

FERC requests additional sediment modeling work

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Federal regulators have selected 15 rivers and creeks along the route of the proposed 807-mile natural gas pipeline from Prudhoe Bay to Nikiski — “representative waterbodies that support sensitive fishery resources” — for additional sediment transport modeling work by the Alaska Gasline Development Corp. (AGDC).

The assignment is part of the Federal Energy Regulatory Commission (FERC) review of AGDC’s plans for open-cut trenching to lay pipe at more than half of the 440-plus water crossings along the route. Regulators want to learn how pipeline construction may stir up sediment in the water and where the sediment might travel.

FERC sent its instructions to the state’s project team on May 31, responding to AGDC’s work plan for sediment transport modeling of open-cut water crossings. “After our review of the plan, we are requesting changes,” FERC said in its letter. Regulators recommended AGDC collect core samples at the proposed water crossings if the data is not otherwise available.

Federal regulators continue to analyze baseline environmental data, predict impacts, and review construction and operation plans for the state-led \$43 billion project to move North Slope natural gas to a liquefaction plant on the eastern shore of Cook Inlet in Nikiski, where the fuel would be loaded aboard liquefied natural gas carriers for delivery to overseas buyers.

FERC is scheduled to issue its draft environmental impact statement in March 2019; its final EIS in December 2019; and then issue a decision in March 2020 on the state’s application to build and operate the project.

In addition to the EIS and permit work, the state continues looking to sign up customers, lenders, and investors for the project, which AGDC in late 2016 took over from North Slope oil and gas producers ExxonMobil, BP, and ConocoPhillips after the companies decided against spending an estimated \$1 billion on permitting and final engineering.

From the state takeover through the end of 2018, AGDC’s gas line project spending is expected to total about \$72 million, according to a staff report at the corporation’s May 10 board of directors meeting. The corporation has said it could need to spend as much as \$800 million more to reach a final investment decision on the project.

Along with its regulatory and commercial work, AGDC continues to promote the project at events and in newspaper inserts in Alaska and at trade shows worldwide.

WATERWAY CROSSINGS

In addition to the open-cut water crossings, the state-led project team plans to temporarily restrict or divert the flow for pipeline installation at fewer than half the waterbody crossings — called “flow isolation.” It will use directional drilling — pulling the pipe under the waterway — at other crossings.

“Major waterbodies are significant due to both their value to fisheries and other wildlife,” FERC wrote in its May 31 letter, asking asked for more modeling work on the open-cut crossings. “Construction across these waterbodies involves extended occupation by construction equipment, often extending for several days and, in some cases, weeks.”

FERC selected for the sediment transport modeling assignment 15 waterbodies used by salmon or other fish, or that provide spawning areas or “essential fish habitat at the crossing location.” FERC said it “eliminated those that are known to have sustained natural turbidity levels,” such as Cook Inlet, which the project will cross with 29 miles of concrete-coated pipe sunk to the sea floor.

In addition to eliminating waters with heavy natural turbidity, FERC made clear in its four-page letter that it is not requesting sediment transport modeling for any winter construction activities. “Although we recognize the significance of the impact, we also recognize that estimating the volume of free water and the flow under winter conditions is likely impossible with any level of accuracy.”

Because data needed for sediment modeling may not be available for all 15 waterbodies, FERC recommended “collecting sediment cores from each waterbody at the proposed crossing location to a depth commensurate with the anticipated trench depth to determine sediment type(s) that could be disturbed and suspended within the water column during construction.”

The regulators instructed AGDC to file a revised sediment transport modeling work plan that incorporates the requested information, “or provide a detailed explanation why the recommendations cannot be incorporated.”

The 15 crossings of creeks and rivers on FERC’s list include:

- An unnamed tributary that feeds into the Sagavanirktok River at Milepost 88.26 of the pipeline route south from Prudhoe Bay.
- Jim River and Douglas and Prospect creeks that feed into South Fork of the Koyukuk River at Mileposts 272.47, 274.77 and 281.35.
- The pipeline crossing of the Nenana River at Milepost 560.98.
- Seven crossings of the Chulitna River and of creeks and unnamed tributaries that feed into the river, stretching from Milepost 586.34 to 658.27.
- Drywater and Trapper creeks that feed into the Lower Susitna River, Mileposts 661.31 and 663.67.

- The Beluga River crossing at Milepost 757.17, on the west side of Cook Inlet.

STATE CONTINUES RESPONDING TO QUESTIONS

The state has been responding to FERC’s data requests for almost a year as federal regulators review the project application and ask AGDC to fill in data gaps and provide more detailed answers to construction and operation plans.

In May the state submitted another package of data requested by FERC, including more information on the alternative of running the gas pipeline to Valdez instead of Nikiski. The city of Valdez has long advocated for building the LNG terminal in the Prince William Sound community, and last year filed with FERC to push for moving the project away from Nikiski.

AGD reported to FERC that the Valdez route would add 62 waterbody crossings to the pipeline route, 24 miles of wetlands crossings, and cross an additional 200 miles of discontinuous permafrost than the route Nikiski. But, on the plus side, almost one-third of the Valdez route would be built within 500 feet of an existing right of way for a road, the trans-Alaska oil pipeline, a powerline or the Alaska Railroad.

Though AGDC — and the producer-led team before the state took over — prefers the Nikiski route, the EIS is required to consider all alternatives, including building the LNG plant at Port MacKenzie, promoted by the Matanuska-Susitna Borough, which owns the property directly across Knik Arm from Anchorage. The borough in January filed a complaint with FERC over the site-selection review.

TRANSPORTATION PLANS

Among its data requests, FERC had asked the state for estimated average and peak traffic volumes on the major Alaska highways that would be used for moving construction materials, supplies and workers. AGDC provided estimated annual full truckloads for 2020-2026, with the peak in 2023 at:

- 45,000 truckloads in 2023 on the Sterling and Kenai Spur highways toward Nikiski.
- Almost 23,000 truckloads on the Glenn and Parks highways between Fairbanks and Anchorage.
- 15,000 full truckloads on the Steese/Elliott/Dalton highways north of Fairbanks.
- 15,500 truckloads on the Seward Highway.

In answer to another FERC question, AGDC said pipeline construction along the Parks Highway within the Nenana Canyon section (Milepost 532 to 536.3) would be scheduled for after the tourism season ends “to reduce disruptions to public access.”

The project plans to move a lot of construction material, especially pipeline segments, aboard the Alaska Railroad. In response to a question from FERC, the state team said it could take two years for the railroad to obtain enough railcars to handle all the freight. To avoid causing

problems for summer tourist traffic on the railroad, AGDC said some of its construction materials would move at night on some routes.

Among the transportation questions from FERC was how AGDC plans to move the thousands of workers who would be employed at the LNG terminal construction site in Nikiski. Workers who commute from out of town would be bused to and from the Kenai airport, AGDC said. And to help lessen the increased traffic from construction workers who live in the Nikiski/Kenai/Soldotna area, AGDC said it would “encourage Kenai Peninsula construction workers to share ride to the construction site.”

To further lessen highway congestion, AGDC said it would schedule construction-related traffic on roadways and at specific crossings in the area to avoid local drivers and school buses.

AGDC reported to FERC that it has dropped its original plan to drill water wells to supply the Nikiski LNG plant site and instead would draw its water from the city of Kenai distribution system, requiring construction of 6 miles of 16-inch water main to reach the LNG site. The state’s April 27 filing said the project would pay for the pipeline and water system upgrades, with the city of Kenai to oversee construction and ownership.

WILDLIFE IMPACTS

In its responses to FERC’s request for more details about its plans to lessen the project’s effects on wildlife, AGDC reported:

- It would build temporary fencing “in areas of known migration and feeding routes to funnel moving animals” away from work areas.
- All work camps would be closed to reduce the likelihood of human interference with wildlife or harming their habitat, and personnel “would be prohibited from visiting areas outside camps or construction areas.”
- Construction of the gas treatment plant at Prudhoe Bay would result in the permanent loss of about 700 acres of caribou habitat. “These impacts are considered permanent but minor, given the large range and expansive habitat available to and used by caribou on the North Slope,” the state told FERC.

FERC had requested more detailed mapping of wildlife habitat of individual species along the pipeline route, including “seasonality of species locations.” After discussing the request with FERC at a March 22 meeting in Washington, D.C., and reviewing the request with the Alaska Department of Fish and Game, AGDC reported May 11: “Habitat mapping for multiple species over a 6,500-square-mile area would be a very large task, and Fish and Game indicated that they do not have the resources or need to conduct such large-scale mapping along this corridor at this time. ... In discussions with Fish and Game, it was decided that the requested mapping and impact analysis are, therefore, not warranted.”

In a further response to continuing discussions with federal regulators over the state’s plans to leave granular fill in place in selected construction areas, AGDC responded April 27: “Leaving

the gravel/fill in place after construction often causes less environmental damage, including damage to wetlands, than trying to scrape it up for removal.” In addition, AGDC said granular fill on top of tundra vegetation can provide thermal insulation for “thaw-sensitive permafrost and permafrost soils with high moisture content.”

Another issue for the FERC-led EIS is how AGDC plans to provide impact aid to communities affected by project construction and operation. AGDC answered that changes to state law would be required to establish a structure for the state-owned, tax-exempt project to make payments in lieu of property taxes to municipalities along the route.

“To the extent these payments are available in the future, they could be used to mitigate costs incurred by municipalities and communities during project operation,” AGDC responded May 11. The state has provided no further information on a specific amount of impact aid payments or how the funds might be distributed to the communities.