

# ISSUE BRIEF **10.01.18**

## **FERC and PHMSA Sign Memorandum of Understanding: Is it the Silver Bullet to Expedited LNG Application Reviews?**

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### **REGULATORY AUTHORITIES AND RESPONSIBILITIES FOR SITING OF LNG FACILITIES**

The rise in U.S. oil and natural gas production is altering the profile of the U.S. energy landscape and driving federal agencies to adjust their longstanding processes due to the uptick in permit applications for proposed liquefied natural gas (LNG) facilities. The Federal Energy Regulatory Commission (FERC), U.S. Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA), and the United States Coast Guard (USCG) are responsible for exercising regulatory authority over the siting, design, construction and operation of LNG facilities, and related land and marine safety and security issues. FERC has exclusive authority to approve the siting, construction, expansion, and operation of on-shore and near-shore LNG facilities, while PHMSA establishes and enforces safety regulations and standards for onshore LNG facilities pertaining to the transportation and storage of LNG in or affecting interstate or foreign commerce. The USCG has authority to regulate marine transfer areas for new waterfront facilities handling LNG. Despite the seemingly well-defined lines of authority between these agencies, overlap, ambiguities, and duplicative efforts exist throughout the LNG permit

approval process. Additionally, the influx of LNG permit applications have strained the resources and technical expertise of PHMSA and FERC and called into question the current approval process, which is needed to advance critical infrastructure projects.<sup>1</sup>

On August 31, 2018, PHMSA and FERC issued a Memorandum of Understanding (MOU) with the shared goal of accelerating and streamlining the permit application review process for proposed LNG facilities. This MOU supersedes the 1985 agreement acknowledging DOT's exclusive authority to promulgate federal safety standards for LNG facilities and FERC's authority to impose requirements at LNG facilities within FERC's jurisdiction.<sup>2</sup> The reformed MOU articulates the legal authority, general scope, and responsibilities of each agency; information sharing requirements; and inspection and enforcement activities.<sup>3</sup> It further identifies PHMSA's expanded role to: 1) issue a Letter of Determination to FERC that ascertains whether a proposed LNG facility is capable of complying with DOT's safety standards, and 2) review the location criteria and wind force design standards consistent with the requirements in 49 CFR Part 193, "Liquefied Natural Gas Facilities: Federal Safety Standards," Subpart B, Siting Requirements. FERC has assumed the latter responsibility in the past. Interestingly, Part 193 already provides PHMSA with the authority to review wind forces in the evaluation of a project's



**When the 1985 FERC/PHMSA MOU and Part 193 regulations were written, the agencies never envisioned that the U.S. would be exporting LNG, thus policies were developed without LNG export in mind.**

**Without an operational vehicle to carry FERC and PHMSA's vision forward, an MOU is only ritualistic rhetoric of an agency's intended actions, a formality lacking any practical path forward.**

**Diverting resources from one understaffed agency to another and placing them into an already superfluous, undefined process only shifts the burden and does not solve the underlying problem.**

compliance with siting requirements, so it is unclear how and to what extent FERC will leverage PHMSA's resources in an area that already falls under existing PHMSA regulatory authority or what additional review FERC will require in this area.

FERC, PHMSA, and the USCG also have an existing 2004 interagency agreement (IA) that identifies specific authorities as well as roles and responsibilities between the respective participating agencies as they relate to safety and security reviews of LNG import and export facilities.<sup>4</sup> Much like an MOU, the IA is a non-legally binding, unenforceable mechanism signed by all parties that formalizes collaboration between federal agencies. At the very least, this formality is a record of the agencies' intent and commitment to partner in a collaborative manner. With an existing IA in place, it is not immediately clear how the additional MOU components will be operationalized and executed outside of the agreement, the manner in which FERC will tap into PHMSA's resources, or to what extent the MOU would speed up the overall FERC National Environmental Policy Act (NEPA) process.

As the influx of applications continues to rise, a recalibrated and modernized process may be warranted considering the U.S. has become the world's largest producer of natural gas over the past few years and is on track to become the largest natural gas exporter by 2020.<sup>5</sup> With domestic gas production at an all-time high and the expansion of hydraulic fracturing and horizontal drilling, the market has undergone a complete reversal with LNG import terminals being converted to LNG export facilities. When the FERC/PHMSA MOU of 1985 and Part 193 regulations were written, the agencies never envisioned that the U.S. would be exporting LNG, thus policies were developed without LNG export in mind. Liquefaction facilities for export add a layer of complexity to the current process since agencies now have to interpret and document how the regulations and MOU, as written for regasification import facilities, apply to the export facilities today. PHMSA has, however, demonstrated a need for regulatory reform. The safety agency held a public meeting in 2016 to solicit input

and obtain background information for the formulation of changes to 49 CFR Part 193.

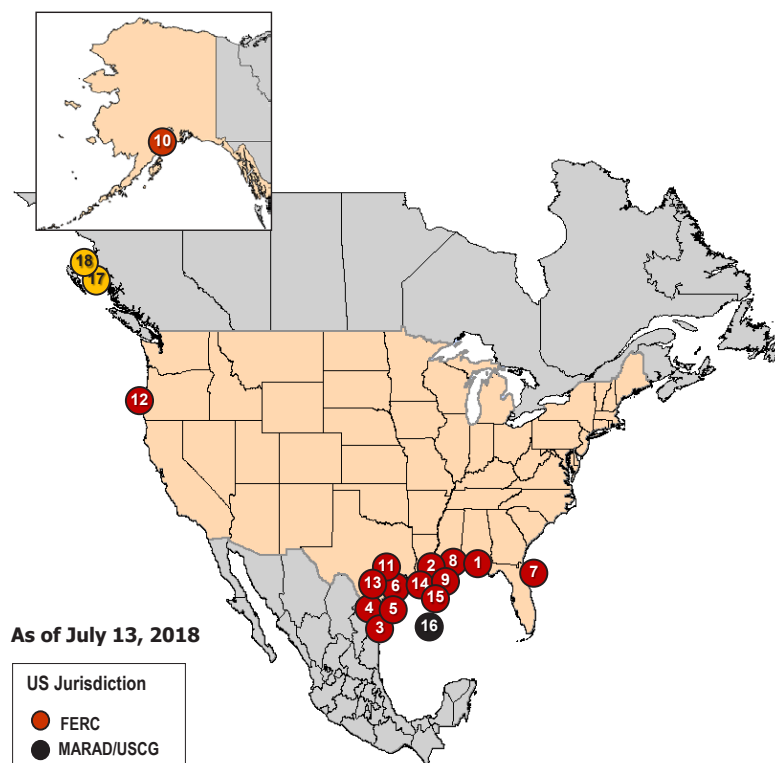
With approximately 13 LNG export projects currently in the FERC application process and two in the pre-filing process in the United States,<sup>6</sup> timely reviews are critical and ostensibly more complicated. As an example, LNG exports undergo a liquefaction process, where natural gas is cooled to a liquid state that is 1/600th of its original gaseous volume to allow for safe and efficient export on specially designed, pressurized vessels. At the receiving terminal, the LNG is unloaded into storage tanks and piped into a regasification plant where it is heated and converted back to conventional natural gas at atmospheric temperature for ultimate use by consumers.

Design reviews for liquefaction and marine export facilities have included new technical and safety concerns since facilities are much larger with more pipe connections, valves, tanks, and processes. This requires more upfront document preparation for the applicants and more analysis and technical expertise by the reviewing agencies, resulting in additional time to process applications as agencies evaluate the potential impacts to public safety. Since Part 193 and the 1985 MOU did not consider LNG exports, there is a continual back-and-forth dialogue between the operators and agencies to resolve issues and incomplete applications during the review stages.

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## **WHY NOW? WHAT'S THE IMPETUS BEHIND THIS EXPEDIENCY?**

Aside from the fact that timely reviews are critical to deliver on major infrastructure projects, it is "in the national interest to promote clean and safe development of our nation's vast energy resources, while also avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation."<sup>7</sup> This is precisely the principle underpinning the March 2017 Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth.

**FIGURE 1 — PROPOSED NORTH AMERICAN LNG EXPORT TERMINALS****PROPOSED TO FERC****Pending Applications:**

1. Pascagoula, MS: 1.5 Bcfd (Gulf LNG Liquefaction) (CP15-521)
2. Cameron Parish, LA: 1.41 Bcfd (Venture Global Calcasieu Pass) (CP15-550)
3. Brownsville, TX: 0.55 Bcfd (Texas LNG Brownsville) (CP16-116)
4. Brownsville, TX: 3.6 Bcfd (Rio Grande LNG – NextDecade) (CP16-454)
5. Brownsville, TX: 0.9 Bcfd (Annova LNG Brownsville) (CP16-480)
6. Port Arthur, TX: 1.86 Bcfd (Port Arthur LNG) (CP17-20)
7. Jacksonville, FL: 0.132 Bcfd (Eagle LNG Partners) (CP17-41)
8. Plaquemines Parish, LA: 3.40 Bcfd (Venture Global LNG) (CP17-66)
9. Calcasieu Parish, LA: 4.0 Bcfd (Driftwood LNG) (CP17-117)
10. Nikiski, AK: 2.63 Bcfd (Alaska Gasline) (CP17-178)
11. Freeport, TX: 0.72 Bcfd (Freeport LNG Dev) (CP17-470)
12. Coos Bay, OR: 1.08 Bcfd (Jordan Cove) (CP17-494)
13. Corpus Christi, TX: 1.86 Bcfd (Cheniere – Corpus Christi LNG) (CP18-512)

**Projects in Pre-filing:**

14. Cameron Parish, LA: 1.18 Bcfd (Commonwealth, LNG) (PF17-8)
15. LaFourche Parish, LA: 0.65 Bcfd (Port Fourchon LNG) (PF17-9)

**PROPOSED TO U.S.-MARAD/COAST GUARD**

16. Gulf of Mexico: 1.8 Bcfd (Delfin LNG)

**PROPOSED CANADIAN SITES**

17. Kitimat, BC: 1.28 Bcfd (Apache Canada Ltd.)
18. Douglas Island, BC: 0.23 Bcfd (BC LNG Export Cooperative)

**SOURCE** “North American LNG Export Terminals Proposed,” Federal Energy Regulatory Commission, <https://www.ferc.gov/industries/gas/indus-act/lng/lng-proposed-export.pdf>.

Other notable executive orders under the Trump administration have catalyzed FERC and PHMSA into action, ensuring more efficient and effective infrastructure investment projects where processes and resources within and between agencies are coordinated, predictable, and transparent. Executive Order 13766, Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects,<sup>8</sup> calls for identifying high-priority projects and establishing expedited procedures and deadlines for completion of environmental reviews and approvals. Correspondingly, EO 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects, sets review deadlines and introduces a policy titled “One Federal Decision” (OFD) for use with major infrastructure projects<sup>9</sup> that institutes a high-level MOU<sup>10</sup> to implement the order. The MOU was signed on April 9, 2018, by the

12 federal agencies that have a role in the environmental review and permitting process for major infrastructure projects, including FERC and the Department of Transportation (parent agency to PHMSA). It commits the signatories to jointly and cooperatively establish procedures for making concurrent and synchronized reviews; eliminate duplication of effort among agencies; improve the efficiency of project delivery; make better-informed decisions; and promote appropriate environmental, community, and economic outcomes.

Adding to the pressure, operators have conveyed their concerns to the White House as well as members of Congress from Gulf Coast states. At a June 2018 oversight hearing, FERC was pressed by Congress to address permitting delays, agency resource constraints, and the commission’s plans for resolution. The Senate has since submitted a follow-up letter on August 21, 2018, to the commissioner inquiring about FERC’s status.

**Consistent with President Trump's executive order to promote energy independence and economic growth, timely reviews are critical to deliver on major infrastructure projects while also avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation.**

Although the recent expansion of PHMSA's obligations in reviewing LNG export projects and the memorialization of a FERC/PHMSA MOU are direct results of external pressures and a shifting LNG market, they will, at least in theory, identify and eliminate process impediments to leverage each agency's expertise. However, an MOU is only ritualistic rhetoric of an agency's intended actions, a formality lacking any practical path forward. Furthermore, without a budget increase for PHMSA, an agency that is already under-resourced, understaffed, and has numerous competing priorities and outstanding congressional mandates, it is uncertain whether expanded obligations will further strain the agency and limit the efficiency improvement envisioned in the White House OFD MOU.

Despite PHMSA having dedicated LNG career staff, third-party contractors, and the authority to over-hire, the actual impact and overflow in duties will not be realized until FERC and PHMSA deliver on the parameters outlined in the MOU. Defining the intended outcome, establishing key performance indicators, and identifying quantifiable metrics and targets for the revised process would offer clarity and help manage expectations. It would also reveal whether the recent actions are provisional arrangements to expedite bottlenecked reviews or if a long-term strategy is being considered. Is the desired end state a temporary reduction in the backlog of LNG permit applications over a specified period of time? Permanent federal staffing at FERC or PHMSA for LNG reviews in FY 2019? Rewriting and reassigning the regulatory authorities of FERC and PHMSA? Devising a work plan or road map prior to implementation would help answer these questions.

One of the first tasks in determining the process boundaries, ownership, and responsibilities should be a high-level evaluation and mapping of the overall FERC/PHMSA review process where overlap, redundancies, delays, deficiencies, and insufficient staffing exist. This should be coupled with a needs assessment to identify resource and capability gaps and generate a roadmap that explains how weaknesses will be managed and which agency is best

suited for specific tasks based on statutory and regulatory authorities, missions, resources, and capabilities. For example, FERC has historically reviewed Subpart B, Siting Requirements of Part 193.2067 wind forces, a responsibility that now rests on PHMSA. An assessment that determines shortfalls between current and desired future conditions would likely identify a subject matter discrepancy for a wind force specialist at PHMSA. Assuming the general responsibilities outlined in the revised MOU are indeed long term, these data could then be leveraged by PHMSA when the agency justifies permanent staffing increases to Congress. Conversely, the purpose of business process mapping is to improve efficiency. Thus, the conclusion of the evaluation may indicate redundancies in several areas, resulting in a staffing surplus that would then allow resources to be diverted elsewhere.

Lastly, the amended process cannot be attained until FERC and PHMSA use the results of the initial evaluation and assessment to develop documented standard operating procedures for transparency and consistency and a functional prioritization tool for better project management. An MOU functions simply as a ceremonial document without operational vehicles to carry the intent forward. Establishing criteria and a methodology for prioritizing LNG export permit applications in queue and alongside other agency priorities will prevent ongoing or planned projects from being delayed or put at risk. Immediately diverting resources from one understaffed agency to another and placing them into an already superfluous, undefined process that is acknowledged by FERC, PHMSA, and Congress to be inadequate and short-staffed only shifts the burden and does not solve the underlying problem. It also does not significantly reduce the backlog of permits. A well-designed and deliberate long-term staffing and operational solution is needed.

PHMSA's FY 2019 budget request to invest in the safe transportation of hazardous materials and energy products cuts funding from the FY 2108 annualized continuing resolution level of \$260.6 million

to \$254.3 million. This funding supports both program areas within PHMSA: Pipeline Safety and Hazardous Materials Safety. The Office of Pipeline Safety requested \$150.2 million to promote the safe construction and operation of new infrastructure and the safe operation, maintenance, and repair of existing pipelines. The Office of Hazardous Materials Safety requested \$52.1 million to support the safe movement of hazardous materials and energy products moving by rail and the movement and storage of liquefied natural gas being used domestically and shipped abroad. The number of full-time equivalent personnel resources (FTE) for the FY 2019 budget request remains flat from FY 2018 at 308 FTE for Pipeline Safety and 203 FTE for Hazardous Materials Safety. However, this is an increase since FY 2017 levels—291 FTE for Pipeline Safety and 183 FTE for Hazardous Materials Safety. With a decreased budget, an increase in agency obligations that requires specific expertise, and the unknown impact of PHMSA's expanded responsibilities, will this meet the intent of the MOU and expedite LNG application reviews? Further complicating this matter is President Donald Trump's recent announcement of pursuing an alternative compensation plan for 2019 that would freeze federal workers' pay at 2018 levels for civilian federal employees, for whom the 2% across-the-board pay increases and 25% locality pay increases will be set at zero. Given these dynamics, it may be challenging for the agency to retain and recruit the expertise and capabilities needed to carry out their safety mission in an expedited fashion.

It will be interesting to see if the revised MOU will meet the intent of minimizing bureaucratic barriers and optimizing the efficiency and effectiveness of the LNG export application process consistent with Trump's executive orders and the FERC/PHMSA MOU. It remains to be seen whether the matter is truly a resource issue or a process issue between FERC and PHMSA. While PHMSA has long participated in LNG design review and oversight with FERC, both agencies, including the regulated community, would benefit significantly by better strategic workforce, resource, and operational planning to make this transition

sustainable, not just by meeting this administration's priorities but through any administration moving forward.

## ENDNOTES

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Cite as:  
**Meidl, Rachel A. *FERC and PHMSA Sign Memorandum of Understanding: Is it the Silver Bullet to Expedited LNG Application Reviews?*. Issue brief no. 10.01.18. Rice University's Baker Institute for Public Policy, Houston, Texas.**