Gas line facts, reality — and a little politics

Senate Bipartisan Working Group

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Project update

- Open seasons closed 5 months and 3 months ago
- Complex commercial negotiations are under way
- Bids were conditional (and confidential)
  - *Possible conditions: Overruns, construction delays, sharing extra revenues, service interruptions — not only the state*
- Shippers generally take on project development financial risk with signed precedent agreements
- No FERC deadline for precedent agreements
  - *Terms become public when agreements ready for FERC*

Key points for Alaskans

- Missed 'deadlines' for precedent agreements are not surprising, considering issues at stake
- Alaskans need to remember producers take the commodity risk, pay the taxes and royalties
- Project needs creditworthy, ship-or-pay, long-term shippers more than it needs pipeline partners
- It will be important to see real progress in 2011 from potential shippers to maintain public support, political and market interest

People are working

- APP sent 19 employees and contractors to recent meeting with FERC and federal permit agencies
- APP planning three dozen open houses in 2011; its first resource reports due to FERC in 2011
- Denali continues adding layers to its GIS database
- FERC has a 14-member team assigned to project
- But applicants are cautious about overspending
- Federal agencies nervous about 2012 application

The unknowns

- How much will economy recover and demand build?
- How much will EPA limit greenhouse gas emissions?
- Will the new Congress overrule or constrain the EPA?
- How much will utilities switch from coal to gas?
- Will utilities move to long-term supply contracts?
- When will the market have room for Alaska gas?
- What will be the price for gas 2020, 2030, 2040?

More market unknowns

- How much will the federal government, states and municipalities constrain shale production?
- Will shale production costs rise (water handling)?
- Can shale fully cover decline of conventional gas?
- Can Alaska gas compete on price with shale?
- Will China and India develop their own shale?
- Will Qatar, Australia, Russia rule the LNG world?

What it will take for Alaska

- Greenhouse gas restrictions, new air quality rules must continue driving utilities from coal to gas
- Gas prices rebound as demand builds
- Community resistance makes life harder on shale; water quality issues drive up shale drilling costs
- Producers see market opportunity after 2020
- Alaska gas must be competitively priced to win market share; not a penny more than others

Alaska politics

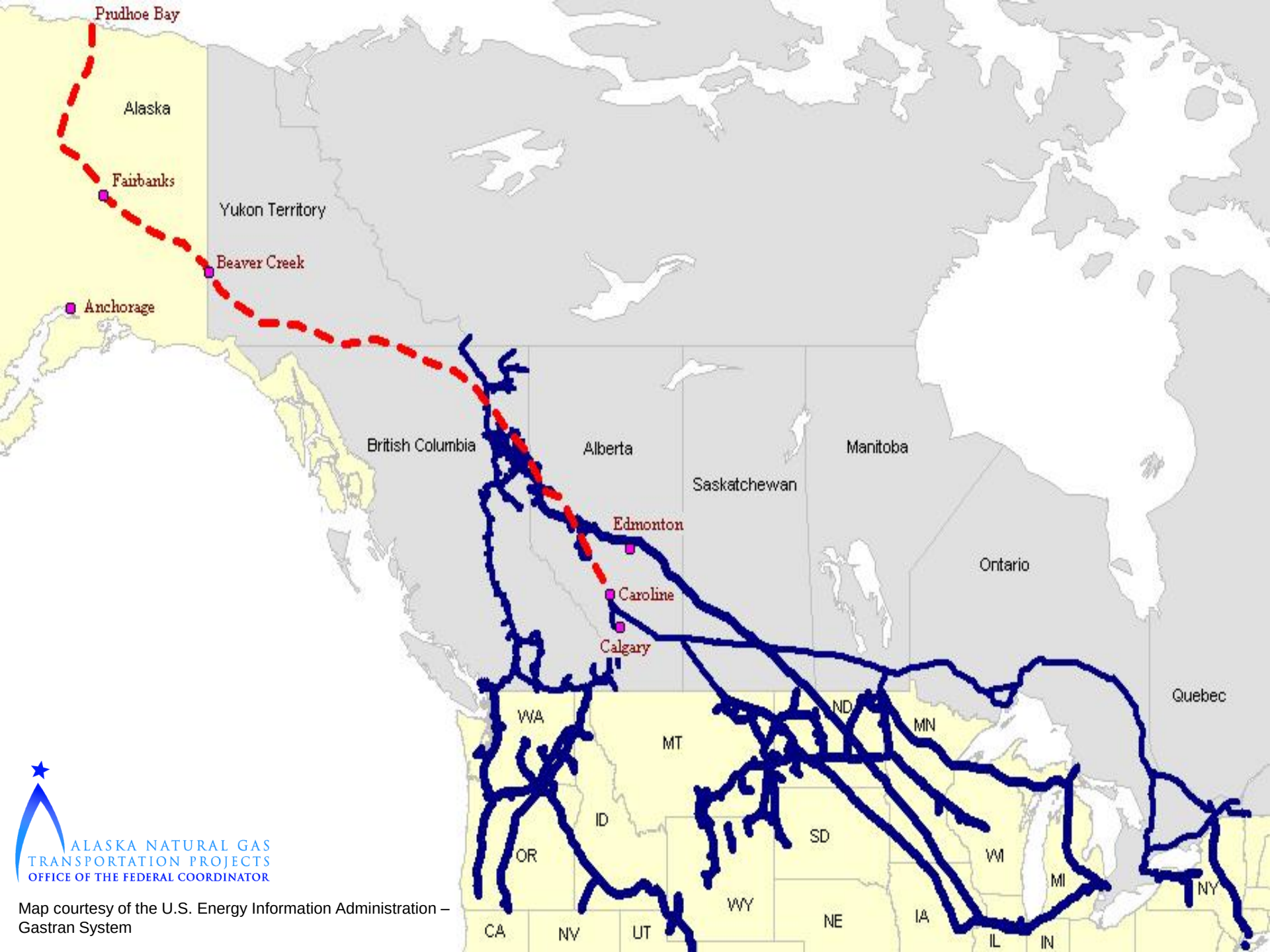
- Expectations of public revenues, 'cheap' gas and gas liquids industry are out of line with reality
- Public lacks full understanding of project risks, supply-and-demand factors, pipeline business
- Alaskans' frustration grows every year
- Public opinion fragmented between projects
- Need a better political climate for the public to accept changes to state fiscal structure

Loan guarantee politics

- Increase in federal guarantee will be difficult; Congress (and the public) skeptical of helping big borrowers, bigger business, biggest banks
- Guarantee authorization easier than appropriation
- Treasury and Department of Energy will 'score' the risk of loan default and assign percentage
- Congress may be asked to pay the risk fee
- $30 billion guarantee: 1% risk = $300 million fee, but if the risk is judged at 5% = $1.5 billion fee

Local reality

- Alaska really needs the big gas pipeline project
- For the public revenues, for the jobs, for the gas,
  but mostly to bring in oil and gas investments
- Alaska isn't as attractive as an oil-only investment
- It's hard to justify investment dollars without
  a way to convert natural gas into profits
- It would be a mistake to count the 'fairness'
  of any gas line fiscal structure in tax dollars only



ALASKA NATURAL GAS TRANSPORTATION PROJECTS
OFFICE OF THE FEDERAL COORDINATOR

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

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***
  - ***Tens of billions in taxes and royalties over life of project***
  - ***Moving so much gas would start an immediate push for new exploration to keep the line full for decades***

This year's politics

- ACES tax fight will occupy the legislative session
- My advice: Keep the gas line out of it
- Wait for precedent agreements and more details on the commercial terms and project economics
- Wait for Alaskans to feel more hopeful about the project, more willing to 'allow' negotiations
- Give governor and his new team time to get ready
- Look toward negotiating a state fiscal deal in 2012

The LNG competition

- Qatar in December celebrated reaching its goal: 11 bcf/d of LNG capacity — world's largest
- $200 billion of Australian LNG projects are under construction or under development
- Papua New Guinea to join LNG club in 2014
- Shell looking to bring first floating 'platform' online 2016 offshore Australia; $5 billion investment
- Russia: Can't sell communism, so it's selling LNG

Not everyone loves shale

- Fracking becoming about as popular as an oil spill
- More questions as it moves closer to urban areas
- Hydraulic fracturing for shale gas requires
  2 million to 5 million gallons of water per well
- EPA official: "Where is that water coming from?"
- Produced water disposal is the biggest issue
- Utilities official: "Environmental costs always go up."
- Wyoming 1st to require fracking chemical disclosure

More shale headlines

- New York governor, Pittsburgh city council, Fort Worth school board, Ohio townships and Pennsylvania communities have delayed, banned or are considering bans on shale gas drilling
- Poll: 79% Pennsylvanians concerned about fracking
- Marcellus Environmental Fund gets $1 million
- Pennsylvania may allow local impact fees on drilling
- Interior Department looking at new rules for hydraulic fracturing for gas on public lands

Shale could help Alaska

- Shale could help by eliminating price spikes and getting utilities to think gas for the long term
- Worldwatch Institute report: "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."
- Stable gas supply encourages more consumption

Utilities are thinking gas

- Clean Air Act is pushing utilities to decide;
  EPA issued new air quality regulations Jan. 2
- Interstate Natural Gas Association of America:
  Replacing half of oldest, least-efficient coal plants would boost demand 5.5 bcf per day
- Denver to go coal-free; TVA, Calpine, Xcel Energy, Constellation, Duke planning gas-fired plants
- Progress Energy Carolinas: OK'd $1.5 billion new gas-fired plants vs. $2 billion rebuild coal plants

Coal may not be king forever

- Half of the nation's coal-fired electrical generating plants are more than 40 years old
- Coal-fired capacity unchanged 1997 to 2008
- No new coal-fired power plants started 2009-2010
- Credit Suisse: Just 25% of coal-fired capacity fully scrubbed; $40 billion to scrub half of the rest
- Utilities see more federal air quality regulations, but don't know what or when — they're nervous

The economics are tight

- Oil transportation costs (pipeline and tanker) eat up less than 10% of value of $80/barrel
- Gas treatment and pipeline costs could consume two-thirds — or more — of $6/mcf gas
- Gas shippers have to sign $100+ billion in binding contracts (tariff) to underpin pipeline financing
- Less risk: 10 $4 billion projects vs. 1 $40 billion line
- State fiscal demands must take into account project risks; competition for investment dollars

Thank you

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