

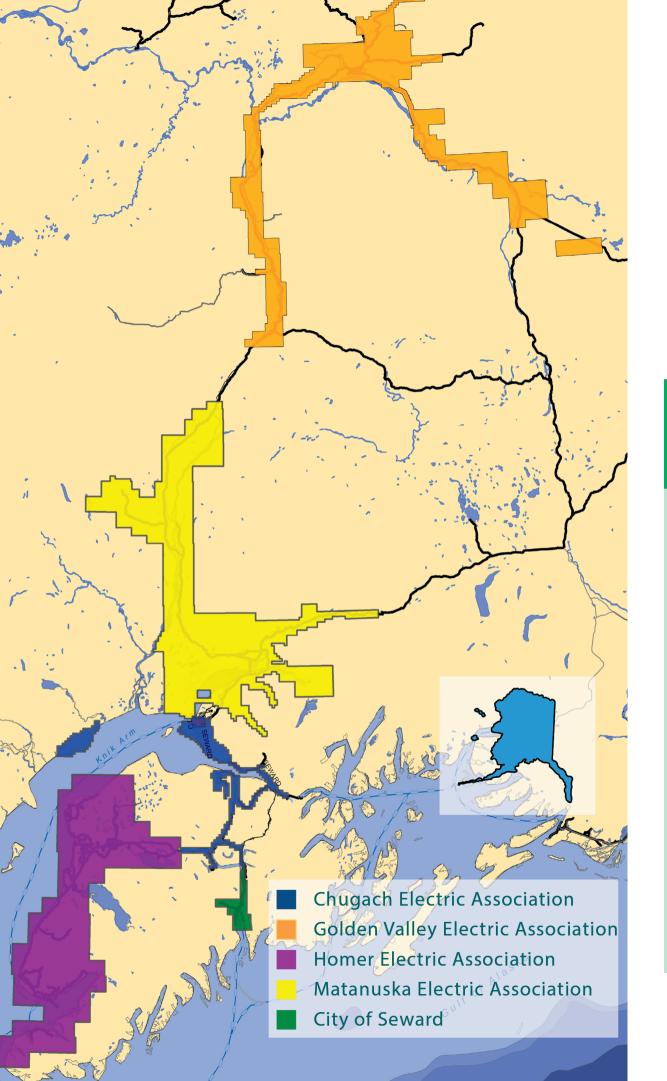
# The Evolution of the Electric Utility Industry

Arthur Miller Chief Executive Officer Chugach Electric Association, Inc. June 26, 2023



# History of the Railbelt





# "Railbelt" Electric System

### Utilities

Four memberowned electric cooperatives and one municipal utility sell power to **Railbelt customers** 

Peninsula

### Location

- Interconnected electric
- grid, that primarily
- follows the Alaska
- Railroad, which
- stretches approximately
- 700 miles from
- Fairbanks through
- Anchorage to the Kenai

### Ratepayers

About 70 percent of Alaska's population is served by the Railbelt electric system

### Origins of power generation in Anchorage

### 1946

The T2 tanker Sacketts Harbor begins providing power to Anchorage and the first power plant was constructed



DANGER HIGH VOLTAGE

### 1948

Chugach Electric was incorporated as an Rural Electrification Administration cooperative

### 1955

The Eklutna power plant comes on-line with two 15megawatt generators

### 1960

The Cooper Lake power plant came on-line, and Chugach began to look at gasfired power generation

### 1968

Power from two 15.7-megawatt units at Chugach's new gas-fired power plant at Beluga flowed into Anchorage

### 1991

CHI

Chugach takes power from Bradley Lake Hydroelectric Project, largest hydroelectric facility in the state

# C HISTORY

### 2013

Chugach begins to receive power from Southcentral Power Project and Fire Island Wind Project

### 2016

Chugach acquires a working interest in Beluga River Unit Gas Field

### 2020

Chugach acquires Municipal Light & Power, and serves 90,000 members at 113,000 locations

# Safety is Priority

#1

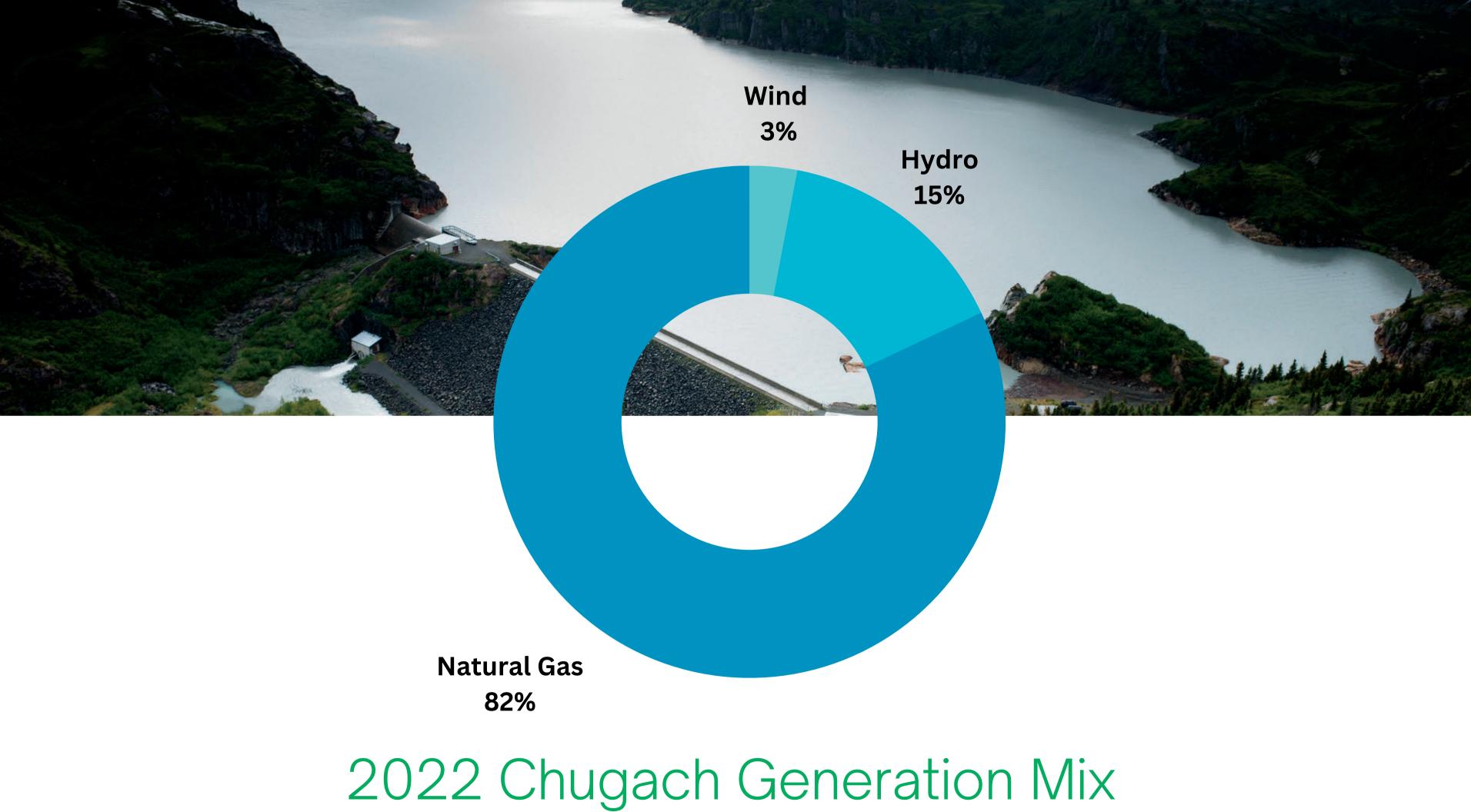
Goal: Continue achieving high levels of safety performance and the prioritization of safety to create an incident and injury-free work environment



# Chugach By the Numbers

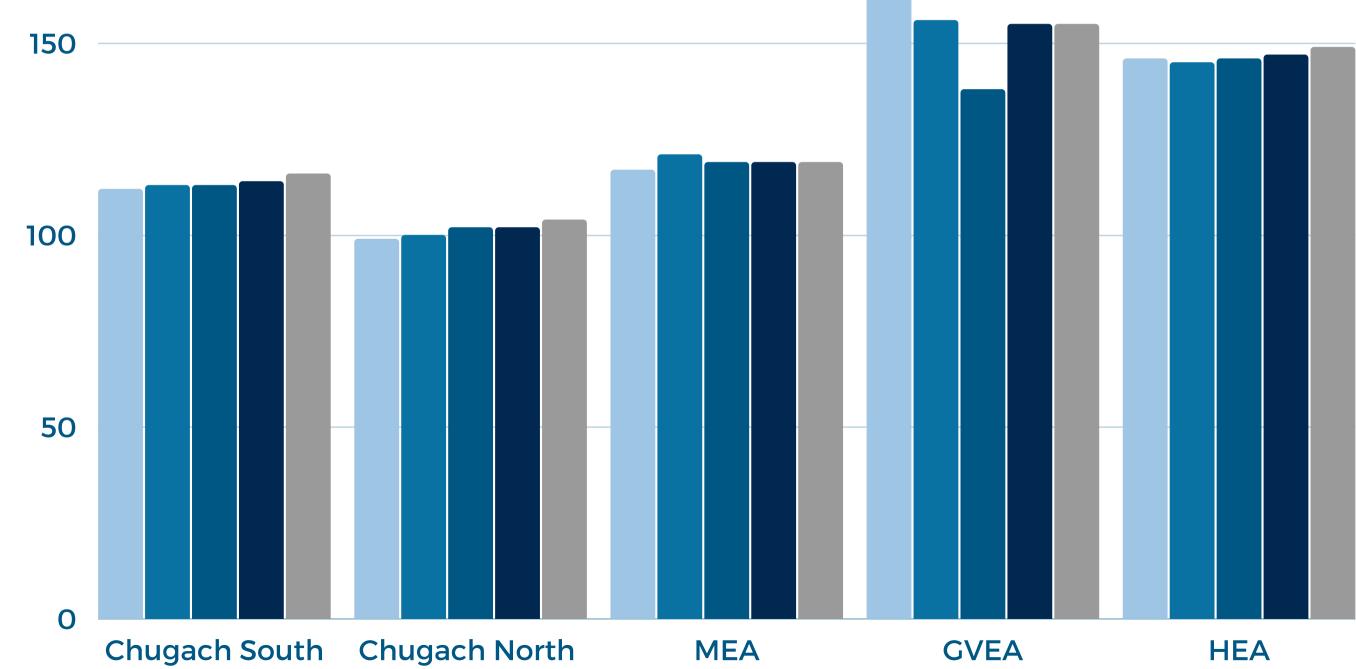
01	Provides power to 1 in 3 Alaskans
02	\$354.5 million in total revenue
03	One of a few utilities in the nation with a direct ownership in a gas field
04	13th largest electric cooperative in U.S. on basis of total asset value
05	15th largest by revenue for Alaska companies 51% or more Alaska-owned and have operations in state

Chugach serves downtown Anchorage, at the base of Chugach State Park



### Railbelt Electric Bill Comparison Average Residential Bill (Based on 525 kWh) April 2023

Q2 2022 Q3 2022 Q4 2022 Q1 2023



### **Chugach Board of Directors**





Sam Cason

Sisi Cooper



**Rachel Morse** 





**Bettina Chastain** 

# **STRATEGIC PRIORITIES**

01	Safety	05	Leade Develo
02	Integration Synergies & Cost Savings		Deeer
		06	Decar
03	Communication, Member Engagement & Community Involvement	07	Natura
04	Business Planning and Economic Development		





Susanne Fleek-Green



Jim Nordlund

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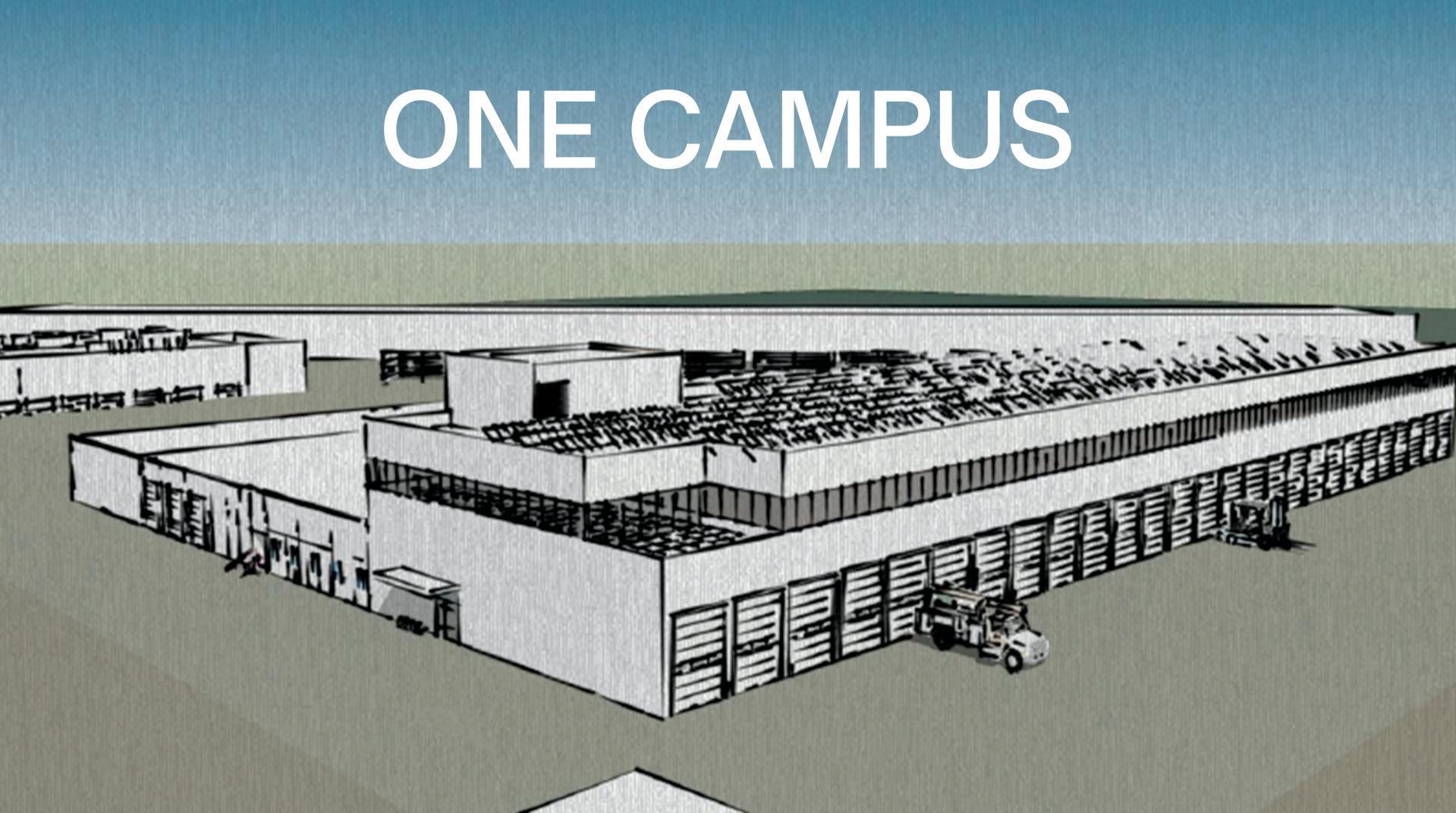
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al Gas Supply

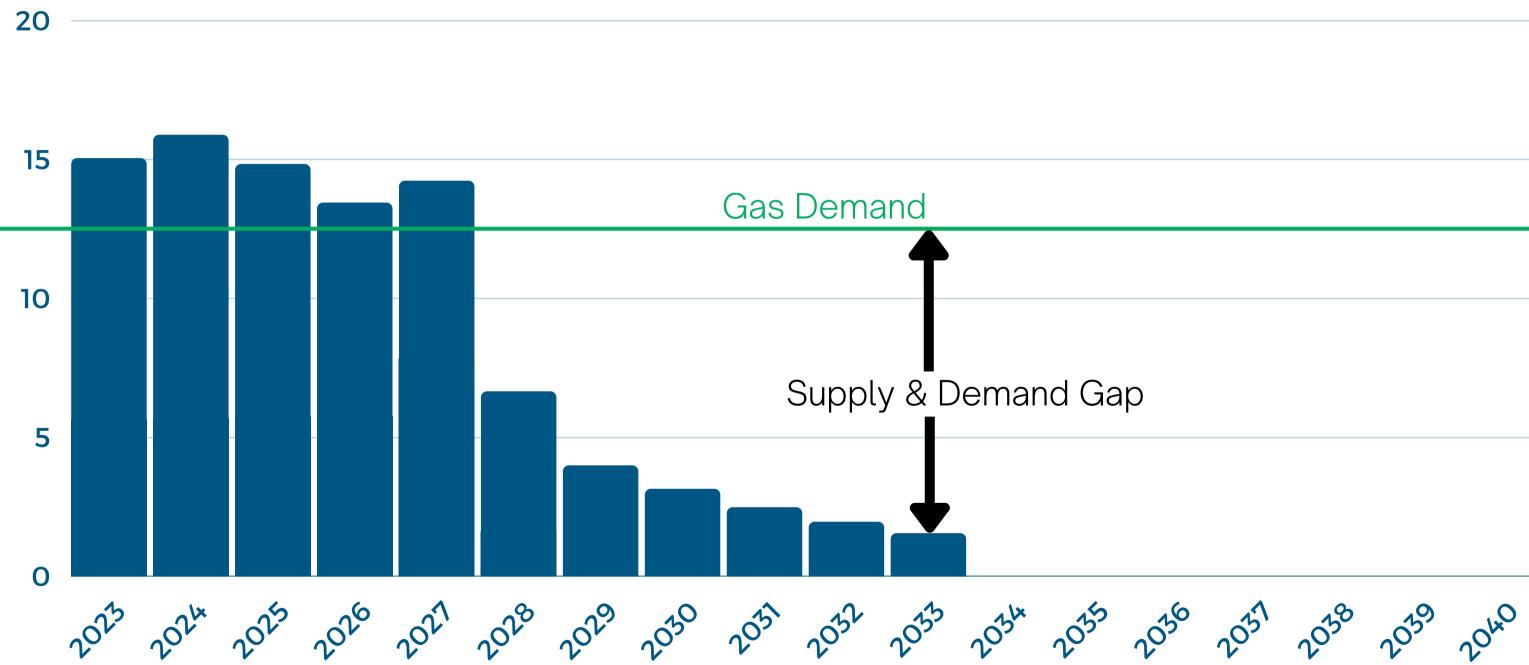


**Continued Acquisition Integration and Savings** 





# Chugach Natural Gas Forecast



\*Chugach/Hilcorp contract expires March 31, 2028 \*\*Expected end of BRU gas field life is 2033

# **Options to Fill the Gap**

Pursue clean energy; when economic.

Clean energy includes energy from renewable generation (wind, solar, hydro, etc.) and energy from zero-emissions sources including nuclear and carbon capture

Alaska North Slope gas lines

Maximize life of Beluga River gas field

Identify LNG import opportunities

Transition requires energy storage



# GENERAL RATE CASE



- RCA requirement (rate case in 2023)
- Expected to be filed by June 30, 2023

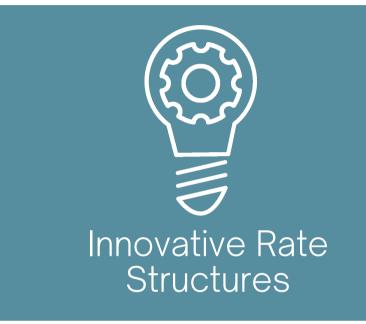


Performance

- Base rates have not been adjusted in years
- Cost increases
- Declines in electric sales
- Covid-19 impacts
- Build equity

- Unification of rates for on the Chugach
  - system





each customer class

- Time of use rates
- New rate for cruise ship interconnection
- Removal of large commercial demand ratchet

# PROPOSED RATE INCREASES

# SYSTEM AVERAGE RATE CHANGES



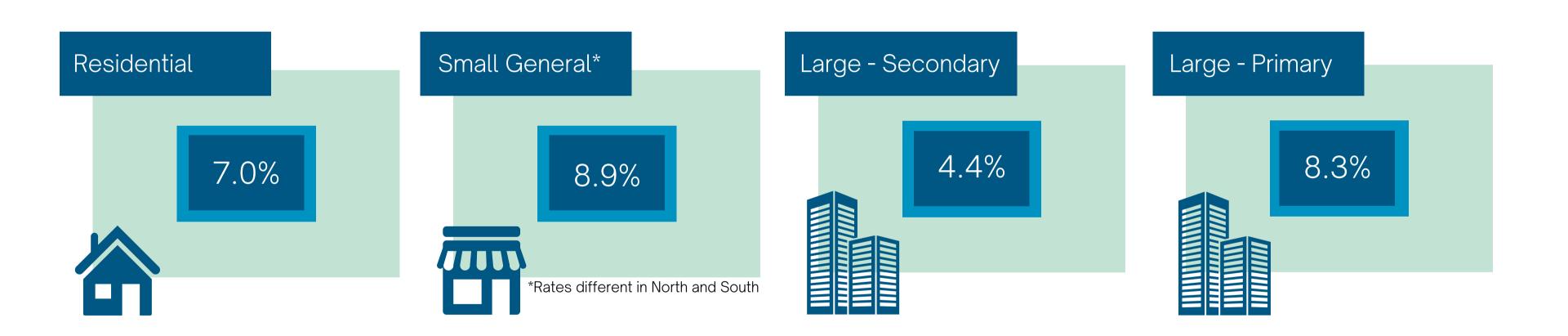
# Permanent\*\* September 2024

Change in Total Bill

5.9%

\*\*Rate increase will differ by rate class. Rate adjustments made in September 2024 will be the difference between permanent and interim rates.

# ESTIMATED TOTAL BILL IMPACT



# Electric Industry is Changing





# Decarbonization

### Clean Energy

- Utility Generation
- Member Generation



1

**Beneficial Electrification** 





# Decentralization

1

Industry is moving from centralized to decentralized business model



Distributed generation, microgrids, batteries



Increases complexity in the provision of electric service

Photo Credit: Alaska Solar

### Technology Advancement

Advanced Metering Infrastructure (AMI)

2

Demand-side management / Load control



Automation

Sophisticated rate design





### Type FOCUS AXR-SD FORM 2S CL200 240V 3W 60Hz TA=30 Kh 7.2 HUGACH ELECTRIC ASSN

### \*NXA128992109 \* **128 992 109** Landis+Gyr PATENT PENDING

# Noving Forward

# Transition to clean energy

Secure natural gas supply Support new and improved transmission infrastructure

Advance electric and gas storage

# OUR USION Responsibly developing energy to build a clean, sustainable future for Alaska

