

EXECUTIVE SUMMARY

This final Environmental Impact Statement (EIS) for the Floridian Natural Gas Storage Project (Project) has been prepared by the staff of the Federal Energy Regulatory Commission (FERC or Commission), in cooperation with the U.S. Fish and Wildlife Service (FWS), U.S. Army Corps of Engineers (COE), and U.S. Environmental Protection Agency (EPA), to fulfill the requirements of the National Environmental Policy Act (NEPA); the Commission's implementing regulations under Title 18, Code of Federal Regulations (CFR) Part 380; and the Council on Environmental Quality regulations for implementing NEPA. The purpose of this document is to inform the public, Commission, and various federal and state agencies about the environmental effects resulting from the construction and operation of the Project; identify and discuss project alternatives; and to recommend practical, reasonable, and appropriate mitigation measures that would avoid or reduce adverse impacts. The FERC is the federal agency responsible for authorizing applications to construct and operate liquefied natural gas (LNG) storage and natural gas transmission facilities.

PROPOSED ACTION

On December 21, 2006, Floridian Natural Gas Storage Company, LLC (FGS) filed a request with the FERC to implement the Commission's Pre-filing Process for the FGS Project. The purpose of the Pre-filing Process is to encourage the early involvement of interested stakeholders, facilitate interagency cooperation, and identify and resolve issues before an application is filed with the FERC.

On January 10, 2007, the FERC granted FGS' request and established a Pre-filing docket number (PF07-3-000) to place information relevant to the proposed Project into the public record.

On October 31, 2007, FGS filed an application with the FERC, in Docket No. CP08-13-000, pursuant to Section 7(c) of the Natural Gas Act, as amended, and Parts 157 and 284 of the FERC's regulations. FGS requests Commission authorization to construct, own, operate, and maintain a LNG storage facility on a 144.63-acre site approximately two miles northwest of the unincorporated town of Indiantown, in Martin County, Florida.

As stated by FGS, the purpose of the proposed Project is to respond to the growing demand for natural gas and natural gas infrastructure in the United States, and, more specifically, in Florida. The Project would enhance access to additional, competitively-priced supplies of natural gas by providing liquefaction, storage, and vaporization services to customers in Florida and the southeastern United States and provide added supply during peak demand periods.

Specifically, the LNG storage facility would include:

- two full-containment LNG storage tanks, each with a nominal working volume of 184,750 cubic meters;
- a liquefaction system with the capacity to process 100 million standard cubic feet per day (MMscfd);
- a vaporization system with the capacity to process 800 MMscfd; and
- a natural gas liquids storage system that could store up to 240,000 gallons of heavy hydrocarbons.

FGS would design, construct, operate, and maintain the LNG storage facility in accordance with governing federal and state regulations, including the U.S. Department of Transportation's (DOT) *Federal Safety Standards for Liquefied Natural Gas Facilities* (49 CFR Part 193) and the National Fire Protection Association's (NFPA) *Standards for the Production, Storage, and Handling of LNG* (NFPA 59A).

FGS also requests authorization to construct, own, operate, and maintain the following natural gas pipeline facilities in order to receive and deliver natural gas from the Gulfstream and Florida Gas Transmission (via a Florida Power & Light [FPL] lateral) interstate pipeline systems:

- an approximately 4-mile-long, 12-inch-diameter receiving pipeline to interconnect with and receive natural gas from the Gulfstream and/or FPL lateral pipelines;
- an approximately 4-mile-long, 24-inch-diameter sendout pipeline that would parallel the 12-inch-diameter pipeline and interconnect with and deliver natural gas from the storage facility to the Gulfstream and the FPL lateral pipelines;
- interconnection points with the Gulfstream pipeline at milepost (MP) 4.18 and with the FPL lateral at MP 4.05; and
- a metering and regulating station.

The pipeline facilities would be designed, constructed, operated, and maintained in accordance with DOT's *Transportation of Natural or Other Gases by Pipeline: Minimum Federal Safety Standards* (49 CFR 192).

PUBLIC OUTREACH AND COMMENTS

As part of our¹ Pre-filing review, we issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Floridian Natural Gas Storage Project (NOI), Request for Comments on Environmental Issues, and Notice of Public Scoping Meeting* on February 15, 2007. This notice was published in the Federal Register and sent to affected landowners; federal, state, and local government agencies; elected officials; environmental and public interest groups; Native American tribes; local libraries and newspapers; and other interested parties (collectively referred to as the environmental mailing list). We also conducted a public scoping meeting in Indiantown,

¹ "We," "us" and "our" refer to the environmental staff of the FERC's Office of Energy Projects.

Florida and a public site visit on March 7, 2007. A transcript of the scoping meeting and all written comments provided at the meeting as well as all comments provided in response to the NOI have been entered into the public record for the Project. In response to our notice, public site visits, and scoping meeting, we received comments from landowners, concerned citizens, public officials, and government agencies regarding the Project. These comments expressed concerns about Project effects on alternatives, wetlands, threatened and endangered species, vegetation, water resources, waste management, land use, visual resources, socioeconomics, air quality, noise, and public safety.

In addition to the public notice and scoping process discussed above, we consulted with other key federal and state agencies, including the EPA, COE, FWS, and Florida Department of Environmental Protection to identify issues that should be addressed in this EIS. Interagency meetings were held on March 8, 2007 and December 6, 2007 to discuss the Project and its associated environmental review process.

On March 21, 2008 the FERC issued a *Notice of Availability of the Draft Environmental Impact Statement for the Floridian Natural Gas Storage Project (NOA)* in the Federal Register and a draft EIS was mailed to all parties on our environmental mailing list. In accordance with the Council on Environmental Quality regulations implementing NEPA, a 45-day comment period was allotted for public comment. On April 16, 2008 a public meeting to hear comments on the draft EIS was held in Indiantown, Florida. A transcript of the meeting and all written comments provided in response to the draft EIS have been entered into the public record for the proposed Project. All timely comments received on the draft EIS are addressed in this final EIS, either as revisions to the text as appropriate, and/or as direct responses to each comment in Appendix D.

This final EIS has been mailed to agencies, individuals, and organizations on our environmental mailing list, and submitted to the EPA for the formal public notice of availability.

ALTERNATIVES CONSIDERED

We considered several alternatives to the proposed action including the no action and postponed action alternatives, LNG system alternatives, LNG storage facility site alternatives, and pipeline system and route alternatives. The proposed Project is not an energy source itself, but is needed to improve current electrical generating system reliability. To the extent that this Project could make gas-fired generating facilities more attractive because of improved reliability, we discussed the status of alternative energy sources and energy conservation in Florida.

LNG system alternatives considered include alternative natural gas storage facilities (e.g., salt domes, depleted oil and gas reservoirs, and aquifer storage), LNG import terminals, and pipeline expansion, looping, and compression. We also considered six alternative LNG storage facility sites, three pipeline route alternatives and several minor pipeline route variations. The Florida Public Service Commission (PSC) concluded that energy demand forecasts continue to surpass current energy conservation and renewable energy programs offered by Florida's utilities and that local utilities should continue

investigating natural gas supply and delivery options such as natural gas storage to maintain diversity in the face of unplanned supply or distribution disruptions (Florida PSC, 2007).

Based on our review of the Project, we have determined that, as modified by our recommended mitigation measures, the proposed Project is the preferred alternative that can meet the Project purpose with the minimum amount of environmental impact.

PROJECT IMPACTS AND MITIGATION

Construction of the Project would affect up to a total of 127.03 acres of land. Specifically, construction of the LNG storage facility and pipeline facilities would temporarily affect 55.58 and 71.45 acres of land, respectively.

Operation of the LNG storage facility would permanently affect 53.10 acres; the remainder of the storage facility site, including the 2.48-acre expansion of an existing stormwater pond, would be preserved as open space. The permanent pipeline right-of-way, metering and regulating station, and pipeline interconnects would permanently affect 25.30 acres.

The Project would have no permanent wetland impacts, but pipeline construction would temporarily impact 3.91 acres of wetlands, none of which qualify as high quality, sensitive, or special-status wetlands. The LNG storage facility construction would not impact any wetlands.

Pipeline construction would cross five waterbodies, all of which are intermittent drainage ditches. FGS would use open-cut methods to cross four drainage ditches and would restore the ditches in accordance with FERC Procedures. FGS would bore under the ditch at MP 0.99 avoiding impacts to 0.03 acre of wetlands. Construction of the LNG storage facility would not adversely affect any waterbodies.

Construction and operation of the Project would result in temporary impacts to other environmental resources including soils, vegetation, wildlife, land use, visual, and air and noise quality. Soils at the Project would be disturbed, but topography is nearly level and the soils have only a slight erodibility potential. The Project-related clearing would decrease vegetative cover and wildlife habitat, but much of this land was previously disturbed and is dominated by invasive species. Further, the LNG storage facility site was previously contaminated and is currently undergoing EPA-supervised remediation.

We have determined that the Project would have no effect or is not likely to adversely affect any federally-listed threatened and endangered species. We have informally consulted with the FWS, which is a cooperating agency in the preparation of this EIS, regarding Project effects on listed species. The FWS has concurred with our determination of effect relative to federally-listed species. Consequently, the Commissions required consultation under Section 7 of the Endangered Species Act is complete. The Florida Fish and Wildlife Conservation Commission indicated the project impact to state-listed species should be negligible.

The Project would not affect residential areas and would be consistent with local zoning and future land use plans. The viewshed of the Project would not be significantly

impacted since the LNG storage tanks, which would be the most prominent features, would be consistent with the existing industrial character of the area. Operation of the LNG storage facility would not result in a detectable increase in noise at the nearest noise sensitive area. Because Martin County is classified as an attainment area for all criteria pollutants, a General Conformity review of the Project is not required. Criteria pollutant emissions from operation of the Project are not expected to exceed annual threshold limits under EPA's Prevention of Significant Deterioration (PSD) and is not considered a major source under the Title V program. Other environmental resources, including geology, groundwater, and recreation would not be significantly affected by the Project.

Cultural resource surveys of the affected Project area did not identify any archaeological sites or historic structures and the State Historic Preservation Officer has concurred that the Project would have no effect on any properties listed in, or eligible for listing in, the National Register of Historic Places. The Seminole and Miccosukee tribal representatives also concurred that no further cultural investigations were needed. Consequently, the Commission's required consultation under Section 106 of the National Historic Preservation Act is complete.

The Project would have a beneficial effect on the local economy and socioeconomics by creating an average of 270 temporary jobs, with a peak of 450 jobs in months 14 and 15 of the project construction, and generating approximately \$120 million in local expenditures over the 36-month construction period. Once the first storage tank is in operation, the Project would also create up to 33 permanent positions; contribute about \$19 million annually to the local economy from Project spending, sales, and payroll; and pay at least \$1.6 million annually in property taxes to Martin County. With the second storage tank in operation these benefits would increase. The Project would also provide some benefits to the environment by removing all invasive and exotic plant species at the Project site.

Our evaluation of the front-end engineering design of the proposed LNG storage facility included a review of materials in cryogenic environments; insulation systems; cryogenic safety; thermodynamics; heat transfer; instrumentation; cryogenic processes; and other relevant safety systems. As a result of the technical review of the proposed design and installation of the LNG storage facility, we identified a number of concerns relating to the reliability, operability, and safety of the proposed design. In response to these issues, FGS provided a list of corrections or modifications to be included in the final design of the facility. The final EIS identifies specific recommendations to address the remainder of these issues in the next phase of project development if authorization is granted by the Commission. Thermal radiation and vapor dispersion exclusion zones were calculated and determined to be in compliance with 49 CFR Part 193.

To reduce potential Project-related environmental impacts, FGS would implement several impact minimization and mitigation measures and plans including the following:

- the FERC's Upland Erosion Control, Revegetation, and Maintenance Plan (Plan);
- the FERC's Wetland and Waterbody Construction and Mitigation Procedures (Procedures);

- Spill Prevention, Control, and Countermeasures Plan;
- Stormwater Pollution Prevention Plan;
- Unanticipated Hazardous Waste Discovery Plan;
- Preserve Area Management Plan;
- Procedures Guiding the Discovery of Unanticipated Cultural Resources and Human Remains;
- Draft Seismic Design Guidelines and Data Submittal Requirements for LNG Facilities; and
- Emergency Response Plan.

To further minimize potential impacts resulting from Project-related activities, we recommended several mitigation measures. These recommendations would minimize the establishment of exotic and invasive plant species during restoration and ensure consistency with coastal zone management efforts.

MAJOR CONCLUSION

We conclude that with the use of FGS' proposed mitigation and our recommended mitigation measures, construction and operation of the proposed facilities would have limited adverse environmental impact.

The primary support for this conclusion reasons for our decision is:

- FGS would construct the LNG storage facility on a former industrial site that primarily consists of disturbed land with invasive exotic species;
- the majority of FGS' proposed pipeline right-of-way would be co-located with or parallel to existing rights-of-way;
- FGS would implement our Plan and Procedures and other plans, which would minimize and mitigate impacts to natural resources during Project construction and operation;
- the proposed LNG storage facility would comply with the siting requirements of Title 49 CFR Part 193;
- FGS would incorporate appropriate features and modifications, as specified by staff's recommendations, into the facility design to enhance the safety and operability of the proposed LNG facility; and
- FGS would implement an environmental inspection and monitoring program that would ensure compliance with all proposed and recommended mitigation measures.