

ALASKA ENERGY AUTHORITY

PROJECT AND INVESTMENT UPDATES

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Anchorage Chamber of Commerce
“Make It Monday” Forum Luncheon
Sept. 21, 2026



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

- \$48 Million Program
- 193 Rural Communities
- 81 Electric Utilities
- Benefits 80,000+ Alaskans (All figures reflect FY2026)



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



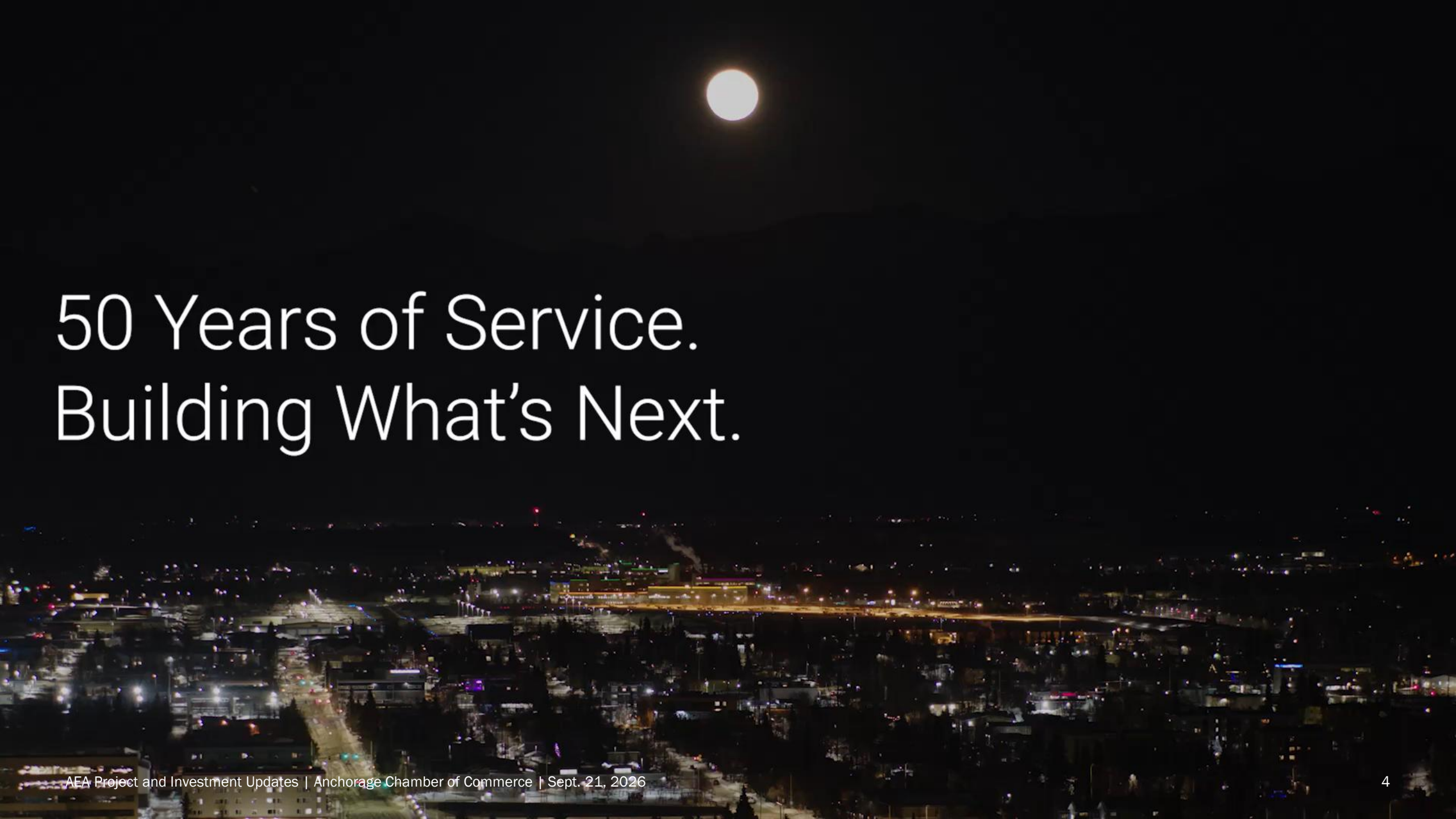
Energy Planning

- 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

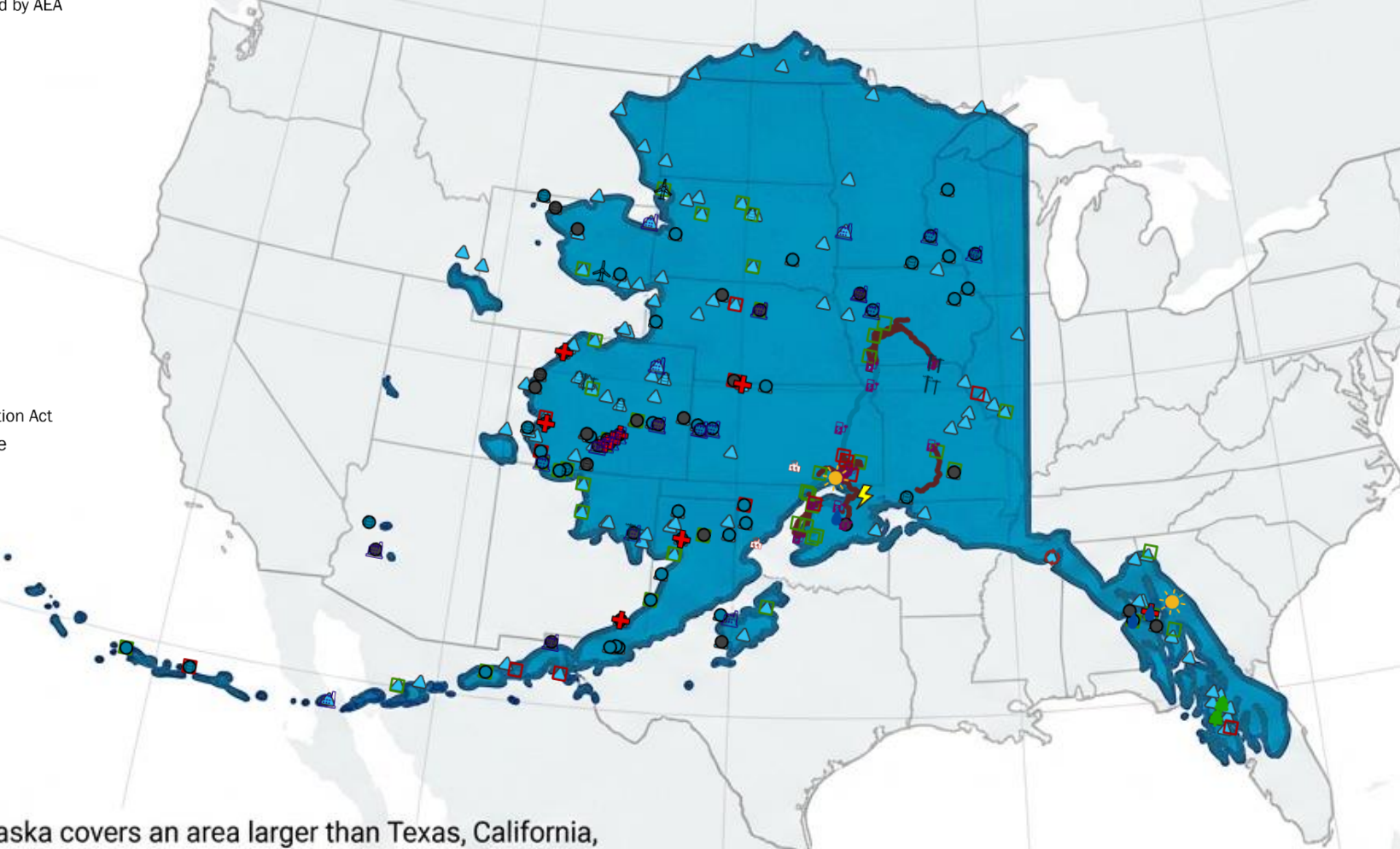
An aerial night photograph of Anchorage, Alaska. The city lights are visible, including the airport and surrounding urban areas. A large, bright full moon is positioned in the upper center of the frame against a dark sky. The text "50 Years of Service. Building What's Next." is overlaid on the left side of the image.

50 Years of Service. Building What's Next.

AEA Active Projects and Services



- Grants and Loans
 - Power Project Fund
 - Renewable Energy Fund
- Owned Assets
 - Other Transmission Lines
 - ⚡ Transmission
 - Transmission Lines Owned by AEA
- Power Cost Equalization
 - ▲ PCE Communities
- Renewable Energy
 - 🌲 Biomass
 - 🚗 Electric Vehicles
 - ⚡ Port Electrification
 - 🔄 Heat Recovery
 - 💧 Hydroelectric
 - ☀️ Solar
 - 🔋 Storage
 - 🌬️ Wind
- Rural Energy
 - 🚚 Bulk Fuel
 - 🚛 Diesel Emissions Reduction Act
 - 👤 Circuit Rider Assistance
 - + Emergency Assistance
 - Utility Training



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.



Railbelt Infrastructure and Military Installations

Railbelt system serving 75 percent of Alaskans; linking Homer–Kenai–Anchorage–Mat-Su–Denali–Fairbanks–Delta Junction



⚡ Bradley Lake Expansion Project – \$400 Million*

Expansion of the **120 MW** Bradley Lake Hydroelectric Project that **increases generation capacity by more than 40 percent**. Additional energy is transferred through the Alaska Intertie to utilities serving Interior Alaska—including military installations.

⚡ Cook Inlet PowerLink – \$413 Million (\$206.5M Federal Grant)

Proposed **38-mile** high-voltage direct current subsea transmission cable enabling up to **200 MW** bi-directional flow. Strengthens Southcentral-Interior transfer capacity and provides **critical backup redundancy for Joint Base Elmendorf-Richardson**.

⚡ SSQ Transmission Upgrades – \$178.5 Million

Upgrades to the Sterling-Soldotna-Quartz Creek transmission corridor that increase transmission capacity by **53 percent** through conversion to **230 kV** infrastructure. The project **reduces transmission losses** and **improves voltage performance within the corridor**.

⚡ Susitna-Watana Hydroelectric Project – \$8.7 Billion (2026)*

Proposed **618 MW** hydroelectric project generating up to **2,800 GWh** annually. The project could **offset future Cook Inlet natural gas supply declines** and provide up to **50 percent** of projected Railbelt electricity demand.



Adding Renewable Energy to the Railbelt

Bradley Lake Expansion Project

Expanding Alaska's Largest Hydroelectric Facility

- AEA owns the **120-megawatt Bradley Lake Hydroelectric Project**, located 27-air miles northeast of Homer on the Kenai Peninsula.
- The project currently provides **~10 percent** of the annual power used by Railbelt utilities and serves about **75 percent** of Alaska's population.
- AEA is advancing the **Bradley Lake Expansion Project**—which includes the **Dixon Diversion** and **Bradley Pool Raise** subprojects—to increase annual energy production.

ESTIMATED COST



\$400 Million

Class IV Estimate

TARGET COMPLETION



2031

Shovel-ready status

Location and Anticipated Benefits

APPROXIMATELY

167,000 MWh

Additional renewable generation annually
(equivalent to 30,000 homes powered)

NATURAL GAS OFFSET

1.5 billion cu ft

7.5% of unmet demand (2030)

PROVEN INFRASTRUCTURE

35 years

Builds on Bradley Lake facilities reliably serving the
Railbelt since 1991

LONG-TERM PRICE STABILITY

Hydropower advantage

Reduced exposure to fuel-price changes

Project Location Map

Dixon Diversion and Bradley Pool

Raise: A 4.6-mile tunnel diverts water from Dixon Glacier into Bradley Lake, and a 16-foot dam raise increases storage.



Bradley Lake Expansion Project

2026 Progress and Key Milestones

Licensing, Engineering, and Field Activities

June 2026

COMPLETED

Final License Amendment application filed with the Federal Energy Regulatory Commission (FERC).

The 5,600-page filing included:

- ☑ Supporting Design Report
- ☑ Applicant-Prepared Environmental Assessment
- ☑ Operations and Hydrology Modeling

Throughout 2026

COMPLETED

Development activities: extensive geotechnical investigations; engineering and design advanced to **60 percent**; pre-diversion stream gaging and salmon monitoring.

Cook Inlet PowerLink (CIPLink)

Alaska's First High-Voltage Direct Current (HVDC) Transmission Project

- AEA is advancing **CIPLink** to strengthen Railbelt reliability through a second transmission path between the Southern and Central Railbelt.
- The project includes a **38-mile subsea cable, converter stations**, and supporting **overland transmission infrastructure**.
- CIPLink would enable up to **200 MW of bidirectional power flow**, allowing utilities to transfer power between regions and share generation resources across the Railbelt.



ESTIMATED COST

\$413 Million

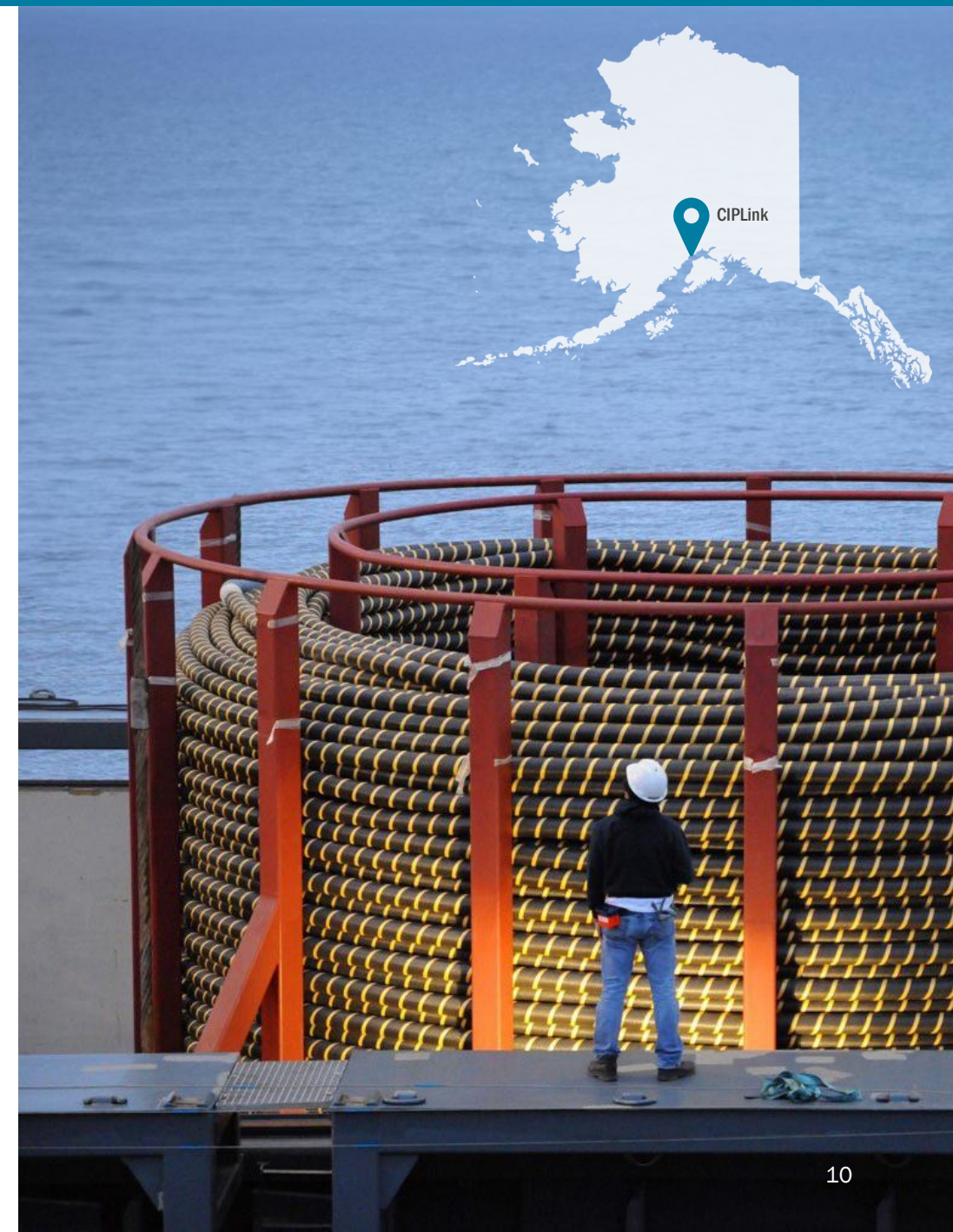
Preliminary engineering done



TARGET COMPLETION

2032

Shovel-ready status



Cook Inlet PowerLink

Location and Anticipated Benefits

APPROXIMATELY

200 MW

Bidirectional power transfer

COOK INLET Crossing

38-mile subsea cable

Additional transmission path

Resource Sharing

Connected Railbelt

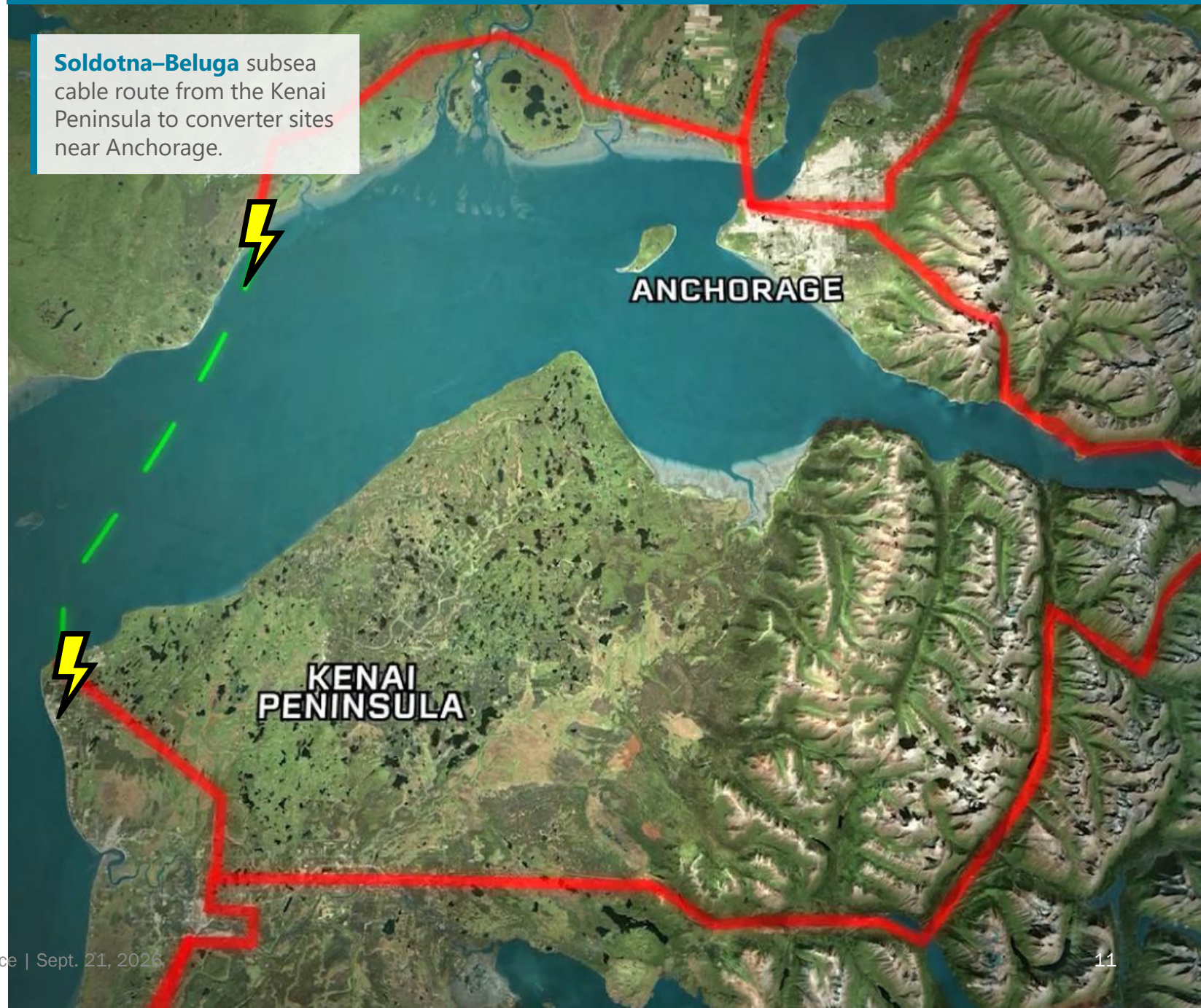
Connects Southcentral and Central Railbelt utilities, allowing utilities to share generation resources

ADDITIONAL TRANSMISSION PATH

System redundancy

Supports reliability during outages

Soldotna–Beluga subsea cable route from the Kenai Peninsula to converter sites near Anchorage.





2026 Progress and Key Milestones

Required permits are in place, and marine surveys begin in September



Marine survey permits obtained

Marine survey permits are secured for the Proposed **35-mile Cook Inlet corridor**.

COMPLETED



Woolpert mobilizes **Sept. 20**, with fieldwork expected through **Oct. 22** (subject to weather and marine conditions). **Surveys will evaluate:**

UNDERWAY

- ☑ Water depths and seafloor conditions
- ☑ Currents, sediments, and potential hazards
- ☑ Existing subsea infrastructure
- ☑ Potential cable landfall locations



Route refinement and engineering activities

Survey data will support cable design, installation planning, and future engineering activities.

NEXT

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

- AEA is currently upgrading **53 miles of transmission line** and converting the corridor from **115 kV to 230 kV**.
- The upgraded corridor is expected to increase transfer capacity by **~50 percent** and improve reliability across the Railbelt.



TRANSFER CAPABILITY

+53%

Potential transfer increase



LINE LOSE REDUCTION

-8.4 PTS

Projected tie-loss drop



ESTIMATED COST

\$178.5 Million

Including all costs



TARGET COMPLETION

2030

Upgrades underway



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.

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.



193

RURAL COMMUNITIES



81

ELECTRIC UTILITIES



80,000

ALASKANS



750 kWh

RESIDENTIAL

Residential customers are eligible for PCE credit up to 750 kWhs per month.

70 kWh

PUBLIC FACILITIES

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

\$48M

FUNDS DISBURSED

In fiscal year 2026, AEA disbursed \$48 million to rural electric utilities benefiting 80,000 Alaskans.

Petersburg, Alaska



Rural Energy

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



Alaska Bulk Fuel Infrastructure Partnership

Denali Commission funds bulk fuel upgrades in 10 rural communities. \$100 million to ANTHC, subawarded to AEA, AVEC.

Largest single-year investment in 20+ years

FUNDED

10

Communities

Awarded

\$100 Million

FY2027 Receipt

RURAL ALASKA



Community Infrastructure

AEA Project and Investment Updates | Anchorage Chamber of Commerce | Sept. 21, 2026

Renewable Energy Fund (REF)



ABOUT THE PROGRAM

Established in 2008 to reduce and stabilize the cost of energy across Alaska.

The Renewable Energy Fund (REF) provides competitive grant funding for renewable energy projects in communities across Alaska. REF supports projects that reduce long-term energy costs, decrease diesel dependence, and improve power reliability.

AEA administers a four-stage review process under Alaska Statute 42.45.045: **eligibility and completeness, technical and economic feasibility, project scoring, and regional spreading.**

ROUND 18 · FY2027

\$14.6 million

9 projects funded by the Governor and Legislature.

CUMULATIVE · SINCE 2008

\$333 million

Total state investment across 18 funding rounds.

PROJECTS IN SERVICE

120 + operational

Plus 58 additional projects in active development.

DIESEL DISPLACED

~120 million gallons

~\$600M avoided at the FY2025 PCE rate (\$4.95/gal).

Power Project Fund (PPF) Loan Program

AEA's Power Project Fund (PPF) offers flexible, low-cost financing for eligible electric power projects. The program supports electric utilities, local governments, regional and village corporations, and independent power producers in developing, expanding, or upgrading power facilities. A wide range of project types qualify.



Outstanding Loans
\$28.5 Million
15 Loans



Uncommitted Cash Balance
\$8.3 Million as of
end of FY2026



Competitive Rates
Current PPF Interest Rate
5.55% as of August 2026



House Bill 307
Offers Reduced Interest Rate
for Loans of \$5 Million or More

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

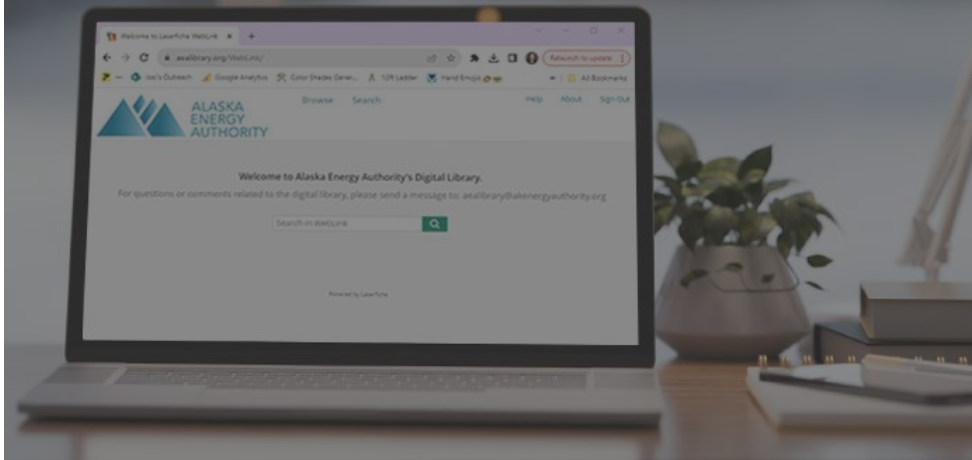
Grid Resilience Formula Grant Program IIJA 40101(d)

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.



OUR TEAM

THANK YOU

AEA's mission is advancing affordable, reliable energy in Alaska.



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