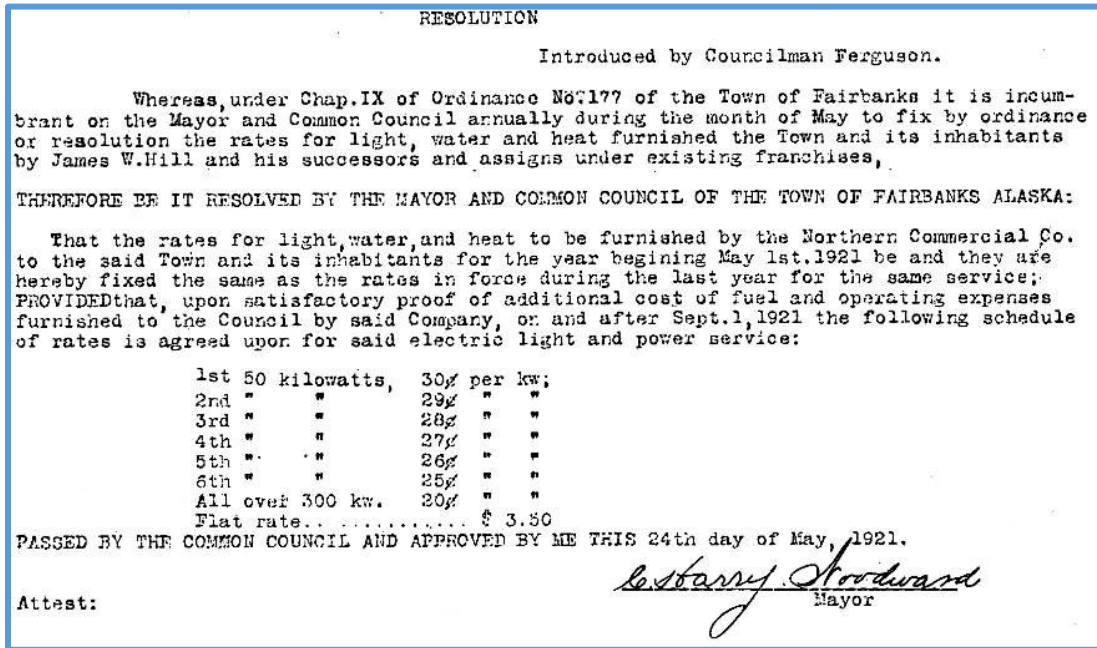


## A Brief History Golden Valley Electric Association Generation as of 2018

Electricity and heat in the early days was all wood. Cost per kwh in 1921 started at 30 cent/kwh. Town Council of Fairbanks franchised power production to the Northern Commercial Company.



The completion of the Alaska Railroad from Talkeetna to Fairbanks in 1923 opened up access to Healy coal. Later than decade, the FE Company installed a 2.1 mw coal plant where GVEA corporate campus now exists to power their gold dredges spread around the valleys around Fairbanks.

After WW II, there was an influx of new residents, many retired military and erstwhile farmers that wanted electricity outside the relatively urbanized town. GVEA was formed as a not-for-profit electrical cooperative, IRS 501(c)12 in 1946 by a group of these rural residents. They ended up buying the FE power plant that suffered a final end with the 1967 flood. The now City of Fairbanks built the [FMUS coal fired power plant](#) starting in 1951 with a total of 5 increasing larger sized generations which was sold to Usibelli's Aurora Energy. GVEA buys power from Aurora under contract ending in 2030.

GVEA looked toward additional generation in the late 1950's. GE and nuclear, then Healy 1.

Further expansion with downtown diesel GE Frame 5's Zehnder 1970

1976, 1977 Pipeline emergency supply with diesel GE Frame 7s in N.P.

Additional co-gen plant in N.P. GE LM6000, now using naptha produced by the adjacent Petrostar refinery.

Intertie transmission Willow to Healy, Railbelt Energy Fund during big buck days, trying to get ready for Susitna. Allows for economy natural gas fired energy from South Central Utilities and GVEA's share of Bradley Hydro power.

BESS 2005 to address intertie outages. Not designed to regulate renewable

GVEA 24 mw windfarm in 2013 at Eva Creek near Healy with a great interest rate and some subsidy, total \$83 mm. It's had issues after the company went bankrupt in 2019 and essentially abandoned us. Not a risk GVEA anticipated and now trying learn how to operate a wind farm.

Bradley Lake hydro, implemented in 1991, approved by Legislature by just one vote. 230 mw, largest in Alaska. GVEA gets a proportional share with the other Railbelt utilities. \$328 mm to construct, 50% paid from bonds that the utilities have paid back and 50% out of the general fund. That 50% the utilities are still paying back over time. Through another bond issue 2 years ago, the Bradley Lake Management Committee had been slowly using that \$167 mm to benefit the entire Railbelt with improved transmission and battery storage.