



Natural Gas Supply

Senate Resources Committee

April 7, 2016



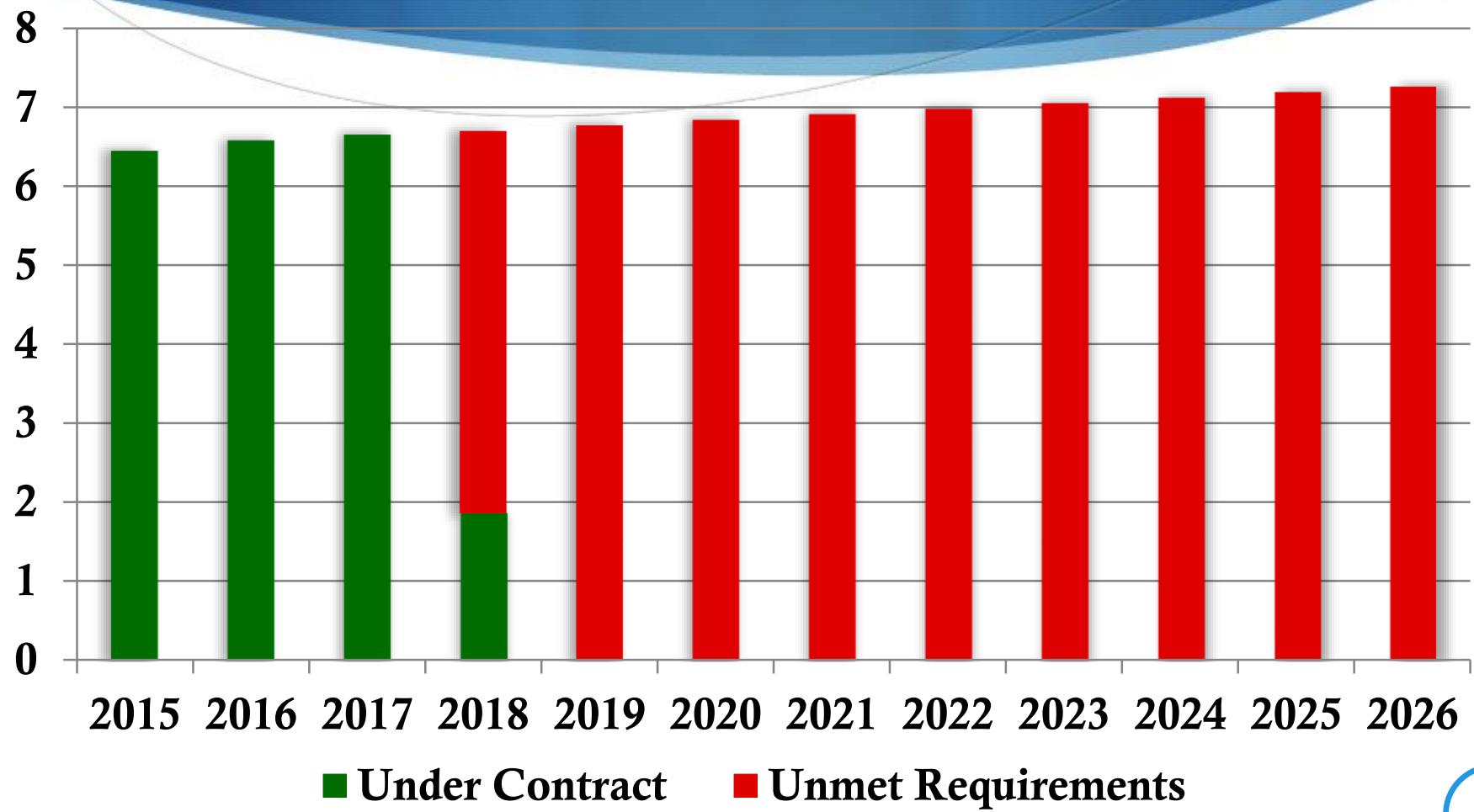
Cooperative Profile

- 61,100 meters, 50,500 members
- Over 4,200 miles of power lines & 22 substations
- Service area the size of West Virginia
- Generation portfolio: 90% natural gas, 10% hydro
- 2015 natural gas demand: 6.5 Bcf
 - 6.5 Bcf = 6,500 MMcf = 6,500,000 Mcf
- 2015 natural gas cost: \$46,345,000
 - Not including peaking services or transportation

Today's Questions

- **What is MEA's gas supply forecast?**
- **What has changed in Cook Inlet gas supply over the past 5 years?**
- **How have tax credit programs in Cook Inlet affected gas supply?**

MEA Gas Supply forecast - (Bcf)



What has changed in the last 5 years?

- 5 Years ago gas supply was available in small quantities and short terms (2 years).
- Most significant positive change is Hilcorp investment in existing Cook Inlet assets.
- Multiple new players investing significant capital.
- What has not changed?
 - USGS assessment of up to 19 Tcf remains to be found in Cook Inlet.
 - Additional reserves are not yet commercially available.

Impact of tax credit programs on gas supply

- **Good News:**
 - Multiple new Cook Inlet investors available for gas supply discussions
 - Life of mature fields have been extended
 - Some additional proven reserves
 - Temporary energy security
- **Bad News:**
 - New reserves are not “behind pipe”, which requires significant current and future investment
 - Temporary energy security

Contingencies

How can I be more efficient?

As consumers, each of us should use energy wisely. Snug, well-insulated structures will retain heat and reduce the amount of gas needed to fuel furnaces and boilers. If you are buying a major new appliance like a refrigerator, look for one that has earned an ENERGY STAR rating. Gas and electric utilities can provide information to help you better understand your energy bill and how to take steps to control it through conservation and energy efficiency. The U.S. Department of Energy, the Alaska Housing Finance Corporation and the website www.akenergyefficiency.org are other great resources for information.

How can I help in an emergency?

If the gas delivery system is going to come under extra stress, it is likely going to be during a prolonged cold snap. In addition to the steps you're already taking to use energy wisely, you may be asked to further reduce your use of natural gas and electricity to help take pressure off the gas delivery system. Relatively small steps can make a big difference in the amount of gas that's needed during a few critical hours.

How will I know if you need my help?

If it's necessary to call for customer action, an announcement will be made through the media by local government officials. Announcements will outline the situation, spell out specific actions customers are being asked to take, and provide some idea of the length of the problem.

How will outages be handled ... and will I lose gas service?

Electric utilities can do something that gas utilities generally can't: interrupt service to selected customers for short periods of time and then restore it. Therefore, no scheduled service outages are planned for ENSTAR customers. Planned power outages would be a last resort, necessary only if the combination of system operations and customer actions fails to solve the problem. If it

In the event of gas system problems, emergency managers might use a chart like this to advise customers.

CONDITION	MEANING	Customer Action
Green	System Stable	<ul style="list-style-type: none">Use energy wiselyBe conservation mindedYour utility can provide energy-saving tips
Yellow	Caution	<ul style="list-style-type: none">Set the thermostat to 65 degrees in living areas, and 40 degrees in the garageLower water heater setting to "warm" or "vacation"Minimize usage of natural gas rangePostpone doing laundry and dishesTurn off unnecessary lights and electronics
Red	Alert	<ul style="list-style-type: none">Set the thermostat to 60 degrees in living areas (if it's safe)Turn water heater gas valve to "pilot"Do not use natural gas appliances, including heaters or gas grillsConsolidate household activities into as few rooms as possibleUse the microwave for cooking

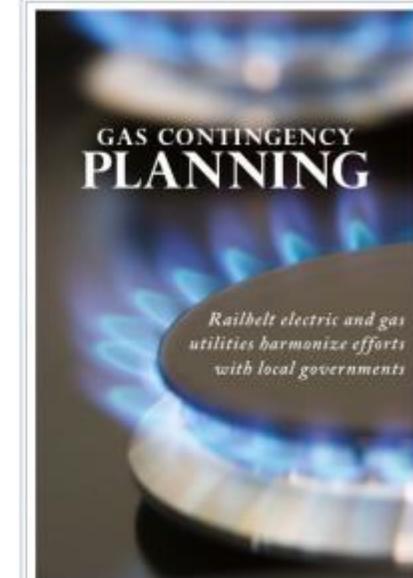
becomes necessary to interrupt service to electric customers, outages are planned to be 20-30 minutes long and rotated among customers, with consideration for critical facilities.

How can I learn more?

Check the websites of your municipal or borough government, electric utility or ENSTAR for additional information.



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Organizations throughout the Railbelt are ready 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 ENSTAR, the electric utilities in the Railbelt, the Municipality of Anchorage, and the Kenai Peninsula and Mat-Su boroughs have been working together on a collective approach to the situation.

WINTER 2011-2012

Summary

- **Uncertainty is the enemy of energy security**
- **Exploration & production risks are not typical core competencies of regulated utilities**
- **Bringing new gas reserves to the point they can be prudently purchased by a regulated utility requires \$100's of millions and many years**