

GOLDEN VALLEY ELECTRIC ASSN. UNDERSTANDING ENERGY IN THE INTERIOR



John Burns

GVEA Vice President & General Counsel

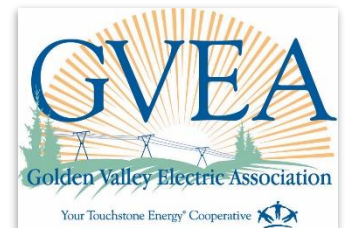
March 6, 2018

House Energy Committee



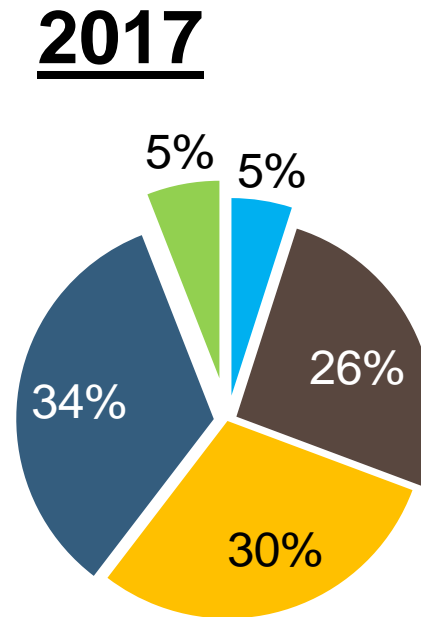
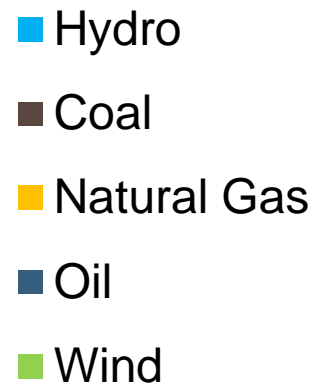
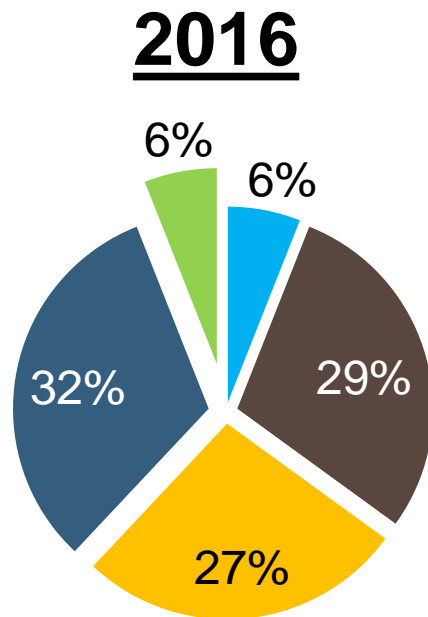
GVEA at a Glance

- Owned by 34,837 members
- Serving nearly 100,000 residents
 - 5,973 square miles
 - 3,229 miles of power lines
 - Fairbanks, Delta Junction, Nenana, Healy, Denali Park, Cantwell
- 2017 Retail Sales: 1.24 billion kWh
- 381 MW Generation Capacity



Where Our Power Comes From

GVEA Fuel Supply



GVEA Generation



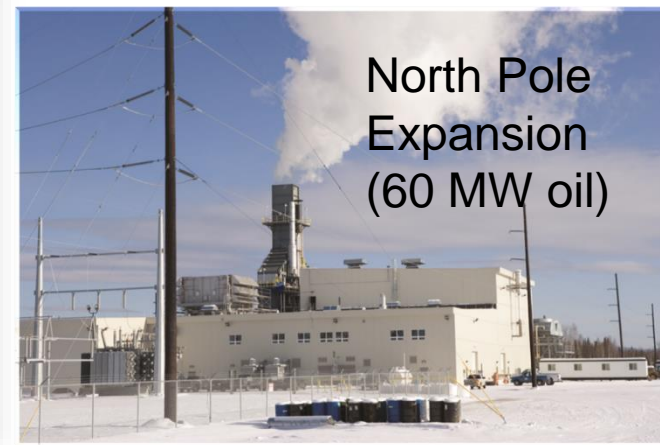
Healy Unit 1 & 2
(28 & 50 MW coal)



Eva Creek
Wind – 25 MW



Fairbanks
(41 MW oil)

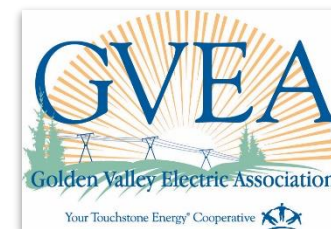


North Pole
Expansion
(60 MW oil)

North Pole
(120 MW oil)



Delta (27 MW oil)



Independent Power Producers (IPP)



Delta Wind



Bradley Lake Hydro



Aurora Energy

IPPs can connect to GVEA's system – following RCA & Tariff guidelines in place...

- **Small** (2 MW or less) use a simplified streamlined process
- **Large** (greater than 2 MW) use Interconnect Agreements

GVEA Supports Renewable Power



SNAP Renewable Energy Producers

199 producers (96% solar & 3% wind & 1% cogen)



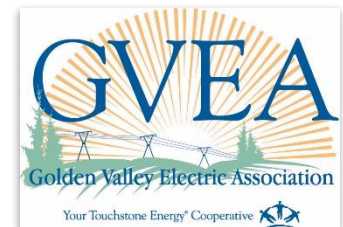
Eva Creek Wind - 5 Years of Success

12 turbines

24.6 MW capacity

GVEA's Renewable Energy Pledge

- 2005 Established Goal: 10% of system peak load
- 2007 Met 10% goal & increased to 20%
- 2014 Met 20% goal & now reviewing



GVEA's *NEW* Solar Project

563 kW solar PV
System

Online: Oct. 2018

Footprint: 3 acres

Contractor: ABS
Alaskan, Inc.

Cost: \$850,000 after
\$225,000 Grant,
USDA "REAP"

Largest solar array in
Alaska



*GVEA property next to BESS &
Wilson Sub. - visible from
Van Horn Rd.*

Power Purchases

25 MW Aurora Energy (coal) - IPP



60 MW Chugach / ML&P / MEA
(natural gas)

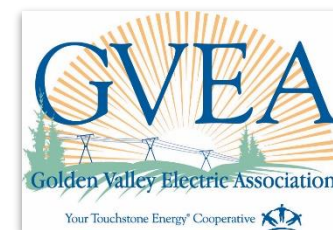
Intertie limited to 75 / 80 MW



Residential kWh Rate Comparison*

<i>kWh Rate</i>	<i>Provider</i>	<i>600 kWh Bill Amt</i>
• 17.3¢	ML&P Anchorage	\$110.26
• 18.6¢	CEA Anchorage	\$119.86
• 19.5¢	MEA Wasilla	\$129.75
• 21.6¢	Seward winter	\$150.82
• 22.0¢	HEA Homer	\$150.20
• 22.8¢	GVEA Fairbanks	\$155.10
• 28.3¢	CVEA Valdez	\$181.68
• 29.7¢	CVEA Glennallen	\$190.20
• 33.0¢	Seward summer	\$219.36

*Effective March 3, 2018

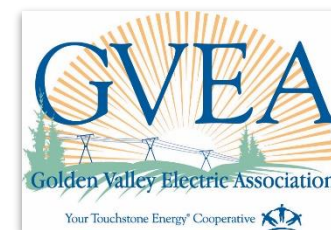


Dispatching Power...by the minute



The Future Looks Bright

- New Load with Clear Air Force Station
- Additional demand associated with the F-35's at Eielson
- Addition of Renewable Energy Sources
- \$7.2 Million Capital Credits Refund

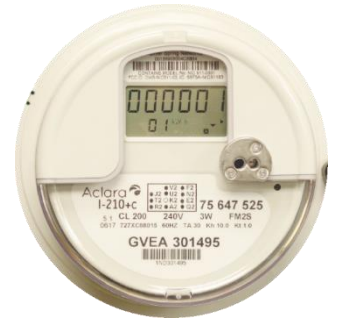


GVEA's Rate Case Successfully Completed

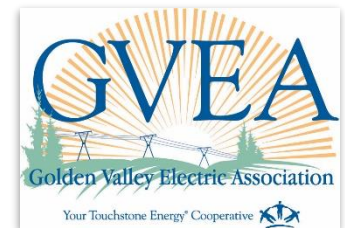
- GVEA's last electric rate study was submitted to the Regulatory Commission of Alaska (RCA) in 2008.
- Dec. 2016 - GVEA filed rate study with RCA. GVEA asked for an annual revenue reduction by about 1.3% or \$3 million.
- Nov. 27, 2017 – RCA issued an order approving rates effective when Healy 2 is online



Meter Replacement Project

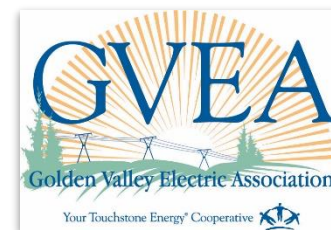


- Advanced Metering Infrastructure (AMI)
- Improves system reliability
- Faster response time to outages & more precise info
- Continue our commitment to minimize costs for our members
- 1,300 meters installed Sept. to Nov. 2017
- 45,000+ meters will be installed April to Oct. 2018
- Member access to usage data via online member portal when all meters are installed



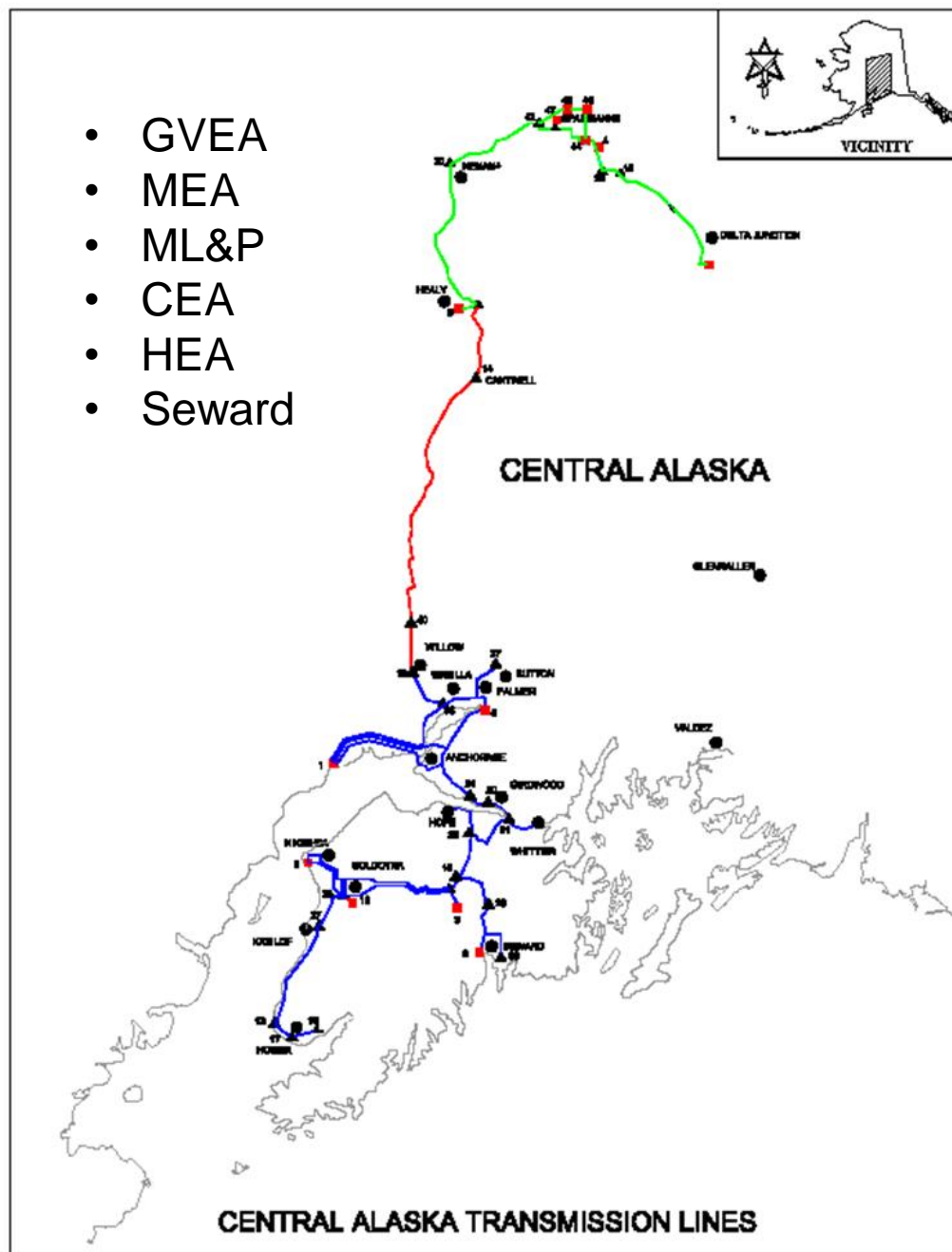
\$7.2 Million Refunded in Capital Credits

- GVEA is a member-owned, not-for-profit cooperative
- Margins at end of year are allocated back to the members – capital credits
- The current disbursement of capital credits consists of:
 - 1992 and earlier: 100% payout - \$2.4M
 - 2016: 25% payout - \$4.8M



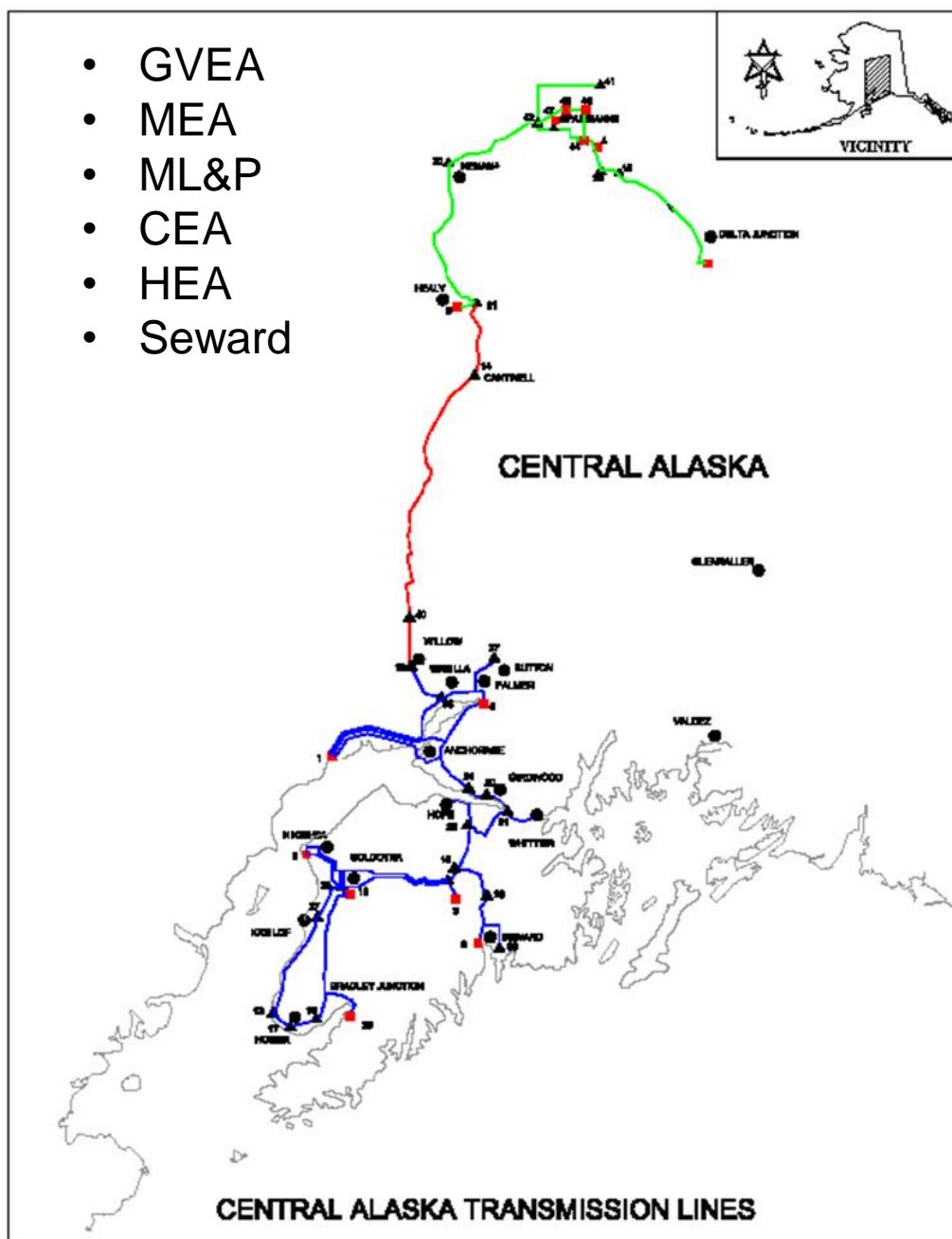
Alaska Railbelt – 1980s

- GVEA
- MEA
- ML&P
- CEA
- HEA
- Seward



- Alaska Intertie Built
- Alaska Intertie Agreement

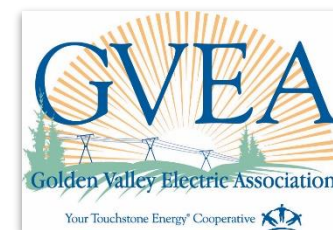
- GVEA
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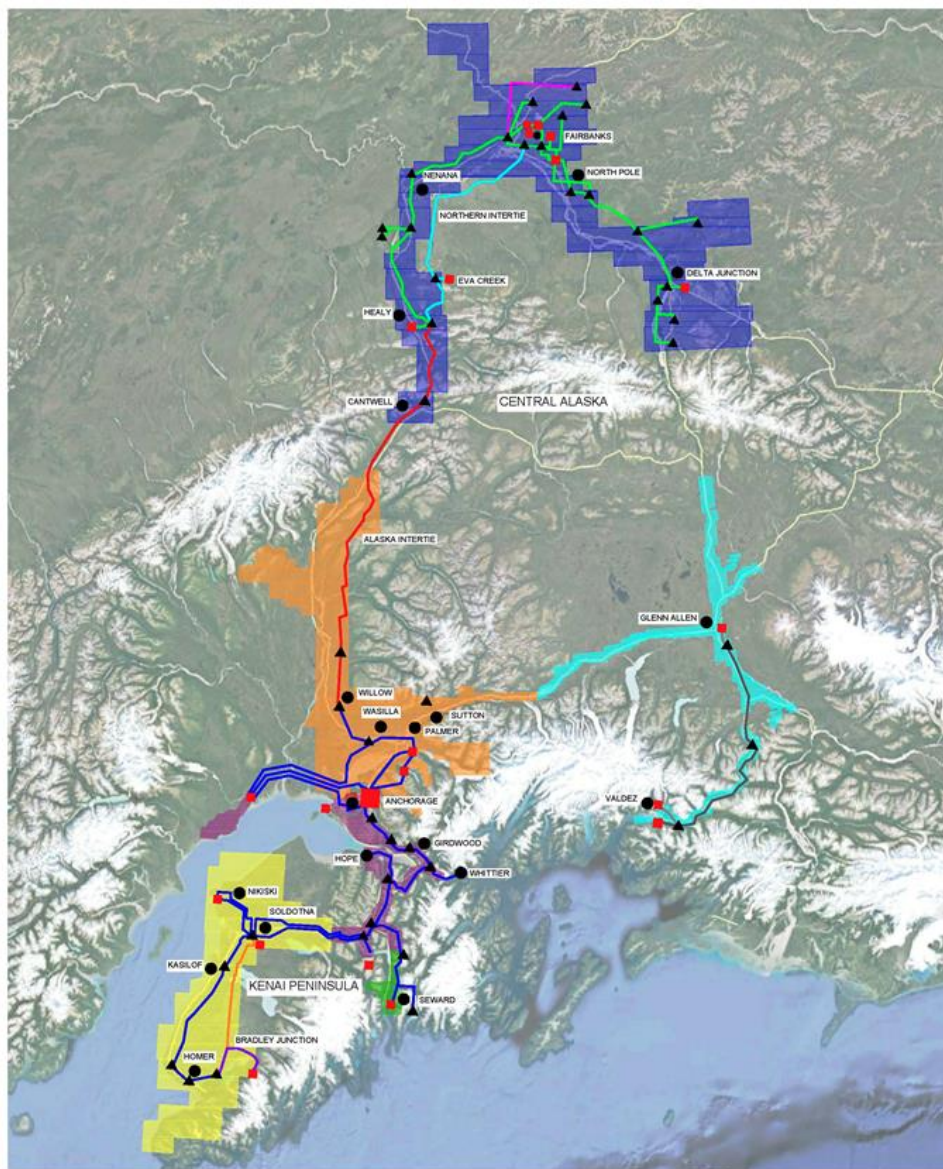


Alaska Railbelt –1990s

Added.....

- Bradley Lake Hydro
- Bradley
Transmission Lines
- Ft. Knox Gold Mine



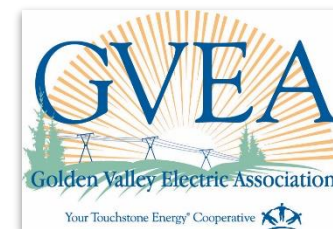


Railbelt Today - - 2000s

Added...

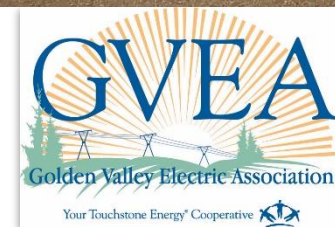
- Northern Intertie
- Battery Energy Storage System (BESS)
- Ground Based Missile Defense
- Alyeska Pump #9
- Pogo Gold Mine
- North Pole to Carney Transmission Line
- Clear AFB

GVEA ♦ MEA ♦ ML&P ♦ CEA ♦ HEA ♦ Seward



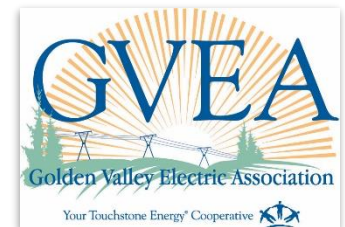


Railbelt Utilities - Year of Unity



Alaska Railbelt Update

- The Railbelt utilities continue to work on a voluntary basis towards:
 - A power pooling agreement
 - The formation of a Railbelt transmission company
- 2018 Goals:
 - Utilities file CPCN application & proposed tariffs w/ RCA
 - RCA ruling approving Transco CPCN filing



Questions?

