165 FERC ¶ 61,031
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Kevin J. McIntyre, Chairman;
Cheryl A. LaFleur, Neil Chatterjee,
and Richard Glick.

National Grid LNG LLC Docket No. CP16-121-000

ORDER ISSUING CERTIFICATE

(Issued October 17, 2018)

1. On April 1, 2016, National Grid LNG LLC (National Grid) filed an application under section 7(c) of the Natural Gas Act (NGA)[1] and Part 157 of the Commission's regulations[2] requesting authorization to add liquefaction facilities at its existing Fields Point liquefied natural gas (LNG) storage facility in Providence, Rhode Island. Currently, natural gas to be stored at National Grid's facility must be trucked in from other facilities as LNG. The proposed Fields Point Liquefaction Project would enable customers to also transport gas as vapor by pipeline to Fields Point for liquefaction and storage.

2. For the reasons discussed below, the Commission will grant National Grid's requested certificate authorization, subject to conditions.

I. Background and Proposal

3. National Grid is a limited liability company organized under the laws of Delaware. National Grid owns and operates a 600,000-barrel of LNG (approximately 2 billion cubic feet of natural gas) capacity LNG storage facility at Fields Point on the Providence River in Providence, Rhode Island, and provides LNG storage, vaporization, and redelivery services subject to the Commission's jurisdiction. Customers currently truck LNG to the Fields Point facility for storage, and National Grid redelivers gas to those customers, most often as vapor via pipeline, and on occasion as LNG by truck. Narragansett Electric Company (Narragansett Electric)[3] pipeline facilities are used to deliver revaporized gas

[1] 15 U.S.C. § 717f(c) (2012).

[2] 18 C.F.R. pt. 157 (2018).

[3] Narragansett Electric is a local distribution company (LDC) that provides electric and gas services to retail customers in Rhode Island. Narragansett Electric has a limited

from National Grid's storage facility to Narragansett Electric's distribution system and by displacement to an Algonquin Gas Transmission, LLC (Algonquin) interstate pipeline for ultimate delivery to National Grid's storage customers. The proposed project would effectively reverse this flow by enabling Algonquin to transport gas that Narragansett Electric would deliver to Fields Point to be liquefied and stored.

4. National Grid states that two of its existing customers, Narragansett Electric and Boston Gas Company (Boston Gas),[4] requested it add liquefaction capability to enable them to deliver gas to National Grid by pipeline and thereby diversify their supply sources.[5] To accommodate this request, National Grid seeks to add a 20 million standard cubic feet per day gas pretreatment and liquefaction system. National Grid states that the proposed facilities will be located within the boundaries of its existing Fields Point site and that it does not propose to alter the capacity of its existing LNG storage tank or the location of existing cryogenic piping and vaporization equipment. Feed gas for the proposed liquefaction facilities will be delivered via Narragansett Electric's existing 12-inch-diameter pipeline.

5. National Grid states that in conjunction with its Fields Point Liquefaction Project, Narragansett Electric plans to make electric infrastructure upgrades on its system in order

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jurisdiction blanket certificate, pursuant to section 284.224 of the Commission's regulations, to transport natural gas in interstate commerce. *Narragansett Electric,* 131 FERC ¶ 61,054 (2010).

[4] National Grid, Narragansett Electric, and Boston Gas are affiliated companies.

[5] National Grid observes that to date, "customers have relied primarily on a single source for their LNG by obtaining it from the Everett, Massachusetts import terminal." National Grid's Application at p. 6. However, "LNG has been sourced from other LNG suppliers in Canada, Pennsylvania, and New Jersey when needed." National Grid's Response to Comments on the Environmental Assessment, at p. 2 (Aug. 9, 2018). Most recently, the "ratio has been approximately 60% purchased from the Everett import terminal and 40% purchased from Quebec." *Id.* p. 6, n.15.

National Grid's customers state that "there are relatively few significant sources of LNG available for purchase in the Northeast," and add that during the 2013 refill season, they "were unable to acquire sufficient quantities of LNG to fill their storage tanks." Comments of Brooklyn Union Gas Company d/b/a National Grid NY; KeySpan Gas East Corporation d/b/a National Grid; Boston Gas and Colonial Gas Company, collectively d/b/a National Grid; Niagara Mohawk Power Corporation d/b/a National Grid; and Narragansett d/b/a National Grid (National Grid Gas Delivery Companies), at p. 4 (May 6, 2016).

to provide a dedicated 13 megawatt 34.5 kilovolt electric service to power National Grid's proposed liquefaction equipment.[6]

II. Notice, Interventions, Comments, and Protests

6. Notice of National Grid's application was published in the *Federal Register* on April 21, 2016.[7]

7. Timely, unopposed motions to intervene were filed by Emlyn E. Addison; Sherrie Andre; Kate Aubin; Burrillville Against Spectra Expansion; Joshua C. Catone; Julian Drix; EMGIE Gas & LNG LLC; the Environmental Justice League of Rhode Island (Environmental Justice League); Christina Ergas; Maureen E. Farrell; Fighting Against Natural Gas; Nicolas Katkevich; the National Grid Gas Delivery Companies; Mary Pendergast; Gina Rodriguez; Ellen A. Tuzzolo; Marlena Von Hoffer; and Pia Ward.[8]

8. On March 27, 2018, No LNG PVD filed a late motion to intervene. National Grid filed a motion opposing the late intervention. We will grant No LNG in PVD's motion pursuant to Rule 214 of the Commission's regulations.[9]

9. Comments and/or protests were filed by individuals and other entities concerning project safety, environmental impacts, and project need. These comments are addressed in the Environmental Assessment (EA) for the project and in this order, as appropriate.

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[6] Although Narragansett Electric's electric upgrades are not subject to the Commission's jurisdiction, we have considered the environmental impacts of these upgrades, along with other planned or proposed projects in the vicinity of the Fields Point site, in assessing the cumulative impacts of National Grid's proposal in section 2.9 of the Environmental Assessment (EA).

[7] 81 Fed. Reg. 23,477 (April 21, 2016).

[8] Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedures. *See* 18 C.F.R. § 385.214 (2018).

[9] 18 C.F.R. § 385.214(d) (2018). Note that in *Tennessee Gas Pipeline Co., L.L.C.*, 162 FERC ¶ 61,167, at PP 49-51 (2018), we explained that going forward, we would apply a less lenient approach in considering out-of-time motions to intervene. We do not apply this new approach here, as No LNG in PVD submitted its motion prior to issuance of the *Tennessee Gas Pipeline Co., L.L.C.* order.

10. National Grid submitted answers in response to comments and protests. Although the Commission's Rules of Practice and Procedure do not permit answers to protests,[10] our rules also provide that we may waive this provision for good cause.[11] We will accept the answers here because they have provided information that assisted us in our decision making.

11. Neesu Wushuwunoa requests we suspend this proceeding to "work with the Mashapaug Nahaganset Tribal Trust and Nation to develop an equitable process for consultation" on this "and future projects proposed to take place in Mashapaug Nahaganset ancestral lands."[12] Although we endeavor to consult with federally-recognized Indian tribes on a government-to-government basis under our *Policy Statement on Consultation with Indian Tribes in Commission Proceedings*,[13] in this case, taking into account that the Mashapaug Nahaganset is neither a federally- nor state-recognized tribe, we have elected to review the concerns expressed by Neesu Wushuwunoa in responding to comments submitted in this proceeding.

III. Discussion

12. Since the proposed Fields Point Liquefaction Project will be used for the transportation and storage of natural gas in interstate commerce, the construction and operation of the facilities are subject to the Commission's jurisdiction under NGA sections 7(c) and (e).[14]

A. Application of the Commission's Policy Statement on New Facilities

13. The Commission evaluates gas project applications guided by its policy statement on the certification of new facilities.[15] The Certificate Policy Statement establishes criteria for determining whether there is a need for a proposed project and whether it will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new natural gas facilities, the Commission

[10] 18 C.F.R. § 385.213(a)(2) (2018).

[11] *Id*. § 385.101(e).

[12] Neesu Wushuwunoa's Comments, at p. 2 (Dec. 8, 2017).

[13] 104 FERC ¶ 61,108 (July 23, 2003).

[14] 15 U.S.C. §§ 717f(c) and (e) (2012).

[15] *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *orders on clarification*, 90 FERC ¶ 61,128 and 92 FERC ¶ 61,094 (2000) (*Certificate Policy Statement*).

balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating proposals for new projects.

14. Under this policy, the threshold requirement for an existing company proposing a new project is that the company must be prepared to financially support the project without relying on subsidization from its existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing jurisdictional companies in the market area and their captive customers, or landowners and communities affected by the location of the new facilities. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, the Commission will evaluate the proposal by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission proceed to complete the environmental analysis where other interests are considered.

15. National Grid's proposal satisfies the threshold requirement that it financially support the project without relying on subsidization from its existing customers. National Grid proposes to provide the new service under new incremental rate schedules with rates designed to recover the project's costs. Only customers utilizing the new liquefaction facilities will pay for the service, thus the project will not be subsidized by National Grid's other customers. Further, the proposal will not degrade service to existing customers, and there will be no adverse impact on other interstate pipelines or their captive customers. We note that no natural gas company or its captive customers have protested the application. Finally, as discussed below, we find the proposed project will have minimal impacts on landowners and surrounding communities.

16. The firm capacity of the proposed project is fully subscribed for a 20-year term under precedent agreements with Boston Gas and Narragansett Electric.[16] Boston Gas

[16] We note the Massachusetts Department of Public Utilities approved Boston Gas' 20-year agreement for firm liquefaction service, finding: it is consistent with that company's supply portfolio objectives; it compares favorably to a range of reasonable supply alternatives; that based on price and non-price factors, liquefaction would contribute to a flexible, reliable, and diversified portfolio, and; liquefaction would reduce reliance on imported LNG and allow access less expensive domestic gas. *Petition of Boston Gas Co. and Colonial Gas Co., each d/b/a National Grid, for Approval of*

and Narragansett Electric state they rely on LNG to satisfy approximately 37 percent and 35 percent, respectively, of their projected peak day requirements, and stress "it is vitally necessary" for "gas distribution companies to have access to sufficient quantities of LNG in order to provide reliable service to the companies' retail customers," and that there are relatively few significant sources of LNG available for purchase in the Northeast.[17]

17. Based on the benefits the project will provide in making new liquefaction service available, and the lack of adverse effects on existing customers and other gas companies and their captive customers, as well as the minimal impacts on landowners and surrounding communities, we find, consistent with the Certificate Policy Statement and NGA section 7(c), that the public convenience and necessity requires approval of the proposed Fields Point Liquefaction Project, as conditioned in this order.

B. Objections to the Showing of Need

18. Some parties opposing the proposed project claim it is not needed, because to date gas trucked to the National Grid LNG tank has proved to be sufficient to meet peak day demands. However, not only have National Grid's storage customers indicated that they have encountered some difficulties in acquiring what they deem to be adequate supplies of LNG,[18] but the customers have asked National Grid to add facilities to enable them to bring gas to the storage tank by pipeline to diversify their supply portfolio by diminishing the need to rely on LNG, which is only available from a limited number of suppliers and can be subject to volatile pricing. National Grid Gas Delivery Companies state that the LNG import terminal in Everett, Massachusetts, is the only supply source "capable of meeting [National Grid's customers'] full LNG refill requirements,"[19] and express their apprehension that because the Everett facility is not subject to the Commission's NGA section 7 jurisdiction,[20] they have no regulatory assurance the Everett facility will

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Contracts for Liquefied Natural Gas and Liquefaction Services, pursuant to G.L. c. 164, § 94A, Mass. D.P.U. Docket No. 15-129, at p. 24 (May 13, 2016). *See* National Grid's Answer to Comments, at p. 3 (May 23, 2016) and the National Grid Gas Delivery Companies' Comments, at p. 5 (Sept. 4, 2018).

[17] National Grid Gas Delivery Companies' Comments, at p. 4 (May 6, 2016).

[18] *See supra* n. 5.

[19] National Grid Gas Delivery Companies' Comments, at p. 3 (Sept. 4, 2018).

[20] *See Distrigas of Massachusetts LLC*, 124 FERC ¶ 61,039 (2008), in which we approved the abandonment of the Everett facilities and services under NGA section 7(b) in favor of regulation exclusively under NGA section 3.

continue to provide them firm service at cost-based just and reasonable rates. Although natural gas commodity prices are not subject to Commission jurisdiction, regardless of the source, National Grid's proposed liquefaction services would be provided under section 7, and thus subject to the protections inherent in the Commission's open-access regime. That the customers believe the proposed project will offer benefits not now available is evidenced by their committing to firm service for the full capacity that would be made available for a 20-year term. We accept these commitments as adequate evidence of the need for the proposed project.[21]

19. The Environmental Justice League contends that "switching from imported gas from Everett, will increase our dependency on the Algonquin pipeline, not diversify our energy needs."[22] We disagree. Currently, National Grid's customers are solely dependent on storage gas that can be purchased in liquid form (most frequently from Everett and on occasion from other locations) and trucked to the Fields Point facility. The proposed project would offer those customers the option to obtain gas in vapor form from domestic sources and deliver it to the storage tank by pipeline. Thus, these customers will not be locked into a "dependency" on Algonquin's pipeline, because they would still to be able to have LNG transported from Everett and elsewhere by truck.[23]

20. Some parties opposing the project argue that conservation, weatherization, and reducing demand could serve as substitutes for National Grid's peaking service, or that an equivalent service could be provided using renewable energy sources. As noted above, current customers, who, as LDCs, have obligations to meet the needs of their retail natural gas customers, have requested and committed to pay for new services. Further, as discussed in the EA, while alternatives such as conservation, weatherization, or utilization of energy from renewable sources could have the potential to affect

[21] The Commission's longstanding reliance on precedent agreements as substantial and sufficient evidence of need has been affirmed by the courts. *See Township of Bordentown, New Jersey v. FERC*, No. 17-3207, slip op. at 48 (3d. Cir. Sept. 5, 2018) ("A contract for a pipeline's capacity is a useful indicator of need because it reflects 'business decision' that such need exists. If there were no objective market demand for the additional gas, no rational company would spend money to secure the excess capacity.") *See also Myersville Citizens for a Rural Community, Inc. v. FERC*, 783 F.3d 1301, 1310-11 (D.C. Cir. 2015) and *Minisink Residents for Environmental Preservation and Safety v. FERC,* 762 F.3d 97 at 110, n.10 (D.C. Cir. 2014).

[22] Comments on EA, at pp. 1-2 (July 25, 2018).

[23] We note that one of National Grid's Fields Point customers, Consolidated Edison Company of New York, Inc. (Con Ed), has opted not to participate as a firm customer on the proposed project.

consumption of natural gas in the area, the purpose of the proposed project is to liquefy gas to be held in storage for revaporization during the peak heating season on an as-needed, on-demand basis. Neither demand reduction nor renewable sources of energy are feasible alternatives for this purpose.

C. Rates

21. Commenters express concern the proposed project could cause retail rates to rise.[24] National Grid insists its project will have no direct impact on retail customer bills, since its customers are LDCs, not retail consumers, and it is not proposing any change to the rates of the LDCs' customers.[25] National Grid points out that retail rates are regulated by state public utility commissions (not this Commission), and a retail rate increase is not a foreseeable outcome of its proposed Fields Point Liquefaction Project. National Grid is correct that the proposed project will not directly impact retail rates, and we concur with National Grid's assertion that a state public utility rate proceeding is the appropriate forum to address issues concerning retail rates.

1. Initial Rates

22. National Grid proposes to provide two new separate, unbundled services – firm liquefaction (Rate Schedule LNG) and interruptible liquefaction (Rate Schedule LNG-D) – under Part 284 of the Commission's regulations at cost-based recourse rates. National Grid proposes initial rates composed of a Capacity Reservation Charge, a Transportation Reservation Charge, and a Fuel Charge. The Capacity Reservation Charge recovers the cost of the liquefaction facilities. The Transportation Reservation Charge is a flow-through of the annual expense National Grid will pay to Narragansett Electric to transport gas from Algonquin to National Grid for liquefaction pursuant to The Narragansett Electric Company Displacement Agreement.[26] The Fuel Charge is a fixed charge that recovers the gas and electricity expenses associated with the liquefaction process.

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[24] *See, e.g.*, the Environmental Justice League's Comments on EA, attached comments at p. 1; Jenna Karlin's Comments (May 9, 2016); and Julian Drix's Comments (May 5, 2016).

[25] National Grid's Answer to Comments, at p. 14 (May 23, 2016).

[26] As noted, LNG is currently delivered by customers to the Fields Point LNG storage tank by truck and then redelivered to customers primarily by revaporizing the LNG and delivering the gas directly to the Narragansett Electric distribution system and by displacement to the Algonquin system, with lesser volumes sent out as LNG by truck.

23. National Grid states it used the liquefaction equipment's design capacity of 20,600 Dekatherm (Dth) per day to develop its maximum firm recourse Capacity Reservation Charge of $179.7262 per Dth per month. National Grid derived this rate using straight fixed-variable (SFV) cost classification based on a first-year cost of service of $50,814,839. The proposed cost of service reflects a capital structure of 63.96 percent equity and 36.04 percent debt,[27] a return on equity (ROE) of 10.55 percent,[28] a cost of debt of 4.62 percent, and a depreciation rate of 4.4 percent, which reflects a 25-year useful life and includes the cost of removing the asset.

24. In an April 13, 2018 data response, National Grid provided an adjusted cost of service and recalculated its initial recourse rates to reflect changes in the federal tax code, as per the Tax Cuts and Jobs Act of 2017,[29] which became effective January 2018. National Grid's work papers show that the effect of the tax code change is a reduction in both the estimated cost of service and the recourse rates. As National Grid's April 13, 2018 calculation reflects the federal tax code that will be in effect when the project goes into service, the Commission will use those revised recourse rates for the purpose of establishing the initial rates.

25. Based on National Grid's April 13, 2018 data response, its adjusted cost of service is $47,337,328, the maximum Capacity Reservation Charge for firm liquefaction under Rate Schedule LNG is $165.8191 per Dth per month, and the maximum Transportation Reservation Charge is $3.5667 per Dth per month. For interruptible liquefaction under Rate Schedule LNG-D, the revised maximum recourse Liquefaction Charge is $5.4516 per Dth per day, and the maximum Transportation Charge is $0.1173 per Dth per day. The interruptible rates for Rate Schedule LNG-D service are based on the 100 percent load factor equivalent of National Grid's firm Rate Schedule LNG rates. National Grid's initial Fuel Charge is $1.2397 per Dth.[30]

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[27] National Grid states that because it does not engage in external financing, the capital structure used is that of KeySpan Corporation, which is National Grid's first upstream parent company that engages in external financing.

[28] National Grid states that due to the fact that it has not had a rate case, the ROE used is the 10.55 percent approved by the Commission in the most recent litigated NGA section 4 general rate case: *El Paso Natural Gas Co.*, 145 FERC ¶ 61,040, at P 686 (2013).

[29] Pub. L. No. 115-97, 131 Stat. 2054 (Dec. 22, 2017).

[30] In National Grid's June 13, 2016 data response it explains that the fuel expense was revised due to a revised heat input value. As a result of the revised fuel expense, the Fuel Charge changed from $1.2487 to $1.2397 per Dth.

26. Based on National Grid's April 13, 2018 data response, the Authorized Overrun Charge is $5.4516 per Dth, which is equivalent to the maximum interruptible liquefaction charge. Additionally, National Grid proposes an Excess Transportation Charge of $0.6000 per Dth.

27. National Grid states that the firm service capacity of the proposed project is fully subscribed for 20 years under precedent agreements with two of its three existing customers: Narragansett Electric and Boston Gas. Both companies have agreed to pay the recourse reservation rate under Rate Schedule LNG with a potential discount in the event costs exceed a specified threshold. National Grid's third existing customer, Con Ed, is considering whether to contract for firm liquefaction service as well. If it does so, the precedent agreements provide that the liquefaction service commitments of Narragansett Electric and Boston Gas will be reduced correspondingly. National Grid states that although firm liquefaction service capability is committed for existing LNG storage customers, interruptible liquefaction service may be available for other customers from time to time.

28. The Commission has reviewed National Grid's proposed cost of service, allocation, and rate design used to develop its proposed recourse rates under Rate Schedules LNG and LNG-D, as well as the Fuel Charge, Authorized Overrun Charge and Excess Transportation Charge, and finds that they are generally consistent with Commission policy. Therefore, the Commission will accept National Grid's proposed initial rates for service under Rate Schedules LNG and LNG-D as revised in the April 13, 2018 data response.

2. Interruptible Service Revenue Crediting

29. National Grid states that it has not allocated costs to the interruptible services but instead will credit those revenues to the firm liquefaction customers. However, the Commission's long-standing policy regarding new interruptible services requires either a 100 percent credit of interruptible revenues, net of variable costs, to maximum rate firm and interruptible customers, or an allocation of costs and volumes to such services.[31] Accordingly, we direct National Grid to modify section 36.2 of the General Terms and Conditions (GT&C) of its tariff to include the crediting of interruptible revenues to maximum-rate firm and interruptible customers.

3. Reporting Incremental Costs and Revenues

30. The Commission will require National Grid to keep separate books and accounting of costs and revenues attributable to the incremental services and capacity created by the

[31] *Wyoming Interstate Co., Ltd.*, 121 FERC ¶ 61,135, at P 9 (2007).

proposed project as required by section 154.309 of the Commission's regulations.[32] The books should be maintained with applicable cross-reference as required by section 154.309 of the Commission's regulations. This information must be in sufficient detail so that the data can be identified in Statements G, I, and J in any future NGA section 4 or 5 rate case, and the information must be provided consistent with Order No. 710.[33]

4. Tariff Issues

a. Rate Schedule FST-LG

31. National Grid proposes to modify the terms and conditions applicable to existing customers in the currently effective Rate Schedule FST-LG by extending service to customers that have obtained released firm capacity rights from another customer under this rate schedule pursuant to GT&C section 14. The Commission rejects National Grid's proposal. An NGA section 7 application is not the appropriate forum to modify the terms and conditions of a currently effective rate schedule. Therefore, National Grid is directed to remove this proposed modification in section 14. Our rejection of National Grid's proposal is without prejudice to National Grid pursuing similar changes in a future limited NGA section 4 proceeding.

b. GT&C Section 19 – Scheduling of Service

32. National Grid filed *pro forma* tariff revisions to the scheduling provisions in GT&C section 19.1 to effectuate the new liquefaction service. National Grid is directed to revise the scheduling provisions in section 19.1 consistent with the revised standard nomination and scheduling timelines the Commission incorporated by reference in Order Nos. 587-W[34] and 809.[35]

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[32] 18 C.F.R. § 154.309 (2018).

[33] *Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines*, Order No. 710, 73 Fed. Reg. 36,414 (June 27, 2008), FERC Stats. & Regs. ¶ 31,267, at P 23 (2008).

[34] *Standards for Business Practices of Interstate Natural Gas Pipelines; Coordination of the Scheduling Processes of Interstate Natural Gas Pipelines and Public Utilities*, Order No. 587-W, 80 Fed. Reg. 67,302 (Nov. 2, 2015), FERC Stats. & Regs. ¶ 31,373 (2015).

[35] *Coordination of the Scheduling Processes of Interstate Natural Gas Pipelines and Public Utilities*, Order No. 809, 80 Fed. Reg. 23,198 (April 24, 2015), FERC Stats. & Regs. ¶ 31,368 (2015).

33. In addition, National Grid's proposed GT&C section 19.2, Liquefaction Service, provides the scheduling priority for firm and interruptible liquefaction services. Section 19.2(a) includes authorized overrun as the lowest priority within firm services, before other interruptible services listed in section 19.2(b). Commission policy requires that all interruptible services, including authorized overrun, be given the same priority for scheduling and curtailment.[36] National Grid is directed to modify section 19.2 accordingly.

34. Several sections of National Grid's *pro forma* tariff records appear to set forth incorrect references or include typographical errors. In a May 26, 2016 data response, National Grid provided revised language to correct GT&C section 19.4(b) by adding the words "and deliveries" to the sentence to describe the scheduling of LNG deliveries to interruptible customers. National Grid also provided revised tariff language to correct references to rate schedules. In addition, the Commission notes that GT&C section 18.4(c) makes reference to GT&C section 18.3(c), which does not appear in the tariff provisions. The Commission directs National Grid to correct these tariff provisions when filing tariff records 30 to 60 days prior to commencement of service.

D. Environmental Analysis

35. On September 25, 2015, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment for the Planned Fields Point Liquefaction Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meeting* (NOI). The NOI was published in the *Federal Register*[37] and mailed to interested parties including federal, state, and local officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and affected property owners, including nearby residences.[38] We received comments in response to the NOI from one U.S. representative, three state senators, two state representatives, one local representative, three state agencies, one local agency, six local organizations, and 76 individuals. In addition, 20 organizations, individuals, and businesses filed motions to intervene in the project.

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[36] *See Sierrita Gas Pipeline LLC*, 147 FERC ¶ 61,192, at P 73 (2014); *Central New York Oil and Gas Co., LLC*, 114 FERC ¶ 61,105, at P 9 (2006) (citing *CNG Transmission Corp.*, 81 FERC ¶ 61,346, at 62,592 (1997); and *Tennessee Gas Pipeline Co*., 62 FERC ¶ 61,250, at 62,676 (1993)).

[37] 80 Fed. Reg. 59,769 (Oct. 2, 2015).

[38] Section 157.6(d)(2)(iii) of the Commission's regulations defines "affected landowners" as those "within one-half mile of proposed" LNG facilities.

36. On October 8, 2015, Commission staff conducted a public scoping session in Providence, Rhode Island, to provide the public with an opportunity to learn more about the project and comment on environmental issues that should be addressed in the Environmental Assessment (EA). In total, 33 individuals provided oral comments on the project at the Commission's scoping session. A transcript of the scoping session was entered into the public record in Docket No. PF15-28-000 on October 29, 2015.

37. The primary issues raised during scoping include project purpose and need, renewable energy and energy conservation alternatives, risks from earthquakes, impacts on neighboring residential properties, environmental justice, impacts on public facilities, property values, employment opportunities, greenhouse gases (GHG), impacts on air quality, general safety issues (including safety of the nearby community), and cumulative impacts including climate change.

38. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA),[39] Commission staff prepared an EA for National Grid's proposal. The EA was prepared with the cooperation of the Rhode Island Coastal Resources Management Council (CRMC), the Rhode Island Department of Environmental Management (RIDEM), and the U.S. Department of Transportation (DOT). The analysis in the EA addresses geology, soils, water resources (including existing groundwater contamination), vegetation, wetlands, wildlife, fisheries, threatened and endangered species, land use, recreation, visual resources, cultural resources, air quality, noise, reliability and safety, socioeconomics (including environmental justice), cumulative impacts, and alternatives. All substantive comments raised during the scoping process were addressed in the EA.

39. The EA was issued for a 30-day comment period and placed into the public record on June 25, 2018. The Commission received comments on the EA from Rhode Island State Senator Harold Metts, Rhode Island State Representative Joseph S. Almeida, City of Providence Councilman Seth Yurdin, the U.S. Environmental Protection Agency (EPA), RIDEM, the Narragansett Bay Commission, the Environmental Justice League,[40] the Rhode Island Student Climate Coalition, Save The Bay, National Grid, Jeff Davidson, Jonathan Hernandez, Lucy Rios, Luis (no last name provided), and Seth H. Handy.[41] The

[39] 42 U.S.C. § 4321 *et seq*. (2012).

[40] In addition to its own comments, the Environmental Justice League's July 7, 2018 submission attached comments opposing the proposed project (some of which had been previously submitted) from other organizations, officials, and individuals.

[41] Seth H. Handy urges the Commission not to preempt the CRMC's consistency determination. *See* the Coastal Zone Management Act of 1972 (CZMA), 16 U.S.C. §§ 1451-1464 (2012); *see also* 15 C.F.R. pt. 930, subpt. D (2018). We clarify that we

U.S. Fish and Wildlife Service, New England Field Office, responded that it did not have comments on the EA.

40. National Grid provided several clarifications and updated information regarding various topics addressed in the EA, such as requirements pertaining to its Short Term Response Action Plan (STRAP) and STRAP Addendum approved by RIDEM, the expected project construction timeframe, mercury test results on proposed feed gas sources, and code design requirements for Seismic Categories I and II. We have noted these clarifications and updates. None of these minor updates changes the conclusions of the EA.

41. National Grid comments that the fire protection systems, uninterruptable power supply, emergency power generators, emergency lighting, radio communications, control valves, instrumentation and shut down systems associated with the project – which are referenced in the EA's recommendation 22 – are not associated with the LNG storage tank or any of its appurtenances, and thus should be classified as Seismic Category II instead of Seismic Category I. The code requirements for Seismic Category I are specific to LNG storage tanks and their appurtenances, whereas Seismic Category II applies to the Project systems. We have revised Environmental Condition 22 to clarify that only those proposed systems that could minimize potential cascading damage impacts to the existing LNG storage tank and its appurtenances should be classified as Seismic Category I.

42. U.S. Senators Jack Reed and Sheldon Whitehouse and U.S. Representatives David Cicilline and James Langevin jointly requested that the period of time to submit comments on the EA be extended from 30 to 60 days. As has been our practice, Commission staff in this proceeding continued to evaluate and respond to comments received after the close of the comment period. While not at issue in this proceeding, this practice is increasingly becoming a concern in permitting proceedings generally. We have been faced with an increasing number of comments submitted after the established deadline for responding to the environmental document has expired. In order for the Commission to evaluate and respond to comments while acting on pending certificate matters in a timely manner, commenters should comply with our notices soliciting comments and file their comments by the established deadlines.

1. EA vs. EIS

43. Save The Bay, City of Providence Councilman Seth Yurdin, and the Environmental Justice League contend the Fields Point Liquefaction Project merits an Environmental Impact Statement (EIS), rather than the EA that was undertaken, arguing an EIS would provide a more detailed evaluation of project impacts. As an initial matter,

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could not preempt the CRMC's CZMA determination, or for that matter, any of the other separate federal authorizations that National Grid is required to obtain.

we do not believe there are issues inadequately or inaccurately reviewed in the EA. We affirm the determination reached in the EA that if National Grid constructs and operates its proposed facilities in accordance with its application, as supplemented, and the environmental conditions described in the EA (which are incorporated as applicable in the appendix to this order), approval of the Fields Point Liquefaction Project would not constitute a major federal action significantly affecting the quality of the human environment. Consequently, because of this finding of no significant impact, there is no cause to prepare an EIS.

44. In this case, Commission staff, guided by experience with prior liquefaction projects and section 380.5 of the Commission's regulations, determined it would be appropriate to initially undertake an EA. The EA thoroughly assessed the proposed project's potential impacts on the resources that would be evaluated in an EIS, and concluded the proposed project would have no significant impact. The comments contain nothing that undermines this conclusion. Rather, the reasons advanced for why an EIS must be prepared largely rest on public concerns regarding the continued operation of the existing Fields Point facility, a matter which is not at issue in this proceeding.

2. Alternatives

45. The regulations of the Council on Environmental Quality (CEQ) require that an EA include a brief discussion of alternatives to the proposed action.[42] Commenters complain the EA's discussion of the alternatives of using renewable energy sources and energy conservation measures was insufficient.

46. The EA acknowledges renewable energy and energy conservation as potential alternatives, but found these would not be reasonable alternatives because they could not fulfill the project's purpose, which is to add liquefaction capability at the Fields Point LNG facility. The EA finds (1) renewable sources could not provide energy in the form and quantities demanded by the project's customers, and (2) while energy conservation initiatives within the Fields Point service area could help to alleviate overall peak shaving demands, energy conservation would not eliminate the need for peak shaving services.[43] In view of this, we concur with the EA's conclusion that renewables and/or conservation are not feasible project alternatives, and were therefore appropriately rejected.

47. Commenters expect renewable energy sources to be developed at an increasingly rapid pace, and to eventually displace the current need for National Grid's LNG storage

[42] 40 C.F.R. § 1508.9(b) (2018).

[43] EA section 3.3 Energy Alternatives at p. 144.

services.[44] We will not reject a pending proposal for which a current need has been shown based on speculation that the project may no longer be needed at some point in the future. We presume National Grid and its customers would not undertake the financial risks inherent in adding the proposed liquefaction capability unless they were confident demand for the new services would be sustained for long enough to justify the investment.[45] Given that National Grid will be at risk for the cost of the project, we also presume the company has prudently projected the duration of demand for the new services it seeks to provide. We decline to second guess National Grid's business decision based on speculation about prospective changes in energy markets.

3. KeySpan LNG, L.P.

48. In 2005, we denied a request by KeySpan LNG, L.P. (KeySpan) to use its existing LNG storage tank at Fields Point to support the development of a new LNG import terminal.[46] In 2007, National Grid acquired KeySpan's assets. U.S. Representative Cicilline asks that we determine whether the denial in *KeySpan* is relevant to the Fields Point Liquefaction Project. Several of the parties that opposed KeySpan's LNG import terminal are participants in this proceeding, and they repeat and renew arguments initially put forth in the *KeySpan* case. They assert we should follow the same rationale we relied on in denying KeySpan's request to also deny National Grid's request, or alternatively, require that National Grid bring the LNG storage tank into compliance with current safety standards as a condition of our approval to add liquefaction facilities.[47]

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[44] For example, Jonathan Hernandez expects "natural gas will very soon become uncompetitive with renewable alternatives coupled with storage solutions" so that "[b]y the time this project is completed, it will already be obsolete and a few years later will be uncompetitive with renewable energy and battery storage alternatives." Comments, at p. 1 (July 25, 2018).

[45] We note the customers committing to firm long-term service, Boston Gas and Narragansett Electric, state they expect to "have an increasing need for LNG resources to meet projected incremental customer demands" and add that "[i]nterstate pipeline capacity cannot be relied upon exclusively to meet projected demand increases," pointing out that "the suspension by Kinder Morgan of its Northeast Energy Direct Project has increased the urgency of obtaining access to incremental LNG supplies." National Grid Gas Delivery Companies' Comments, at p. 5 (May 6, 2016). *See also supra* note 21.

[46] *KeySpan*, 112 FERC ¶ 61,028 (2005), *order dismissing and denying reh'g*, 114 FERC ¶ 61,054 (2006).

[47] DOT, which oversees compliance with the 49 C.F.R. Part 193 safety standards, does not require existing LNG storage tanks such as the National Grid's, which met the

49. We do not believe the outcome in *KeySpan* should determine the outcome here. Prior to *KeySpan*, we had permitted companies to make modifications to LNG facilities without requiring that existing facilities be upgraded to comply with contemporary regulatory requirements.[48] In contrast to those cases, we deemed KeySpan's request to be a case of first impression, because "for the first time, we have been presented with a proposal to construct a new LNG import facility which would incorporate an existing LNG storage facility;"[49] thus, "[i]n essence, KeySpan is proposing to construct a new LNG import terminal."[50]

50. Before KeySpan sought to make use of its existing LNG storage tank as a component of a new LNG import terminal, the same tank had been owned by Algonquin LNG, Inc. (Algonquin LNG). Algonquin LNG operated the Fields Point facility as National Grid now does, receiving deliveries of LNG by truck for storage, and then sending the stored LNG out to customers as vapor by pipeline or as LNG by truck. During the period of its ownership, Algonquin LNG sought authorization to modify the facility by, among other things, connecting it to a pipeline and adding liquefaction capability so it could offer the same service that National Grid now seeks to provide; namely, the option for customers to deliver gas by pipeline and have it liquefied on site and stored as LNG. In granting Algonquin LNG's requested authorization, we did not require that the existing LNG storage tank be modified to meet then-current DOT safety, due to DOT's determination that adding liquefaction facilities would not be a significant modification of the LNG tank.[51] Ultimately, Algonquin LNG, citing market conditions, decided not to go forward with its project. Now National Grid has revived, in large part, Algonquin LNG's proposal.

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regulatory requirements in effect when it was placed in service, to make modifications to be able to comply with subsequent regulatory changes. However, if certain existing LNG facilities are replaced, relocated, or significantly altered, they may then become subject to current Part 193 standards governing siting, design, installation, and construction. *See* 49 C.F.R. § 193.2005(b) (2018).

[48] *See, e.g.*, *Cove Point LNG Limited Partnership*, 97 FERC ¶ 61,043, *orders on reh'g and clarification*, 97 FERC ¶ 61,276 (2001) and 98 FERC ¶ 61,270 (2002); *Southern LNG, Inc.*, 103 FERC ¶ 61,029 (2003); and *Trunkline Gas Company*, LLC, 108 FERC ¶ 61,251 (2004), *order amending certificate*, 110 FERC ¶ 61,131 (2005).

[49] 112 FERC ¶ 61,028 at P 57.

[50] *Id.* at P 2.

[51] *Algonquin LNG*, 79 FERC ¶ 61,139, at 61,607 (1997), *order on reh'g*, 83 FERC ¶ 61,133 (1998); s*ee also* Algonquin LNG's EA, at p. 60 (Feb. 2, 1997).

51. We find National Grid's proposal here to be far closer in intent, design, scope, and scale to Algonquin LNG's proposal to receive by pipeline and liquefy gas at the existing storage facility than to KeySpan's proposal to build a new LNG terminal incorporating the existing LNG storage tank. Accordingly, we find the rationale and result in *Algonquin LNG* to be the more appropriate model to follow. Thus, as we concluded in *Algonquin LNG* we conclude here: the proposal to add a pipeline interconnect and liquefaction capability at the LNG storage tank does not significantly alter the tank, and thus does not require upgrading the tank to meet current DOT safety standards.

4. Public Safety

52. Commenters express concerns about the safety of the proposed project, in particular, the potential risks to nearby schools, day care centers, hospitals, health care centers, and residential communities. The Environmental Justice League disagrees with the EA's conclusion that the proposed facilities would be a sufficient distance away from existing and planned future residences and public services.

53. The proposed new facilities will be installed inside the existing security fence surrounding the Fields Point site. The LNG storage tank has been operating since 1974 without significant incident and no changes are proposed to the tank. The EA observes that Fields Point is in an industrial area, and adding liquefaction capability does not represent a new type of use, since the Fields Point site will continue to function as an LNG storage facility. The EA describes DOT siting requirements,[52] which mandate that certain spills and releases cannot extend beyond the property line. DOT has reviewed and does not object to the criteria and methodology National Grid used to identify design spill scenarios. Based on the hazard analyses discussed in EA section 2.8.5, we affirm the proposal would not significantly increase the risk to development adjacent to the Fields Point site or to the public beyond the adjacent development. We therefore find the proposed project's location would be a sufficient distance away from existing and planned future residences and public services. We concur with the EA's conclusion that National Grid's design includes acceptable layers of protection or safeguards that would reduce the risk of a potentially hazardous scenario from developing into an event that could impact the offsite public.

54. Some comments do not take issue with the proposed liquefaction facilities per se, but raise objections to the continued operation of the LNG storage tank. The proposed project has been evaluated to determine if it could impact the safety and reliability of the existing LNG storage tank, and we have found that it would not, as it would not modify the existing mode of operation of the storage tank. The existing tank is subject to regular inspections by DOT and Commission staff to ensure its continued safe and reliable

[52] 49 C.F.R. pt. 193, subpt. B (2018).

operation. Because the continued operation of the LNG storage tank is not at issue in this proceeding, we confine our responses to safety concerns related to the newly proposed facilities.[53]

55. Save The Bay maintains the public is entitled to review the plan to shut down the facility in the event of a major storm and should be made aware of potential impacts due to emergency situations.[54] The Narragansett Bay Commission observes that EA section 2.8.4 directs National Grid to submit certain information on the proposed project's design, construction, operation, and emergency procedures and asks that National Grid's submissions be made public.[55]

56. In response to Save The Bay, we note LNG plant operators must prepare emergency procedures that provide for: responding to controllable emergencies and recognizing an uncontrollable emergency; taking action to minimize harm to the public including the possible need to evacuate the public; and coordinating and cooperating with appropriate local officials.[56] Information pertaining to items such as offsite emergency response and procedures for public notification and evacuation is subject to public disclosure. In response to the Narragansett Bay Commission, we note this order's environmental conditions require National Grid to submit the information described in EA section 2.8.4. Upon submission, this information becomes part of the record in this proceeding and thereby accessible to the public. If upon submission, certain information is initially withheld from public view, Save The Bay, the Narragansett Bay Commission, or others may seek access pursuant to the procedures described in sections 388.108 and 388.113 of the Commission's regulations.

57. In answer to Save The Bay's concern about a major storm event, National Grid has an existing Facility Response Plan in place that addresses weather-related events at Fields Point. National Grid states that:

> [I]n the event of severe weather, including flooding, the LNG plant would go into shut down mode that includes closing of all transfer valves and isolation systems. The internal valves on the LNG storage tank as well as filling valves would be shut and no liquid could be transferred in or out of

[53] If the proposed facilities are placed in service, they too become subject to ongoing inspection by DOT and Commission staff.

[54] Save The Bay's Comments on EA, at 3-4 (July 24, 2018).

[55] The Narragansett Bay Commission's Comments on EA, at p. 1 (Aug. 2, 2018).

[56] *See* 49 C.F.R. § 193.2509 (2018).

the tank. The proposed liquefaction facilities would shut down in a similar manner.[57]

58. In addition, this order's Environmental Condition No. 61 requires National Grid to update its emergency procedures, which include the existing Facility Response Plan, prior to commissioning its new liquefaction facilities. As part of developing an updated Facility Response Plan to protect the public in the event of an emergency, National Grid will work with area firefighters and emergency responders to identify any additional coordination, response equipment, or training that may be appropriate for the new facilities and products.[58]

5. Bund Wall: Segmentation and Safety

59. In its application, National Grid stated its intention to add a reinforced concrete bund wall around its LNG storage tank, and stressed that this wall and its proposed liquefaction facilities are independent projects. National Grid explained that by undertaking these two projects simultaneously, it could reduce overall peak construction manpower and temporary construction vehicle traffic. National Grid maintained that the bund wall qualifies as an auxiliary installation under section 2.55(a) of the Commission's regulations. Commission staff sought clarification on how the bund wall could qualify as a section 2.55(a) auxiliary installation. In response, National Grid replied that it is reevaluating the design of the bund wall and no longer expects to proceed with its construction at the same time as the proposed liquefaction facilities.[59]

60. The Environmental Justice League insists the proposed liquefaction project should be considered in conjunction with construction of the bund wall, citing CEQ regulations that state connected actions, cumulative actions, and similar actions should be considered in a NEPA review to preclude segmenting federal actions into separate projects and thereby failing to address the true scope and impact of the activities that should be under consideration. Connected actions (1) automatically trigger other actions; (2) cannot or will not proceed unless other actions are taken previously or simultaneously; and (3) are interdependent parts of a larger action and depend on the larger action for their

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[57] National Grid's Answer to Comments on the EA, at pp. 18-19 (Aug. 9, 2018).

[58] *See* 49 C.F.R. § 193.2509(b)(3) (2018).

[59] *See* National Grid's March 16, 2017 data response. National Grid adds that after it completes "its reevaluation of the storage tank containment enhancement project, it commits to meet with the Commission staff to discuss its plans and to file a Natural Gas Act section 7(c) application for the project, if appropriate for the design at that time." *Id.* at p. 1.

justification.[60] Actions are cumulative if, when viewed with other proposed actions, they have cumulatively significant impacts and should therefore be discussed in the same impact statement.[61] Similar actions are those "which, when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography."[62]

61. We find that adding liquefaction capability (which, as discussed, does not involve significant changes to the LNG tank) and adding a bund wall specifically for the LNG tank (i.e., not for the newly-proposed facilities) are functionally independent projects, either can go forward without the other. Thus, the Fields Point Liquefaction Project does not qualify as a connected action to the bund wall. Whether the bund wall's impacts should be added to the proposal's impacts as cumulative or similar is no longer relevant, since National Grid no longer plans to build the wall at the same time as the liquefaction facilities and we have no such proposal before us. We affirm the Fields Point Liquefaction Project is not a segment of a larger action.

62. The Environmental Justice League objects to National Grid setting aside plans to build a bund wall, stating that by not building the wall, "National Grid is trying to ignore safety concerns over the aging tank."[63] With respect to safety, as to the hazard analyses and thermal exclusion zones, the EA concludes that "dispersion hazards from thermal radiation, vapor dispersion, and explosion overpressure would not extend beyond the boundaries of the Project site;" further, the "site is a sufficient distance away from existing and planned future residences and public services," thus "no significant adverse impacts would occur during Project construction or operation."[64] In addition, the EA evaluated the proposed project to determine if it could impact the safety and reliability of the existing LNG storage tank, a proposed concrete barrier separating the liquefaction facilities from the existing LNG storage tank, and a proposed impoundment system that

[60] 40 C.F.R. § 1508.25(a)(1) (2018).

[61] *Id.* at. § 1508.25(a)(2).

[62] *Id*. at § 1508.25(a)(3). Unlike connected and cumulative actions, an agency has some discretion about combining similar actions in the same environmental review. *See, e.g., Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1305-06 (9th Cir. 2003).

[63] The Environmental Justice League's Comments on EA at p. 5.

[64] *See* EA at p. 33. We note our assessment of potential project impacts was based on the Fields Point site as is, and did not rely on the prospective installation of other facilities such as a bund wall.

reduces the risk of an incident impacting the existing LNG storage tank. To ensure there would be no adverse impacts, we adopt recommendations to finalize the design of these components and others, and include Environmental Condition No. 36, which directs National Grid to file an updated vacuum relief analysis for the existing LNG tank.[65] In view of these conclusions, and our finding that the new liquefaction facilities would not significantly alter the existing LNG storage tank, we have no reason to subject the existing tank to hazard analyses as a component of our assessment of the safety of the new liquefaction facilities. Consequently, the bund wall has no bearing on our review of the application before us, and this proceeding is not the appropriate forum to discuss whether or how to build a bund wall.[66]

6. Environmental Justice

63. Rhode Island Senator Harold M. Metts jointly with U.S. Representative Joseph S. Almeida, the Environmental Justice League, and others, insist the proposed Fields Point Liquefaction Project will have disproportionately high and adverse impacts on minority or low-income populations and pose a risk to these populations. Some commenters claim we have failed to follow the directives of Executive Order No. 12898.[67]

64. We note that although the EA does consider potential project impacts on minority or low-income populations as part of the assessment of socioeconomic effects, it does not do so pursuant to Executive Order No. 12898, as that order does not apply to independent agencies such as the Commission. Accordingly, the Commission is not bound by the directives of that Executive Order. In addition, some comments seek to establish that because Fields Point is in an industrial area, and because minority and low-income populations are in the same area, no further development should be permitted in this area. Setting aside the merits of such a policy, we clarify that our review looks at the potential impacts of the particular project before us to gauge whether its impacts would result in a disproportionately high and adverse impact on minority or low-income populations. Thus, in this case we do not look back and attempt to determine whether longstanding industrial operations proximate to the Fields Point site may have contributed to disproportionately high and adverse impacts on the health and safety of nearby residents.

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[65] In a Sept. 19, 2016 Data Response on whether the existing pressure relief and vacuum relief needed modification as a result of the addition of the proposed liquefaction facilities, National Grid only addressed pressure relief valves.

[66] We note that while there may be advantages to constructing the separate projects simultaneously, such as administrative efficiencies and a compacted time frame, we have no cause to compel National Grid to do so.

[67] *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Fed. Reg. 7629 (Feb. 11, 1994).

Rather, we take the current conditions as they are and ask whether impacts of the proposed project, when added to the status quo, will cause disproportionately high and adverse impacts. As discussed below, we find they will not.

65. We do not dispute commenters' claims that environmental conditions in the vicinity of Fields Point reflect its historic use as a site for industrial operations; however, we anticipate the additional environmental degradation the proposed project may cause would be minimal, and would not result in high and adverse impacts on affected populations. Given our finding that no affected population would be subject to high and adverse impacts, we see no reason to discuss claims that fault our geographic and demographic identification of affected populations. Commenters have not presented arguments or evidence that call into question the EA's conclusion, based on a rigorous analysis employing the use of the EPA's EJSCREEN tool, that the proposed project will not have disproportionately high and adverse impacts on minority or low-income populations. As stated in EA sections 2.5.1, 2.5.4, and 2.7.1, the proposed project would generate positive benefits for the local economy and have relatively little impact on traffic, minimal impacts on air quality, and minimal impacts on local minority or low-income communities. The EA also considered potential impacts of accidents, and determined National Grid's facilities' design includes acceptable layers of protection and safeguards to reduce the risk of a hazardous scenario from developing into an event that could impact the offsite public, regardless of demographic make-up. In view of this, we find the EA adequately considered the proposed project's potential environmental impacts and properly concluded it would not have disproportionately high and adverse impacts on minority or low-income populations.

7. Sea Level Rise and 500-year Design Basis

66. The analysis in the EA used a 30-year design life for the facilities in projecting potential environmental impacts. Commenters claim this is too short a time frame, because the new facilities may be in service for more than 30 years, and if so, the potential for more extreme environmental impacts increases. In particular, commenters point to the prospect for the sea level to rise. The EA took this into account,[68] and noted that although regulations require National Grid to design its proposed liquefaction facilities to withstand a 100-year flood event, National Grid has elected to design the facilities to withstand a 500-year flood event, which exceeds the DOT's federal regulations and CRMC requirements. In addition, National Grid will place concrete jersey barriers along the north side of the project site. Designing the facilities to a higher standard than required should enhance resistance to the risks of damage due to extreme events such as sea level rise, hurricanes, and floods.

[68] *See, e.g.*, the discussion in the EA of National Grid's Coastal and Hydraulic Modeling Analysis at pp. 89-91 and EA section 2.9.2.5 on climate change.

67. With respect to the facilities' anticipated 30-year design life, as stated in the EA and in Environmental Condition No. 13 of this order, National Grid will be required to submit a surface maintenance plan that ensures the crest elevation relative to mean sea level will be maintained for the *life of the facility*. Although we assess the proposed facilities using a 30-year design life, once in operation, the new liquefaction facilities, along with the existing Fields Point LNG facilities, will be subject to regular on-site inspections by Commission staff for as long as the facilities remain subject to our jurisdiction. Thus, for the facilities to continue to operate, they must continue to comply with all applicable conditions and requirements.[69] In the event circumstances indicate National Grid may no longer be capable of operating its facilities in accordance with the conditions of its authorization – whether in 5 years or 50 years – the Commission may compel National Grid to show cause why it should not abandon noncompliant facilities and services.[70]

68. Save The Bay is not satisfied with the Environmental Condition No. 13 requirement that National Grid submit "a surface maintenance plan for a perimeter berm, stamped and sealed by the professional engineer-of-record, registered in Rhode Island" with "procedures to ensure the crest elevation relative to mean sea level would be maintained for the life of the facility considering berm settlement, subsidence, and sea level rise." Save The Bay states that the Commission "may not skirt its obligation to take a 'hard look' at the environmental consequences by delegating future issues concerning the safety of the tank to an engineer hired by National Grid."[71]

69. We clarify that we are not delegating our assessment of environmental impacts to a third party. National Grid has designed its proposed facilities to withstand a 500-year

[69] This applies as well to the 49 C.F.R. pt. 193 regulations enforced by PHMSA. We note that National Grid, like all certificate holders, has an "obligation to add or even replace facilities necessary to maintain the certificated capacity," or alternatively "to seek abandonment" under NGA section 7(b). *Maritimes and Northeast Pipeline, L.L.C., et al.*, 80 FERC ¶ 61,136, at 61,476 (1997).

[70] The CRMC, in its Coastal Zone Management Federal Consistency Determination, states that any "substantial changes to the proposed Project from the material presented by National Grid, or later substantial modifications to the license issued by FERC, may require a separate CZMA review." National Grid's submission of the CRMC decision, at p. 2 (Dec. 20, 2017). We concur with National Grid's observation that if "the liquefaction equipment continues to operate beyond the currently anticipated 30 years, then the CRMC may need to engage in another consistency review." National Grid's Answer to Comments on the EA at p. 16.

[71] Save The Bay's Comments on EA at p. 4.

flood event, thereby exceeding DOT regulations and National Oceanic and Atmospheric Administration recommendations.[72] We have determined, after taking a hard look, that National Grid's proposed protective measures, including its design of revetment and jersey barriers, along with the site and equipment elevations and locations, would be sufficient to protect the proposed facilities from a 500-year still water elevation level of 19 feet and a sea level rise of 0.9 feet. We will review the surface maintenance plan when it is submitted, and thereafter continue to monitor the adequacy of National Grid's protective measures as part of our ongoing oversight of the Fields Point facilities and operation.

8. Surface Water and Groundwater Resources

70. Commenters express general concerns about the proposed project's impact on surface water resources, the project's potential to cause water pollution, and the potential spread of existing groundwater contamination in the project area. As explained in the EA, National Grid is required to obtain a Water Quality Certification from RIDEM. In addition, National Grid must adhere to its project-specific *Spill Prevention, Control, and Countermeasure Plan & Preparedness, Prevention, and Contingency Plan*, which will ensure that impacts on surface water resources are not significant.[73] Further, the EA concludes that based on the mitigation measures to which National Grid has committed in its STRAP and STRAP Addendum, existing groundwater contamination at the project site will be managed effectively to minimize impacts on groundwater resources during construction and operation of the project.[74] We concur with these conclusions.

71. RIDEM observes that the EA does not indicate whether the proposed stormwater collection and treatment system will be lined to reduce potential impacts on groundwater resources on site. RIDEM recommends that National Grid provide an evaluation of how its impoundment rainwater removal systems in the existing Truck Loading Sump area will comply with both the Rhode Island Pollution Discharge Elimination System and Water Quality Regulations. Because the details of the RIDEM recommendations were not included in the EA, and National Grid has not provided information to specify whether the stormwater collection and treatment system will be lined, we have included Environmental Condition Nos. 17 and 18 in the appendix to this order, which respectively require that prior to construction, National Grid file for Commission review and approval (1) a plan that specifies how the stormwater collection and treatment system will be lined in order to reduce potential impacts on groundwater resources on site, and (2) an evaluation of how the impoundment rainwater removal systems will comply with

[72] EA at p. 90.

[73] *Id.* at p. 26.

[74] *Id.* at p. 23.

both the Rhode Island Pollution Discharge Elimination System and Water Quality Regulations. National Grid's compliance with RIDEM's recommendations and our environmental conditions will ensure the project will have no significant adverse impacts.

72. RIDEM also observes that the Providence River at the location of the project site should be classified as SB1{a}, rather than SB1 as indicated in EA section 2.2.2.1. According to RIDEM Water Quality Regulations, {a} indicates a partial use designation due to impacts from Combined Sewer Overflow. Primary contact recreational activities, shell fishing uses, and fish and wildlife habitat will likely be restricted. This change does not affect our analysis and we have noted the correction.

9. Short Term Response Action Plan

73. The Environmental Justice League argues the Commission should require full remediation of the entire Fields Point site prior to National Grid installing the proposed liquefaction facilities. As described in more detail in EA section 1.4.3, RIDEM's Office of Waste Management is overseeing National Grid's cleanup of Fields Point. RIDEM determined that a STRAP was appropriate and required for the remediation of the impacted soil and groundwater on that portion of National Grid's property where the liquefaction facilities would be located. RIDEM and National Grid participated in a Public Involvement Plan to collect and respond to community concerns about the investigation and cleanup of the Fields Point site. Additionally, RIDEM expanded the public participation process to the maximum amount of time allowable by regulation. RIDEM responded to all technical STRAP comments, as well as comments concerning RIDEM's jurisdiction and the regulatory process.[75] National Grid has submitted a STRAP and STRAP Addendum. RIDEM concurs with, and is monitoring compliance with, these plans. Commenters fault National Grid's STRAP for not being a comprehensive plan to fully remediate the entire site. RIDEM, which has been supervising remediation of the Fields Point site for decades, has found National Grid's STRAP sufficient to permit the liquefaction project to go forward without first fully remediating the entire site, and we accept this determination.

10. Air Emissions and Climate Change

74. Several commenters express concerns about the proposed project's potential short- and long-term air quality impacts. Emissions attributable to construction are reviewed in the EA, and we affirm the finding that although air quality in Providence County would be affected by fugitive dust and combustion emissions attributable to construction equipment, land disturbance, and increased traffic from worker and delivery vehicles, these emissions would be below all applicable air quality standards, only minimally impact local and regional air quality, and be intermittent and temporary. As an added

[75] *Id.* p. 6-7.

measure of protection, National Grid will conduct perimeter air monitoring for respirable dust and total volatile organic compounds during construction.

75. With respect to long-term air impacts attributable to operating the new liquefaction facilities, the EA found that the addition of a regeneration heater and emergency generator would produce only small amounts of emissions, which would comply with air quality provisions and minimally impact local and regional air quality as illustrated through a refined dispersion modeling analysis.[76] Further, the EA noted that the existing LNG storage tank does not require a Title V permit,[77] and with the addition of the maximum potential emissions of all pollutants from the proposed liquefaction facilities, the Fields Point emissions would remain well below any applicable major source threshold, and thus would not require a Title V permit.

76. Comments that claim the proposed project will contribute to global climate change or encourage additional domestic natural gas production indicate a misunderstanding of this particular proposal. The Fields Point Liquefaction Project is not expected to make changes to current quantities of gas produced, gas delivered to the storage tank, LNG stored, gas delivered to National Grid's customers, or gas ultimately consumed. Although the proposal may diminish the distance between wellhead and burnertip for some shipments of gas, it should not alter volumes of gas produced or consumed, and thus should not cause a significant change in emissions.

77. In response to comments received on the EA requesting more detailed information about changes in truck transport and LNG-related air emission impacts, National Grid presented an expanded evaluation of GHG emissions that not only takes into account a potential decrease in emissions due to substituting transportation by pipeline for

[76] *Id.* pp. 59-60. The EA found the proposed project would not alter the current levels of emissions from truck loading and unloading, valves, flanges, connectors, pump seals, maintenance activities, emergency venting, equipment operated intermittently, and laboratory equipment.

[77] The Title V Operating Permit Program, described in 40 C.F.R. pt. 70 (2018), requires major stationary sources of air emissions to obtain an operating permit if potential emissions of criteria pollutants would exceed certain thresholds. RIDEM clarifies that the New Source Performance Standards, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units,* is not applicable to the proposed regeneration heater, as the heater's capacity is rated at less than 10 million Btu per hour. In addition, RIDEM points out that several sub-headings under the Adobe Acrobat version of the EA on the Commission's e-library, and distributed to commenters via compact disc, are incorrectly listed under the heading "Title V Operating Permit." We have noted these corrections.

transportation by truck (similar to the scenario posited in the EA), but also compares the difference in emissions due to substituting transportation by pipeline for transportation by ship to the Everett, Massachusetts, LNG terminal. National Grid's estimates indicate the proposal would result in a net decrease in transportation-related GHG emissions (as carbon dioxide equivalent (CO_2e)) of between approximately 2,756 to 3,781 tons per year.[78] Some of these emission reductions are attributable to replacing trips by trucks taking foreign LNG from Everett or Quebec with shorter trips from Fields Point, made possible by adding the ability to receive domestic gas by pipeline and liquefy it at Fields Point. The remaining decreases are attributable to reducing net marine transport of LNG to Everett, again made possible by the proposed project.

78. We accept the premise that to the extent the proposed project permits National Grid's customers to displace foreign sources of natural gas, liquefied abroad and transported by ship, with domestic sources of natural gas, delivered by pipeline and liquefied on site, global GHG emissions should be reduced. National Grid observes the EA's estimate of the proposed project's GHG emissions is based on a theoretical maximum, and therefore overstates the likely emissions from actual operations. The EA assumes the regeneration heater will operate 8,760 hours per year – i.e., continuously for a year – resulting in an estimate of 5,160 tons of GHG per year. National Grid expects to operate the heater up to 214 days a year during the summer storage fill period, and does not expect it to run 24 hours per day, and so suggests a more reasonable estimate of the heater's GHG emissions would be 1,513 tons per year. National Grid's lesser estimate may represent a more realistic scenario; however, this does not affect the determination in the EA that the proposed project would not result in significant cumulative impacts.[79]

11. Traffic

79. The Narragansett Bay Commission and the EPA maintain there is a need for more detail concerning how the proposed project may affect truck transport of LNG to and from the modified Fields Point LNG facility. Specifically, the EPA recommends that the EA's discussion of truck trips during operation explain in greater detail the conclusion that completion of the project would not meaningfully change the numbers of LNG truck trips to and from Fields Point. The EPA also requests there be a quantitatively estimate of the change (1) in the number of truck trips from Everett to Fields Point after the addition of the liquefaction facilities; (2) in deliveries to other sites from National Grid's existing Fields Point LNG storage facility; and (3) the corresponding change in truck-transport-related emissions. The Narragansett Bay Commission expresses concerns that

[78] *Id.*

[79] *Id.* p. 140-42.

increased traffic impacts are not being properly assessed, and recommends that off-site shipments be addressed in more detail.

80. In its application, National Grid studied potential changes in traffic volumes in the project area and the Providence region.[80] As stated in the EA, according to National Grid, installing liquefaction facilities would not meaningfully change the number of LNG truck trips to and from Fields Point.[81] In response to comments related to traffic congestion, National Grid performed a more detailed study of the transportation of LNG to and from Fields Point.[82] We have reviewed National Grid's assessment of the impact of its proposed project on vehicular traffic, and concur with its finding that the project, overall, will cause no meaningful increase in traffic volumes or noise associated with those volumes. We therefore affirm the EA's determination that construction and operation of the proposed project (including construction and operation of Narragansett Electric's related nonjurisdictional project to upgrade its facilities to provide dedicated electric service to power the new liquefaction equipment) will not significantly increase traffic congestion.

81. Some commenters are concerned that the proposed project will result in additional trips by trucks transporting LNG to or from Fields Point. National Grid acknowledges that after its proposed facilities go into operation, it may elect to send out as many as 1,300 more trucks to transport LNG to LDCs to fill their storage facilities. However, National Grid explains that the LNG supplied from Fields Point "would be a one for one replacement for some of the existing truck deliveries from Everett and Quebec;" i.e., the total number of truck trips in the region would not change, and because Fields Point is closer to the LDC's, the average miles per trip would decrease.[83] We note that adding liquefaction facilities would not alter the capacity of National Grid's LNG storage tank or customers' contract storage volumes, but would, in part, reverse the flow of LNG by truck. Instead of trucks carrying LNG to the storage tank and departing empty, once customers can displace deliveries by truck with deliveries by pipeline, trucks can arrive empty and be filled from the tank. We affirm the conclusion in the EA that operation of

[80] National Grid's Application, Resource Report 5, sections 5.4, 5.7.2, and 5.9.2.4, and Resource Report 10, Table 10.1-1.

[81] EA at p. 39.

[82] National Grid's Answer to Comments on the EA at pp. 5-9.

[83] *Id.* p. 7.

the Fields Point LNG facility, if modified as proposed, "would not meaningfully change the number of truck trips to and from the Project area."[84]

12. Visual Impacts

82. The Environmental Justice League comments that the project facilities, including vapor fencing, may result in visual impacts on nearby Southside and Washington Park residents. As discussed in the EA and illustrated in figure 2.8.6-2, the 32-foot-high vapor barrier is in close proximity to the existing LNG tank. Therefore, the tallest portion of this vapor barrier will be well within the existing facility's premises and juxtaposed with the much taller LNG tank, and thus will not add appreciably to the facility's visual impact on these communities. Although the 8-foot-high and 12-foot-high portions of the vapor barrier may be visible to some Southside and Washington Park residents, as stated in the EA, "to the degree that the new liquefaction facilities are visible, their appearance would be generally consistent with the industrial character of the existing site and surrounding properties."[85] We affirm the EA's conclusion that the proposed facilities will not result in significant adverse visual impacts.

[84] EA at p. 138. *See also* EA section 2.5.4.2 at p. 39. Note that transportation of hazardous materials by truck must comply with federal, state, and local laws, ordinances, and regulations. The federal requirements for the transportation of hazardous materials by truck are the DOT regulations in 49 C.F.R. pts. 100-199 and 300-399. Within DOT, PHMSA and the Federal Motor Carrier Safety Administration (FMCSA) are charged with administering the safety aspects of hazardous materials transported by truck. PHMSA establishes requirements for packaging, labeling, emergency response, and security for the domestic transportation of hazardous materials. PHMSA's Emergency Response Guidebook is often used by fire fighters, police, and other emergency service personnel who may be the first to arrive at the scene of a transportation incident involving hazardous materials. FMCSA establishes driver licensing and qualification requirements and standards for routing either by the motor carrier or by a state. Truck routing is governed by 49 C.F.R. § 397 and the state. All trucks carrying LNG or other hazardous materials to or from Fields Point will be required to adhere to the above-described safety standards. We have considered transportation of LNG by trucks in other proceedings, and are satisfied these standards are sufficient to ensure public safety and security. *See, e.g., Elba Liquefaction Company, L.L.C,* 155 FERC ¶ 61,219, *order on reh'g,* 157 FERC ¶ 61,195 (2016).

[85] EA at pp. 35-36.

13. State Agencies' Procedures and Actions

83. Some commenters question the actions of RIDEM and CRMC, and suggest the Commission use its own environmental review process as a forum to remedy what the commenters perceive to be flaws in these state agencies' procedures. Concerns regarding state agencies' procedures are appropriately directed to state authorities, as our authority does not extend to assessing or enforcing state agencies' compliance with their own procedural provisions. RIDEM and CRMC were cooperating agencies in preparing the EA. RIDEM has federally delegated authority to provide the Water Quality Certification required under section 401 of the Clean Water Act,[86] and CRMC has federally delegated authority to determine whether the proposal is consistent with Rhode Island's coastal management plan under section 307 of the Coastal Zone Management Act.[87] National Grid's proposed project cannot go forward unless both state agencies act under delegated authority to issue necessary federal approvals. We advise National Grid, as we routinely advise all applicants, to work with state agencies and comply with their procedures and obligations, provided they are consistent with federal requirements and would not unreasonably delay the construction or operation of the proposed project.[88]

E. Conclusions

84. Based on the analysis in the EA, as supplemented herein, we conclude that if constructed and operated in accordance with National Grid's application and supplements, and in compliance with the environmental conditions in the appendix to this order, our approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment. Compliance with the environmental conditions appended to our orders is integral to ensuring that the environmental impacts of approved projects are consistent with those anticipated by our

[86] 33 U.S.C. § 1251 *et seq.* (2012).

[87] *See supra* n. 41.

[88] State regulation would be preempted to the extent it interferes or conflicts with federal authority. In a January 17, 2017 letter to RIDEM, Commission staff observed that preemption could apply to the Rhode Island Industrial Property Remediation and Reuse Act (R.I. Gen. Laws § 23-19.14-1 *et seq.*), the Remediation Regulations promulgated thereunder, and the Public Involvement Plan if these state provisions were to interfere or conflict with the Commission's regulatory authority. We reiterate that objections to how state agencies are implementing state laws – e.g., RIDEM's enforcement of state mandates regarding remediation – are appropriately directed to state agencies, as this federal proceeding is not the proper forum to address compliance with state laws.

environmental analyses. Thus, Commission staff carefully reviews all information submitted. Commission staff will only issue a notice to proceed with an activity when satisfied that the project sponsor has complied with all applicable conditions. We also note that the Commission has the authority to take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the project, including authority to impose any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the order, as well as the avoidance or mitigation of unforeseen adverse environmental impacts resulting from project construction and operation.

85. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between natural gas companies and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.[89]

86. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application, and exhibits thereto, and comments, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued to National Grid, authorizing it to construct and operate the proposed facilities, as described and conditioned herein, and as more fully described in the application.

(B) The certificate authority issued in Ordering Paragraph (A) is conditioned on National Grid's:

(1) Completion of construction of the proposed facilities and making them available for service within three years of the date of this order pursuant to section 157.20(b) of the Commission's regulations;

[89] *See* 15 U.S.C. § 717r(d) (2012) (state or federal agency's failure to act on a permit considered to be inconsistent with Federal law); *see also Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 310 (1988) (state regulation that interferes with FERC's regulatory authority over the transportation of natural gas is preempted); *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, 245 (D.C. Cir. 2013) (noting that state and local regulation is preempted by the NGA to the extent it conflicts with federal regulation, or would delay the construction and operation of facilities approved by the Commission).

(2) Compliance with all applicable Commission regulations under the NGA including, but not limited to, Parts 154, 157, and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations;

(3) Compliance with the environmental conditions listed in the appendix to this order; and

(4) Filing written statements affirming that it has executed firm service agreements for volumes and service terms equivalent to those in its precedent agreement, prior to commencing construction.

(C) National Grid's proposed initial rates and the language contained in its pro forma tariff records are approved, as modified in this order. National Grid must make a tariff filing at least 60 days prior to commencement of service to place the rates and tariff records approved herein into effect.

(D) National Grid shall keep separate books and accounts of costs attributable to the proposed incremental services, as described above.

(E) National Grid shall notify the Commission's environmental staff by telephone or e-mail of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies National Grid. National Grid shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission. Commissioners Glick and LaFleur are concurring with a joint separate statement attached.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix

Environmental Conditions

As recommended in the environmental assessment (EA) and modified herein, this authorization includes the following conditions:

1. National Grid shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff data requests), and as identified in the EA, unless modified by the order. National Grid must:

    a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
    b. justify each modification relative to site-specific conditions;
    c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
    d. receive approval in writing from the Director of the Office of Energy Projects (OEP) before using that modification.

2. The Director of OEP, or the Director's designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the order, and take whatever steps are necessary to ensure the protection of life, health, property, and the environment during construction and operation of the project. This authority shall allow:

    a. the modification of conditions of the order;

    b. stop-work authority and authority to cease operation; and

    c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from project construction and operation.

3. **Prior to any construction**, National Grid shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EI), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.

4. The authorized facility locations shall be as shown in the EA, as supplemented by filed maps and diagrams. **As soon as they are available, and before the start of**

construction, National Grid shall file with the Secretary any revised maps or diagrams for all facilities approved by the order. All requests for modifications of environmental conditions of the order or site-specific clearances must be written and must reference locations designated on these maps/diagrams.

5. National Grid shall file with the Secretary detailed maps/diagrams and aerial photographs at a scale not smaller than 1:6,000 identifying any facility relocations, and staging areas, storage yards, access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/diagrams/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area**.

6. **Within 60 days of the acceptance of the Certificate and before construction begins**, National Grid shall file an Implementation Plan for the project for review and written approval by the Director of OEP. National Grid must file revisions to the plan as schedules change. The plan shall identify:

   a. how National Grid will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the order;
   b. how National Grid will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to on-site construction and inspection personnel;
   c. how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
   d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
   e. the location and dates of the environmental compliance training and instructions National Grid will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change);
   f. the company personnel (if known) and specific portion of National Grid‘s organization having responsibility for compliance;
   g. the procedures (including use of contract penalties) National Grid will follow if noncompliance occurs; and

h. for each discrete facility, a Gantt or Program Evaluation and Review Technique chart (or similar project scheduling diagram), and dates for:
   (1) the completion of all required surveys and reports;
   (2) the environmental compliance training of on-site personnel;
   (3) the start of construction; and
   (4) the start and completion of restoration.

7. National Grid shall employ at least one EI. The EI shall be:

   a. responsible for monitoring and ensuring compliance with all mitigation measures required by the order and other grants, permits, certificates, or other authorizing documents;
   b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
   c. empowered to order correction of acts that violate the environmental conditions of the order, and any other authorizing document;
   d. a full-time position, separate from all other activity inspectors;
   e. responsible for documenting compliance with the environmental conditions of the order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
   f. responsible for maintaining status reports.

8. Beginning with the filing of its Implementation Plan, National Grid shall file updated status reports with the Secretary on a **monthly** basis until all construction and restoration activities are complete. Problems of a significant magnitude shall be reported to the FERC **within 24 hours.** On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

   a. an update on National Grid's efforts to obtain the necessary federal authorizations;
   b. project schedule, including current construction status of the project and work planned for the following reporting period;
   c. a listing of all problems encountered, contractor nonconformance/ deficiency logs, and each instance of noncompliance observed by the EI during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
   d. a description of the corrective and remedial actions implemented in response to all instances of noncompliance, nonconformance, or deficiency;
   e. the effectiveness of all corrective and remedial actions implemented;
   f. a description of any landowner/resident complaints which may relate to

compliance with the requirements of the order, and the measures taken to satisfy their concerns; and

g. copies of any correspondence received by National Grid from other federal, state, or local permitting agencies concerning instances of noncompliance, and National Grid's response.

9. National Grid shall employ a special inspector during construction, and a copy of the special inspector's reports shall be included in the **monthly** status reports filed with the Secretary (see condition 8 above). The special inspector shall be responsible for:

a. observing the construction of the liquefaction facility to be certain it conforms to the design drawings and specifications;
b. furnishing inspection reports to the engineer- or architect- of-record and other designated persons. All discrepancies shall be brought to the immediate attention of the contractor for correction, and then if uncorrected, to the engineer- or architect- of-record; and
c. submitting a final signed report stating whether the work requiring special inspection was, to the best of his/her knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions.

10. National Grid must receive written authorization from the Director of OEP **before commencing construction of any project facilities**. To obtain such authorization, National Grid must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

11. **Prior to construction of the final design**, National Grid shall file with the Secretary the following information, stamped and sealed by the professional engineer-of-record, registered in Rhode Island:

a. quality assurance and quality control procedures to be used for civil/structural design and construction;
b. site preparation drawing and specifications;
c. pile installation drawings and specifications;
d. seismic specifications for procured equipment prior to the issuing of requests for quotations;
e. liquefied natural gas (LNG) facility structures and foundation design drawings and calculations (including prefabricated and field-constructed structures); and
f. condition assessment evaluation of representative existing piles supporting pre-existing structural foundations.

12. National Grid must receive written authorization from the Director of OEP **prior to introducing hazardous fluids into the project facilities**. Instrumentation and controls, hazard detection, hazard control, and security components/systems necessary for the safe introduction of such fluids shall be installed and functional.

13. **Prior to commencement of service**, National Grid shall file with the Secretary a surface maintenance plan for the perimeter berm, stamped and sealed by the professional engineer-of-record, registered in Rhode Island. The surface maintenance plan shall include procedures to ensure the crest elevation relative to mean sea level will be maintained for the life of the facility considering berm settlement, subsidence, and sea level rise.

14. National Grid must receive written authorization from the Director of OEP **before placing into service the liquefaction facility and other components of the project**. Such authorization will only be granted following a determination that the facilities have been constructed in accordance with FERC approval, can be expected to operate safely as designed, and the rehabilitation and restoration of areas affected by the project are proceeding satisfactorily.

15. **Within 30 days of placing the authorized facilities in service,** National Grid shall file an affirmative statement with the Secretary, certified by a senior company official:

    a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
    b. which of the conditions in the order National Grid has complied with or will comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

16. National Grid shall file a full load noise survey with the Secretary **no later than 60 days** after placing the modified Fields Point LNG Facility in service. If a full load condition noise survey is not possible, National Grid shall provide an interim survey at the maximum possible operation and file the full load operational survey **within 6 months**. If the noise attributable to the operation of all of the equipment at the modified Fields Point LNG Facility, under interim or full load conditions, exceeds a day-night sound level of 55 decibels on the A-weighted scale at any nearby NSAs, National Grid shall file a report on what changes are needed and shall install the additional noise controls to meet the level **within 1 year** of the in-service date. National Grid shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

17. **Prior to construction**, National Grid shall file with the Secretary for review and written approval by the Director of OEP, a plan that specifies how the stormwater collection and treatment system will be lined in order to reduce potential impacts on groundwater resources on site.

18. **Prior to construction**, National Grid shall file with the Secretary for review and written approval by the Director of OEP, an evaluation of how its impoundment rainwater removal systems in the existing Truck Loading Sump area will comply with both the Rhode Island Pollution Discharge Elimination System and Water Quality Regulations.

The following conditions shall apply to this project. Information pertaining to these specific conditions shall be filed with the Secretary for review and written approval by the Director of OEP, or the Director's designee, within the timeframe indicated by each condition. Specific engineering, vulnerability, or detailed design information meeting the criteria specified in Order No. 833 (Docket No. RM16-15-000), including security information, shall be submitted as critical energy infrastructure information pursuant to Title 18 Code of Federal Regulations Section 388.113 [18 C.F.R. § 388.113 (2018)]. See *Critical Electric Infrastructure Security and Amending Critical Energy Infrastructure Information*, Order No. 833, 81 Fed. Reg. 93,732 (Dec. 21, 2016), FERC Stats. & Regs. 31,389 (2016). Information pertaining to items such as offsite emergency response, procedures for public notification and evacuation, and construction and operating reporting requirements will be subject to public disclosure. All information shall be filed a <u>minimum of 30 days</u> before approval to proceed is requested.

19. **Prior to initial site preparation**, National Grid shall file an overall project schedule, which includes the proposed stages of the commissioning plan.

20. **Prior to initial site preparation**, National Grid shall file quality assurance and quality control procedures for construction activities.

21. **Prior to initial site preparation**, National Grid shall file procedures for controlling access during construction.

22. **Prior to construction of the final design,** National Grid shall specify the project fire protection systems and shutdown systems associated with the existing LNG storage tank and its isolation as Seismic Category I.

23. **Prior to construction of the final design**, National Grid shall file change logs that list and explain any changes made from the Front End Engineering Design provided in National Grid's application and filings. A list of all changes with an

explanation for the design alteration shall be filed and all changes shall be clearly indicated on all diagrams and drawings.

24. **Prior to construction of the final design**, National Grid shall file information/revisions pertaining to National Grid's response numbers 8, 22, 33, 50, 54, 55, 64, and 67 of its September 16, 2017 filing; response numbers 9 and 114 of its September 23, 2016 filing; response number 71 of its September 26, 2016 filing; response numbers 1 and 13 of its May 12, 2017 filing; response number 2 of its June 23, 2017 filing; response numbers 11, 12, 15, and 17 of its October 30, 2017 filing; response numbers 1, 3, 6, 10, and 11 of its March 9, 2018 filing; response numbers 2, 4, 6, 8, and 10 of its April 16, 2018 filing; and response number 1 of its May 4, 2018 filing, which indicated features to be included or considered in the final design.

25. **Prior to construction of the final design**, National Grid shall file a plot plan of the final design showing all major equipment, structures, buildings, and impoundment systems.

26. **Prior to construction of the final design**, National Grid shall file an up-to-date complete equipment list, process and mechanical data sheets, and specifications.

27. **Prior to construction of the final design**, National Grid shall file three-dimensional plant drawings to confirm plant layout for maintenance, access, egress, and congestion.

28. **Prior to construction of the final design**, National Grid shall file up-to-date Process Flow Diagrams with heat and material balances and one complete set of Piping and Instrumentation Diagrams (P&IDs), which include the following information:

    a. equipment tag number, name, size, duty, capacity, and design conditions;
    b. equipment insulation type and thickness;
    c. valve high pressure side and internal and external vent locations;
    d. piping with line number, piping class specification, size, and insulation type and thickness;
    e. piping specification breaks and insulation limits;
    f. all control and manual valves numbered;
    g. relief valves with size and set points; and
    h. drawing revision number and date.

29. **Prior to construction of the final design**, National Grid shall file P&IDs, specifications, and procedures that clearly show and specify the tie-in details required to safely connect the project to the existing LNG facility.

30. **Prior to construction of the final design**, National Grid shall file a car seal philosophy and a list of all car-sealed and locked valves consistent with the P&IDs.

31. **Prior to construction of the final design**, National Grid shall file a hazard and operability review of the completed design prior to issuing the P&IDs for construction. A list of recommendations resulting from its review and actions taken on the recommendations shall also be included.

32. **Prior to construction of the final design**, National Grid shall file the cause-and-effect matrices for the process instrumentation, fire and gas detection system, and emergency shutdown system. The cause-and-effect matrices shall include alarms and shutdown functions, details of the voting and shutdown logic, and set points.

33. **Prior to construction of the final design**, National Grid shall demonstrate that, for hazardous fluids, piping and piping nipples 2 inches or less in diameter are designed to withstand external loads, including vibrational loads in the vicinity of rotating equipment and operator live loads in areas accessible by operators.

34. **Prior to construction of the final design**, National Grid shall specify that piping specifications for stainless steel piping capable of operating at cryogenic temperatures shall require the inner and outer ring of spiral wound gaskets to be stainless steel.

35. **Prior to construction of the final design**, National Grid shall file the sizing basis and capacity for the final design of the vent stack as well as the pressure and vacuum relief valves for major process equipment, vessels, and storage tanks.

36. **Prior to construction of the final design**, National Grid shall file an updated vacuum relief analysis for the existing LNG tank that considers contingencies in accordance with National Fire Protection Association (NFPA) 59A, and demonstrates that the existing vacuum relief valves are sized to handle these considerations. The analysis shall evaluate the operation of all pumps operating at maximum capacity unless they interlocked or outfitted with a safety instrumented system with a safety integrity level of 2 that limits the operation or flow at or below existing levels.

37. **Prior to construction of the final design**, National Grid shall file electrical area classification drawings.

38. **Prior to construction of the final design**, National Grid shall file drawings and details of how process seals or isolations installed at the interface between a

flammable fluid system and an electrical conduit or wiring system meet the requirements of NFPA 59A (2001 edition).

39. **Prior to construction of the final design**, National Grid shall file details of an air gap or vent installed downstream of process seals or isolations installed at the interface between a flammable fluid system and an electrical conduit or wiring system. Each air gap shall vent to a safe location and be equipped with a leak detection device that shall continuously monitor for the presence of a flammable fluid, alarm the hazardous condition, and shut down the appropriate systems.

40. **Prior to construction of the final design**, National Grid shall provide a means to remove mercury as part of the design to limit concentrations to less than 0.01 micrograms per normal cubic meter or alternatively provide monitoring for mercury by means of an analyzer or preventative maintenance inspections of the heat exchangers and connections for a mercury removal package.

41. **Prior to construction of the final design**, National Grid shall include provisions in the facility plot plan for the possible future installment of a mercury removal system.

42. **Prior to construction of the final design**, National Grid shall file procedures and a method to monitor the LNG density from the liquefaction process facilities to the existing LNG storage tank to aide in the selection of top or bottom fill of the tank and to prevent tank rollover.

43. **Prior to construction of the final design**, National Grid shall file the procedures for pressure/leak tests which address the requirements of American Society of Mechanical Engineers (ASME) VIII and ASME B31.3, as required by 49 C.F.R. Part 193.

44. **Prior to construction of the final design**, National Grid shall file a plan for clean-out, dry-out, purging, and tightness testing. This plan shall address the requirements of the American Gas Association's Purging Principles and Practice required by 49 C.F.R. Part 193, and shall provide justification if National Grid is not using an inert or non-flammable gas for clean-out, dry-out, purging, and tightness testing.

45. **Prior to construction of the final design**, National Grid shall file an updated fire protection evaluation of the proposed facilities carried out in accordance with the requirements of NFPA 59A (2001 edition), Chapter 9.1.2 as required by 49 C.F.R.

Part 193. A list of recommendations resulting from its evaluation, supporting justifications, and actions taken on the recommendations shall also be included.

46. **Prior to construction of the final design**, National Grid shall specify that all emergency shutdown valves are to be equipped with open and closed position switches connected to the Distributed Control System/Safety Instrumented System.

47. **Prior to construction of the final design**, National Grid shall file a drawing showing the location of the emergency shutdown buttons. Emergency shutdown buttons shall be easily accessible, conspicuously labeled, and located in an area which will be accessible during an emergency.

48. **Prior to construction of the final design**, National Grid shall file spill containment system drawings with dimensions and slopes of curbing, trenches, impoundments, and capacity calculations considering any foundations and equipment within impoundments.

49. **Prior to construction of the final design**, National Grid shall file a revised spill conveyance and sump box design that will prevent spills from reaching the cold box and compander foundation.

50. **Prior to construction of the final design**, National Grid shall demonstrate how an LNG spill from the LNG liquefaction rundown line will be safely transferred from the elevated diversion tray to the grade-level liquefaction area trench system and also into the trench system to the existing LNG storage tank containment sump.

51. **Prior to construction of the final design**, National Grid shall file an evaluation of how its impoundment rainwater removal systems complies with 49 C.F.R. section 193.2173 with concurrence from the U.S. Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) or how it provides an equivalent level of safety with concurrence from PHMSA.

52. **Prior to construction of the final design**, National Grid shall file complete drawings and a list of the hazard detection equipment. The drawings shall clearly show the location and elevation of all detection equipment. The list shall include the instrument tag number, type and location, alarm indication locations, and shutdown functions of the hazard detection equipment. In addition, National Grid

shall include in the final design oxygen sensors to be installed in the liquid nitrogen storage area.

53. **Prior to construction of the final design**, National Grid shall file a technical review of its proposed facility design that:

    a. identifies all combustion/ventilation air intake for equipment and buildings and the distances to any possible hazardous fluid release (LNG, flammable refrigerants, flammable liquids, and flammable gases); and
    b. demonstrates that these areas are adequately covered by hazard detection devices and indicates how these devices will isolate or shut down any combustion or ventilation equipment whose continued operation could add to or sustain an emergency.

54. **Prior to construction of the final design**, National Grid shall file complete plan drawings and a list of the fixed and wheeled, dry-chemical, and hand-held fire extinguishers, and other hazard control equipment. Drawings shall clearly show the location by tag number of all fixed, wheeled, and hand-held extinguishers. The list shall include the equipment tag number, type, capacity, equipment covered, discharge rate, and automatic and manual remote signals initiating discharge of the units.

55. **Prior to construction of the final design**, National Grid shall file facility plans and drawings that show the location of the firewater and foam systems. Plan drawings shall clearly show the planned location of firewater and foam piping, post indicator valves, and the location and area covered by, each monitor, hydrant, hose, water curtain, deluge system, foam system, water-mist system, and sprinkler. The drawings shall also include piping and instrumentation diagrams of the firewater and foam system.

56. **Prior to construction of the final design**, National Grid shall specify that the firewater flow test meter is equipped with a transmitter and that a pressure transmitter is installed upstream of the flow transmitter. The flow transmitter and pressure transmitter shall be connected to the Distributed Control System and recorded. The firewater main header pressure transmitter shall also be connected to the Distributed Control System and recorded.

57. **Prior to construction of the final design**, National Grid shall specify that it will install a minimum of two firewater jockey pumps.

58. **Prior to construction of the final design**, National Grid shall certify that the final design is consistent with the information provided to the DOT as described in the design spill determination letter dated June 28, 2017 (Accession Number 20170628-4002). In the event that any modification to the design alters the

candidate design spills on which the 49 C.F.R. Part 193 siting analysis was based, National Grid shall consult with the DOT on any actions necessary to comply with Part 193.

59. **Prior to construction of the final design**, National Grid shall file the final design details of the pipe shrouding that demonstrates how the shroud design accounts the mechanical forces from a release at maximum pressures and thermal stresses and shock from sudden cryogenic temperatures of a LNG release. In addition, the final design shall consider the installation of the pipe shrouding to ensure that operation and maintenance of equipment and valves is not impacted.

60. **Prior to construction of the final design**, National Grid shall file procedures to maintain and inspect the vapor barriers provided to meet the siting provisions of 49 C.F.R. section 193.2059.

61. **Prior to commissioning**, National Grid shall file an updated emergency procedures to include the project facilities as well as instructions to handle onsite emergencies related to the hazardous project fluids.

62. **Prior to commissioning**, National Grid shall file a detailed schedule for commissioning through equipment startup. The schedule shall include milestones for all procedures and tests to be completed prior to introduction of hazardous fluids and during commissioning and startup. National Grid shall file documentation certifying that each of these milestones has been completed before issuance of any authorization by the Director of OEP to commence the next phase of commissioning and startup.

63. **Prior to commissioning**, National Grid shall file plans and detailed procedures for testing the integrity of onsite mechanical installation, functional tests, introduction of hazardous fluids, operational tests, and placing the equipment into service.

64. **Prior to commissioning**, National Grid shall tag all equipment, instrumentation, and valves in the field, including drain valves, vent valves, main valves, and car-sealed or locked valves.

65. **Prior to commissioning**, National Grid shall file a tabulated list and drawings of the proposed hand-held fire extinguishers. The list shall include the equipment tag number, extinguishing agent type, capacity, number, and location. The drawings

shall show the extinguishing agent type, capacity, and tag number of all hand-held fire extinguishers.

66. **Prior to commissioning**, National Grid shall file updates, addressing the project facilities, in the existing operation and maintenance procedures and manuals, as well as safety procedures.

67. **Prior to commissioning**, National Grid shall provide a detailed training log that demonstrates all operating staff has completed required training.

68. **Prior to introduction of hazardous fluids**, National Grid shall file an evaluation on the snow volume allowance criteria for impoundments that demonstrates National Grid's assertion that a potential LNG spill would sink beneath the snow or provide snow removal procedures that include the new LNG Pump Loading Skid Sub-Containment Sump or include an adequate snow volume allowance with quantitative justification.

69. **Prior to introduction of hazardous fluids**, National Grid shall complete all pertinent tests (Factory Acceptance Tests, Site Acceptance Tests, Site Integration Tests) associated with the Distributed Control System and the Safety Instrumented System that demonstrates full functionality and operability of the system.

70. **Prior to introduction of hazardous fluids**, National Grid shall complete a firewater pump acceptance test and firewater monitor and hydrant coverage test. The actual coverage area from each monitor and hydrant shall be shown on facility plot plan(s).

71. **Prior to LNG production**, National Grid shall receive written authorization from the Director of OEP. After producing LNG, National Grid shall file weekly reports on the commissioning of the proposed systems that detail the progress toward demonstrating the facilities can safely and reliably operate at or near the design production rate. The reports shall include a summary of activities, problems encountered, and remedial actions taken. The weekly reports shall also include the latest commissioning schedule, including projected and actual LNG production by liquefaction train, LNG storage inventories in the storage tank, and anticipated and actual sendout volumes. Further, the weekly reports shall include a status and list of all planned and completed safety and reliability tests, work

authorizations, and punch list items. Problems of significant magnitude shall be reported to the FERC **within 24 hours**.

72. **Prior to commencement of service**, National Grid shall update procedures for offsite contractors' responsibilities, restrictions, and limitations and for supervision of these contractors by National Grid staff.

73. **Prior to commencement of service**, National Grid shall label piping with fluid service and direction of flow in the field, in addition to the pipe labeling requirements of NFPA 59A (2001 edition).

74. **Prior to commencement of service**, National Grid shall notify the FERC staff of any proposed revisions to the security plan and physical security of the plant.

The following measures shall apply **throughout the life** of the project facilities:

75. The facilities shall be subject to regular FERC staff technical reviews and site inspections on at least a **biennial** basis or more frequently as circumstances indicate. Prior to each FERC staff technical review and site inspection, National Grid shall respond to a specific data request, including information relating to possible design and operating conditions that may have been imposed by other agencies or organizations. Up-to-date detailed piping and instrumentation diagrams reflecting facility modifications and provision of other pertinent information not included in the semi-annual reports described below, including facility events that have taken place since the previously submitted semi-annual report, shall be submitted.

76. National Grid shall report any design modifications and operating problems for the project facilities in the **semi-annual** operational reports filed with the Secretary for the facility.

77. **Semi-annual** operational reports shall be filed with the Secretary to identify changes in facility design and operating conditions; abnormal operating experiences; activities (e.g., liquefied and vaporized quantities, boil off/flash gas, number and volume of trucking, etc.); and plant modifications, including future plans and progress thereof. Abnormalities shall include, but not be limited to, potential hazardous conditions from offsite vessels, storage tank stratification or rollover, geysering, storage tank pressure excursions, cold spots on the storage tanks, storage tank vibrations and/or vibrations in associated cryogenic piping, storage tank settlement, significant equipment or instrumentation malfunctions or failures, non-scheduled maintenance or repair (and reasons therefore), relative movement of storage tank inner vessels, hazardous fluids releases, fires involving hazardous fluids and/or from other sources, negative pressure (vacuum) within a storage tank, and higher than predicted boil off rates. Adverse weather conditions

and the effect on the facility also shall be reported. Reports shall be submitted **within 45 days after each period ending June 30 and December 31**. In addition to the above items, a section entitled "Significant Plant Modifications Proposed for the Next 12 Months (dates)" shall be included in the semi-annual operational reports. Such information will provide the FERC staff with early notice of anticipated future construction/maintenance at the LNG facilities.

78. The plant's incident reporting requirements shall be updated to the following: significant non-scheduled events, including safety-related incidents (e.g., LNG, heavier hydrocarbons, refrigerant, or natural gas releases, fires, explosions, mechanical failures, unusual over pressurization, and major injuries) and security-related incidents (e.g., attempts to enter site, suspicious activities) shall be reported to FERC staff. In the event an abnormality is of significant magnitude to threaten public or employee safety, cause significant property damage, or interrupt service, notification shall be made **immediately**, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency procedure. In all instances, notification shall be made to FERC staff **within 24 hours**. This notification practice shall be incorporated into the LNG facility's emergency plan. Examples of reportable hazardous fluids related incidents include:

a. fire;
b. explosion;
c. estimated property damage of $50,000 or more;
d. death or personal injury necessitating in-patient hospitalization;
e. release of hazardous fluids for five minutes or more;
f. unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability, structural integrity, or reliability of an LNG facility that contains, controls, or processes hazardous fluids;
g. any crack or other material defect that impairs the structural integrity or reliability of an LNG facility that contains, controls, or processes hazardous fluids;
h. any malfunction or operating error that causes the pressure of a pipeline or LNG facility that contains or processes hazardous fluids to rise above its maximum allowable operating pressure (or working pressure for LNG facilities) plus the build-up allowed for operation of pressure limiting or control devices;
i. a leak in an LNG facility that contains or processes hazardous fluids that constitutes an emergency;
j. inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank;
k. any safety-related condition that could lead to an imminent hazard and cause (either directly or indirectly by remedial action of the operator), for

purposes other than abandonment, a 20 percent reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility that contains or processes hazardous fluids;

l. safety-related incidents to hazardous fluids transportation occurring at or en route to and from the LNG facility; or

m. an event that is significant in the judgment of the operator and/or management even though it did not meet the above criteria or the guidelines set forth in an LNG facility's incident management plan.

In the event of an incident, the Director of OEP has delegated authority to take whatever steps are necessary to ensure operational reliability and to protect human life, health, property or the environment, including authority to direct the LNG facility to cease operations. Following the initial company notification, FERC staff will determine the need for a separate follow-up report or follow-up in the upcoming semi-annual operational report. All company follow-up reports shall include investigation results and recommendations to minimize a reoccurrence of the incident.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

National Grid LNG LLC Docket No. CP16-121-000

(Issued October 17, 2018)

GLICK, Commissioner, and LaFLEUR, Commissioner, *concurring*:

We concur in the Commission's decision to grant National Grid LNG LLC authorization to add liquefaction facilities at its existing Fields Points liquefied natural gas storage facility under section 7 of the Natural Gas Act.[1] We write separately to highlight the need to evaluate the significance of all environmental effects under the National Environmental Policy Act, including greenhouses gas (GHG) emissions. We agree with today's finding that the liquefaction facility will not have a significant effect on the environment,[2] particularly given the limited GHG emissions associated with the project.[3] However, we disagree with the language in the Environmental Assessment that dismisses the Social Cost of Carbon as a useful tool to inform the environmental review, stating the Social Cost of Carbon method "cannot meaningfully inform the Commission's decision whether and how to authorize a proposed project under the NGA."[4] We believe the Social Cost of Carbon provides a meaningful and informative approach for an agency to consider how its actions contribute to the harm caused by climate change.[5] By translating the long-term damage done by a ton of carbon dioxide into monetary value, the Social Cost of Carbon offers a method for linking GHG emissions to particular

[1] 15 U.S.C. § 717f (2012).

[2] *National Grid LNG LLC*, 165 FERC ¶ 61,031 at P 84 (2018); Environmental Assessment at 147 (EA).

[3] EA at 142.

[4] *Id.*

[5] *See Florida Southeast Connection, LLC*, 164 FERC ¶ 61,099 (2018) (LaFleur & Glick, Comm'rs, dissenting).

climate impacts, helping satisfy our obligation to consider how the Commission's actions contribute to the harm caused by climate change.

For these reasons, we respectfully concur.

_____
Richard Glick
Commissioner

_____
Cheryl A. LaFleur
Commissioner