ALASKA ENERGY AUTHORITY

DELIVERING ENERGY SOLUTIONS THAT POWER ALASKA

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AEA's Mission & Vision

Our refined mission and vision reflect the direction outlined in AEA's strategic plan and reinforce our commitment to meeting the evolving energy needs of Alaska's communities.

WHO WE ARE, WHAT WE DO

OUR MISSION

Advancing affordable, reliable energy in Alaska.

WHERE WE'RE HEADED

OUR VISION

A resilient and reliable energy future for Alaska, enabled by strong infrastructure, innovation, and collaboration.

AEA Programs and Services Overview

Owned Assets
- Bradley Lake Hydroelectric Project
- Alaska Intertie
- Sterling to Quartz Creek Transmission Line
- Cook Inlet PowerLink

Power Cost Equalization
- $46 Million Program
- 188 Rural Communities
- 81 Electric Utilities
- Benefits 81,000+ Alaskans

(All figures reflect FY2025)

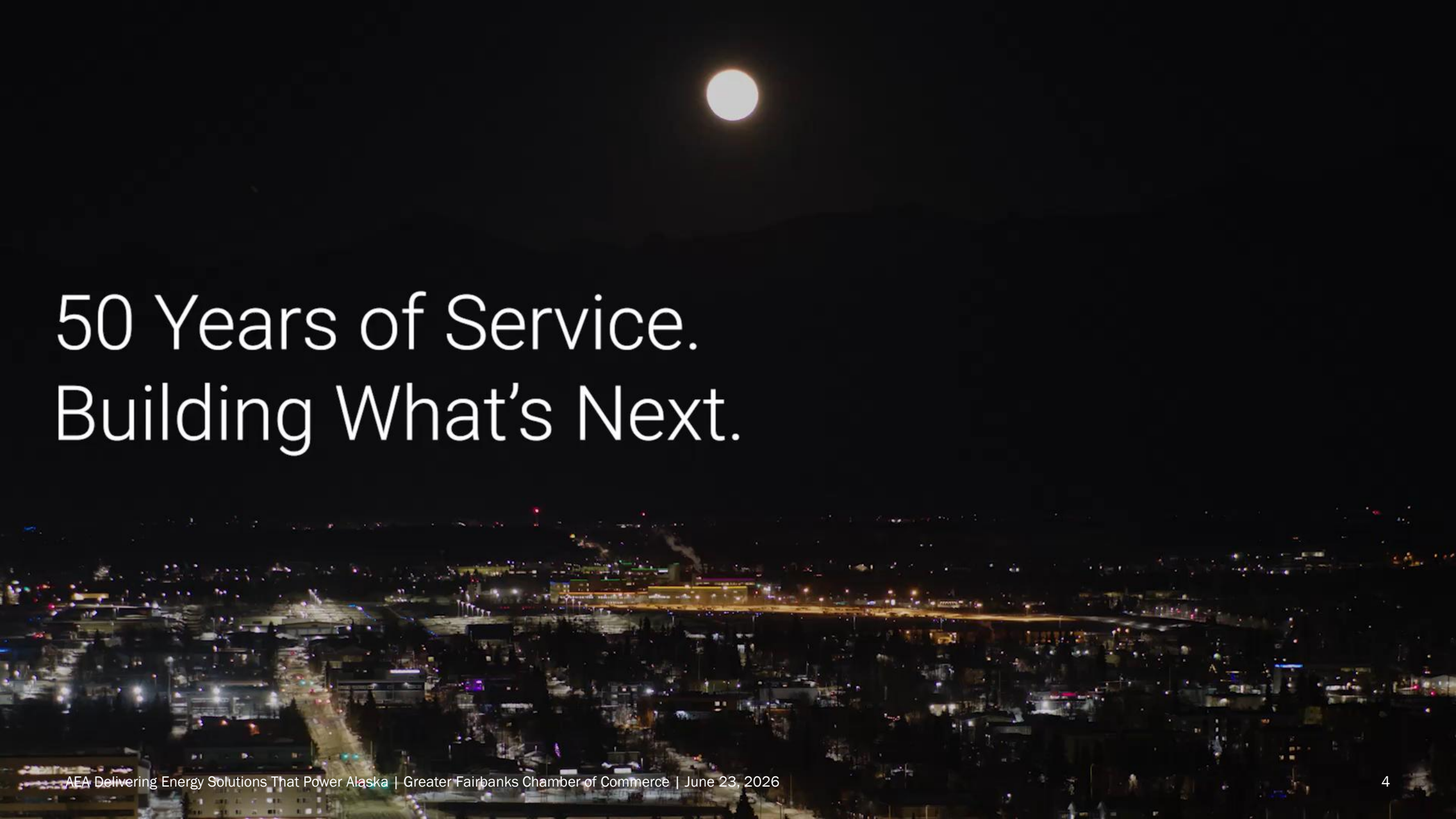
Rural Energy
- Bulk Fuel Upgrades
- Rural Power System Upgrades
- Circuit Rider Program
- Electrical Emergency Assistance

Renewable Energy and Energy Efficiency
- Renewable projects; biomass, electric vehicles, hydroelectric, solar, and wind
- Federal programs: NEVI and Home Energy and High Efficiency Rebate Allocation

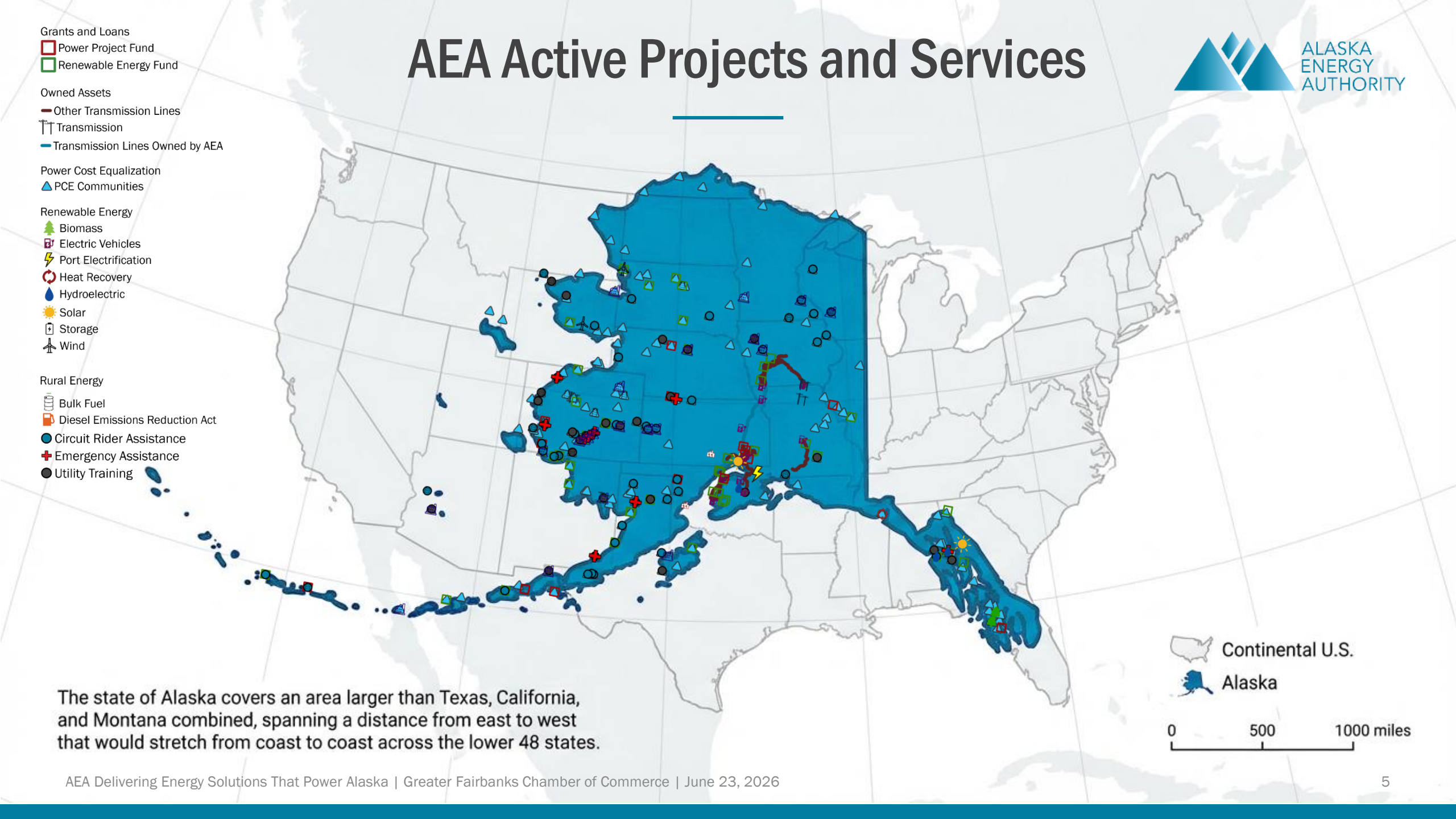
Grants and Loans
- Renewable Energy Fund
- Power Project Fund
- Federal Grants

Energy Planning
- Alaska Energy Security Task Force
- State Energy Security Profile
- Electronic Library
- Energy Data Resources
- 40101(d) Grid Resilience

Railbelt Transmission Organization
- AEA, Railbelt Reliability Council, and Utility Governance
- Certificate of Public Convenience and Necessity
- Tariff Under Regulatory Review


50 Years of Service.
Building What’s Next.

AEA Active Projects and Services



The state of Alaska covers an area larger than Texas, California, and Montana combined, spanning a distance from east to west that would stretch from coast to coast across the lower 48 states.

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Bradley Lake Expansion Project

AEA is advancing the Bradley Lake Expansion Project, which includes the **Dixon Diversion** and **Bradley Pool Raise** sub-projects. This project will divert water from Dixon Glacier to increase Bradley Lake's annual energy production by **50 percent**.

ESTIMATED ANNUAL OUTPUT
180,000 MWh
≈ 30,000 homes powered

NATURAL GAS OFFSET
1.5 Billion cu ft
7.5% of unmet demand (2030)

TARGET COMPLETION
2031
Shovel-ready status

ESTIMATED COST
$400 Million
Class IV Estimate


BRADLEY LAKE
EXPANSION PROJECT

Cook Inlet PowerLink (CIPLink)

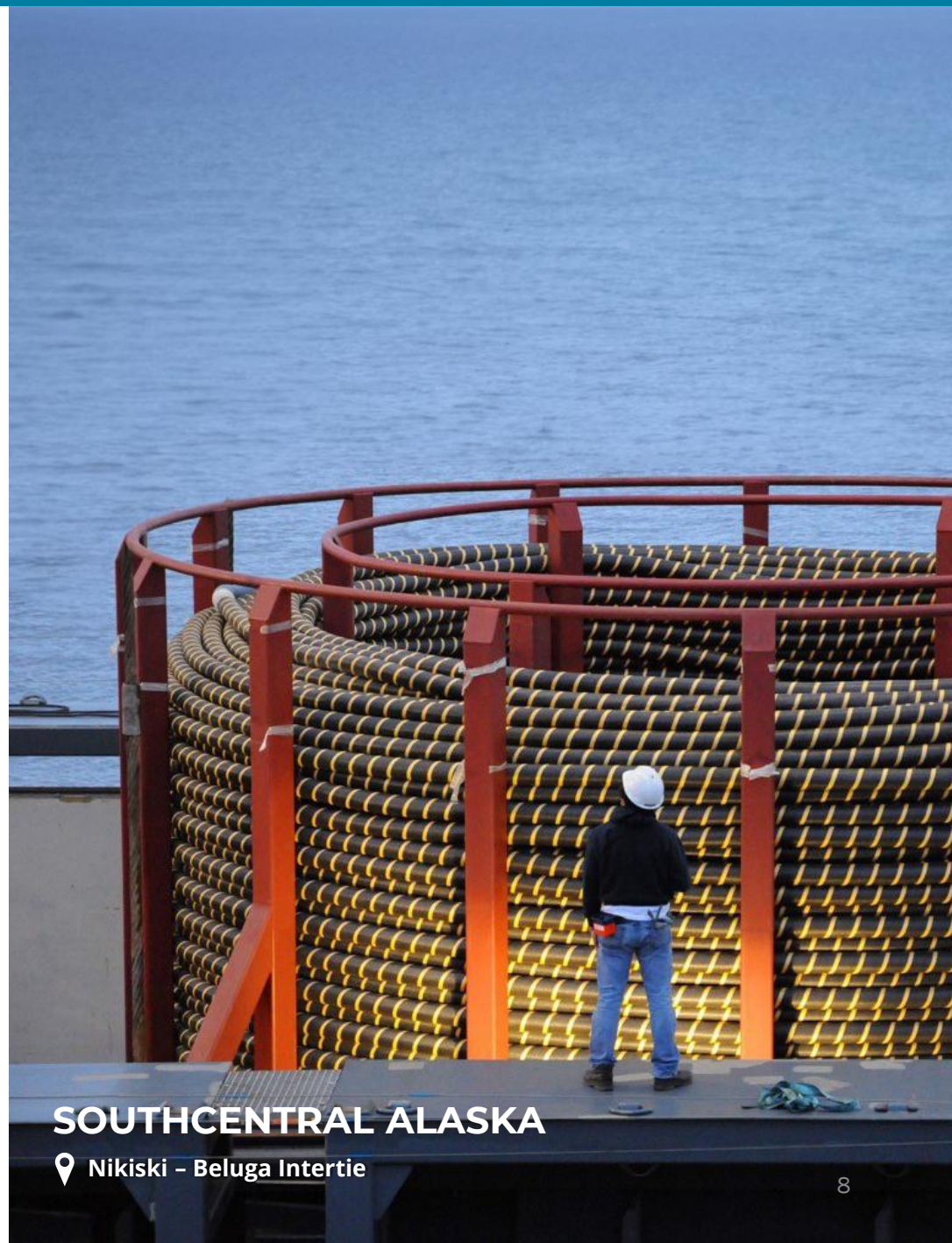
CIPLink is a high-voltage direct current (HVDC) transmission system connecting Southern and Central Railbelt regions. It features a **38-mile subsea cable** and overland routes to deliver **up to 200 MW** of bidirectional power flow.

CAPACITY
200 MW
Bidirectional Flow

CONNECTIVITY
Railbelt Link
Connects South & Central Regions

TARGET COMPLETION
2032
Shovel-ready status

ESTIMATED COST
$413 Million
Preliminary Engineering Done



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Soldotna-Sterling-Quartz Creek (SSQ) Transmission Line and Substation Project

Upgrading transmission lines from 115 kV to 230 kV increases Railbelt transfer capacity by 50 percent, significantly improving system reliability and stability.

TRANSFER CAPABILITY

+53%

Potential stability-limited increase

LINE LOSS REDUCTION

-8.4 PTS

Projected full-corridor tie-loss drop

TARGET COMPLETION

2030

Upgrades underway

ESTIMATED COST

$173.9 Million

Including all costs

Power Cost Equalization (PCE)

PCE is a key part of Alaska's energy policy—helping rural residents access affordable electricity despite isolation and high infrastructure costs, narrowing the gap with urban rates and supporting rural utilities.

193
RURAL COMMUNITIES

81
ELECTRIC UTILITIES

81,000
ALASKANS

Electricity costs for Alaska's rural residents are significantly higher than in urban areas. The PCE program reduces these costs, ensuring affordable service, reliable centralized power, and the long-term viability of rural utilities.

750 kWh
RESIDENTIAL

Residential customer are eligible for PCE credit up to 70 kWhs per month.

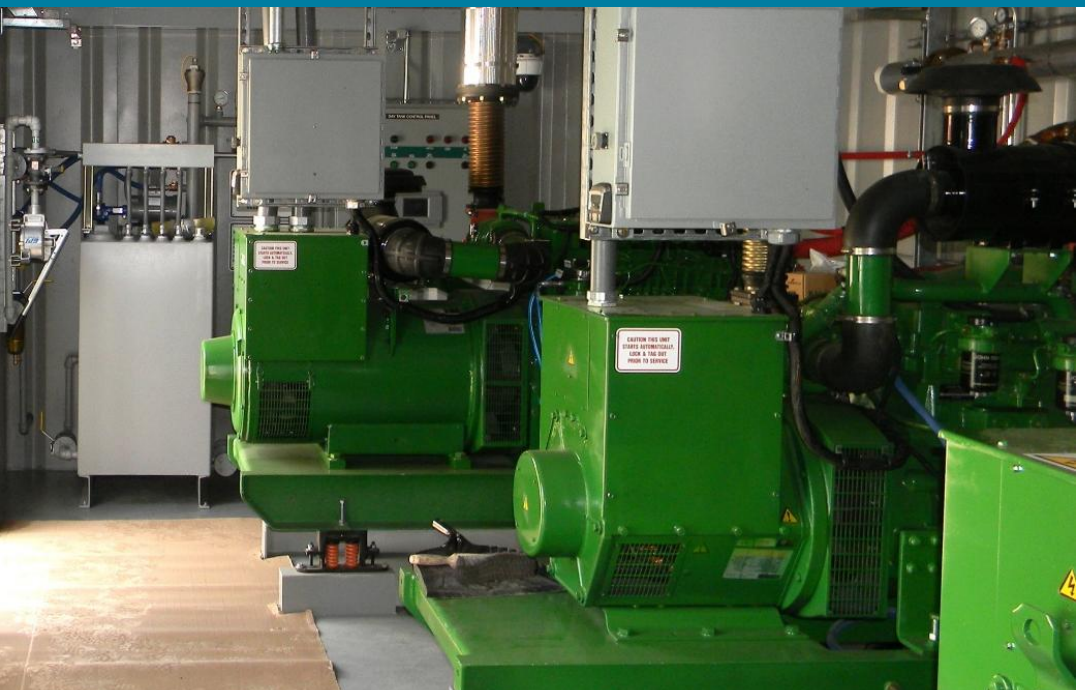
70 kWh
PUBLIC FACILITIES

Community facilitates can Receive PCE credit for up to 70 kWhs per month multiplied by the number of residents in a community.

$46M
FUNDS DISBURSED

In fiscal year 2025, AEA disbursed $46 million to rural electric utilities benefiting 81,000 Alaskans.

Petersburg, Alaska



RURAL ALASKA

Community Infrastructure

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Rural Energy Infrastructure

Improving reliability and safety for Alaska's remote communities.

Rural Power System Upgrades

Improves generation in villages with <2,000 people by replacing inefficient mechanical systems with electronic generator sets.

Mitigates risk of aging system failure

ELIGIBLE
170
Communities

DEFERRED MAINT.
$300 Million
Funding Need

Bulk Fuel Upgrades

Designs and builds modern, code-compliant bulk fuel facilities. Most existing facilities are >40 years old and pose safety risks.

Addresses corrosion and environmental risks

INVENTORY
400+
Facilities

DEFERRED MAINT.
$1 Billion
Funding Need

Renewable Energy Fund (REF)

For **Round 18**, AEA has **recommended 29 applications totaling $41.2 million** for consideration in the FY2027 Capital Budget, reflecting strong demand for continued investment in renewable energy projects across Alaska.

Rounds 13-17: 67 projects – $53.55M

- **Rd 13: 11 Projects – $4.75M**
- **Rd 14: 27 Projects – $15M**
- **Rd 15: 18 Projects – $17M**
- **Rd 16: 5 Projects – $10.5M**
- **Rd 17: 6 Projects – $6.3M**

Kongiganak, Alaska

Since its inception, the State has invested **$333 million** in the REF

110+ projects are operational, and **49** more in **development**

REF has **displaced 120 million gallons of diesel**—$600 million in avoided costs at the FY2025 Power Cost Equalization rate of $4.95 per gallon

Federal Program Funds Secured - $39.8 million
Estimated Final Federal Allocation ~ $20 Million

Grid Resilience Formula Grant Program IIJA 40101(d)


Metlakatla, Alaska

- AEA administers Section 40101(d) grid resilience funds through a competitive process. Of the **$60 million** expected in federal formula grants, **$39.8 million** has been awarded to date; a final allocation is expected in 2026.

- **Round 2** (second solicitation): **Three projects** were awarded sub-grants totaling **$17.7 million—**
  - **Two** to strengthen grid resilience across the **Railbelt** and **Southcentral Alaska,** served by **Matanuska Electric Association** and **Golden Valley Electric Association**.
  - **One** to enhance grid resilience in **Southeast Alaska** served by **Southeast Alaska Power Agency**.

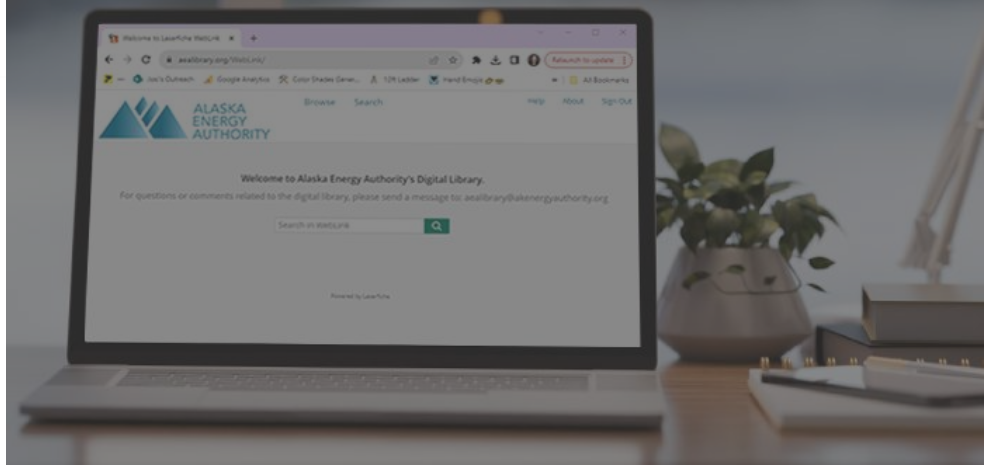
- **Round 1** (initial solicitation): **Three projects** were awarded sub-grants totaling **$20.9 million—**
  - **two** to strengthen the **Railbelt grid** and
  - **one** to support resilience in the **Interior** served by **Golden Valley Electric Association**.

- Eligible resilience measures include:
  - Hardening lines and substations
  - Extreme-weather upgrades
  - Fire-resistant components
  - Microgrids and energy storage

- Funding requires a **15 percent state match** and a **33 percent small-utility match**.

AEA Electronic Library (E-Library)

Provides the public with open, transparent access to over 50 years of Alaska energy data.



Since its launch, AEA's E-library has averaged **over 650 unique visitors per month**. Site visits to the e-library are reported to be trending positively, with an average **10 percent increase** in site visits month over month.

The E-library launched with **7,500 documents**, including program publications, technical reports, research, and feasibility studies. Currently, over **13,000 documents** are searchable.

The E-library is **fully accessible** to the public via the library tab on AEA's website, or directly at https://www.akenergyauthority.org/library.

Home Energy and High Efficiency Rebate Allocations

AEA is collaborating with AHFC to deliver more than $74 million in home energy rebates to Alaskans (pending with DOE)

Program Feature	🏠 Home Owner Managing Energy Savings (HOMES)	⚡ High-Efficiency Electric Home Rebates (HEEHR)
Purpose:	Whole-home energy efficiency retrofits	High-efficiency electric equipment and appliances
Who Can Benefit:	All households (higher incentives for low- and moderate-income households)	Low- and moderate-income households
Eligible Improvements:	Insulation, air sealing, windows, doors, and other efficiency measures	Heat pumps, heat pump water heaters, electrical upgrades, insulation, and related measures
Rebate Structure:	Based on modeled or measured energy savings achieved	Based on installation of qualifying equipment
Maximum Incentive:	Typically $2,000–$4,000+ for single-family homes; higher for multifamily projects	Up to $14,000 per household
Alaska Allocation:	**$37.3 Million**	**$37.1 Million**

Key Difference

🏠 **HOMES:** Rewards homeowners for reducing overall energy use.

⚡ **HEEHR:** Helps households purchase and install efficient electric equipment.

Alaska Advantage

✅ Eligible costs may include contractor travel, materials, and project expenses.

✅ Additional program flexibility approved specifically for Alaska and Hawaii.


SUSITNA-WATANA HYDRO
Clean, reliable energy for the next 100 years.

Contact Us

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