

# Alaska LNG Outlines Issues For Next Round of Resource Reports

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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's next round of environmental and construction planning reports — called resource reports — will address issues raised by regulatory agencies and the public, including why the project picked Nikiski as the site for its proposed natural gas liquefaction plant and how it would reduce impacts on highways, recreation activities and tourism during construction and operations.

Moving millions of cubic yards of gravel, hundreds of miles of pipe and thousands of workers and pieces of equipment during several years of construction will rely on every transportation route into and around the state including highway, rail, water and air. The project is “developing a transportation plan that will minimize the direct and indirect impacts of project construction to transportation and traffic,” Alaska LNG reported in an April 7 letter to the Federal Energy Regulatory Commission.

The potential impacts and a high-level overview of a proposed transportation mitigation plan will be discussed in Resource Report No. 5, Alaska LNG told FERC. That report will cover a lot more than transportation. Labeled the socioeconomics report, it also will detail the project's potential effects on communities including the job market, population, housing, schools, and government and community services.

The socioeconomics review is one of 13 reports FERC requires from LNG project applicants. The reports provide a base for FERC to draft its environmental impact statement and for regulatory agencies to ensure they have the data needed for their permit and authorization decisions.

Alaska LNG is in its fourth year of gathering and analyzing data for the reports. A first draft was submitted in February 2015, with the second draft this summer to weigh in at thousands of pages and with much more detail and a first look at steps to lessen environmental and community impacts — and also a look at the benefits of the development estimated at \$45 billion to \$65 billion. Final details of the transportation plan and other measures would come when Alaska LNG submits its full application for FERC authorization.

## **REPORTS EXPECTED BY JUNE**

The project plans to file its latest draft reports during the second and third quarters this year, Alaska LNG said in its April 7 letter to FERC. The letter did not specify a schedule, though an April 8 state agency presentation said the first two reports were being updated by project teams for a final review by the partners in May before submission to FERC. Those first two reports will be No. 1, the general project description, and No. 10, project alternatives.

Regulatory agencies and the public will have an opportunity to comment on the draft reports before Alaska LNG submits its final reports and project application to FERC — which could come in 2016 or 2017, though there is no required deadline and no project commitment at this time.

The partnership of North Slope oil and gas producers ExxonMobil, BP and ConocoPhillips, along with the state of Alaska, is looking to complete its preliminary engineering and design work this year, concurrent with commercial, operating and fiscal negotiations, working toward the next decision point later this year or next on the multibillion-dollar project to move North Slope gas to market.

While working to finish and submit the second round of draft reports, Alaska LNG crews will be back in the field this spring and summer, collecting more data for project design and construction decisions. The field work will be reduced from last year.

## **SUMMER FIELD WORK INCLUDES COOK INLET**

Alaska LNG teams briefed Kenai Peninsula residents April 14 on this year's field work, which will include continued soil sampling and mapping of the seabed floor between where the pipeline would enter Cook Inlet on the west side and where it would come ashore north of the LNG plant site on the Kenai Peninsula.

The geophysical and geotechnical work started in early April on the west side of Cook Inlet, with a 240-foot-long vessel lowering a 3-ton piece of equipment to the seafloor to vibrate into the seabed and pull up core samples from approximately 15 feet below the seafloor. Crews pulled 15 samples on the west side of the inlet, working in slack water as the vessel used its six thrusters to hold position on site. Work will later move to the Kenai Peninsula side of the inlet — but not before Alaska LNG talks with setnetters in the area to ensure the work is compatible with fishing activities — with plans to wrap up Cook Inlet work in June or July.

Seafloor mapping along the almost 30-mile pipeline route across the inlet is scheduled to start in a month or so, as the project team continues working with federal agencies on necessary approvals.

Additional onshore soil-sample boreholes will be drilled in the area of the proposed LNG plant site, focusing on ensuring that the ground can handle the heavy weight of storage tanks and plant equipment. (Each of the two LNG storage tanks would be large enough for a Boeing 747 to spin around inside the walls.) The project plans to drill about 50 boreholes this year, “to really hone in on the proposed equipment locations,” an Alaska LNG team member reported at the community meeting.

Project teams also reported on the marine trestle that would extend out from the plant, carrying an LNG pipeline to twin loading berths in deep water. The latest plan for the trestle has it extending approximately 3,300 feet from the shoreline (3,900 feet from the bluff), with vertical supports every 120 feet in the water.

The liquefaction plant, storage tanks, marine terminal, gas-fired generating plant and everything else at the Nikiski site add up to a huge investment. “You’re talking of an LNG plant that is north of \$20 billion,” Michael Britton, plant manager for Alaska LNG, told the Kenai audience. The plant is likely to represent more than 40 percent of the project’s total cost, he said.

Alaska LNG continues to talk with Nikiski property owners in its quest to buy the 800 to 900 acres needed for the plant and safety zone. The project has struck deals on more than 600 acres.

## **AQUIFER TESTS NEW THIS YEAR**

New for this year are plans to perform test pumps in the area of the plant site to investigate three aquifers of different depths. The project believes the deepest of the three is confined and does not mix with the two shallower aquifers.

The project wants to learn more about the aquifers as it determines the best way to supply water for the plant during construction and operations. The water pulled up in the tests will be discharged into a nearby rock quarry purchased by Alaska LNG, where the water will infiltrate back into the ground.

In addition to data gathering, Alaska LNG plans to demolish 20 structures on property it purchased for the plant site, removing environmental hazards and vacant buildings as part of its property management.

Alaska LNG has explained at several public presentations the past year why it selected Nikiski as the preferred site for its liquefaction plant, and will explain it again — in more detail — in the project alternatives report (No. 10). The report will cover why it selected Nikiski rather than Valdez or other Southcentral Alaska sites, and why it decided not to build the plant on the North Slope which would have eliminated the need for a costly 806-mile pipeline through the state.

In a filing with FERC, Alaska LNG noted that eliminating the pipeline through the center of the state would “severely limit opportunities” for Alaskans to tap into the line for gas. It also listed other negatives for building the LNG plant on the North Slope: shallow nearshore waters, extreme weather, ice conditions and higher construction and operating costs.

“A detailed analysis regarding the proposed site (Nikiski) and a robust range of site alternatives considered but eliminated by the applicants ... will be included in Resource Report No. 10,” Alaska LNG advised FERC in its April 7 letter.

## **PROJECT TEAMS RECOMMEND 42-INCH PIPE**

In a review separate from its alternatives report to FERC, Alaska LNG teams spent the past five months — and about \$20 million — analyzing the pros and cons of sticking with the original plan to use 42-inch-diameter steel pipe for the line from Prudhoe Bay to Nikiski, or switching to 48-inch pipe as proposed by Alaska Gov. Bill Walker to accommodate future, unknown gas discoveries. The project team has recommended to the partners that they stay with 42-inch pipe, based on project design impacts, cost, availability and construction risk.

It’s not like the smaller pipe would limit expansion of the project’s capacity: It could handle a third more volume by adding additional compressor stations along the line to push more gas into the pipe.

An alternatives decision for Alaskans — but not for FERC — is the location and build-out from the pipeline for in-state gas distribution, called off-takes. The build-outs are not part of Alaska LNG, though the project will provide the interconnection points. The state will be charge of whatever happens from that connection point.

Determining the location of “technically and commercially feasible” off-takes is up to the Alaska Gasline Development Corp., which has the job of representing the state’s 25 percent ownership interest in Alaska LNG. The state corporation, which was created by the legislature in 2010, is working with the North Slope producers in project design and planning.

In its filings with FERC, Alaska LNG said its next round of draft reports will cover:

**No. 1: General project description**

In addition to detailed project mapping from the North Slope to the LNG plant in Nikiski, the report will provide a thorough overview of the entire project, its construction and operations plans, and timetables for construction. The maps “usually are a huge attachment” to the electronic file, a FERC official told federal, state and borough officials at a two-day workshop in Anchorage April 12-13. The construction timetable in Report No. 1 “is a big picture schedule,” the official said.

**No. 2: Water use and quality, and wastewater discharge**

The report will discuss the LNG plant’s water needs — and those of facilities along the pipeline and at the North Slope gas treatment plant — in addition to proposed water sources, potential impacts and mitigation measures.

**No. 3: Fish, wildlife and vegetation**

Habitat for fish and wildlife will be covered in the report, as will pipeline construction impacts on permafrost. Impacts on protected species and wildlife harvests by subsistence users also are important parts of the report.

**No. 4: Cultural resources**

Identification and protection of Alaska Native traditional cultural sites and other historic properties are required. To protect the sites, the locations will not be publicly disclosed.

**No. 5: Socioeconomics**

One of the most wide-ranging reports, No. 5 will discuss impacts on communities from construction and operations, and how they can be avoided or reduced. That would include traffic, sound and light pollution, and effects on tourism, schools, waste management, public services, emergency services and subsistence — a long list. The report also will look at the project’s benefits. Alaska LNG has contracted with the state Department of Fish and Game to conduct subsistence user surveys in communities along the pipeline route.

### **No. 6: Geological resources**

Geohazards, such as earthquake faults and unstable soils, will be addressed, as will gravel sites for the millions of cubic yards of material that will be needed for construction. The report will include a preliminary gravel sourcing plan and reclamation measures.

### **No. 7: Soils**

Pipeline construction through permafrost will be covered in the report (also Nos. 1 and 3), as will handling material from dredging operations at the Prudhoe Bay dock and the equipment offloading facility proposed for the LNG plant site at Nikiski.

### **No. 8: Land use, recreation and aesthetics**

The report will look at impacts to tourism and recreational areas. “To the extent practicable, the project footprint would avoid recreational areas,” Alaska LNG told FERC. “In the instances where it would not be possible to do so,” the project would work with land managers and local organizations to develop site-specific plans.

### **No. 9: Air and noise quality**

Air emissions during construction, particularly from heavy construction equipment, and during operations will be addressed. Underwater sound impacts on marine species will be covered, too.

### **No. 10: Alternatives**

The LNG plant site and pipeline route alternatives considered by the project and raised by regulators and the public will be addressed in the report, including the best way to thread the pipeline through the tight area between Denali National Park, the Parks Highway, Nenana River, Alaska Railroad tracks, a deep gorge and the tourism-related business area known as “Glitter Gulch.”

### **No. 11: Reliability and safety**

A big issue in this report will be operations at the liquefaction plant, proposed for a site near other oil and gas industrial plants and residential properties. Safety issues for building the high-pressure gas pipeline near the trans-Alaska oil pipeline also will be addressed.

### **No. 12: PCB contamination.**

This report will be short; neither Alaska LNG nor FERC expect to encounter any PCB contamination issues in the project.

**No. 13: Engineering and design material**

This will be the most technical of the reports, including substantial engineering of the entire LNG facility.