



# Power Cost Equalization Overview

House Energy Committee

Feb. 20, 2013

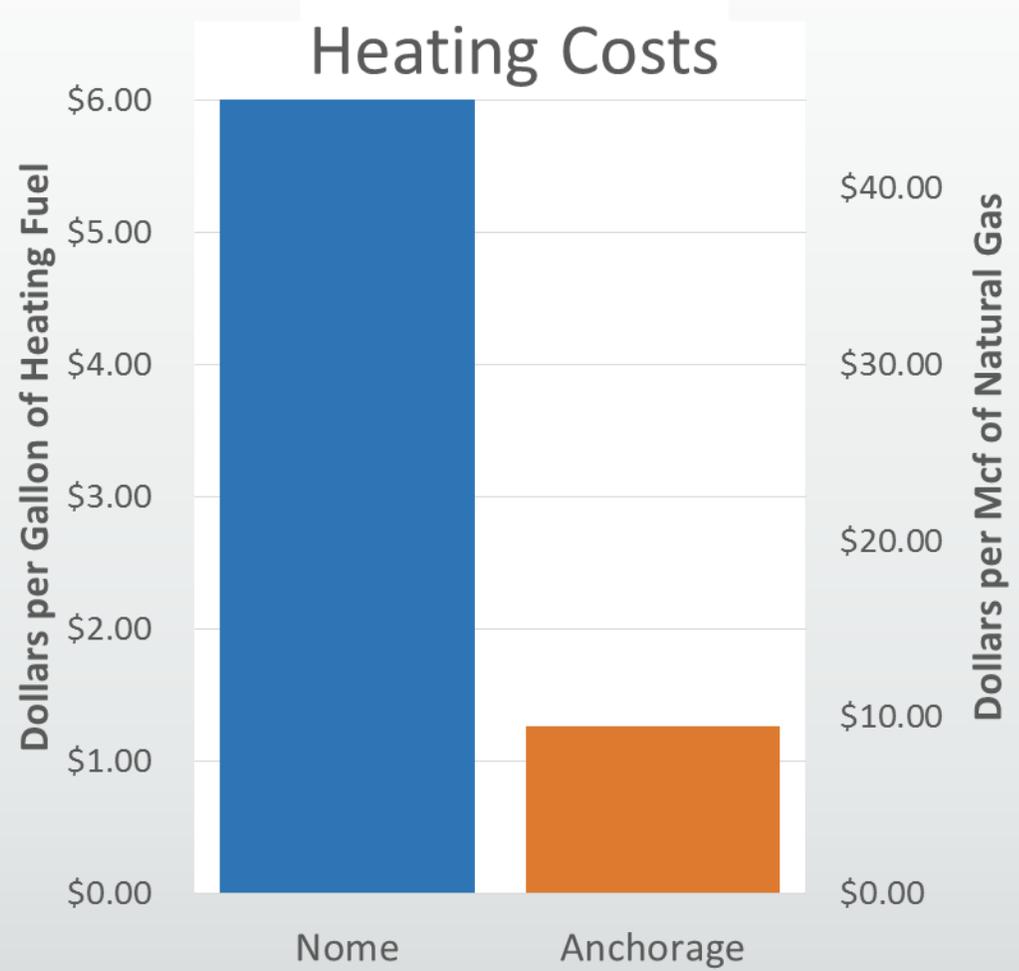
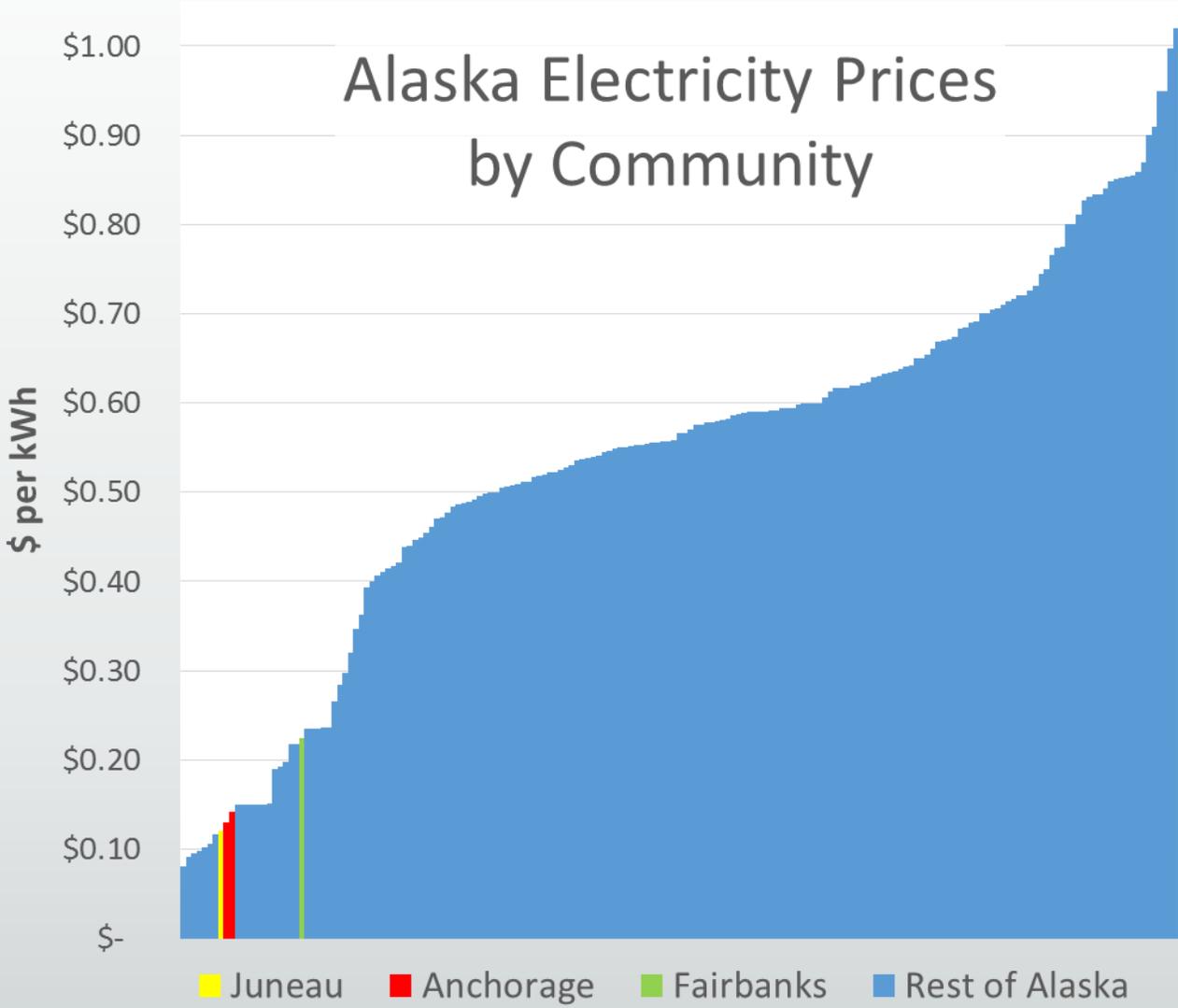


# Alaska Energy Authority

Mission: Reduce the Cost of Energy in Alaska

- Accomplished by:
  - Energy Planning and Policy
  - Investing in Energy Infrastructure
  - Diversifying Alaska's Energy Portfolio
  - Technical Training and Assistance

# Alaska's Energy Costs



# The Need for PCE

- Rural Alaska electrical rates can be 3 to 5 times higher than in urban Alaska
- Assistance needed in rural Alaska to maintain and operate basic infrastructure and systems
- Power Cost Equalization (PCE) created at a time when State funds were used to construct major energy projects to serve urban areas
- Four Dam Pool hydroelectric facilities:
  - State-owned assets in Kodiak, Valdez, Wrangell-Petersburg and Ketchikan
  - provided low-cost and reliable power
  - Four Dam Pool facilities sold to communities they served

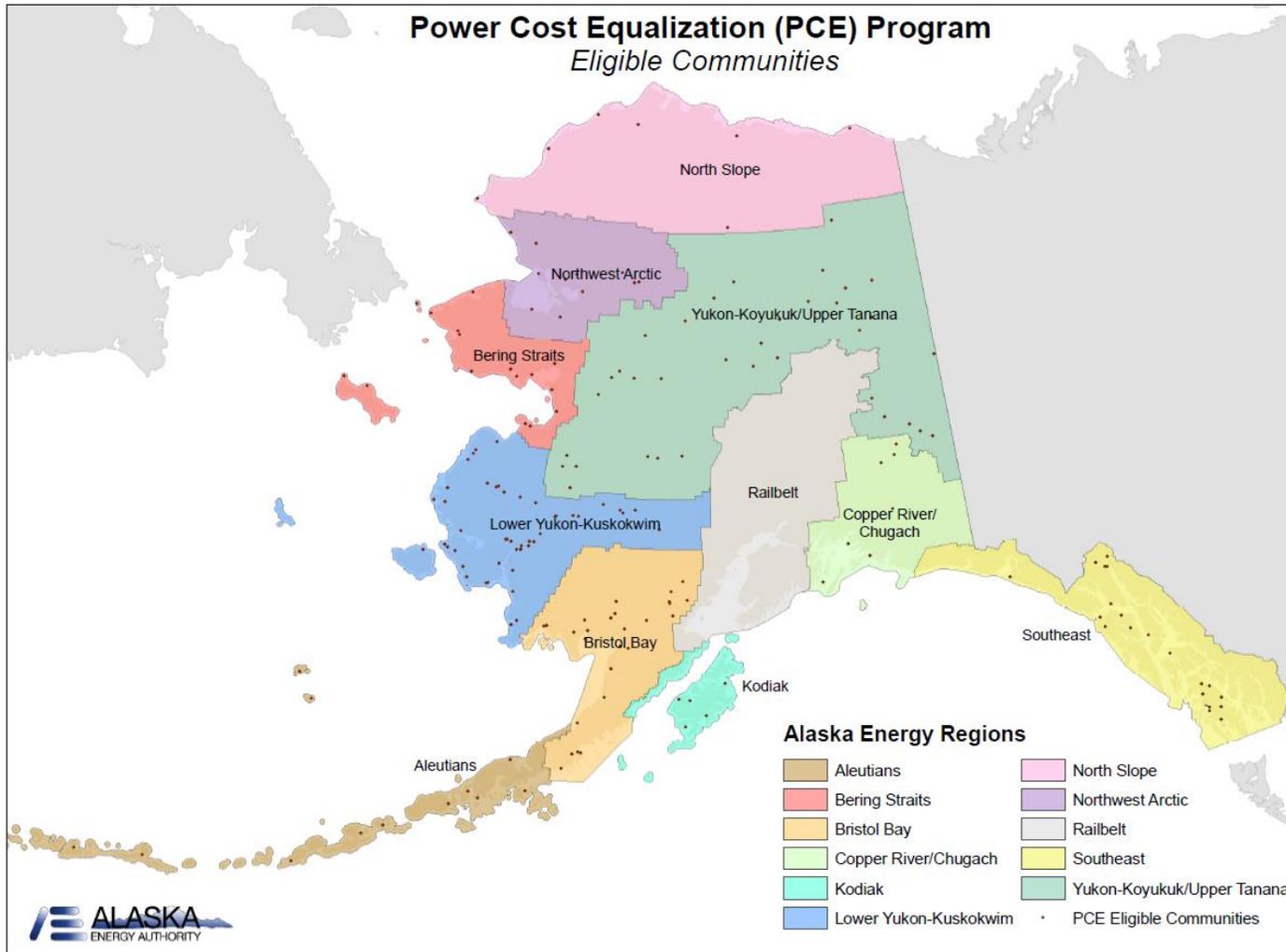
# Power Assistance Programs

- State of Alaska had two prior power-assistance programs
  - Power Production Assistance Program ('80)
  - Power Cost Assistance Program ('81)
- AS 44.83.162.-165 replaced previous programs with the PCE program
  - effective October 1984
  - Present law AS 42.45.100-190
- PCE program equalizes the power cost per kilowatt hour (kWh) statewide at a cost close-or equal- to the mean of power costs in Anchorage, Fairbanks and Juneau (AS 42.45.100(a)(1))

# PCE: Eligibility

- 1983- residential sales less than 7,500/MWh and 1984- used diesel greater than 75% of consumption (AS.42.45.150)
- Eligible:
  - about 30% of all kWh sold by participating utilities
  - community facilities (e.g. water and sewer, public lighting)
  - residential customers
- Not eligible:
  - State and Federal facilities (including schools)
  - commercial customers
- Railbelt electrical utilities, Juneau and Four Dam Pool communities are not eligible

# PCE: Participating Communities



- Approximately 81,000 Alaskans live in the 188 participating communities

# Calculating the Floor

<b>Utility</b>	<b>Rates \$</b>	<b>% PCE floor</b>	<b>%Utility Sales Used</b>
Alaska Electrical Light & Power	0.1210	14.5	100.0
Chugach Electric Association	0.1418	52.3	98.5
Golden Valley Electric Association	0.2162	6.6	20.7
Matanuska Electric Association	0.1511	11.7	24.9
Municipal Light & Power	0.1302	14.9	100.0
Floor for FY 13	0.1430		

# Calculating the PCE Level: Overview

The PCE level is:

- Calculated for each participating utility – per community
- Eligible Utility Costs determined by RCA
  - two categories of costs: fuel and non-fuel
  - non-fuel costs do not include utility profit
  - cannot exceed \$0.8142kWh
- Lowered by any additional State or federal assistance
- A utility is not eligible if their average rate is below the PCE Floor

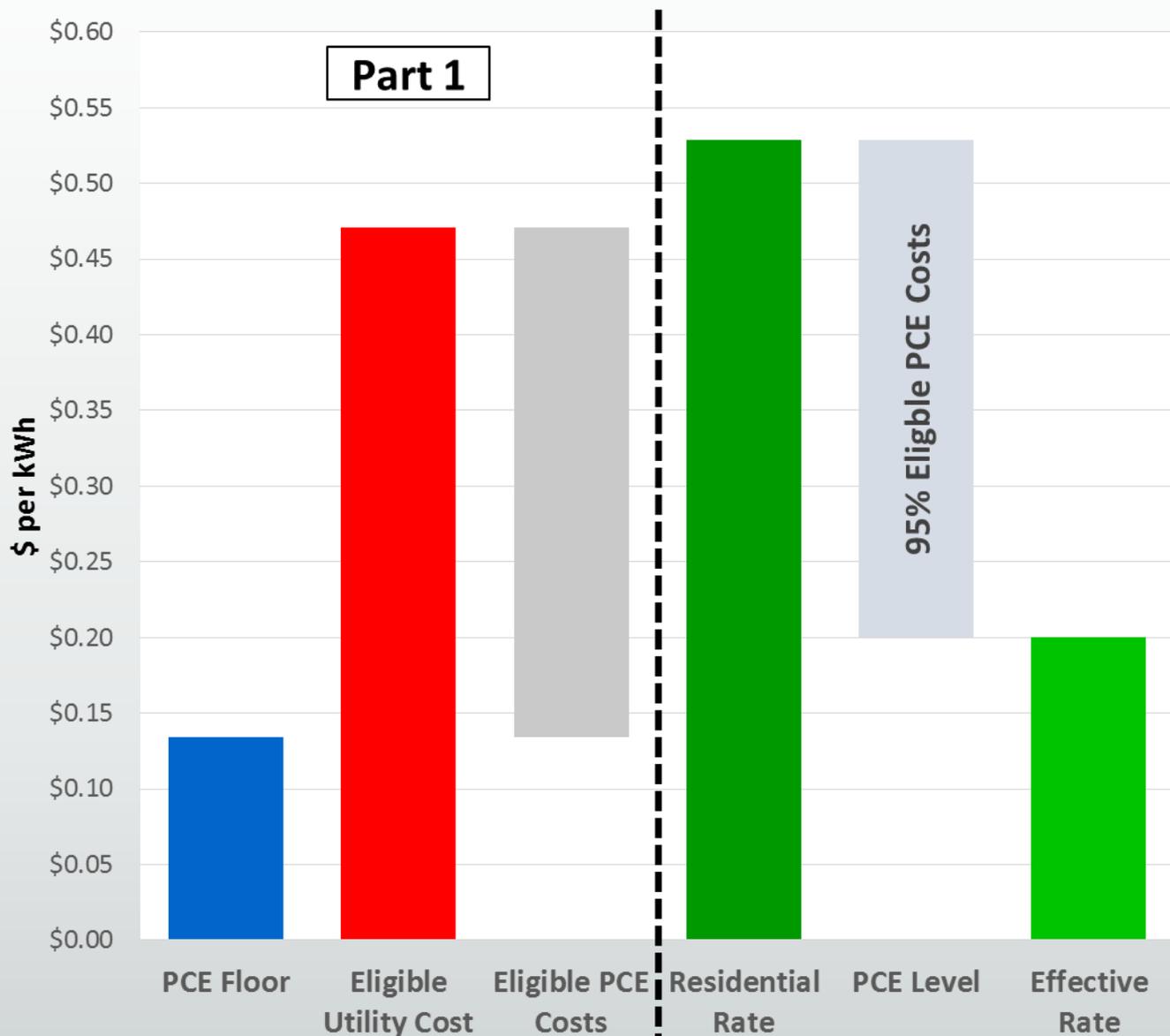
**Max PCE Level  
equals  
95%  
of  
(\$1.00 - \$0.1430)**

# PCE: Reducing Power Bills

- Residential: credit on first 500 kWh consumed each month (per customer)
- Community facilities: credit on 70 kWh x the community population (for the entire community)
- Customer's bill= total cost - the PCE credit
- Utilities are required to notify the customer of the PCE credit and the total cost of service with every bill
- Utilities are reimbursed on the customer credit

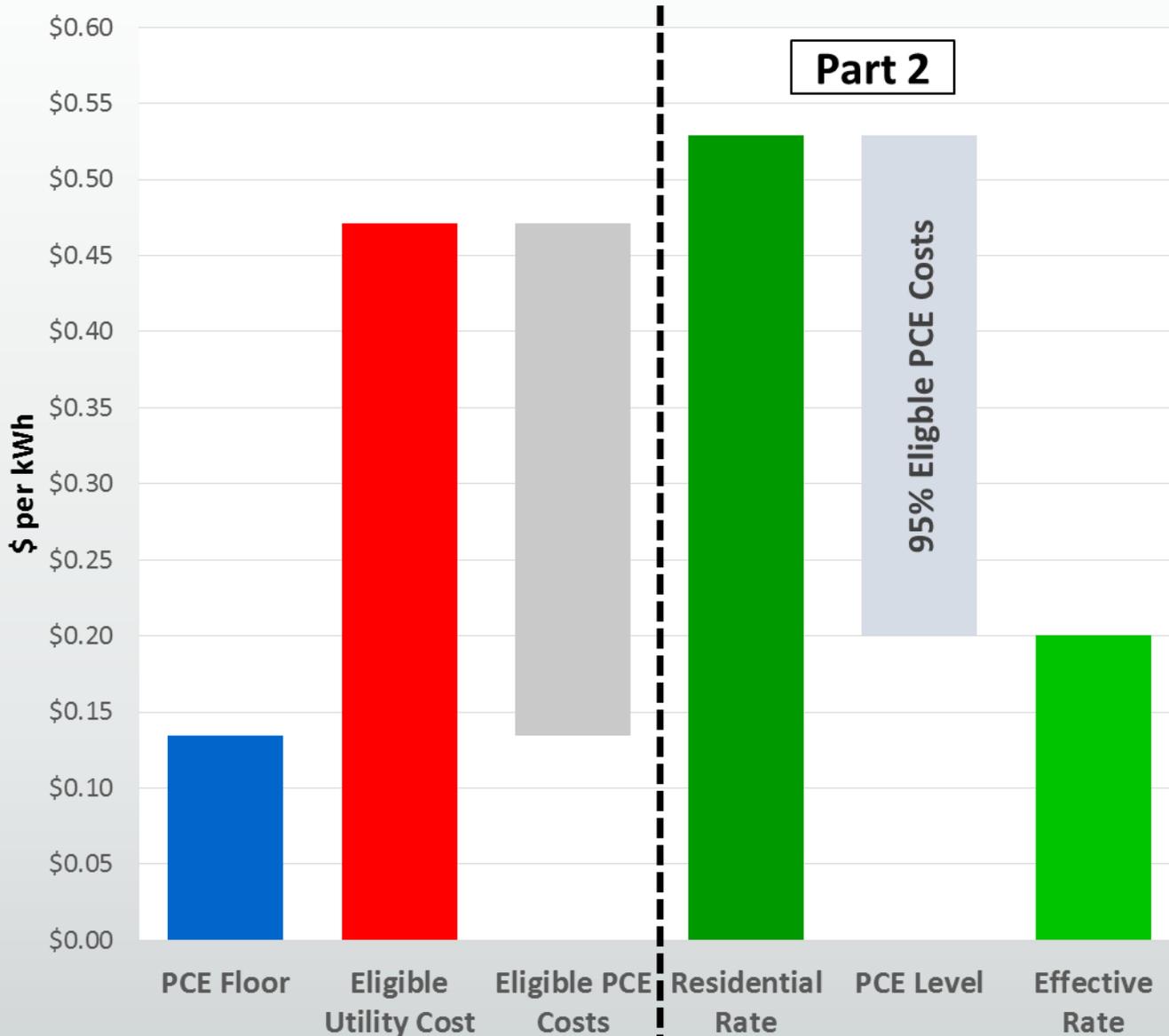
*Population numbers updated by Department of Commerce, Community and Economic Development on July 1, annually*

# Calculating PCE Rates: Part 1



- PCE Floor
  - weighted average power cost of Anchorage, Fairbanks and Juneau
  - determined by the RCA
  - \$0.1430 per kWh (FY13)
- Eligible Utility Costs (RCA verified)
  - fuel costs and non-fuel costs only
  - \$0.47 per kWh (current average)
  - max cost of \$1.00 per kWh
- Eligible PCE Costs
  - RCA Utility Cost minus the Floor

# Calculating PCE Rates: Part 2



- Residential Rate
  - calculated by the utility
  - \$0.53 per kWh (current average)
- PCE Level
  - 95% of the Eligible PCE Costs
  - calculated for each community
- Effective Rate
  - price customers pay for PCE-eligible kWhs
  - residential Rate minus PCE Level
  - \$0.22 per kWh (current average)

# PCE: Reducing Power Bills

## Sample Bill

Without PCE	600 kWh (kWh used)	*	\$.50/kWh (utility rate)	=	\$300
PCE Credit	500 kWh (PCE eligible)	*	\$.30/kWh (PCE rate)	=	\$150

**\$300-\$150= \$150 (Customer Pays)**

# PCE: Administration

## **AEA's role:**

- Authorizes payment to electric utilities
- Determines eligibility for residential and community facility customers
- Administers the PCE Fund based on
  - fiscal appropriations by the Alaska Legislature
  - monthly reports submitted by participating utilities
- Ensures compliance with Statutes and regulations

## **RCA's role:**

- Determines eligibility of utilities
- Sets PCE rates, calculations based on use, costs and efficiencies
- Ensures compliance with Statutes and regulations

# PCE: Funding

1. PCE Endowment Fund
2. General Fund
3. PCE Fund and Rural Electric Capitalization Fund

- PCE Payments totaling \$39.5 million at 100% (FY12)

# PCE: Funding

## PCE Endowment Fund

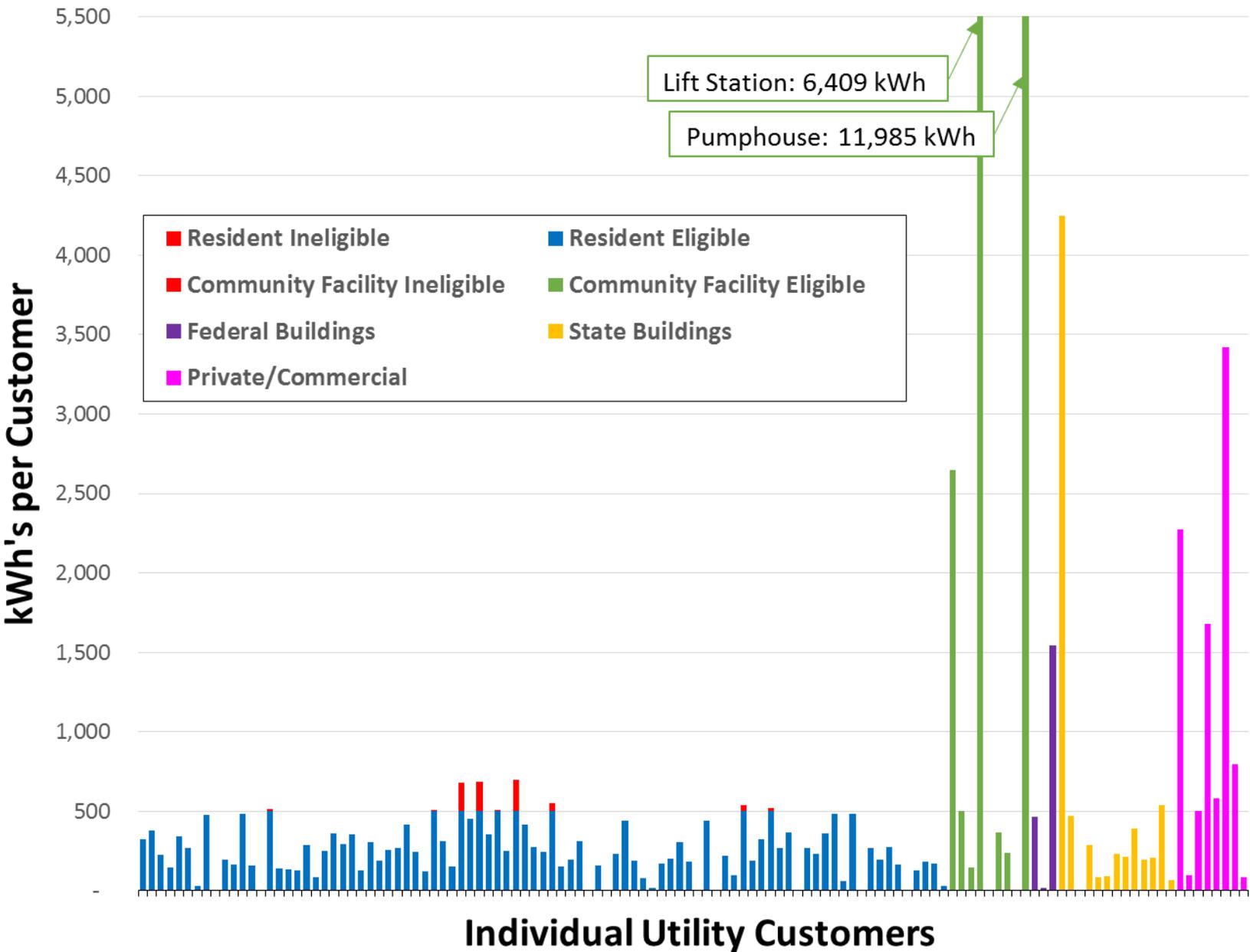
- AEA fund, managed by the Department of Revenue
- Created and capitalized in FY01 with funds from the Constitutional Budget Reserve and Four Dam Pool sale proceeds
- Further capitalized with General Funds in FY07 (\$182.7 million) and FY12 (\$400 million)
- 7% of the endowment fund's 3-year monthly average market value may be appropriated to the PCE program (AS 42.45.085 )
- Invested to earn 7% over time
- \$788 million in PCE Endowment Fund (as of 12/31/12)
- Anticipated to be only funding source in FY16

# Community Example: Akiak



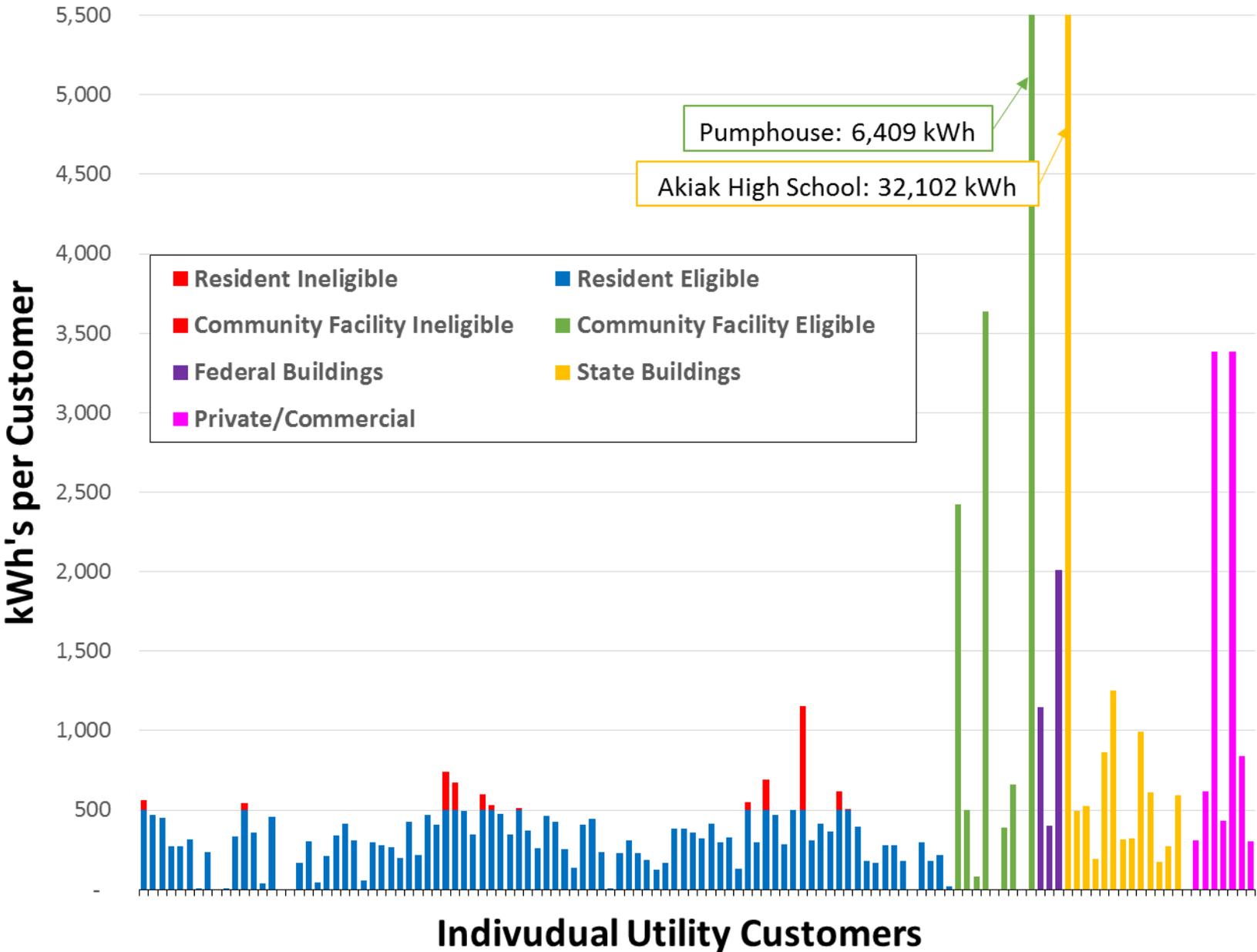
- Individual customer data for a summer month (July '12) and winter month (Dec. '12) in Akiak was used to demonstrate relative impact of PCE
- 121 electric customers in community
  - 89 residential
  - 9 community facilities
  - 3 Federal government
  - 13 State/local government
  - 8 commercial/private

# July Akiak Electric Customer Use



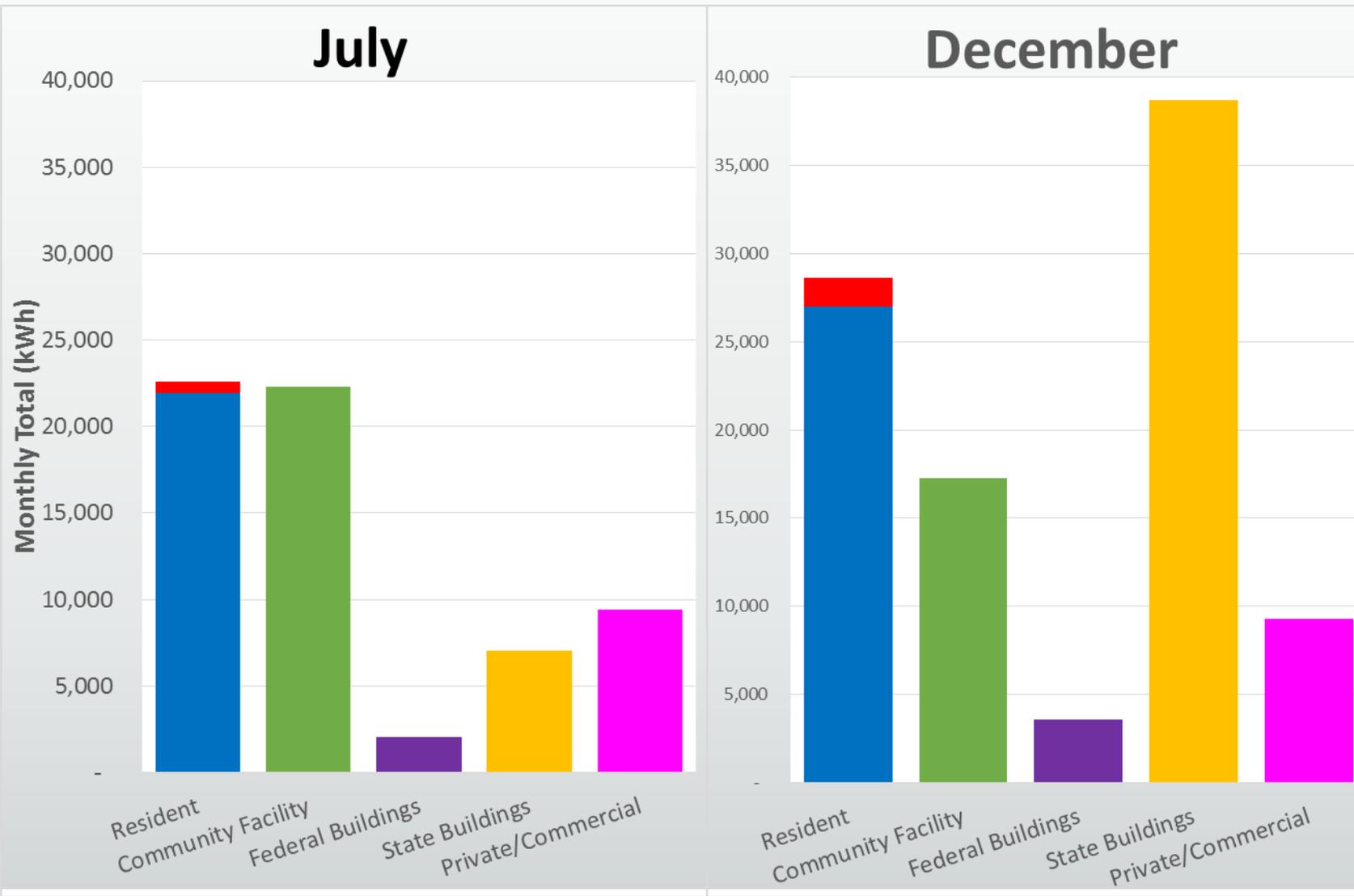
- July customer usage is relatively low
- Bulk of Community Facility use is associated with water and sewer

# December Akiak Electric Customer Use



- Increase in total electric use in winter
- Akiak High School becomes the largest electric user in the community

# Akiak Electric Use by Customer Type



- Increases (from July – Dec.)
  - total electric: 54%
  - total residential: 27%
  - ineligible residential: 146%
  - State buildings: 451%
- PCE eligible kWh
  - July: 70%
  - December: 45%
  - high eligible percentage, compared to state average



[AKEnergyAuthority.org](http://AKEnergyAuthority.org)