

An Alaska gas line is possible

Prepared for Commonwealth North

Larry Persily, Federal Coordinator

Aug. 16, 2010



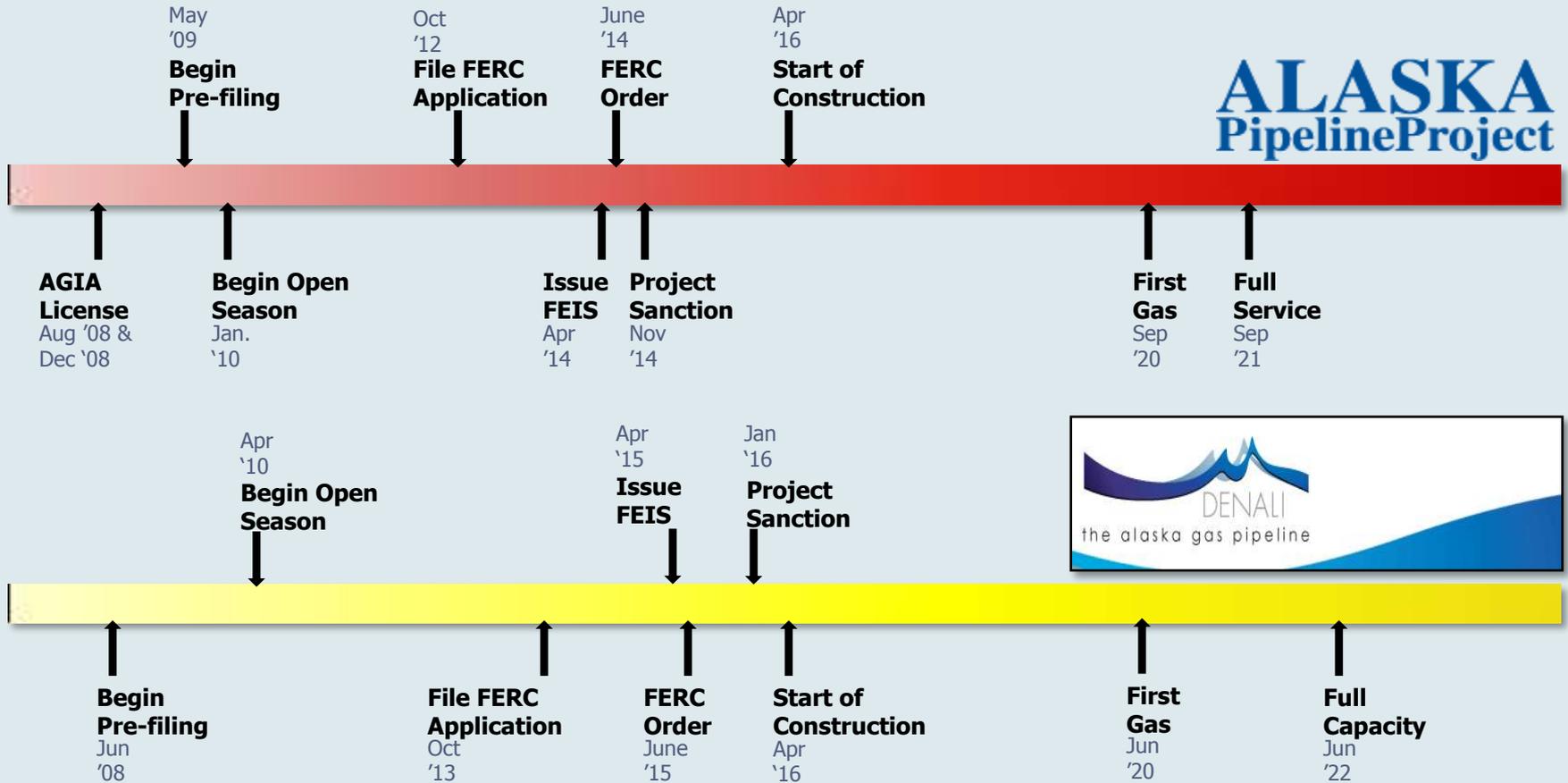
There is progress

- Alaska Pipeline Project (TransCanada/ExxonMobil)
- Denali – The Alaska Gas Pipeline (ConocoPhillips/BP)
- The four have spent almost \$500 million since 2000
- 2010 open seasons to judge shippers' interest
- Meanwhile, Alaskans are getting more impatient
- Alaska gubernatorial election Nov. 2 injects politics
- And BP's problems add to uncertainty

Open seasons

- TransCanada/Exxon open season closed July 30
 - *Options: Through Canada, or to Valdez for LNG*
- TransCanada reported multiple bids, with conditions
 - *No disclosures until precedent agreements*
- Conditions on pipeline bids not unusual
 - *Just like an earnest money offer on a house*
- ConocoPhillips/BP open season closes Oct. 4
- Agreements could come late 2010, early 2011

Potential project schedules



What's the risk?

- ❑ Overruns on \$30 billion - \$40 billion Arctic project
- ❑ Steel prices, work delays, weather, lawsuits
- ❑ Market price for natural gas
- ❑ Low margins after high transportation costs
- ❑ Competing gas supplies, such as shale
- ❑ Uncertain state tax structure
- ❑ Second-guessing by state utility commissions on long-term gas supply contracts

Where is the best gas market?

- Pipeline from Alaska to North America would feed into the largest natural gas market in the world
- North America consumes 75 to 80 bcf per day
- North America market is three times the size of China, India, Japan, South Korea and Taiwan gas markets combined
- U.S. demand growth essential for Alaska project
- Utilities need to love gas for power generation

Gas market numbers

- Global gas trade in 2007
- 73% of worldwide gas production was consumed within the producing country
- 19% of gas production was delivered to foreign customers by cross-border pipeline
- 8% of gas was delivered by LNG tanker
- The bigger the size of the market, the more new gas it can absorb

What would help

- Fuel switching from coal to gas-fired generation
 - *Growth in electrical power is the key*
 - *CERA: Power load 19 bcf/d 2009 to 35 bcf/d 2030*
- Even just replacing older coal plants would help
- Promoting natural gas as a transportation fuel
- Congress: CO₂; cap-and-trade; climate change
- Shale actually could help by eliminating price spikes and getting utilities to think gas for long term

Everyone has an opinion

- Former Govs. Frank Murkowski and Bill Sheffield
- Former Sen. Ted Stevens said no line to Lower 48
- Former University President Mark Hamilton: Gas will never exceed \$6/mcf in 2010 dollars during his lifetime
- All of the gubernatorial candidates
- Me too
- Only thing for certain: **We're probably all wrong**

The dreaded shale

- Shale gas production 10% of U.S. supply last year
- Growing across U.S. and Canada, especially Alberta and B.C.
- Close to markets; easy to adjust production
- Drilling rig efficiency is up, and up and up
- States are hungry for revenues and jobs
- Shale will hold down price spikes; no more \$14 gas
- Like Flubber, it's a perfect product — but is it?

Shale has its problems

- Fracking becoming about as popular as an oil spill
- Water quality concerns
- EPA review underway; possible federal legislation
- More questions as it grows closer to urban areas
- An environmental disaster could change the game
- Shale also needs tens of billions of dollars of new pipelines, treatment plants
- Steep production decline curve; deep wells cost \$\$

A lot of LNG competition

- We're not alone looking west to East Asia
- Papua New Guinea, Australia (including coal-seam), Indonesia, Sakhalin, Malaysia and Brunei, West African nations, Qatar, Oman, Yemen
- All either operating or building LNG plants
- Floating LNG; Shell's multibillion-dollar order with Samsung will access smaller fields in Pacific Basin
- New projects totaling 9 bcf/d online in 2009-2010
- An additional 7 bcf/d scheduled by 2015

Role of federal coordinator

- Coordinate federal permitting process so that it works for the project developer and the public
- Ensure that no federal agency imposes unreasonable permit requirements on project
- Coordinate with state agencies
- Coordinate with Canadian government agencies
- But no permitting help, loan guarantees or financial benefits for exclusively export project

It's not easy, but it's possible

- Open seasons will test market demand for gas
- Shippers sign up and take on development risk
- Long term, North America needs to burn more gas
- Producers need to gamble on demand and price
- Alaska needs to negotiate fiscal terms
- At some point everyone needs to sit down and talk
- Gas line to North America possible if right things happen and all parties willing to contribute

Thank you

Larry Persily, Federal Coordinator

1717 H St. NW, Suite 801
Washington, DC 20006

(202) 478-9755

lpersily@arcticgas.gov

www.arcticgas.gov