BRADLEY LAKE PROJECT MANAGEMENT COMMITTEE RESOLUTION NO. 22 - 04

Development of Required Work Projects

INTRODUCTION

The Bradley Lake Project Management Committee ("BPMC") is responsible for the management, operation, maintenance, and improvement of the Bradley Lake Hydroelectric Project (the "Project"), subject to the non-delegable duties of the Alaska Energy Authority (the "Authority").

At its December 10, 2021 meeting, the BPMC approved Resolution No. 21-02 that endorsed a plan to finance and develop a series of projects to increase the energy available to benefit the Bradley Lake Hydroelectric Project (the "Project") and its utility purchasers ("Purchasers").

The BPMC established a Special Committee to assist in the development plans for financing, design and engineering at the Project. The Special Committee has provided its recommendations to the BPMC for these important steps. The plans allow the BPMC to leverage past investments in the Project and optimize its value without additional costs to Alaskans by applying existing payments to approved Required Project Work, as provided in the Power Sales Agreement (the "PSA").

The BPMC has received guidance from the Department of Law ("DOL") regarding the proposed projects to be funded as Required Project Work in the PSA, and awaits independent review from a consultant selected by the Authority.

PURPOSE OF BPMC RESOLUTION 22-04

BPMC Resolution No. 22-04 identifies the authorized Required Work Projects that the BPMC intends to finance and complete at the Project. By funding Required Project Work, the BPMC seeks to minimize costs, stabilize rates for ratepayers, and optimize the benefits generated by the Project.

BPMC RESOLUTION NO. 22-04

WHEREAS, the Bradley Lake Project Management Committee ("BPMC") receives its authority under the Bradley Lake Hydroelectric Project Agreement for the Sale and Purchase of Electric Power ("Power Sales Agreement").

WHEREAS, the BPMC is responsible for the management, operation, maintenance, and improvement of the Bradley Lake Hydroelectric Project (the "Project"), subject to the non-delegable duties of the Alaska Energy Authority (the "Authority").

WHEREAS, the Project is the largest lowest cost renewable, carbon free energy generating facility on the System.

WHEREAS, the BPMC has set forth its intent to provide for improvements and upgrades to the transmission path for energy generated by the Project in BPMC Resolution No. 21-02.

WHEREAS, the Special Committee of the BPMC appointed for the purpose of examining ways to upgrade and improve the deliverability of Project Power has made recommendations for the removal of the transmission constraints on the Project for consideration by the BPMC.

WHEREAS, Exhibit A is attached to this Resolution and incorporated herein by this reference and contains a list and representative map of the proposed Required Project Work recommended by the Special Committee that will serve to optimize the value of the Project and result in increased availability of the Railbelt Electric System's largest renewable, carbon-free energy resource for all Purchasers;

WHEREAS, the projects listed in Exhibit A are essential for the removal of the transmission constraints on the deliverability of energy generated by the Project and can be financed through the use of excess payment funds for agreed-upon Required Project Work.

WHEREAS, each of the Required Work Projects listed in Exhibit A have been reviewed by the Department of Law at the request of the Authority and the Purchasers.

WHEREAS, the Department of Law has determined that each of the listed projects in the first tranche listed in Exhibit A and the associated map constitutes Required Project Work subject to an independent analysis demonstrating that each Required Work Project is consistent with sound economics and national industry standards.

WHEREAS, the Authority has selected an expert to review the Required Work Projects in Exhibit A, and the BPMC is awaiting the determination on each proposed Required Work Project.

NOW, THEREFORE, BE IT RESOLVED THAT, the aforementioned comments and Recitals are incorporated and made part of this Resolution No. 22-04;

BE IT ALSO RESOLVED THAT, Resolution 21-02 is incorporated into this Resolution 22-04 as if fully set forth;

BE IT ALSO RESOLVED THAT, the BPMC accepts the recommendations from the Special Committee regarding the Required Project Work to be financed and completed as listed in Exhibit A;

BE IT ALSO RESOLVED THAT, the BPMC approves the projects listed in Exhibit A, and directs its Executive Director of Railbelt Regional Coordination to work with the BPMC and the Special Committee of the BPMC to immediately begin the process of expediting work on the essential improvements and upgrades detailed in Exhibit A to benefit the Project's transmission system and enhance the deliverability of energy produced by the Project; and

BE IT ALSO RESOLVED THAT, the Special Committee will continue to report its progress to the BPMC as needed.

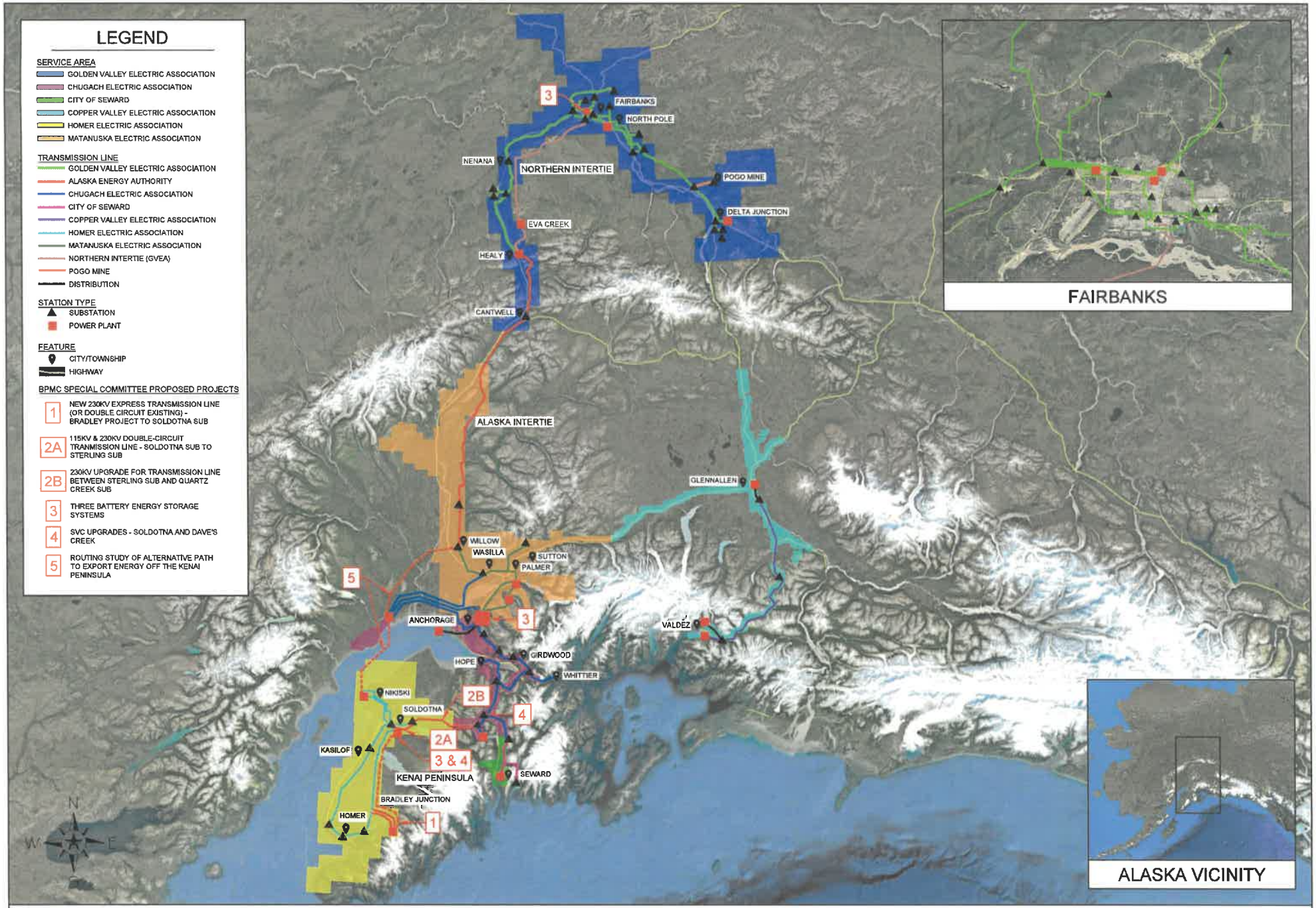
DATED at Anchorage Alaska, this 20TH day of May, 2022.

Chair, Anthony M. Izzo

Attest: _____
Secretary, Curtis Thayer

EXHIBIT A
REQUIRED PROJECT LIST /MAP

Project Cost ($ million)	BPMC Special Committee Projects	2/4/2022
	BPMC First Tranche **"Required Project Work"** 2022-2029	
$ 66.0	New 230 kV (operated at 115 kV) Express Transmission Line - Bradley Project to Soldotna Sub[1&6]	
$ 70.0	115 kV & 230 kV Double-circuit Transmission Line - Soldotna Substation to Sterling Substation[6] and 230 kV Upgrade for Transmission Line between Sterling Substation and Quartz Creek Substation[6] (includes substations upgrades for 230 kV operation)	
$ 115.0	Battery Energy Storage Systems for Grid Stabilization[6]	
$ 8.5	SVC Upgrades (Soldotna and Dave's Creek)	
$ 10.0	Routing study of Alternative Path to Export Energy off the Kenai Peninsula[5]	
$ 269.5	(note: assumes that CEA completes 230 kV upgrades from Quartz Sub to University Sub)	
	Second Tranche Projects to Complete Railbelt 230 kV Transmission Backbone	
$ 90.0	Teeland to Fairbanks 230 kV Upgrade (including substations)[2]	
$ 15.0	Railbelt Cybersecurity and Communications Upgrade[6]	
$ 105.0		
	Railbelt Resiliency Projects Required for 230 kV Transmission System	
$ 185.0	Alternative Transmission Line from Kenai to Southcentral (TBD by Routing Study) [1&6]	
$ 129.3	Lorraine - Douglas 230 kV extension of the Alaska Intertie (42 miles)[6]	
$ 10.7	Fossil Creek Substation 230 kV upgrade[6]	
$ 9.7	Eklutna Hydro Substation 230 kV Upgrade or alternate project[6]	
$ 243.6	Douglas - Healy 230 kV transmission line (171 miles)[6]	
$ 106.8	Healy - Fairbanks 138 kV to 230 kV Conversion[6]	
$ 685.1		
	Renewable Generation Projects required to help meet CO2 Reduction Goals	
$ 125.0	Dixon Diversion (Bradley Lake)[4&6] - note that variations of this project cost up to about $400 million	
$ 480.0	200 MW of Wind Generation near Fairbanks[3]	
$ 240.0	100 MW Wind near Delta Junction[3]	
$ 845.0		
[1]	Cost estimate from 2017 AEA Railbelt Transmission Plan	
[2]	Cost estimate by GVEA	
[3]	Preliminary cost estimate from Railbelt CO2 restriction study	
[4]	Cost estimate by AEA	
[5]	BPMC Special Engineering Subcommittee	
[6]	Shovel-Ready Energy Infrastructure Projects in Alaska (Draft by AEA, April 2021)	



BPMC REQUIRED PROJECT WORK 2022 - 1ST TRANCHE

UPDATED: MAY 5, 2022

FILE PATH: Vault/Project Explorer/Documents/FAC - Facilities/MP - Maps/Service Area Maps/Alaska Utility Service Area