Next round of LNG project reports to FERC expected to start late spring

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(This update, provided by the Kenai Peninsula Borough mayor's office, is part of an ongoing effort to help keep the public informed about the Alaska LNG project.)

Alaska LNG plans to start submitting the project's second round of draft "resource reports" to federal regulators in late spring, running into July before the last of the 13 environmental and engineering reports will be turned in to the Federal Energy Regulatory Commission and available to the public.

The first reports will be the general project description (Resource Report No. 1) and alternatives (No. 10), according to minutes of meetings held between Alaska LNG and FERC officials in January. The other 11 reports — including soils, air quality, water quality, community impacts and safety — "are anticipated to be submitted on a staggered schedule between May and July," according to the meeting notes filed in FERC's public docket.

Though weak global LNG markets have called into question whether the Alaska project will proceed to the next level of engineering and design spending in 2017, the partners have said they remain committed to finishing their preliminary work this year and preparing the reports for submittal to FERC. Though not as much as last year, Alaska LNG project teams and their contractors will be back in the field this year for onshore and offshore work as they collect more data for regulators and their own design and decision needs.

The partners — North Slope producers ExxonMobil, BP and ConocoPhillips, and the state of Alaska — spent almost \$500 million from 2012 through 2015, including three summers of field work. The partners approved a work plan of more than \$200 million for this year. The project's full budget, through construction, was estimated in 2012 at \$45 billion to \$65 billion for producing as much as 20 million metric tons of LNG per year (about 2.5 billion cubic feet of natural gas per day).

FIRST REPORT A COMPLETE PROJECT DESCRIPTION

Despite its title, the general project description of Report No. 1 will weigh in at several thousand pages — including maps — giving the public the most detailed look to date at where and how the Point Thomson-to-Prudhoe Bay gas pipeline, North Slope gas treatment plant, Prudhoe Bay-to-Nikiski pipeline and liquefied natural gas plant and marine terminal at Nikiski would be built.

The other filing expected in late spring, Report No. 10, is required to set out alternatives to the project — discussing the other options for moving North Slope gas to market.

Discussing alternatives is required for every federal environmental impact statement, and Alaska LNG is no exception.

One option long championed by many Alaskans would be to route the pipeline to Valdez, site of the trans-Alaska oil pipeline terminal, instead of Nikiski. Several public comments submitted to FERC last year raised that issue. Alaska LNG will be required in Report No. 10 to explain why it did not select Valdez for the gas liquefaction plant and marine terminal, just as it will explain why it rejected other sites around Cook Inlet and Prince William Sound.

In its January meetings with project team members, FERC officials also advised that the alternatives report should cover pipeline route options around — or just inside — the border of Denali National Park. The gas line needs to make it through several miles in a tight area near the park entrance about two-thirds of the way south from Prudhoe Bay to Nikiski, with the Nenana River, a deep gorge, the Parks Highway, railroad tracks, tourism businesses and a steep hillside to the east presenting an engineering and environmental challenge.

The project sponsors have long acknowledged that routing challenge, as has the state in its earlier work on a smaller North Slope gas line project.

Running the buried pipeline just inside the park boundary would avoid sight and safety conflicts with tourism businesses and tourist views along the narrow route between the highway, railroad tracks, river and gorge. It would avoid building the line into the hillside to the east. And it could make natural gas more easily available for park facilities, providing a cleaner option to diesel fuel.

Separate from the main line routing decision, the state is in charge of selecting off-take points along the line to allow for in-state gas distribution.

CHANGE IN FEDERAL LAW POSSIBLE

The 1980 Alaska National Interest Lands Conservation Act, which added to Denali National Park, allows pipelines through parks and refugees created under the act. But it requires a very specific regulatory process that effectively gives any one federal agency the ability to stop the entire project from Prudhoe to Nikiski, and directs that in such cases the president would have to decide. That process would be in addition to the FERC-led environmental impact statement that all federal agencies would use in their own permitting and regulatory decisions.

Looking to assist the project in its consideration of the pipeline route option through the edge of the park, Alaska Sen. Lisa Murkowski in February introduced an amendment before the full Senate to resolve the duplicative regulatory process. The amendment, part of a comprehensive energy bill, would not otherwise eliminate any environmental standards or agency authorities and would apply only to a high-pressure gas pipeline.

The amendment was waiting for Senate floor action as of early March. House approval would be required before the bill could go to the president.

The National Park Service, in a January phone call meeting with Alaska LNG, FERC and other federal agencies, reported it was preparing to advise the project "regarding development of an alternative that would comply with the National Park Improvement Act, particularly the requirement to select a route that the National Park Service determines will have the least environmental impact."

FERC, Alaska LNG and the contractor selected to help FERC prepare the environmental impact statement meet monthly to review project issues. It's part of the pre-filing process, which encourages a project development team and federal officials to discuss concerns and share information in advance of a full application to FERC.

In addition to continuing those regular meetings, FERC and Alaska LNG have discussed that resource report workshops for multiple federal and state agencies will be held a month or so after the second series of draft reports are filed. (Alaska LNG submitted its first draft reports in February 2015.) Information from the final resource reports would be incorporated into the EIS. Drafting the EIS would start with a project application.

Alaska LNG also told FERC in January that it plans to hold one-on-one meetings this year to discuss project details with each agency. Similar meetings have been a constant in the project development plan, such as an air emissions and modeling meeting held with federal officials in in Seattle in December.

WORK PLANS FOR 2016

Not all of this year's work involves fulfilling regulatory agency requests. Alaska LNG expects to make a decision this spring whether to stick with its original plan to use 42-inch-diameter pipe for the gas line, or move up to 48-inch pipe as proposed by Alaska Gov. Bill Walker to accommodate unknown future gas discoveries.

"A general range of impacts associated with 48-inch pipe will be presented in the next draft resource reports," according to the January meeting notes. The larger, heavier pipe would present its own construction challenges, particularly in setting the pipe on the seabed floor across almost 30 miles of Cook Inlet.

This year's field work in the area of the LNG plant in Nikiski may include:

- Drilling 50 onshore geotechnical boreholes to learn more about the site's soil and ground characteristics, of particular importance for supporting the heavy liquefaction modules and other equipment that would be located at the plant site.
- A 10-day "aquifer test" in area of the plant to test groundwater capability. Alaska LNG estimates it would need about 380,000 gallons of water a day during construction, and less than half that volume during plant operations. It is still reviewing options for water sources.

- More seafloor mapping in the area of the LNG marine terminal and pipeline route across Cook Inlet. This would include retrieving and redeploying devices that measure currents and gather ice data.
- Gathering geotechnical data near to shore at the LNG plant site and along the Cook Inlet crossing. Alaska LNG has applied to the state for permission to drill about 25 boreholes offshore.

Field work is expected to start in April or May and run three to four months, with some onshore work possibly running into October. No deep seismic work is planned this year, and no test trenching will be conducted in the shallow waters near shore. Alaska LNG will not use a jack-up rig for offshore drilling as it did last year. Instead, a smaller rig mounted on a vessel will be used.

Along the 806-mile pipeline route from Prudhoe to Nikiski, teams are planning to continue cultural and archeological surveys, though at about half of last year's levels. Installation of noise monitoring equipment is planned for selected sites along the route to gather baseline data for the EIS.

The project continues to acquire land at the LNG plant site, having assembled more than 600 of the 800 to 900 acres needed. Demolition crews took down nine structures on the acreage last year — buildings that presented safety or security hazards — with plans this year to take down perhaps 20 or so more buildings.

Separate from the LNG project, but related, Alaska LNG continues to review options for rerouting a portion of the Kenai Spur Highway away from the liquefaction plant, LNG storage tanks and marine terminal.

That route feasibility work and determining the regulatory requirements will continue in 2016, but the project has no plans to identify specific parcels or purchase land for a highway reroute this year. A timeline for those decisions will depend on whether the LNG project sponsors decide to advance to the next stage of development, called FEED (front-end engineering and design), which could cost \$1 billion to \$2 billion.

WEAK MARKETS DON'T HELP

That billion-dollar-plus decision will depend in great part on market conditions — including oil and gas prices, global LNG supply and demand — and fiscal and operating agreements among the producer partners and between the producers and the state.

One of the biggest challenges is the gas balancing agreement, which would govern how much gas from each of the project's anchor fields — Prudhoe Bay and Point Thomson — feeds into the gas treatment plant at Prudhoe and down the line to Nikiski. The three producers have different shares in the two fields and each company needs to protect its own interests.

At Prudhoe Bay, ExxonMobil and ConocoPhillips each hold 36 percent of the gas reserves, with BP at 26 percent. At Point Thomson, ExxonMobil has a commanding 62 percent share of the gas, with BP at 32 percent and ConocoPhillips at 5 percent.

How much gas and when the gas feeds into the project will determine each partner's revenues. And how to handle maintenance, for example, or supply disruptions from either field — taking more gas from the other field to maintain LNG production — while continuing to honor each partner's contractual deliveries to customers are part of the gas balancing negotiations.

Gov. Walker is frustrated with the pace of the complex negotiations, including fiscal terms between the state and producer partners. And all of the partners are frustrated with the market, which has taken a steep dive in prices while work has been underway on Alaska LNG. Spot-market prices for LNG delivered to Asia in March 2016 are down three-quarters from record highs just two years ago. Cargoes at \$5 per million Btu are common.

"The elephant in the room has been for some time — what do we do in the challenging times of low oil prices and how does that impact the project?" Gov. Bill Walker said at a Feb. 17 press conference with the producers. The partners will look at whether there is "another ownership structure that makes more sense," Walker said, though he did not offer any specifics.

"We will be looking at different options, different structures of how that would work," Walker said, without providing details. The governor said he hoped to have more information in March.