

# Back in the day...

## Almost no transmission in Alaska

- ▶ Chugach electric owned a line (built in 1968) from the Beluga gas field to Anchorage
- ▶ Subsidized natural gas heated and lit South Central
- ▶ Fairbanks relied on local heavy oil and coal
- ▶ Diesel fuel was the primary energy source elsewhere

## Very little hydropower

- ▶ Eklutna – 30 mw, serving ML&P, MEA, CEA
- ▶ Cooper Lake – 20 mw, serving CEA
- ▶ Snettisham – 52 mw, serving Juneau
- ▶ ~20 mw of small projects scattered throughout SE Alaska

# Then we had Oil - 1977

The State began to spend its newfound wealth

- A transmission line to Fairbanks was started
- The Susitna mega-project design was started
- The Bradley Lake project was started
- Kodiak, Valdez, Ketchikan, Wrangell and Petersburg began work on 4 hydro-projects
- Studies were commissioned to identify projects to reduce the cost of electricity throughout Alaska

# Power Cost Assistance Programs

- 1980 - Power Production Cost Assistance Program
- 1981- Power Cost Assistance Program, designed to self-extinguish in five years
- 1984 – Power Cost Equalization
  - Utilities that used diesel for 75% of power in 1983
  - Cost of power equalized to the average of Anchorage, Fairbanks and Juneau – 8.5 cents/kwh
  - Costs above 52.5 cents were not covered
  - All users were eligible for the first 750 kWh used
  - Community Facilities get PCE on all kWh used

# Why are we subsidizing Rural Alaska?

- This was the compromise reached in 1984, when the Legislature recognized that there was no answer to bring affordable power to rural Alaska
- Billions of dollars were spent or committed to reduce power costs for urban Alaska and communities fortunate to have hydropower
- Railbelt communities continue to benefit from heavily subsidized natural gas since 1968.
- In 1985, PCE utilities paid \$1.17/gallon of diesel – 25x the cost of Railbelt gas at \$0.35/mcf

# The PCE Endowment Fund

- Established in FY2000 via HB446
  - **After 15 years of underfunding PCE (FY92 – FY07)**
- Invested to achieve 7% return
- \$100 M from CBR in FY01
- \$84 M from sale of 4 Dam Pool hydros in FY02
- \$182.7 M in FY07
- \$400 M in FY12
- Value as of 10/31/20 \$1.06 B
- Revised target of 5% return in FY16
  - After PCE, returns fund Municipal Assistance, Renewable Energy Grants

# How does PCE work?

- Utility applies to RCA to participate
- Utility submits detailed cost and operational data
- RCA determines eligible costs and computes PCE
- Utility bills customers per normal tariff rates
- Utility applies PCE credit based upon actual consumption (subject to kWh limit)
- Consumer is responsible to pay bill after PCE credit
- Utility bills State (AEA) for all PCE credited
- Utility provides AEA with detailed billing records
- Utility files annual update of costs with RCA

# Between 1985 and 2020

- The floor is up 143% to 20.63 cents
- The ceiling was raised from 52.5 cents to \$1.00
- Eligible electricity has been reduced 1/3 to 500 kwh
- 6,000+ commercial customers no longer get PCE
- Fuel cost up 127% but efficiency is also up 32%
  - Fuel cost per kWh went from \$.1033 - \$.1914
- Non-fuel costs per kWh are up 34%
  - \$.141 in '85 to \$.189 in '19
- PCE cost in FY86 \$17.8 million
- PCE cost in FY19 \$28.4 million

# Program Changes since FY86

	FY86	FY19
Alaskans served (000s)	62	82
Total Sales (gWh)	225	454
Eligible Sales	108	130
Percentage eligible	48%	29%
Fuel Cost/gallon	\$1.17	\$3.06
Fuel Consumed – MM gallons	21	28
Fuel cost – millions	\$23	\$87
Non-fuel cost – millions	\$32	\$86
Total utility cost – millions	\$55	\$173
Total PCE – millions	\$17.8	\$28.4
Percent of total costs	32%	16%

# Doesn't Most of PCE go to "Overheads?"

## FY19 Program Statistics

Fuel Costs	\$86,989,310
Non-Fuel Costs	<u>\$85,813,619</u>
Total Electricity Cost	\$172,802,929
Total PCE Disbursed	\$28,357,347
Percent of Fuel Costs	33%
Percent of Total Costs	16%