



GOLDEN VALLEY ELECTRIC ASSN.

Golden Valley Electric Association (GVEA) provides electric service to over 45,000 meters (100,000 residents) in Interior Alaska. GVEA's mission is to safely provide members with reliable electric service, quality customer service and innovative energy solutions at fair and reasonable prices. Along with other Railbelt utilities, GVEA is committed to working with legislators to drive down the cost of energy across the state and asks for support in making the Railbelt Vision a reality.

LEGISLATIVE SUPPORT

- 1 Provide \$206.5M in funds to match the Department of Energy GRIP funding to construct a High-Voltage Direct Current (HVDC) submarine transmission line from Nikiski to Beluga and regional energy storage systems.
- 2 Commit to future funding the second phase of the HVDC transmission line extension from Beluga to Healy, creating a high-capacity, redundant Railbelt transmission corridor.
- 3 Passage of enabling legislation to authorize Alaska Energy Authority to work with Railbelt utilities to create a unified Railbelt transmission system operator.
- 4 Commit to future funding to upgrade and enhance capacity of existing Railbelt transmission backbone.
- 5 Support the responsible transition to clean energy technologies (including renewable generation) with no impact on reliability and/or a material negative impact on electric rates.
- 6 Support Railbelt Utility efforts in securing a long-term, reliable source of natural gas in a manner that supports the transition to clean energy technologies, including renewable generation.

ONGOING INITIATIVES

1 The Railbelt Vision

- Transmission Upgrades and Redundancy
- Strategically Located Energy Storage
- Generation Diversity

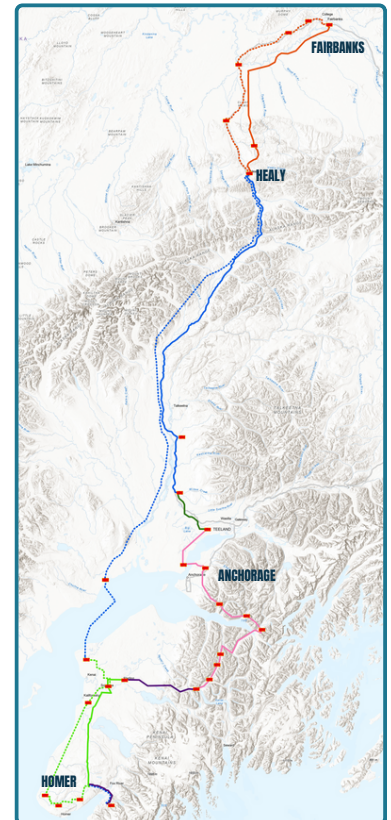
2 Wind Integration

- Negotiating potential Power Purchase Agreements (PPA) with two entities intending to construct large-scale wind farms.
- Submitted a letter of interest under the Empowering Rural America (New ERA) program:
 - 150MW/300MWh Li-ion BESS to allow the integration of large-scale wind (up to 150 MW) into GVEA's system.
 - Constructing a 138kV system and associated substations to interconnect the proposed wind projects.
 - Refinancing the debt associated with Healy Unit 2 after its retirement at 0% interest and reinvesting the loan interest savings achieved.

3 Battery Energy Storage / LDES

- Battery Energy Storage System (BESS) needed to economically integrate large-scale wind
- Formal application submitted under the Powering Affordable Clean Energy (PACE) program for:
 - A 46MW/92MWh Li-ion BESS
 - A power purchase agreement with a 16MW solar facility to be installed in Nenana
 - Upgrades to the Nenana Substation and infrastructure to interconnect the solar facility
- Long-Duration Energy Storage
 - GVEA/Westinghouse were awarded a \$50M grant through DOE's Office of Clean Energy Demonstrations. The project utilizes long-duration energy storage technology, which is potentially capable of providing 100MW / 12-hour energy storage to help regulate the integration of renewable energy on the Railbelt.

Ultimate Objective: Ensure that the lowest cost electron can be transmitted from wherever it is generated to wherever it is needed on the Railbelt, unconstrained.



GVEA'S POSITION ON EXISTING PROPOSED LEGISLATION

- GVEA is in **support** of HB 227 (Electric Utility Liability) and SB 196 (Employer Drug and Alcohol Testing).
- As currently drafted, GVEA is **opposed** to HB 121 / SB 101 (Renewable Portfolio Standard), SB 152 (Community Energy Facilities; Net Metering) and HB 256 (Electric Utility Plant/Facility Closures).

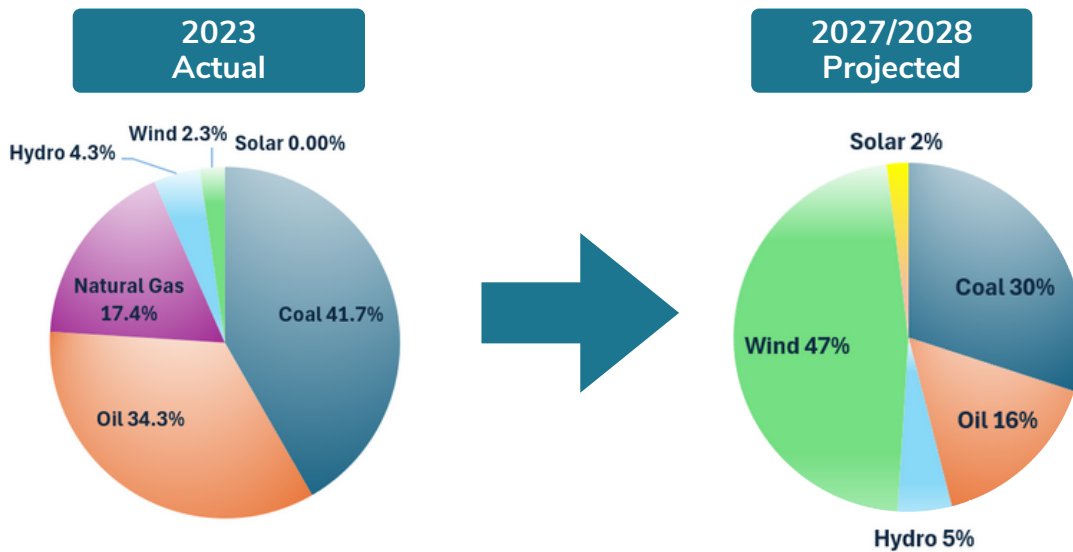
STRATEGIC GENERATION PLAN

In 2022, GVEA issued a Strategic Generation Plan (SGP) with the primary goal of providing long-term rate stability, lower rates and a reduction in carbon emissions, all without negatively impacting reliability. The SGP consists of five components:

- 1 Install a selective catalytic reduction (SCR) system on Healy Unit 1.
- 2 Develop a comprehensive plan for the systematic retirement of Healy Unit 2.
- 3 Integrate large scale wind into GVEA's system.
- 4 Purchase and install a new Battery Energy Storage System (BESS).
- 5 Secure a PPA for 30-50 MW of alternative energy.

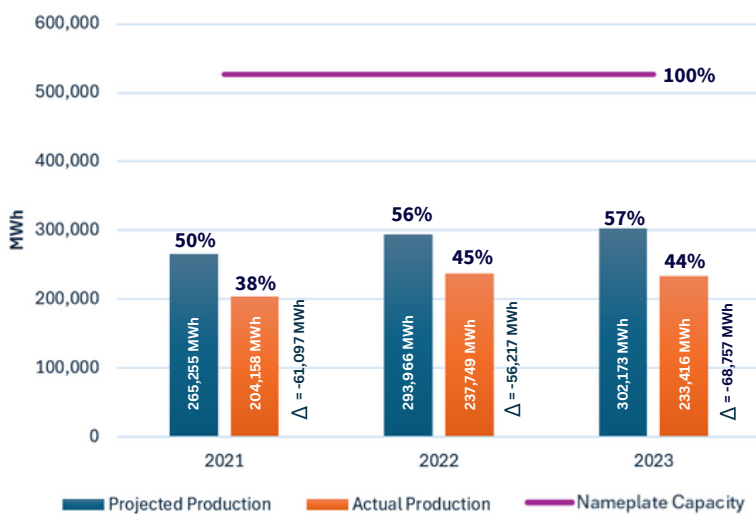
POWER GENERATION MIX

Current to projected generation based on successful SGP implementation.



HEALY UNIT 2 DATA

Healy Unit 2 Yearly kWh Production



GVEA COPA Estimates vs. Actual

