

Regulators continue review of LNG project reports

By Larry Persily lpersily@kpb.us

Sept. 1, 2016

(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.)

Pending any possible changes in the project's schedule or work plans under state leadership, federal regulators are continuing to review, ask questions and suggest improvements to reduce the environmental impacts of Alaska LNG's proposed construction and operations plans.

More than 30 state and federal regulatory agency personnel met for an all-day workshop in Anchorage on Aug. 25 with Federal Energy Regulatory Commission staff and the third-party contractor that would help draft the project's federal environmental impact statement. The meeting coincided — coincidentally, not intentionally — with a state legislative committee meeting a few blocks away at which lawmakers were told the state plans to take over the project from its producer partners ExxonMobil, BP and ConocoPhillips.

After four years of work, including two years under the FERC pre-filing process, and more than half-a-billion dollars in spending, Alaska LNG a month ago submitted its second draft "resource reports," providing detailed design, environmental and logistics planning and impacts of the proposed \$45 billion to \$50 billion project to move North Slope natural gas more than 800 miles to a liquefaction plant and marine terminal in Nikiski for export.

State and federal regulatory agencies are reviewing the reports — **10 in all, totaling thousands of pages** — looking for data gaps and providing recommendations to improve the project by reducing its environmental effects.

Agency comments are due to FERC by Sept. 26. The purpose of the draft reports during a project's pre-file status is to reduce the need for additional data requests after final resource reports are filed with a project application, said Jim Martin, FERC's environmental project manager for Alaska LNG.

The EIS contractor Aug. 25 asked state and federal agencies to tell FERC what works in the project plans, what doesn't work, what could be improved, and what are considered best practices for construction in Alaska.

Not covered at the workshop was Report No. 11, Safety and Reliability, which Alaska LNG submitted to FERC on Sept. 1.

STATE TAKEOVER POSSIBLE

Alaska LNG has been working to prepare final resource reports for submission with a complete application to FERC, possibly early next year. The state's project development agency, the Alaska Gasline Development Corp., told legislators that it plans to take over the leadership role and submit an application in its name to FERC in early January 2017, depending on how much more work is required after agencies send in their comments on the second draft resource reports.

The North Slope producer partners this year have expressed growing concerns over the weak global market for new LNG supplies and favored slowing down development spending on the Alaska venture. After ExxonMobil, BP and ConocoPhillips told state officials the companies were not inclined to proceed next year with a complete application to FERC and expensive final engineering and design work — at an estimated cost of \$1 billion to \$2 billion in additional spending — the governor decided Alaska would take the lead to keep the project moving on a faster schedule. The governor wants to see if state control could reduce the project's financing costs and avoid federal taxation.

A successful state takeover would require several agreements between all parties:

- Designating the state as the sole applicant with FERC. (The pre-file currently is in the names of the four individual partners.)
- Transferring or assigning Alaska LNG's federal export authorization to the state. (The state was not a party to the 2015 Department of Energy authorization approved for ExxonMobil, BP and ConocoPhillips.)
- Contracting or otherwise making available North Slope gas for the project. (The producers hold the leases on the oil and gas production fields at Prudhoe Bay and Point Thomson.)
- Selling, transferring or giving an option to the state on the more than 630 acres of land purchased by Alaska LNG in Nikiski for the liquefaction plant and marine terminal site. (The state was not a party to the land purchases.)

The state had not released specific plans or budgets for any of the necessary agreements as of Sept. 1. The producer partners have said they will cooperate with the transition to a state-led venture. The Alaska Gasline Development Corp., in its presentation to lawmakers, said it would be responsible for seeking regulatory approvals, lining up customers and financing after the project shifts to state control.

While all that plays out, FERC, along with state and federal regulatory agencies, will continue their review of Alaska LNG's draft resource reports. FERC and its EIS contractor reported at the Aug. 25 workshop on new information in the second draft reports (the first drafts were submitted in February 2015), information still missing, and what they called "hot-button issues."

Meanwhile, the Alaska LNG project team is wrapping up its 2016 work. One of its last field projects for the year was to conduct aquifer pump tests from water wells in the Nikiski area to help determine if a water draw for construction and operations at the LNG plant site would affect the area's groundwater resources. The team has 13 observation and monitoring wells in place and has drilled the first of three pump wells, with permission from the state to pump 10.5 million gallons spread over 11 days. Due to a need for more information about existing groundwater conditions before pumping starts and upcoming winter conditions, Alaska LNG will not conduct the aquifer pump tests this year.

DENALI PARK ROUTE OPTION

Another recent development was notice from FERC that it would accept public comments until Sept. 25 on a pipeline route alternative through 6.16 miles within the eastern edge of Denali National Park, in the vicinity of the park entrance, Parks Highway and Nenana River. The alternative route would help avoid construction conflicts with the river, highway, railroad tracks, a deep gorge, hillside terrain and other issues. In addition, the alternative route could provide easier access to natural gas for park facilities.

Congress is considering legislation that would ease a 36-year-old regulatory process — but not ease any environmental rules — for burying the pipeline in the park.

In response to earlier public comments, and in working with federal and state regulatory agencies, Alaska LNG has identified the alternative route as an option. FERC in July issued a supplemental notice requesting public comments on the option.

FERC's reports to agencies at the Aug. 25 workshop covered:

Report No. 1, General Project Description

The second draft includes detailed facility layouts for the North Slope gas treatment plant that would clean the gas of carbon dioxide and other impurities; expansion of West Dock at Prudhoe Bay for sealift deliveries of plant modules and other equipment; and the liquefaction plant and marine terminal in Nikiski.

Additional information is included on 50 sites for pipeline construction camps, storage yards and contractor yards, along with a detailed project schedule and construction plan for winter work in permafrost areas.

Though the draft is not enough to prepare the project's EIS, "it's progress ... they've done a good job," one of FERC's contractors told agency personnel at the workshop.

FERC identified several general project issues for further discussion:

- How long temporary facilities would remain in place, such as the marine offloading facility that would be built in Nikiski for barge and ship deliveries of plant modules and equipment.
- Placing gravel over thaw-sensitive permafrost soils to create a work area during pipeline construction.
- Moving an estimated 42 million gallons of fuel to Prudhoe Bay during construction.
- Selection, development and operations at approximately 150 material sites that would provide 39 million cubic yards of rock and gravel for project construction.
- Dredging plans at the Prudhoe Bay dock.
- Restoration plans along the entire project footprint.

Report No. 2, Water Use and Quality

The waterbody crossings list is 92 percent complete in the second draft report, FERC said. It lists no crossings of National Wild and Scenic Rivers, no crossings of impaired (contaminated) waterways, 12 crossings of navigable waterways, and more than 600 other minor, intermediate and major crossings.

Key issues not fully addressed include alternatives to reduce wetlands fill, such as minimizing gravel roads. Data gaps include precise configuration of the pipeline entry and exit in Cook Inlet and its position on the seafloor as the pipeline travels 29 miles from the West Side of the inlet near Beluga to landfall north of the LNG plant site.

Hot-button issues and discussion points for FERC include near-shore environmental impacts of dredging, functional assessment of wetlands, water use during construction and spill response plans.

Report No. 3, Fish, Wildlife and Vegetation

The second draft report includes a lot of new information:

- An impact analysis on aquatic habitat from sediment disposal, fuel leaks and spills.
- Vegetation mapping and descriptions, with potential impacts on vegetation.
- A discussion of noise impacts on wildlife.
- Draft avian protection plan, noxious and invasive plant and animal control plans, and an erosion control plan.

Information still pending includes a wildlife avoidance and interaction plan, marine mammal mitigation and monitoring plan, and restoration plan. “Restoration techniques will likely be important given the challenging climate,” FERC said. The agency also said it wants to see more information on eelgrass beds and their importance as habitat for juvenile fish and shellfish, and more detailed marine vegetation surveys.

FERC asked the Alaska Department of Fish and Game and U.S. Fish and Wildlife Service to recommend construction methods that would minimize damage to streams. Other issues on the discussion-point list include potential impacts on marine mammals from dredging, the impact of lightning on wildlife during winter construction, and timing of construction during wildlife breeding, rearing and migration periods.

Impact to beluga whale critical habitat in upper Cook Inlet is on the list of FERC concerns. For example, one of the EIS contractors suggested that the frequent resupply deliveries to the pipe-laying barge in Cook Inlet could come up from Homer rather than down from Anchorage in order to avoid disruptions to beluga critical habitat where the Susitna River drains into Cook Inlet west of Anchorage.

Report No. 4, Cultural Resources

The second draft contains a lot of new information on archaeology surveys across the entire pipeline route from Prudhoe Bay to Nikiski. FERC has asked Alaska LNG to discuss the project's "cumulative impacts on cultural resources," along with a timeline for starting consultations with public land managers "to ensure the project considers each agency's viewshed protection standards and practices as they relate to historic properties."

Report No. 5, Socioeconomics

The draft provided new information on community and economic impacts from project construction, updated subsistence and traditional knowledge reports, and updated traffic counts on state highways through 2015. However, FERC said, the draft provides "a limited qualitative discussion" of potential impacts during project operations.

The draft also includes more details on primary and secondary ports for construction material deliveries, though FERC wants to see additional information on the frequency and type of vessels and their cargoes.

Still pending and expected in the final report are:

- Modeling of regional economic impacts.
- Estimates of worker payroll and local expenditures.
- Housing needs.
- Cost estimates of impacts on communities and more information on a fund to cover those costs. Earlier plans for producer payments into an impact fund in lieu of property taxes likely will have to be replaced with another funding mechanism if the state takes over the project.

FERC's list of issues not fully addressed in the draft and hot-button issues included:

- The project's potential impacts on commercial fishing.

- Competition between subsistence users and sport hunters. FERC said it wants to see more discussion of this issue in the final report.
- Detailed information on road improvements needed along Alaska highways to prepare for project construction traffic. Still pending are mitigation measures for dealing with increased highway traffic, and who will pay for improvements such as additional weigh stations and pull-out areas. “There needs to be a better discussion of who is responsible,” the EIS contractor said. “Weigh stations on the Elliott, Glenn and Parks Highway have limited capacity and backups may occur,” FERC said.
- FERC also wants to see more information on plans to relocate a portion of the Kenai Spur Highway where it passes through the proposed LNG plant site in Nikiski. Alaska LNG has identified several relocation options, but no decisions on a preferential route or schedule are expected anytime soon. “It’s sort of on the back burner at this time,” an Alaska LNG team member reported at the FERC workshop.
- Potential long-term financial benefits and job opportunities for local communities.
- An assessment of impacts on tourism — for example, would visitors go elsewhere if all the hotel rooms are full during construction. “Only general statements are provided, with no comprehensive or site-specific analysis,” FERC said of the draft report.

Report No. 6, Geological Resources

New information in the latest draft includes plans for blasting and sourcing gravel for project construction, including reclamation measures, with more information pending on potential landslides, storm surges and soil liquefaction in project work areas.

Data gaps identified by FERC include influence of rising sea levels on the project, an emergency response plan for volcanic activity across Cook Inlet from the LNG plant, and blasting techniques in areas of bedrock overlaid by permafrost along the pipeline route.

Report No. 7, Soils

The report includes new information on erosion control plans and revegetation, a draft winter construction plan in permafrost areas and additional information on project impacts to permafrost. Still pending are more detailed investigation and evaluation of soil and permafrost conditions, including thermal modeling, and plans to separate different layers of soils dug up during construction.

FERC also identified “bluff and shoreline erosion and stabilization methods” among the data gaps to be filled in with the final reports.

Report No. 8, Land Use, Recreation and Aesthetics

New information includes a summary of landfills that would be used during construction and operations. Coordination plans are still pending for recreational-use and public-use lands. FERC also expects more information on “specific opportunities for increased recreational

access” along the pipeline right of way — which it said “is not an easy answer.” As an example, said an Alaska Department of Natural Resources official at the workshop, ATV and snowmachine users would be drawn to the right of way and pipeline access roads in the Susitna Valley.

Still pending for the final report and FERC application are a viewshed analysis, and more detailed lighting information for major project facilities (potential light pollution).

Report No. 9, Air Quality and Noise

New information in the draft includes estimated air pollutants, greenhouse-gas emissions and hazardous pollutants during construction and operations, along with preliminary air quality dispersion modeling for the LNG plant, compressor stations along the pipeline, and the gas treatment plant at Prudhoe Bay. Baseline noise surveys also are provided for the LNG plant, compressor stations and mainline valve sites.

Still pending are mitigation plans for noise, dust and open burning of brush during construction, and emissions at sites where gravel and rock would be dug out for use in construction. FERC also said it wants to see more detail on 24-hour construction activities.

Report No. 10, Alternatives

This is the report that looks at all of the alternatives — not just different sites for the LNG plant but also different pipeline routings, aboveground vs. buried pipe and construction methods. Federal law requires consideration and discussion of project alternatives in an environmental impact statement, with consideration given to the least environmentally damaging practicable alternative.

The second draft of Report No. 10 provides numerous new alternatives for specific sites and routes, with design and construction alternatives. FERC said information is still pending on:

- Alternative river crossing methods.
- An analysis of smaller, trucked modules for gas treatment plant construction rather than larger modules that would move by barge to Prudhoe Bay.
- Further consultation with federal pipeline safety regulators on marine pipeline construction methods.
- An explanation of why testing the pipeline after construction with pressurized air is not feasible, rather than the sponsors’ preferred option of testing the pipeline by filling it with water.
- More information on Valdez as an option for the LNG plant site. Alaska LNG rejected Valdez as impractical due to a lack of level and accessible land, air quality permit considerations, sea ice and potential conflicts with oil tanker traffic. The trans-Alaska oil pipeline terminal is in Valdez, and the community has long promoted itself as the best site for an LNG terminal.