

ELECTRONICALLY SUBMITTED FEBRUARY 5, 2024

Honorable Debbie-Anne A. Reese, Acting Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

RE: Proposed Dixon Diversion Amendment Update
Bradley Lake Project FERC Project No. 8221

Dear Interested Parties:

The Alaska Energy Authority (AEA) is pursuing a Federal Energy Regulatory Commission (FERC) license amendment associated with the existing 120-megawatt Bradley Lake Hydroelectric Project (Bradley Lake Project, FERC No. P-8221). The purpose of the amendment is to gain authorization to increase the Bradley Lake Dam height and divert meltwater from the Dixon Glacier to Bradley Lake to generate additional power. The Bradley Lake Project is located on the Bradley River in the Kenai Peninsula Borough northeast of the town of Homer in Southcentral Alaska. AEA is providing an update to the Proposed Action and to the Process Plan Schedule for the proposed license amendment.

Background

On April 27, 2022, AEA initiated the amendment process by filing its Initial Consultation Document (ICD). The ICD described two alternative project configurations for evaluation. The Dixon to Bradley Lake alternative involved an inter-basin transfer of glacial meltwater from the toe of the Dixon Glacier to the southwestern portion of Bradley Lake. The Dixon to Martin River alternative directed Dixon Glacier meltwater from the toe of the glacier to a new powerhouse on the Martin River and described facilities that would be necessary to construct and operate the powerhouse. Both alternatives included the construction of varying lengths of new access roads and overhead transmission lines, and a Bradley Lake Dam raise of 7, 14, or 28 feet.

AEA hosted a Joint Agency and Public Meeting in Homer, Alaska on June 14, 2022, and representatives from the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration Fisheries (NOAA), Alaska Department of Fish and Game (ADF&G), Alaska Department of Natural Resources, USFWS Kenai National Wildlife Refuge, and members of the public attended. In response to the proposed alternatives, studies were requested by USFWS, NOAA, ADF&G, and Cook Inletkeeper (CIK). On November 2, 2022, AEA provided the Draft Study Plan (DSP) for proposed studies which included a summary of the agency and stakeholder requested studies, AEA's response to the study requests, and AEA's proposed 2023 field season studies. On November 17, 2022, AEA conducted a Study

Plan meeting to review the DSP and associated study plan and implementation process schedule. Comments on the DSP were received at the end of December 2022 from ADF&G, USFWS, and Water Policy Consulting, LLC.

On March 27, 2023, AEA filed with FERC and distributed to interested parties a letter indicating that AEA decided to remove the Dixon to Martin River alternative from further consideration because it would not have met the purpose and need of AEA and the Railbelt utilities as the preliminary engineering assessment indicated that this alternative would have resulted in greater capital and operational costs and reduced potential energy compared to the Dixon to Bradley Lake alternative. In addition, this alternative would have resulted in greater potential impacts to wildlife, wetlands, and cultural resources. Since then, AEA has further advanced the conceptual design of the Dixon to Bradley Lake alternative and refined the Proposed Action, as described below. AEA also collected Martin River hydrology data, continued Red Lake salmon counts, and conducted field reconnaissance in 2023 to better inform the preliminary feasibility assessment and proposed study methodologies.

Revised Proposed Action

As part of the Proposed Action, AEA is proposing to raise the Bradley Lake Dam and spillway up to 28 feet from current heights that would increase the normal full pool of Bradley Lake elevation from 1,180 feet up to 1,208 feet, the surface area from 3,820 acres up to 4,224 acres, and the storage capacity from 284,000 acre-feet up to 386,000 acre-feet. The Dixon Diversion structure (25-feet high by 75-feet long at a crest elevation of 1,275 feet) and the 4.9-mile-long Dixon Diversion to Bradley Lake Tunnel conveyance structure would be the same as described in the ICD. The only proposed new access road would consist of the approximately one-mile-long spur road extending from the existing Upper Battle Creek access road to the downstream exit of the proposed Dixon Diversion tunnel. No new overhead transmission or distribution lines are proposed as part of the project. A three-phase power line is proposed to be installed underground from the Bradley Lake powerhouse to the Bradley Lake Dam along the existing access road and to the Dixon Diversion Tunnel outlet along the existing Upper Battle Creek access road (approximately 10 miles total). From there, power would be supplied to the Dixon Diversion structure through the tunnel. Power supply for the construction worker camp would be provided via a new approximately half-mile-long underground transmission line extending from the proposed underground line adjacent to the existing Bradley Lake Dam access road. The additional power generated from the proposed diversion would be transmitted from the existing Bradley Lake powerhouse substation and connect to the Homer Electric Association line between Fritz Creek and Soldotna via the existing 115-kV transmission line.

Updated Process Schedule

Given the further refinement of the Proposed Action, AEA is in the process of developing a Final Study Plan (FSP). Those studies that remain applicable to the updated Proposed Action and associated comments and study requests previously provided by the agencies and stakeholders are being considered, as well as field reconnaissance, hydrology data collection, and Red Lake salmon surveillance conducted in 2023. AEA intends to provide an updated Project Description, summary of the 2023 field season studies, and proposed changes to the DSP for agency review and comment in February, two weeks in advance of holding a public meeting via email and the AEA Dixon website (<https://www.akenergyauthority.org/What-We-Do/Railbelt-Energy/Bradley-Lake-Hydroelectric-Project/Dixon-Diversion-Project>). The proposed changes will address the updated Proposed Action, stakeholder comments received to the DSP in December 2022, and information gathered during 2023. AEA will hold public meetings in March to discuss the proposed changes and planned 2024 activities and intends to file the FSP in April 2024. Accordingly, AEA has updated the amendment process schedule to reflect these changes (Table 1).

Table 1 Updated Dixon Diversion Amendment Process Schedule

Responsible Party	Activity	Dates
Stage 2 Study Planning and Implementation		
Stakeholders	Project Update and Study Plan Meeting Anchorage, AK	March 5, 2024 8:30 am – 12:00 pm
Stakeholders	Terrestrial Study Planning Meeting	March 2024 – date TBD
Stakeholders	NHPA Section 106 Consultation Meeting	March 2024 – date TBD
AEA	Final Study Plan	April 2024
AEA	Conduct 2024 Season Studies	Spring/Summer 2024
Stakeholders	2024 Field Season Debrief Meeting	November/December 2024
AEA	2024 Study Reports	January 2025
Stakeholders	Comments on Study Reports	February 2025
Stakeholders	Pre-Field Season Meeting	April 2025
AEA	Conduct 2025 Season Studies	Spring/Summer 2025
Stakeholders	2025 Field Season Debrief Meeting	November/December 2025
AEA	2025 Study Reports	January 2026
AEA	Draft Amendment Application (DAA)	April 2026
FERC/ Stakeholders	Comments on DAA	June 2026
Stage 3 License Application Filing and FERC Review		
AEA	Final Amendment Application	September 2026
FERC	FERC Notice of Amendment	Anticipated November 2026
Stakeholders	Comments on Amendment Application	Anticipated February 2027
FERC	FERC EA/EIS	TBD
AEA	FERC Amendment Order	TBD

Prior to the FSP submission, AEA intends to host a **Joint Agency and Public Meeting at the AEA office building in Anchorage, Alaska on March 5, 2024 from 8:30 am to 12:00 pm**. The agenda for the Joint Meeting will consist of: (a) description of the revised Proposed Action, (b) overview of the FERC amendment process, (c) review of relevant data collected in 2023, (d) summary of comments received to the DSP, (e) proposed revisions to the DSP and anticipated 2024 study program, and (f) obtaining input from the public regarding proposed changes to the DSP. During March 2024, AEA also intends to hold a virtual meeting to finalize the scope of terrestrial resource studies and another virtual meeting for purposes of National Historic Preservation Act (NHPA) Section 106 consultation.

To assist with meeting planning and logistics, AEA requests that all participants planning to attend the Joint Meeting **RSVP to Bryan Carey at bcarey@akenergyauthority.org by February 20, 2024.**

AEA appreciates continued stakeholder and agency involvement in the Bradley Lake Project amendment process for the proposed Dixon Diversion.

Sincerely,

ALASKA ENERGY AUTHORITY

A handwritten signature in dark ink, appearing to read 'Bryan Carey', is positioned above the printed name and title.

Bryan Carey, P.E.
Director of Owned Assets, Alaska Energy Authority

Electronic CC: Distribution List
 FERC Docket