



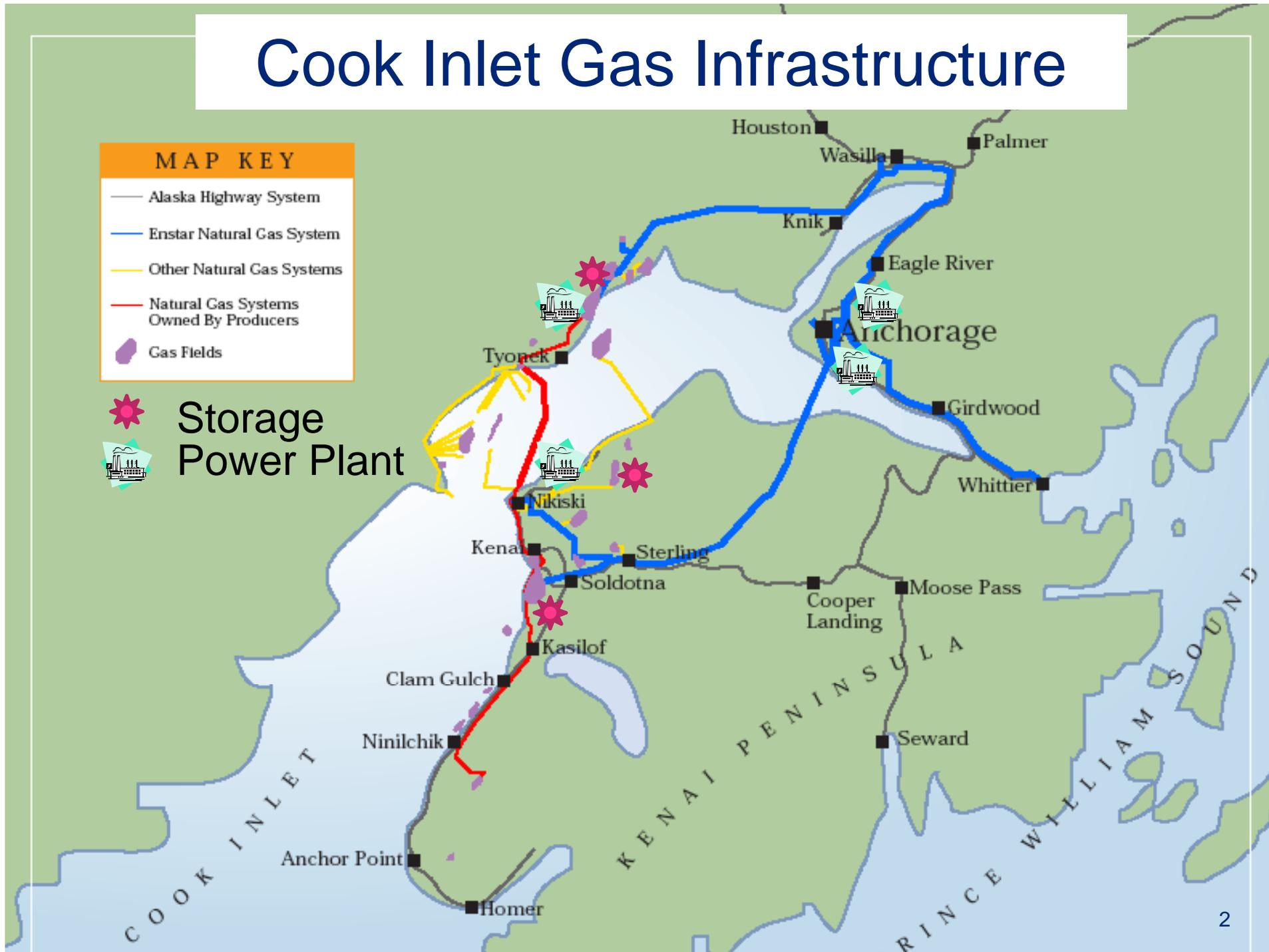
House Special Committee on Energy
September 1, 2009

Cook Inlet Gas Infrastructure

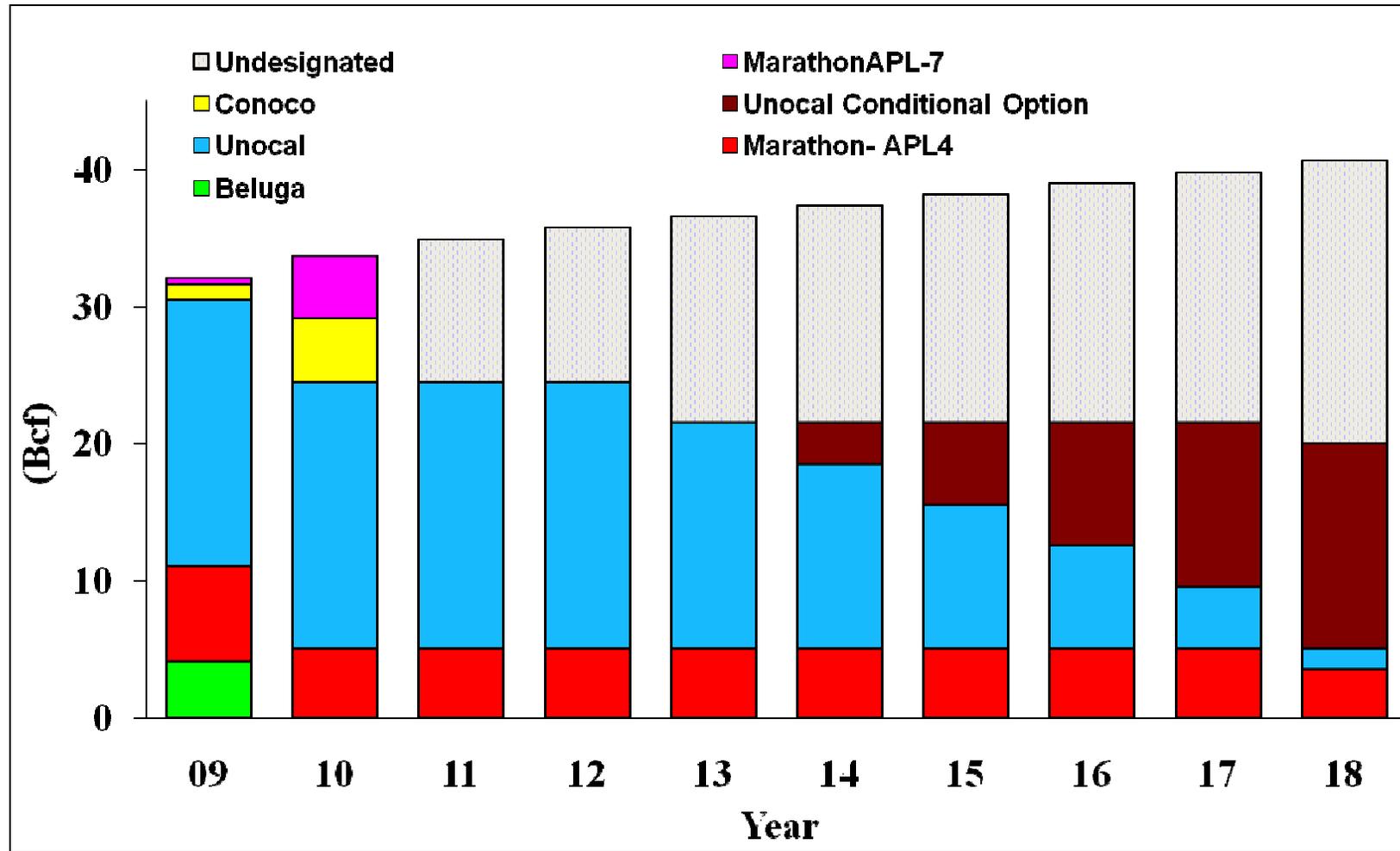
MAP KEY

- Alaska Highway System
- Enstar Natural Gas System
- Other Natural Gas Systems
- Natural Gas Systems Owned By Producers
- Gas Fields

 Storage
 Power Plant



Gas Supply – Winter 2009/2010 Outlook



Cook Inlet Peak Day Comparison

| | 2/3/99 | 1/9/07 | 1/3/09 |
|---------------------------------------------|---------------|---------------|---------------|
| Average Temp | -19° F | -10° F | -11° F |
| On ENSTAR System | 272 | 292 | 314* |
| Off ENSTAR System: | | | |
| CEA Beluga | 83 | 83 | 60* |
| CEA/HEA Nikiski | 14 | 12 | 12 |
| Nikiski LNG | 224 | 150 | 40 |
| Fertilizer Plant | 157 | 0 | 0 |
| Other Industrials | <u>13</u> | <u>6</u> | <u>14</u> |
| Total Cook Inlet Deliverability Est. | 763 | 543 | 440 |
| Less Storage Volumes** | 0 | ~43 | ~60 |
| Well Supply | 763 | 500 | 380 |

Volumes in MMcf

*CEA Beluga Received 20 MMcf from ENSTAR System

** Source DNR 3/17/09 House Energy Committee Presentation



All Our Energy Goes Into Our Customers

ENSTAR 2009/2010 Supply Portfolio

2009



Beluga River Unit Producers



ConocoPhillips



Marathon APL-4



Marathon APL-7



Union

FORECASTED PEAK 270MMcfd

2010



ConocoPhillips



Marathon APL-4



Marathon APL-7

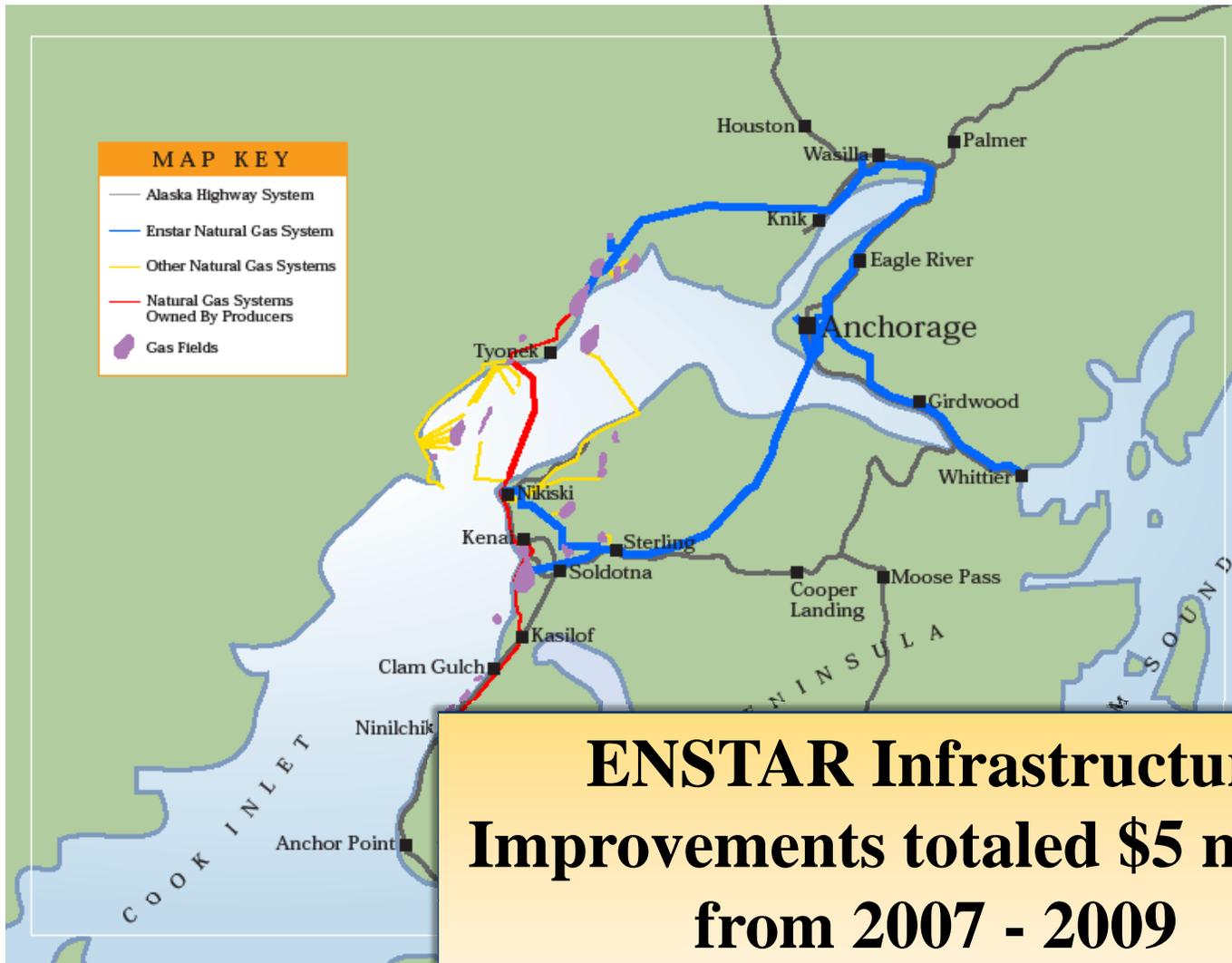


Union

FORECASTED PEAK 282MMcfd

ENSTAR's requirements are contracted for until Dec 31, 2010

ENSTAR System



ENSTAR Operations

-  ENSTAR staffed 24/7/365
 - Trained staff to respond to emergencies
-  Central Operations center in Anchorage
 - Regional Offices in Soldotna & Wasilla
-  Alternative Gas Control locations
 - Wasilla & Sterling
-  Redundant Communications Network
-  Equipment & Supplies pre-staged
 - Anchorage, Wasilla, Soldotna, & Sterling

ENSTAR Standard Operating Procedures



| OPERATIONS DEPARTMENT STANDARD OPERATING PROCEDURES | | | | | | | | | |
|--------------------------------------------------------|-----------------|---------------------------|-------------------------------------------------------------------------|-------------------|-----|--------|-------------------------------------------------|---|--|
| TABLE OF CONTENTS | | | | | | | | | |
| Updated: | | May 29, 2009 | | | | | | | |
| | | This Procedure Applies to | | | | | | | |
| SOP NUMBER | REVISION NUMBER | Date Issued | TITLE | CFR 192 Procedure | APC | ENSTAR | Fort Richardson (Dowry Unit/11th and Honeywell) | | |
| 1000 | | | General Information | | | | | | |
| 1 | 004 | 8/15/08 | Procedure Manual Policy Statement | No | x | x | x | x | |
| 10 | 004 | 8/15/08 | How to Use This Manual | No | x | x | x | x | |
| 15 | 005 | 8/15/08 | How to Add, Change or Delete a Procedure | No | x | x | x | x | |
| 20 | 004 | 8/15/08 | Operations Organization Chart | No | x | x | x | x | |
| 1100 | | | Emergency Procedures/Safety | | | | | | |
| 1 | 004 | 8/15/08 | Evacuation/Communication Program | No | x | x | x | x | |
| 5 | 014 | 8/15/08 | ENSTAR Emergency Operation Plan | Yes | | | | | |
| 10 | 010 | 8/15/08 | Reporting Incidents | Yes | x | x | x | x | |
| 15 | 004 | 8/15/08 | Reporting Safety-Related Conditions | Yes | x | x | x | x | |
| 20 | 002 | 8/15/08 | Hearing Conservation Program | No | x | x | x | x | |
| 25 | 008 | 8/15/08 | Operator Qualification Plan | Yes | x | x | x | x | |
| 30 | 003 | 8/15/08 | Assessment and ROW Safety | Yes | x | x | x | x | |
| 35 | 006 | 8/15/08 | Respiratory Protection Standards | No | x | x | x | x | |
| 40 | 003 | 8/15/08 | Lockout/Tagout Procedures | No | x | x | x | x | |
| 45 | 003 | 8/15/08 | Excavation Standards | No | x | x | x | x | |
| 50 | 004 | 8/15/08 | Damage Response Procedures | Yes | x | x | x | x | |
| 55 | 003 | 8/15/08 | Uniform Policy | No | | | | | |
| 60 | 004 | 8/15/08 | Customer and Emergency Response Official Education Program | Yes | x | x | x | x | |
| 62 | 003 | 5/29/09 | Public Awareness Program | Yes | x | x | x | x | |
| 65 | 002 | 8/15/08 | Customer Pipe Notification | Yes | x | x | x | x | |
| 70 | 002 | 8/15/08 | Control Station Entry Procedure | No | x | x | x | x | |
| 75 | 003 | 8/15/08 | Oil Spill Response and Cleanup Procedures | No | x | x | x | x | |
| 85 | 003 | 8/15/08 | Prevention of Accidental Ignition of Natural Gas | Yes | x | x | x | x | |
| 90 | 003 | 8/15/08 | Eye Protection Policy | No | x | x | x | x | |
| 1200 | | | Security | | | | | | |
| 1 | 002 | 8/15/08 | Security Assessment and Security Plan | Yes | x | x | x | x | |
| 5 | 004 | 8/15/08 | Unauthorized Natural Gas Usage Prevention and Handling Procedures | No | x | x | x | x | |
| 10 | 005 | 8/15/08 | Security Practices for Valves, Regulator Stations and Metering Stations | Yes | x | x | x | x | |
| 1300 | | | Engineering and Design | | | | | | |
| 5 | 004 | 8/15/08 | Station and Valve Identification Numbering System | Yes | x | x | x | x | |
| 6 | 002 | 8/15/08 | Operating Valve Maintenance Procedures | Yes | x | x | x | x | |
| 10 | 003 | 8/15/08 | Tracognition System Class Location and MACP Review Procedures | Yes | x | | | | |
| 15 | 003 | 8/15/08 | Engineering Records Retention Procedure | No | x | x | x | x | |
| 20 | 003 | 8/15/08 | Expenditure Request | No | x | x | x | x | |
| 1400 | | | Damage Prevention | | | | | | |
| 1 | 005 | 8/15/08 | Damage Prevention Program | Yes | x | x | x | x | |
| 5 | 008 | 8/15/08 | Line Location Policy and Procedures | No | x | x | x | x | |
| 15 | 003 | 8/15/08 | Routine Leak Surveying Procedure | Yes | x | x | x | x | |
| 20 | 011 | 5/29/09 | Pipeline Surveillance and Patrol | Yes | x | x | x | x | |
| 25 | 005 | 8/15/08 | Investigation of Accidents and Material Failures | Yes | x | x | x | x | |
| 30 | 003 | 8/15/08 | Pipeline Markers | Yes | x | x | x | x | |
| 1500 | | | Corrosion Control | | | | | | |
| 5 | 010 | 4/17/09 | Corrosion Control Policy | Yes | x | x | x | x | |
| 1600 | | | Gas Control | | | | | | |
| 1700 | | | Gas Measurement and Regulation | | | | | | |
| 1 | 003 | 8/15/08 | Safe Entrance to Gas Handling Facilities | No | x | x | x | x | |
| 5 | 004 | 8/15/08 | Regulator Station Maintenance Procedure | Yes | x | x | x | x | |
| 10 | 001 | 8/15/08 | Periodic Meter Change-Out Program | No | | | | | |
| 15 | 007 | 4/17/09 | Meter Location Standards and Drawings | No | x | x | x | x | |
| 20 | 004 | 8/15/08 | Natural Gas Odorant Handling Procedures | Yes | x | x | x | x | |
| 30 | 002 | 8/15/08 | Management Meter Handling Techniques | No | x | x | x | x | |
| 35 | 001 | 8/15/08 | Meter Control System | No | | | | | |
| 1800 | | | Compressor Stations | | | | | | |
| 5 | 004 | 8/15/08 | Gudzenath Compressor Station Operation | Yes | x | | | | |
| 10 | 003 | 8/15/08 | Kalfinsky Compressor Station Operation | Yes | x | | | | |
| 15 | 002 | 8/15/08 | Compressor Station Maintenance | Yes | x | | | | |
| 20 | 004 | 8/15/08 | Compressor Station Tests and Inspections | Yes | x | | | | |

Standard Operating Procedures



Comprehensive Review of Emergency Operating Plans

- Gas Supply Disruption
- Gas Leaks
- Damages- contractors/homeowners
- Natural Disasters
- Fires



Employee Training

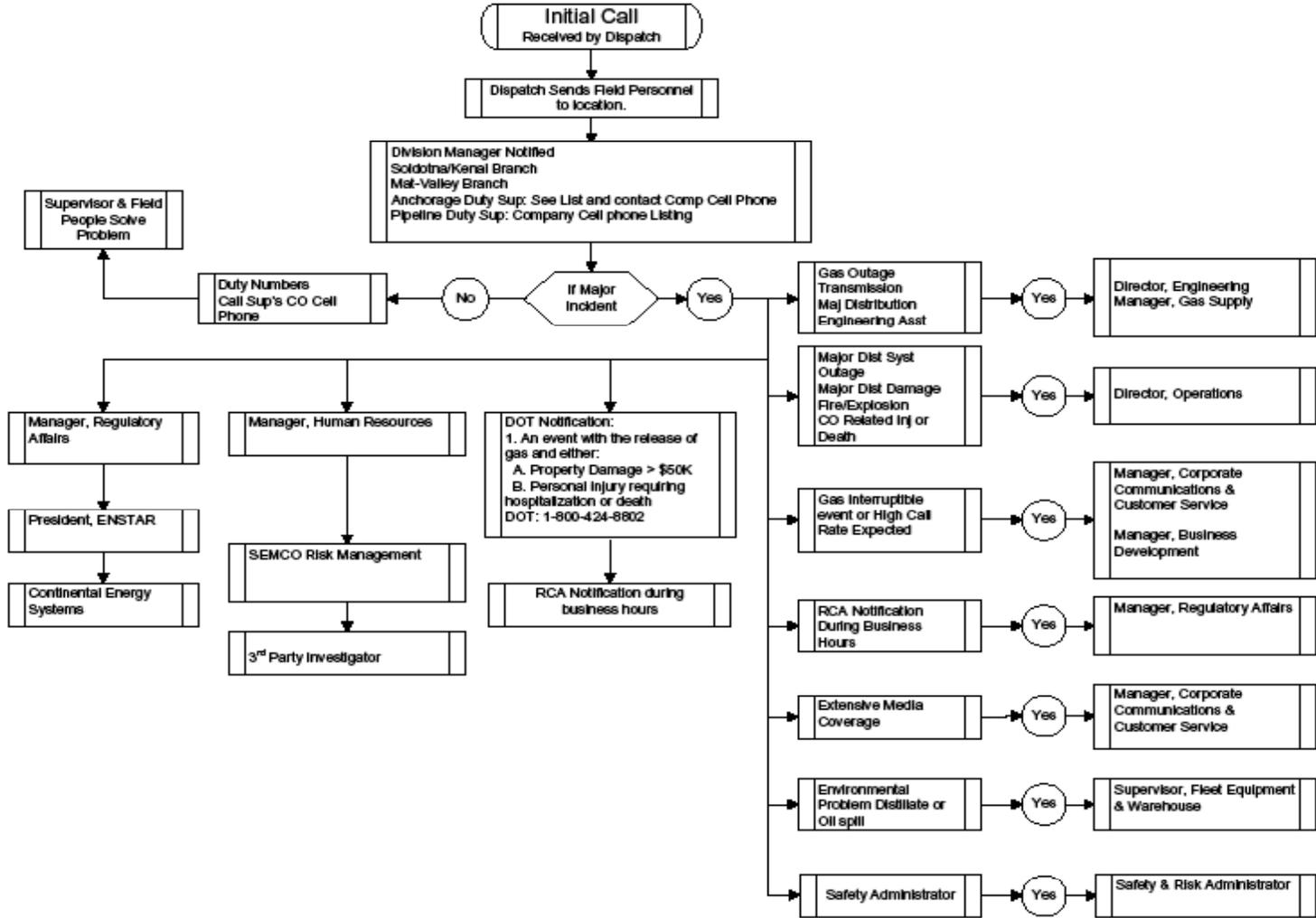
- Operator Qualifications Program



PHMSA annually audits ENSTAR

- Two audits successfully concluded early summer 2009

ENSTAR Emergency Response Call Tree*



*phone numbers redacted



All Our Energy Goes Into Our Customers

Cook Inlet Gas Supply Coordination

- Primary utility users of gas



- ENSTAR hosts Annual Shippers/Producers Meeting
- Shippers forecast demand
 - Annual/Monthly/Daily
- Daily nominations on ENSTAR Pipelines coordinated between
 - ENSTAR/Shipper/Supplier



All Our Energy Goes Into Our Customers

ENSTAR Contingencies

-  Updated Gas Emergency Agreement
-  Specific ENSTAR contracts have “Peaking” or “Excess” gas purchase rights
 - **IF AVAILABLE**
-  Alternative delivery locations into the ENSTAR pipeline system
-  RCA Approved cost recovery system
 - ENSTAR Tariff Section 1200
 - “Cost Causer - Cost Payer”
-  Significant incentive for shippers to provide appropriate quantity of gas for their own customers

GAS EMERGENCY AGREEMENT LETTER

ENSTAR Natural Gas Company (ENSTAR), Chugach Electric Association (CEA), Municipal Light & Power (ML&P) and Golden Valley Electric Association (GVEA) hereby referred to as the Parties agree to work cooperatively together to minimize the effect on the public of a shortage of natural gas in accordance with the principles in this letter.

The Parties recognize the difficulties caused by the loss of electricity in Southcentral Alaska and will work together in good faith to keep the interconnected generation and transmission system energized and as many customers energized as possible.

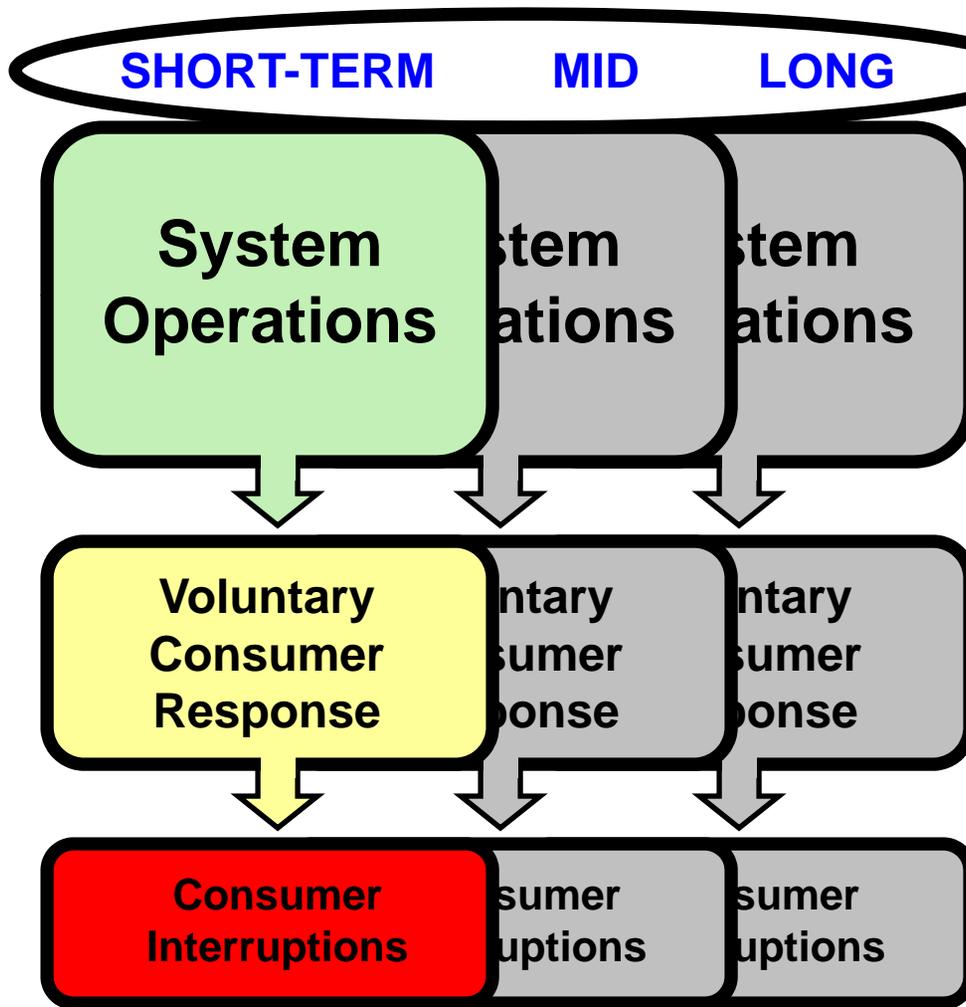
The Parties recognize the difficulties caused by the depressurization of the gas transmission and distribution system and will work with ENSTAR to maintain transmission and distribution gas pressures.

At the onset of any emergency restricting the amount of gas available, ENSTAR Operations Center personnel will contact Southcentral Power Control Centers to mutually determine a course of action. ENSTAR will also simultaneously work with the, natural gas producers, 3rd party marketers and industrial users of natural gas. Depending upon the event the following alternatives (priority order determined by the event) will be used to limit the effect of the emergency:

- Curtail ENSTAR deliveries to interruptible customers;
- Curtail non-firm power sales (Economy Energy Sales);
- Maximize hydro generation;
- Shift electric loads between power plants to address gas production and transportation problems (may cause inter-utility sales/purchases);
- All Parties call upon backup supplies of gas if available;
- Shift power plants to alternate fuels in accordance with Section 1200 (Interruption) of the ENSTAR Tariff;
- Import electricity from Fairbanks;
- Appeal to the public to reduce use of gas (ENSTAR);
- Appeal to the public to reduce use of electricity (electric utilities);

Gas Emergency Agreement Letter August 25 2009 -1-

Gas Supply Interruption Incident Response Overview*



DRAFT Utilities Emergency Response Overview

| | Short-term (Hours to days) | Mid-term (Weeks to months) | Long-term (Years) |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System Ops (In no particular order, depends on situation) | <ul style="list-style-type: none"> Increase hydro generation Increase limits on Kenai 115 KV line Golden Valley Electric Assoc. <ul style="list-style-type: none"> - Curtail energy sales - Purchase up to 75 MW - Purchase up to 70 MW Divert gas from LNG plant (steam shutdown) Reduce/eliminate spinning reserve (Chugach arm SLO) MLSP/Chugach generation swap (Joint decision) MLSP commits to liquid fuel (MLSP decision) Emergency gas purchases (beyond contractual requirements) Adjust generation mix based on deliverability BESS Seward on own generation Non-ENSTAR/APC system users of gas are interrupted Intermittent gas customers are curtailed 3rd Party Gas Marketers adjust deliveries Adjust gas flows to MLSP as needed Adjust gas delivery points based on deliverability | <ul style="list-style-type: none"> Divert gas from LNG plant (steam shutdown) Golden Valley Electric <ul style="list-style-type: none"> - Curtail energy sales - Purchase up to 75 MW Interrupt Seward Electric Sharing agreements Emergency rates (would require tariff) Portable generators (i.e. issue from GE and use of bladder) MLSP to continue liquid fuel (MLSP decision) Evaluate spinning reserve | <ul style="list-style-type: none"> Southcentral Power Project More renewables Wind, geothermal, hydro Gas storage <ul style="list-style-type: none"> - LNG, in-ground Replacement generation M&P Plant 1 & 2 IGT - liquid fuel conversion Purchase power from LVVA Stock Incentive Management Plan Integrate Seward generation Additional BESS to reduce spinning reserve Long-term rate design changes Integrate gas transmission system |
| Voluntary Actions | <ul style="list-style-type: none"> Widespread <ul style="list-style-type: none"> - Switches under Public Gov't control - Mutual utility assistance actions Commercial <ul style="list-style-type: none"> - Self-generation (not with natural gas) - Reduce exterior lighting Residential <ul style="list-style-type: none"> - Action sheet Utilities own facilities <ul style="list-style-type: none"> - Cut non-essential load at utility facilities - Reduce non-essential gas consumption - Retail & Commercial | <ul style="list-style-type: none"> Widespread <ul style="list-style-type: none"> - Matanuska Electric - Homer Electric - Seward Electric - Conservation/Efficiency - Power Education <ul style="list-style-type: none"> - Smart Lighting - Smart Metering - Audits - Dispatchable and street light circuits? - Reduce non-essential gas consumption - Retail & Commercial | <ul style="list-style-type: none"> Widespread <ul style="list-style-type: none"> - Matanuska Electric - Homer Electric - Seward Electric - Conservation/Efficiency - Smart Power - Education - Smart metering - Audits - Dispatchable alternative self-generation |
| Interruptions | <ul style="list-style-type: none"> Shared responsibility among utilities Fairness, sensitivity to critical loads, rotation 20 to 30 minutes per outage Gas Curtailments of Commercial Accounts | <ul style="list-style-type: none"> Feeders prioritized Shared responsibility among utilities Fairness, sensitivity to critical loads, rotation 20 to 30 minutes per outage Gas Curtailments of Commercial Accounts | <ul style="list-style-type: none"> Feeders prioritized Shared responsibility among utilities Fairness, sensitivity to critical loads, rotation 20 to 30 minutes per outage Gas Curtailments of Commercial Accounts |

DRAFT---Customer Action Plan

DRAFT - Energy Disruption Customer Action Plan

| CONDITION | MEANING | Customer Action (Natural Gas Usage) | Customer Action (Electric Usage) |
|-----------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Green | Systems Good | <ul style="list-style-type: none"> Normal activity Use energy wisely - Be conservation-minded Your utilities can provide tips on saving energy | <ul style="list-style-type: none"> Normal activity Use energy wisely - Be conservation-minded Your utilities can provide tips on saving energy |
| Yellow | Caution | <ul style="list-style-type: none"> Set thermostat to 65 degrees in living areas, and 60 in the garage Lower water heater setting to "Warm" or "Vacation" Minimize usage of natural gas ranges, and clothes dryer Do not use natural gas fire places, decorative heaters or grills. Do not use natural gas hot tubs | <ul style="list-style-type: none"> Propose doing laundry or dishes Turn off unnecessary lights and electronics Turn off unnecessary space heating, especially in unoccupied rooms Avoid using heat bulb heaters Avoid using hot tubs |
| Red | Emergency | <ul style="list-style-type: none"> Set thermostat at 60 degrees in living areas (no flames) Turn water heater gas valve to "off" Do not use natural gas fireplaces, decorative heaters or gas grills | <ul style="list-style-type: none"> Preheat with electricity, close off under rooms and cover heat register to minimum setting Close Make Household Appliances into as few rooms as possible Use the microwave for cooking |

*Source CEA 8/26/09 RCA Presentation

Actions & Next Steps

-  Utilities updated RCA 8/26/09
-  Gas & electric system operator tabletop scheduled for 9/10/09
-  ENSTAR hosts Annual Shippers/Producer meeting 9/17/09
-  Coordination with Municipality of Anchorage
 - Utilities & MOA meeting today on coordination plan
 - By September 18, 2009 - community education plan
 - October 2009 - Energy conservation month & notification of alert status
 - October 2009 – Conduct real-world test of voluntary curtailment
 - By October 23, 2009 - complete MOA Emergency Action Plan
 - By November 6, 2009 – MOA tabletop exercise
 - By November 13, 2009 - Review of MOA tabletop exercise and modify MOA Emergency Response Plan accordingly

In Conclusion

-  Cook Inlet deliverability continues to decline
-  Mutual aid planning & coordination among the utilities is occurring but not a long term solution
-  Coordinated customer awareness & education efforts are ongoing
-  Utilities, producers, local and state governments must work together for long term solutions to ensure the safety and security of our communities for heat and power
-  Regulatory and fiscal certainty are required to achieve long term solutions

Questions and Comments