

## Special Session Anchorage, Alaska June 20, 2008

Gene Dubay, SVP & COO Continental Energy Systems

Colleen Starring, Regional Vice President ENSTAR Natural Gas Company



<u>All Our Energy</u> Goes Into Our Customers

## Who We Are – ENSTAR Facts

### Established 1961

- Number of Meters 128,000+
- Number of Alaskans Served\* 345,600
- Miles of Distribution Mains and Transmission Mains – 3,100
- Direct Impact on Alaska's Economy \$306 mil
- Number of ENSTAR Employees 174
- Rank among Alaskan energy Utilities 1
- New Customers in 2007 2,376

\* 128,000 Meters x 2.7 Alaskan Consumers per Meter





# **ENSTAR** (Alaska Pipeline Company)

- Engineering/Construction
- 47 Years of Experience in Alaska
- Constructed and Operates 450 miles of Transmission Mains and 2700 miles of Distribution Mains
  - Represents 75% of all gas transmission pipelines in Alaska
  - Represents 100% of distribution mains in South-Central Alaska

## Expertise

- Compression Plant Engineering & Construction
- Pipeline Engineering
- Environmental/Permitting
- Construction Management





## South Central Gas Distribution





All Our Energy Goes Into Our Customers



# ENSTAR In-State Pipeline Phase One





### Historic & Projected Natural Gas Production (Bcf/Year) Source: Division of Oil & Gas Report 2006





All Our Energy Goes Into Our Customers

# Gas Supply – April 2008 Outlook





#### All Our Energy Goes Into Our Customers

## Foothills Unit Area Map





All Our Energy Goes Into Our Customers

## **ENSTAR Line**

### Natural Gas for South Central Alaska





# Pipeline Route & Cost

## Cook Inlet to Fairbanks

- Approximately 320 Miles
- Parks Highway Route

## Fairbanks to the Foothills

- Approximately 370 miles
- Dalton Highway Route

Cost \$970 million

Cost \$2.3 Billion



## Total Project Cost - \$3.3 Billion for 20" Diameter Project Timeline – 5-6 Years 2-3 Years of Permitting, Design & Procurement 3 Years of Pipeline Construction





## **Foothills Natural Gas Milestones**

|                             | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-----------------------------|------|------|------|------|------|------|------|------|
| Gubik 1st drilling season   |      |      |      |      |      |      |      |      |
| ENSTAR Pipeline - Phase 1   |      |      |      |      |      |      |      |      |
| Gubik 2nd drilling season   |      |      |      |      |      |      |      |      |
| Producer update             |      |      |      |      |      |      |      |      |
| ENSTAR Go or No-Go Decision |      |      | •    |      |      |      |      |      |
| Gubik 3rd drilling season   |      |      |      |      |      |      |      |      |
| ENSTAR Pipeline - Phase 2   |      |      |      |      |      |      |      |      |
| Construction                |      |      |      |      |      |      |      |      |
| FIRST GAS                   |      |      |      |      |      |      |      |      |



All Our Energy Goes Into Our Customers

# Advantages of the ENSTAR Line

- Timing (First gas 2014)
- Alaska controls its' own destiny
- Long-term supply solution for the Railbelt communities
- Not mutually exclusive with pipeline to Lower 48
- Compliments AGIA and the DENALI project
- Could revive Agrium plant
- Could extend life of Kenai LNG plant
- Creates opportunities for natural gas-based industrial growth in South Central Alaska
- In-state markets qualify for lower tax burdens under Alaska's ACES
- Achieves reasonable end user pricing for Alaskans
- Ensures sufficient wellhead prices for exploration & development





## **Cost to Consumer**

# Switching to Alternative Fuels in South Central Alaska (2008 costs)





### <u>All Our Energy</u> Goes Into Our Customers

# Accessible In-State Market

## ENSTAR

- South-Central Electric Companies
  - Chugach, MLP, MEA, HEA
- Fairbanks Natural Gas

## Military Bases

- Elmendorf AFB & Fort Richardson
- Eielson AFB & Fort Wainwright
- Golden Valley Electric
- Tesoro Refinery
- Flint Hills Refinery

## Agrium

LNG Export





# **ENSTAR Pipeline Study**

**Throughput and Load Estimates** 

| Load Profile MMcfd                          | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| ENSTAR                                      | 93.710      | 95.110      | 96.540      | 97.990      | 99.460      | 100.950     |
| South-Central Electric Companies            | 57.000      | 47.200      | 49.200      | 51.200      | 52.200      | 53.200      |
| Fairbanks NG                                | 6.000       | 10.000      | 18.000      | 20.000      | 21.000      | 22.000      |
| Military Bases and Additional<br>Commercial | 13.000      | 13.000      | 14.000      | 14.000      | 14.000      | 14.000      |
| Golden Valley Electric                      | 8.770       | 8.770       | 8.770       | 8.770       | 17.530      | 17.530      |
| Tesoro Refinery                             | 11.000      | 11.000      | 11.000      | 11.000      | 11.000      | 11.000      |
| Flint Hills Refinery                        | 13.700      | 13.700      | 13.700      | 13.700      | 13.700      | 13.700      |
| Agrium, Inc.                                | 131.510     | 131.510     | 131.510     | 131.510     | 131.510     | 131.510     |
| LNG Export                                  | 134.250     | 134.250     | 134.250     | 134.250     | 134.250     | 134.250     |
| Total                                       | 468.930     | 464.530     | 476.960     | 482.410     | 494.640     | 498.140     |



<u>All Our Energy</u> Goes Into Our Customers

## Assumptions

- Project based on utility grade gas
- 20" diameter high grade steel pipeline
- Operating pressure ~2500 psi
- Operating pressure & design allow for additional hydrocarbon spiking







## **Current ENSTAR Pipeline Status**

- Contracted engineering, environmental, and construction companies to assist with the project
- Update meetings scheduled with Anadarko in Alaska July 15<sup>th</sup>
- Aerial Photography
  - Southern Route (FBX to Big Lake)
    - Approximately 70% of data has been acquired
    - Data processing is just beginning complete by Aug 31, 2008
  - Northern Route (North Slope to Fairbanks)
    - All data has been acquired
    - Processing will be complete in approximately 30-days

### LIDAR Data

- Approximately 90% of data has been acquired
- Processing complete by July 11, 2008

### Field Work

• Work is underway – numerous trips for route reconnaissance, river crossing investigations, pinch point investigations, geotechnical studies, seismic studies, constructability, etc, will occur between now and October 2008.





## **Current ENSTAR Pipeline Status**

### Agency and Stakeholder Communications

- Initial communications have occurred with the following agencies or organizations: BLM/JPO, (three regions), ADOT (both Northern and Southern Regions), COE, DNR, National Park Service, NGO's (including National Parks Conservation Association, Alaska Center for the Environment, Trustees for Alaska, and Defenders of Wildlife), CIRI, Doyon, Alyeska Pipeline Service Company, and Conoco Philips.
- Communications are planned with Fairbanks Northstar Borough, Denali Borough, Mat-Su Borough, Fish and Wildlife, University of Alaska, EPA, USGS, Mental Health Trust, AHTNA, and others.

### Data Gathering

• Research data is being gathered and stored to a project library. To be used as reference material for the project. Data includes geotechnical, seismic, environmental, regulatory, engineering, and construction design information.

#### Document Management System

 DMS developed to store data (GIS, environmental, regulatory) relevant to the project. Data is stored and is available for all entities that are involved with the project.





## **Development Plan Priorities**

- Continue regulatory permit acquisition
- Prepare economic & financial models
- Address environmental work
- Public outreach & public involvement
  - Alaska Support Alliance, Fairbanks Economic Development Corporation, Rotary Clubs, South Central Chambers, ASRC, CIRI, Doyon, KTUU, KTVA, Anchorage Daily News, Fairbanks Daily News Miner, Peninsula Clarion, Talk Radio Programs, Platts Gas Daily
  - Continued updates planned
- State ROW application preparation





## **Questions and Comments**



