

Alaska's natural gas: *Does anyone need it?*



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The answer hinges on 'ifs'

- North American demand growth and higher prices
- Future productivity of shale gas; environmental costs
- Global competition in Asia-Pacific markets
- North Slope producers willing to bet on the future
- Stable, manageable fiscal terms with the state
- Alaskans need to measure success not by the last tax dollar but by access to affordable gas and tens of billions in oil and gas investments

Coal is losing its grip

- American Electric, the biggest U.S. producer of coal-fired electricity, plans to retire 6,000 MW of coal production by end of 2014
- Southern Co., the biggest U.S. utility owner by market value, will shutter 4,000 MW of coal plants and replace the load with gas
- North and South Carolinas' Progress Energy will phase out 11 of its oldest, dirtiest coal-fired generating plants by 2014

Natural gas gains

- Coal's share of electrical generation in the first quarter 2011 was the lowest in 30 years
- U.S. electrical generation by natural gas has climbed 50% over the past decade
- Estimate for 2012: Coal for power will drop 2%; gas-fueled power consumption to climb 5.6%
- Several forecasts put gas ahead of coal for power generation in three decades

Gas prices lower than low

- Below \$2.40 on the NYMEX for April delivery
- Almost one-sixth of summer 2008 peak
- Warm winter, weak economy, large stockpiles equal lowest natural gas prices in a decade
- Producers keep sending gas to market to generate cash flow on their capital costs
- Eventually, supply and demand will rebalance; eventually, debt load and development costs will catch up with drillers and slow production

LNG sells at higher prices

- Asia LNG contracts generally linked to oil prices
- Spot sales peaked close to \$18; back below \$15
- But don't confuse spot with long-term contract prices
- Buyers are pushing back, especially China and India
- The new kid: U.S. exports linked to gas prices, not oil
- Cheniere LNG buyers to pay \$2.25 - \$3/million Btu for capacity, regardless whether they use the liquefaction plant — a \$40 billion commitment

China gas options and prices

- About half of China's natural gas imports come via pipeline from Turkmenistan; more on its way
- Buyers paid \$10.33 in January for that pipeline gas
- China holds contracts for 7 bcf/d of pipeline gas from Turkmenistan and Myanmar, more than four times what it bought in January 2012
- Russia gas an option; so is China's own shale gas
- Government price controls mean importers subsidize higher-priced natural gas contracts

Lots of competition in Asia

- Qatar, Australia, Russia, Papua New Guinea, Mozambique, Canada all look to same market
- Almost 20 bcf/d LNG export projects under way worldwide; it's more than Asia's 2011 demand
- In 2011, North America consumed four times as much natural gas as Japan, China, South Korea, Taiwan and India imported LNG
- Will supply growth overbuild, or will demand grow faster than new supply? Room for Arctic?

And now U.S. LNG exports

- Nine applications filed with Energy Department; one approved; eight are pending and on hold
- Energy Department economic impact report expected this spring; politics are heating up
- Opposition from some utilities, industrial consumers
- Meeting domestic needs first, and not driving up prices at home are economic and political issues
- North Slope gas export requires second approval that it would not harm gas pipeline to Lower 48

Alaska political hurdles

- More Alaskans are warming up to the notion that the state will need to negotiate a fiscal structure that works to enhance gas project economics
- But they are frustrated we don't have a gas line
- Frustration a strong political force, but unproductive
- Alaskans should realize they need a gas line for jobs, affordable gas for local needs, and more oil for an aging pipeline — and then count the cumulative benefits for decades to come

Alaska gas line status report

- Agency and public comments on project's draft environmental resource reports due Friday
- TransCanada/ExxonMobil on track to file project application with FERC in October
- Start of 2-year environmental review process
- FERC could issue certificate late summer 2014
- 2012 application part of deal for state funding; TC/Exxon halfway to state's \$500 million cap
- Still no commercial contracts to ship on the pipeline

Talk of LNG instead

- Governor believes better market may be in Asia
- Governor has asked North Slope producers and TransCanada to get together by end of March to agree on a plan to seriously study LNG exports instead of a pipe through Canada
- He wants companies to pencil out an LNG project while TransCanada/ExxonMobil move ahead with FERC application for the Alberta pipeline
- The intent is to preserve both options until a decision

And state still pursues Plan B

- In case there is no pipeline through Canada, and in case there is no large-scale LNG project, Alaska could have ready a smaller in-state line
- Draft environmental impact statement under review
- Could cost the state \$400 million to get permits and building plans, and ready for construction
- State likely would need to assist with financing
- Plan B will need paying customers, just like a big line

Yes, it is confusing

- Public comment filed for FERC review of TransCanada/ExxonMobil project:
“Frankly, there are so many project proposals floating around out there it is challenging for the public to keep track of which is which.”
- It’s hard to know when the public will know which, if any, will be built and when the gas will flow
- Patience is frustrating, but all projects need the same thing – customers to cover the mortgage

Meanwhile, at the wellhead

- North Slope oil started flowing in 1977
- Production peak at 2 million barrels a day in 1998
- Fiscal 2011, the flow was down to 603,000 a day
- Projection for 2012, further drop to 574,000 a day
- The 2013 estimate: 555,000 barrels a day
- By 2020: The state projects 486,000 a day, assuming several new fields come online
- If not for high oil prices, Alaska would be in trouble

It's not just the tax dollars

- ❑ Low oil flow causes serious pipeline problems
- ❑ Low volume, low velocity the worst combination
- ❑ Corrosion, condensation, ice and wax buildup
- ❑ Less oil and more costs add up to higher tariffs
- ❑ If the flow gets too low, might have to heat the oil
- ❑ Flint Hills refinery in North Pole is paying the bill of heating the oil for processing, then “donating” the warm excess back in the line

Answer is more oil

- ❑ More oil solves the pipeline flow problems
- ❑ More oil extends life of the trans-Alaska pipeline
- ❑ More oil allows Alaska to continue tax-free life
- ❑ Never a state sales tax; no income tax since 1980
- ❑ But, the state is at serious risk if oil prices fall
- ❑ Alaska needs \$96 oil for a balanced state budget
- ❑ Healthy reserves, but savings are a one-time savior

Lots of opportunities

- ❑ Offshore drilling could start this summer
- ❑ No state royalty or production tax from offshore
- ❑ Federal onshore acreage comes with controversy
- ❑ Congress not likely to open ANWR to drilling
- ❑ State would share in onshore federal royalty
- ❑ State lands rich with heavy oil, but it's not easy
- ❑ Talk of shale oil in Alaska, but no drilling yet

The impediments

- ❑ Expensive to work in the Arctic
- ❑ Limited time to work while tundra is frozen
- ❑ State production tax quadrupled since 2005
- ❑ Production tax, property tax, income tax, royalty add up to a heavy burden; many say too heavy
- ❑ The higher the oil price, the steeper the tax rate
- ❑ Legislature debating lower taxes; no consensus
- ❑ Governor bets on more production with lower taxes

Thank you

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