



Integrity • Urgency • Ownership • Alignment • Innovation



# Hilcorp Alaska Workforce

## Year End 2012

255 Employees  
96% Alaska Residents

## Year End 2013

316 Employees  
97% Alaska Residents

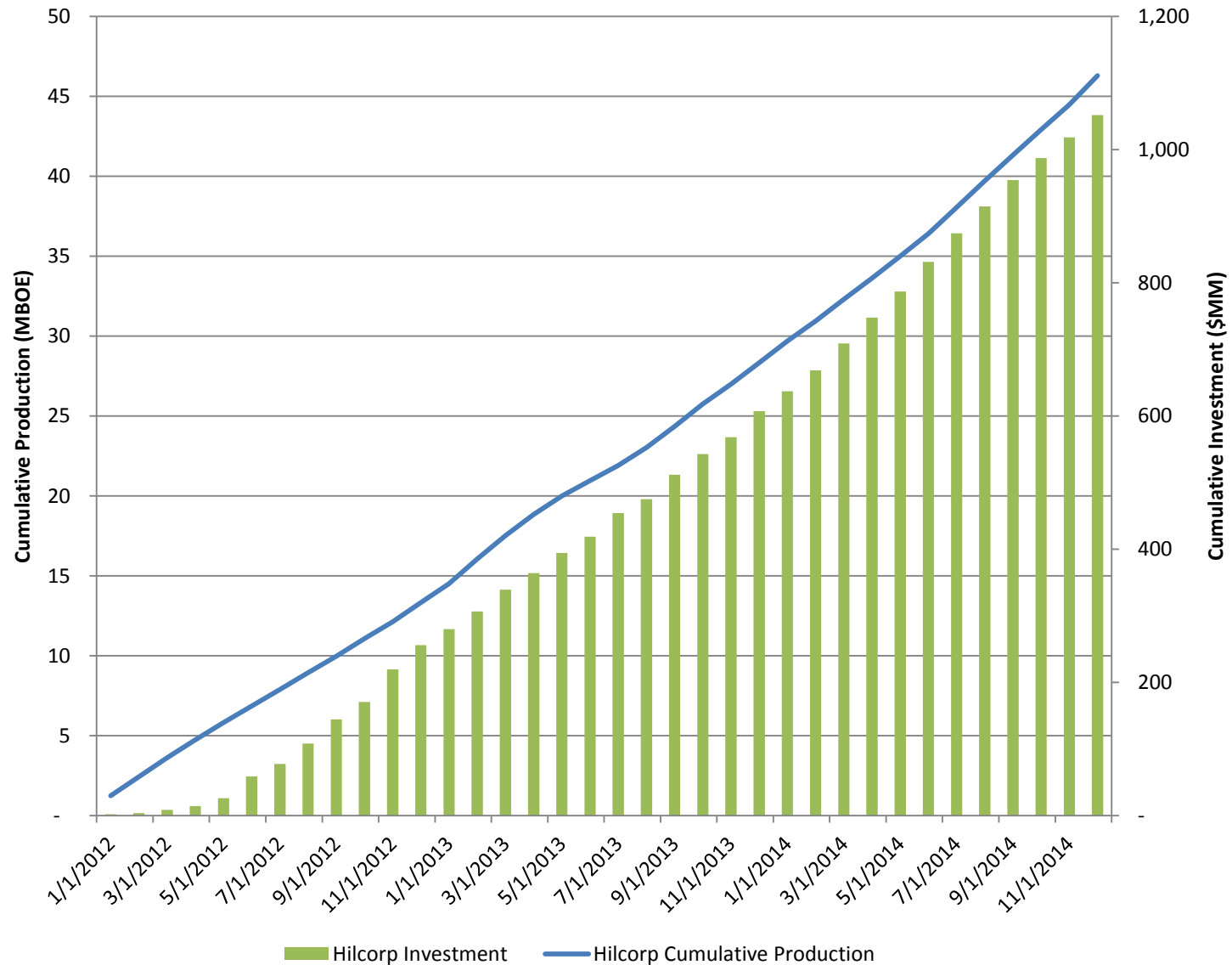
## Year End 2014

505 Employees  
88% Alaska Residents



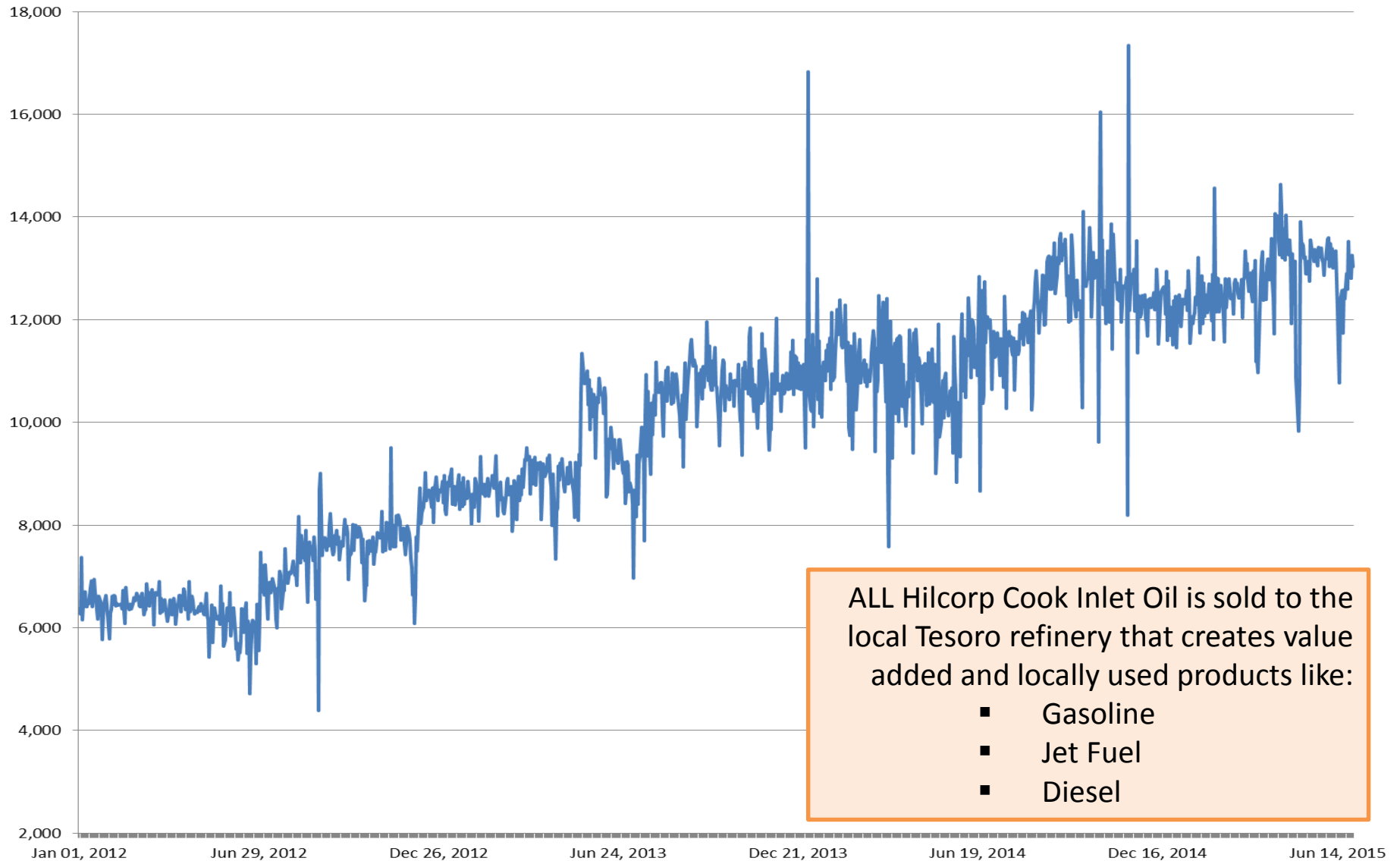


# Hilcorp Alaska Investment



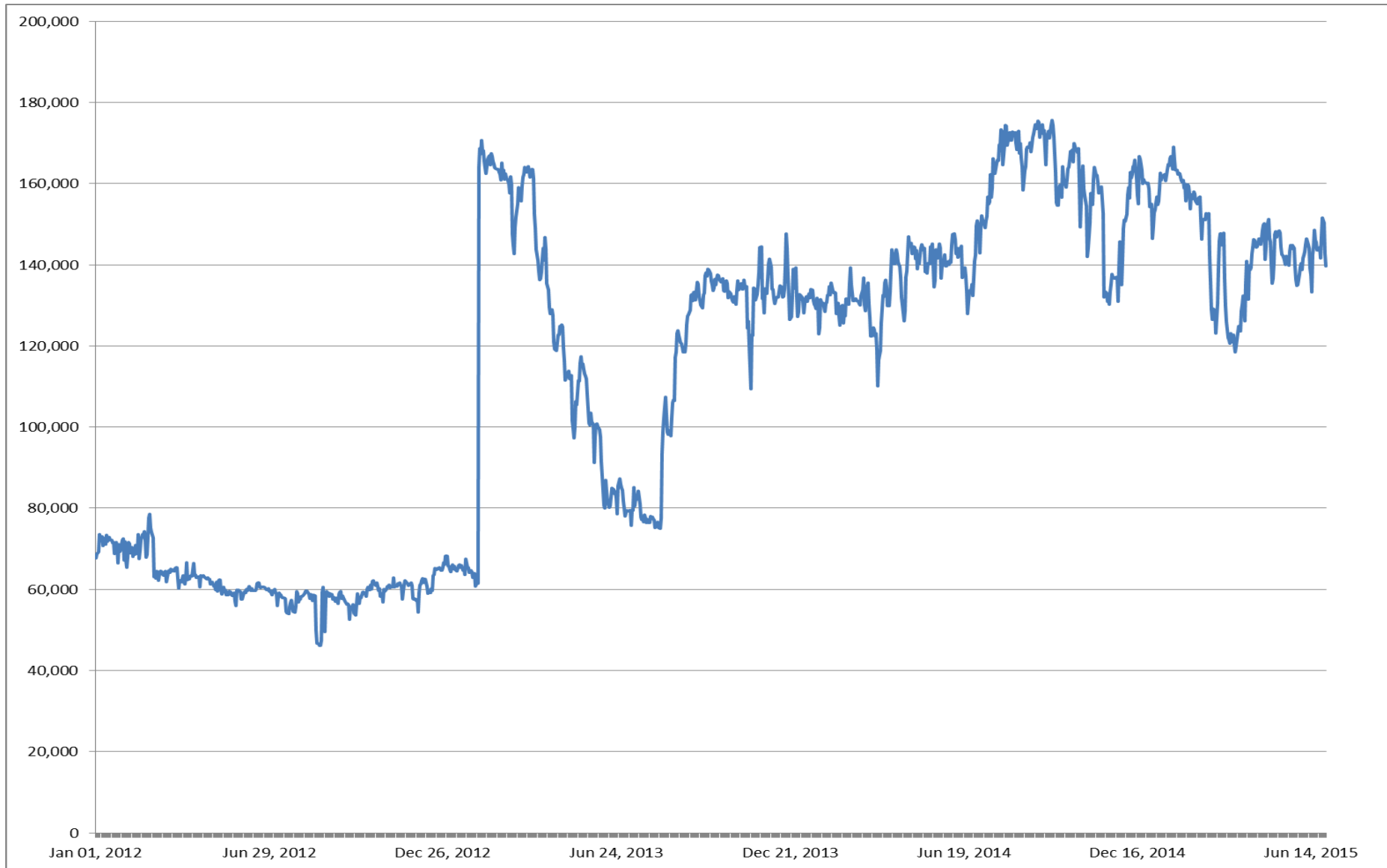


# Cook Inlet Oil Production





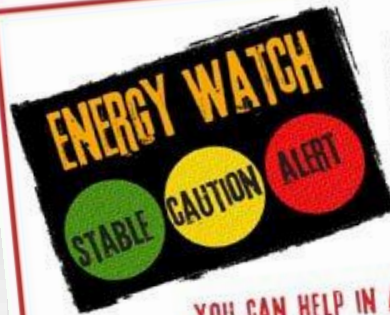
# Cook Inlet Gas Production







# Alaska's Gas Supply in 2010



Organizations throughout the Railbelt are making plans to deal with a potential natural gas shortfall this winter. While it's not considered likely, all agree that it is important to be prepared. Nobody wants to be caught unprepared on a cold, dark winter evening. That's why the electric utilities in the Railbelt, ENSTAR, the Municipality of Anchorage, and the Kenai Peninsula and Mat-Su boroughs have been working together on a collective approach to the situation.

**YOU CAN HELP IN A NATURAL GAS EMERGENCY. HERE'S HOW.**

If a gas delivery problem develops, emergency managers might issue an alert using this Energy Watch chart.

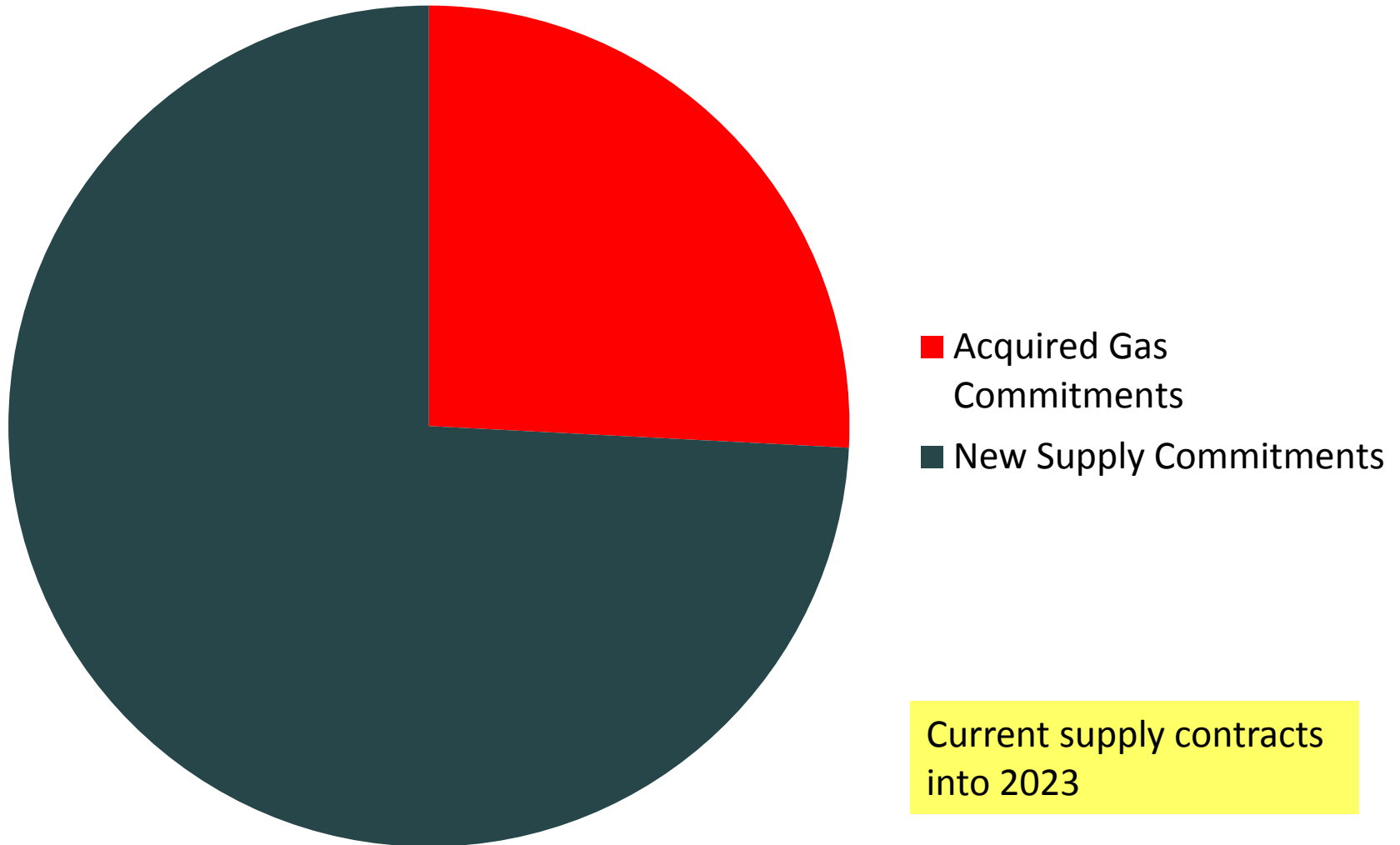
Energy Disruption Customer Action Plan		
CONDITION	MEANING	CUSTOMER ACTION
Green	Stable	Use energy wisely; be conservation minded Your utilities can provide tips on saving energy
Yellow	Caution	Set thermostat to 65 degrees in living areas, and 40 in the garage Lower water heater setting to "warm" or "vacation" Minimize usage of natural gas range Postpone doing laundry and dishes Turn off unnecessary lights and electronics
Red	Alert	Set thermostat at 60 degrees in living areas (55 if away) Turn water heater gas valve to "pilot" Do not use natural gas fireplaces, decorative heaters or gas grills Consolidate household activities into as few rooms as possible

**EVERY LITTLE BIT COUNTS.  
TOGETHER WE CAN MAKE A DIFFERENCE.**



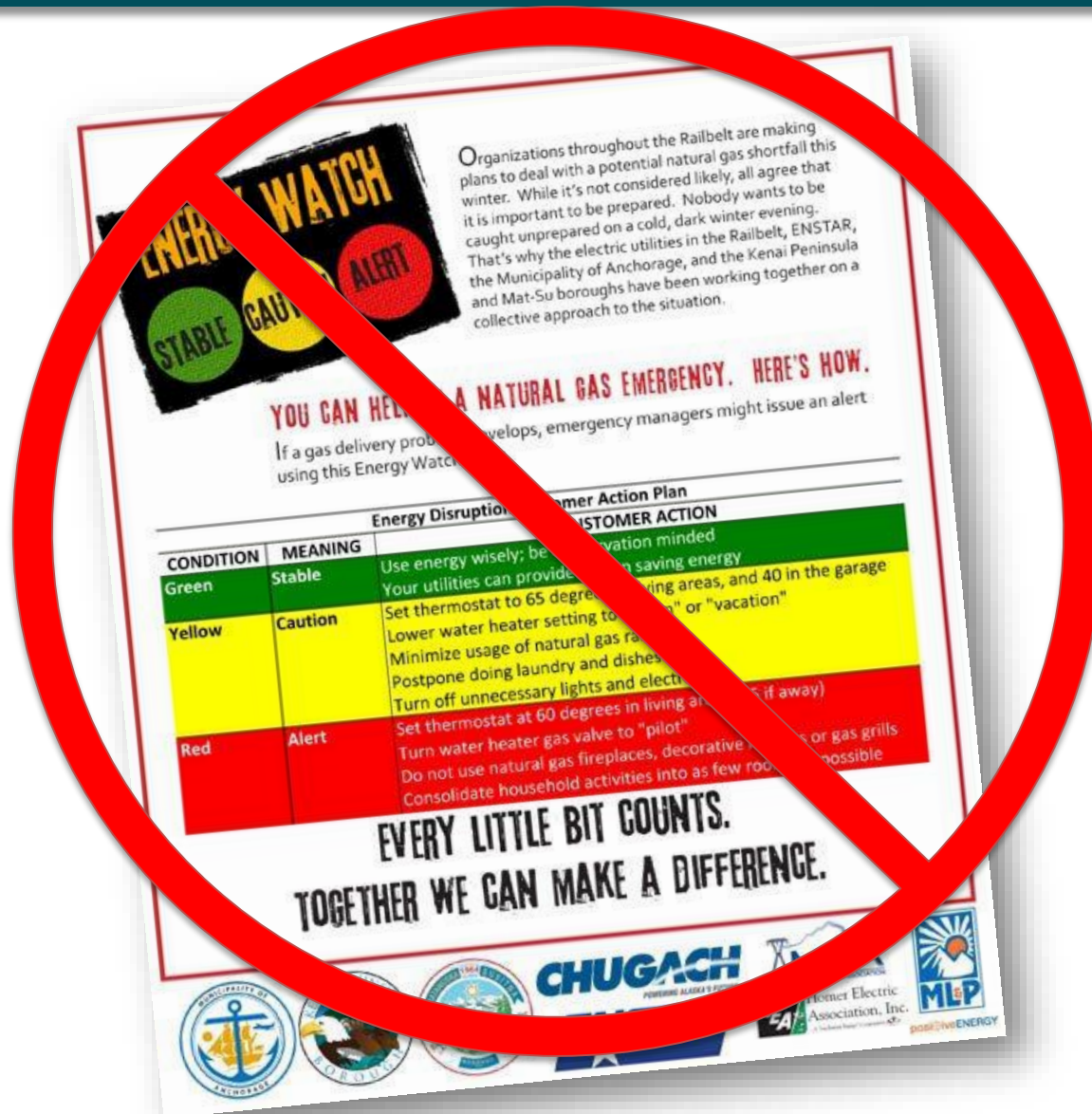


# Increased gas supply for Alaskans





# Where are we now?



**ENERGY WATCH**

**STABLE CAUTION ALERT**

Organizations throughout the Railbelt are making plans to deal with a potential natural gas shortfall this winter. While it's not considered likely, all agree that it is important to be prepared. Nobody wants to be caught unprepared on a cold, dark winter evening. That's why the electric utilities in the Railbelt, ENSTAR, the Municipality of Anchorage, and the Kenai Peninsula and Mat-Su boroughs have been working together on a collective approach to the situation.

**YOU CAN HELP IN A NATURAL GAS EMERGENCY. HERE'S HOW.**

If a gas delivery problem develops, emergency managers might issue an alert using this Energy Watch.

Energy Disruption		Customer Action Plan
CONDITION	MEANING	CUSTOMER ACTION
Green	Stable	Use energy wisely; be conservation minded. Your utilities can provide information on saving energy.
Yellow	Caution	Set thermostat to 65 degrees in living areas, and 40 in the garage. Lower water heater setting to "economy" or "vacation". Minimize usage of natural gas ranges. Postpone doing laundry and dishes. Turn off unnecessary lights and electronics (if away).
Red	Alert	Set thermostat at 60 degrees in living areas. Turn water heater gas valve to "pilot". Do not use natural gas fireplaces, decorative heaters, or gas grills. Consolidate household activities into as few rooms as possible.

**EVERY LITTLE BIT COUNTS.  
TOGETHER WE CAN MAKE A DIFFERENCE.**

**CHUGACH**  
POWERING ALASKA'S FUTURE

**Kenai Electric Association, Inc.**

**MLP**

**positiveENERGY**





# How did we get here – PRA Study

## Cook Inlet Gas Study - An Analysis for Meeting the Natural Gas Needs of Cook Inlet Utility Customers

prepared for



March 2010

Peter J. Stokes, PE  
William Grether & Thomas P. Walsh

Petrotechnical Resources of Alaska  
3601 C Street Suite 822  
Anchorage, AK 99503  
(907) 272-1232



Due to the uncertainties of drilling and producing activities of operating and exploration companies and what Alaska state agencies do and do not do in influencing those activities, this study should be considered a best estimate based on current data. It was prepared using generally accepted engineering and geological predictive methods. As such, Petrotechnical Resources of Alaska can make no warranty as to actual future Cook Inlet gas drilling and production.

### Executive Summary prepared by Cook Inlet Utilities

ENSTAR Natural Gas Company, Chugach Electric Association, and Anchorage Municipal Light and Power (Cook Inlet Utilities) commissioned Petrotechnical Resources of Alaska (PRA) to study Cook Inlet natural gas reserves and forecast annual natural gas production. We asked PRA to estimate the cost of the development necessary to meet the immediate needs of Cook Inlet utility customers from 2010 to 2020. The PRA study includes a review of estimated reserves and deliverability of Cook Inlet gas wells drilled between 2001 and 2009, scenarios for potential development activity, a review of a December 2009 Alaska Department of Natural Resources (DNR) reserves analysis, and an analysis of when it might be necessary to rely on non-Cook Inlet natural gas sources, such as liquefied natural gas (LNG) imports or other in-state resources.

In the future, Cook Inlet utility customers should expect to pay more for the gas used by Cook Inlet Utilities to generate heat and electricity. PRA examined results from all of the gas wells drilled in Cook Inlet between 2001 and 2009 and determined that producers spent approximately \$1.0 to \$1.2 billion in development costs to add reserves of approximately 519 billion cubic feet (Bcf) of natural gas. If the current trends for well success rates and costs continue, producers will need to spend two to three times that amount, an estimated \$1.9 to \$2.8 billion, to meet projected Cook Inlet utility demand from 2010 to 2020. Producers will invest the necessary capital in future drilling activity only if they have a reasonable expectation of a return that is competitive with other investment opportunities. In order to assure continued drilling activities, increased development costs must be reflected in the market price utilities pay for the gas and ultimately pass onto their customers. Cook Inlet Utilities will also require storage services to deliver gas to their customers on the coldest days and enable producers to optimize gas production rates. The estimated cost of a storage facility is \$150 to \$200 million<sup>1</sup>. These storage costs will also be borne by utility customers.

<sup>1</sup> Storage cost estimates based on ENSTAR's development assessment.



## From PRA:

### 1. “Immediate Actions Needed”

- “Additional well-capitalized exploration and development companies must commit to develop Cook Inlet and other Alaska gas reserves.”
- “Additional regional industrial gas demand must be found to encourage the development of Cook Inlet reserves and spread the increased costs of production.”

### 2. “Minimum requirements to meet demand in Cook Inlet gas market until 2020”

- “To meet projected demand for the next decade, 185 new wells will be needed, which is a 45% increase over the number of wells drilled in the 2001-2009 period.”
- “Development costs for this period are estimated at \$1.85 to \$2.8 billion, an increase in total capital of 54-180%”.



# Do we “declare victory” in Cook Inlet?



## *National Assessment of Oil and Gas Fact Sheet*

# Assessment of Undiscovered Oil and Gas Resources of the Cook Inlet Region, South-Central Alaska, 2011

**T**he U.S. Geological Survey (USGS) recently completed a new assessment of undiscovered, technically recoverable oil and gas resources in the Cook Inlet region of south-central Alaska. Using a geology-based assessment methodology, the USGS estimates that mean undiscovered volumes of nearly 600 million barrels of oil, about 19 trillion cubic feet of natural gas, and 46 million barrels of natural gas liquids remain to be found in this area.

