Project (DOE/EIS-0572)

AGENCY: Office of Clean Energy Demonstrations; U.S. Department of Energy.

ACTION: Record of decision (ROD).

SUMMARY: The U.S. Department of Energy (DOE) announces its decision to provide financial assistance to Kootznoowoo, Inc. (Kootznoowoo) in support of its project to construct a small-scale hydroelectric power generation facility on Thayer Creek to supply reliable, lower-cost energy to Angoon, Alaska (AK) ("Project"). The Project would include the construction and operation of a marine barge landing, underground cable, transmission line, access road, and hydroelectric facility. An earlier design for the Project was originally reviewed by the U.S. Forest Service (FS) in a 2009 Environmental Impact Statement (EIS) and Record of Decision (ROD). Ultimately, the Project did not move forward, primarily due to economic constraints. In 2021, Kootznoowoo submitted a Change Analysis to the FS in support of a Special Use Permit (SUP) to make the Project more economically feasible while remaining within the scope of the 2009 FEIS and ROD. In 2022, the FS determined that implementation of the Project changes as described in the Change Analysis would not result in a substantial change to the FS's proposed action or reveal significant new circumstances or environmental Impacts and therefore, a correction or supplement to the original National Environmental Policy Act (NEPA) analysis was not necessary.

Pursuant to NEPA and applicable NEPA implementing regulations, DOE reviewed the FS's 2009 Final EIS (FEIS) and 2021 Kootznoowoo Change Analysis and determined that the FEIS, as supplemented by the 2021 Change Analysis, adequately analyzes the potential environmental effects of DOE's action of providing financial assistance to the project. Accordingly, on December 20, 2024, DOE adopted the FS's 2009 FEIS. DOE was not a cooperating agency on the original EIS and therefore republished the FEIS on DOE's Office of NEPA Policy and Compliance website for a 30-day review period. DOE is publishing this ROD to document its decision to provide financial assistance to the Project as analyzed in the action alternative in the FS's FEIS.

**ADDRESSES:** For further information on this ROD, contact NEPA Document Manager, by mail at Office of Clean Energy Demonstration Projects, U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC 20585, email: *oced.esh@hq.doe.gov*. This ROD and DOE/EIS-0572, as well as other general information concerning the DOE NEPA process, are available for viewing or download at: *https://www.energy.gov/nepa/doeeis-0572-kootznoowooinc-thayer-hydroelectric-project-admiralty-island-alaska*. For general information on the ERA Program, visit *https://www.energy.gov/oced/era*.

**FOR FURTHER INFORMATION CONTACT:** Gretchen Applegate, NEPA Document Manager, Office of Clean Energy Demonstration, U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC 20585, telephone: 240-252-0399 email: *oced.esh@hq.doe.gov.* 

### SUPPLEMENTARY INFORMATION:

**Background** 

DOE's Proposed Action is to provide financial assistance via a cooperative agreement to support the construction of an 800 to 850 kW hydroelectric generation facility, including a concrete structure, intake structure and sluiceway, access road, penstock, powerhouse with turbine and generator, electric switchyard, overhead transmission line and submarine cable. The Project area is located within Admiralty Island National Monument, Tongass National Forest, Alaska. The proposed hydroelectric generation facility would be constructed on Thayer Creek with power delivered to Angoon, AK. Angoon is approximately 50 miles south of Juneau and the Project area is just north of Angoon along the east shoreline of Chatham Strait. The Project area is defined through the Alaska National Interest Lands Conservation Act of 1980 (ANILCA) as T. 49 S., R. 67 E. and T. 50 S., R 67 E, Copper River Base and Meridian.

Land ownership in the Project area is mixed. FS manages the majority of the land within the Project area as part of the Kootznoowoo Wilderness. In the southern portion of the Project area, there are private lands, with surface rights owned by Kootznoowoo, Inc., and subsurface interests owned by Sealaska, Inc. Angoon boundaries include section 24, T. 50 S., R. 67 E. and section 19, T. 50 S., R. 68 E.

FS published a notice of intent for the EIS on October 14, 2004. FS held public scoping meetings from October 14-15, 2004. They received nine public comments. The notice of availability of the Draft EIS was announced in the *Federal Register* on May 25, 2007, for a 45-day comment period. FS held an open house meeting on June 27, 2007. They received 14 public comments. The notice of availability of the FEIS was published in the *Federal Register* on March 20, 2009. The record of decision was issued by FS on May 8, 2009, selecting Alternative 3. However, the selected alternative was not constructed as previously analyzed primarily due to prohibitively high costs.

In 2021, Kootznoowoo submitted a Change Analysis to FS to support a Special Use Permit Application. The new design proposal was intended to develop the Project in a more environmentally sustainable and economically feasible manner and the new design elements were to make the Project economically feasible while remaining within the scope of the FS's FEIS and ROD. Overall, the Project's revised design has a smaller footprint than the alternative previously selected in the 2009 FS ROD. These changes are reflected in DOE's analysis of the Proposed Action described in detail.

On September 14, 2022, the FS considered and concurred on the Change Analysis submitted by Kootznoowoo and determined that the implementation of the changes would not result in a substantial change to the proposed action or reveal significant new circumstances or environmental impacts. Accordingly, the FS determined that a correction or supplement to the 2009 NEPA documents was not necessary. The Special Use Permit (SUP) was issued on August 2, 2023.

In 2023, Kootznoowoo applied for financial assistance from DOE for its hydroelectric Project in response to Funding Opportunity Announcement, DE-FOA-0002970, under DOE's Energy Improvement in Rural or Remote Areas Program. DOE selected Kootznoowoo's Project for award and is completing a NEPA review as part of its decision-making process.

### **DOE NEPA Review**

NEPA requires Federal agencies to evaluate the environmental impacts of proposals for major Federal actions with the potential to significantly affect the quality of the human environment. Providing financial assistance through cooperative agreements in support of Kootznoowoo's proposed Project to construct a small-scale hydroelectric facility on Thayer Creek in Angoon, AK is subject to NEPA. DOE was not a cooperating agency on the original EIS prepared by the FS; therefore, DOE conducted a review of the existing NEPA documentation for the proposed Project in accordance with DOE's NEPA Implementing Regulations at 10 CFR part 1021 and applicable regulations in effect at the time the ROD was published. DOE also considered non-NEPA documents, such as Federal and State permits, site reports and documents, the 2021 Change Analysis in support of a SUP, and relevant public information to inform DOE's evaluation of the existing NEPA documents.

DOE's review and adoption of the FS NEPA documents covers only the proposed Project as submitted to DOE via funding opportunity DE-FOA-0002970. Any significant changes in the scope of the proposed Project would be subject to additional NEPA review by DOE.

Formal announcements of adoption were published by the U.S. Environmental Protection Agency (EPA) and DOE in the *Federal Register* Vol. 89 No. 245 104150 (12/20/2024). The notice of adoption provided that DOE would execute a ROD no sooner than 30 days after publication of the notice of availability.

#### Alternatives Considered

The present DOE decision is whether to provide financial assistance (*i.e.* funding) to Kootznoowoo in support of its Project to construct a small-scale hydroelectric project on Thayer Creek in Angoon, AK. The Project would include the construction and operation of a marine barge landing, underground cable, transmission line, access road, and hydroelectric facility. DOE's Preferred Alternative is to fund the Project as described in Kootznoowoo's cooperate agreement. The Project that DOE will fund is the same design and scope as the project Kootznoowoo submitted for its 2021 Change Analysis. Accordingly, the alternatives being considered by DOE are Alternative 1: The Proposed Action, which is to fund the hydroelectric facility as described by FS in the 2009 FEIS, as supplemented by the 2021 Change Analysis for the SUP; and Alternative 2: The No Action Alternative which is not to fund the hydroelectric facility.

In the FS's 2009 FEIS, the FS evaluated four alternatives. For its part, DOE independently evaluated the previous four alternatives analyzed by the FS and determined that only two alternatives remain relevant to DOE's current decision. First, the 2009 FEIS included a "No Action Alternative" as Alternative 1. Under the No Action Alternative, the FS would not have issued a special use authorization (SUA) for the Project, and the Project would not be constructed. DOE relies on the FS's "No Action Alternative" analysis to inform DOE's "No Fund" alternative (Alternative 2). Second, the 2009 FEIS identified its Preferred Alternative, Alternative 3, which was later supplemented by the 2021 Change Analysis. Because the Project submitted to DOE for funding consideration is the same as the project described by Kootznoowoo in the 2021 Change Analysis, DOE relies on the FS's evaluation of Alternative 3 for purposes of DOE's funding decision below. The FS also evaluated two additional alternatives in the 2009 FEIS (Alternatives 2 and 4) which are not relevant to DOE's current NEPA determination, as those elements of the project's potential design and scope are no longer contemplated by Kootznoowoo or the FS. Additionally, DOE notes that each action alternative considered by the FS in the 2009 FEIS included modifications, in the form of terms and conditions in the SUA, to Kootznoowoo's Selected Project Arrangement to reduce potential effects to resources in the project area and to meet specific requirements found in the applicable forest plan. Those considerations are outside the scope of DOE's analysis. See Chapter 2 of the FEIS.

# DOE's Alternative 1: Fund the Hydroelectric Project (Preferred Alternative)

DOE is proposing to authorize the expenditure of federal funding by Kootznoowoo to conduct planning, construction and operations activities for a hydroelectric facility. Kootznoowoo plans to construct an 850 kW, run-of-river hydroelectric facility and 6.7 miles of 12.5 kV overhead transmission line to Angoon, Alaska. Angoon is currently powered by diesel generators supplying an islanded micro-grid with an average annual load of 1,792,172 kWh (~ 200 average kW). Kootznoowoo's Project aims to bring reliable, lower-cost energy to Angoon to reduce energy costs and imported diesel consumption. The Project would help to stabilize and reduce energy prices and would provide resiliency for an isolated and remote community with some of the highest energy costs in the nation, while providing sufficient energy generation for economic development. This Project has been in development for more than 40 years by Kootznoowoo. The Project would create up to 30 construction jobs and one full-time operations and maintenance job.

The Project submitted to DOE for funding consideration mirrors that analyzed by the 2009 FEIS as Alternative 3, as supplemented and described in detail in the 2021 Change Analysis. As outlined in the 2021 Change Analysis, the Project would include the following activities:

- 6.3 miles of above-ground 12.5 kV transmission line (45-60-foot pole height) along the access road
- 0.24 miles of submarine transmission line (installed beneath the seafloor)
- Marine facility located along Kootznahoo Inlet on Kootznoowoo-owned lands, 5.1 miles south of Thayer Creek and approximately 0.5 miles north of Angoon

- Marine facility components would include a barge landing, boarding float, storage and maintenance yard with garage, and transmission transition area on Kootznoowoo-owned lands
- 6.7 miles of access routes with a minimum 100-foot buffer from areas identified as high-vulnerability karst and streams. Access routes would include 2.2 miles from Chatham Strait/Little Island Marine Facility to the Powerhouse and 4.5 miles from Chatham Strait/Little Island Marine Facility to Kootznahoo Inlet
- Approximately 50-70 feet clearing width for access/transmission lines
- Diversion Dam would be located at the top of the waterfall approximately 80 feet upstream of the plunge pool at the base of the anadromous fish barrier and would be approximately 19 feet high
- 0.7 acres for the impoundment located near the bottom of Reach C, above the diversion structure
- 85-feet of 72-inch penstock, from the dam to the powerhouse
- 2 switchyards near the shoreline where the submarine cable enters and exits Kootznahoo Inlet
- Power plant structure would be approximately 30 feet by 30 feet and 25 feet high to house a single generating unit, with a total generating capacity of 800 to 850 kW; the powerhouse would be sited near the base of the anadromous fish barrier
- Tailrace discharge to the plunge pool at the base on the anadromous fish barrier (top of Reach B)

### Alternative 2: No Action

Under the No-Action Alternative, DOE would not authorize the expenditure of federal funds by Kootznoowoo in support of the Project. For purposes of this "no fund" analysis, DOE assumes the project activities, as outlined in Alternative 1, would not proceed if DOE does not authorize the expenditure of federal funds. Any potential beneficial or adverse effects to the physical, natural, or socioeconomic resources would not be realized.

### **Potential Environmental Impacts**

Potential environmental impacts represent those impacts from the Proposed Action and No Action Alternatives.

Potential Environmental Impacts of DOE's No Action Alternative: The No Action Alternative would have a negligible impact to resources with the exception of a moderate to major negative impact to air quality and emissions of greenhouse gases due to the continued operations of diesel generators to generate electricity in Angoon. The diesel fuel burned by the Inside Passage Electric Cooperative, Inc. for electricity generation in 2006 produced the equivalent of 1,877 tons of carbon dioxide. See Chapter 3 of the FEIS.

Potential Environmental Impacts of DOE's Proposed Action: Based on the analysis of the Project in the FS's FEIS and the Change Use Analysis, the Project will potentially impact the following resources: geology and soils, hydrology, ecology, visual, cultural, subsistence, wilderness, and socioeconomics. Based on the analysis in those documents there would be negligible to minor impacts to those resources due to a small disturbance footprint and adequate protections. With the exception of potentially moderate impacts to hydrologic resources to winter streamflow and winter minimum water temperature and dissolved oxygens levels and major impacts to cultural resources which is outlined in the Memorandum of Agreement (MOA). As noted previously, Kootznoowoo made certain changes to the Project after the FS's 2009 FEIS, which aimed to develop the Project in a more environmentally sustainable and economically feasible manner while remaining within the scope of the FS's existing FEIS and ROD. See Chapter 3 of the FEIS. Overall, the revised design, which is reflected in the Project DOE intends to fund, has a smaller footprint than the alternative previously considered in the 2009 FS ROD as Alternative 3, the Selected Alternative. See Chapter 2 of the FEIS. The current design requires a smaller overall footprint than the FS's Selected Alternative. The levels of anticipated effect on most resource categories are generally similar to, or slightly less than, those identified for the FS's Selected Alternative and would have less of an effect on fish habitat in Thayer Creek. The current design will have a greater visual impact on scenic views because it includes an overhead transmission line rather than a buried transmission line. While the overhead transmission line will be beneath the tree canopy height for most of its length, it may be visible from a few locations in Angoon and along Chatham Strait.

Approximately 34 acres of the Project area would be exposed to surface erosion and 1,000 feet of road would be in or adjacent to areas over a 67 percent slope. There would be no effects to high vulnerability karst features. There would be no effect to the natural flow in anadromous reach and reduces flow within 100 feet of Reach C to 26 cfs during turbine operation or to natural flow. There would be a negligible effect to flow across all seasons and water temperature. A minor effect would occur to erosion and sediment from ground-disturbing activities and sediment supply from above the dam. Approximately 80 feet would be dewatered from Class II fish habitat and no effects to fish habitat due to location of discharge water from the facility. The current design would reduce potential effects to fish and habitat by siting the diversion at the top of the falls and returning water to a plunge pool at top of the anadromous reach. This avoids dewatering/icing potential for most of Reach C and reduces flow in anadromous habitat less than the previous 2009 Selected Alternative 3. There would be a minor to moderate effect to rare plants from ground disturbing activities and low potential to introduce invasive species in disturbed areas. There would be approximately 2.8 miles of road built on wetlands. There would be a reduced effect to the connectivity acres of productive old growth removed from beach fringe and riparian management for biodiversity and wildlife habitat compared to the 2009 design of approximately 28 acres. Less than one percent of potential habitat for management indicator species and migratory birds would be affected. There would be no effect to marine mammals due to trained monitors observing vibratory/impact hammer operations. There would be no effect to the threatened and endangered species including humpback whale, stellar sea lion, and shorttailed albatross. The Project may affect individual Aleutian tern, black oystercatcher, Queen Charlotte Island goshawk, and sensitive plants; however, effects would likely be short term and temporary. There would be effects to scenery from a visible transmission line; however, the marine facility would not be visible from Angoon and would be in an area with other visual features of the built environment. There would be no significant possibility of a meaningful restriction on subsistence activity. There would be some negative effects to wilderness due to the road and the transmission line visibility and operation. See Section 4 of the Change Use Analysis.

# Agency(s) Concurrence, Permits, and Certifications

Kootznoowoo submitted to DOE concurrence, permits, and certifications from the following agencies for the proposed Project:

- U.S. Army Corps of Engineers permit for discharge of fill into waters of the United States,
- U.S. Fish and Wildlife Service and National Marine Fisheries Service for Section 7 of the Endangered Species Act,
- Alaska Department of Fish and Game for fish habitat,
- State of Alaska Water Quality Certification under Section 401 of the Clean Water Act,
- Alaska Department of Natural Resources Lease and Easement,
- Memorandum of Agreement under Section 106 of the National Historical Preservation Act (NHPA), and
- Resource Plans accepted by FS.

# Floodplain and Wetland Assessment (10 CFR part 1022)

This Floodplain and Wetland Assessment and Statement of Findings has been prepared in accordance with 10 CFR part 1022, "Compliance with Floodplain and Wetland Environmental Review Requirements" which were promulgated to implement the requirements of the DOE's responsibilities under Executive Order 11988, Floodplain Management, and Executive Order 11990, Wetlands Protection.

DOE is proposing to provide federal funding to Kootznoowoo for the Project to construct and operate a hydroelectric facility. The Project is not located within a Federally listed floodplain. The Project would construct approximately 2.6 miles of road in forested and scrub/shrub muskeg wetlands. Road construction through wetlands is unavoidable and there are no practicable alternatives to analyze that would avoid wetland impacts. To minimize potential harm, the FS shall require several Best Management Practices (BMPs), including using overlay construction and providing adequate hillslope drainage.

On March 2, 2022, Kootznoowoo received a water quality certification under Section 401 of the Federal Clean Water Act of 1977 for the placement of dredged and/or fill material in waters of the U.S. including wetlands and streams associated with the development of the Project. On November 28, 2022, Kootznoowoo received a permit from the U.S. Army Corps of Engineers for discharge of fill material and install structures into water of the U.S. for construction of the Project.

DOE consulted with the FS and is relying on FS's analysis of potential impacts of the Project to wetlands is in the FS FEIS and the Change Use Analysis. See Section 3.7 of the FS FEIS. In accordance with 10 CFR part 1022 and based upon the information presented in this Statement of Findings, DOE concludes that this action conforms to applicable floodplain and wetland protection standards and the appropriate steps have been taken to minimize potential harm within the wetlands and no additional wetland assessment is required for DOE's ROD.

# **Comments on Adoption of the FS NEPA Documents**

DOE did not receive comments from the public during the 30-day review period of the Adoption of the FS 2009 FEIS.

#### Decision

DOE has decided to select Alternative 1 (Proposed Action) as its Preferred Alternative, by which DOE shall provide financial assistance in support of Kootznoowoo's Project in Angoon, AK. The Project will include the construction and operation of a marine barge landing, underground cable, transmission line, access road, and hydroelectric facility. Issuance of this ROD is not a decision to authorize financial assistance in support of the Proposed Action.

# **Basis for Decision**

DOE reviewed the FS's 2009 FEIS and 2021 SUP Change Analysis and determined that the FS's FEIS is an adequate statement, and the Project DOE intends to fund is substantially similar to that analyzed in the FS's FEIS pursuant applicable regulations. DOE also considered non-NEPA documents, such as Federal and State permits, site reports and documents, the 2021 Change Analysis in support of a SUP, and relevant public information to inform DOE's evaluation of the existing NEPA documents. DOE adopted the FS 2009 FEIS on December 20, 2024. DOE did not receive any public comments during the 30-day review period. As described below, the Memorandum of Agreement (MOA) for Section 106 of the NHPA was executed on February 26, 2025. Kootznoowoo has secured all necessary permits, concurrences, and approvals by the Federal, state, and local authorities under other applicable environmental laws and regulations. DOE also considered the potential environmental impacts of its Proposed Action when making its decision. Based on this information, DOE has made the decision to authorize funding to be used by Kootznoowoo to plan for, construct and operate the hydroelectric facility.

This ROD was published pursuant to laws in effect at the time it was issued.

# **Mitigation Measures**

Specific terms and conditions, general terms and conditions, and monitoring plans were imposed by the FS as described in the 2009 FEIS and subsequent ROD would be the responsibility of FS to ensure compliance and enforcement. DOE is not proposing any additional mitigation measures as part of the selection of the Proposed Action. In order to comply with Section 106 of the NHPA, the FS and consulting parties executed an MOA to ensure that stipulations be carried out as conditions of the Project's approval; these include avoidance and mitigation stipulations for preconstruction, construction, and post-construction phases. DOE is a signatory on the MOA.

# Avoidance Stipulations

FS will mark the Thayer Creek site for avoidance prior to construction activities in the vicinity of the site.

## **Mitigation Stipulations**

### **Pre-Construction:**

- The following pre-construction mitigation stipulations shall be carried out prior to the start of any ground disturbing activities:
- Kootznoowoo will coordinate with the consulting parties to develop the following documents:
- an archeological monitoring and treatment plan.
- a Native American Graves Protection and Repatriation Act (NAGPRA) plan of action.
- Kootznoowoo will lead the coordination between Angoon Community Association (ACA) and the FS in cooperation with Chatham School District, to record surface "features" of the Stillwater sites through photos, videos, and/or oral interviews that will be archived on the Kootznoowoo website.
- The FS shall provide Kootznoowoo and ACA with maps and geospatial data of all sites, features, and culturally modified trees (CMTs) at Stillwater and Thayer Creek to aid in locating, avoiding when possible, and documenting cultural features as stipulated above.

- Kootznoowoo will archive the collected data on the Kootznoowoo website.
- Kootznoowoo will lead the coordination between ACA, the FS, and Chatham School
  District to photograph and if possible, conduct 3-D scans on Kootznoowoo land within
  the Stillwater APE, that may be removed in relation to the undertaking. The data will be
  used to create a virtual story map.

## **Construction Phase:**

- Kootznoowoo will provide a monitoring archeologist and a local cultural observer to monitor construction activities that are anticipated to impact historic properties within the Stillwater Area of Potential Effect (APE).
- Kootznoowoo, the City of Angoon, and ACA will consult on the final disposition location for any cultural materials collected from the Stillwater APE.
- Kootznoowoo will consult with the City of Angoon and ACA to identify the final disposition location for any cultural materials collected from the Stillwater APE throughout the duration of the Project.

# **Post-Construction Phase:**

• Kootznoowoo will coordinate with ACA and the FS to host at least one community event in Angoon to share the stories and information about the Stillwater sites.

# Signing Authority

This document of the Department of Energy was signed on April 23, 2025, by Cathy Tripodi, Director, Office of Clean Energy Demonstrations, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC on April 23, 2025.

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Cathy Tripodi, Director, Office of Clean Energy Demonstrations