# Railbelt Electric Energy System and Energy Transition

Chugach Electric Association - Arthur Miller Golden Valley Electric Association - John Burns Homer Electric Association - Brad Janorschke Matanuska Electric Association - Tony Izzo





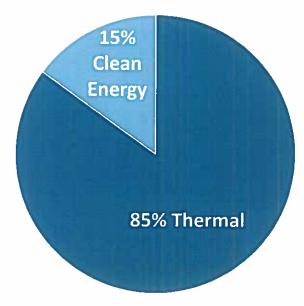




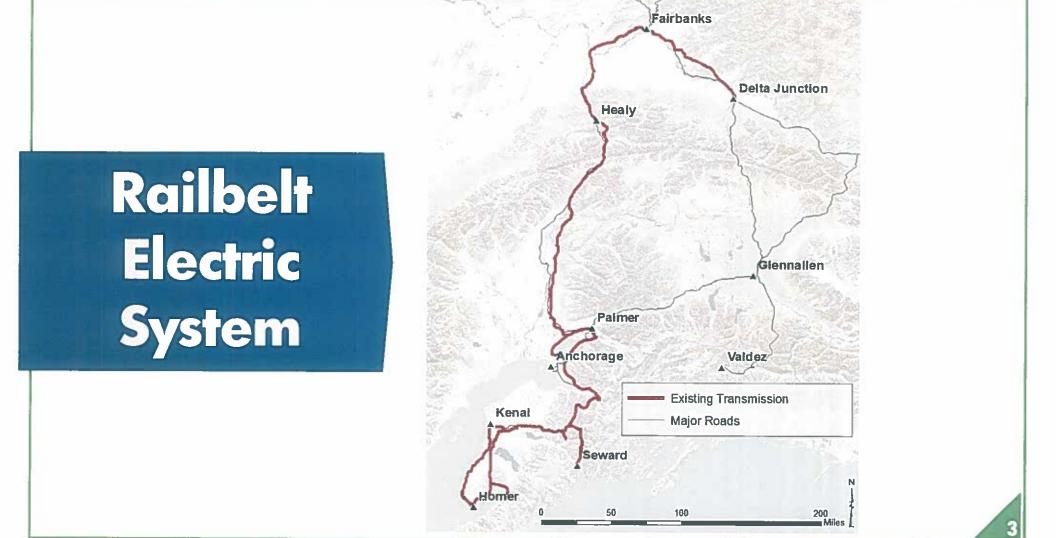
### Railbelt Electric Utilities by the Numbers

#### 4 MEMBER-OWNED ELECTRIC COOPERATIVES • 1 MUNICIPAL UTILTY

- Provides power to more than 75% of the state's population
- Railbelt electric system stretches 700 miles
- Average Cost of Power on Railbelt is low compared to the rest of the state, and is comparable to areas in the Lower-48
- Uses 41% of Cook Inlet Natural Gas



Railbelt Generation
Sources

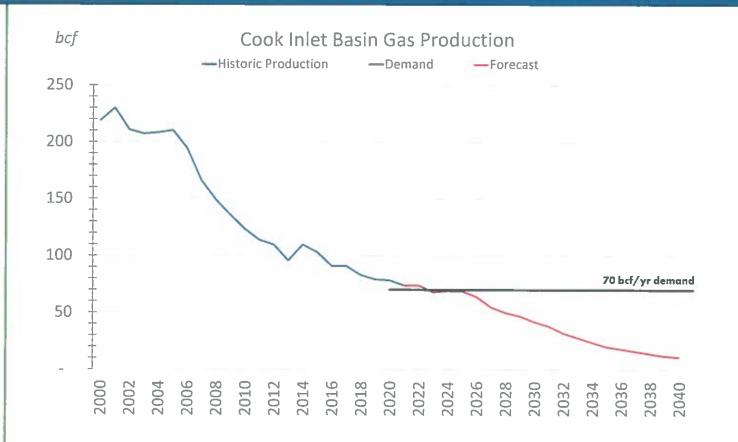




# **Key Elements to Address**

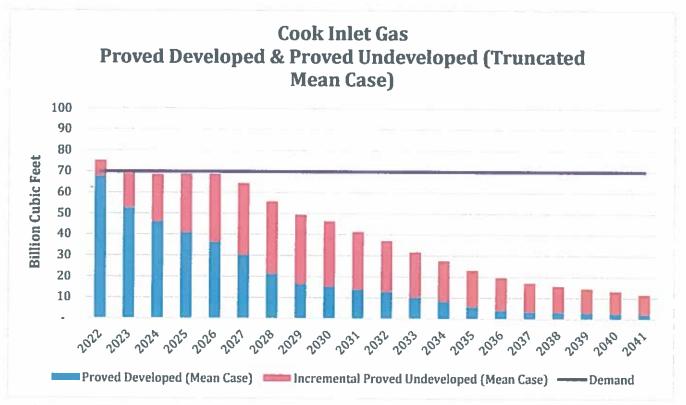
- Natural gas supply
- Diversification and energy security
- Transmission/energy storage infrastructure
- Rate stability

### **Historic Cook Inlet Production**



After 60 years of affordable and reliable supply, current Cook Inlet gas reserves will not meet demand by the end of the decade

### Railbelt Gas Forecast



Source: 2022 Cook Inlet Gas Forecast; State of Alaska, Department of Natural Resources, January 2023.

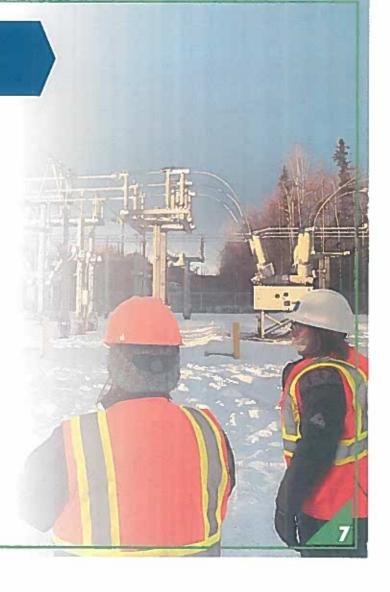
# Options to fill the gap

#### Diversify Railbelt energy portfolio through:

- Pursuing clean energy; when economic
  - ➤ Clean energy includes energy from renewable generation (wind, solar, hydro, etc.) and energy from zero-emissions sources including nuclear and carbon capture
- Exploring natural gas solutions
  - Alaska North Slope gas lines
  - LNG import opportunities

#### The transition will require:

- Energy storage
- Transmission upgrades

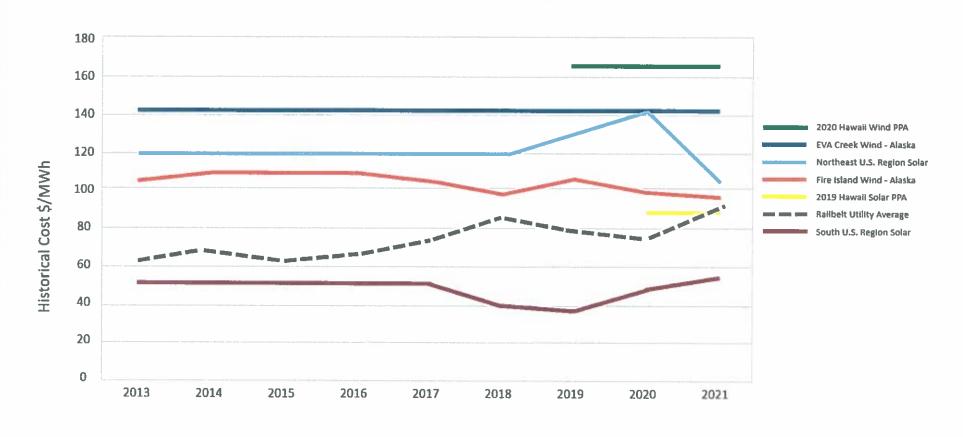


# Railbelt Clean Energy Goals

Focus is on achievable, sustainable energy policy:

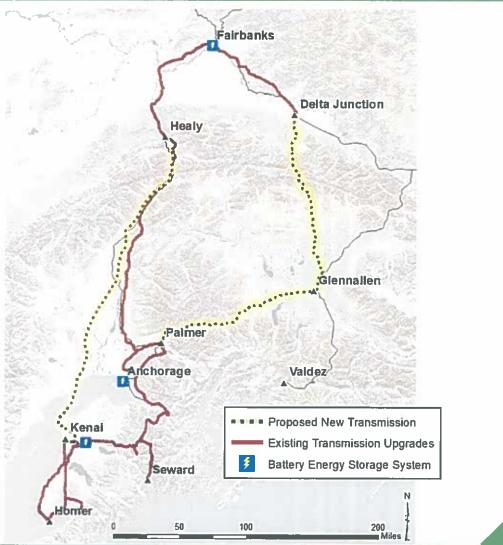
- Diversification of generation sources
- Sensible approach with no adverse impact on rates or reliability
- Fosters and encourages collaboration with stakeholders
- Provides energy security
- Maximizes carbon reductions

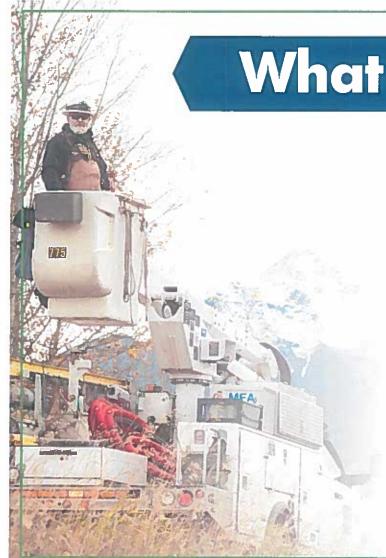
# **Cost Comparison**



# The Railbelt Vision

- **Southern transmission**
- Northern transmission
- Roadbelt transmission
- Energy storage



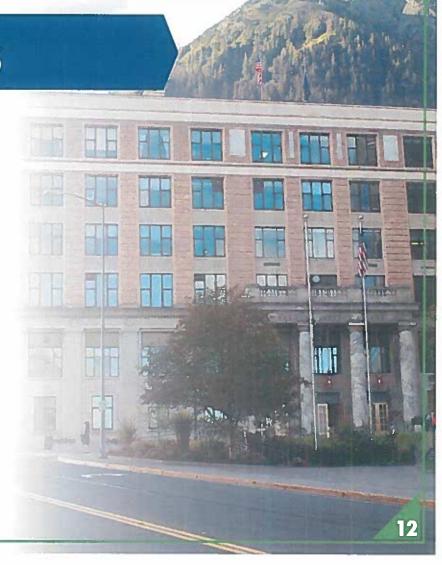


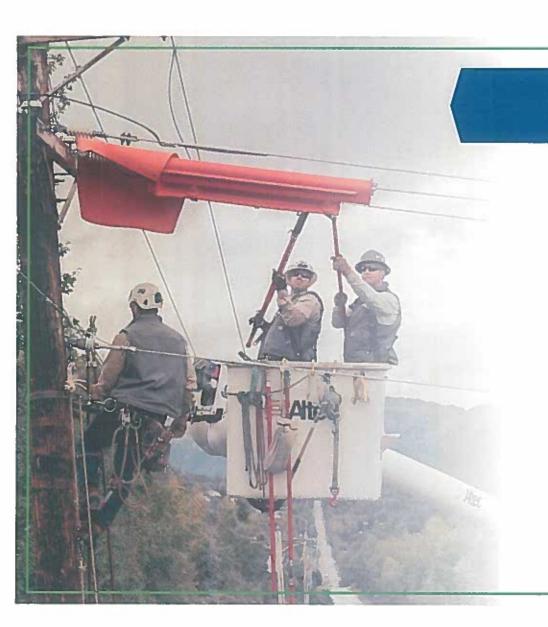
## What the Vision will Achieve

- Increased generation availability and unconstrained dispatch
- Increased clean energy generation, including renewables
- Increased transfer capabilities
- **Economies of scale**
- Supports military's mission in Alaska
- Enables economic development
- Rate stability benefits PCE communities

## Legislative Priorities

- Economic/affordable transition to lower carbon
- Transmission infrastructure/ energy storage
- Leverage state and federal funding
- Reasonably priced long-term in-state supply of natural gas





### **Questions?**

Safe

Reliable

Affordable

Energy for Alaskans