## 181 FERC ¶ 61,143 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Richard Glick, Chairman; James P. Danly, Allison Clements, Mark C. Christie, and Willie L. Phillips.

Commonwealth LNG, LLC

Docket Nos. CP19-502-000 CP19-502-001

## ORDER GRANTING AUTHORIZATION UNDER SECTION 3 OF THE NATURAL GAS ACT

(Issued November 17, 2022)

1. On August 20, 2019, as amended July 8, 2021, Commonwealth LNG, LLC (Commonwealth) filed an application under section 3 of the Natural Gas Act (NGA)<sup>1</sup> and Part 153 of the Commission's regulations<sup>2</sup> for authorization to site, construct, and operate a natural gas liquefaction and export facility, including an NGA section 3 natural gas pipeline, in Cameron Parish, Louisiana (Commonwealth LNG Project). The Commonwealth LNG Project will be located on the west side of the Calcasieu Ship Channel, near the entrance to the Gulf of Mexico. For the reasons discussed in this order, we will authorize Commonwealth's proposed project, subject to the conditions discussed and attached herein.

### I. <u>Background and Proposal</u>

2. Commonwealth is a Texas limited liability company, with its primary place of business located in Houston, Texas, and is authorized to do business in the State of Louisiana. Commonwealth is a wholly owned subsidiary of Commonwealth Projects, LLC, which is in turn wholly owned by a private individual, Paul Varello.<sup>3</sup>

3. The proposed Commonwealth LNG Project consists of: six liquefaction trains; six liquified natural gas (LNG) storage tanks; one marine loading berth; a 3.04-mile-long,

<sup>1</sup> 15 U.S.C. § 717b.

<sup>2</sup> 18 C.F.R. pt. 153 (2021).

<sup>3</sup> Application at 4; *id.* at Ex. B.

42-inch-diameter pipeline; and other process and support facilities. Specifically, Commonwealth proposes to construct the following:

- Six 1.4 million metric tonnes per annum (MTPA) liquefaction trains, each with an approximately 60-megawatt gas turbine with mechanical drive;
- Six 50,000 cubic meter (m<sup>3</sup>) (net capacity equivalent to approximately 1.06 billion cubic feet (Bcf)) full-containment LNG storage tanks;<sup>4</sup>
- A single berthing dock with the capacity to service vessels from 10,000 m<sup>3</sup> to 216,000 m<sup>3</sup>;
- A potable water supply line from existing municipal water systems;
- A 180-megawatt simple cycle electric power generator for the LNG Facility auxiliary loads, including emergency and back-up systems;
- Various operational buildings and structures;
- A 3.04-mile-long, 42-inch-diameter natural gas pipeline with tie-ins (including metering and emergency shut-off systems) at the existing 12- and 20-inch-diameter Bridgeline pipelines and the 16-inch-diameter Kinetica pipeline; and
- An interconnection to the LNG terminal, including a pig receiver, separator, liquid storage facility, custody transfer meters, pressure regulators, emergency shutdown valves, and gas analyzers.

4. Each liquefaction train has a design production capacity of approximately 65.1 Bcf per year (1.4 MTPA) for a total design export capacity of 8.4 MTPA. However, under optimal operating conditions, the project will have a peak liquefaction capacity of up to 441.4 Bcf per year (approximately 9.5 MTPA). The 3.04-mile pipeline will be capable of

<sup>&</sup>lt;sup>4</sup> In the 2021 amendment, Commonwealth proposed to modify the LNG storage tank design from an inner and outer tank fabricated from nine percent nickel steel to a nine percent nickel steel inner tank and a concrete outer tank with carbon steel liner in order to bring the design into compliance with all appropriate code requirements and preclude the need for a Special Permit from the Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). Amendment at 3-4. The amendment also proposes to increase the net capacity of the LNG storage tanks from 40,000 m<sup>3</sup> to 50,000 m<sup>3</sup>, for a total working storage volume of 300,000 m<sup>3</sup>. *Id.* at 4.

delivering up to 1.44 Bcf per day (Bcf/d) of natural gas to support the peak liquefaction capacity.

5. Commonwealth states that the purpose of the proposed project is to liquefy and export to foreign markets domestically produced natural gas sourced from the existing interstate and intrastate pipeline systems of Kinetica Partners, LLC (Kinetica) and EnLink Bridgeline Holdings LP (Bridgeline), respectively, in southwest Louisiana.

6. On April 17, 2020, the Department of Energy's Office of Fossil Energy (DOE/FE) authorized Commonwealth to export 9.5 MTPA (1.21 Bcf/d) of LNG to nations with which the United States has a Free Trade Agreement (FTA) for a 25-year term.<sup>5</sup> Commonwealth's application to export up to 9.5 MTPA of LNG to non-FTA nations is pending with DOE/FE.<sup>6</sup>

## II. Notice, Interventions, Protests, and Comments

7. Notice of Commonwealth's application was published in the *Federal Register* on September 9, 2019, with motions to intervene due by September 24, 2019.<sup>7</sup> Notice of Commonwealth's amendment to the 2019 application was published in the *Federal Register* on July 20, 2021, with motions to intervene due by August 3, 2021.<sup>8</sup> Cameron LNG, LLC and Public Citizen, Inc, filed timely, unopposed motions to intervene in response to the notices of the 2019 application and the 2021 amendment,

<sup>6</sup> On September 11, 2020, Commonwealth requested to amend its pending application to the DOE/FE to request an export term to non-FTA nations through December 31, 2050, instead of the originally requested 20-year term. *See* Commonwealth LNG, LLC, Application to Amend Requested Export Term in Pending Long-Term Application Through December 31, 2050, FE Docket No. 19-134-LNG (filed Sept. 11, 2020). Commonwealth states that these volumes are not additive to the approved export volumes in Order No. 4521.

<sup>7</sup> 84 Fed. Reg. 47,284 (Sept. 24, 2019).

<sup>8</sup> 86 Fed. Reg. 38,337 (July 20, 2021).

<sup>&</sup>lt;sup>5</sup> See Commonwealth LNG, LLC, FE Docket No. 19-134-LNG, Order No. 4521 (Apr. 17, 2020) (Order No. 4521) (authorizing exports for a 25-year term, beginning on the earlier of the date of first exportation or seven years from the date of DOE/FE's authorization).

respectively.<sup>9</sup> On March 5, 2020, Venture Global Calcasieu Pass, LLC, filed an opposed motion to intervene out of time. This late intervention was granted on May 8, 2020.<sup>10</sup> On August 3, 2021, Center for Biological Diversity, Healthy Gulf, Louisiana Bucket Brigade, Louisiana Environmental Action Network, National Audubon Society, Port Arthur Community Action Network, Restore Explicit Symmetry To Our Ravaged Earth, Sierra Club, and Turtle Island Restoration Network filed a joint timely motion to intervene, which was opposed. This intervention was granted on October 12, 2021.<sup>11</sup>

8. Protests were filed by National Audubon Society and, jointly, by Center for Biological Diversity, Healthy Gulf, Louisiana Environmental Action Network, Louisiana Bucket Brigade, Port Arthur Community Action Network, Restore Explicit Symmetry To Our Ravaged Earth, Sierra Club, and Turtle Island Restoration Network (collectively, the Environmental Coalition).<sup>12</sup> On August 18, 2021, Commonwealth filed an answer to the comments and protests by the National Audubon Society and the Environmental Coalition. Although the Commission's Rules of Practice and Procedure do not permit answers to protests,<sup>13</sup> we will accept the answers herein because they clarify the concerns raised and provide information that has assisted in our decision making. In addition, we received a number of comments in support of the project, citing an increase in job opportunities, local economic investment, and minimization of environmental impacts. Numerous individuals and entities also filed comments expressing concerns about the

<sup>10</sup> May 8, 2020 Notice Granting Late Intervention.

<sup>11</sup> Oct. 12, 2021 Notice Granting Intervention.

<sup>12</sup> Two slightly different but overlapping coalitions of organizations filed further comments on October 25, 2021 and May 23, 2022. For ease of reference, we also refer to these commenters under the umbrella of the Environmental Coalition. Specific organizations are listed at notes 18 & 47, *infra*. On October 12, 2022, Louisiana Bucket Brigade filed, in this and several other Commission gas project dockets, a letter addressed to President Biden expressing general opposition to LNG export terminals on environmental, economic, climate, and national security grounds and sharing information about its *Defend U.S. Consumers* campaign, which Louisiana Bucket Brigade states will increase public awareness about the risks associated with continued gas export terminal development. Louisiana Bucket Brigade October 12, 2022 Letter at 1-4. The Bucket Brigade's October 12<sup>th</sup> letter generally expresses the same issues already raised in its joint protest and environmental comments in this proceeding.

<sup>13</sup> 18 C.F.R. § 385.213(a)(2) (2021).

<sup>&</sup>lt;sup>9</sup> Timely, unopposed motions to intervene are automatically granted pursuant to Rule 214 of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214 (2021).

need for and environmental impacts of the project. The protests and comments were addressed in the draft Environmental Impact Statement (EIS), and as appropriate, below.

9. On May 23, 2022, the Natural Resources Defense Council (NRDC) filed a timely motion to intervene and comments pursuant to the Commission's regulation at section 380.10(a), which states that "[a]ny person who files a motion to intervene on the basis of a draft environmental impact statement will be deemed to have filed a timely motion, in accordance with § 385.214, as long as the motion is filed within the comment period for the draft environmental impact statement."<sup>14</sup> NRDC's comments are addressed in the final EIS,<sup>15</sup> and as appropriate, below.

### III. Discussion

## A. <u>Public Interest Standard Under Section 3 of the NGA</u>

10. Because the proposed facilities will be used to export natural gas to foreign countries, the construction and operation of the proposed facilities and site of their location require approval by the Commission under section 3 of the NGA.<sup>16</sup> Section 3 provides that an application shall be approved if the Commission finds the proposal "will not be [in]consistent with the public interest," subject to "such terms and conditions as the Commission [may] find necessary or appropriate."<sup>17</sup>

<sup>14</sup> 18 C.F.R. § 380.10(a) (2021).

<sup>15</sup> Unless otherwise noted, "EIS" refers to the final EIS.

<sup>16</sup> 15 U.S.C. § 717b(a). The regulatory functions of NGA section 3 were transferred to the Secretary of Energy of the DOE in 1977 pursuant to section 301(b) of the Department of Energy Organization Act, Pub. L. No. 95-91, 42 U.S.C. § 7101 *et seq.* The Secretary subsequently delegated to the Commission the authority to approve or disapprove the construction and operation of natural gas import and export facilities and the site at which such facilities shall be located. The most recent delegation is in DOE Delegation Order No, 00-004.00A, effective May 16, 2006. The Commission does not authorize importation or export natural gas must be submitted to the DOE. *See EarthReports, Inc. v. FERC*, 828 F.3d 949, 952-53 (D.C. Cir. 2016) (detailing how regulatory oversight for the export of LNG and supporting facilities is divided between the Commission and DOE).

<sup>17</sup> 15 U.S.C. § 717b(a), (e)(3). For a discussion of the Commission's authority to condition its approvals of LNG facilities under section 3 of the NGA, *see*, e.g., *Distrigas* 

11. Commenters state that Commonwealth fails to provide evidence of market need for the project, that authorizing additional LNG infrastructure would likely result in an overbuild of capacity, and that the project's contribution to climate change and other adverse environmental impacts render it contrary to the public interest.<sup>18</sup> The Environmental Coalition asserts that the project does not provide meaningful public benefit if it merely duplicates capacity that is already provided by other existing projects.<sup>19</sup> Louisiana Bucket Brigade asserts that LNG companies are exploiting Russian hostilities to garner support for their proposed LNG projects and that expanding the number of LNG terminals poses national security risks.<sup>20</sup> Last, the Environmental Coalition argues that the Commission cannot simply defer to the DOE's assessment of the public interest, especially since DOE has "disclaimed authority to consider export-induced gas production and other effects occurring 'upstream' of delivery of LNG to an export carrier" under the National Environmental Policy Act (NEPA).<sup>21</sup>

12. Section 3(a) of the NGA provides, in part, that "no person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the Commission authorizing it to do so."<sup>22</sup> As noted above, in 1977 the Department of Energy Organization Act transferred the regulatory functions of section 3 of the NGA to the Secretary of Energy. Subsequently, the Secretary of Energy delegated to the Commission authority to "[a]pprove or disapprove the construction and operation of particular facilities, the site at which such facilities shall be

*Corp. v. FPC*, 495 F.2d 1057, 1063-64 (D.C. Cir.), *cert. denied*, 419 U.S. 834 (1974); *Dynegy LNG Prod. Terminal*, *L.P.*, 97 FERC ¶ 61,231 (2001).

<sup>18</sup> Environmental Coalition August 3, 2021 Protest at 2-3, 6; Center for Biological Diversity, Healthy Gulf, John Allaire, Louisiana Environmental Action Network, National Audubon Society, PACAN, Scenic Galveston, Inc., Sierra Club, and Turtle Island Restoration Network October 25, 2021 Comments at 1, 16.

<sup>19</sup> Environmental Coalition August 3, 2021 Protest at 2 (citing *Env't Def. Fund v. FERC*, 2 F.4th 953, 973 (D.C. Cir. 2021), *cert. denied*, 142 S. Ct. 1668 (2022)).

<sup>20</sup> Louisiana Bucket Brigade October 12, 2022 Letter at 1-2.

<sup>21</sup> Environmental Coalition August 3, 2021 Protest at 2-3 (citing National Environmental Policy Act Implementing Procedures, 85 Fed. Reg. 78,197, 78,198, 78,201 (Dec. 4, 2020)).

<sup>22</sup> 15 U.S.C. § 717b(a).

located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry for imports or exit for exports."<sup>23</sup>

13. However, as we have previously explained,<sup>24</sup> the Secretary has not delegated to the Commission any authority to approve or disapprove the import or export of the commodity itself.<sup>25</sup> Therefore, we decline to address commenters' and protestors' economic claims (e.g., those regarding market demand for LNG), which are relevant only to the exportation of the commodity of natural gas, which is within DOE's exclusive jurisdiction, and are not implicated by our limited action of reviewing proposed terminal sites. The Commission's authority under NGA section 3 applies "only to the siting and the operation of the facilities necessary to accomplish an export[,]"<sup>26</sup> while "export decisions [are] squarely and exclusively within the [DOE]'s wheelhouse."<sup>27</sup> Similarly, issues related to the impacts of natural gas development and production are related to DOE's authorization of the export and not the Commission's siting of the facilities,<sup>28</sup> notwithstanding DOE's interpretation of its own obligations under NEPA.

14. As the U.S. Court of Appeals for the District of Columbia Circuit has explained, the NGA section 3 standard that a proposal "shall" be authorized unless it "will not be

<sup>23</sup> DOE Delegation Order No. 00-004.00A.

<sup>24</sup> See Alaska Gasline Dev. Corp., 171 FERC ¶ 61,134, at P 15, order on reh'g, 172 FERC ¶ 61,214 (2020).

<sup>25</sup> See supra note 16; see also Freeport LNG Dev., L.P., 148 FERC ¶ 61,076, reh'g denied, 149 FERC ¶ 61,119 (2014), aff'd sub nom. Sierra Club v. FERC, 827 F.3d 36 (D.C. Cir. 2016) (finding that because the DOE, not the Commission, has sole authority to license the export of any natural gas through LNG facilities, the Commission is not required to address the indirect effects of the anticipated export of natural gas in its NEPA analysis); Sabine Pass Liquefaction, LLC, 146 FERC ¶ 61,117, reh'g denied, 148 FERC ¶ 61,200 (2014), aff'd sub nom. Sierra Club v. FERC, 827 F.3d 59 (D.C. Cir. 2016).

<sup>26</sup> Trunkline Gas Co., LLC, 155 FERC ¶ 61,328, at P 18 (2016).

<sup>27</sup> Sierra Club v. FERC, 827 F.3d at 46.

<sup>28</sup> Id.

consistent with the public interest[,]"<sup>29</sup> "sets out a general presumption favoring such authorization[s]."<sup>30</sup> To overcome this favorable presumption and support denial of an NGA section 3 application, there must be an "affirmative showing of inconsistency with the public interest."<sup>31</sup> We have reviewed Commonwealth's application to determine if the siting, construction, and operation of its facilities as proposed would not be consistent with the public interest.<sup>32</sup> Construction of the Commonwealth LNG Project would impact approximately 230.8 acres of land (165.8 acres for the terminal and 48.4 acres for the pipeline), and operation of the project would continue to impact about 153.0 of those acres (152.7 acres for the terminal and 0.3 acres for the pipeline).<sup>33</sup> An additional 47 acres of open water would be affected by construction and operation of the marine berthing dock facilities. After construction, the Commonwealth LNG Project would be on open land (89.3 %), developed land (8.2 %), open water (2.3 %), and forested land (0.2 %).<sup>34</sup>

15. Commission staff has prepared a comprehensive EIS thoroughly analyzing all environmental impacts properly associated with our action of approving the siting and operation of the Commonwealth LNG Project. As discussed below, the EIS finds that, although some impacts would be permanent and significant, such as impacts on visual resources, most impacts would not be significant or would be reduced to less-thansignificant levels with the implementation of avoidance, minimization, and mitigation

<sup>30</sup> EarthReports v. FERC, 828 F.3d at 953 (quoting W. Va. Pub. Servs. Comm'n v. U.S. Dep't of Energy, 681 F.2d 847, 856 (D.C. Cir. 1982)); see also Sierra Club v. U.S. Dep't of Energy, 867 F.3d 189, 203 (D.C. Cir. 2017).

<sup>31</sup> Sierra Club v. U.S. Dep't of Energy, 867 F.3d at 203 (quoting Panhandle Producers & Royalty Owners Ass'n v. Econ. Regul. Admin., 822 F.2d 1105, 1111 (D.C. Cir. 1987)).

<sup>32</sup> See Nat'l Steel Corp., 45 FERC ¶ 61,100, at 61,332-33 (1988) (observing that DOE, "pursuant to its exclusive jurisdiction, has approved the importation with respect to every aspect of it except the point of importation" and that the "Commission's authority in this matter is limited to consideration of the place of importation, which necessarily includes the technical and environmental aspects of any related facilities").

<sup>33</sup> Final EIS at 2-10, tbl. 2.2-1.

<sup>34</sup> See id. at 4-167, tbl. 4.8.1-1.

<sup>&</sup>lt;sup>29</sup> 15 U.S.C. § 717b(a). In addition, NGA section 3(c) provides that the exportation of gas to FTA nations "shall be deemed to be consistent with the public interest." *Id.* § 717b(c). As noted above, Commonwealth has received authorization to export to FTA nations. *See supra* P 6.

measures recommended in the EIS<sup>35</sup> and adopted by this order. We find that the various arguments raised regarding the Commonwealth LNG Project do not amount to an affirmative showing of inconsistency with the public interest that is necessary to overcome the presumption in section 3 of the NGA.

In accordance with the Memorandum of Understanding signed on August 31, 2018, 16. by the Commission and the Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA),<sup>36</sup> PHMSA undertook a review of the proposed project's ability to comply with the federal safety standards under Part 193, Subpart B, of Title 49 of the Code of Federal Regulations.<sup>37</sup> On August 2, 2022, PHMSA issued a Letter of Determination (LOD) indicating that Commonwealth has demonstrated that the siting of the proposed Commonwealth LNG Project complies with these federal safety standards. The LOD includes six conditions that must be met, four of which overlap with Commission staff's recommended conditions, which conditions are adopted herein in Appendix A. Two of the LOD conditions pertain to emergency response planning for hazards that extend over a highway that bisects Commonwealth's property.<sup>38</sup> The Commission is responsible for review and approval of Emergency Response Plans developed in coordination with federal, state, and local emergency response organizations. Accordingly, Environmental Condition 39 requires Commonwealth to file for review and written approval by Director of OEP Emergency Response Plans and any associated cost sharing plan provisions in coordination with federal, state, and local agencies for hazards that may reach State Highway 27. Commission staff will coordinate with DOT PHMSA on any overlapping conditions; e.g., the emergency response requirements. If the project is subsequently modified so that it differs from the details provided in the documentation submitted to PHMSA, further review would be conducted by PHMSA.

17. Commonwealth will operate its LNG terminal under the terms and conditions mutually agreed to by its customers and will solely bear the responsibility for the recovery of any costs associated with construction and operation of the terminal and associated

<sup>36</sup> Memorandum of Understanding Between the Department of Transportation and the Federal Energy Regulatory Commission Regarding Liquefied Natural Gas Facilities (Aug. 31, 2018), https://www.ferc.gov/legal/mou/2018/FERC-PHMSA-MOU.pdf.

<sup>37</sup> 49 C.F.R. pt. 193, subpt. B (2021).

<sup>38</sup> Specifically, these LOD provisions call for signage to be added and maintained on or near the state highway to aid in evacuation and procedures on coordination with local agencies to evacuate persons on the state highway right of way.

<sup>&</sup>lt;sup>35</sup> As part of its environmental review, staff developed mitigation measures it determined would appropriately and reasonably reduce the environmental impacts resulting from project construction and operation.

facilities. Accordingly, Commonwealth's proposal does not trigger NGA section 3(e)(4).<sup>39</sup>

18. In view of the above, after careful consideration of the entire record of this proceeding, including the findings and recommendations of the final EIS, we find that, subject to the conditions imposed in this order, Commonwealth's proposal is not inconsistent with the public interest. Therefore, we will grant Commonwealth's application.

### B. <u>Environmental Analysis</u>

19. To satisfy the requirements of NEPA,<sup>40</sup> Commission staff evaluated the potential environmental impacts of the proposed project in an EIS. The U.S. Army Corps of Engineers (COE); U.S. Coast Guard (USCG); U.S. Department of Energy (DOE); DOT's PHMSA; U.S. Fish and Wildlife Service (FWS); National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS); and U.S. Environmental Protection Agency (EPA) participated as cooperating agencies, as defined by NEPA. Cooperating agencies have jurisdiction by law or special expertise with respect to resources potentially affected by a proposal and participate in the NEPA analysis.

20. On February 22, 2018, the Commission issued a Notice of Intent (NOI) to Prepare an Environmental Impact Statement for the Planned Commonwealth LNG Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Session. The NOI was issued during the Commission's pre-filing review process for Commonwealth's project that began on August 15, 2017, in Docket No. PF17-8-000. The pre-filing review process provides opportunities for interested stakeholders to become involved early in project planning, facilitates interagency cooperation, and assists in the

<sup>39</sup> 15 U.S.C. § 717b(e)(4) (governing orders for LNG terminal offering open access service).

<sup>40</sup> 42 U.S.C. §§ 4321 *et seq. See also* 18 C.F.R. pt. 380 (2021) (Commission's regulations implementing NEPA). On July 16, 2020, CEQ issued a final rule updating its 1978 regulations, Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304 (July 16, 2020), which was effective September 14, 2020; however, the NEPA review of this project was in process at that time and was prepared pursuant to the 1978 regulations. On April 20, 2022, CEQ issued a final rule to amend three provisions of its NEPA regulations which became effective on May 20, 2022. National Environmental Policy Act Implementing Regulations Revisions, 87 Fed. Reg. 23,453 (Apr. 20, 2022). The April 2022 final rule generally restores provisions of the 1978 regulations that were modified in 2020. Therefore, the Commonwealth LNG Project EIS is consistent with the April 2022 final rule.

identification and resolution of issues prior to a formal application being filed with the Commission. The NOI was published in the *Federal Register*<sup>41</sup> and was mailed to project stakeholders. FERC staff held a public scoping session in Johnson Bayou, Louisiana on March 13, 2018, to receive public comments on the project. The pre-filing process ended on August 20, 2019, when Commonwealth filed its application. During the scoping periods, we received over 240 comments from landowners; federal, state, and local agencies; Native American Tribes; companies and non-governmental organizations; and other interested individuals.

21. On October 15, 2019, the Commission issued a *Notice of Schedule for Environmental Review of the Commonwealth LNG Project* (NOS). The NOS was published in the *Federal Register* on October 21, 2019.<sup>42</sup> The NOS established an anticipated issuance date for the final EIS of October 2, 2020.

22. On March 16, 2020, the Commission suspended the environmental review schedule pending sufficient responses from Commonwealth to Commission staff data requests and an official interpretation from PHMSA pertaining to Commonwealth's proposed LNG storage tank design. On June 8, 2021, Commonwealth filed an amendment to its application to modify the proposed LNG storage tank design and capacities in a manner that resolved many of the data requests' issues and would not require Commonwealth to request a special permit to waive PHMSA's minimum federal regulations.

23. On September 24, 2021, the Commission issued a second NOI that was published in the *Federal Register* on September 30, 2021,<sup>43</sup> and established a revised issuance date for the final EIS of September 9, 2022. It also established an additional public scoping comment period that closed on October 25, 2021.

24. On March 31, 2022, Commission staff issued a draft EIS. Notice of the draft EIS was published in the *Federal Register* on April 6, 2022, establishing a 45-day public comment period that ended on May 23, 2022.<sup>44</sup> Copies of the notice were mailed to 413 stakeholders. Commission staff held virtual public comment sessions on April 25 and 26, 2022, to solicit and receive comments on the draft EIS. The Commission received written and verbal comments on the draft EIS concerning potential project impacts on surface water and wetlands, vegetative communities of special concern, migratory birds and other wildlife, aquatic resources and essential fish habitat, special status species,

<sup>41</sup> 83 Fed Reg. 10,470 (Mar. 29, 2018).

<sup>42</sup> 84 Fed. Reg. 56,185 (Oct. 21, 2019).

<sup>43</sup> 86 Fed. Reg. 54,182 (Sept. 30, 2021).

<sup>44</sup> 87 Fed. Reg. 19,918 (Apr. 6, 2022).

recreation areas, visual resources, environmental justice communities, air quality and noise, reliability and safety, cumulative impacts, greenhouse gas emissions, and climate change. We received verbal comments from 10 individuals. We received over 40 written comments from federal agencies, state agencies, non-governmental organizations, and individuals, as well as multiple copies of two form letters.

25. Commission staff issued the final EIS for the project on September 9, 2022. The notice of availability of the final EIS was published in the *Federal Register* on September 15, 2022. The final EIS addresses: geology, soils, water resources, wetlands, vegetation, wildlife, aquatic resources, threatened and endangered species, land use, recreation, visual resources, socioeconomics, environmental justice, cultural resources, air quality, noise, safety, cumulative impacts, and identified alternatives. It also addresses all substantive environmental comments received on the draft EIS.

26. The final EIS concludes that construction and operation of the project would result in some adverse environmental impacts, but that with the mitigation measures recommended in the EIS, most of these impacts would be reduced to less than significant levels. The EIS concludes that impacts on visual resources, including visual impacts affecting environmental justice communities, would be significant.

27. The Commission received comments on the final EIS from the EPA and from Commonwealth, which are addressed below. Endangered species, greenhouse gas emissions, visual resources, and issues related to environmental justice communities and certain pending permits and consultations are also discussed further below.

# 1. <u>Pending Permits and Consultations</u>

28. Commonwealth would be responsible for obtaining all permits and approvals required to construct and operate the project. Commission staff listed major permits, approvals, and consultations in the final EIS,<sup>45</sup> including the required coastal use permit and essential fish habitat consultation, which are discussed below.

# a. <u>Coastal Use Permit</u>

29. In the final EIS, Commission staff noted that Commonwealth would construct and operate the project in compliance with conditions that would be set forth in the Louisiana Department of Natural Resources Office of Coastal Management's coastal use permit, which will serve as the state's Coastal Zone Management Act consistency determination.<sup>46</sup> Because Commonwealth has not yet obtained the permit, Commission staff included a

<sup>&</sup>lt;sup>45</sup> Final EIS at 1-16 to 1-18.

<sup>&</sup>lt;sup>46</sup> See Final EIS at 4-174.

recommendation that, prior to construction, Commonwealth should file with the Commission a copy of the consistency determination. The Environmental Coalition argues that this approach "fails to provide the opportunity for informed, meaningful public participation that NEPA requires" and that the Commission cannot conditionally issue a certificate when there is reason to believe that various permits will not or should not have been issued by the relevant agencies "due to inconsistencies with state laws."<sup>47</sup>

30. The Commission's practice of issuing conditional certificates has consistently been affirmed by courts as lawful.<sup>48</sup> As we have explained, the Commission's longstanding approach is a practical response to the reality that it may be impossible for an applicant to obtain all approvals necessary to construct and operate a project in advance of the Commission's issuance of its certificate without unduly delaying a project.<sup>49</sup> We find that there is a sufficiently developed record before us regarding the benefits and adverse impacts of the project before us upon which to base our determination. Accordingly, staff's recommendation that Commonwealth should file with the Commission a copy of the determination of consistency with the Coastal Zone Management Act before construction has been adopted as environmental condition 17 and is included in appendix A of this order.

<sup>48</sup> See Del. Riverkeeper Network v. FERC, 857 F.3d 388, 399 (2017) (upholding Commission's approval of a natural gas project conditioned on securing state certification under section 401 of the Clean Water Act); see also Myersville Citizens for a Rural Cmty., Inc. v. FERC, 783 F.3d 1301, 1320-21 (2015) (upholding the Commission's conditional approval of a natural gas facility construction project where the Commission conditioned its approval on the applicant securing a required federal Clean Air Act air quality permit from the state); Del. Dep't. of Nat. Res. & Envtl. Control v. FERC, 558 F.3d 575, 578-79 (D.C. Cir. 2009) (holding Delaware suffered no concrete injury from the Commission's conditional approval of a natural gas terminal construction despite statutes requiring states' prior approval because the Commission conditioned its approval of construction on the states' prior approval); Pub. Utils. Comm'n. of Cal. v. FERC, 900 F.2d 269, 282 (D.C. Cir. 1990) (holding the Commission had not violated NEPA by issuing a certificate conditioned upon the completion of the environmental analysis).

<sup>49</sup> See, e.g., Broadwater Energy LLC, 124 FERC ¶ 61,225, at P 59 (2008); Crown Landing LLC, 117 FERC ¶ 61,209, at P 26 (2006); Millennium Pipeline Co., L.P., 100 FERC ¶ 61,277, at PP 225-231 (2002).

<sup>&</sup>lt;sup>47</sup> Center for Biological Diversity, John Allaire, Louisiana Bucket Brigade, Micah 6:8 Mission, National Audubon Society, RESTORE, Sierra Club, and Turtle Island Restoration Network May 23, 2022 Comments at 32-34 (Environmental Coalition May 23, 2022 Comments).

### b. Essential Fish Habitat Consultation

31. Under the Magnuson-Stevens Fishery Conservation and Management Act, as amended in 1996, a federal agency must consult with NMFS when authorizing a proposed activity that will adversely affect essential fish habitat (EFH). As described in the final EIS, the consultation process starts by the action agency (the Commission) providing notification of the action to NMFS.<sup>50</sup> The action agency then prepares an EFH assessment. Next, NMFS reviews the assessment and may provide conservation recommendations. Finally, the action agency must respond to NMFS, and for any conservation recommendation that is not recommended, explain its reasoning for not adopting the recommendation. The Commonwealth LNG Project would impact essential fish habitat as a result of construction of Commission-jurisdictional facilities (the LNG terminal and pipeline) as well as non-jurisdictional facilities (through a beneficial use of dredged materials (BUDM) pipeline and placement area). Therefore, Commission staff initiated consultation with NMFS for the project.<sup>51</sup>

32. In the final EIS, Commission staff described potential impacts on EFH as well as the consultation history between the Commission and NMFS. The Environmental Coalition states that the draft EIS did not provide an opportunity for meaningful comment on the Commission's assessment of the project's impact on EFH because, for example, the public has not yet been able to review any potential conservation measures recommended by NMFS.<sup>52</sup> The draft and final EIS stated that Commonwealth would mitigate temporary impacts on EFH through implementation of the Project's Wetland and Waterbody Construction and Mitigation Procedures, including revegetation and through wetland mitigation bank credits. Commonwealth is actively coordinating mitigation requirements for EFH with the U.S. Army Corps of Engineers (Corps) as part of the section 404 and 10 permitting process and the Louisiana Department of Natural Resources Office of Coastal Management (OCM) as part of the Coastal Use Permit process and will provide mitigation for EFH impacts according to the results of the Louisiana Wetland Rapid Assessment Method and Wetland Value Assessment calculations, respectively, as recommended by NMFS. As stated in the final EIS, Commonwealth's mitigation proposal for impacts on EFH has been modified since the draft EIS. We note that on October 26, 2022, 53 NMFS filed its EFH Conservation Recommendations. One of NMFS' Conservation Recommendations is that the applicant be required to purchase wetland mitigation bank credits from the Corps' approved tidally influenced mitigation banks within the

<sup>50</sup> Final EIS at 4-129 to 4-130.

<sup>51</sup> See October 5, 2022 letter to NMFS initiating EFH consultation.

<sup>52</sup> Environmental Coalition May 23, 2022 Comments at 89.

<sup>53</sup> See NMFS October 26, 2022 letter.

Chenier Plain. The Corps is in the process of determining mitigation requirements for impacts on wetlands (some of which are EFH). Although wetland mitigation is still pending, the Corps is the agency responsible for, and with special expertise in, ensuring no net loss of wetlands. Our staff has not recommended any additional mitigation, nor does the record support doing so. Accordingly, we will not require any additional wetland mitigation outside of the Corps' requirements.

NFMS states that the water control structure<sup>54</sup> should be replaced by an open tidal 33. ditch to allow for control of water ingress volumes and salinity levels in the culvert waters but also permit ingress and egress of marsh fauna at the terminal site.<sup>55</sup> The water control structure was discussed in the draft EIS but details were further developed in the final EIS. NMFS is mainly concerned that the structure will strand EFH species. Its most recent concerns are that more information is needed to identify the purpose and need for the water control structure, and that Commonwealth has not identified how its actions would impact water levels and salinity enough to require it. NFMS requested additional data related to water level and salinity, monitoring, operation, reporting, and alternatives. Commonwealth responded to these concerns in its November 4, 2022 filing. The structure would mimic the natural behavior of the existing drainage once construction is complete, primarily of the large wetlands and waterbodies west of the terminal. The OCM has stated that the project, including the water control structure, would have little to no negative impacts on the local hydrology. The current hydrology is maintained through an existing water control structure, which the proposed structure is intended to mimic. Alternatives were discussed in appendix D of the final EIS. Given that Commonwealth has stated it would consult with state and federal agencies, including OCM, NMFS, and the Corps, to confirm the final design of the structure, that specific details of the culvert and water control structure design would be determined during the final design of the Terminal, and the intent of the structure is to maintain salinity, hydrology, and water levels, we conclude that the intent of NMFS Conservation Recommendation 2 has been met.

34. Commonwealth would also use a pipeline to move dredge materials, which is not jurisdictional to the Commission. As described in the draft EIS, Commonwealth's plan was to place dredge materials at a 1,100-acre dredge materials placement area (DMPA) about 500 feet offshore and directly south of the Terminal. Commonwealth's proposal, as detailed in the final EIS, is now to transport dredge slurry to a 640-acre BUDM site within the wetlands on the south shore of Calcasieu Lake in the FWS Cameron Prairie NWR. Commonwealth has been developing the BUDM site proposal with input from multiple agencies, including the Coastal Protection and Restoration Authority. This beneficial use is accepted as mitigation for impacts on wetlands by the Corps. NFMS relayed concerns

<sup>&</sup>lt;sup>54</sup> See id.

<sup>&</sup>lt;sup>55</sup> See Final EIS at 2-7.

regarding this non-jurisdictional area in its October 26, 2022 letter, including the use of exterior borrow, gapping of erosion control devices, and final target marsh fill elevation, which Commonwealth addressed in it is November 4, 2022 filing. However, this relates to a Corps-jurisdictional area and will be addressed by permits issued by the Corps and potentially the FWS. We note that this location would be used for initial dredge material disposal during construction and two maintenance dredge events. The final placement of future maintenance dredging would be coordinated with the Corps.

35. NMFS also states that the Corps should provide a complete EFH assessment which clearly characterizes, delineates, and quantifies impacts on EFH by habitat type, includes all activities associated with this project, and describes measures taken to avoid, minimize, mitigate, or offset the adverse impacts of the proposed activities on EFH. As the lead federal agency, Commission staff prepared an EFH assessment within the final EIS as appendix D. However, we note that the Corps may choose to provide an updated EFH assessment, including the finalized wetland mitigation.

## 2. <u>Eastern Black Rail</u>

36. A stated in the final EIS with respect to the eastern black rail, FWS's Biological Opinion found that the project would likely adversely affect, but is not likely to jeopardize the continued existence of the species.<sup>56</sup> The Environmental Coalition argues that the Biological Opinion fails to analyze the entire agency action, does not properly define the action area, fails to adequately analyze the project's effects, improperly relies on speculative mitigation measures to support its decision that the project will not jeopardize the continued existence of the species, and fails to adequately explain why estimated take numbers will not jeopardize the continued existence of the species of the species.<sup>57</sup> Therefore, the Environmental Coalition states that the Commission's reliance on the flawed Biological Opinion violates section 7(a)(2) of the Endangered Species Act (ESA).<sup>58</sup>

37. As we have explained in prior orders, although a federal agency is required to ensure that its action will not jeopardize the continued existence of listed species or adversely modify their critical habitat, it must do so in consultation with the appropriate agency, in this case, FWS. Because FWS is charged with implementing the ESA, it is the

<sup>58</sup> Environmental Coalition May 23, 2022 Comments at 61.

<sup>&</sup>lt;sup>56</sup> Final EIS at 4-144 to 4-145.

<sup>&</sup>lt;sup>57</sup> Environmental Coalition May 23, 2022 Comments at 42-61. National Audubon Society also states that the BO is flawed. National Audubon Society May 23, 2022 Comments at 1.

recognized expert regarding matters of listed species and their habitats, and the Commission may rely on its conclusions.<sup>59</sup>

38. In reviewing whether the Commission may appropriately rely on the Biological Opinion, the relevant inquiry is not whether the document is flawed, but rather whether the Commission's reliance was arbitrary and capricious.<sup>60</sup> Therefore, an agency may rely on a Biological Opinion if a challenging party fails to cite new information that the consulting agency did not take into account that challenges the Biological Opinion's conclusions. Here, the alleged defects that the Environmental Coalition identifies do not rise to the level of new information that would cause the Commission to call into question the factual conclusions of FWS's Biological Opinion. Thus, it is appropriate for the Commission to rely on the judgment of FWS, the agency that Congress has determined in the ESA should be responsible for providing its expert opinion regarding whether authorizing the project is likely to jeopardize the continued existence of the eastern black rail.

### 3. <u>Visual Resources</u>

39. Commonwealth asserts that its comments on the draft EIS regarding impacts on visual resources were not addressed in the final EIS and continues to contend that the finding in the final EIS that impacts on visual resources would be significant is unsupported.<sup>61</sup> Specifically, Commonwealth argues that: (1) the finding of significant impact on certain viewsheds is arbitrary and capricious; (2) Commission staff incorrectly determines that the project would "add" or "introduce" an industrial element to support that finding; (3) Commission staff inaccurately characterizes a poured concrete slab and metal canopy as a permanent recreational vehicle (RV) residence and relies on that property to incorrectly support staff's finding of significant cumulative impacts on visual resources.

40. First, Commonwealth disagrees with the finding that the proposed terminal would have a significant impact on the viewsheds of users of the Calcasieu Ship Channel; users of Holly and Broussard Beaches; and motorists along the Creole Nature Trail

<sup>60</sup> City of Tacoma v. FERC, 460 F.3d at 75.

<sup>61</sup> Commonwealth October 27, 2022 Comments at n.8 & 8-12.

<sup>&</sup>lt;sup>59</sup> Annova LNG Common Infrastructure, LLC, 170 FERC ¶ 61,140, at P 55 (2020) (citing *City of Tacoma v. FERC*, 460 F.3d 53, 75 (D.C. Cir. 2006) (finding that expert agencies such as FWS have greater knowledge about the conditions that may threaten listed species and are best able to make factual determinations about appropriate measures to protect the species)).

All-American Road.<sup>62</sup> Commonwealth states that all three groups would already have line-of-sight to the existing, operating, larger Calcasieu Pass LNG facility.<sup>63</sup> Commonwealth states that users of Broussard Beach would have very limited line-of-sight to the Commonwealth facility, as it would lie behind the existing Calcasieu Pass LNG terminal, which is between the Commonwealth terminal and Broussard Beach; users of Holly Beach near the Town of Holly Beach, as well as at the closest beach access point to the project terminal, would see the larger Calcasieu Pass LNG terminal in line with Commonwealth's facility. Commission staff concluded that the proposed terminal would have significant visual impact on users of Holly and Broussard Beaches based on visual renderings created by Commonwealth.<sup>64</sup> These conclusions were based on the terminal, including the six LNG storage tanks, flare stack, and liquefaction trains, being visible from Holly and Broussard Beaches. A portion of the Creole Nature Trail All-American Road runs adjacent to the proposed terminal site. As stated in the final EIS, the project would be visible for about 12 miles of the Creole Nature Trail All-American Road.<sup>65</sup> The final EIS states that for users directly adjacent to the terminal, the change from open marshland to a large industrial site would be a significant visual and viewshed change.<sup>66</sup> We agree with the staff's conclusion in the final EIS.

41. Next, Commonwealth states that contrary to the draft EIS' determination, the project would not "introduce" any industrial elements to the area because these elements are already present.<sup>67</sup> However, the analysis states that the terminal would "add" an "additional" industrial element to the area;<sup>68</sup> therefore, we agree with Commonwealth that the proposed terminal would not introduce a new industrial element to the project area. Commonwealth does not believe adding an LNG terminal to an area which already houses an existing LNG terminal, among other industrial facilities, would negatively impact the

<sup>62</sup> Id. at 9.

<sup>63</sup> Portions of the Calcasieu Pass LNG Project were placed into service on April 7, 2021, and May 13 and July 28, 2022; however, construction is not yet complete.

<sup>64</sup> Final EIS at app. E.

<sup>65</sup> Final EIS at 4-173.

<sup>66</sup> Final EIS at 4-173.

<sup>67</sup> Commonwealth October 27, 2022 Comments at 9-10.

<sup>68</sup> Final EIS at 4-172.

viewshed and thus argues that a significance finding, without further justification, is arbitrary and capricious.<sup>69</sup>

42. "In considering whether the effects of the proposed action are significant," the Commission "analyze[s] the potentially affected environment and degree of the effects of the action."<sup>70</sup> Although the general area already houses an existing LNG terminal, the construction of the Commonwealth LNG terminal would still adversely change the visual character of the environment, going from largely flat herbaceous land and wetlands to large industrial structures. We again note that much of the final EIS conclusion of impact on nearby visual receptors was based upon the visual renderings produced by the applicant.<sup>71</sup> Additionally, the referenced existing LNG terminal is on the opposite side of the Calcasieu Ship Channel from the proposed project, thereby making it further removed from some of the sensitive receptors (e.g., an RV site and Holly Beach) than the project. For these reasons we agree with staff's finding of significance with respect to visual resources.

43. Third, Commonwealth states it has concerns with staff's conclusion that the project would have significant cumulative impacts on visual resources, when considered in conjunction with the Calcasieu Pass and CP2 LNG terminals.<sup>72</sup> Moreover, Commonwealth believes this determination directly contradicts Commission staff's finding that the Calcasieu Pass LNG facility would not result in significant cumulative visual impacts, particularly as the Calcasieu Pass final EIS included Commonwealth's facility in its cumulative impacts analysis. Further, Commonwealth alleges that this conclusion is based solely on the extent of impacts of the project from the viewshed from a single temporary RV site, finding that the construction and operation of additional LNG terminals in the surrounding area would have a minimal cumulative impact.<sup>73</sup> Regarding the RV site, Commonwealth disagrees with the description of the poured concrete slab and metal canopy, owned by a Mr. John Allaire, as a "permanent RV residence" and requests the Commission refer to this property as "temporary living quarters for recreational, camping,

<sup>70</sup> 40 C.F.R. § 1501.3(b) (2022).

<sup>73</sup> Id.

<sup>&</sup>lt;sup>69</sup> Commonwealth October 27, 2022 Comments at 9-11.

<sup>&</sup>lt;sup>71</sup> Final EIS at app. E.

<sup>&</sup>lt;sup>72</sup> Commonwealth October 27, 2022 Comments at 11-12.

travel, or seasonal use."<sup>74</sup> Regardless of whether Mr. Allaire permanently resides in this location, staff accurately describes the visual impacts of the proposed terminal on Mr. Allaire's property.<sup>75</sup> We agree with the finding in the final EIS that the proposed terminal would have a significant visual impact, and significant cumulative impact, on the viewshed from Mr. Allaire's property. Mr. Allaire's property is not adjacent to the Calcasieu Pass LNG terminal; therefore, Commission staff did not evaluate visual impacts on Mr. Allaire's property in the final EIS for the Calcasieu Pass Project.

44. Finally, Commonwealth states that it has proposed a Visual Screening Plan to reduce viewshed impacts to the maximum extent possible, including its proposal to avoid disturbing native vegetation and its proposed planting of sugar berry trees.<sup>76</sup> The final EIS describes Commonwealth's Visual Screening Plan and concludes that, even with Commonwealth's Visual Screening Plan, the visual impacts on the RV location could be significant,<sup>77</sup> and as Commonwealth states, the final EIS did not identify any additional mitigation within our jurisdiction (i.e., within the project area) that would reduce these visual impacts.

## 4. <u>Environmental Justice</u>

45. In conducting NEPA reviews of proposed natural gas projects, the Commission follows the instruction of Executive Order 12898, which directs federal agencies to identify and address "disproportionately high and adverse human health or environmental effects" of their actions on minority and low-income populations (i.e., environmental justice communities).<sup>78</sup> Executive Order 14008 also directs agencies to develop

<sup>75</sup> Final EIS at 4-172, 4-379.

<sup>76</sup> Commonwealth October 27, 2022 Comments at 12.

<sup>77</sup> Final EIS at 4-172.

<sup>78</sup> Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994). While the Commission is not one of the specified agencies in Executive Order 12898, the Commission nonetheless addresses environmental justice in its analysis, in accordance with our governing regulations and guidance, and statutory duties. *See* 15 U.S.C. § 717b; *see also* 18 C.F.R. § 380.12(g) (2021) (requiring applicants for projects involving significant aboveground facilities to submit information about the socioeconomic impact area of a project for the Commission's consideration during NEPA review); Commission,

<sup>&</sup>lt;sup>74</sup> *Id.* at 9 (referencing the Cameron Parish Police Jury code). Throughout the review process, Commonwealth and Mr. Allaire have disagreed with each other regarding the description of the RV, and the duration and frequency of its use.

"programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts."<sup>79</sup> Environmental justice is "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."<sup>80</sup>

46. Consistent with the Council on Environmental Quality (CEQ)<sup>81</sup> and EPA<sup>82</sup> guidance, the Commission's methodology for assessing environmental justice impacts

*Guidance Manual for Environmental Report Preparation* at 4-76 to 4-80 (Feb. 2017), https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf.

<sup>79</sup> Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Feb. 1, 2021). The term "environmental justice community" includes disadvantaged communities that have been historically marginalized and overburdened by pollution. *Id.* at 7629. The term also includes, but may not be limited to minority populations, low-income populations, or indigenous peoples. *See* EPA, *EJ 2020 Glossary* (Aug. 18, 2022), https://www.epa.gov/environmentaljustice/ej-2020-glossary.

## <sup>80</sup> EPA, Learn About Environmental Justice,

https://www.epa.gov/environmentaljustice/learn-about-environmental-justice (Sep. 6, 2022). Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. *Id.* Meaningful involvement of potentially affected environmental justice community residents means: (1) people have an appropriate opportunity to participate in decisions about a proposed activity that may affect their environment and/or health; (2) the public's contributions can influence the regulatory agency's decision; (3) community concerns will be considered in the decision-making process; and (4) decision makers will seek out and facilitate the involvement of those potentially affected. *Id.* 

# <sup>81</sup> CEQ, Environmental Justice: Guidance Under the National Environmental Policy Act 4 (Dec. 1997) (CEQ's Environmental Justice Guidance),

https://www.energy.gov/sites/default/files/nepapub/nepa\_documents/RedDont/G-CEQ-EJGuidance.pdf. CEQ offers recommendations on how federal agencies can provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices. There were opportunities for public involvement during the Commission's prefiling and environmental review processes. Final EIS at 1-5.

<sup>82</sup> See generally EPA, Promising Practices for EJ Methodologies in NEPA

considers: (1) whether environmental justice communities (e.g., minority or low-income populations)<sup>83</sup> exist in the project area; (2) whether impacts on environmental justice communities are disproportionately high and adverse; and (3) possible mitigation measures. As recommended in *Promising Practices*, the Commission uses the 50% and the meaningfully greater analysis methods to identify minority populations.<sup>84</sup> Specifically, a minority population is present where either: (1) the aggregate minority population of the block groups in the affected area exceeds 50% or (2) the aggregate minority population in the block group affected is 10% higher than the aggregate minority population percentage in the county/parish.<sup>85</sup>

47. CEQ's *Environmental Justice Guidance* also directs low-income populations to be identified based on the annual statistical poverty thresholds from the U.S. Census Bureau. Using *Promising Practices*' low-income threshold criteria method, low-income populations are identified as block groups where the percent of a low-income population in the identified block group is equal to or greater than that of the county/parish.

48. To identify potential environmental justice communities, and as discussed in the final EIS, Commission staff used 2019 U.S. Census American Community Survey data<sup>86</sup> for the race, ethnicity, and poverty data at the state, county, and block group level.<sup>87</sup> Additionally, in accordance with *Promising Practices*, staff used EJScreen, EPA's environmental justice mapping and screening tool, as an initial step to gather information

<sup>83</sup> See generally Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994). Minority populations are those groups that include: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

<sup>84</sup> See Promising Practices at 21-25.

<sup>85</sup> Here, Commission staff selected Calcasieu Parish, Cameron Parish, and Jefferson Davis Parish in Louisiana and Jefferson and Orange Counties, Texas as the comparable reference communities to ensure that affected environmental justice communities are properly identified. A reference community may vary according to the characteristics of the particular project and the surrounding communities. Final EIS at 4-190.

<sup>86</sup> U.S. Census Bureau, American Community Survey 2019 ACS 5-Year Estimates Detailed Tables, File# B17017, *Poverty Status in the Past 12 Months by Household Type by Age of Householder*, https://data.census.gov/cedsci/table?q=B17017; File #B03002 *Hispanic or Latino Origin By Race*, https://data.census.gov/cedsci/table?q=b03002.

<sup>87</sup> See Final EIS at fig. 4.9-1, apps. F & G.

*Reviews* (Mar. 2016) (Promising Practices), https://www.epa.gov/sites/default/files/2016-08/documents/nepa\_promising\_practices\_document\_2016.pdf.

regarding minority and low-income populations; potential environmental quality issues; environmental and demographic indicators; and other important factors.<sup>88</sup>

49. Once staff collected the block group level data, as discussed in further detail below, staff conducted an impacts analysis for the identified environmental justice communities and evaluated health or environmental hazards; the natural physical environment; and associated social, economic, and cultural factors to determine whether impacts would be disproportionately high and adverse on environmental justice communities and also whether those impacts would be significant.<sup>89</sup> Commission staff assessed whether impacts on an environmental justice community were disproportionately high and adverse based on whether those impacts were predominately borne by that community, consistent with EPA's recommendations in *Promising Practices*.<sup>90</sup>

50. Staff identified 91 environmental justice community block groups (out of 149 total block groups) within the 54-kilometer radius around the proposed LNG facility.<sup>91</sup> Twenty-four of the block groups are identified as environmental justice populations based on poverty levels, 18 based on the minority threshold, and 49 based on both the poverty and minority thresholds.<sup>92</sup> However, the block group within which the Commonwealth LNG terminal site is located, Census Tract 9702.01, Block Group 2, is not an environmental justice community. The closest environmental justice block groups to the terminal site are Census Tract 9702.01, Block Group 3 approximately 0.1 mile from the

<sup>88</sup> See Final EIS at 4-188.

<sup>89</sup> See Promising Practices at 33 (stating that "an agency may determine that impacts are disproportionately high and adverse, but not significant within the meaning of NEPA" and in other circumstances "an agency may determine that an impact is both disproportionately high and adverse and significant within the meaning of NEPA").

<sup>90</sup> *Id.* at 44-46 (explaining that there are various approaches to determining whether an action will cause a disproportionately high and adverse impact, and that one recommended approach is to consider whether an impact would be "predominantly borne by minority populations or low-income populations"). We recognize that EPA and CEQ are in the process of updating their guidance regarding environmental justice and we will review and incorporate that anticipated guidance in our future analysis, as appropriate.

<sup>91</sup> Final EIS at 4-191. For this project, we determined that a 54-kilometer radius around the proposed aboveground facilities was the appropriate unit of geographic analysis for assessing project impacts on the environmental justice communities. A 54-kilometer radius represents the furthest extent of impacts on environmental justice communities.

<sup>92</sup> Final EIS at 4-191.

LNG terminal (with the closest residence, ship pilots' temporary housing, approximately 3,300 feet away) and Census Tract 9701, Block Group 1 approximately 2.7 miles from the proposed Commonwealth LNG pipeline.<sup>93</sup> The closest town within an environmental justice community is Cameron (within Census Tract 9702.01, Block Group 3), which is over 2 miles away from the terminal site.<sup>94</sup> With respect to the Park and Ride commuter parking lot locations, only one block group is an environmental justice community (Census Tract 33, Block Group 2). That community is within 1 mile of a Park and Ride lot.<sup>95</sup>

51. The final EIS determined that potential impacts on the identified environmental justice communities may relate to wetlands, surface water, aquatic resources, recreation, tourism, socioeconomics, traffic, noise, air quality, safety, and visual resources.<sup>96</sup> Environmental justice concerns are not present for other resource areas such as geology, groundwater, wildlife, land use, or cultural resources, due to the minimal overall impact the project would have on these resources.<sup>97</sup>

### a. <u>Wetlands</u>

52. The final EIS finds that project impacts on wetlands would be short-term and temporary during construction, and permanent during operation.<sup>98</sup> While all the wetland impacts would be outside the boundaries of the identified environmental justice communities, the loss of wetland habitat, and the subsequent decrease in wetland benefits (i.e. shoreline and habitat protection for a variety of plant and animal species that can be used for recreation and/or sustenance, and recreation and education opportunities), could affect those environmental justice communities near the project, particularly the community located in Census Tract 9702.01, Block Group 3.<sup>99</sup> However, the total impacted wetland area for the project (89.9 acres) represents about 0.3% of the approximately 27,000 acres of wetlands contained within the HUC 12 watershed, in which

<sup>93</sup> Final EIS at 4-191 to 4-192, 4-198.

<sup>94</sup> Final EIS at 4-198.

<sup>95</sup> Final EIS at 4-191.

<sup>96</sup> Final EIS at 4-192, 4-194 to 4-198.

<sup>97</sup> Final EIS at 4-192.

<sup>98</sup> Final EIS at 4-194.

<sup>99</sup> See Final EIS at 4-194.

the project is located.<sup>100</sup> In addition, through implementation of the measures in Commonwealth's revised *Workspace Restoration Plan* and project-specific *Wetland and Waterbody Construction and Mitigation Procedures* and Commonwealth's compliance with Clean Water Act permitting,<sup>101</sup> impacts on wetlands would be minimized and mitigated and would not have a significant impact on environmental justice communities.<sup>102</sup> Environmental justice communities in the study area would experience cumulative impacts on wetlands; however, cumulative impacts on wetlands would be less than significant.<sup>103</sup> We agree with staff's conclusions.

## b. <u>Surface Water</u>

Regarding surface water, the final EIS finds that construction and operation of the 53. terminal would permanently impact two unnamed waterbodies (a drainage ditch and a tidal slough) within the project area and would both temporarily (during construction) and permanently (during operation) impact portions of the adjacent Calcasieu Ship Channel.<sup>104</sup> As stated in the final EIS, these impacts would result from dredging activities, site construction, marine traffic, stormwater runoff, water use, hydrostatic testing, and could occur from accidental spills or other releases of hazardous substances.<sup>105</sup> Environmental justice communities in proximity to the project, particularly the community located in Census Tract 9702.01, Block Group 3, would be affected most by dredging and resuspension of sediments. Commonwealth would attempt to minimize waterbody impacts by minimizing the amount of dredging needed within the Calcasieu Ship Channel.<sup>106</sup> Further, Commonwealth would minimize impacts on water quality by using a hydraulic suction dredge, where turbidity would be focused close to the river bottom and would equate to a storm event within a short distance of the cutterhead. The final EIS concludes impacts on environmental justice communities related to surface water would not be significant.<sup>107</sup> Environmental justice communities in the study area would experience

<sup>100</sup> Final EIS at 4-194.

<sup>101</sup> See Final EIS at section 4.4.2.

<sup>102</sup> Final EIS at 4-194.

<sup>103</sup> Final EIS at 4-383 to 4-384.

<sup>104</sup> Final EIS at 4-194.

<sup>105</sup> Final EIS at 4-194.

<sup>106</sup> Final EIS at 4-194.

<sup>107</sup> Final EIS at 4-194.

cumulative impacts on surface water; however, these impacts would be less than significant.<sup>108</sup> We agree.

54. As stated in the final EIS, construction and operation of the terminal, as well as marine traffic to and from the terminal, have the potential to adversely impact water quality in the event of an accidental release of a hazardous substance such as fuel, lubricants, coolants, or other material.<sup>109</sup> Environmental condition 1 in the appendix of this order requires Commonwealth to implement the measures outlined in the FERC's *Upland Erosion Control, Revegetation and Maintenance Plan* and Commonwealth's *Wetland and Waterbody Construction and Mitigation Procedures* to minimize the likelihood of a spill and to implement its *Spill Prevention and Response Plan* in the event of a spill. If an accidental release were to occur, environmental justice communities along the ship channel, particularly the community in Census Tract 9702.01, Block Group 3, as well as individuals from these communities that use the channel, would be affected.<sup>110</sup> With the mitigation measures, the final EIS concludes that environmental justice communities communities would not be significantly impacted by an accidental release.<sup>111</sup>

55. EPA comments that the Commission should provide a brief discussion of the potential impact and mitigation measures for any potential induced flooding to the adjacent environmental justice communities associated with the construction of proposed project facilities, holistically.<sup>112</sup> The final EIS states the terminal is in a FEMA floodplain and the area inside the storm surge wall would encompass 84.5 acres and 1.4 million cubic meters within the floodplain.<sup>113</sup> The area within the storm surge wall would represent 0.15 % of the total acres in the watersheds in which the project is located. In an average storm surge, the volume displaced by the area within the storm surge walls would represent 0.13 % of the overall floodplain capacity. The final EIS concludes that impacts are very small in relation to the overall floodplain and would not be expected to impact flooding.<sup>114</sup> Therefore, impacts on environmental justice communities due to induced flooding are not anticipated.

<sup>108</sup> Final EIS at 4-384.

- <sup>109</sup> Final EIS at 4-194.
- <sup>110</sup> Final EIS at 4-194.
- <sup>111</sup> Final EIS at 4-194.

<sup>112</sup> EPA October 14, 2022 Comments at 1-2.

<sup>113</sup> Final EIS at 4-78.

<sup>114</sup> Final EIS at 4-78.

#### c. <u>Aquatic Resources</u>

Recreational and commercial fishing could be impacted by construction activities 56. associated with the terminal. As stated in the final EIS, project activities are anticipated to occur during peak fishing and recreational seasons; however, due to the overall size of the waterway and access to and maneuverability within the Calcasieu Ship Channel, fishing and recreational activities would not be significantly affected by the proposed use of barges.<sup>115</sup> Temporary impacts on recreational and commercial users in the Calcasieu Ship Channel, who would likely include individuals from environmental justice communities, may occur in construction areas.<sup>116</sup> Permanent impacts on recreational and commercial fisheries in the ship channel, as well as on individuals from environmental justice communities, may occur due to the loss of available fishing areas from operation of the marine facilities and LNG carrier traffic. However, although the final EIS finds that fish, crab, and shrimp species common to the bay could be present, the area in which project activities occur does not have any unique features or habitat characteristics that would draw recreational or commercial users to this particular location versus other locations within the Calcasieu Ship Channel.<sup>117</sup> Given these characteristics, and due to the overall size of the waterway, the final EIS concludes that these impacts on environmental justice communities would not be significant.<sup>118</sup> Environmental justice communities in the study area would experience cumulative impacts on aquatic resources; however, these impacts would be less than significant.<sup>119</sup> We agree.

### d. <u>Tourism</u>

57. The EIS finds that no significant impacts on tourism are anticipated from the project for environmental justice communities.<sup>120</sup> As stated in the EIS, the main tourist attraction near the terminal is Holly Beach.<sup>121</sup> There are several access points to Holly Beach near the terminal that may experience visual and/or noise impacts. Given these impacts, Holly Beach users may choose to access the beach near the town, which is

<sup>115</sup> Final EIS at 4-195.

- <sup>116</sup> Final EIS at 4-195.
- <sup>117</sup> Final EIS at 4-195.
- <sup>118</sup> Final EIS at 4-195.
- <sup>119</sup> Final EIS at 4-384.
- <sup>120</sup> Final EIS at 4-196.
- <sup>121</sup> Final EIS at 4-196.

further from the site and would not be subject to significant visual or noise impacts. Given the availability of alternate areas on Holly Beach, further from the facility, the final EIS concludes that a decrease in visits would not be anticipated and impacts on environmental justice communities associated with tourism (e.g. loss of revenue from tourism) would not be significant.<sup>122</sup> Environmental justice communities in the study area would experience cumulative impacts on tourism; however, these impacts would be less than significant.<sup>123</sup> We agree with these conclusions.

## e. <u>Socioeconomics</u>

Regarding socioeconomics, as stated in the EIS, the temporary influx of 58. workers/contractors into the area could increase the demand for community services, such as housing, police enforcement, and medical care.<sup>124</sup> An influx of workers could also affect economic conditions and other community infrastructure. However, sufficient housing units would be available and impacts on community services would be mitigated.<sup>125</sup> Based on the foregoing, the final EIS concludes that socioeconomic impacts on environmental justice communities would be less than significant.<sup>126</sup> EPA recommends that the Commission "conduct a socioeconomic cost analysis of financial impact to the historically overburden and disadvantage populations due to increase in property taxes, material goods, housing, etc."<sup>127</sup> As stated in the final EIS, several large LNG terminal projects have been proposed or approved that could have overlapping construction schedules with the Commonwealth LNG Project including Cameron LNG Expansion, Driftwood LNG, Lake Charles LNG, and CP2 LNG.<sup>128</sup> Combined, these additional projects could require a peak of more than 20,000 workers, a 10 percent increase in the current population.<sup>129</sup> The temporary flux of workers/contractors into the area from all of these projects would increase the demand for housing. Should other major industrial projects listed in table 4.13-2 of the final EIS be constructed at the same

<sup>122</sup> Final EIS at 4-196.

<sup>123</sup> Final EIS at 4-384.

<sup>124</sup> Final EIS at 4-196.

<sup>125</sup> Final EIS at 4-180 & 4-182 to 4-184.

<sup>126</sup> Final EIS at 4-196.

<sup>127</sup> EPA October 14, 2022 Comments at 2.

<sup>128</sup> Final EIS at 4-385.

<sup>129</sup> Final EIS at 4-385.

time as Commonwealth, 3,500 units would still be available.<sup>130</sup> This cumulative increased demand for housing could drive costs up, increase property taxes, and adversely impact low-income individuals.<sup>131</sup> An increase in costs of material goods may also occur due to increased demand for these goods. However, impacts on property values, property taxes, and costs of material goods from the project alone are not anticipated. Consequently, while environmental justice communities in the study area would experience cumulative impacts on socioeconomic resources, these impacts would be less than significant.<sup>132</sup> We agree with staff's conclusions.

## f. <u>Road and Marine Traffic</u>

59. The final EIS finds that area residents may be affected by traffic delays during construction of the project.<sup>133</sup> Project construction would temporarily increase use of area roads by heavy construction equipment and associated trucks and vehicles. Increased use of these roads would result in a higher volume of traffic, increased commute times, and greater risk of vehicle accidents.<sup>134</sup> These impacts would most likely affect environmental justice communities near the project, such as Cameron (Census Tract 9702.01 Block Group 3) and Hackberry (Census Tract 9702.01 Block Group 1), as well as those communities to the north where workers would most likely find housing.<sup>135</sup> Commonwealth would implement mitigation measures to alleviate any potential road congestion during construction, including the use of bus lots in Carlyss, Louisiana, and the establishment of temporary travel lanes and the use of flaggers and signs, as necessary, to ensure the safety of local traffic.<sup>136</sup> Once construction is complete, Commonwealth estimates that operation would average about 75 light vehicles per day and 10 heavy vehicles (i.e., trucks) per day. The project would not result in a change in the roadway

- <sup>130</sup> Final EIS at 4-385 to 4-386.
- <sup>131</sup> Final EIS at 4-385 to 4-386.
- <sup>132</sup> Final EIS at 4-385 to 4-386.
- <sup>133</sup> Final EIS at 4-196.
- <sup>134</sup> Final EIS at 4-196.
- <sup>135</sup> Final EIS at 4-196.
- <sup>136</sup> Final EIS at 4-196.

level of service<sup>137</sup> for any of the area roadways during construction or operation.<sup>138</sup> Therefore, the final EIS concludes that traffic impacts on environmental justice communities would be less than significant.<sup>139</sup> Environmental justice communities in the study area would experience cumulative impacts associated with traffic; however, these impacts would be less than significant.<sup>140</sup> EPA recommends the Commission ensures the alternative plan for crossing Highway 27/82 would not further disproportionally adversely impact the environmental justice populations near the proposed Project.<sup>141</sup> This crossing location is not located within an environmental justice community (Census Tract 9702.01, Block Group 2) and impacts would be localized and would not have an impact on environmental justice communities.

60. As stated in the EIS, barge deliveries would occur throughout the project's 36- to 38-month construction period, with a higher number of deliveries expected to occur during certain phases of construction.<sup>142</sup> During operations, up to 156 LNG carriers would call at the terminal per year.<sup>143</sup> Because the terminal site is near the mouth of the ship channel, the final EIS concludes that barge deliveries would not result in significant impacts on marine traffic in the ship channel.<sup>144</sup> In addition, the final EIS concludes that recreational boaters and fishers, which likely include individuals from environmental justice communities, would not experience significant changes in marine traffic.<sup>145</sup> We agree.

## g. <u>Noise</u>

61. As stated in the final EIS, noise levels above ambient conditions, attributable to construction activities, would vary over time and would depend upon the nature of the

<sup>138</sup> Final EIS at 4-196.

<sup>139</sup> Final EIS at 4-196 to 4-197.

<sup>140</sup> Final EIS at 4-386 to 4-387.

<sup>141</sup> EPA October 14, 2022 Comments at 2.

<sup>142</sup> Final EIS at 4-197.

<sup>143</sup> Final EIS at 4-197.

<sup>144</sup> Final EIS at 4-197.

<sup>145</sup> Final EIS at 4-197.

<sup>&</sup>lt;sup>137</sup> Level of service (LOS) is a term used to describe the operating conditions of a roadway based on factors such as speed, travel time, maneuverability, delay, and safety.

construction activity, the number and type of equipment operating, and the distance between sources and receptors.<sup>146</sup> The closest noise sensitive area (NSA) located within an environmental justice community (Census Tract 9702.01 Block Group 3) is about 3,300 feet east of the proposed terminal site and is a set of buildings on the southern tip of Monkey Island used to house Calcasieu Ship Channel pilots.<sup>147</sup> Peak construction noise related to project activities would increase noise levels over ambient by 7 decibels on the A-weighted scale at this NSA and would be temporary. The majority of construction activities at the terminal would occur during daytime hours and prior to 10 p.m., with the exception of dredging activities. As recommended in the final EIS,<sup>148</sup> environmental conditions 19 and 20 in the appendix to this order require that Commonwealth monitor noise levels between 7 p.m. to 7 a.m. to ensure noise levels during these hours are less than our criterion of 48.6 decibels on the A-weighted scale at the nearest NSA (see environmental condition 18 in the appendix to this order). Operational noise associated with the terminal site would be persistent and would increase noise levels over ambient by about 3 decibels at the closest NSA. In addition, as recommended in the final EIS,<sup>149</sup> environmental conditions 19 and 20 in the appendix to this order require Commonwealth to meet sound level requirements. The final EIS concludes that the project would not result in significant noise impacts on local residents and the surrounding communities, including environmental justice populations.<sup>150</sup> Environmental justice communities in the study area would experience cumulative impacts related to noise; however, these impacts would be less than significant.<sup>151</sup> We agree.

## h. <u>Air Quality</u>

62. As explained in the final EIS, construction and operation of the terminal site would result in long-term impacts on air quality.<sup>152</sup> Construction air emissions from the project, when considered with current background concentrations, would be below the National Ambient Air Quality Standards (NAAQS), which are designated to protect public health. Environmental condition 1 in the appendix to this order requires Commonwealth to

<sup>146</sup> Final EIS at 4-197.

- <sup>147</sup> Final EIS at 4-197.
- <sup>148</sup> Final EIS at 4-241.
- <sup>149</sup> Final EIS at 4-245.
- <sup>150</sup> Final EIS at 4-197.
- <sup>151</sup> Final EIS at 4-387.
- <sup>152</sup> Final EIS at 4-197.

mitigate exhaust emissions during construction by using construction equipment and vehicles that comply with EPA mobile and non-road emission regulations, and usage of commercial gasoline and diesel fuel products that meet specifications of applicable federal and state air pollution control regulations. Further, environmental condition 1 in the appendix to this order requires Commonwealth to mitigate fugitive dust by applying water to the roadways and reducing vehicle speeds. The final EIS concludes that construction-related impacts on local air quality would not be significant.<sup>153</sup>

The final EIS states that Commonwealth conducted air dispersion modeling to 63. assess operational air quality impacts and show compliance with applicable NAAQS and Class II Prevention of Significant Deterioration (PSD) Increments for the pollutants subject to PSD review.<sup>154</sup> Additionally, staff modeled the impacts of mobile sources (LNG carriers and tugs) in addition to the PSD and NAAQS modeling required by the state. The cumulative modeling indicated that operation of the project (including LNG terminal stationary sources and mobile sources) may contribute to a potential nitrogen dioxide (NO<sub>2</sub>) 1-hour NAAQS exceedance; however, the project's contribution (including LNG stationary and mobile sources) would be less than the significant impact level at each exceedance location.<sup>155</sup> A majority of these potential exceedances within the modeled area would be within environmental justice communities.<sup>156</sup> Commonwealth's contribution to all exceedances is estimated to be less than the significant impact level at all exceedance locations. Although the project would be in compliance with the NAAQS and the NAAQS are designated to protect sensitive populations, the final EIS acknowledges that NAAQS attainment alone may not ensure there is no localized harm to such populations due to project emissions of volatile organic compounds, hazardous air pollutants, as well as issues such as the presence of non-project related pollution sources, local health risk factors, disease prevalence, and access (or lack thereof) to adequate care.<sup>157</sup> The final EIS concludes that that the project would not cause or significantly contribute to a potential exceedance of the NAAQS and would not result in significant impacts on air quality in the region.<sup>158</sup> Environmental justice communities in the study area would experience

- <sup>153</sup> Final EIS at 4-197.
- <sup>154</sup> Final EIS at 4-198.
- <sup>155</sup> Final EIS at 4-198.
- <sup>156</sup> Final EIS at 4-198.
- <sup>157</sup> Final EIS at 4-198.
- <sup>158</sup> Final EIS at 4-198.

cumulative impacts on air quality; however, these impacts would be less than significant.<sup>159</sup> We agree.

### i. <u>Safety</u>

64. Commission staff evaluated potential impacts from incidents identified along the LNG marine vessel transit route and at the LNG terminal, including potential impacts to people with access and functional needs as defined in National Fire Protection Association (NFPA) 1600, Standard on Continuity, Emergency, and Crisis Management<sup>160</sup> and NFPA 1616, Standard on Mass Evacuation, Sheltering, and Re-Entry Programs.<sup>161</sup> The worst-case distances from these potential incidents would potentially impact three block groups, two of which are considered environmental justice communities. The block groups located with environmental justice communities that exceed the thresholds for minority and low income would include Census Tract 9702.01, Block Group 3 (based on the low-income threshold); and Census Tract 9701, Block Group 1 (based on the minority threshold).<sup>162</sup>

65. Should a catastrophic incident or other more likely emergency occur at the Commonwealth LNG terminal or at the LNG marine vessel along its route, people in environmental justice communities, including those with access and functional needs, could experience significant public safety impacts. However, Commission staff has determined that the risk (i.e., likelihood and consequence) of accidental and intentional events would be less than significant with implementation of the proposed safety and security measures recommendations. We agree and adopt all recommendations herein as Environmental Conditions 21 through 128, including the additional Environmental Condition on emergency response as a result of the PHMSA LOD. These measures further enhance the safety and security of the engineering design of the layers of protection for review subject to the approval by Commission staff and in accordance with recommended and generally accepted good engineering practices, which go above the minimum federal safety standards for the LNG terminal and LNG marine vessel promulgated in PHMSA and USCG regulations, such that they would further reduce the

<sup>159</sup> Final EIS at 4-387 to 4-388.

<sup>160</sup> Freely and publicly accessible to view in English and Spanish at NFPA, https://www.nfpa.org/codes-and-standards/allcodes-and-standards/list-of-codes-and-standards/detail?code=1600, accessed March 2022.

<sup>161</sup> Freely and publicly accessible to view in English only at NFPA, https://www.nfpa.org/codes-and-standards/all-codesand-standards/list-of-codes-andstandards/detail?code=1616, accessed March 2022. *See* Final EIS at 4-315.

<sup>162</sup> Final EIS at 4-315.

risk of incidents impacting the public to less than significant levels, including impacts to environmental justice communities.<sup>163</sup> We agree with this conclusion. We encourage Commonwealth to engage with the two potentially impacted environmental justice communities<sup>164</sup> as it develops an Emergency Response Plan (ERP) in accordance with Environmental Condition 37.

# j. <u>Visual Impacts</u>

66. Commonwealth disputes staff's significance finding on environmental justice communities for visual resources, stating the "only rationale for such a finding is that members of an environmental justice community may visit Holly Beach, and depending on where they access the beach, the project could be highly visible."<sup>165</sup> The LNG terminal would be constructed on marshland within the Calcasieu Ship channel and existing industrial sites to the east, sandy shoreline and the Gulf of Mexico to the south, marshland and the town of Holly Beach to the west, and marshland to the north. As stated in the final EIS, construction of the LNG terminal would result in a permanent change in the viewshed and would add an industrial element to the area.<sup>166</sup>

67. Moreover, the final EIS explained that in addition to visual impacts on individuals from environmental justice communities who visit Holly Beach, the facility and associated project lighting will be visible from various locations within environmental justice communities. Specifically, daytime and nighttime visual renderings of the Commonwealth LNG terminal indicate that the facility and associated project lighting will be visible from environmental justice communities and up to distances of 10 miles from the terminal.<sup>167</sup> In addition, the facility would also be visible from portions of Census Tract 9702.01, Block Group 3, which is considered an environmental justice community and visible from the town of Cameron an environmental justice community 2.4 miles east across the ship channel. There are also several buildings at the southern tip of Monkey Island, within environmental justice Census Tract 9702.01, Block Group 3, that house Lake Charles ship pilots and their offices.<sup>168</sup> These buildings have a direct and

<sup>164</sup> See supra P 64 (environmental justice communities in Census Tract 9702.01, Block Group 3 and Census Tract 9701, Block Group 1).

<sup>165</sup> Commonwealth October 27, 2022 Comments at 3.

<sup>166</sup> Final EIS at 4-195.

<sup>167</sup> See Final EIS at app. E, fig. E-3, E-7, & E-8.

<sup>168</sup> Final EIS at 4-195.

<sup>&</sup>lt;sup>163</sup> Final EIS at 4-316.

uninhibited view of the terminal site. The final EIS concludes that while the direct visual changes would be outside the boundaries of the identified environmental justice communities, the permanent changes in the viewshed would have a permanent and significant adverse effect on those environmental justice communities near the project.<sup>169</sup> We agree.

Commission staff also determined that environmental justice communities would 68. experience significant cumulative visual impacts. Staff analyzed the cumulative impacts along the Calcasieu Ship Channel (including impacts from facilities in Cameron and just to the north of Cameron) and determined that the project would adversely contribute to visual impacts on users of the Calcasieu Ship Channel, users of Holly and Broussard Beaches, residents in the town of Cameron, and motorists along the Creole Nature Trail All-American Road.<sup>170</sup> While the extent of impacts would vary depending on the proximity to the sites, environmental justice communities may experience significant visual changes from the construction of additional sites, flares, lighting, and storage tanks for several miles. Daytime and nighttime visual renderings of the Commonwealth LNG terminal indicate that the project lights will be visible from environmental justice communities and up to distances of 10 miles from the terminal.<sup>171</sup> In addition to the visual impacts from the Commonwealth LNG terminal, Calcasieu Pass (0.3 miles from the Project) and CP2 LNG (1.3 miles from the Project) will have clearly visible features from LNG storage tanks, flares, facility lighting, and LNG vessels. Additionally, Port Louisiana (1.1 miles from the Project) will contribute to visual impacts from loading cranes, industrial buildings, facility lighting, and vessels. Although the Commonwealth project is not located within an environmental justice block group, Calcasieu Pass, CP2 LNG, and Port Louisiana are located within environmental justice block groups (Census Tract 9702.01, Block Group 3 and Census Tract 9701.00, Block Group 1) along the Calcasieu Ship Channel and are located within 1.3 miles of the Project.<sup>172</sup> The final EIS concluded, and we agree, that Commonwealth and the mentioned facilities will contribute to the surrounding area's heavy nighttime lighting and will detract from the overall quality of the scenic views of the surrounding area.<sup>173</sup>

<sup>169</sup> Final EIS at 4-195.

- <sup>170</sup> Final EIS at 4-172.
- <sup>171</sup> See Final EIS at fig. E-3, E-7, & E-8.
- <sup>172</sup> See Final EIS at fig. 4.9-1 & fig. 4.12-2.
- <sup>173</sup> See Final EIS at 4-173.

### k. <u>Sufficiency of Cumulative Impacts Analysis</u>

69. EPA comments that the Commission should assess the cumulative adverse environmental impact of the proposed project and other Commission projects on the environmental justice population.<sup>174</sup> Cumulative impacts were addressed in the final EIS and are noted above.<sup>175</sup> The final EIS concludes that environmental justice communities in the study area would experience less than significant adverse cumulative impacts on wetlands, surface water, aquatic resources, socioeconomics, traffic, noise, and air quality.<sup>176</sup> However, the final EIS concluded that adverse cumulative visual impacts related to the project and the additional projects within the geographic scope would be significant.<sup>177</sup> We agree with these conclusions.

## I. <u>Environmental Justice Conclusion</u>

70. As described throughout the final EIS, the proposed project would have a range of impacts on the environment and on individuals living in the vicinity of the project facilities, including environmental justice populations. The closest environmental justice block groups are Census Tract 9702.01, Block Group 3 approximately 0.1 mile from the LNG terminal (with the closest residence, ship pilots' temporary housing, approximately 3,300 feet away) and Census Tract 9701, Block Group 1 approximately 2.7 miles from the pipeline.<sup>178</sup> The closest town within an environmental justice community is Cameron (within Census Tract 9702.01, Block Group 3) over 2 miles away.<sup>179</sup> The final EIS concludes that, with respect to the resources with potential impacts on environmental justice communities near the terminal, direct and cumulative visual impacts would be significant.<sup>180</sup> We agree.

71. Commonwealth states that the finding in the final EIS that impacts on environmental justice communities would be disproportionately high and adverse is not

<sup>174</sup> EPA October 14, 2022 Comments at 2.

<sup>175</sup> Final EIS at 4-383 to 4-388; see also supra PP 52-63, & 68.

<sup>176</sup> Final EIS at 4-388.

<sup>177</sup> Final EIS at 4-388.

<sup>178</sup> Final EIS at 4-198.

<sup>179</sup> Final EIS at 4-198.

<sup>180</sup> Final EIS at 4-198, 4-199, & 4-388.

well founded or justified.<sup>181</sup> With respect to whether impacts on environmental justice communities would be disproportionately high and adverse, we clarify that only cumulative impacts to visual resources would be predominately borne by environmental justice communities and thus disproportionately high and adverse. All other direct and cumulative impacts would not be disproportionately high and adverse. While environmental justice and non-environmental justice block groups near the project's terminal would both experience significant direct and cumulative visual impacts, the cumulative visual impacts would be predominately borne by environmental justice communities due to the cumulative adverse visual impacts from this project when considered along with the visual impacts from Calcasieu Pass, CP2 LNG, and Port Louisiana, all of which are located within environmental justice block groups, as noted above. Due to these substantial light-emitting facilities (ranging from 230 to 672 acres in size) within and immediately adjacent to surrounding environmental justice communities, we conclude that cumulative visual impacts on environmental justice communities would be disproportionately high and adverse as these impacts would be predominantly borne by environmental justice communities.<sup>182</sup>

72. EPA requests the Commission implement measures to mitigate, eliminate and/or avoid disproportionately high and adverse impacts to environmental justice communities.<sup>183</sup> As described above, direct and cumulative visual impacts on environmental justice communities near the terminal would be significant and cumulative visual impacts on environmental justice communities would be disproportionately high and adverse. Environmental condition 1 in the appendix of this order requires Commonwealth to implement the mitigation measures described in the Commonwealth Facility Lighting Plan, which would reduce visual impacts from facility lighting. Environmental condition 1 also requires Commonwealth to avoid disturbance of the native vegetation within the terminal exclusion buffer area, which will provide over 1,300 feet of vegetated buffer. However, the LNG facility is located within the Chenier Plain, which is almost treeless. To augment the native vegetation, environmental condition 1 requires Commonwealth to plant native sugarberry (Celtis laevigata) trees of 15-25- gallon size on 15-foot centers approximately 30 feet inside Commonwealth's exclusion fence for approximately 150 feet on the upland chenier area (i.e., their typical landscape position). Although these trees will provide some level of visual screening, the mature height of the native trees of the Chenier Plain is relatively low compared to the LNG facility's structures, which will still be visible. Although Commonwealth is required to implement the mitigation described above, significant direct and cumulative visual impacts would still occur and cumulative visual

<sup>&</sup>lt;sup>181</sup> Commonwealth October 27, 2022 Comments at 3-4.

<sup>&</sup>lt;sup>182</sup> See Final EIS at 4-199.

<sup>&</sup>lt;sup>183</sup> EPA October 14, 2022 Comments at 1.

impacts on environmental justice communities would remain disproportionately high and adverse.

### 5. <u>Greenhouse Gas Emissions and Climate Change</u>

73. The CEQ defines effects or impacts as "changes to the human environment from the proposed action or alternatives that are reasonably foreseeable," which include those effects that "occur at the same time and place" and those that "are later in time or farther removed in distance, but are still reasonably foreseeable."<sup>184</sup> An impact is reasonably foreseeable if it is "sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision."<sup>185</sup>

74. For this proposed action, the reasonably foreseeable and causally connected greenhouses gases (GHG) emissions are emissions associated with the project's construction and operation. The final EIS estimates that construction of the project would result in 547,314 tons of carbon dioxide equivalent (CO<sub>2</sub>e) emissions (equivalent to 496,515 metric tons of CO<sub>2</sub>e) over the 4 years of construction, inclusive of pipeline, terminal, barge, and commissioning emissions.<sup>186</sup> GHG emissions from the operation of the project would result in an annual increase of CO<sub>2</sub>e emissions of about 3,559,091 tons per year (tpy) (equivalent to 3,228,754 metric tpy).<sup>187</sup>

75. The final EIS compared the project's GHG emissions to the total GHG emissions of the United States as a whole and at the state level, which allows us to contextualize the project's projected emissions.<sup>188</sup> In addition, our NEPA analysis included a qualitative analysis of the project's climate impacts<sup>189</sup> and acknowledge that the project would increase the atmospheric concentration of GHGs, and would contribute cumulatively to climate change.<sup>190</sup> Additionally, when states, such as Louisiana, have GHG emissions reduction targets, we will compare a project's GHG emissions to those state goals to

<sup>184</sup> 40 C.F.R. § 1508.1(g) (2021).

<sup>185</sup> 40 C.F.R. § 1508.1(aa).

<sup>186</sup> See Final EIS at 4-213 to 4-220, tbls. 4.11.1-4, 4.11.1-5, & 4.11.1-6.

<sup>187</sup> See Final EIS at 4-224, tbls. 4.11.1-7.

<sup>188</sup> Final EIS at 4-396 (finding that the project's operational emissions could potentially increase  $CO_2$  emissions based on the 2020 national levels by 0.06% and potentially increase  $CO_2$ e emissions based on Louisiana's 2019 levels by 1.7%).

<sup>189</sup> Final EIS at 4-395.

<sup>190</sup> Final EIS at 4-396.

provide additional context.<sup>191</sup> We have done so in the EIS.<sup>192</sup> The calculation shows the percentage difference that the project's annual increase in CO<sub>2</sub>e emissions would make towards the state's GHG reduction targets. The Commission does not determine whether an individual project's GHG emissions comply with the state's goals. Last, the final EIS disclosed the social cost of GHGs associated with the project's reasonably foreseeable GHG emissions.<sup>193</sup> By adopting the climate impact analysis in the EIS, we recognize that the project may release GHG emissions that contribute incrementally to future global climate change impacts,<sup>194</sup> and have identified climate change impacts in the region.<sup>195</sup> In light of this analysis, and because we are conducting a generic proceeding to determine whether and how to Commission will conduct significance determinations for GHG emissions going forward, the Commission is not herein characterizing these emissions as significant or insignificant.<sup>196</sup>

76. NRDC urges the Commission to wait to conduct NEPA analysis until the Commission decides how it will determine the significance of GHG emissions.<sup>197</sup>

<sup>191</sup> See Tex. E. Transmission, LP, 180 FERC ¶ 61,186, at P 28 (2022) and Golden Pass Pipeline, LLC, 180 FERC ¶ 61,058, at P 21 (2022).

<sup>192</sup> Final EIS at 4-396 to 397 (finding that the project's GHG emissions from the operation of the terminal would represent 3.2% of Louisiana's 2030 projected GHG emission levels, assuming Louisiana achieves its planned reductions from the state's 2005 levels).

<sup>193</sup> Final EIS at 4-397 to 4-398.

<sup>194</sup> Final EIS at 4-396.

<sup>195</sup> Final EIS at 4-395.

<sup>196</sup> On February 17, 2022, the Commission issued the Updated Certificate Policy Statement and an Interim GHG Policy Statement. *Certification of New Interstate Nat. Gas Facilities Consideration of Greenhouse Gas Emissions in Nat. Gas Infrastructure Project Revs.*, 178 FERC ¶ 61,197 (2022). The Interim GHG Policy Statement established a NEPA significance threshold of 100,000 tons per year of carbon-dioxideequivalent (CO2e) as a matter of policy, which was meant to serve as interim guidance for project applicants and stakeholders and the Commission sought public comment on the statement. On March 24, 2022, the Commission, upon further consideration, made both statements draft and stated that it would not apply either statement to pending or new projects until the Commission issues any final guidance after public comment. Interim GHG Policy Statement, 178 FERC ¶ 61,197 at P 2.

<sup>197</sup> NRDC May 23, 2022 Comments at 25-27.

However, the Commission has sufficient information to proceed. It has quantified and contextualized the project's construction and operational GHG emissions,<sup>198</sup> recognized that the project's contributions to GHG emissions will incrementally contribute to future global climate change impacts, and described those potential impacts in the region. Having substantively complied with NEPA, it is reasonable for the Commission to act on Commonwealth's application.<sup>199</sup>

77. Commenters generally assert that the Commission should analyze GHG emissions relating to upstream production and downstream consumption of the natural gas that would be exported from the Commonwealth LNG Project facilities.<sup>200</sup> As we have repeatedly held,<sup>201</sup> under *Sierra Club v. FERC (Freeport)*,<sup>202</sup> the Commission need not consider the effects of upstream production or downstream transportation, consumption, or combustion of exported gas because the DOE's "independent decision to allow exports . . . breaks the NEPA causal chain and absolves the Commission of responsibility to include [these considerations] in its NEPA analysis."<sup>203</sup>

78. The Environmental Coalition argues that the Commission must still consider upstream and downstream emissions because (1) the analysis would inform Commission decisionmaking on whether to require additional mitigation or avoidance of direct effects at the terminal site<sup>204</sup> and (2) "DOE's evaluation of Commonwealth LNG's exports is a

<sup>198</sup> WildEarth Guardians v. Jewell, 738 F.3d 298, 309 (D.C. Cir. 2013).

<sup>199</sup> See e.g., Columbia Gulf Transmission, LLC, 180 FERC ¶ 61,206, at P 87 & n.206 (2022); see also, e.g., Sierra Club v. FERC, 38 F.4th 220, 226 (D.C. Cir. 2022) ("NEPA requires agencies to 'take a hard look at the environmental consequences before taking a major action.") (quoting *Balt. Gas & Elec. Co. v. Nat. Resources Def. Council, Inc.*, 462 U.S. 87, 97 (1983) (internal quotation marks omitted)); *Del. Riverkeeper Network*, 45 F.4th at 108 ("An agency's compliance with NEPA's requirements is also reviewed under the APA's arbitrary and capricious standard.") (citation omitted).

<sup>200</sup> Final EIS at 4-398. *See, e.g.*, EPA May 23, 2022 Comments at 2; Environmental Coalition May 23, 2022 Comments at 16, 19-20.

<sup>201</sup> See Columbia Gulf Transmission, LLC, 178 FERC ¶ 61,198, at P 46, order on reh'g, 180 FERC ¶ 61,206, at P 78 (2022).

<sup>202</sup> 827 F.3d 36.

<sup>203</sup> *Id.* at 48; see also Final EIS at 4-398 (citing *Freeport*, 148 FERC ¶ 61,076).

<sup>204</sup> Environmental Coalition May 23, 2022 Comments at 19 (citing 15 U.S.C. § 717b(e)(3)(A)).

connected action that cannot be segmented from FERC's review of the terminal project, and FERC, as lead agency, must inform DOE's decisionmaking as well."<sup>205</sup> Specifically, the Environmental Coalition asserts that a comprehensive analysis of related project impacts could persuade the Commission that the project's direct impacts rise to the level of significance when combined with the indirect impacts of DOE's connected action, which could then persuade the Commission to require additional mitigation of those direct impacts (for example, by requiring carbon capture and sequestration).<sup>206</sup> The Environmental Coalition also states that the *Freeport* court explicitly declined to analyze whether the Commission's responsibility under the NGA to act as "lead agency" or the prohibition against segmentation of NEPA analysis of interconnected actions requires the Commission to consider indirect upstream and downstream impacts.<sup>207</sup>

79. NRDC states that the Commission cannot defer climate analysis to DOE, especially as DOE has disclaimed authority to consider upstream impacts from export-induced gas production, and must consider the global emissions of the project, citing CEQ's April 2022 final rule that restored the 1978 definition of "effects" under NEPA.<sup>208</sup>

80. We are not persuaded that these arguments lead to a different outcome than the court reached in *Freeport*. As we have recently explained in response to similar arguments:

NGA section 15(b)(1) directs the Commission to act as "lead agency for the purposes of coordinating all applicable Federal authorizations and for the purposes of complying with the National Environmental Policy Act." Although the lead agency supervises the preparation of the environmental document where more than one federal agency is involved, the "lead agency" designation does not alter the scope of the project before the Commission either for approval or

<sup>208</sup> NRDC May 23, 2022 Comments at 27-29.

<sup>&</sup>lt;sup>205</sup> Environmental Coalition May 23, 2022 Comments at 16, 19-21. The Environmental Coalition further argues that *Freeport* was wrongly decided. *Id.* at 16-19. The Commission is not free to ignore controlling precedent, as the comments acknowledge, and declines to ask the D.C. Circuit to clarify or overrule *Freeport. Id.* at 17, 19 ("[W]e do not contend that FERC can disregard D.C. Circuit cases that have not been overruled."). The Environmental Coalition also urges the Commission to include this information on a voluntary basis to "provide important information to the public and to cooperating agency decisionmakers." *Id.* at 16. We decline to do so.

<sup>&</sup>lt;sup>206</sup> Environmental Coalition May 23, 2022 Comments at 16, 19-20.

<sup>&</sup>lt;sup>207</sup> Environmental Coalition May 23, 2022 Comments at 16, 20.

environmental review. Nor does the lead agency role make the Commission responsible for ensuring a cooperating federal agency's compliance with its own NEPA responsibilities.<sup>209</sup>

81. Here, the project before the Commission is the construction and operation of facilities under section 3 of the NGA to export natural gas to foreign countries. The Commission fulfilled its role as lead agency in the NEPA review by publishing the final EIS on September 9, 2022 and by our analysis here. DOE participated as a cooperating agency in the creation of the EIS. As the agency responsible for authorizing exports, DOE is responsible for determining its obligations and providing appropriate supplemental environmental analysis should DOE decide to authorize exports from the proposed project to non-FTA nations.<sup>210</sup>

82. Additionally, "the requirement that an agency consider connected actions in a single environmental document is to 'prevent agencies from dividing one project into multiple individual actions' with less significant environmental effects."<sup>211</sup> As discussed above, the proposal before the Commission is to site, construct, and operate the Commonwealth LNG Project, a natural gas liquefaction and export facility. The export of natural gas was proposed before, and authorized by, DOE, not the Commission.

83. Finally, the NEPA review of project was prepared pursuant to the 1978 regulations; therefore, the Commonwealth LNG EIS is consistent with the April 2022 final rule that NRDC cites.

# 6. <u>Environmental Impacts Conclusion</u>

84. We have reviewed the information and analysis contained in the final EIS regarding the potential environmental effects of the project, as well as the other information in the record. We are accepting the environmental recommendations in the final EIS as modified herein, and are including them as conditions in Appendix A to this order. Based on our consideration of this information and the discussion above, we agree with the conclusions presented in the final EIS and find that the project, if implemented as described in the final EIS, is an environmentally acceptable action.

<sup>211</sup> Columbia Gulf Transmission, LLC, 180 FERC ¶ 61,206 at P 83 (quoting Myersville Citizens for a Rural Cmty., Inc. v. FERC, 783 F.3d at 1326).

<sup>&</sup>lt;sup>209</sup> Columbia Gulf Transmission, LLC, 180 FERC ¶ 61,206, at P 82 (2022) (citations omitted) (analyzing section 7 facilities supporting LNG terminal).

<sup>&</sup>lt;sup>210</sup> As noted above, Commonwealth's LNG application is pending with DOE.

### IV. <u>Conclusion</u>

85. For the reasons discussed above, we find that the project is not inconsistent with the public interest, and we will grant Commonwealth's application for authorization under section 3 of the NGA to site, construct, and operate its proposed project.

86. 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 environmental analyses. Thus, Commission staff carefully reviews all information submitted, and will issue a notice to proceed with a particular activity only when satisfied that the applicant 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.

87. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this authorization. The Commission encourages cooperation between applicants 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.<sup>212</sup>

88. 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.

<sup>&</sup>lt;sup>212</sup> See 15 U.S.C. § 717r(d) (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) and 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).

### The Commission orders:

(A) Commonwealth is authorized under section 3 of the NGA to site, construct, and operate its Commonwealth LNG Project, as described and conditioned herein and as more fully described in its application and supplements, including any commitments made therein, subject to the environmental conditions contained in the appendix to this order.

(B) Commonwealth's proposed facilities shall be constructed and made available for service within five years of the date of this order.

(C) Commonwealth 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 Commonwealth. Commonwealth shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission. Chairman Glick is concurring with a separate statement attached. Commissioner Danly is concurring in part with a separate statement attached. Commissioner Clements is concurring with a separate statement attached. Commissioner Phillips is concurring with a separate statement attached.

(S E A L)

Kimberly D. Bose, Secretary.

# Appendix A

# **Environmental Conditions**

As recommended in the final environmental impact statement (final EIS) and otherwise amended herein, this authorization includes the following conditions.

- 1. Commonwealth LNG, LLC (Commonwealth) shall follow the construction procedures and mitigation measures described in its application and supplements, including responses to staff data requests and as identified in the EIS, unless modified by the Order. Commonwealth 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), or the Director's designee, **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 Commonwealth LNG Project (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 impacts resulting from Project construction and operation.
- 3. **Prior to any construction**, Commonwealth shall file an affirmative statement with the Secretary, certified by senior company officials, 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 EIS, as supplemented by filed plot plans, alignment sheets, and facility diagrams. As soon as they are available, and before the start of construction, Commonwealth shall file with the Secretary any revised detailed plans, diagrams, and alignment sheets at a scale not smaller than 1:6,000 with station positions 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 specify locations designated on these plans, diagrams, and alignment sheets.
- 5. Commonwealth shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed that 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 or 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, or aerial photographs. Use of each area must be approved in writing by the Director of OEP, or the Director's designee, **before construction in or near that area**.

This requirement does not apply to extra workspace allowed by the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* and/or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route alignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
- b. implementation of endangered, threatened, or special concern mitigation measures;
- c. recommendations by state regulatory authorities; and
- d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
- 6. At least 60 days before construction begins, Commonwealth shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP, or the Director's designee. Commonwealth must file revisions to the plan as schedules change. The plan shall identify:

- a. how Commonwealth will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EIS, and required by the Order;
- b. how Commonwealth 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 onsite construction and inspection personnel;
- c. the number of EIs assigned, and 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 Commonwealth will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
- f. the company personnel (if known) and specific portion of Commonwealth's organization having responsibility for compliance;
- g. the procedures (including use of contract penalties) Commonwealth will follow if noncompliance occurs; and
  - i. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
  - ii, the completion of all required surveys and reports;
  - iii. the environmental compliance training of onsite personnel;
  - iv. the start of construction; and
  - v. the start and completion of restoration.
- 7. Commonwealth shall employ at least one EI for the Project. The EI(s) 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, Commonwealth 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 Commonwealth'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. 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 Commonwealth from other federal, state, or local permitting agencies concerning instances of noncompliance, and Commonwealth's response.
- 9. Commonwealth shall develop and implement an environmental complaint resolution procedure, and file such procedure with the Secretary, for review and approval by the Director of OEP, or the Director's designee. The procedure shall

provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the project and restoration of the right-of-way. Prior to construction, Commonwealth shall mail the complaint procedures to each landowner whose property will be crossed by the project.

- a. In its letter to affected landowners, Commonwealth shall:
  - i. provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
  - ii. instruct the landowners that if they are not satisfied with the response, they should call Commonwealth's Hotline; the letter should indicate how soon to expect a response; and
  - iii. instruct the landowners that if they are still not satisfied with the response from Commonwealth's Hotline, they should contact the Commission's Landowner Helpline at 877-337-2237 or at LandownerHelp@ferc.gov.
- b. In addition, Commonwealth shall include in its monthly status report a copy of a table that contains the following information for each problem/concern:
  - i. the identity of the caller and date of the call;
- i. the location by milepost and identification number from the authorized alignment sheet(s) of the affected property;
- ii. a description of the problem/concern; and
- iii. an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.
- 10. All conditions attached to the water quality certification issued by Louisiana Department of Environmental Quality constitute mandatory conditions of this Authorization Order. **Prior to construction**, Commonwealth shall file, for review and written approval of the Director of OEP, or the Director's designee, any revisions to its project design necessary to comply with the water quality certification conditions.
- 11. Commonwealth must receive written authorization from the Director of OEP, or the Director's designee, **before commencing construction** of any Project facilities. To obtain such authorization, Commonwealth must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

- 12. Commonwealth must receive written authorization from the Director of OEP, or the Director's designee, **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. Commonwealth must receive written authorization from the Director of OEP, or the Director's designee, **before placing into service** the Project facilities. 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.
- 14. **Within 30 days of placing the authorized facilities in service**, Commonwealth 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. identifying which of the conditions in the Order Commonwealth 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.
- 15. **Prior to construction of the Project Pipeline**, Commonwealth shall file with the Secretary for review and written approval by the Director of OEP, or the Director's designee, an alternative contingency plan for crossing Highway 27/82 in the event that Commonwealth is unable to successfully complete the proposed horizontal directional drill of Highway 27/82. Commonwealth shall develop the contingency plan in consultation with the Louisiana Department of Transportation and Development.
- 16. Commonwealth shall successfully complete the Highway 27/82 crossing **prior to the start of construction of the remainder of the Project Pipeline**.
- 17. **Prior to construction of the Project**, Commonwealth shall file with the Secretary a copy of the determination of consistency with the Coastal Zone Management Program issued by the Louisiana Department of Natural Resources.
- 18. During construction activities at the Terminal, Commonwealth shall monitor noise levels **between 7:00 p.m. and 7:00 a.m.**, document the noise levels in the construction status reports, and restrict the noise attributable to construction activities to no more than 55 A-weighted decibel (dBA) day-night sound level (L<sub>dn</sub>) (48.6 dBA total noise impacts) at noise sensitive areas (NSA) 1 and 2.

- 19. Commonwealth shall file a full power load noise survey with the Secretary for the Terminal no later than 60 days after each liquefaction train is placed into service. If the noise attributable to operation of the equipment at the Terminal exceeds an L<sub>dn</sub> of 55 dBA at NSAs, within 60 days Commonwealth shall modify operation of the liquefaction facilities or install additional noise controls until a noise level below an L<sub>dn</sub> of 55 dBA at the NSAs is achieved. Commonwealth 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.
- 20. Commonwealth shall file a noise survey with the Secretary **no later than 60 days** after placing the entire Terminal into service. If a full load condition noise survey is not possible, Commonwealth shall provide an interim survey at the maximum possible horsepower load **within 60 days** of placing the Terminal into service and provide the full load survey **within 6 months**. If the noise attributable to operation of the equipment at the Terminal exceeds an L<sub>dn</sub> of 55 dBA at any nearby NSA under interim or full horsepower load conditions, Commonwealth 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. Commonwealth shall confirm compliance with the above requirement by filing an additional noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.
- 21. **Prior to initial site preparation**, Commonwealth shall file with the Secretary the following information, stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana:
  - a. finalized ground improvement solution of wick drains combined with surcharge for the Project site;
  - b. site soil compaction via surcharge procedures and specifications; and
  - c. finalized wick drains installation design package.
- 22. **Prior to initial site preparation**, Commonwealth shall file with the Secretary the following information, stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana:
  - a. the corrosion control and prevention plan for any underground piping, structures, foundations, equipment, and components; and
  - b. the erosion control and prevention plan for the marine facility area.
- 23. **Prior to initial site preparation**, Commonwealth shall file with the Secretary the finalized plot plan with final design of finished slopes and elevations contour lines for the Project site. The finalized plot plan shall be stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana.

- 24. **Prior to initial site preparation**, Commonwealth shall file with the Secretary the finalized pile load test program (e.g., pile load test procedure, locations, configuration, quality assurance, and quality control, etc.). The filing shall be stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana.
- Prior to site initial preparation, Commonwealth shall file with the Secretary the 25. final design of floodwalls (storm surge protection barriers) to comply with applicable code/standards requirements including but are not limited to National Fire Protection Association (NFPA) 59A (2019 edition) as incorporated by 33 Code of Federal Regulations (CFR) 127, and NFPA 59A (2001 edition) in 49 CFR 193. In addition, the floodwalls shall be designed and maintained in accordance with American Society of Civil Engineers (ASCE)/Structural Engineering Institute (SEI) 7 (2022 edition) or equivalent and ASCE/SEI 24 (2014 edition) or equivalent and to withstand a minimum of a 500-year mean occurrence interval in consideration of relative sea level rise, local subsidence, site settlement, shoreline recession, erosion and scour effect, and wind-driven wave effects, etc. The sea level rise and vertical land movement should be in accordance with at a minimum intermediate curve corresponding to design life of facility in Global and Regional Sea Level Rise Scenarios for the United States. U.S. Department of Commerce. National Ocean and Atmospheric Administration, National Ocean Service Center for Operational Oceanographic Products and Services, February 2022 or equivalent. The final design of floodwalls shall be stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana.
- 26. **Prior to construction of final design**, Commonwealth shall file with the Secretary consultation with U.S. Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) that determines whether the use of normally closed valves to remove stormwater from curbed areas will meet PHMSA regulations.
- 27. **Prior to construction of final design**, Commonwealth shall file with the Secretary the following information, stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana:
  - a. the finalized settlement monitoring program and procedures for the Project site;
  - b. the total and differential settlement of final designed structures, systems, and components foundations for the Project site; and
  - c. the total and differential settlement monitoring system of LNG storage tank foundation design shall comply with applicable LNG industrial codes/standards, including but not limited to American Petroleum Institute (API) 620 (12<sup>th</sup> edition), API 625 (1<sup>st</sup> edition), API 650 (13<sup>th</sup> edition), API 653 (5<sup>th</sup> edition), and ACI 376 (2011 edition) or approved equivalents.

- 28. **Prior to construction of final design**, Commonwealth shall file with the Secretary the following information, stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana:
  - a. site preparation drawings and specifications;
  - b. finalized civil design basis, criteria, specifications;
  - c. LNG terminal structures, LNG storage tank, and foundation design drawings and calculations (including prefabricated and field constructed structures);
  - d. seismic specifications for procured Seismic Category I equipment prior to the issuing of request for quotations;
  - e. quality control procedures to be used for civil/structural design and construction; and
  - f. a determination of whether soil improvement is necessary to counteract soil liquefaction.

In addition, Commonwealth shall file, in its Implementation Plan, the schedule for producing this information.

- 29. Prior to construction of the final design, Commonwealth shall file with the Secretary the finalized seismic monitoring program for the Project site. The seismic monitoring program shall comply with NFPA 59A (2019 edition) sections 8.4.14.10, 8.4.14.12, 8.4.14.12.1, 8.4.14.12.2, and 8.4.14.13; ACI 376 (2011 edition) sections 10.7.5 and 10.8.4; U.S. Nuclear Regulatory Commission Regulatory Guide (RG) 1.12 (Revision 3) sections 1 and 3 through 9 and all subsections, or equivalents subject to review and approval. A free-field seismic monitoring device should be included in the seismic monitoring program for the Project site. The proposed seismic monitoring system must include installation location plot plan; description of the triaxial strong motion recorders or other seismic instrumentation; the proposed alarm set points and operating procedures (including emergency operating procedures) for control room operators in response to such alarms/data obtained from seismic instrumentation; and testing and maintenance procedures.
- 30. **Prior to construction of final design**, Commonwealth shall file with the Secretary the settlement monitoring and maintenance plan that have been reviewed, approved, stamped and sealed by a professional engineer of record registered in the state of Louisiana, which ensures the facilities are protected for the life of the LNG terminal considering settlement, subsidence, and sea level rise.
- 31. **Prior to construction of final design**, Commonwealth shall file with the Secretary the final design elevation for the structures/buildings outside floodwalls area,

including but are not limited to admin office/main control room, maintenance building, elevated flare, marine flare, jetty platform control room, etc. The final design elevation drawings and calculations shall be stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana.

Information pertaining to the following specific recommendations 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 recommendation. 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 18 CFR § 388.113. See Critical Electric Infrastructure Security and Amending Critical Energy Infrastructure Information, Order No. 833, 81 Fed. Reg. 93,732 (December 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 would be subject to public disclosure. All information shall be filed a minimum of 30 days before approval to proceed is requested.

- 32. **Prior to initial site preparation**, Commonwealth shall file an overall Project schedule, which includes the proposed stages of initial site preparation, construction, commissioning, and in-service plan relative to notice to proceed requests and related conditions.
- 33. **Prior to initial site preparation**, Commonwealth shall file procedures for controlling access during construction.
- 34. **Prior to initial site preparation**, Commonwealth shall file quality assurance and quality control procedures for construction activities, including transportation load monitoring for prefabricated process modules and LNG storage tanks.
- 35. **Prior to initial site preparation**, Commonwealth shall file with the Secretary the finalized wind design basis for the project facility, which shall include the tornado loads determination and consideration of its load combination as required by ASCE/SEI 7 (2022 edition) or approved equivalent.
- 36. **Prior to initial site preparation**, Commonwealth shall file its design wind speed criteria for all other facilities not covered by PHMSA's Letter of Determination to be designed to withstand wind speeds commensurate with the risk and reliability associated with the facilities in accordance with ASCE 7-22 or equivalent.
- 37. **Prior to initial site preparation**, Commonwealth shall develop an Emergency Response Plan (ERP) (including evacuation and any sheltering and re-entry) and coordinate procedures with the U.S. Coast Guard (USCG); state, county, and local emergency planning groups; fire departments; state and local law enforcement; and other appropriate federal agencies. This plan shall be consistent with

recommended and good engineering practices and based on potential impacts and onsets of hazards from accidental and intentional events along the LNG marine vessel route and potential impacts and onset of hazards from accidental and intentional events at the LNG terminal, including but not limited to a catastrophic failure of the largest LNG tank. This plan shall address any special considerations and pre-incident planning for infrastructure and public with access and functional needs and shall include at a minimum:

- a. materials and plans for periodic dissemination of public education and training materials for evacuation and/or shelter in place of the public within any transient hazard areas along the marine vessel route, and within LNG terminal hazard areas;
- b. plans to competently train emergency responders required to effectively and safely respond to hazardous material incidents including, but not limited to LNG fires and dispersion;
- c. plans to competently train emergency responders to effectively and safely evacuate or shelter public within transient hazard areas along the marine vessel route, and within hazard areas from LNG terminal;
- d. designated contacts with federal, state and local emergency response agencies responsible for emergency management and response within any transient hazard areas along the marine vessel route, and within hazard areas from LNG terminal;
- e. scalable procedures for the prompt notification of appropriate local officials and emergency response agencies based on the level and severity of potential incidents;
- f. scalable procedures for mobilizing response and establishing a unified command, including identification, location, and design of any emergency operations centers and emergency response equipment required to effectively and safely to respond to hazardous material incidents and evacuate or shelter public within transient hazard areas along the marine vessel route, and within LNG terminal hazard areas;
- g. scalable procedures for notifying public, including identification, location, design, and use of any permanent sirens or other warning devices required to effectively communicate and warn the public prior to onset of debilitating hazards within any transient hazard areas along the LNG marine vessel route and within hazard areas from LNG terminal;
- h. scalable procedures for evacuating the public, including identification, location, design, and use of evacuation routes/methods and any mustering

locations required effectively and safely evacuate public within any transient hazard areas along the LNG marine transit route and within hazard areas from LNG terminal; and

i. scalable procedures for sheltering the public, including identification, location, design, and use of any shelters demonstrated to be needed and demonstrated to effectively and safely shelter public prior to onset of debilitating hazards within transient hazard areas that may better benefit from sheltering in place (i.e., those within Zones of Concern 1 and 2), along the route of the LNG marine vessel and within hazard areas that may benefit from sheltering in place (i.e., those within areas of 1,600 British thermal units (BTU)/ft<sup>2</sup>-hr and 10,000 BTU/ft<sup>2</sup>-hr radiant heats from fires with farthest impacts, including from a catastrophic failure of largest LNG tank) of the LNG terminal.

Commonwealth shall notify the FERC staff of all planning meetings in advance and shall report progress on the development of its ERP **at 3-month intervals**.

- 38. **Prior to initial site preparation**, Commonwealth shall file a Cost-Sharing Plan identifying the mechanisms for funding all Project-specific security/emergency management costs that would be imposed on state and local agencies. This comprehensive plan shall include funding mechanisms for the capital costs associated with any necessary security/emergency management equipment and personnel base. This plan shall include sustained funding of any requirement or resource gap analysis identified to effectively and safely evacuate and shelter public and to effectively and safely respond to hazardous material incidents consistent with recommended and good engineering practices. Commonwealth shall notify FERC staff of all planning meetings in advance and shall report progress on the development of its Cost Sharing Plan **at 3-month intervals**.
- 39. **Prior to construction of final design of any permanent facilities**, Commonwealth shall file Emergency Response Plans and any associated Cost Sharing Plan provisions in coordination with federal, state, and local agencies for hazards that may reach State Highway 27, including identifying potential incidents, impact distances, and timing of the onset of hazards reaching State Highway 27, and measures to notify approaching highway traffic and evacuate persons from impacted areas as quickly as possible relative to the onset of hazards. The ERP and Cost Sharing Plans should discuss consideration of signage or equivalent, and maintenance thereof, to facilitate notification and evacuation.
- 40. **Prior to construction of final design**, Commonwealth shall file change logs that list and explain any changes made from the front-end-engineering-design (FEED) provided in Commonwealth's application and filings. A list of all changes with an

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

- 41. Prior to construction of final design, Commonwealth shall file information/revisions pertaining to Commonwealth's response: numbers 15, 45, 65, and 106 of its February 4, 2020 filing; numbers 124, 125c, 127, 134, 135, 148, 153, 154, 155, 157, 161, 162, 164, 165, and 167 of its March 4, 2020 filing; numbers 7, 17, and 18 of its June 4, 2021 filing; numbers 5, 23, 27, 28, 29, 30, 31, 32, and 33 of its November 9, 2021 filing, which indicated features to be included or considered in the final design.
- 42. **Prior to construction of final design**, Commonwealth shall file drawings and specifications for crash rated vehicle barriers in accordance with American Society for Testing and Materials (ASTM) F2656 (2015 edition) or approved equivalent at each facility entrance for access control. The crash rating vehicle type shall be supported by a security vulnerability assessment that takes into account the potential target attractiveness, threats, vulnerabilities, consequences, and mitigation effectiveness consistent with American Institute of Chemical Engineers, Guidelines for Analyzing and Managing the Security Vulnerabilities of Fixed Chemical Sites, 2003 or approved equivalent. The crash rating speed shall be supported by an analysis of the maximum attainable vehicle velocity based on vehicle type acceleration and road characteristics (e.g., straight length, radius of curvature, sloped/banked, coefficient of friction, etc.).
- 43. **Prior to construction of final design**, Commonwealth shall file drawings of internal road vehicle protections, such as guard rails, barriers, and bollards to protect transfer piping, pumps, compressors, hydrants, monitors, etc. to ensure that they are located away from roadway or protected from inadvertent damage from vehicles.
- 44. **Prior to construction of final design**, Commonwealth shall file drawings of the security fence. The fencing drawings shall provide details of fencing that demonstrates it is in accordance with NFPA 59A (2019 edition) or approved equivalent and would restrict and deter access around the entire facility and has a setback from exterior features (e.g., power lines, trees, etc.) and from interior features (e.g., piping, equipment, buildings, etc.) that does not allow the fence to be overcome.
- 45. **Prior to construction of final design**, Commonwealth shall file security camera and intrusion detection drawings. The security camera drawings shall show the locations, mounting elevation, areas covered, and features of each camera (e.g., fixed, tilt/pan/zoom, motion detection alerts, low light, etc.) and shall provide camera coverage at access points and along the entire perimeter with redundancies and camera coverage interior of the facility to enable rapid monitoring of the terminal, including a camera at the top of each LNG storage tank, and coverage within pretreatment areas, within liquefaction areas, within truck transfer areas,

within marine transfer areas, and within buildings. The drawings shall show or note the location and type of the intrusion detection and shall cover the entire perimeter of the facility.

- 46. **Prior to construction of final design**, Commonwealth shall file photometric analyses or equivalent and associated lighting drawings. The lighting drawings shall show the location, elevation, type of light fixture, and lux levels of the lighting system and shall provide illumination along the perimeter of the terminal, process equipment, mooring points, and along paths/roads of access and egress to facilitate security monitoring and emergency response operations in accordance with API 540 (4<sup>th</sup> edition) or approved equivalent and applicable federal regulations.
- 47. **Prior to construction of final design**, Commonwealth shall file a plot plan of the final design showing all major equipment, structures, buildings, and impoundment systems.
- 48. **Prior to construction of final design**, Commonwealth shall file a building siting assessment to ensure plant buildings that are occupied or critical to the safety of the LNG plant are adequately protected from potential hazards involving fires and vapor cloud explosions.
- 49. **Prior to construction of final design**, Commonwealth shall file three-dimensional plant drawings to confirm plant layout for maintenance, access, egress, and congestion.
- 50. **Prior to construction of final design**, Commonwealth shall file up-to-date process flow diagrams (PFDs), heat and mass balances (HMBs), and piping and instrument diagrams (P&IDs) including vendor P&IDs. The HMBs shall demonstrate a peak export rate of 9.5 million metric tonnes per annum. The P&IDs shall include the following information:
  - a. equipment tag number, name, size, duty, capacity, and design conditions;
  - b. equipment insulation type and thickness;
  - c. storage tank pipe penetration size and nozzle schedule;
  - d. valve high pressure side and internal and external vent locations;
  - e. piping with line number, piping class specification, size, and insulation type and thickness;
  - f. piping specification breaks and insulation limits;
  - g. all control and manual valves numbered;
  - h. relief valves with size and set points; and
  - i. drawing revision number and date.

- 51. **Prior to construction of final design**, Commonwealth shall file P&IDs, specifications, and procedures that clearly show and specify the tie-in details required to safely connect subsequently constructed facilities with the operational facilities.
- 52. **Prior to construction of final design**, Commonwealth shall file a car seal and lock philosophy and car seal and lock program, including a list of all car-sealed and locked valves consistent with the P&IDs. The car seal and lock program should include monitoring and periodically reviewing correct car seal and lock placement and valve position.
- 53. **Prior to construction of final design**, Commonwealth shall file information to demonstrate the Engineering Procurement and Construction (EPC) contractor has verified that all FEED hazard identification recommendations have been addressed.
- 54. **Prior to construction of final design**, Commonwealth shall file a hazard and operability review of the final design P&IDs, a list of the resulting recommendations, and action taken on the recommendations. The issued for construction P&IDs shall incorporate the hazard and operability review recommendations and justification shall be provided for any recommendations that are not implemented.
- 55. **Prior to construction of final design**, Commonwealth shall file design pressure and set point information for the piping, equipment, and pressure relief valves located between the inlet feed gas high integrity pressure protection system (HIPPS) and the downstream pressure regulators to demonstrate pressures would not exceed the design pressures of these components.
- 56. **Prior to construction of final design**, Commonwealth shall provide a check valve upstream of the acid gas removal column to prevent backflow or provide a dynamic simulation that shows that upon plant shutdown, the swan neck would be sufficient for this purpose.
- 57. **Prior to construction of final design**, Commonwealth shall specify a second source of vacuum breaker gas (i.e., pad gas) for the LNG storage tanks independent of the liquefaction facility.
- 58. **Prior to construction of final design**, Commonwealth shall include LNG tank fill flow measurement with high flow alarm.
- 59. **Prior to construction of final design**, Commonwealth shall specify a discretionary vent valve on each LNG storage tank that is operable through the Distributed Control System (DCS). In addition, a car sealed open manual block valve shall be provided upstream of the discretionary vent valve.
- 60. **Prior to construction of final design**, Commonwealth shall file the safe operating limits (upper and lower), alarm and shutdown set points for all instrumentation (e.g., temperature, pressures, flows, and compositions).

- 61. **Prior to construction of final design**, Commonwealth shall file 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.
- 62. **Prior to construction of final design**, Commonwealth shall specify that all emergency shutdown valves are to be equipped with open and closed position switches connected to the Distributed Control System (DCS)/ safety instrument system (SIS).
- 63. **Prior to construction of final design**, Commonwealth shall demonstrate that all electrical, instrument, and control systems at the project, which activate emergency systems or are relied upon for isolation or shutdowns, will be designed to withstand a 20-minute fire exposure per UL 1709 (6<sup>th</sup> edition) or approved equivalent.
- 64. **Prior to construction of final design**, Commonwealth shall file an up-to-date equipment list, process and mechanical data sheets, and specifications. The specifications shall include:
  - a. building specifications (e.g., control buildings, electrical buildings, compressor buildings, storage buildings, pressurized buildings, ventilated buildings, blast resistant buildings);
  - b. mechanical specifications (e.g., piping, valve, insulation, rotating equipment, heat exchanger, storage tank and vessel, other specialized equipment);
  - c. electrical and instrumentation specifications (e.g., power system, control system, SIS, cable, other electrical and instrumentation); and
  - d. security and fire safety specifications (e.g., security, passive protection, hazard detection, hazard control, firewater).
- 65. **Prior to construction of final design**, Commonwealth shall file a list of all codes and standards and the final specification document number where they are referenced.
- 66. **Prior to construction of final design**, Commonwealth shall file a complete specifications and drawings of the proposed LNG tank design and installation.
- 67. **Prior to construction of final design**, Commonwealth shall file an evaluation of emergency shutdown valve closure times. The evaluation shall account for the time to detect an upset or hazardous condition, notify plant personnel, and close the emergency shutdown valve(s).
- 68. **Prior to construction of final design**, Commonwealth shall file an evaluation of dynamic pressure surge effects from valve opening and closure times and pump operations that demonstrate that the surge effects do not exceed the design pressures.

- 69. **Prior to construction of final design**, Commonwealth 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.
- 70. **Prior to construction of final design**, Commonwealth shall clearly specify the responsibilities of the LNG tank contractor and the EPC contractor for the piping associated with the LNG storage tank.
- 71. **Prior to construction of final design**, Commonwealth shall file the sizing basis and capacity for the final design of the flares and/or vent stacks as well as the pressure and vacuum relief valves for major process equipment, vessels, and storage tanks.
- 72. **Prior to construction of final design**, Commonwealth shall file the sizing calculations for the PSVs of the following vessels: E-A0101 Inlet Gas Preheater, E-A0403 Demethanizer Reboiler, E-A0301 Regeneration gas hot oil heater. Specifically, the calculations shall show the influence of the backpressure on these PSVs since they vent to the hot oil expansion drum (V-2101A) instead of the flare.
- 73. **Prior to construction of final design**, Commonwealth shall specify the process vessels, and storage vessels for ethylene, propane, isopentane, condensate, hot oil, and LNG are installed with spare pressure relief valves to ensure overpressure protection during relief valve testing or maintenance.
- Prior to construction of final design, Commonwealth shall file an updated fire 74. protection evaluation of the proposed facilities. A copy of the evaluation, a list of recommendations and supporting justifications, and actions taken on the recommendations shall be filed. The evaluation shall justify the type, quantity, and location of hazard detection and hazard control, passive fire protection, emergency shutdown and depressurizing systems, firewater, and emergency response equipment, training, and qualifications in accordance with NFPA 59A (2001). The justification for the flammable and combustible gas detection and flame and heat detection systems shall be in accordance with International Society of Automation (ISA) 84.00.07 (2018 edition) or approved equivalent methodologies and would need to demonstrate 90 % or more of releases (unignited and ignited) that could result in an off-site or cascading impact would be detected by two or more detectors and result in isolation and de inventory within 10 minutes. The analysis shall take into account the set points, voting logic, wind speeds, and wind directions. The justification for firewater shall provide calculations for all firewater demands based on design densities, surface area, and throw distance as well as specifications for the corresponding hydrant and monitors needed to reach and cool equipment.
- 75. **Prior to construction of final design**, Commonwealth shall file spill containment system drawings with dimensions and slopes of curbing, trenches, impoundments,

tertiary containment and capacity calculations considering any foundations and equipment within impoundments, as well as the sizing and design of the downcomers. The spill containment drawings shall show containment for all hazardous fluids including all liquids handled above their flashpoint, from the largest flow from a single line for 10 minutes, including de-inventory, or the maximum liquid from the largest vessel (or total of impounded vessels) or otherwise demonstrate that providing spill containment would not significantly reduce the flammable vapor dispersion or radiant heat consequences of a spill.

- 76. **Prior to construction of final design**, Commonwealth shall file an analysis that demonstrates the flammable vapor dispersion from design spills would be prevented from dispersing underneath the elevated LNG storage tanks, or the LNG storage tanks would be able to withstand an overpressure due to ignition of the flammable vapor that disperses underneath the elevated LNG storage tanks.
- 77. **Prior to construction of final design**, Commonwealth shall file an analysis that demonstrates the flammable vapor dispersion from design spills would be prevented from dispersing underneath the elevated control room, or the control room would be able to withstand an overpressure due to ignition of the flammable vapor that disperses underneath the elevated control room.
- 78. **Prior to construction of final design**, Commonwealth shall file a technical review of its proposed facility design that evaluates other potential locations for the proposed control room, or additional mitigation measures to protection the control room from high radiant heats.
- 79. **Prior to construction of final design**, Commonwealth shall file electrical area classification drawings, including cross sectional drawings. The drawings shall demonstrate compliance with NFPA 59A (2019 edition), NFPA 70 (2017 edition), NFPA 497 (2017 edition), and API RP 500 (3<sup>rd</sup> edition), or approved equivalents. In addition, the drawings shall include revisions to the electrical area classification design or provide technical justification that supports the electrical area classification of the following areas using most applicable API RP 500 figures (e.g., figures 20 and 21) or hazard modeling of various release rates from equivalent hole sizes and wind speeds (see NFPA 497 release rate of 1 lb-mole/minute).
- 80. **Prior to construction of final design**, Commonwealth shall file analysis of the buildings containing hazardous fluids and the ventilation calculations that limit concentrations below the lower flammable limits (LFL) (e.g., 25-percent LFL), including an analysis of off gassing of hydrogen in battery rooms, and shall also provide hydrogen detectors that alarm (e.g., 20- to 25-percent LFL) and initiate mitigative actions (e.g., 40- to 50-percent LFL) in accordance with NFPA 59A (2019 edition) and NFPA 70 (2017 edition), or approved equivalents.

- 81. **Prior to construction of final design**, Commonwealth 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) or approved equivalent.
- 82. **Prior to construction of final design**, Commonwealth 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.
- 83. **Prior to construction of final design**, Commonwealth 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 as well as their coverage area. The list shall include the instrument tag number, type and location, alarm indication locations, and shutdown functions of the hazard detection equipment.
- 84. **Prior to construction of final design**, Commonwealth shall file a technical review of facility design that:
  - a. identifies all combustion/ventilation air intake equipment and the distances to any possible flammable gas or toxic release; and
  - b. demonstrates that these areas are adequately covered by hazard detection devices and indicates how these devices would isolate or shutdown any combustion or heating ventilation and air conditioning equipment whose continued operation could add to or sustain an emergency.
- 85. **Prior to construction of final design**, Commonwealth shall file a design that includes hazard detection suitable to detect high temperatures and smoldering combustion products in electrical buildings and control room buildings.
- 86. **Prior to construction of final design**, Commonwealth shall file an evaluation of the voting logic and voting degradation for hazard detectors.
- 87. **Prior to construction of final design**, Commonwealth shall file a list of alarm and shutdown set points for all hazard detectors that account for the calibration gas of the hazard detectors when determining the lower flammable limit set points for methane, ethylene, propane, isopentane, and condensate.
- 88. **Prior to construction of final design**, Commonwealth shall file a list of alarm and shutdown set points for all hazard detectors that account for the calibration gas of hazard detectors when determining the set points for toxic components such as condensate and hydrogen sulfide.
- 89. **Prior to construction of final design**, Commonwealth shall file a drawing showing the location of the emergency shutdown buttons, including, but not limited to the refrigerant storage, condensate storage, and LNG storage areas. Emergency

shutdown buttons shall be easily accessible, conspicuously labeled, and located in an area which would be accessible during an emergency.

- 90. **Prior to construction of final design**, Commonwealth shall file facility plan drawings and a list of the fixed and wheeled dry-chemical, hand-held fire extinguishers, and other hazard control equipment. Plan drawings shall clearly show the location by tag number of all fixed, wheeled, and hand-held extinguishers and shall demonstrate the spacing of extinguishers meet prescribed NFPA 10 (2018 edition) or approved equivalent travel distances. 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 and shall demonstrate they meet NFPA 59A (2019 edition) or approved equivalent.
- 91. **Prior to construction of final design**, Commonwealth shall file drawings and specifications for the structural passive protection systems to protect equipment and supports from cryogenic releases.
- 92. **Prior to construction of final design**, Commonwealth shall file calculations or test results for the structural passive protection systems to protect equipment and supports from cryogenic releases.
- 93. **Prior to construction of final design**, Commonwealth shall file drawings and specifications for the structural passive protection systems to protect equipment and supports from pool and jet fires.
- Prior to construction of final design, Commonwealth shall file a detailed 94. quantitative analysis to demonstrate that adequate mitigation would be provided for each pressure vessel that could fail within the 4,000 BTU/ft2-hr zone from a pool or jet fires; each critical structural component (including the LNG marine vessel) and emergency equipment item that could fail within the 4,900 BTU/ft2-hr zone from a pool or jet fire; and each occupied building that could expose unprotected personnel within the 1,600 BTU/ft2-hr zone from a pool or jet fire. Trucks at truck transfer stations shall be included in the analysis of potential pressure vessel failures, as well as measures needed to prevent cascading impact due to the 10minute sizing spill at the marine area. A combination of passive and active protection for pool fires and passive and/or active protection for jet fires shall be provided and demonstrate the effectiveness and reliability. Effectiveness of passive mitigation shall be supported by calculations or test results for the thickness limiting temperature rise over the fire duration, and active mitigation shall be supported by reliability information by calculations or test results, such as demonstrating flow rates and durations of any cooling water would mitigate the heat absorbed by the component. The total firewater demand shall account for all components that could fail to a pool or jet fire.
- 95. **Prior to construction of final design**, Commonwealth shall file an evaluation and associated specifications, drawings, and datasheets for transformers demonstrating

how it would prevent cascading damage of transformers (e.g., fire walls or spacing) in accordance with NFPA 850 (2015 edition) or approved equivalent.

- 96. **Prior to construction of final design**, Commonwealth shall file facility plan drawings showing the proposed location of the firewater and any foam systems. Plan drawings shall clearly show the location of firewater and foam piping, post indicator and sectional 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 demonstrate that each process area, fire zone, or other sections of piping with several users can be isolated with post indicator or sectional valves and that firewater coverage is provided by at least two monitors or hydrants with sufficient firewater flow to cool exposed surfaces subjected to a fire. The drawings shall also include piping and instrumentation diagrams of the firewater and foam systems.
- 97. **Prior to construction of final design**, Commonwealth shall specify that the firewater pump shelter is designed to remove the largest firewater pump or other component for maintenance with an overhead or external crane.
- 98. **Prior to construction of final design**, Commonwealth shall demonstrate that the firewater storage tank is in compliance with NFPA 22 (2018 edition) or approved equivalent.
- 99. **Prior to construction of final design**, Commonwealth 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 DCS and recorded.
- 100. **Prior to construction of final design**, Commonwealth shall file drawings of the storage tank piping support structure and support of horizontal piping at grade including pump columns, relief valves, pipe penetrations, instrumentation, and appurtenances.
- 101. **Prior to construction of final design**, Commonwealth shall file the structural analysis of the LNG storage tank and outer containment demonstrating they are designed to withstand all loads and combinations, including shipping loads.
- 102. **Prior to construction of the final design**, Commonwealth shall file the finalized projectile/missile impact analysis to demonstrate that the outer concrete container wall of the full containment LNG storage tank could withstand projectile/missile impact. The analysis shall detail the projectile/missile speeds and characteristics and methods used to determine penetration resistance and perforation depths. The finalized projectile/missile impact analysis shall be stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana.
- 103. **Prior to construction of final design**, Commonwealth shall file an analysis of the structural integrity of the outer containment of the full containment LNG storage

tank demonstrating it can withstand the radiant heat from a roof tank top fire or adjacent tank roof fire.

- 104. **Prior to construction of final design**, Commonwealth shall file an analysis of the structural integrity of the outer containment of the full containment LNG storage tank demonstrating it can withstand the thermal shock caused by a failure of the inner tank.
- 105. **Prior to commissioning**, Commonwealth 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. Commonwealth shall file documentation certifying that each of these milestones has been completed before authorization to commence the next phase of commissioning and startup will be issued.
- 106. **Prior to commissioning**, Commonwealth shall file detailed plans and procedures for: testing the integrity of onsite mechanical installation; functional tests; introduction of hazardous fluids; operational tests; and placing the equipment into service.
- 107. **Prior to commissioning**, Commonwealth shall file settlement results from the hydrostatic tests of the LNG storage containers and shall file a plan to periodically verify settlement is as expected and does not exceed the applicable criteria set forth in API 620 (12<sup>th</sup> edition), API 625 (1<sup>st</sup> edition), API 650 (13<sup>th</sup> edition), API 653 (5<sup>th</sup> edition), and ACI 376 (2011 edition) or approved equivalents. The program shall also specify what actions would be taken after various levels of seismic events.
- 108. **Prior to commissioning**, Commonwealth shall file the operation and maintenance procedures and manuals, as well as safety procedures, hot work procedures and permits, abnormal operating conditions reporting procedures, simultaneous operations procedures, and management of change procedures and forms.
- 109. **Prior to commissioning**, Commonwealth 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 and shall provide justification if not using an inert or non-flammable gas for clean-out, dry-out, purging, and tightness testing.
- 110. **Prior to commissioning**, Commonwealth shall tag all equipment, instrumentation, and valves in the field, including drain valves, vent valves, main valves, and carsealed or locked valves.
- 111. **Prior to commissioning**, Commonwealth shall file a plan to maintain a detailed training log to demonstrate that operating, maintenance, and emergency response staff have completed the required training.

- 112. Prior to commissioning, Commonwealth shall file the procedures for pressure/leak tests which address the requirements of American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section VIII (2017 edition) and ASME B31.3 (2016 edition) or approved equivalents. In addition, Commonwealth shall file a line list of pneumatic and hydrostatic test pressures.
- 113. **Prior to introduction of hazardous fluids**, Commonwealth shall complete and document a pre-startup safety review to ensure that installed equipment meets the design and operating intent of the facility. The pre-startup safety review shall include any changes since the last hazard review, operating procedures, and operator training. A copy of the review with a list of recommendations, and actions taken on each recommendation, shall be filed.
- 114. **Prior to introduction of hazardous fluids**, Commonwealth shall complete and document all pertinent tests (Factory Acceptance Tests, Site Acceptance Tests, Site Integration Tests) associated with the DCS and SIS that demonstrates full functionality and operability of the system.
- 115. **Prior to introduction of hazardous fluids**, Commonwealth shall develop, file, and implement an alarm management program consistent with ISA 18.2 (2016 edition) or approved equivalent to reduce alarm complacency and maximize the effectiveness of operator response to alarms.
- 116. **Prior to introduction of hazardous fluids**, Commonwealth shall complete and document a clean agent acceptance tests.
- 117. **Prior to introduction of hazardous fluids**, Commonwealth shall complete and document 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).
- 118. **Prior to introduction of hazardous fluids**, Commonwealth shall complete and document foam system and sprinkler system acceptance tests.
- 119. Commonwealth shall file a request for written authorization from the Director of OEP prior to unloading or loading the first LNG commissioning cargo. After production of first LNG, Commonwealth 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 each liquefaction train, LNG storage inventories in each storage tank, and the number of anticipated and actual LNG commissioning cargoes, along with the associated volumes loaded or unloaded. 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.

- 120. **Prior to commencement of service**, Commonwealth shall file a request for written authorization from the Director of OEP. Such authorization would only be granted following a determination by the USCG, under its authorities under the Ports and Waterways Safety Act, the Magnuson Act, the Maritime Transportation Security Act of 2002, and the Security and Accountability For Every Port Act, that appropriate measures to ensure the safety and security of the facility and the waterway have been put into place by Commonwealth or other appropriate parties.
- 121. **Prior to commencement of service**, Commonwealth shall file any proposed revisions to the security plan and physical security of the plant.
- 122. **Prior to commencement of service**, Commonwealth shall label piping with fluid service and direction of flow in the field consistent with ASME A13.1 (2007 edition) or approved equivalent, in addition to the pipe labeling requirements of NFPA 59A (2001).
- 123. **Prior to commencement of service**, Commonwealth shall provide plans for any preventative and predictive maintenance program that performs periodic or continuous equipment condition monitoring.
- 124. **Prior to commencement of service**, Commonwealth shall develop procedures for offsite contractors' responsibilities, restrictions, monitoring, training, and limitations and for supervision of these contractors and their tasks by Commonwealth staff. Specifically, the procedures shall address:
  - a. selecting a contractor, including obtaining and evaluating information regarding the contract employer's safety performance and programs;
  - b. informing contractors of the known potential hazards, including flammable and toxic release, explosion, and fire, related to the contractor's work and systems they are working on;
  - c. developing and implementing provisions to control and monitor the entrance, presence, and exit of contract employers and contract employees from process areas, buildings, and the plant;
  - d. developing and implementing safe work practices for control of personnel safety hazards, including lockout/tagout, confined space entry, work permits, hot work, and opening process equipment or piping;
  - e. developing and implementing safe work practices for control of process safety hazards, including identification of layers of protection in systems being worked on, recognizing abnormal conditions on systems they are working on, and re-instatement of layers of protection, including ensuring bypass, isolation valve, and car-seal programs and procedures are being followed;

- f. developing and implementing provisions to ensure contractors are trained on the emergency action plans and that they are accounted for in the event of an emergency; and
- g. monitoring and periodically evaluating the performance of contract employers in fulfilling their obligations above, including successful and safe completion of work and re-instatement of all layers of protection.

In addition, conditions 124 through 127 shall apply **throughout the life** of the LNG Terminal facilities:

- 125. The facility shall be subject to regular FERC staff technical reviews and site inspections on at least an **annual basis** or more frequently as circumstances indicate. Prior to each FERC staff technical review and site inspection, Commonwealth 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 P&IDs 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.
- Semi-annual operational reports shall be filed with the Secretary to identify 126. changes in facility design and operating conditions; abnormal operating experiences; activities (e.g., ship arrivals, quantity and composition of imported and exported LNG, liquefied and vaporized quantities, boil off/flash gas); and plant modifications, including future plans and progress thereof. Abnormalities shall include, but not be limited to, unloading/loading/shipping problems, potential hazardous conditions from offsite vessels, storage tank stratification or rollover, geysering, storage tank pressure excursions, cold spots on the storage tank, storage tank vibrations and/or vibrations in associated cryogenic piping, storage tank settlement, significant equipment or instrumentation malfunctions or failures, nonscheduled 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 would provide the FERC staff with early notice of anticipated future construction/maintenance at the LNG facilities.
- 127. In the event the temperature of any region of the LNG storage container, including any secondary containment and imbedded pipe supports, becomes less than the

minimum specified operating temperature for the material, the Commission shall be notified **within 24 hours** and procedures for corrective action shall be specified.

- 128. Significant non-scheduled events, including safety-related incidents (e.g., LNG, condensate, 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 the FERC staff. In the event that 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 the FERC staff within 24 hours. This notification practice shall be incorporated into the liquefaction 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 5 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;

- 1. safety-related incidents from 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, the FERC staff would 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

#### Commonwealth LNG, LLC

Docket Nos. CP19-502-000 CP19-502-001

(Issued November 17, 2022)

GLICK, Chairman, concurring:

1. I concur with the Commission's decision to grant, pursuant to section 3 of the Natural Gas Act (NGA),<sup>1</sup> Commonwealth LNG, LLC's (Commonwealth) requested authorization to construct and operate the Commonwealth LNG project.

2. I write separately, however, because I am concerned that section 3 of the NGA does not provide a sufficient framework for consideration of the adverse impacts associated with a proposed LNG facility. Under section 7 of the NGA, when the Commission determines whether to grant a certificate of public convenience and necessity for a proposed interstate gas pipeline, we essentially make two findings: whether the project is needed and, if so, whether it is in the public interest. As the courts have noted, this latter determination requires us to consider "all factors bearing on the public interest,"<sup>2</sup> which we do by weighing the project's benefits against its potential adverse impacts. For LNG export or import facilities, however, the Department of Energy determines whether the export or import is consistent with the public interest.<sup>3</sup> The Commission's review is limited to considering whether the public interest, with the statutory presumption that the facilities *are* consistent with the public interest.<sup>4</sup> Under that bifurcated framework, it is not clear how we are supposed to weigh a project's

<sup>1</sup> 15 U.S.C. § 717b(a).

<sup>2</sup> Atl. Refining Co. v. Pub. Serv. Comm'n of N.Y., 360 U.S. 378, 391 (1959).

<sup>3</sup> 42 U.S.C. § 7151(b); *see also* 15 U.S.C. § 717b(c) (stating that exports of natural gas "to a nation with which there is in effect a free trade agreement . . . shall be deemed to be consistent with the public interest").

<sup>4</sup> See EarthReports, Inc. v. FERC, 828 F.3d 949, 953 (D.C. Cir. 2016) ("Under NGA § 3, an LNG proposal shall be authorized unless the proposal will not be consistent with the public interest, while under NGA § 7 a finding must be made that a proposal is or will be required by the present or future public convenience and necessity; NGA § 3, unlike § 7, sets out a general presumption favoring such authorization.") (cleaned up).

adverse impacts when the public interest determination as to the LNG export or import is outside our jurisdiction.

3. Here, the Environmental Impact Statement (EIS), while acknowledging that the Commonwealth LNG project operation will result in CO<sub>2</sub> emissions in excess of 3.5 million tons per year, fails to conclude whether these emissions would have a significant impact on the environment. In my view, the Commission should have assessed whether the project's CO<sub>2</sub> emissions are significant. The Commission in *Northern Natural* already demonstrated it could do so.<sup>5</sup> Considering the significance of a reasonably foreseeable adverse impact would also make the Commission's order more legally durable, should a protesting party challenge the Commission's decision in court.

4. Climate change poses an existential threat to our security, economy, environment, and, ultimately, the health of individual citizens. Unlike many of the challenges that our society faces, we know with certainty what causes climate change: It is the result of GHG emissions, including carbon dioxide and methane—which are released in large quantities through the production and the consumption of natural gas. Given that, it is critical that, consistent with our statutory authority, we fully consider a project's contribution to climate change as part of our public interest determination. In my opinion, it is readily apparent that the Commonwealth LNG project's operational CO<sub>2</sub> emissions, which are projected to exceed 3.5 million tons per year (the equivalent of the annual GHG emissions of nearly 700,000 automobiles<sup>6</sup>), will significantly impact the environment. As the EIS notes, these emissions will increase Louisiana's CO<sub>2</sub> emissions nearly 2 percent over 2019 levels.<sup>7</sup>

5. In addition, Commonwealth sits in southwest Louisiana, an area of the country with several environmental justice communities and a long history of heavy industrialization, with the attendant consequences for those surrounding communities. Indeed, many of the communities in the area exhibit rates of cancer, asthma, and other

<sup>6</sup> This figure was calculated using the U.S. Environmental Protection Agency's Greenhouse Gas Equivalencies Calculator. *See* U.S. Envtl. Prot. Agency, Greenhouse Gas Equivalencies Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator (last visited Nov. 15, 2022).

<sup>7</sup> Final Environmental Impact Statement, Docket Nos. CP19-502-000, et al., at 4-396 (Sept. 2022).

<sup>&</sup>lt;sup>5</sup> N. Nat. Gas Co., 174 FERC ¶ 61,189, at P 32 (2021). As I have previously stated, this is something we regularly do with respect to myriad different environment impacts. See, e.g., Columbia Gulf Transmission, LLC, 180 FERC ¶ 61,206 (2022) (Glick, Chairman, concurring at P 4); Tenn. Gas Pipeline Co., 179 FERC ¶ 61,041 (2022) (Glick, Chairman, concurring at P 5 & nn.190-93).

serious ailments that are well above the national average.<sup>8</sup> I believe that the Commission has both a legal and moral obligation to seriously consider the impacts of any facility it sites in these communities, including both the impacts directly attributable to the facility itself and cumulatively along with other facilities in the area. Today's order adopts the conclusion in the EIS that the facility will have significant visual impacts on certain surrounding environmental justice communities. And while I agree with that conclusion, I believe we must also continue to revise and refine our approach to environmental justice to ensure that we are adequately identifying all adverse impacts for environmental justice communities, mitigating them to the extent possible, and then seriously considering them in our public interest analysis.

6. Bearing those considerations in mind, this order aptly illustrates the dilemma we face under NGA section 3. We have what is clearly, at least in my opinion, a significant adverse impact in the form of 3.5 million tons of GHGs, but the potentially countervailing benefit to that adverse impact, namely the export of natural gas, falls outside our jurisdiction. Under that circumstance, it is not at all clear how the Commission is supposed to adequately assess the public interest, including the adverse impacts, without also considering the actual export and import, which Congress did not give this Commission jurisdiction to consider within our public interest determination. On the one hand, I find it difficult to believe that the Commission can consider only the adverse impacts associated with a section 3 facility and not the benefits the export or import may provide, as that would seem to tilt the public interest determination against the facility, which would be at least philosophically inconsistent with the standard of review, which as noted favors approval of the facility. On the other though, the courts have made clear that a section 3 facility's adverse impacts, including with respect to climate change and environmental justice, must be part of public interest determination under section 3 and inquiry that fails to seriously weigh those factors would also be legally suspect.9

7. That uncertainty creates a challenging situation, to put it mildly, for all stakeholders, including the Commission. After all, surely there is a degree of adverse impact so great that the public interest requires the Commission to reject a section 3 application. But without a clear framework for making that determination in light of the substantial benefits that LNG exports can provide (after all, Congress deemed exports to our free trade partners to be categorically in the public interest), there is unavoidable

<sup>9</sup> Vecinos para el Bienestar de la Comunidad Costera v. FERC, 6 F.4th 1321, 1331 (D.C. Cir. 2022).

<sup>&</sup>lt;sup>8</sup> See Kimberly A. Terrell & Gianna St. Julien, *Air Pollution Is Linked to Higher Cancer Rates Among Black or Impoverished Communities In Louisiana*, Environ. Res. Lett. 17 (Jan. 2022), *available at:* https://iopscience.iop.org/article/10.1088/1748-9326/ac4360/pdf.

uncertainty regarding how the Commission can and should weigh adverse impacts. When it comes to infrastructure that costs billions of dollars and impacts the surrounding community and the environment more generally, uncertainty is bad for everyone. For that reason, I believe it would be beneficial for Congress to clarify how the Commission is supposed to weigh the public interest factors under section 3, including the benefits provided by imports and exports of LNG.

For these reasons, I respectfully concur.

Richard Glick Chairman

# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

### Commonwealth LNG, LLC

Docket Nos. CP19-502-000 CP19-502-001

(Issued November 17, 2022)

DANLY, Commissioner, concurring in the judgment:

I concur in the decision to grant Commonwealth LNG, LLC's (Commonwealth) 1. Natural Gas Act (NGA)<sup>1</sup> authorization to site, construct, and operate a natural gas liquefaction and export facility, including an NGA section 3 natural gas pipeline, in Cameron Parish, Louisiana (Commonwealth LNG Project).

There are any number of problems with this order: we should not lose sight of the 2. limits of our authority under the NGA,<sup>2</sup> we should have repudiated Northern,<sup>3</sup> and we should not have included Social Cost of Greenhouse Gases calculations in this proceeding's environmental document.<sup>4</sup> All of these issues have been thoroughly

<sup>1</sup> 15 U.S.C. § 717b.

<sup>2</sup> See, e.g., Gulf S. Pipeline Co., LLC, 181 FERC ¶ 61,145 (2022) (Danly, Comm'r, concurring in part and dissenting in part at P 3).

<sup>3</sup> Id. (Danly, Comm'r, concurring in part and dissenting in part at P 4); see N. Nat. Gas Co., 174 FERC ¶ 61,189 (2021) (Northern). In Northern, a majority of my colleagues established what has been referred to (by some) as the "eyeball" test. See Catherine Morehouse, Glick, Danly spar over gas pipeline reviews as FERC considers project's climate impacts for first time, UTIL. DIVE, Mar. 19, 2021, https://www.utilitydive.com/news/glick-danly-spar-over-gas-pipeline-reviews-as-fercconsiders-projects-cli/597016/ ("We essentially used the eyeball test,' [Chairman Glick] said, adding that based on that analysis, 'it didn't seem significant in terms of the impact of those emissions on climate change."").

<sup>4</sup> Gulf S. Pipeline Co., LLC, 181 FERC ¶ 61,145 (Danly, Comm'r, concurring in the judgment at P 7); see also Final Environmental Impact Statement at 4-397 & 4-398 (Final EIS).

canvassed in my concurrently-issued separate statement in *Gulf South Pipeline Company*, *LLC*<sup>5</sup> and in many earlier separate statements and need not here be repeated at length.

3. I will start by acknowledging that the Commission is acting on this authorization relatively quickly following the release of the Final EIS, which was issued on September 9, 2022. This order comes 69 days later. I note that the Commission's action is approximately two months earlier than I recently predicted for the issuance of the order.<sup>6</sup>

4. I cannot overstate the importance of timely action on our pending NGA section 3 applications. Simply put, "LNG . . . is needed right now."<sup>7</sup> FERC Staff's 2022 Summer Assessment Report recognized as much.<sup>8</sup> Moreover, the Commission has come to

<sup>5</sup> *Gulf S. Pipeline Co., LLC*, 181 FERC ¶ 61,145.

<sup>6</sup> See Commission Danly November 4, 2022 Letter to Senator Barrasso at App. D, page 75 (predicting a January 9, 2023 order issuance date by estimating 4 months as the time between the final NEPA document and order issuance because that was the average processing time from January 1, 2019, to May 24, 2021).

<sup>7</sup> See Senate Energy & Nat. Res. Committee, *Full Committee Hearing To Review FERC's Recent Guidance On Natural Gas Pipelines*, https://www.energy.senate.gov/ hearings/2022/3/full-committee-hearing-to-review-ferc-s-recent-guidance-on-natural-gaspipelines, at 01:02:24 (Mar. 3, 2022) (recording Chairman Manchin).

<sup>8</sup> See FERC Staff Report to the Commission, Summer Energy Market and Reliability Assessment, at 6 (May 19, 2022), https://www.ferc.gov/media/report-summerassessment-2022 ("Higher natural gas prices for summer 2022 are expected at major trading hubs across the U.S. as demand growth is forecasted to exceed supply growth amid increases in LNG liquefaction capacity, increase exports due to global demand for LNG, and limited growth in natural gas production.") (FERC Staff's Summer 2022 Assessment Report); id. at 7 ("The surrounding Gulf Coast region should see a combination of strong industrial sector and electric power sector demand this summer in addition to record LNG export demand."); id. at 8 ("Natural gas production from the nearby Appalachia region is typically more than able to meet summer demand in the Northeast and New England, resulting in slightly reduced natural gas prices as compared to the Texas and Louisiana Gulf Coasts (South Texas to Henry Hub), which have significant year-round demand for electric power generation, industrial processes, and LNG exports."); id. at 9-10 ("International LNG prices continue to remain relatively high in 2022 amid supply uncertainties and the need to replenish Europe's natural gas inventories, which combined with increased liquefaction capacity in the U.S. is expected to drive higher LNG exports from the U.S.") (citing EIA, Short-Term Energy Outlook Market Review - Natural Gas (April 7, 2022),

https://www.eia.gov/outlooks/steo/marketreview/natgas.php); *id.* at 11 ("[H]igh European natural gas prices have recently incentivized more LNG exports to the continent, with

understand that several project sponsors with pending applications expect their projects will supply Europe's demand for LNG.<sup>9</sup> And unlike the application at issue in this proceeding, some of the applications for NGA section 3 authorizations continue to suffer unnecessary delay.

5. Two such projects are pending with the Commission on remand. On August 3, 2021, the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) remanded, without vacatur, authorization orders for two such projects due to deficiencies under the Administrative Procedure Act (APA) in the Commission's analysis of environmental justice issues and the Commission's failure to respond to an argument regarding section 1502.21(c) of the Council on Environmental Quality's National Environmental Policy Act regulations<sup>10</sup> when deciding whether it should use the Social Cost of Carbon.<sup>11</sup> It has been more than a year since the Commission reacquired jurisdiction over the orders on remand.<sup>12</sup> And on August 12, 2022, in one of the relevant

<sup>9</sup> See Rio Grande LNG, LLC, 181 FERC ¶ 61,032, at P 5 (2022) ("expects to play a role in supplying Europe's demand for LNG as the European Union attempts to reduce reliance on Russian energy supplies."); Port Arthur LNG, LLC, 181 FERC ¶ 61,024, at P 3 n.7 (2022) ("Sempra Infrastructure Partners, LP has entered into negotiations with multiple European companies that contemplate negotiation of long-term sale and purchase agreements for LNG from the Liquefaction Project."); see also Texas LNG Brownsville LLC, Request for Commission Action on Remand for Texas LNG Project, Docket No. CP16-116-000, at 2 (Aug. 12, 2022) (explaining that the applicant "is in active discussions with buyers of LNG, particularly in Europe, and is optimistic about the commercial environment and the opportunity to provide energy security to strategic allies of the United States").

<sup>10</sup> 40 C.F.R. § 1502.21(c).

<sup>11</sup> Vecinos para el Bienestar de la Comunidad Costera v. FERC, 6 F.4th 1321 (D.C. Cir. 2021) (Vecinos).

<sup>12</sup> The remaining authorizations at issue on remand are for Texas LNG Brownsville LLC's Texas LNG Project in Docket No. CP16-116 (Brownsville Project) and Rio Grande LNG, LLC's Rio Grande LNG Terminal in Docket No. CP16-454 and Rio Bravo Pipeline Company, LLC's Rio Bravo Pipeline Project in Docket No. CP16-455 (collectively, Rio Projects). For the authorizations relevant to Rio Projects, the D.C.

shipments to Europe outpacing exports to Asia beginning in December 2021. Continued increased international demand should incentivize high utilization rates of and exports from U.S. LNG export terminals throughout summer 2022.") (citation omitted); *id.* at 41 ("Natural gas exports are forecast to contribute to natural gas demand growth, as LNG exports continue to increase."); *id.* ("U.S. energy sector participants may continue to expand production and export supplies needed globally, such as LNG.").

dockets, *i.e.*, Docket No. CP16-116-000, Texas LNG Brownsville, LLC (Texas LNG) indicated that it "is in active discussions with buyers of LNG, particularly in Europe, and is optimistic about the commercial environment and the opportunity to provide energy security to strategic allies of the United States."<sup>13</sup> In that filing, Texas LNG requested prompt Commission action on remand and explained that "[t]he lack of Commission action on remand and explained that "[t]he lack of Commission action on remand is having a material impact on Texas LNG" and that "Texas LNG has significant internal and external technical resources standing by to continue the development and eventual construction of the project, but without a final order on remand, Texas LNG lacks much-needed clarity on timing for project planning purposes."<sup>14</sup> On November 4, 2022, Texas LNG again requested that the Commission promptly issue an order on remand.<sup>15</sup>

6. Rio Grande LNG, LLC has also recently requested prompt Commission action on remand.<sup>16</sup> And members of Congress have reached out to the Commission regarding the delay.<sup>17</sup> Even still, these efforts to underscore the importance of timely Commission

Circuit's mandate issued on October 25, 2021. For the authorizations relevant to the Brownsville Project, the D.C. Circuit's mandate issued on September 27, 2021. In regard to the authorizations for Annova LNG Common Infrastructure, LLC's Annova LNG Brownsville Project in Docket No. CP16-480, the court in *Vecinos* "dismiss[ed] the petition . . . as moot." *Vecinos*, 6 F.4th at 1327. The Commission granted a request to vacate the Annova LNG Brownsville Project authorization on April 15, 2021. *Annova LNG Common Infrastructure, LLC*, 175 FERC ¶ 61,030 (2021).

<sup>13</sup> Texas LNG Brownsville LLC, Request for Commission Action on Remand for Texas LNG Project, Docket No. CP16-116-000, at 2 (Aug. 12, 2022).

<sup>14</sup> *Id.* at 2-3.

<sup>15</sup> See Texas LNG Brownsville LLC, Reply Comments, Docket No CP16-116-000, at 18 (Nov. 4, 2022).

<sup>16</sup> Rio Grande LNG, LLC, Reply Comments, Docket Nos. CP16-454-000, *et al.* (Nov. 4, 2022) (stating "that the Commission has all information required in order to issue an order properly responding to the D.C. Circuit's Remand Order as well as the long-pending Rio Bravo Amendment Application in Docket No. CP20-481, and respectfully requests that the Commission promptly and as expeditiously as possible issue an order on remand").

<sup>17</sup> See U.S. Senator John Cornyn, November 4, 2022 Letter, Docket No. CP16-454-000, at 1 (observing that the project sponsor is "is well-positioned to provide LNG supply to our allies in Europe" and urging the Commission to resolve the pending proceedings in a timely manner); U.S. Representative Dan Crenshaw, August 22, 2022 Letter, Docket Nos. CP16-116, et al., at 1-2 (explaining the importance of LNG exports

action have all been unavailing. In the remand dockets, Commission staff took the unprecedented step of opening comment periods on the companies' responses for Commission staff's information request. Those comment periods closed on November 4, 2022, and action still has yet to be taken.<sup>18</sup>

7. It is beyond dispute that demand for American LNG has risen dramatically and that its importance as a geo-strategic commodity has become more critical than ever before. The costs caused by the Commission's delays are profound.<sup>19</sup> Delay in

and requesting an explanation for the delay in acting on remand).

<sup>18</sup> See Commission Staff, Notice Seeking Public Comment on Responses to Information Requests re Texas LNG Brownsville LLC, Docket No. CP16-116-000 (Sept. 30, 2022) (establishing an October 21, 2022 deadline for initial comments and a November 4, 2022 deadline for reply comments); Commission Staff, Notice Seeking Public Comment on Responses to Information Requests re Rio Grande LNG, LLC and Rio Bravo Pipeline Co., LLC, Docket Nos. CP16-454-000, et al. (Sept. 30, 2022) (same). *But see* Chairman Glick Response to U.S. Representative Dan Crenshaw's August 22, 2022 Letter, Docket No. CP16-116-000, et al., at 1 (Oct. 31, 2022) ("Once the comment period closes, the Commission will move forward with action addressing the Court's remand.").

<sup>19</sup> See, e.g., Nat'l Grid LNG, LLC, 179 FERC ¶ 61,205, at PP 5-7 (2022) (explaining that although National Grid LNG, LLC "planned to begin construction of the project at the end of 2016[,]... it did not receive certificate authorization until October 2018," and therefore it requested an increase in its initial recourse rates since the estimated cost of the facilities increased from \$180,256,679 to \$390,829,000-a difference of \$210,572,321—as a result of increased construction costs due to the timing change and construction work plan changes). Cf. Duke Energy, Dominion Energy and Duke Energy cancel the Atlantic Coast Pipeline (July 5, 2020), https://news.dukeenergy.com/releases/dominion-energy-and-duke-energy-cancel-the-atlantic-coastpipeline (announcing Dominion Energy's and Duke Energy's cancellation of the Atlantic Coast Pipeline Project—a project with a Commission-issued certificate of public convenience and necessity-due to "ongoing delays and increasing cost uncertainty which threaten[ed] the economic viability of the project" and explaining that the project faced many challenges, including: (1) adverse court decisions regarding their federal permit for waterbody and wetland crossings (Nationwide Permit 12), which led to uncertainty in the companies' investment; and (2) "legal challenges to the project's federal and state permits[,] [which] caused significant project cost increases and timing delays" and resulted in an estimated "project cost . . . increase[] to \$8 billion from the original estimate of \$4.5 to \$5.0 billion" as well as an estimated delay of "three-and- ahalf-year[s]" for the project's in-service date).

processing applications results in greater project expenses and difficulty securing capital on commercially acceptable terms. The climate of uncertainty created by our delays threatens the entire LNG industry. When regulatory timelines are uncertain, risk premiums rise, and it becomes more difficult for investors to rationally allocate capital in this capital-intensive industry. Simply put, regulatory uncertainty chills investment and impairs an industry the Commission is charged with promoting.<sup>20</sup> Although I am not aware of it happening in a recent NGA section 3 application, we have already witnessed proposed NGA section 7 projects<sup>21</sup> withdrawn due to Commission inaction.<sup>22</sup> Had we acted quickly, and had those projects met with Commission approval, they could have delivered critical, desperately needed natural gas.

8. Turning to the substance of today's order, I disagree with the Commission's attempt to sugarcoat its "analysis" just because we are unable to determine the

<sup>21</sup> 15 U.S.C. § 717f.

<sup>22</sup> See, e.g., Adelphia Gateway, LLC, Withdrawal of Prior Notice, Docket No. CP21-14-000, at 2 (Oct. 12, 2021) (withdrawing a request to install and operate an additional electric-motor driven compressor unit at its already authorized Marcus Hook Compressor Unit because "as a result of the extension of the environmental review through the supplemental EIS process and a prolonged Commission review process, the Project has been delayed well beyond Adelphia's expectations and, more specifically, there is significant uncertainty regarding when an order will issue in this docket" and "[i]n light of this, Adelphia has decided not to continue the development of the Project"); Eastern Gas Transmission & Storage, Letter Withdrawing its Applications for the Mid-Atlantic Cooler Project, Docket No. CP21-97-000, at 1 (Sept. 20, 2021) (withdrawing an application for an NGA section 7 certificate—which had been filed nearly six months prior and had requested permission to build minor upgrades to three compressor stations in Pennsylvania and Virginia-because, "[d]espite [the project's] limited scope, the Commission has not taken action to prepare an Environmental Assessment"); Dominion Energy Transmission Inc., Withdrawal of Certificate Application for Sweden Valley Project, Docket No. CP18-45-000 (June 28, 2019) (withdrawing an application for a project that "involved limited facilities, including modification of an existing compressor station and the construction of two measuring stations, approximately five miles of pipeline and related ancillary facilities" because "the Project has been adversely impacted" and "[t]he Project customer has opted to terminate the requested transportation service" as a result of the Commission's inaction on the application nearly ten months after the issuance of an environmental assessment).

 $<sup>^{20}</sup>$  See NAACP v. FPC, 425 U.S. 662, 669-70 (1976) (recognizing that the purpose of the NGA is to "encourage the orderly development of plentiful supplies of . . . natural gas at reasonable prices") (citations omitted).

significance of GHG emissions. Today's order states that "[b]y adopting the climate impact analysis in the EIS, [the Commission] recognize[s] that the project may release GHG emissions that contribute incrementally to future global climate change impacts" and that the Commission has "identified climate change impacts in the region."<sup>23</sup> Exactly what climate change impacts in the region did the Commission "identif[y]"?<sup>24</sup> There certainly appear to be no "identified climate change impacts" in the record. Could it be that the Commission is referring to no more than the disclosure of estimated emissions associated with the project's construction and operation, or the comparison of the project's GHG emissions to the total GHG emissions of the United States as a whole, or the comparison to state GHG inventories, or the comparison of a project's GHG emissions to a state's GHG emissions reduction goals?<sup>25</sup> Is the Commission merely referring to its discussion in the Final EIS of the U.S. Global Change Research Program's Fourth Assessment Report, which was published in 2017 and 2018, and that report's "observations" and "projections" of "climate change impacts" for the Southeast region of the United States?<sup>26</sup> Never mind the "climate change impacts," where in the record can we find the "climate impact analysis" upon which that identification of impacts purports to rely? Can the Commission's mere disclosure of direct emissions estimates and their bald comparison to state inventories truly be considered "analysis" when nothing can be gleaned from that information?<sup>27</sup> This is especially doubtful given that the Commission has no means by which to determine the significance of those estimated emissions.

 $^{23}$  Commonwealth LNG, LLC, 181 FERC  $\P$  61,143, at P 75 (2022) (citations omitted) (Commonwealth).

<sup>24</sup> Id.

<sup>25</sup> See Final EIS at 4-396 to 4-397.

<sup>26</sup> See id. at 4-394 & 4-395 (citing U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME I (Donald J. Wuebbles et al. eds) (2017), https://science2017.global change.gov/downloads/CSSR2017\_FullReport.pdf (USGCRP Report Volume I); U.S. GLOBAL CHANGE RESEARCH PROGRAM, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES (David Reidmiller et al. eds.) (2018), https://nca2018.globalchange.gov/downloads/NCA4 \_2018\_FullReport.pdf (USGCRP Report Volume II)).

<sup>27</sup> See Merriam-Webster, https://www.merriam-webster.com/dictionary/analysis (defining "analysis" as "a detailed examination of anything complex in order to understand its nature or to determine its essential features : a thorough study"); Cambridge Dictionary, https://dictionary.cambridge.org/dictionary/english/analysis (defining "analysis" as "the act of studying or examining something in detail, in order to discover or understand more about it, or your opinion and judgment after doing this");

9. Without a credible, reasoned method to determine significance, the Commission has a rocky road ahead should it continue in its pursuit of environmental policy goals. Aside from the legal risk under the APA that would attend the establishment of any unsupported, arbitrary threshold, a reading of the Supreme Court's decision in West Virginia v. Environmental Protection Agency<sup>28</sup> should impress upon the Commission that caution is necessary when contemplating the regulation of subjects that have not been clearly placed within our jurisdiction by Congress. "Agencies have only those powers given to them by Congress, and 'enabling legislation' is generally not an 'open book to which the agency [may] add pages and change the plot line."<sup>29</sup> Notably, the Commission received a much-needed reminder of this several months ago when the U.S. Court of Appeals for the Fifth Circuit vacated a portion of the Commission's order that was *ultra vires* because the Commission's acted outside its statutory authority.<sup>30</sup> Because the Commission does not have "a clear delegation from [Congress]"<sup>31</sup> to regulate GHG emissions, the Commission's charge under the NGA remains "encourag[ing] the orderly development of plentiful supplies of . . . natural gas at reasonable prices."<sup>32</sup> In other words, the NGA's purpose, established by Congress and articulated by the Supreme Court, is for the Commission to *promote* the development of natural gas infrastructure.

10. What it comes down to is this—until a credible methodology, based on reasoned decision making, is established by a competent agency with the requisite statutory authority, the Commission cannot conclude whether the estimated GHG emissions from a proposed project are significant. The answer to the Commission's problem is not to

<sup>28</sup> West Virginia v. EPA, 142 S. Ct. 2587 (2022).

<sup>29</sup> Id. at 2609 (citation omitted).

<sup>30</sup> See Midship Pipeline Co., L.L.C. v. FERC, 45 F.4th 867, 877 (5th Cir. 2022) (vacating part of the Commission's order and remanding the remainder because "[t]he FERC's interpretation of the NGA to give the agency power to determine 'the reasonable cost' of remediation efforts 'change[d] the plot line' of its enabling legislation, and was therefore erroneous" and "[t]he FERC lacks such authority under the NGA, and it likewise lacked authority to order an ALJ to make such a determination indirectly") (quoting *West Virginia v. EPA*, 142 S. Ct. at 2609).

<sup>31</sup> West Virginia v. EPA, 142 S. Ct. at 2616.

<sup>32</sup> NAACP, 425 U.S. at 669-70 (citations omitted); accord Myersville Citizens for Rural Cmty., 783 F.3d 1301, 1307 (quoting NAACP, 425 U.S. at 669-70).

Oxford Learner's Dictionaries, https://www.oxfordlearnersdictionaries.com/definition/ english/analysis (defining "analysis" as "the detailed study or examination of something in order to understand more about it; the result of the study").

paper over the lack of analytical material in its orders by simply declaring that it has conducted "analysis" that has led to the identification of unspecified "impacts." Ignore the Commission's characterization of what it is doing; look instead to what it actually does. Equally important is what it fails to do. The Commission has *never* established a reasoned, credible basis upon which to ascribe significance under NEPA to a given quantity of project-level GHG emissions, using the Social Cost of Carbon or any other metric. Nor has the Commission been able to connect a particular project's GHG emissions to discrete, physical effects on the environment. Why? Because there exist no means by which to arrive at such a determination such that it would satisfy our obligations under the APA to engage in reasoned decision making.

For these reasons, I respectfully concur in the judgment.

James P. Danly Commissioner

## UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

#### Commonwealth LNG, LLC

Docket Nos. CP19-502-000 CP19-502-001

(Issued November 17, 2022)

CLEMENTS, Commissioner, concurring:

I concur with the decision to authorize the Commonwealth LNG Project because it 1. is consistent with our precedents on issuing conditional authorizations under the Natural Gas Act.<sup>1</sup> This project shows why we should reconsider our approach.<sup>2</sup>

Commonwealth's proposed LNG terminal would be located on the shoreline of the 2. Calcasieu Ship Channel, less than one mile from the Gulf of Mexico.<sup>3</sup> The terminal would occupy approximately 105 acres, of which 89 are wetlands that would be permanently lost.<sup>4</sup> There are also two waterbodies on the site that would be permanently impacted.<sup>5</sup> The project's marine facilities will occupy another 47 acres of open water.<sup>6</sup> Commonwealth will excavate and dredge approximately 1.73 million cubic yards of sediment from the Calcasieu Ship Channel to create an LNG tanker berthing area; it will dredge another 152,000 yards every two years for maintenance. Considering these facts, Commonwealth's proposal could be fairly characterized as a water-based project. Yet,

 $^{2}$  I have questioned the wisdom of conditional authorizations in other contexts. E.g., PennEast Pipeline Co., LLC, 174 FERC ¶ 61,056 (2021) (Glick, Chair, and Clements, Comm'r, concurring).

<sup>3</sup> Final Environmental Impact Statement for the Commonwealth LNG Project, Docket Nos. CP19-502-000 and CP19-502-001 (Sept. 2022) at p. 2-1.

<sup>4</sup> *Id.* at pp. 2-9, 4-83.

<sup>5</sup> *Id.* at p. 4-74.

<sup>6</sup> *Id.* at p. 2-7.

<sup>&</sup>lt;sup>1</sup> See, e.g., Broadwater Energy LLC, 124 FERC ¶ 61,225 (2008); Crown Landing LLC, 117 FERC ¶ 61,209 (2006). Courts have found the practice of issuing conditional authorizations lawful. See, e.g., Del. Riverkeeper Network v. FERC, 857 F.3d 388, 399 (2017). However, just because courts have allowed this approach does not mean it is good policy.

the agencies responsible for issuing critical water-related permits have not yet acted.<sup>7</sup> Their future decisions could well result in changes to the project or to planned environmental mitigation measures. As we issue the order today, neither the Commission nor the public we serve can predict, let alone evaluate, what those changes might mean for the environment or for the health and welfare of the environmental justice and other communities affected by the project.

3. I am troubled that there will be no opportunity for public comment on these moving pieces, at least as part of the Commission's approval process. The Commission should consider whether to provide a formal opportunity for public comment on the final environmental impact statement (EIS) to assure we have input on changes made after the draft EIS was issued.<sup>8</sup> This is not necessarily a question of what is legally required of the Commission as the lead agency under the National Environmental Policy Act (though to be sure some intervenors and commenters contend we have fallen short of our legal obligations, demonstrating the increased legal risk project authorizations face from the rush to act without full consideration of material information). Even more fundamentally, it is a policy question of how best to protect the public interest, which is our charge under the Natural Gas Act. Keeping impacted members of the public fully informed is the first step. Genuinely listening to them is the vital next step.

4. Perhaps most important, we must continue our efforts to inform affected environmental justice communities about proposed projects, as well as potential changes to those projects and planned mitigation measures. We then must directly and actively solicit their input on potential mitigation measures. As I heard during the Commission's listening sessions leading to the development of our Office of Public Participation and in subsequent meetings with environmental justice community representatives, we need

<sup>&</sup>lt;sup>7</sup> For example, the Army Corps of Engineers has not yet issued critical Clean Water Act section 404 and Rivers and Harbors Act section 10 permits for the project. Moreover, the Louisiana Department of Natural Resources has not issued a coastal use permit, which will serve as its consistency determination under the federal Coastal Zone Management Act.

<sup>&</sup>lt;sup>8</sup> As reflected in the Commission's order, the location for placement of dredged material changed from the time of the draft EIS to the final EIS. *Commonwealth LNG*, *LLC*, 181 FERC ¶ 61,143, at P 34 (2022) (Order). On October 26, 2022, the National Marine Fisheries Service (NMFS) submitted extensive comments to the Commission, which raised concerns with the new plan for the dredged material. The Commission's order says these concerns will be addressed sometime in the future by the Army Corps of Engineers and possibly the Fish and Wildlife Service. Order at P 34. The public has had no opportunity to comment on the issues the NMFS has raised, nor can it possibly know at this stage how the agencies will resolve these concerns.

more direct and sustained engagement to assure these communities are fully informed and have a meaningful opportunity to explain on the record what specific mitigation measures are needed. Today's conditional authorization cannot assure that a meaningful opportunity was provided to environmental justice communities in this instance. The Commission's dedicated staff have helped us to improve our performance in this regard, but we must do more.<sup>9</sup>

5. Finally, I support the Chairman's call for Congress to provide a clear framework for the Commission to make its public interest determination under section 3 of the Natural Gas Act.<sup>10</sup>

For these reasons, I respectfully concur.

Allison Clements Commissioner

<sup>10</sup> Order (Glick, Chairman, concurring, at P 7).

<sup>&</sup>lt;sup>9</sup> For example, we should *require* project sponsors to submit plans for engaging with the affected public, including environmental justice communities, on the essential elements of emergency response plans for LNG facilities. I am heartened that this order at least encourages Commonwealth to do so voluntarily. I hope the company will set a strong example for the LNG industry in its engagement with environmental justice communities.

# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

### Commonwealth LNG, LLC

Docket Nos. CP19-502-000 CP19-502-001

(Issued November 17, 2022)

PHILLIPS, Commissioner, concurring:

1. I concur on today's order as it is consistent with Commission precedent. I believe strongly that applicants, environmental groups, and communities are entitled to consistent, predictable outcomes from the Commission. With that said, I am concerned with our approach to mitigating impacts on environmental justice communities, especially those already enduring negative impacts from industrial development.

2. Commonwealth LNG is located on the Chenier Plain, an almost treeless, flat marsh surrounded by the Sabine Wildlife Refuge on the Calcasieu Ship Channel and the Gulf of Mexico. The facility will be adjacent to the existing Calcasieu Pass LNG Terminal and the proposed CP2 LNG Terminal, and just over 2 miles away from, and within view of Cameron, Louisiana. Cameron is a small town of approximately 219 people, 36% of whom live below the poverty level, which is a higher percentage than the parish in which the town is located. The facility will be directly north, and within view of, Holly Beach, a recreational area on the Gulf that serves tourists, who make valuable economic contributions to the area, and nearby residents. This is a significant burden for any community to bear, and I have deep reservations about the consolidation of these negative visual impacts on this small town.

3. With that said, the diligent work of our staff did not identify any other disproportionately high and adverse health or environmental impacts to this environmental justice community. Furthermore, Commonwealth LNG cites its community engagement in the area and provides mitigation consistent with our precedent for the severity of its impacts.<sup>1</sup> I believe as a general matter applicants should make

<sup>&</sup>lt;sup>1</sup> Compare Commonwealth LNG, LLC, 181 FERC ¶ 61,143, at P 72 (2022) (describing the Facility Lighting Plan and tree planning to reduce visual impacts) with Annova LNG Common Infrastructure, LLC, 169 FERC ¶ 61,132, at P 51 (2019) (describing the Facility Lighting Plan to reduce visual impacts); Venture Global Plaquemines LNG, 168 FERC ¶ 61,204 at Appendix, Environmental Condition 1 (requiring proposed mitigation plans); Plaquemines LNG Final Environmental Impact Statement, CP17-66-000 at 4-64 (describing the Facility Lighting Plan to reduce visual

efforts to improve community outcomes at large and I especially view efforts to recruit job applicants within the community to be of great value. Specifically in areas in which there are developing and cumulative impacts, I believe such measures may be necessary.

For these reasons, I respectfully concur.

Willie L. Phillips Commissioner

impacts).

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