

144 FERC ¶ 61,099  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;  
Philip D. Moeller, John R. Norris,  
Cheryl A. LaFleur, and Tony Clark.

Sabine Pass Liquefaction, LLC  
Sabine Pass LNG, L.P.

Docket No. CP13-2-000

ORDER AMENDING SECTION 3 AUTHORIZATION

(Issued August 2, 2013)

1. On October 9, 2012, Sabine Pass Liquefaction, LLC (Sabine Liquefaction) and Sabine Pass LNG, L.P. (Sabine Pass LNG) (collectively, Sabine Pass) filed an application to amend the order issued in *Sabine Pass Liquefaction, LLC*, 139 FERC ¶ 61,039 (2012) (2012 Order).<sup>1</sup> That order authorized Sabine Pass under section 3 of the Natural Gas Act (NGA) and the Commission's regulations<sup>2</sup> to site, construct, and operate facilities for the liquefaction and export of domestically-produced natural gas at the existing Sabine Pass Liquefied Natural Gas (LNG) terminal.<sup>3</sup> In this proceeding, Sabine Pass seeks authorization to make certain modifications that will enable it to accelerate construction and enhance the Liquefaction Project's operation and reliability (Modification Project). As discussed below, this order grants the requested authorization.

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<sup>1</sup>*Reh'g denied*, 140 FERC ¶ 61,076 (2012).

<sup>2</sup> 18 C.F.R. Part 153 (2013).

<sup>3</sup> Sabine Pass LNG and Sabine Pass Liquefaction are subsidiaries of Cheniere LNG, Inc., which is a subsidiary of Cheniere Energy, Inc.

## I. Background

2. In 2004, the Commission authorized Sabine Pass LNG under section 3 of the NGA to site, construct, and operate an LNG terminal to import foreign-sourced LNG.<sup>4</sup> Subsequently, in 2009, the Commission issued an order amending Sabine Pass LNG's section 3 authorization to allow the terminal facilities to export LNG that had been previously imported into the United States and stored at the Sabine Pass LNG terminal in liquid form.<sup>5</sup> The 2012 Order authorized Sabine Pass to site, construct, and operate facilities designed to liquefy domestic natural gas delivered by nearby pipelines,<sup>6</sup> store the LNG in the terminal's storage facilities, and deliver the LNG from the storage tanks into marine vessels for export (Liquefaction Project). As relevant to this proceeding, the 2012 Order authorized Sabine Pass to construct and operate four LNG liquefaction trains and a 12-inch diameter, 1.2-mile-long water supply pipeline across the Sabine Pass Channel using horizontal directional drilling.

3. The 2012 Order authorized the Liquefaction Project to be constructed in two stages, with each stage comprising two LNG liquefaction trains. Sabine Pass commenced construction of Stage 1 (Trains 1 and 2) in May 2012. Sabine Pass anticipates that Train 1 will be substantially completed in February 2016, and that Train 2 will be substantially completed in June 2016.

4. Sabine Liquefaction initially entered into four LNG sale and purchase agreements equal to the approximate maximum capacity of the Liquefaction Project (16 million tons per year (mtpa) of LNG, or approximately 2.2 Bcf per day). Based on more recent detailed engineering review and given certain gas quality and ambient conditions, Sabine Liquefaction has concluded that the maximum capacity of the Liquefaction Project is 18 mtpa. Sabine Liquefaction subsequently executed a sale and purchase agreement with its affiliate, Cheniere Marketing LLC, for up to approximately 2 mtpa of additional LNG capacity, subject to receipt of all required export authorizations from the U.S. Department of Energy.

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<sup>4</sup> *Sabine Pass LNG, L.P.*, 109 FERC ¶ 61,324 (2004). The Sabine Pass LNG terminal is located in Louisiana on the eastern shore of the Sabine Pass Channel, east of the Town of Sabine Pass, Texas.

<sup>5</sup> *Sabine Pass LNG, L.P.*, 127 FERC ¶ 61,200 (2009).

<sup>6</sup> The pipeline facilities of Cheniere Creole Trail Pipeline, L.P. and Kinder Morgan Louisiana Pipeline LLC interconnect with the Sabine Pass LNG terminal. Natural Gas Pipeline Company of America LLC's pipeline facilities traverse the terminal site, but are not currently interconnected with the LNG terminal.

## II. Proposals

5. Sabine Pass states that because it has sold liquefaction services utilizing all the Liquefaction Project's authorized capacity, it plans to accelerate construction of Stage 2 (Trains 3 and 4) to coincide with construction of Stage 1 (Trains 1 and 2).<sup>7</sup> Sabine Pass states that the Modification Project proposals herein are necessary to safely accelerate construction of the Liquefaction Project and will enable Sabine Pass to meet the Liquefaction Project's targeted in-service date, its commercial obligations under its LNG sale and purchase agreements, and its construction contract with Bechtel Oil, Gas and Chemicals, Inc.

6. Sabine Pass states that its requested modifications are minor and that there will be no significant environmental or landowner impacts. With the exception of the adjacent 80-acre Lighthouse Road Tract, to be used initially as additional workspace and thereafter in conjunction with operation of the Liquefaction Project, and portions of two additional water supply pipelines, the Modification Project will be located wholly within the existing Sabine Pass LNG terminal and Liquefaction Project property boundaries and will not require the acquisition of additional land.<sup>8</sup> The Modification Project facilities are discussed below.

### A. Facilities

#### 1. Feed-Gas Metering and Condensate Removal Facilities

7. The proposed Modification Project facilities include four feed-gas pipeline meter interconnects with the Liquefaction Project, a heavies removal unit (HRU) for each liquefaction train, and condensate storage, metering, and send-out facilities. These facilities will be constructed within the boundary of the Liquefaction Project or within areas outside the boundary which were reviewed and approved by the Commission for use in conjunction with the Liquefaction Project. Thus, installation of the proposed facilities will not involve ground disturbances beyond those previously authorized for the Liquefaction Project.

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<sup>7</sup> Sabine Pass states it also contemplates submitting an application under NGA section 3 to construct and operate additional trains in a Stage 3 (Trains 5 and 6) that would add 1.3 Bcf per day of liquefaction capability. *See* Sabine Pass' prefiling proceeding in Docket No. PF13-8-000.

<sup>8</sup> The Liquefaction Project includes a site construction area of approximately 288.21 acres and the permanent use of an additional 191 acres within the existing terminal site for operation.

8. The four feed-gas pipeline meter stations Sabine Pass proposes to construct will ensure reliable delivery of feed-gas to the Liquefaction Project. Sabine Pass will construct the interconnects on the west side of the Liquefaction Project between the existing Duck Blind Road and Liquefaction Trains 2 and 4. Each pipeline meter interconnect will include filtration/liquids separation, pressure regulation, and measurement equipment.

9. Once these facilities are constructed, and prior to commencement of service, Sabine Pass contemplates transferring ownership and control of two of the feed-gas pipeline meter station interconnects to Cheniere Creole Trail Pipeline, L.P (CTPL) and Natural Gas Pipeline Company of America LLC (NGPL), each of which will seek Commission authorization to acquire and operate the facilities.<sup>9</sup> While ultimate ownership of the remaining two feed-gas pipeline meter stations for which authorization is sought in this application has not yet been finalized, Sabine Pass states that discussions are currently ongoing with other interstate natural gas pipeline companies with facilities in proximity to the Liquefaction Project concerning possible interconnection with the Liquefaction Project.

10. Sabine Pass proposes to construct four HRUs to ensure the reliability and operability of the Liquefaction Project. Prior to liquefaction, any heavier compounds in feed-gas must be removed to avoid freezing of the gas stream in the downstream liquefaction unit.<sup>10</sup> An HRU will be located inside the battery limits within each of the four liquefaction trains. Each HRU will consist of a heavies removal column and reboiler, debutanizer systems, and a condensate stabilizer system. The HRUs are intended to operate intermittently when the Liquefaction Project receives feed-gas of heavier composition than that anticipated under normal operating circumstances.

11. Sabine Pass proposes a condensate storage, metering, and send-out system to manage the condensate produced by the HRUs. For condensate storage, Sabine Pass will construct one 5,000-barrel internal floating roof (IFR) tank each for Stages 1 and 2,

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<sup>9</sup> On February 21, 2013, the Commission authorized CTPL, among other things, to construct and operate the new Gillis Compressor Station and approximately 200 feet of 42-inch diameter lateral piping to tie into one of the meter stations proposed in the Modification Project to supply domestic natural gas to the Liquefaction Project. *Cheniere Trail Pipeline*, 142 FERC ¶ 61,137, at P 11 (2013).

<sup>10</sup> The presence of heavy compounds can interfere with the liquefaction process and must be removed from the delivered gas stream before liquefaction. The HRU is used to remove condensate and any such heavier hydrocarbon compounds (e.g., pentanes, hexanes, heptanes, octanes, nonanes, and decanes and aromatics, such as benzene, toluene, ethylbenzene, and xylene) that may be present in the feed-gas stream.

immediately east of LNG Storage Tank S-101 and northeast of Bank 3 of the Submerged Combustion Vaporizers.<sup>11</sup> Both IFR tanks will be able to receive condensate from each HRU via a common 6-inch diameter pipeline. Sabine Pass proposes to construct and operate a condensate meter station, as well as approximately 1,300 feet of 4-inch diameter pipeline, between the condensate storage tanks and the condensate pipeline system of Plains Pipeline, L.P. (Plains Pipeline).

12. The primary method for transporting condensate from the Liquefaction Project site will be through the Plains Pipeline. However, Sabine Pass also proposes to construct and operate truck loading facilities to transport condensate produced by the HRUs in the event that the condensate does not meet Plains Pipeline's quality specifications or there is a disruption in pipeline service. The truck loading facilities will include a metering skid with a downstream truck loading connection. Condensate will be loaded onto commercial trucks, estimated at no more than two trucks per year, which will pass through industrial areas to Port Arthur, Texas, and Lake Charles, Louisiana.

## **2. Workspace and Parking Facilities**

13. Construction of the proposed Modification Project facilities will necessitate additional workspaces, laydown, and parking areas to be utilized during the ongoing construction of the Liquefaction Project. These additional areas will allow construction of the Liquefaction Project's four trains to proceed safely under a more aggressive schedule than the initially contemplated phased construction.

14. These facilities will be located within the Sabine Pass LNG Terminal and Liquefaction Project property boundaries, except for the facilities to be constructed on the Lighthouse Road Tract. The 80-acre Lighthouse Road Tract is owned by the same landowner who owns the property on which the Sabine Pass LNG Terminal and the Liquefaction Project are located. It is currently used for waterfowl hunting but will be converted to industrial use for operation of the Liquefaction Project.

## **3. Water Supply Facilities**

15. Sabine Pass proposes to construct two additional water supply lines, portions of which are outside of the boundaries of the Liquefaction Project, to support the water demands of the Liquefaction Project during peak operations and to provide redundancy in the event of a failure or disruption of service in any of the existing water supply lines. The first proposed water supply line will be a 12-inch diameter, 5,623-foot long line that will extend from the Liquefaction Project, across the Sabine Pass Channel (via horizontal

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<sup>11</sup> These facilities were authorized as part of the original Sabine Pass LNG terminal in 2004.

directional drilling (HDD)), to connect to an existing 12-inch diameter water supply line on Pleasure Island. This will provide up to 700 gallons per minute (GPM) of water to the Liquefaction Project. The second proposed water supply line will be a parallel 24-inch diameter line that will connect to a 24-inch diameter water supply line to be constructed by the City of Port Arthur, Texas to provide up to 3,500 GPM of water to the Liquefaction Project. Sabine Pass has leased from the City of Port Arthur an approximate 200 by 200 foot temporary workspace located adjacent to the Walter Umphrey State Park on Pleasure Island for HDD entry for both water supply lines.

### **III. Public Notice**

16. Notice of the application was published in the *Federal Register* on October 29, 2012 (77 Fed. Reg. 65,546), with interventions and protests due on or before November 8, 2012.

17. On February 4, 2013, the Sierra Club Environmental Law Program (Sierra Club) filed a motion to intervene with its National Environmental Policy Act (NEPA) scoping comments. It refiled its pleading electronically, with minor corrections, after regular business hours on February 4, 2013. On February 19, 2013, Sabine Pass filed an answer, opposing Sierra Club's motion to intervene on the grounds that Sierra Club did not demonstrate good cause for filing a motion to intervene after November 8, 2012, and stating that Sierra Club's intervention would delay and disrupt the proceeding and prejudice existing parties. Sabine Pass also asserts that the motion to intervene should be dismissed because Sierra Club, under the guise of submitting scoping comments, is asking the Commission to reconsider the Liquefaction Project due to what it alleges is improper segmentation of the environmental review process of the Liquefaction and Modification Projects.

18. The Commission's regulations provide that timely motions to intervene in Commission proceedings are those filed within the time period prescribed by the Commission's notice of the proceedings for filing interventions and protests.<sup>12</sup> In this case, motions to intervene were due by November 8, 2012. The Commission has a liberal intervention policy in applications for authorization of natural gas projects before an order on the merits has been issued.<sup>13</sup> Notwithstanding the fact that its motion to intervene was filed late, the Commission finds that Sierra Club has demonstrated an interest in this proceeding and that granting Sierra Club's intervention at this stage of the

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<sup>12</sup> 18 C.F.R. § 385.210(b) (2013).

<sup>13</sup> See *Cameron LNG, LLC*, 118 FERC ¶ 61,019, at PP 21-22 (2007).

proceeding will not cause undue delay or disruption or otherwise prejudice the applicant or other parties.<sup>14</sup> We will grant Sierra Club's late motion to intervene.

19. While Sabine Pass disputes Sierra Club's scoping arguments, the relative merits of the Sierra Club's scoping arguments do not determine whether Sabine Pass has been prejudiced or whether the Commission should grant intervenor status. Having granted Sierra Club's motion to intervene and found that Sierra Club has a substantial interest in this proceeding, the Commission will address Sierra Club's scoping arguments in the environmental discussion of this order.

#### IV. Discussion

20. Because the proposed facilities will be used to export natural gas to foreign countries, the siting, construction, and operation of the facilities require Commission approval under NGA section 3.<sup>15</sup> While section 3(a) provides that an application shall be approved if the proposal "will not be inconsistent with the public interest," section 3 also provides that an application may be approved "in whole or in part, with such modification and upon such terms and conditions as the Commission may find necessary or appropriate."<sup>16</sup> Section 3(a) also provides that for good cause shown, the Commission may make supplemental orders as it may find "necessary or appropriate."

21. The proposed Modification Project will enable Sabine Pass to accelerate its Liquefaction Project construction schedule and will enhance the operability and

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<sup>14</sup> 18 C.F.R. § 385.214(d) (2013).

<sup>15</sup> 18 C.F.R. § 153.5 (2013). The regulatory functions of section 3 were transferred to the Secretary of Energy in 1977 pursuant to section 301(b) of the Department of Energy Organization Act. 42 U.S.C. § 7151(b)(2006). In reference to regulating the imports or exports of natural gas, the DOE Secretary subsequently delegated to the Commission the authority to approve or disapprove the construction and operation of particular facilities, the site at which facilities shall be 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. The Secretary's current delegation of authority to the Commission relating to import and export facilities was renewed by the Secretary's DOE Delegation Order No. 00-044.00A, effective May 16, 2006. Applications for authorization to import or export natural gas (the commodity) must be submitted to DOE.

<sup>16</sup> 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 Corporation v. FPC*, 495 F.2d 1057, 1063-64 (D.C. Cir. 1974), *cert. denied*, 419 U.S. 834 (1974) and *Dynegy LNG Production Terminal, L.P.*, 97 FERC ¶ 61,231 (2001).

reliability of the Liquefaction Project. The HRU facilities will remove heavier hydrocarbons that could freeze in the liquefaction process. The condensates produced by the HRU will be stored on-site before transportation by pipeline or truck, in the event that Plains Pipeline is unable to transport the condensate. The additional water pipelines will provide a reliable supply of additional water that will be used for the liquefaction process and potable water requirements. The additional workspace, laydown, and parking areas will provide a safer work environment during construction of the Liquefaction Project on an accelerated schedule. Thus, we find that, subject to the environmental conditions in this order, the proposed Modification Project is not inconsistent with the public interest.

22. Sabine Pass' proposal includes the construction of four feed-gas meter stations interconnecting with pipelines supplying domestic natural gas to the Liquefaction Project. After construction and prior to commencement of service, Sabine Pass states that it intends to transfer ownership and control of two feed-gas meter stations to CTPL, NGPL, and two to as yet unidentified interstate pipelines. We note that section 153.9(a) of the regulations provides that section 3 facilities are not transferrable without prior Commission authorization. Therefore, the pipelines planning to acquire and operate the feed gas meter stations must do so pursuant to either case-specific or Part 157 blanket certificate authorization. Conditioned upon such authorization being in place, Sabine Pass is authorized to transfer, as proposed, the four metering facilities once they are completed. Within 10 days of transfer, Sabine Pass must notify the Commission of the effective dates of the transfers and the identities of the pipelines acquiring the facilities.

## **V. Environment and Safety**

23. On January 3, 2013, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment* (NOI). The NOI was mailed to interested parties including federal, state, and local officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and affected property owners. In response to the NOI, the Sierra Club filed a motion to intervene that included environmental scoping comments.

24. Sierra Club comments that the installation of the proposed HRUs and liquid handling operations would increase overall operations and throughput of the facility. As stated in the environmental assessment (EA), the Modification Project would not affect Sabine Pass' authorized LNG import or export volumes. The amount of LNG that Sabine Pass can export is limited by the export authorizations issued by the U.S. Department of Energy's Office of Fossil Energy.<sup>17</sup>

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<sup>17</sup> Modification Project EA at 6.

25. Sierra Club also comments that the EA should address additional air modeling to identify air quality impacts on the surrounding region, including ozone levels. The EA includes an air quality modeling analysis that evaluates impacts of the Modification Project combined with the existing Sabine Pass LNG terminal and includes other existing sources of air emissions in the project area.<sup>18</sup> The modeling analysis demonstrated that the Modification Project would not cause or significantly contribute to a violation of National Ambient Air Quality Standards. In addition, the EA explains that as part of Sabine Pass' air permit application, the Louisiana Department of Environmental Quality (LDEQ) clarified that updated photochemical grid modeling to reevaluate ozone impacts would not be required, and that the additional emissions would not change the ozone concentrations above the reporting threshold in the previous ozone impact report.<sup>19</sup>

26. Sierra Club requests that the Commission consider alternatives that would avoid the wetland impacts associated with the proposed placement of the Modification Project facilities. The EA evaluates the feasibility of other alternatives but found that no environmentally preferable alternative was identified.<sup>20</sup>

### Segmentation

27. Sierra Club<sup>21</sup> asserts that the Modification Project is an effort to avoid comprehensive environmental review of the Liquefaction Project by improperly "segmenting" the Modification Project from the Liquefaction Project.<sup>22</sup> Sabine Pass contends that the Modification Project does not amount to unlawful segmentation.

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<sup>18</sup> *Id.* at 59.

<sup>19</sup> *Id.* at 63.

<sup>20</sup> *Id.* at 68-69. The EA considered the proposed project and the no-action alternative, and found no other system alternative that would meet the project purpose and need. In addition, the EA examined whether there were preferable alternative sites for each component of the project, and found none that were environmentally preferable. No stakeholder provided suggested alternatives for study.

<sup>21</sup> Williams Research on behalf of the Gulf Coast Environmental Labor Coalition makes the same segmentation argument in comments on the EA.

<sup>22</sup> "Segmentation" or "piecemealing" is "an attempt by an agency [or applicant] to divide artificially a 'major Federal action' into smaller components to escape the application of NEPA to some of its segments." *O'Reilly v. United States Army Corps of Engineers*, 477 F.3d 225 at 235-236 (5<sup>th</sup> Cir. 2007) (citing *Save Barton Creek Ass'n v. Federal Highway Administration*, 950 F.2d 1129 at 1139-1140, 1144 (5<sup>th</sup> Cir. 1992)).

(continued...)

### Major Federal Action

28. Unlawful segmentation almost always involves a “major Federal action”<sup>23</sup> that requires preparation of an environmental impact statement (EIS) under Council on Environmental Quality (CEQ) regulations. CEQ regulations provide where an EA concludes in a finding of no significant impact, an agency may proceed, as in this case, without preparing an EIS.<sup>24</sup>

29. The Modification Project fine-tunes the Liquefaction Project and enables Sabine Pass to more quickly place it in service. The Modification Project does not present a segmentation issue because neither it nor the Liquefaction Project it modifies (nor both actions in combination) constitute a major federal action that significantly affects the human environment that required preparation of an EIS.<sup>25</sup>

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“Segmentation analysis functions ‘to weed out projects which are pretextually segmented, *and* for which there is no independent reason to exist. When the segmentation project has *no* independent justification, no life of its own, or is simply illogical when viewed in isolation, the segmentation will be held invalid.’” *Save Barton Creek*, 950 F.2d at 1139, 1144 (citing *Macht v. Skinner*, 715 F. Supp. 1131, 1135 (D.D.C. 1989) (emphasis in original), *aff’d* 889 F.2d 291 (D.C. Cir. 1989)).

<sup>23</sup> 40 C.F.R. § 1508.18 (2013) (“‘Major Federal action’ includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly (Sec. 1508.27)).” As defined in 40 C.F.R § 1508.27, “significantly” requires considerations of both context and intensity. In *Village of Los Ranchos de Albuquerque v. Barnhart*, 906 F.2d 1477 (10<sup>th</sup> Cir. 1990), a local bridge project was held not to be a major federal action under NEPA and was properly segmented from an interstate highway project.

<sup>24</sup> 40 C.F.R. § 1501.4(e) and 1508.13 (2013).

<sup>25</sup> The Commission’s environmental regulations list examples of actions that normally require preparation of an EIS because they are major federal actions: siting, construction, and operation of jurisdictional LNG import/export facilities, certain certificate applications under NGA section 7 to develop an underground natural gas storage facility, and major natural gas pipeline construction projects using rights-of-way in which there is no existing pipeline. 18 C.F.R. § 380.6 (2013).

### Pretextual Circumvention

30. Sierra Club argues that unlawful segmentation occurred because Sabine Pass foresaw or should have foreseen the need for its Modification Project when it filed for authorization for its Liquefaction Project. In *Tennessee Gas Pipeline Co.*, however, the Commission observed that whether subsequent projects are “reasonably foreseeable” is relevant to the issue of the sufficiency of a cumulative impact analysis, not to the issue of segmentation.<sup>26</sup> For impermissible segmentation to occur under CEQ regulations, the complaining party must show an attempt by the applicant or agency to *pretextually* circumvent NEPA to avoid studying in the same environmental document the connected impacts<sup>27</sup> of a single overall project.<sup>28</sup>

31. The Commission authorized the Liquefaction Project following its evaluation of information about known project requirements.<sup>29</sup> Until more detailed engineering review took place, Sabine Pass was unaware that there could be a need for a HRU in each liquefaction train to remove condensate depending on the quality of the domestic feed gas.<sup>30</sup> Also, Sabine Pass’ requirement for an additional 80 acres of workspace in order to operate more safely, while meeting its accelerated, simultaneous construction timetable for Stages I and II, was based on market demand that developed after the 2012 Order. Sabine Pass originally had contemplated construction of Trains 1-4 in separate stages.

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<sup>26</sup> *Tennessee Gas Pipeline Co.*, 142 FERC ¶ 61,025, at P 45 (2013) (citing *Reilly v. United States Army Corps of Engineers*, 477 F.3d 225, 236 (5<sup>th</sup> Cir. 2007)).

<sup>27</sup> CEQ regulations at 40 C.F.R. § 1508.25(a)(1) (2013) (Connected actions are closely related.). To assist agencies in deciding which actions should be analyzed together and which should be analyzed separately, the CEQ regulations define “connected actions,” as “closely related,” i.e., they automatically trigger other actions, cannot or will not proceed unless other actions are taken previously or simultaneously, or are interdependent parts of a larger action and depend on the larger action for their justification.

<sup>28</sup> 40 C.F.R. § 1508.27(b)(7) (2013) (“Significance cannot be avoided by ... breaking [a large project] down into small component parts.”).

<sup>29</sup> *Wilderness Society v. Salazar*, 603 F. Supp. 2d 52, 60-61 (D.C. 2009).

<sup>30</sup> While the EA for the Liquefaction Project did not discuss or contemplate the need for HRUs, Sabine Pass states that subsequent to the issuance of the Liquefaction EA more detailed engineering design indicated that HRUs would be used from time to time to remove heavier hydrocarbons. Sabine Pass’ February 19, 2013 Answer at 5, n.17.

The Commission's initial environmental review also did not identify a need to construct two additional water pipelines.<sup>31</sup>

32. Thus, we find that there is no indication in the record that Sabine Pass intentionally downsized its Liquefaction Project or concealed information from the Commission to avoid a more comprehensive NEPA review. We also see no subterfuge in Sabine Pass' timing for filing its Modification Project and, hence, no violation of NEPA occurred.

### **Contemporaneous Proposals**

33. Unlawful segmentation occurs in the context of contemporaneously proposed projects.<sup>32</sup> Sabine Pass, however, has not filed two contemporaneous proposals.<sup>33</sup> The Modification Project amendment is a proposal to revise the *approved* Liquefaction Project. As circumstances changed and the need for the Modification Project became obvious, Sabine Pass filed its amendment. While there is some information in the Liquefaction Project application relating to potential additional water needs, Sabine Pass became aware of the need for two additional water pipelines almost two years after filing the Liquefaction Project application. We do not require an applicant's original application to discuss as a connected action a possible project for which there is no current concrete proposal to build. A concept sketching out a potential future need is not equivalent to an actual filed proposal<sup>34</sup> or one that the Commission has accepted under its pre-filing procedures.

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<sup>31</sup> The EA for the Liquefaction Project stated that upon further design of the Liquefaction Project, Sabine Pass observed that the "current design of the [water] pipeline capacity may not be sufficient to meet the Project's needs" and it "is continuing to evaluate the water supply needs and supply for the Project." EA section 1.3.1 at I-10.

<sup>32</sup> *Hammond v. Norton*, 370 F. Supp. 2d 266 (2005)(D.D.C.) (must evaluate two proposed physically connected oil products pipeline segments in a single EIS); *Florida Wildlife Fed'n v. Corps of Engineers*, 401 F. Supp. 2d 1298, 1317 (S.D. Fla. 2005) (must evaluate all acreage planned for development).

<sup>33</sup> [W]hen several proposals for coal-related actions that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together. (footnote omitted) Only through comprehensive consideration of pending proposals can the agency evaluate different courses of action. (footnote omitted). *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976).

<sup>34</sup> *Save Barton Creek*, 950 F.2d at 1137.

34. In its pleading contending there was no segmentation, Sabine Pass cites *Floridian Natural Gas Storage Company, LLC (Floridian)*,<sup>35</sup> *PetroLogistics Natural Gas Storage, LLC (PetroLogistics)*,<sup>36</sup> and *Webster v. U.S. Department of Agriculture (Webster)*.<sup>37</sup> Sierra Club argues that Sabine Pass' reliance on *Floridian* and *PetroLogistics* is misplaced, stating that the amended authorizations in those proceedings were not necessary to the completion or operation of the originally proposed projects, while the Liquefaction Project cannot proceed without the proposed Modification Project. The Commission, however, does not see a distinction between *Floridian* and *PetroLogistics* and the Modification Project. In *Floridian* and *PetroLogistics*, proposed amendments were approved to respond to increased demand for transportation of LNG by truck (*Floridian*) and to increase storage capacity (*PetroLogistics*). Here, Sabine Pass filed its amendment to meet its accelerated in-service date and developing contractual obligations. The fact that the amendment is now necessary to the completion of the Liquefaction Project does not make it a connected action that could or should have been analyzed together with the Liquefaction Project.

35. Sierra Club also argues that Sabine Pass' reliance on *Webster*<sup>38</sup> was misplaced, stating that the Court found no improper segmentation in *Webster* because there was no evidence a water treatment facility or water distribution system would be constructed. Sierra Club asserts that there was enough evidence of additional modifications here that Sabine Pass should have filed its Modification Project together with its Liquefaction Project. As noted earlier, while there was some indication that there would be a need to increase water supply capacity, the Liquefaction Project EA expresses no awareness of

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<sup>35</sup> 140 FERC ¶ 61,167 (2012) (Following issuance of an EA, the Commission amended its 2008 authorization to allow customers to use Floridian's LNG truck loading station during the normal course of business instead of only during emergency situations).

<sup>36</sup> 130 FERC ¶ 62,273 (2010) (Following issuance of an EA, the Acting Director, Division of Pipeline Certificates, Office of Energy Projects, issued an order amending a certificate to allow the installation of a single electric-driven submersible pump in PetroLogistics' storage cavern well No. 25).

<sup>37</sup> 685 F.3d 411 (4<sup>th</sup> Cir. 2012).

<sup>38</sup> 685 F.3d 411, 425-427 (4<sup>th</sup> Cir. 2012) (The Court held an agency is not required to consider a speculative action for which there are no plans as a connected action. The Court stated that while agencies must consider connected actions in the same EIS, an agency is not required to consider a water treatment facility or distribution system as an action connected to the construction of a dam where there are no plans for such a facility or system).

the possible need for facilities to remove condensates or to acquire more land for additional workspaces. The Court's reasoning in *Webster* supports the Commission's conclusion in this proceeding.

### **Tiering**

36. CEQ regulations allow an agency to tier its environmental analysis "when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe."<sup>39</sup> "Tiering may also be appropriate for different stages of actions."<sup>40</sup>

37. Sabine Pass' Modification Project amendment is an example of appropriate tiering and incorporation by reference of general discussions in the Liquefaction Project's EA into the Modification Project's EA.<sup>41</sup> The Modification Project's EA concentrated on the issues specific to the EA in this proceeding. Sabine Pass' amendment proposes modifications to the previously authorized Liquefaction Project and is based on detailed engineering information that first became available after our approval of the Liquefaction Project. The Modification Project was not ripe for filing with the Commission at the time Sabine Pass filed its application for the Liquefaction Project. Thus, there was no opportunity to evaluate both proposals in the same environmental document, which Sierra Club believes would have been the better course of action. The Modification Project's changes to the design and facilities of the Liquefaction Project will not have significant environmental impacts.

### **Request to Reopen the April 16 Order's Environmental Record**

38. Sierra Club argues that the Commission should not review the marginal effects of the Modification Project in isolation and, to avoid unlawful segmentation,<sup>42</sup> must reopen Sierra Club's comments and filings in Docket No. CP11-72-000 and reconsider the entire Liquefaction Project and the environmental issues raised in that proceeding. Sabine Pass

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<sup>39</sup> 40 C.F.R. § 1508.28(b) (2013). *Webster*, 685 F.3d at 432, n. 4 and *Wilderness Society v. Salazar*, 603 F. Supp. 2d 52, 61 (D.D.C. 2009).

<sup>40</sup> 40 C.F.R. § 1502.20 (2013).

<sup>41</sup> The Modification Project's EA summarizes and incorporates discussion in the Liquefaction Project's EA concerning seismic hazards (section 2.1.3), water line hydrostatic test water (section 2.3.4), land use, visual resources, and aesthetics (section 2.5), air quality and noise (section 2.7.1), and reliability and safety analysis (section 2.8).

<sup>42</sup> As noted earlier, the facts in this case do not present a segmentation situation.

contends, on the other hand, that reopening the environmental record of the Liquefaction Project is a misguided collateral attack on the April 16 Order authorizing the Liquefaction Project. Because we have found that Sierra Club's assertion of improper segmentation is not justified, we reject Sierra Club's request to reopen the environmental record of the Liquefaction Project.

### **The Environmental Assessment**

39. To satisfy the requirements of NEPA, our staff prepared an EA for Sabine Pass' proposal. The analysis in the EA addresses geology, soils, water resources, wetlands, vegetation, fisheries, wildlife, threatened and endangered species, land use, recreation, visual resources, cultural resources, air quality, noise, safety, and alternatives. The EA states that the Modification Project would have environmental impacts similar to those previously addressed in the Sabine Pass Liquefaction Project EA for relevant resources.<sup>43</sup>

40. The EA was issued for a 30-day comment period and placed into the public record on April 24, 2013. The Commission received comments on the EA from the U.S. Environmental Protection Agency (EPA) and Gulf Coast Environmental Labor Coalition (GCELC). Responses to the comments are provided below.

### **Wetlands**

41. The EA states that the Modification Project would affect 58 acres of wetland on Sabine Pass' existing site. GCELC commented that the EA does not disclose either the location or the function of the wetlands associated with the mitigation bank where Sabine Pass would purchase credits as compensation for those impacts. In addition, GCELC contends that the EA fails to discuss whether participation in wetlands mitigation banks adequately mitigates the losses of wetland. The EA discusses the Modification Project's impacts on wetlands, which are primarily former dredge material placement areas, and describes the proposed purchase of credits in the Petit Bois and Grand Canard Mitigation Banks.<sup>44</sup> Based on this information, the EA concludes that impacts on wetlands would not be significant. The final details of Sabine Pass' mitigation for impacts on wetlands will be determined by the U.S. Army Corps of Engineers as part of Sabine Pass' section 404 permit process.

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<sup>43</sup> The EA for the Sabine Pass Liquefaction Project (Docket No. CP11-72-000) was issued on December 28, 2011.

<sup>44</sup> Modification Project EA at 16.

### **Threatened and Endangered Species**

42. GCELC comments that the EA does not discuss the types of avian and aquatic wildlife that use the Modification Project area. The EA provides examples of wildlife species that could be present in the project area, which includes avian species. Because aquatic habitats would not be impacted by construction of the project, common aquatic species were not discussed. However, federally listed aquatic species were considered in the EA. The EA concludes that because there would be no impacts on shoreline or aquatic habitats, there would be no effect on federally listed species.<sup>45</sup>

43. GCELC commented that the federally listed piping plover could be present in the Modification Project area and that surveys for this species should be required. The EA determines that suitable habitat for the piping plover would not be affected by the Modification Project and that surveys are not necessary.<sup>46</sup> The EA further concludes that the Modification Project would have no effect on any federally listed species and states that the U.S. Fish and Wildlife Service concurred with this determination.<sup>47</sup>

### **Cultural Resources**

44. In its comments to the EA, the EPA recommends the Commission consult with federally-recognized Tribes regarding historical and cultural resources, in compliance with section 106 of the National Historic Preservation Act and Executive Order 13175, Consultations and Coordination with Indian Tribal Governments). The EA states that Sabine Pass conducted cultural resource survey investigations at its terminal in 2004, including the temporary workspace areas, access roads, and associated aboveground facilities. The results of the survey reports were submitted to the State Historic Preservation Office (SHPO) and the SHPO concurred with the results of the survey reports and confirmed the “no effect” determination.<sup>48</sup> Six tribes were consulted as part of the evaluation of the Liquefaction Project. These tribes included: Chitimacha Tribe of Louisiana; Jena Band of Choctaw; Caddo Nation; Coushatta Tribe of Louisiana; Alabama-Coushatta Tribe of Texas; and Tunica-Biloxi Tribe. Because these tribes expressed no objections to the Liquefaction Project and the SHPO concurred with the results of the survey reports, no additional consultation was necessary.

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<sup>45</sup> *Id.* at 20.

<sup>46</sup> *Id.*

<sup>47</sup> *Id.*

<sup>48</sup> Liquefaction Project EA at 2-40.

### **Environmental Justice**

45. The EPA recommends that the Commission analyze socioeconomic impacts and environmental justice. As stated in the EA, the Modification Project will affect areas completely within or immediately adjacent to the existing, previously analyzed and approved construction areas. Socioeconomic impacts and environmental justice were evaluated in the EA for the Liquefaction Project and that EA concluded that construction and operation would not disproportionately affect any population group, including low-income and minority populations, and no environmental justice issues were expected as a result of construction or operation of the Liquefaction Project.<sup>49</sup> No aspect of the Modification Project will result in different or additional socioeconomic impacts or environmental justice concerns.

### **Indirect Impacts**

46. The EPA's comments on the EA state that the Commission should consider the extent to which drilling activity might be stimulated by the construction of an LNG export facility on the Gulf Coast, along with other proposed LNG export facilities, and the potential environmental effects associated with that drilling expansion. As stated in the EA, the purpose of the Modification Project is to enhance the operations of the Liquefaction Project, which was previously reviewed and authorized, and is currently under construction. The 2012 Order concluded that impacts which may result from additional gas development are not reasonably foreseeable, as defined in CEQ regulations, and that any additional shale gas development is not an effect of the project for purposes of a cumulative impacts analysis.<sup>50</sup> The EA also indicates that the Modification Project would not change the volumes of gas that could be exported. Thus, the proposals will not have any effect on additional drilling.

### **Air Quality**

47. The EPA recommends that a Fugitive Dust Control Plan be developed that includes a number of measures to control fugitive dust. The EA states that Sabine Pass currently implements a Fugitive Dust Control Plan for construction of the Liquefaction Project.<sup>51</sup> This plan includes spraying water on access roads and laydown areas, enforcing a 15 mile per hour speed limit on unsurfaced roads, covering open-bodied haul trucks, enclosing the work area for specific activities, and identifying individuals with

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<sup>49</sup> Liquefaction Project EA at 2-39.

<sup>50</sup> 2012 Order, 139 FERC ¶ 61,039 at PP 94-99.

<sup>51</sup> Modification Project EA at 33.

authority to implement dust control measures or with authority to stop work orders, if contractors do not comply with dust control measures. The EA recommends that Sabine Pass adopt its existing Fugitive Dust Control Plan for use on the Modification Project and identify additional measures. We have incorporated this recommendation as Environmental Condition 12 of this Order.

48. GCELC believes that the Modification Project attempts to correct underestimated greenhouse gas (GHG) emissions from the original Liquefaction Project. GCELC states that the Liquefaction Project EA identified 3.91 million tons per year of GHG emissions and the revised LDEQ air permit identifies 4.65 million tons per year of GHG emissions. GCELC states that the Modification Project fails to include the additional GHG emissions as part of the air quality analysis for the project.

49. In response to comments received on the original Liquefaction Project EA, Sabine Pass provided revised emission calculations to account for the inclusion of the thermal oxidizers. The revised GHG emission calculations were included in the 2012 Order for the Liquefaction Project, and identified an additional 0.791 million tons per year of GHG from those originally presented in the LDEQ air permit for the Liquefaction Project.<sup>52</sup> Therefore, the additional GHG emissions GCELC believes should be addressed were already considered in our review of the Liquefaction Project. The Modification Project identifies air emissions associated with the new components not previously reviewed by the Commission.

50. GCELC comments that the Modification Project EA should address the impacts of bidirectional operations, including increased ship traffic and ship air emissions, because the original Liquefaction Project EA and the 2012 Order ignored the bidirectional capability of the Sabine Pass export facility. We disagree. The 2012 Order for the Liquefaction Project discussed simultaneous operation as a bidirectional facility<sup>53</sup> and clarified that no additional ships would be required.<sup>54</sup>

51. GCELC notes that the Modification Project includes recovery, storage, and transportation of volatile organic compounds (VOC), some of which may be hazardous air pollutants (HAP). GCELC states that the Modification Project EA fails to discuss the composition or amount of additional HAP emissions from this process.

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<sup>52</sup> 2012 Order, 139 FERC ¶ 61,039 at Appendix B.

<sup>53</sup> *Id.* P 10.

<sup>54</sup> Liquefaction Project EA at 1-9.

52. The EA states that under normal operating conditions the Modification Project would release up to 0.75 tons per year of VOCs.<sup>55</sup> This includes all compounds which fall under the definition of VOCs, including those which would also be considered HAPs. The EA also states that the internal floating roof tank would be subject to National Emission Standards for Hazardous Air Pollutants, and the project demonstrates compliance using New Source Performance Standard Subpart Kb - Standards of performance for Volatile Organic Liquid Storage Vessels.<sup>56</sup>

53. Finally, GCELC states that the EA fails to address the Modification Project's compliance with the General Conformity Rule. The EA includes a labeled subsection under Air Quality for General Conformity and states that the Modification Project does not include any direct or indirect new emissions within the Beaumont-Port Arthur Area 8-hour ozone maintenance area.<sup>57</sup> Thus, the General Conformity Regulations are not applicable to the Modification Project.

### **Cumulative Impacts**

54. GCELC asserts that the EA fails to discuss the environmental implications for the future addition of CTPL's nearby compressor station on its pipeline delivering natural gas to the Liquefaction Project and the addition of two liquefaction trains. The new compressor station will be approximately 100 kilometers from the Modification Project. Pursuant to Prevention of Significant Deterioration (PSD) regulations, the PSD modeling analysis for the Liquefaction Project included emissions from sources within 53.4 kilometers of the center of the Sabine Pass terminal, including Sabine Pass emitting sources and other PSD sources. Therefore, the compressor station was not considered within the area that would result in cumulative air impacts. As stated in the EA, the addition of two liquefaction trains is in the pre-filing stage. The Liquefaction Expansion Project and Cheniere Creole Trail Pipeline Extension were included in the cumulative impacts analysis for the Modification Project.<sup>58</sup> Trains 5 and 6, if ultimately constructed, will not affect the resources impacted by the Modification Project.

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<sup>55</sup> Modification Project EA at 34.

<sup>56</sup> *Id.* at 29.

<sup>57</sup> *Id.*

<sup>58</sup> Modification Project EA at 56-57.

### Safety

55. The EA recommends in environmental condition 33 that the final design must include a hazard and operability review of the “Issued for Design P&IDs.”<sup>59</sup> The EA acknowledges that Sabine Pass had conducted a preliminary safety review which included a hazard and operability study based on its preliminary design.<sup>60</sup> We clarify environmental condition 33 to require Sabine Pass to conduct a hazard and operability review of the completed final design.

56. Based on the analysis in the EA, we conclude that if constructed and operated in accordance with Sabine Pass’ application and supplements, and with the environmental conditions included in this order, our approval of the Modification Project would not constitute a major federal action significantly affecting the quality of the human environment.

57. 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 jurisdictional natural gas companies and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.<sup>61</sup>

58. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application, as supplemented, and exhibits thereto, submitted in support of the authorizations sought herein, and upon consideration of the record,

#### The Commission orders:

(A) The authorization to construct LNG liquefaction and export facilities granted in the 2012 Order is amended, as discussed in the body of this order.

(B) In all other respects, the authorization granted in the 2012 Order shall remain in full force and effect.

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<sup>59</sup> P&ID refers to Piping and Instrumentation Diagrams.

<sup>60</sup> *Id.* at 38.

<sup>61</sup> See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P., et al.*, 52 FERC ¶ 61,091 (1990), *order on reh’g*, 59 FERC ¶ 61,094 (1992).

(C) As discussed in the body of this order, Sabine Pass is authorized to transfer, as proposed, the four metering facilities once they are completed. Within 10 days of transfer, Sabine Pass must notify the Commission of the effective dates of the transfers and the identities of the pipelines acquiring the facilities.

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

(E) Sierra Club's motion to intervene out-of-time is granted pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.

## Appendix

### Environmental Conditions

The authorization granted is subject to the following environmental conditions:

1. Sabine Pass 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 EA, unless modified by the Order. Sabine Pass must:
  - a. request any modification to these procedures, measures, or conditions in a filing with the 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 Office of Energy Projects (OEP) before using that modification.
2. The Director of OEP has delegated authority to take all steps necessary to ensure the protection of life, health, property and the environment during construction and operation of the project. This authority shall include:
  - a. stop-work authority and authority to cease operation; and
  - b. the design and implementation of any additional measures deemed necessary to assure continued compliance with the intent of the conditions of the Order.
3. **Prior to any construction**, Sabine Pass shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, EIs, and contractor personnel would be informed of the EI's authority and have been or would be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed design sheets. **As soon as they are available, and before the start of construction**, Sabine Pass shall file with the Secretary any revised detailed survey maps/sheets at a scale not smaller than 1:6,000 with station positions for the facility approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these survey maps/sheets.
5. Sabine Pass shall file with the Secretary detailed maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all facility relocations,

and staging areas, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and 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/sheets/aerial photographs. Each area must be approved in writing by the Director of the OEP **before construction in or near that area.**

This requirement does not apply to extra workspaces allowed by our 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 realignments and facility location changes resulting from:

- a. implementation of cultural resource mitigation measures;
- b. implementation of endangered, threatened, or special concern species 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. **Within 60 days of the acceptance of this authorization and before construction begins**, Sabine Pass shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Sabine Pass must file revisions to the plan as schedules change. The plan shall identify:

- a. how Sabine Pass would implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;
- b. how Sabine Pass would 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 per spread, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;
- d. company personnel, including EIs and contractors, who would receive copies of the appropriate material;

- e. the location and dates of the environmental compliance training and instruction Sabine Pass would 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 sessions);
  - f. the company personnel (if known) and specific portion of Sabine Pass' organization having responsibility for compliance;
  - g. the procedures (including use of contract penalties) Sabine Pass would follow if noncompliance occurs; and
  - h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
    - (1) the completion of all required surveys and reports;
    - (2) the environmental compliance training of onsite personnel;
    - (3) the start of construction; and
    - (4) the start and completion of restoration.
7. Beginning with the filing of its Implementation Plan, Sabine Pass shall file updated status reports with the Secretary on a monthly basis **until all construction and restoration activities are complete**. On request, these status reports would also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on Sabine Pass' efforts to obtain the necessary federal authorizations;
  - b. the construction status of the project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
  - c. a listing of all problems encountered 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 actions implemented in response to all instances of noncompliance, and their cost;
  - e. the effectiveness of all corrective 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 Sabine Pass from other federal, state, or local permitting agencies concerning instances of noncompliance, and Sabine Pass' response.

8. **Prior to receiving written authorization from the Director of OEP to commence construction of any project facilities**, Sabine Pass shall file with the Secretary documentation that it has received all authorizations required under federal law (or evidence of waiver thereof).
9. Sabine Pass must receive written authorization from the Director of OEP **prior to introducing natural gas or process fluids** into the project facilities. At a minimum, instrumentation and controls, hazard detection, hazard control, emergency shutdown, and security components/systems shall be installed and functional.
10. Sabine Pass must receive written authorization from the Director of OEP **before placing the project into service**. Such authorization would only be granted following a determination that rehabilitation and restoration of the areas affected by the project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized facilities in service**, Sabine Pass 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 would be consistent with all applicable conditions; or
  - b. identifying which of the Order conditions Sabine Pass has complied with or would 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.
12. **Prior to construction**, Sabine Pass shall file with the Secretary a statement verifying it will adopt its existing Fugitive Dust Control Plan for use on the Modification Project. Sabine Pass shall also identify the modifications to the existing measures or additional measures it will implement for the Modification Project. The revised and/or additional measures shall also be filed with the Secretary **prior to construction**, for review and written approval by the Director of Office of OEP.

**The following measures shall apply to the Sabine Pass heavies removal unit (HRU) and condensate storage and send-out facilities. Information pertaining to Environmental Conditions 13 through 42 shall be filed with the Secretary for review and written approval by the Director of OEP either: prior to construction of final design; or prior to commissioning, as indicated by each specific condition. Specific engineering, vulnerability, or detailed design information meeting the criteria specified in Order No. 683 (Docket No. RM06-24-000), including security information, shall be submitted as critical energy infrastructure information (CEII)**

**pursuant to 18 CFR § 388.112 (2013). See CEII, Order No. 683, 71 Federal Register 58,273 (October 3, 2006), FERC Statutes and Regulations ¶ 31,228 (2006).**

**Information pertaining to items, such as off-site 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.**

13. The **final design** shall address the information/revisions pertaining to Sabine Pass LNG's response number 4 of its January 3, 2013 filing and response number 9 of its February 4, 2013 filing which indicated features to be included or considered in the final design.
14. The **final design** shall include complete plan drawings and a list of the fixed and wheeled dry-chemical, fire extinguishing, and high-expansion-foam hazard control equipment. The information shall include a list with the equipment tag number, type, size, equipment covered, and automatic and manual remote signals initiating discharge of the units. Plan drawings shall clearly show the planned location of all fixed and wheeled extinguishers.
15. The **final design** of the fixed and wheeled dry-chemical fire extinguishing equipment, and high-expansion-foam hazard control equipment shall identify manufacturer and model.
16. The **final design** shall include an updated fire protection evaluation of the existing and proposed facilities carried out in accordance with the requirements of National Fire Protection Association (NFPA) 59A 2001, chapter 9.1.2.
17. The **final design** shall provide up-to-date Piping and Instrument Diagrams (P&IDs), which include the following information:
  - a. equipment tag number, name, size, duty, capacity, and design conditions;
  - b. equipment insulation type and thickness;
  - c. piping with line number, piping class specification, size, and insulation type and thickness;
  - d. piping specification breaks and insulation limits;
  - e. all control and manual valves numbered;
  - f. relief valves with set points;
  - g. drawing revision number and date; and
  - h. change log with the associated drawing revision number and date that lists and explains the changes made from the approved design.

18. The **final design** shall provide an up-to-date major equipment list, data sheets and specifications. A change log shall be included which explains the changes made from the approved design.
19. The **final design** shall include details of the shutdown logic, including cause-and-effect matrices for alarms and shutdowns.
20. The **final design** shall specify that branch piping and piping nipples servicing the proposed HRU and condensate storage and send out facilities are consistent with the existing facility's specifications.
21. The **final design** shall include a plan for clean-out, dry-out, purging, and tightness testing. This plan shall address the requirements of the American Gas Association's Purging Principles and Practice required by 49 C.F.R. Part 193 and shall provide justification for not using an inert or non-flammable gas for cleanout, dry-out, purging, and tightness testing
22. The **final design** of the Heavies Removal Column Reflux pumps shall include drawings that clearly show the space between the primary and secondary seal being continuously vented to the atmosphere as required by NFPA 59A (2001), Section 7.6.
23. The **final design** shall include an automatic isolation valve in addition to the manual shutoff valve on the condensate transfer truck loading line.
24. The **final design** shall include a check valve on the condensate storage tank fill line upstream of the tank.
25. The **final design** shall include a fire safe automatic shutoff valve located at the tank platform downstream of the condensate storage tank withdrawal manual isolation valve.
26. The **final design** shall include an emergency shutdown station located outside the truck loading area that would be accessible in the event of an ignited spill inside or outside of the condensate storage diked area.
27. The **final design** of the hazard detectors shall account for the calibration gas when determining the Lower Flammability Limit (LFL) set points for condensate.
28. The **final design** shall include flammable gas detection inside the condensate storage diked area located at ground level and directly adjacent to the inlet and outlet piping for each condensate storage tank.
29. The **final design** shall include operating procedures specifying that the Heavies Removal Column (HRC) and the HRC Reboiler would be drained prior to restarting the equipment when cryogenic temperatures exist in the HRC or in the HRC Reboiler.
30. The **final design** shall include valve position indicators on critical valves or provide an evaluation that demonstrates valve position indicators would not be

- required on critical valves. In the event that valve position indicators would not be installed, Sabine Pass shall provide operating procedures that include instructions on how to verify valve positions from controller outputs.
31. The **final design** shall include a thermal relief valve between valves XV 17050 and FV-17051 in accordance with Section 6.8.2 of NFPA 59A (2001) to prevent overpressure if both valves close on the 4" 11HC-17051-P0-H1.5" bottoms liquid line from the Debutanizer.
  32. The **final design** shall include a high pressure alarm and an absolute rate of change alarm for the Hot Oil Surge Drum (11V-3401).
  33. The **final design** shall include a hazard and operability review of the completed design (or "Final Design" P&IDs). A copy of the review and a list of recommendations, and actions taken on the recommendations, shall be filed.
  34. The **final design** shall include complete plan drawings and a list of the hazard detection equipment. The information shall include the manufacturer and model and a list with the instrument tag number, type and location, alarm locations, and shutdown functions of the proposed hazard detection equipment. Plan drawings shall clearly show the location of all detection equipment.
  35. The **final design** shall include a revised impoundment design that ensures separate impoundments are provided for each condensate storage tank and that each impoundment provides a volumetric capacity of 110% of each condensate storage tank's maximum liquid capacity.
  36. The **final design** shall include a proposed water removal system design for the condensate storage tank impoundment dike area and the condensate truck loading containment trough area which meets the requirements of 49 C.F.R. §193.2173(a) by providing either drainage pumps and piping or alternative drainage means which have been approved by the U.S. Department of Transportation.
  37. An updated Emergency Response Plan which includes the HRU and condensate storage system, as well as instructions to handle on-site condensate-related emergencies shall be filed **prior to commissioning**.
  38. For the HRU and condensate storage and send-out system, Sabine Pass shall complete the following **prior to commissioning** conditions as referenced in the April 16, 2012 Sabine Pass LNG Liquefaction Order (Docket Number CP11-72-000): Environmental Conditions 43, 44, 45, 46, 47, 48, 49, and 50.
  39. Progress on the construction of the HRU and condensate storage and send-out system shall be reported in **monthly** reports filed with the Secretary. Details shall include a summary of activities, problems encountered, contractor non-conformance/deficiency logs, remedial actions taken, and current project schedule. Problems of significant magnitude shall be reported to the FERC **within 24 hours**.

**Environmental Conditions 40 through 42 shall apply throughout the life of the facility:**

40. The facility shall be subject to regular Commission staff technical reviews and site inspections on at least an **annual basis** or more frequently as circumstances indicate. Prior to each Commission staff technical review and site inspection, Sabine Pass shall respond to a specific data request, including information relating to possible design and operating conditions that may have been imposed by other agencies or organizations. Up-to-date detailed piping and instrumentation diagrams reflecting facility modifications and provision of other pertinent information not included in the semi-annual reports described below, including facility events that have taken place since the previously submitted semi-annual report, shall be submitted.
41. **Semi-annual** operational reports shall be filed with the Secretary to identify changes in facility design and operating conditions, abnormal operating experiences, activities (including ship arrivals, quantity and composition of imported and exported LNG, liquefied and vaporized quantities, boil-off/flash gas, etc.), plant modifications, including future plans and progress thereof. Abnormalities shall include, but not be limited to: unloading/loading/shipping problems, potential hazardous conditions from off-site vessels, storage tank stratification or rollover, geysering, storage tank pressure excursions, cold spots on the storage tanks, storage tank vibrations and/or vibrations in associated cryogenic piping, storage tank settlement, significant equipment or instrumentation malfunctions or failures, non-scheduled maintenance or repair (and reasons therefore), relative movement of storage tank inner vessels, vapor or liquid releases, fires involving natural gas 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)" also shall be included in the semi-annual operational reports. Such information would provide Commission staff with early notice of anticipated future construction/maintenance projects at the LNG facility.
42. 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 Commission staff. In the event an abnormality is of significant magnitude to threaten public or employee safety, cause significant property damage, or interrupt service, notification shall be made immediately, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency procedure. In all instances, notification shall be made to Commission staff **within**

**24 hours.** This notification practice shall be incorporated into the LNG facility's emergency plan. Examples of reportable LNG, NGL, condensate, or refrigerant 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 LNG, NGL, condensate, or refrigerants for five minutes or more; 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 gas, NGL, condensate, refrigerants, or LNG; any crack or other material defect that impairs the structural integrity or reliability of an LNG facility that contains, controls, or processes gas, refrigerants, NGL, condensate, or LNG;
- f. any malfunction or operating error that causes the pressure of a pipeline or LNG facility that contains or processes gas, refrigerants, or LNG 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;
- g. a leak in an LNG facility that contains or processes gas, refrigerants, NGL, condensate, or LNG that constitutes an emergency;
- h. inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank;
- i. 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 gas, NGL, condensate, refrigerants, or LNG;
- j. safety-related incidents to LNG, condensate, or refrigerant vessels occurring at or en route to and from the LNG facility; or
- k. 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, Commission 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.