An Alaska gas pipeline really is possible

Greater Palmer Chamber of Commerce

Nov. 17, 2010

Larry Persily, Federal Coordinator

There is progress

- Alaska Pipeline Project (TransCanada/ExxonMobil)
  and Denali (ConocoPhillips/BP)
  have spent more than $500 million since 2000
- Open seasons closed; multiple bids (with conditions)
- Conditions on pipeline bids not unusual
  - ***Just like an earnest money offer on a house***
- More news could come late 2010, early 2011
  - ***No disclosures until signed agreements***

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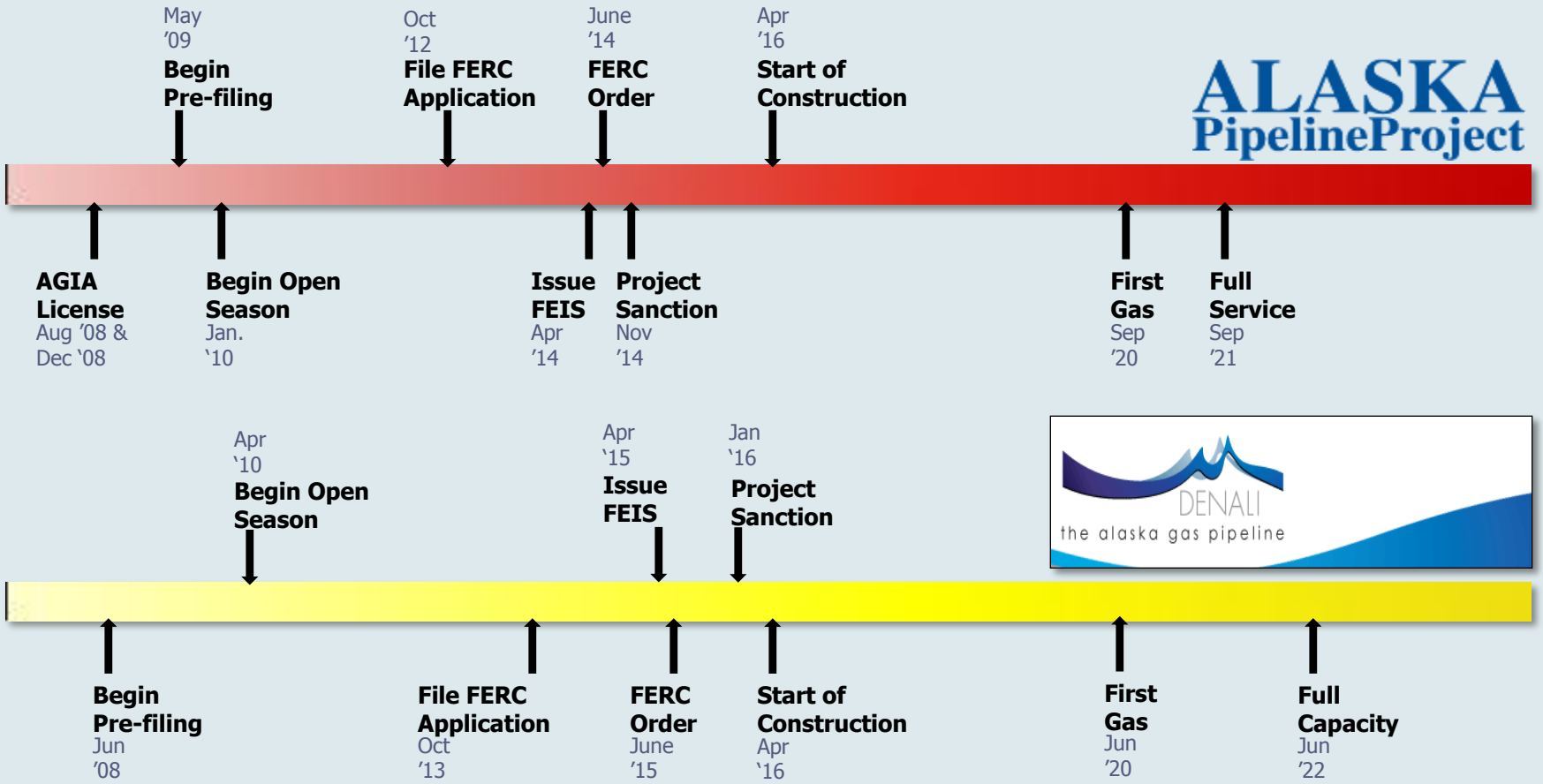
Precedent agreements

- Next step in FERC process after open season
- Can take weeks in a small projects; several months for larger projects — and this is the largest ever
- Not the final binding shipping commitment, but close
- Public disclosure of shipper, volume and tariff
- Signed precedent agreements trigger spending
- Shippers start to assume some of the risk
  - ***Shippers can be billed for share of costs if project dies***

Proposed project schedules



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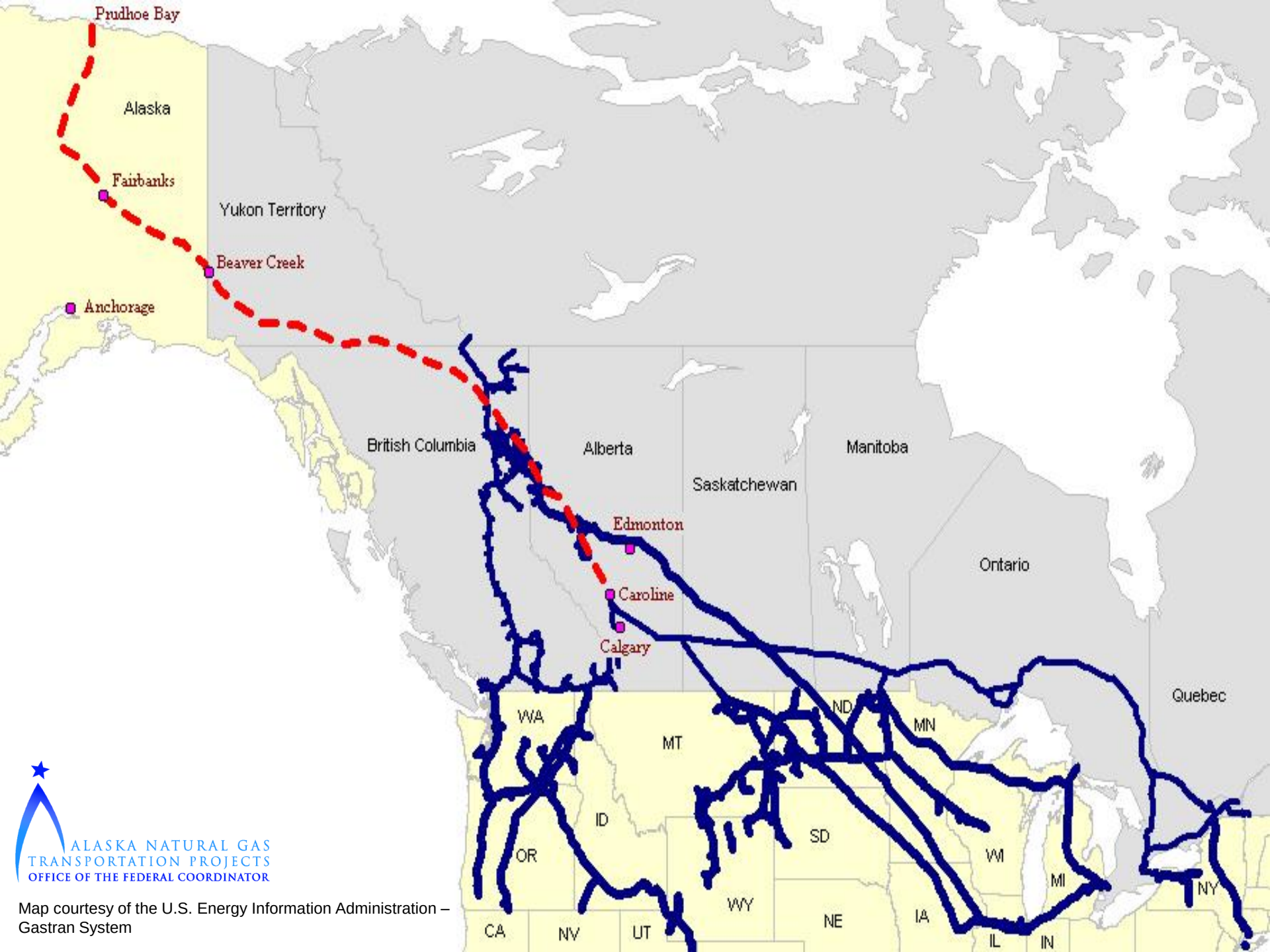
Find the best market

- 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
- Pipeline grid can move Alaska gas from California to New York, and every other state in between
- North America market is three times the size of China, India, Japan, South Korea and Taiwan natural gas markets combined
- In-state delivery must be part of deal for Alaskans



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Map courtesy of the U.S. Energy Information Administration – Gastran System

LNG market is tough

- Australia, Indonesia, Russia, Malaysia, Brunei, Papua New Guinea, Qatar, Oman, Yemen, United Arab Emirates, Egypt, Algeria, Nigeria, Trinidad, Peru and Norway
- All operating or building LNG export projects
- New projects add 50% to Asia supply 2009-2015
- Qatar is on target to reach its 2010 goal of 11 bcf per day, with some of the lowest costs

Australia wants to be No. 1

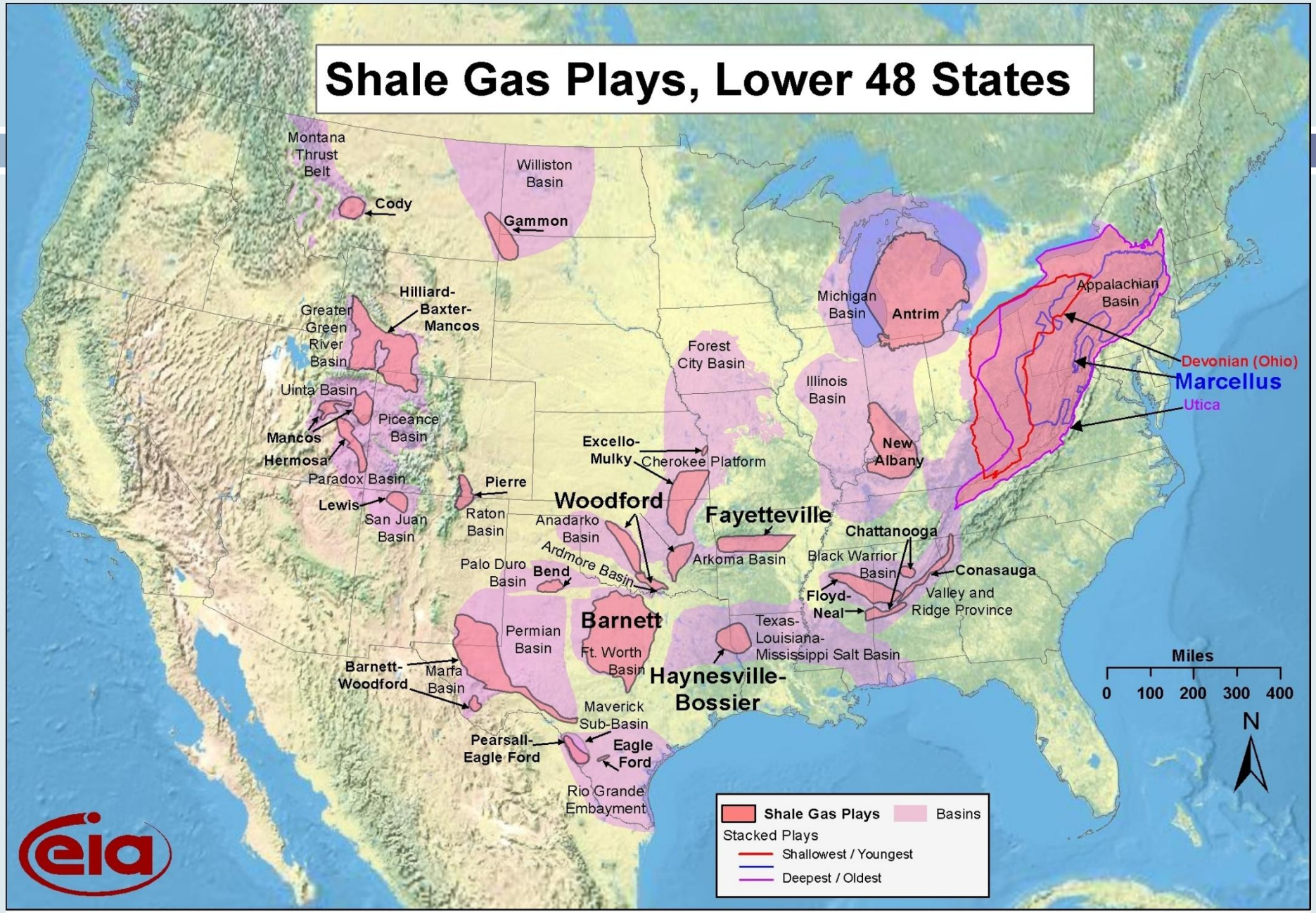
- $50 billion in LNG projects under construction
- $50 billion more in projects will be ready for investment decisions by next year
- Shell, Chevron, ExxonMobil, ConocoPhillips, Hess, Total, Apache, Woodside and others are spending serious money in Australia
- Shell alone looking at $50 billion this decade
- Nothing in Australia needs 800-mile Arctic pipeline

Floating LNG

- Shell looking to bring first floating 'platform' online 2016 for offshore (120 miles) Australia field
- Australian government just approved Shell project
- $5 billion investment; 500 million cubic feet per day
- Samsung holds contract to build up to 10 ships
- 1,600 feet long, 250 feet wide, one-stop shop
- Other producers also looking at floating LNG for Indonesia and Papua New Guinea

Competition back home

- Unconventional gas about 20% of U.S. supply
- Growing rapidly across the U.S. and Canada
- Horizontal drilling efficiency improves each year
- CERA: "Nobody drills a dry hole in a shale play. If they did, they're not very good."
- But the truth is, much of shale goes toward replacing declining production from conventional gas wells
- And shale wells experience a steep decline curve



Source: Energy Information Administration based on data from various published studies.
Updated: March 10, 2010

Shale has its problems

- Fracking becoming about as popular as an oil spill
- EPA review underway; states consider their own laws
- More questions as it moves closer to urban areas
- Hydraulic fracturing for shale gas requires
  3 million to 5 million gallons of water per well
- EPA lead: "Where is that water coming from?"
- Produced water disposal is the biggest issue
- Utilities group: "Environmental costs always go up."

Shale actually could be good

- Shale could help by eliminating price spikes and getting utilities to think gas for the long term
- Worldwatch Institute: "Price volatility remains the Achilles' heel of natural gas."
- No utility can afford repeat of $14 price spikes
- Utility president: "Building a 1,000-megawatt, gas-fired plant doesn't make sense if you can't be sure what your fuel costs will be."
- Shale makes utilities feel more comfortable with gas

Utilities are thinking gas

- Growth in electrical power plant demand is essential
- American Public Power Association: Clean Air Act is pushing utilities to decide which plants survive
- The future is natural gas, not coal, for new plants
- TVA, Calpine, Xcel Energy, Constellation, Duke, Progress Energy planning new gas-fired plants
- Colorado's Xcel: Gas will cost $1.3 billion, but $225 million less than upgrading coal plants

New regulations and EPA

- Anything that helps drive the nation to clean-burning natural gas would be good for Alaska project
- New EPA regulations could boost gas demand
- Utilities see possible new federal regulations, but don't know what or when — they're nervous
- They are factoring that uncertainty into their long-term power plant investment decisions now
- Politics could help, or hurt, natural gas demand

Demand growth is key

- Electrical demand grew from 14 billion cubic feet per day in 2000 to 19 bcf per day in 2009
- CERA: Electrical utility demand for gas could almost double 2009 - 2030; an additional 16 bcf/day
- Interstate Natural Gas Association of America: Replacing half of oldest, least-efficient coal plants would require 5.5 bcf of gas per day
- It's not taking from coal, but going after new plants and replacement of older, costlier coal plants

It's not easy, but it's possible

- Wood Mackenzie: **"Whether the project proceeds … depends on if the producers and the state can reach agreement on the applicable tax terms and, ultimately, what the producers believe to be the long-term value of natural gas in the North American marketplace."**
- At some point everyone needs to sit down and talk
- Alaska needs the gas line to help replace declining oil revenues and spur North Slope development

Getting the most for Alaska

- Growing interest in a state-subsidized, small line from Prudhoe Bay to Fairbanks to Southcentral
- Hypothetical: For a multibillion-dollar state subsidy in a small in-state gas line, Alaska could get:
  - ***Gas to Fairbanks, and also gas to Southcentral (but with a heavy subsidy to match today's prices)***
  - ***Few hundred million dollars a year in taxes & royalties***
  - ***Too small of a gas volume to justify new North Slope development that could stem decline in oil production***

There is a better option

- Take those billions, negotiate and look at what could be done to help a large line to North America
- Merge the mainline and in-state pipeline projects
- The state could get for its money:
  - ***The lowest cost gas for in-state consumers***
  - ***$2 billion a year or more in taxes and royalties***
  - ***Moving so much gas would start an immediate push for new exploration to keep the line full for decades***

Thank you

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