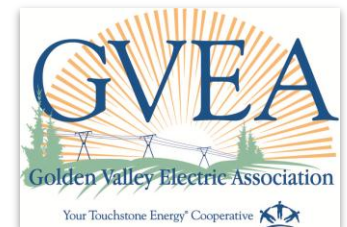


GOLDEN VALLEY ELECTRIC ASSN. **INTERIOR ENERGY ISSUES**



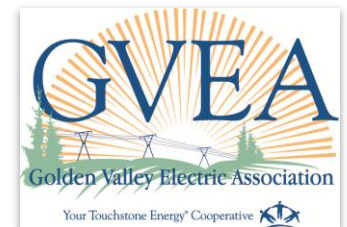
Cory Borgeson
GVEA President & CEO

February 1, 2013



GVEA at a Glance

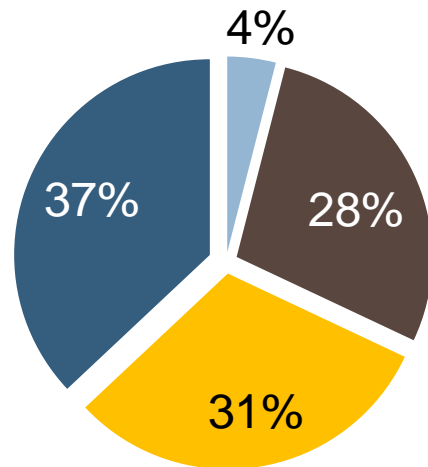
- Owned by 34,480 members
- 5,973 square mile service territory
- 99.97 percent reliability during 2012
 - Average member experienced less than 2.5 hours without power
- Generation capacity: 291(296) MW
- Anticipated wind generation:
78,840 MWh per year
- 2012 peak load 217.6 MW
- Annual sales: 1.33 billion kWh



Where the Power Comes From

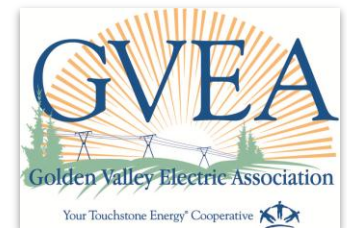
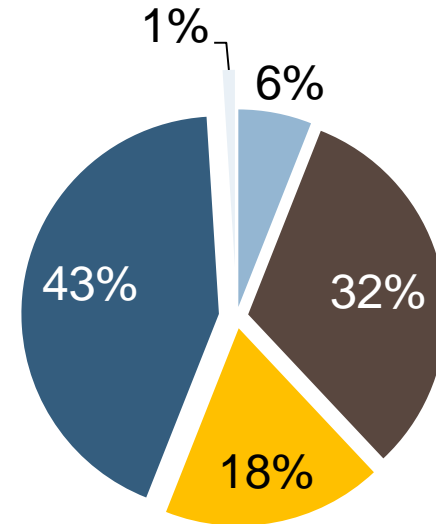
GVEA Fuel Supply

2011



■ Hydro
■ Coal
■ Natural Gas
■ Oil
■ Wind

2012



Alaska Residential Electric Rates*

- Fairbanks (GVEA): 20¢
- Minto (Alaska Village Electric):
 - 22¢ (with state assistance)
 - 61¢ (without assistance)
- Glennallen (Copper Valley Electric): 33¢
- Homer (Homer Electric Assn.): 16¢
- Anchorage (Chugach Electric): 13¢

*Rates are per kilowatt-hour and do not include monthly customer charges.

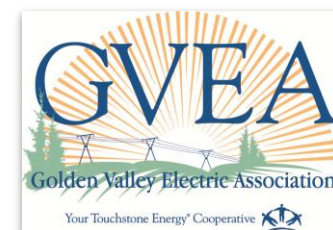


Alaska Urban Space Heating Costs

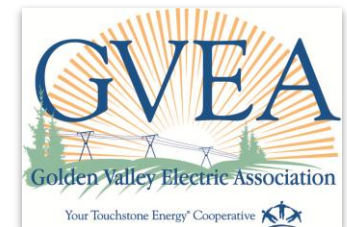
Simplified Fuel Cost Comparison: Fuel Oil, Propane, Natural Gas

Location, Tariff, System	Fuel Oil, \$/gallon	Propane, \$/gallon	Natural Gas, \$/MCF
	1.00	1.12	7.96
Anchorage June 2012	1.38	1.54	11.00
	2.00	2.24	15.92
	3.00	3.35	23.88
Fairbanks, June 2012	4.00	4.47	31.84
	5.00	5.59	39.80
	6.00	6.71	47.76
	7.00	7.83	55.72

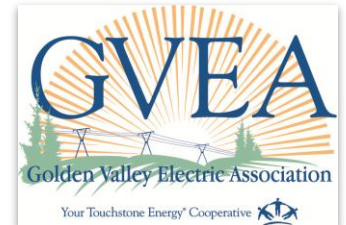
Source: Northern Economics.



Impacts to Our Community



Generation Facilities



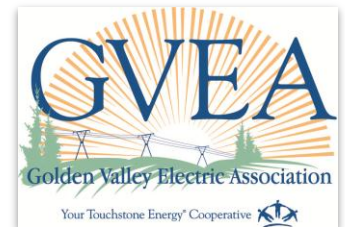
Bradley Lake (hydro) – 15 MW



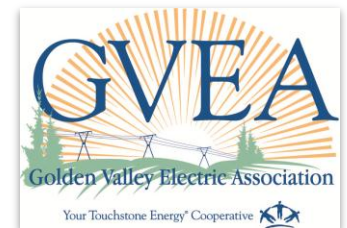
Healy Power Plant (coal) – 28 MW



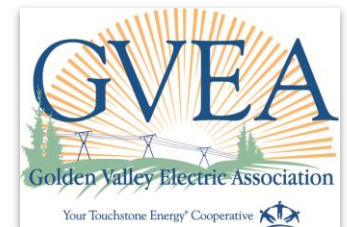
Eva Creek Wind (25MW) – 78,840 MWh/year anticipated generation



Zehnder Power Plant (diesel) – 41 MW



North Pole Power Plant (diesel or HAGO) – 120 MW



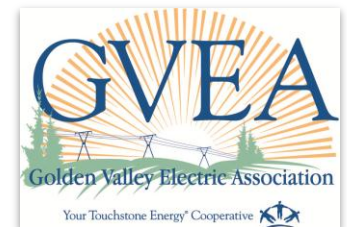
North Pole Expansion Power Plant (naphtha or natural gas) - 60 MW



Delta Power Plant (diesel) – 27 MW



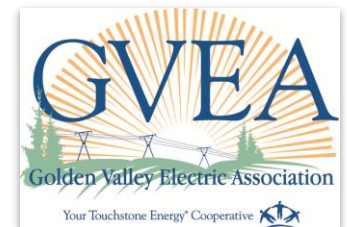
Power Purchases



Chugach/MEA (natural gas) – 60 MW (intertie limited to 75/80 MW)



Aurora Energy (coal) – 25 MW



Dispatching Power



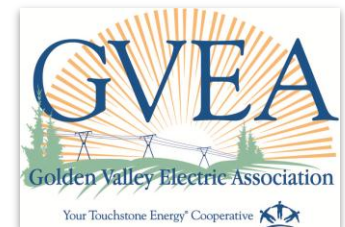
Electric Costs at GVEA

- Fuel & Purchased Power Charge:
10.802¢ kWh
- Utility Charge: 9.597¢ kWh
- Customer Charge: \$17.50
- <http://www.gvea.com/rates/rates>



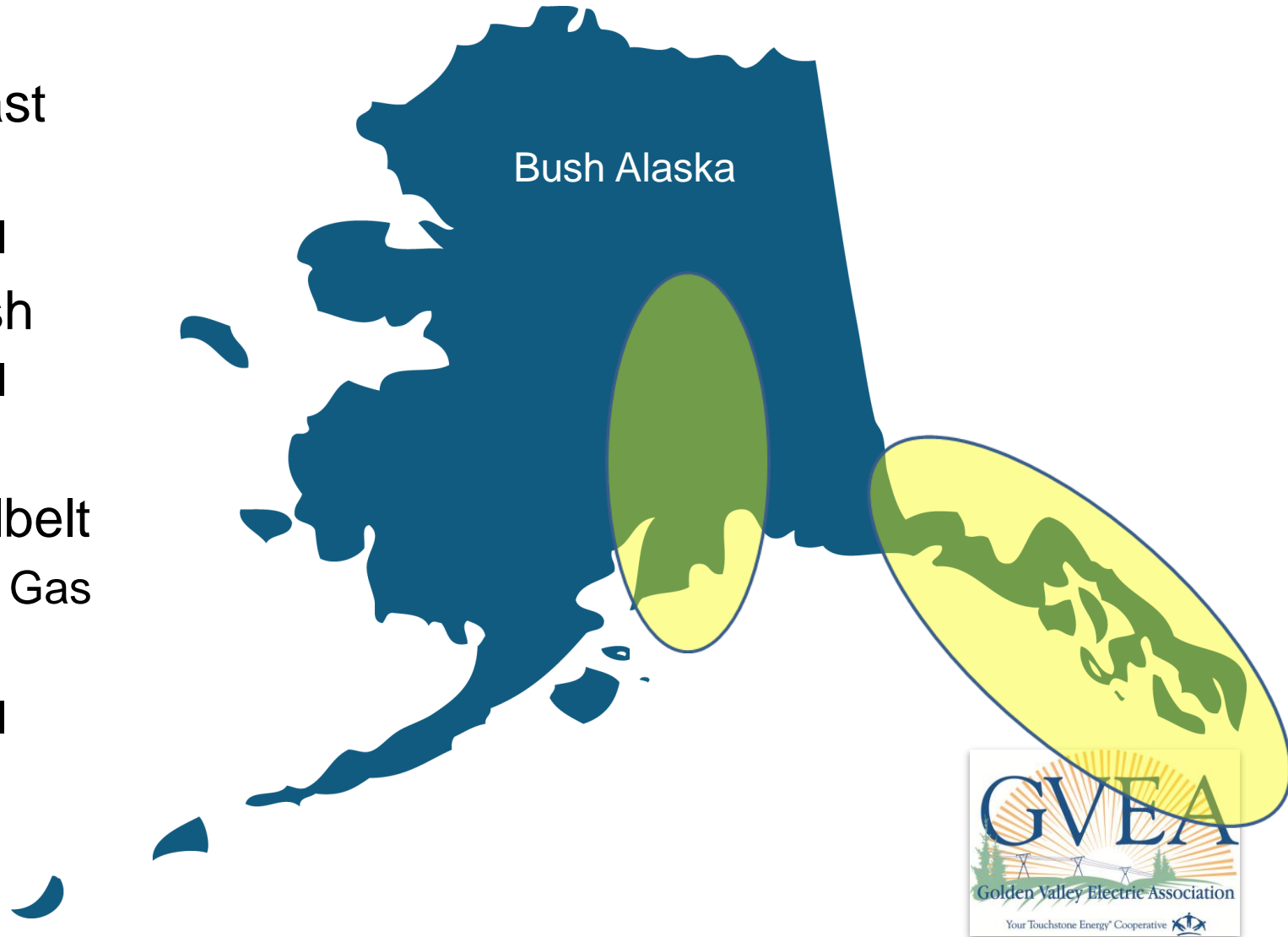
Solutions

- Gas purchases via Intertie
- Healy Clean Coal Plant
- LNG Trucking
- Susitna Hydro
- HVDC Transmission
- Conservation – Power to Use Less



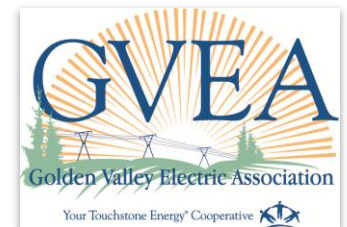
Generation Sources

- Southeast
 - Hydro
 - Fuel Oil
- The Bush
 - Fuel Oil
 - Wind
- The Railbelt
 - Natural Gas
 - Hydro
 - Fuel Oil
 - Coal

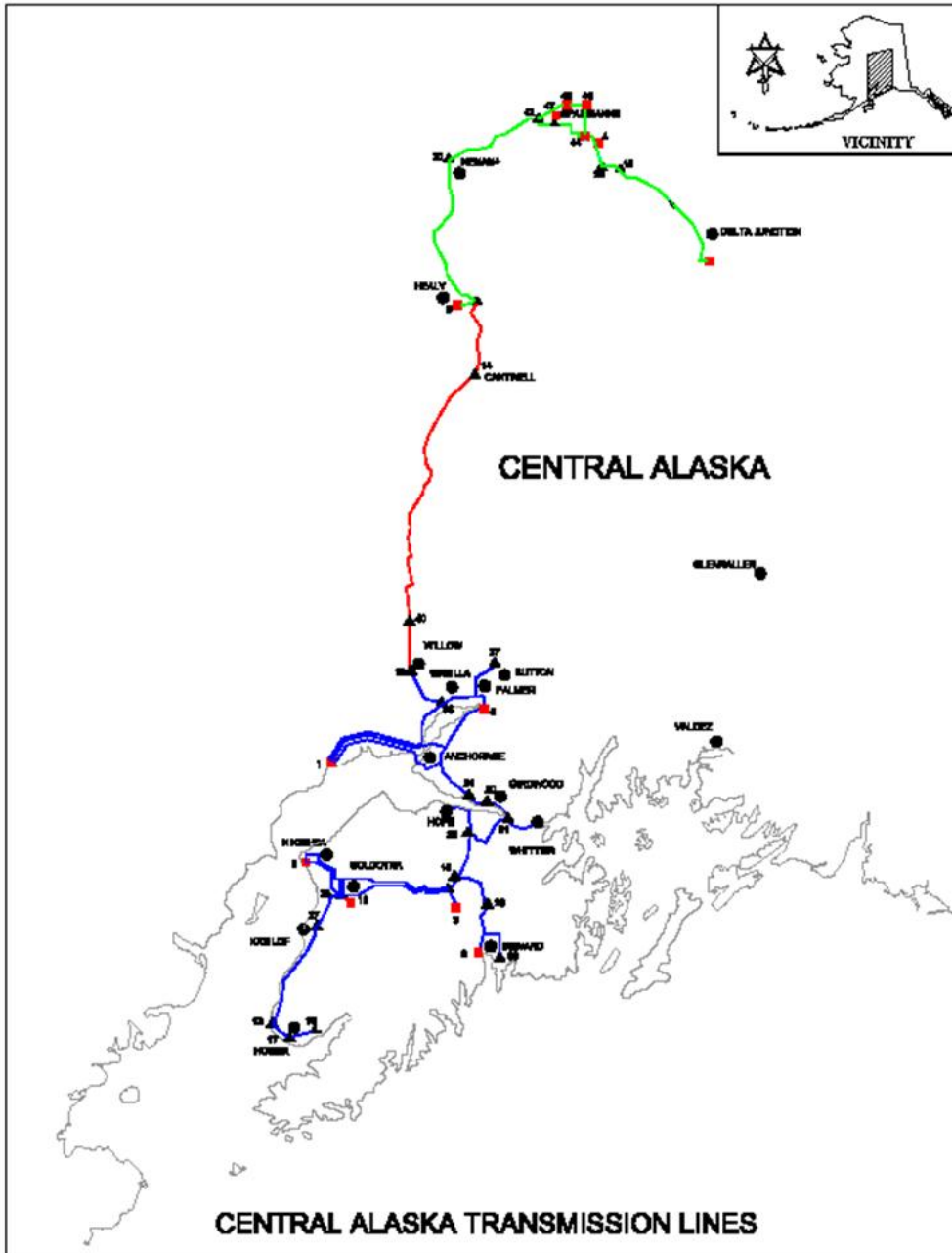


Railbelt Electric Overview

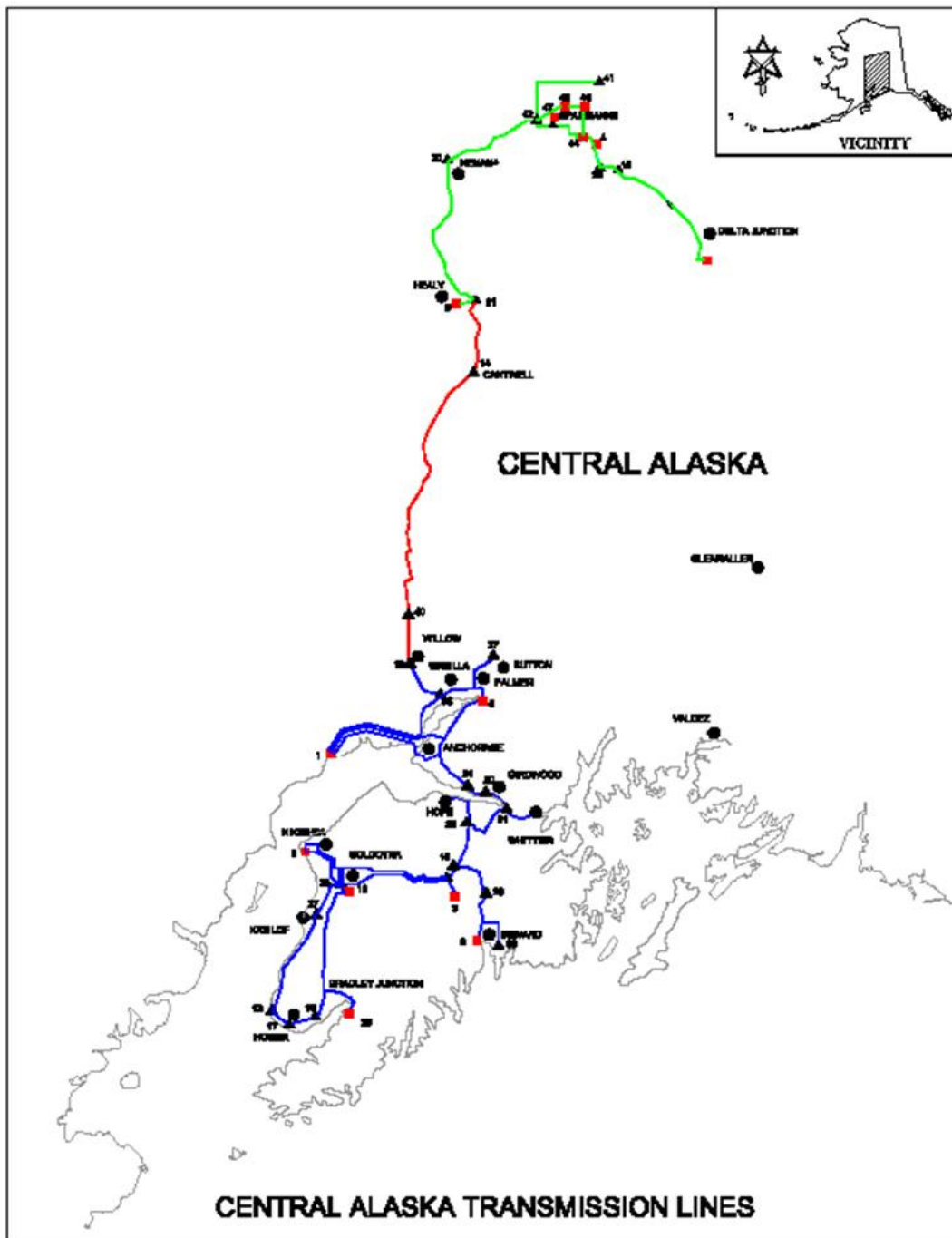
- Six distribution utilities
- Interconnection from Homer to Fairbanks
- Three primary generating utilities
- Collection of small, dispersed generating units
- Independent operation – modified Lower-48 operating rules for Alaska Intertie



Railbelt – 1980s

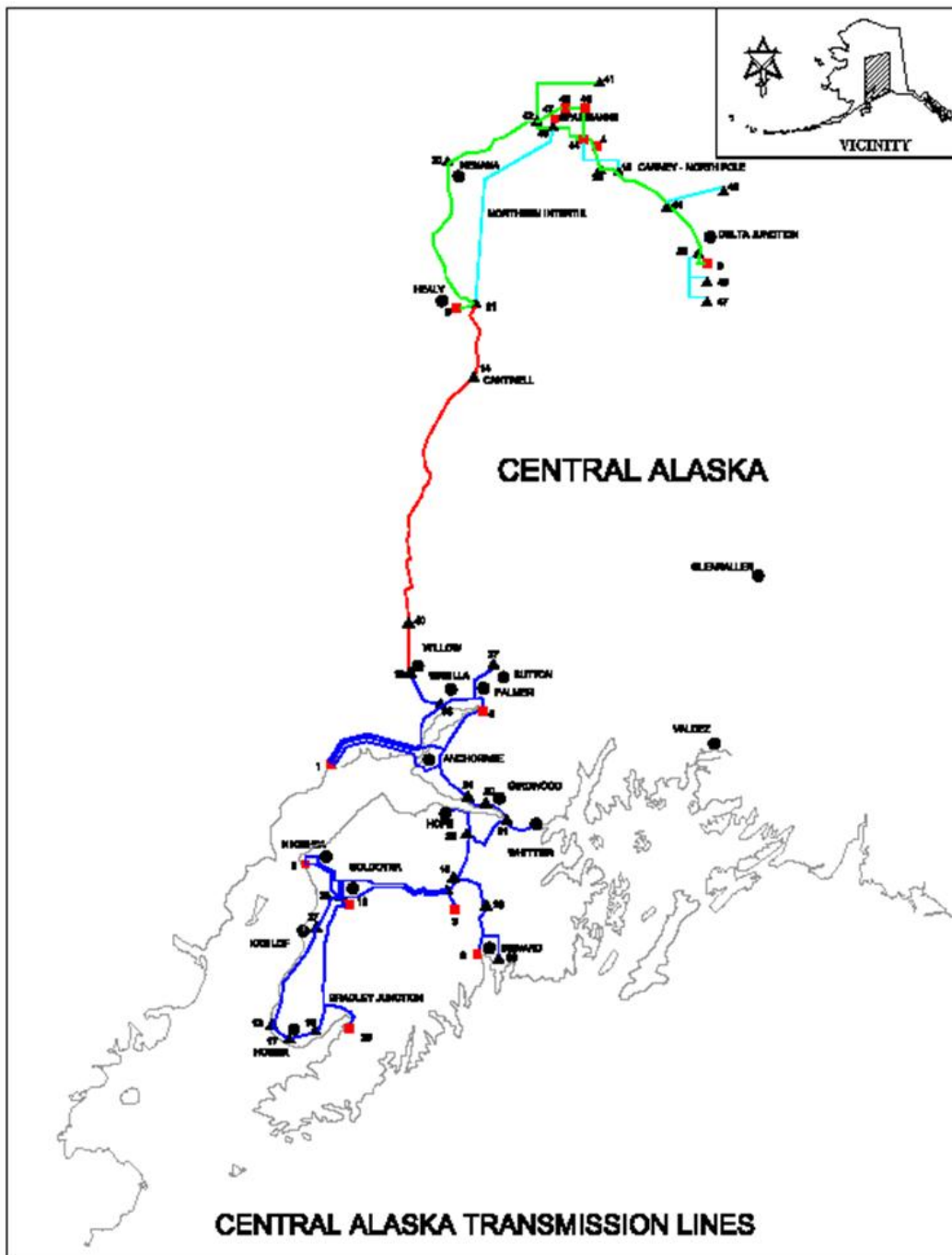


- Alaska Intertie Built
- Alaska Intertie Agreement
- Soldotna Unit #1



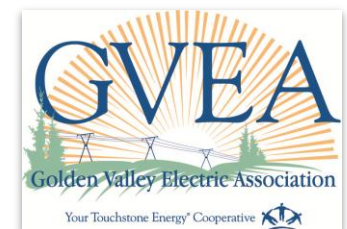
Railbelt –1990s

- Bradley Lake Hydro
- Bradley Transmission Lines



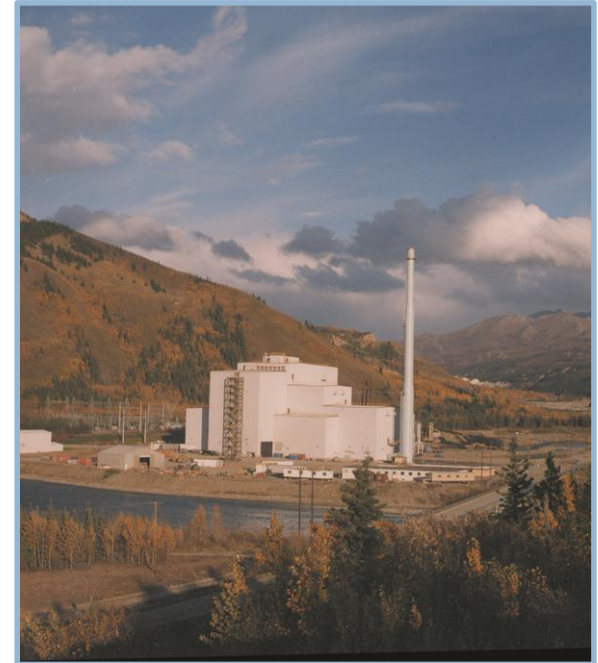
Railbelt - 2000s

- Northern Intertie
- Battery Energy Storage System

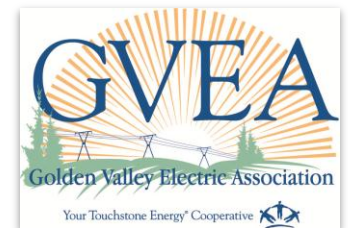


Healy Clean Coal Plant Update

- 50 MW plant adjacent to Healy I
- Air permit approved in November 2012
- Expect to take possession of plant in 2013
- Estimated online in 2015



Questions



Power to Use Less Ads

the power to use less

Smart Strips give YOU the power to use less.

Receive up to two Smart Strips with your Home Energy Audit.

Sign up today.

www.gvea.com/audit



The image shows a white Smart Strip power strip with a coiled cord. The strip has multiple outlets and a digital display. The GVEA logo is visible in the bottom right corner of the advertisement.



Power to Use Less Ads



The advertisement is a black and white image. On the left, the text 'the power to use less' is written vertically, with a power button icon replacing the letter 'o' in 'power'. In the center, a vehicle plug-in timer is shown plugged into a wall outlet. The timer has a digital display and a dial. To the right of the timer, the text reads: 'Vehicle plug-in timers give YOU the power to use less.', 'Receive one – installed – with your Home Energy Audit.', and 'Sign up today.' Below this text is the website 'www.gvea.com/audit'. At the bottom right is the GVEA logo, which includes the text 'GVEA' and 'Golden Valley Electric Association'.

the power to use less

Vehicle plug-in timers
give YOU the power to
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GVEA
Golden Valley Electric Association

