



Chapter 4

FERC CERTIFICATES & AUTHORIZATIONS

CHAPTER FOUR: FEDERAL FERC APPROVALS

Background

What is FERC's role in permitting LNG terminals?

The Federal Energy Regulatory Commission (FERC or “the Commission”) is the most important agency in the entire LNG permitting process because Congress has tapped it as the lead federal agency on permitting LNG export and import facilities (“Section 3 projects”) and interstate gas pipelines (“Section 7 projects”).¹³⁸

With the authority given to it from the Natural Gas Act,¹³⁹ FERC regulates the infrastructure (e.g., an LNG terminal) while DOE regulates the commodity (export of gas) and everyone else (i.e., other agencies) regulates specific impacted resources (e.g., wetlands, water, air, coastal zone, etc.). In Congress’s words, under Section 3 of the NGA, FERC has “the exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal” located onshore or in near-shore waters.¹⁴⁰ FERC evaluates locations, impacts, and safety of these terminals. When FERC approves (or in other words, “certifies”) a terminal, it does so in a certificate order (also known as a “certificate”¹⁴¹).

FERC is responsible for ensuring that the Natural Gas Act is followed, that the administrative record is complete (including a record of other federal agency decisions on the project), and that environmental review of the entire project is properly conducted according to the law (namely, the National Environmental Policy Act (NEPA)). FERC’s review is intended to be so comprehensive such that other federal agencies may rely on FERC’s environmental review documents to support the issuance of their own permits (although it not always is). FERC is also responsible for establishing and maintaining a schedule for all other federal authorizations and coordinating with federal and state agencies in obtaining comments on the proposed project where appropriate. In short, for many

TERMINALS VS. PIPELINES

FERC is responsible for permitting both LNG terminals and interstate gas pipelines (reviewing requests for Section 3 authorizations and Section 7 certificates, respectively). The laws governing these two types of infrastructure differ in several important ways (see Section 4.B.1). Even though this guide focuses on challenging terminals, it is very important to challenge both, both optically and because sometimes—as was true in the Jordan Cove challenge—the most powerful arguments against a project relate exclusively to its pipelines.

¹³⁸ Section 3 and Section 7 refer to the relative sections of the Natural Gas Act from which FERC derives its oversight authority for each type of project. FERC was made lead agency for projects to build LNG import and export terminals in the 2005 amendment to the NGA (the Energy Policy Act of 2005).

¹³⁹ 15 U.S.C. § 717 *et seq.*

¹⁴⁰ 15 U.S.C. § 717b(e)(1). The Department of Energy delegated to FERC the authority under Natural Gas Act § 3(e), 15 U.S.C. § 717b(e), to license LNG terminals. Also see 42 U.S.C. § 7172(e) and DOE Delegation Order No. 0204-112, 49 Fed. Reg. 6684, 6690 (Feb. 22, 1984). LNG facilities sited at the Canadian or Mexican border for import or export also require a Presidential Permit. FERC must obtain a favorable recommendation from the Secretaries of State and Defense before issuing a Presidential Permit. If the Secretaries do not agree, the President decides directly. Executive Order No. 10,485, 18 Fed. Reg. at 5397.

¹⁴¹ When FERC approves (or “authorizes”) a pipeline, it does so in an “authorization.” For projects that include a terminal and a pipeline, FERC typically issues its decision in a single document, sometimes referred to simply as a “Certificate Order” even though it also includes the authorization as well. Sometimes this order is just referred to as FERC’s “order,”—but this can be ambiguous because FERC has authority to issue many types of orders (e.g., ruling on who is a party, setting deadlines, deciding other issues). It’s typically only used to refer to a certificate order when the meaning is clear from the context.

environmental issues, FERC’s certification process is the best place for advocates to raise their concerns.

Note that as introduced in Chapter 3.A.1, this guide focuses on the issues that arise when FERC reviews a Section 3 application (for a terminal), but often an applicant will file a joint application under Section 3 *and* Section 7 (for a pipeline) at the same time, as it needs to construct both an export terminal *and* the pipeline to supply it with gas. Under the Natural Gas Act there are several key differences in how FERC must analyze applications for pipelines as compared to terminals, which this guide highlights in Section 4.B.1. As the Jordan Cove challenge showed, the pipeline portion may be the most vulnerable part of the project, so it should never be overlooked. In addition, applicants that successfully receive a certificate to build a pipeline can exercise eminent domain to take land for construction, whereas that power cannot be used to construct a terminal. This has huge potential ramifications for landowners along the pipeline route. Therefore, even though this guide focuses on challenges to terminals, advocates challenging an application that has both a Section 3 and Section 7 component should strongly consider mounting a challenge to both the terminal and the pipeline.

Who is FERC and what are the relevant offices and people for LNG challenges?

FERC is a federal agency that regulates a number of energy-related activities and things beyond LNG terminals, including: applications to build interstate gas pipelines and affiliated facilities; rates and services for electricity; rates and services for gas pipelines; rates and services for oil pipelines; and hydropower licensing and safety. It is an “independent” agency¹⁴² organized under the Department of Energy.¹⁴³ At its head are up to five commissioners appointed by the President and confirmed by the Senate¹⁴⁴—the commission sometimes has less than five commissioners due to delays appointing or confirming replacements; three is the minimum number needed for quorum.¹⁴⁵ One commissioner is designated the chairman. The chairman can help



¹⁴² Agencies that are “independent” have more freedom from the influence and control of the U.S. president and their executive department than other agencies do (like EPA). For example, FERC’s status as an independent agency affects whether it is bound by executive orders or guidance—it generally has more discretion than a regular agency to treat such directives as not binding. See Section 4.E.14 (highlighting this difference in the context of environmental justice). The president’s authority to remove the heads of an independent agency (which in FERC’s case are called commissioners) is very limited: FERC’s commissioners may not be fired except for extreme misconduct, although the president *can* demote the lead commissioner (the “chairwoman” or “chairman”). For example, in 2020, the president abruptly demoted then-Chairman Neil Chatterjee after he began supporting more climate-friendly policies. Dan Gearino, “Trump Demoted FERC Chairman Chatterjee After He Expressed Support for Carbon Pricing,” *Inside Climate News*, Nov. 6, 2020, <https://insideclimatenews.org/news/06112020/trump-ferc-chairman-neil-chatterjee/>. Chatterjee continued as a commissioner and the other Republican appointee, James Danly, was elevated to chairman in his place.

¹⁴³ The fact that FERC is an independent agency organized under DOE means it is not beholden to the head of the DOE or even the president—it simply is organized under the same laws as DOE. This link between FERC and DOE does foreshadow a different issue, namely the difficulties that persist in determining which agency has authority for different aspects of gas permitting—including which agency is responsible for analyzing upstream and downstream emissions from a project. Gillian Giannetti, *Federal Agencies Play Hot Potato on LNG Emissions*, NRDC, Dec. 8, 2020, <https://www.nrdc.org/experts/gillian-giannetti/federal-agencies-play-hot-potato-lng-emissions>.

¹⁴⁴ Each commissioner serves for a five-year term. Because of this and the fact that FERC is an independent agency, commissioners often serve presidential administrations that did not appoint them. In addition, no more than three commissioners can be from a single political party. As such, a Republican president may need to nominate a Democrat for the Commission, and vice versa.

¹⁴⁵ For example, for part of 2019 and 2020, FERC operated with only three commissioners due to the Senate’s failure to confirm replacements after one commissioner retired and another died. David Bradley, “FERC Continues With Two Vacancies — For Now,” *NGI*, Jan. 9, 2020, <https://www.naturalgasintel.com/ferc-continues-with-two-vacancies-for-now/>; Congressional

steer FERC’s prioritizes when it comes to setting policy, analyzing applications, and organizing the application process itself, but the chairman has no greater vote on any given application than any other commissioner. The chairman also dictates which applications are placed on FERC’s agenda for review—and if an application is not placed on the agenda, it can’t be approved!

The commissioners oversee thirteen offices within FERC, four of which are particularly relevant for LNG terminal permitting and litigation:

1. Office of Energy Projects: The staff of this office is responsible for the substantive work in reviewing applications for LNG projects and creating the necessary environmental review documents required under NEPA.¹⁴⁶ The staff also makes recommendations to the Commissioners of mandatory conditions that should be placed on a certificate limiting the project.¹⁴⁷ The Commissioners review recommendations of the staff and decide whether to include the staff’s recommendations and conditions in FERC’s certificate order.
2. Office of General Counsel: This office includes the lawyers that defend FERC’s certificate orders in federal court if they are appealed.¹⁴⁸ The office now includes a new senior counsel for environmental justice and equity position that has been filled with a long-time environmental justice advocate who publicly states that FERC needs to do better on environmental justice.¹⁴⁹
3. Office of Enforcement: This office is directed to serve the public interest by: “protecting consumers through market oversight and surveillance; assuring compliance with tariffs, rules, regulations, and orders; detecting, auditing, and investigating potential violations; and crafting appropriate remedies, including civil penalties and other measures.”¹⁵⁰ This office makes sure that an LNG applicant/operator follows the conditions set in the order authorizing a project.

Research Service, “The Loss of Quorum at the Federal Energy Regulatory Commission,” CRS Report R44767, Feb. 6, 2017, <https://www.everycrsreport.com/reports/R44767.html> (describing other recent vacancies and how a loss of quorum affects FERC).

¹⁴⁶ FERC, “Office of Energy Projects (OEP),” <https://www.ferc.gov/office-energy-projects-oeep>. In particular, FERC’s Division of Gas – Environment and Engineering (DG2E) staff is responsible for managing the NEPA process, making recommendations to the Commission to avoid, minimize, and mitigate impacts, and monitoring compliance. FERC, E-Learning, “FERC Environmental Review and Compliance for Natural Gas Facilities, Module 1 – FERC’s Regulatory Responsibilities,” 3:16, <https://www.ferc.gov/industries-data/natural-gas/environment/e-learning>.

¹⁴⁷ See 15 U.S.C. § 717b(a) (“The Commission may by its order grant such application [to export LNG], in whole or in part, with such modification **and upon such terms and conditions** as the Commission may find necessary or appropriate”) (emphasis added); see also 15 U.S.C. § 717b(e)(3)(A) (“the Commission may approve an application described in paragraph (2) [an application to “site, construct, expand, or operate an LNG terminal”], in whole or part, **with such modifications and upon such terms and conditions as the Commission find necessary or appropriate**) (emphasis added). Some conditions are standard and included as examples in FERC’s regulations. See 18 C.F.R. § 157.20 (giving a non-exclusive list of general conditions applicable to certificates). In NEPA documents, staff recommendations are often in boldface and bulleted text.

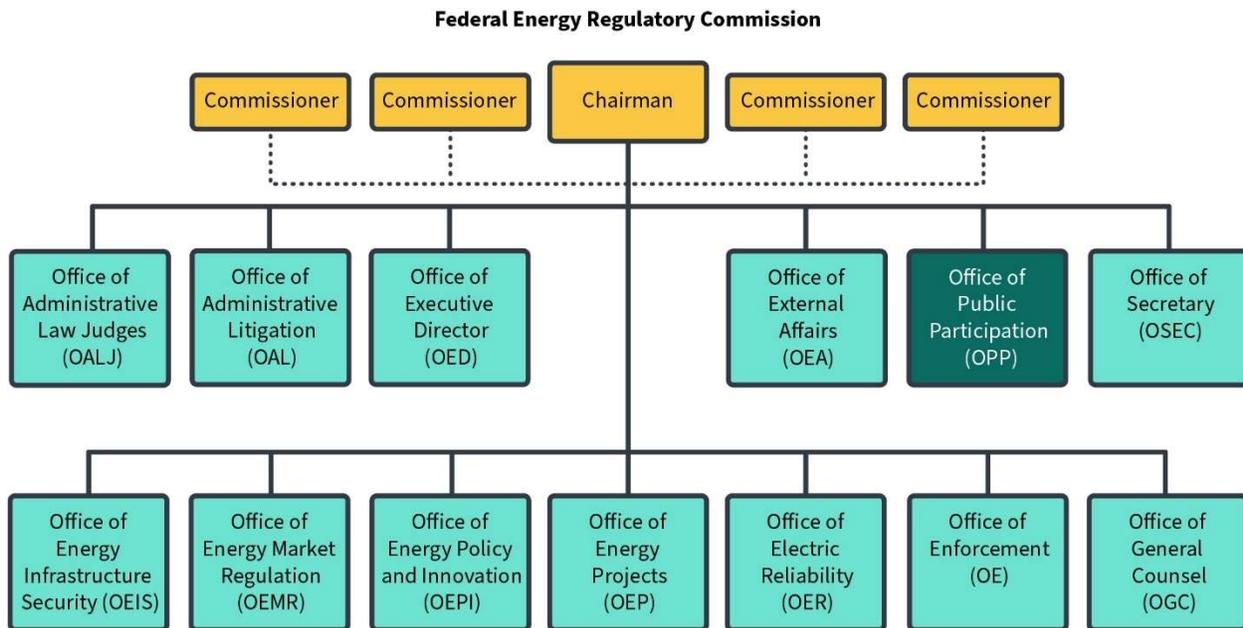
¹⁴⁸ FERC, “Office of the General Counsel (OGC),” <https://www.ferc.gov/office-general-counsel-ogc>.

¹⁴⁹ FERC, “Open Access: Montana Cole Discusses Environmental Justice and Equity,” <https://www.ferc.gov/news-events/news/open-access-montina-cole-discusses-environmental-justice-and-equity>. FERC’s senior counsel on environmental justice, Montana Cole, was previously at NRDC where she penned the following criticism of FERC’s historical handling of these issues: “Pipeline Case Brief: FERC Enables Environmental Injustice,” <https://www.nrdc.org/experts/montina-cole/pipeline-case-brief-ferc-enables-environmental-injustice>.

¹⁵⁰ FERC, “Enforcement,” <https://www.ferc.gov/enforcement>. See also FERC, “Staff Report on the Office of Enforcement’s activities during Fiscal Year 2021,” <https://www.ferc.gov/news-events/news/staff-presentation-staff-report-office-enforcements-activities-during-fiscal-year>.

4. Office of Public Participation: The purpose of this newly formed office is to assist the public in navigating FERC proceedings of all types. Staff is directed to help the public understand when and how to intervene, comment, file motions, or seek rehearing.¹⁵¹

All of FERC's offices are shown below:¹⁵²



As of December 3, 2021, there is a full contingent of five commissioners.¹⁵³ The Commission consists of three Democrats and two Republicans, with Democrat Richard Glick as chairman. Many expect Chairman Glick and the Democratic majority will help to make FERC more responsive to the arguments of communities and environmental advocates.

What must an applicant receive from FERC to proceed with construction?

If a project is approved after all of FERC's environmental analyses are conducted, FERC issues an order certifying the project and authorizing the construction and operation of the facilities. (Sometimes referred to as a "Certificate Order," "Order," or "Certificate" when both a pipeline and a terminal is permitted, and an "Authorization" or "Authorization Order" if just the terminal is permitted, as was the case with Alaska LNG.) At least three Commissioners must approve or deny a proposed project, and a decision can pass through a simple majority vote. The certificate order discusses FERC's decision to accept (*i.e.*, authorize) or reject a project. FERC's authorization of a project is typically conditioned on the applicant complying with construction and operation requirements specified in the order. These certificate orders are often dozens, if not over a hundred, pages long. The length is needed to justify their conditions and to respond to comments on the environmental documents—comments often submitted by advocates opposed to the facility.

¹⁵¹ FERC, "Office of Public Participation (OPP)," <https://www.ferc.gov/OPP>.

¹⁵² FERC, "Offices," <https://www.ferc.gov/offices>.

¹⁵³ FERC, "Willie L. Phillips Sworn in as FERC Commissioner," Dec. 3, 2021, <https://cms.ferc.gov/news-events/news/willie-l-phillips-sworn-ferc-commissioner>.

An example approval order under Section 3 and Section 7 of the Natural Gas Act can be found here: <https://cms.ferc.gov/sites/default/files/whats-new/comm-meet/2019/112119/C-2.pdf> (Rio Grande LNG Order, since withdrawn).

Why should I participate in the FERC process?

FERC's certification is the main approval that a facility needs. Although a project cannot go forward without also obtaining the necessary Clean Air Act, Coastal Zone Management, and Clean Water Act permits, among other federal permits, the FERC certification process is the agency review that focuses holistically on the terminal facility itself. The Department of Energy must certify the export of gas as a commodity—which it may do in part even before FERC's process even begins¹⁵⁴—and state permitting agencies may be reviewing certain aspects of the project concurrently (and may issue their permits prior to FERC certification), but no other agency is responsible for such a broad review of the LNG terminal as FERC. In other words, problems with a proposed project that other agencies might be able to ignore as outside of their jurisdiction (*i.e.*, not their problem) usually cannot be ignored by FERC.¹⁵⁵ Moreover, to challenge the other permits without challenging FERC is optically confusing and strategically poor, because FERC's role of lead agency means that its analysis of environmental impacts, alternatives, and project scope is often what other *federal* agencies defer to and rely on when issuing their own permits.¹⁵⁶

In addition, internal and external pressures on FERC—such as the formation of an Office of Public Participation and the federal D.C. Circuit Court's increased discomfort with FERC's handling of key issues—should translate into an increased likelihood of advocates successfully defeating projects at FERC. Finally, FERC's process is relatively more transparent than some of the other federal agencies, making the barrier to entry a little less than for other permitting processes.

What are the primary ways an advocate can participate in the FERC process?

- Sign up for automatic notifications of new filings added to the FERC dockets for the project at the pre-filing stage and the application stage (each stage has its own docket and the pipeline and terminal portions will have separate dockets)
- Participate in any open houses held by the company
- Submit scoping comments during the pre-filing stage
- Attend the scoping meeting during the pre-filing stage
- Timely intervene during the application process (necessary to later litigate the certificate)

¹⁵⁴ Typically before applying with FERC, applicants file at least the portion of their DOE application that requests authorization to export to countries with free-trade agreements requiring national treatment for trade in natural gas ("FTA countries"). FTA-country applications are fast-tracked with minimal review, so applicants quickly receive these approvals and then can bolster their FERC applications by stating they already have export approval—even if they never intend to export gas to these countries at all. For more on the DOE process see Chapter 5.

¹⁵⁵ This is why advocates should file comments challenging **any** aspect of the project that appears concerning during FERC proceedings, even if they can't tie these issues to the two main statutes that FERC must comply with (the Natural Gas Act and the National Environmental Policy Act—see Section 4.B)—those issues are still valid and should be considered.

¹⁵⁶ For example, FERC and the Corps have an official memorandum of understanding as to what extent the Corps will defer to FERC's interpretation of the project purpose and how the Corps will otherwise participate in FERC's NEPA review of gas facilities and pipelines. *Memorandum of Understanding between the Army Corps of Engineers and the Federal Energy Regulatory Commission for Interstate Natural Gas Pipeline Projects*, June 30, 2005, <https://www.ferc.gov/sites/default/files/2021-04/mou-30.pdf>.

- Comment on the draft environmental impact statement (note, comments never need to be limited to pointing out potential violations of the NGA or NEPA, or any other particular statute)
- Comment on the final environmental impact statement
- File a request for rehearing
- Appeal the certificate in Federal Circuit Court¹⁵⁷ (either the D.C. Circuit or the circuit court presiding over the project location, e.g., often the Fifth Circuit for Louisiana and Texas facilities)

What are other resources on FERC's process for permitting LNG facilities?

There are many other resources online that can be helpful for advocates looking to challenge LNG facilities. When looking for NEPA guidance online, be aware that each agency charged with implementing NEPA has some legal discretion as to how and when to involve the public.¹⁵⁸ The only NEPA regulations relevant for FERC's certification of LNG projects are issued by FERC itself or by the Council on Environmental Quality ("CEQ," for more details, see Section 4.B.3). Therefore, it is important to look for FERC- or CEQ-specific resources to understand FERC's NEPA practices.

Some helpful resources include:

- FERC's July 2015 brochure "Suggested Best Practices for Industry Outreach Programs to Stakeholders" contains a succinct summary of the applicant's pre-filing process, open houses, scoping meetings, application process, and EIS basics.¹⁵⁹
- FERC's Guidance Manual for Environmental Report Preparation, Volume I¹⁶⁰ and Volume II.¹⁶¹ A comprehensive manual geared for an applicant audience, it is a great resource for advocates wanting to understand the intricacies of FERC's relationship with the applicant and how FERC reviews requests for certification under the Natural Gas Act. Volume II of FERC's Guidance Manual for Environmental Report Preparation focuses on the Resource Reports specific to LNG facilities: RR 11 and 13.
- FERC has produced several online tutorials that describe its environmental review and compliance process for gas facilities. Modules 1-5 are most relevant for advocates challenging the certification process: <https://www.ferc.gov/industries-data/natural-gas/environment/e-learning>.
- For a quick overview of FERC's NEPA responsibilities and process, see <https://openei.org/wiki/RAPID/Roadmap/9-FD-i>.
- A redline of the Council on Environmental Quality's (CEQ) NEPA regulations, comparing the 1978 version with the 2020 version, which as of January 2022 is in the process of being rewritten to more closely resemble the 1978 version: <https://ceq.doe.gov/docs/laws-regulations/ceq-final->

¹⁵⁷ 15 U.S.C. § 717r(a) ("Any party to a proceeding under this chapter aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia. . .")

¹⁵⁸ For example, whether scoping comments are solicited during the EA process varies by lead agency. FERC does not ask for scoping comments during an EA.

¹⁵⁹ FERC, *Suggested Best Practices for Industry Outreach Programs to Stakeholders*, July 2015, 17-24. <https://www.ferc.gov/sites/default/files/2020-04/stakeholder-brochure.pdf>.

¹⁶⁰ FERC, *Guidance Manual For Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. I*, Feb. 2017, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

¹⁶¹ FERC, *Guidance Manual For Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. II*, Feb. 2017, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-2.pdf>.

[rule-redline-changes-2020-07-16.pdf](#). Different versions of CEQ’s NEPA regulations may be relevant for different LNG challenges, but some free legal research software only publishes the most recent version of these regulations. In addition, as of January 2022, the 1978 regulations are one of the better sources for predicting what *future* regulations will look like, given that the revisions to the 2020 version are still being drafted. This comparison document also can help advocates understand the citations in FERC orders and advocate comments published *before* 2020, when the 1978 version controlled (see Section 4.B.3 for more).

How is this chapter organized?

Section 4.B overviews the laws that FERC must comply with before issuing a certificate, such as the Natural Gas Act and NEPA. Section 4.B also lists the federal agencies that FERC must consult with and changes on the horizon with FERC. Section 4.C walks step-by-step through FERC’s review process, from pre-filing, application, rehearing, and judicial appeal. Section 4.D describes in detail the opportunities for public participation in FERC’s process up through the rehearing stage. Section 4.E gives specific examples of issues that could be raised in comments and Section 4.F provides links to comments filed by other advocates.

What laws must FERC comply with before issuing a certificate?

The main statutes governing FERC’s certification of LNG facilities are the Natural Gas Act (NGA) and the National Environmental Policy Act (NEPA). FERC also has developed regulations that it is bound to follow when analyzing and approving projects, including some regulations specific to its approvals of LNG terminals. In addition, the Council on Environmental Quality (CEQ)—the federal agency with responsibility for overseeing all NEPA assessments and regulations¹⁶²—has NEPA regulations that FERC has followed.¹⁶³ (As of January 2022, these regulations are in flux, as Sections 4.B.3 and 4.B.5 describe.) The table below summarizes the statutes and regulations relevant to FERC’s LNG approval process:

TABLE 4.1: The main laws and regulations that govern FERC’s review

GAS LAWS		ENVIRONMENTAL LAWS	
Natural Gas Act	Section 3: Exportation / Importation of Gas): governs the construction or modification of LNG terminals (15 U.S.C. § 717b) Section 7(c) (15 U.S.C. § 717f(c)) governs the construction of interstate pipelines	National Environmental Policy Act	42 U.S.C. §§ 4321 – 4370m-12
FERC’s general and procedural regulations (not specific to LNG)	18 C.F.R. Subpart X	CEQ’s NEPA regulations	40 C.F.R. §§ 1500-1508

¹⁶² 42 U.S.C. § 4344(3).

¹⁶³ As it did in the Rio Grande LNG FEIS in 2020. FERC, “Rio Grande LNG Project, Final Environmental Impact Statement, Volume 1,” May 2020, 1-6, https://www.ferc.gov/sites/default/files/2020-05/FEIS-volume-1_0.pdf. (“Based on its authority under the NGA, the FERC is the lead agency for preparation of this EIS in compliance with the requirements of NEPA, the Council on Environmental Quality’s (CEQ) regulations for implementing NEPA (Title 40 of the Code of Federal Regulations, Parts 1500–1508 [40 CFR 1500–1508]), and the FERC regulations implementing NEPA (18 CFR 380).”).

GAS LAWS		ENVIRONMENTAL LAWS	
			(undergoing revision as of January 2022)
FERC's NGA regs on LNG export and import facilities	18 C.F.R. § 153 et seq.	FERC's NEPA regulations¹⁶⁴	18 C.F.R. Part 380

FERC's failure to follow these statutes or regulations in certifying a project should provide a solid basis for a court to overturn a certificate (although an experienced NEPA attorney should always be consulted to structure specific litigation arguments).¹⁶⁵ Therefore, it is important for advocates to read these laws and have a firm grasp on the responsibilities they place on FERC and the applicant.¹⁶⁶ Note that advocates should not limit themselves when filing comments to just raising issues that are potential violations of these laws—advocates can and should challenge any aspect of the project that is concerning, including issues that fall entirely outside of NEPA and the NGA. As introduced in Chapter 3 Section A.3, there are many other federal laws that applicants must show compliance with before FERC can issue a permit. This guide highlights some of these in Section 4.E as part of the sample comments.

Although an advocate should be familiar with both the NGA and NEPA, these two laws are not the same levers when it comes to challenging terminals. NEPA requires that FERC take a “hard look” at many very specific aspects of the project and their impacts—while the NGA requires that a terminal be more vaguely “consistent with the public interest” (and that the pipeline be both in the public convenience and necessary). Both laws are useful tools and may be subject to future refinement, either by acts of Congress or by court decisions that alter the understanding of these laws. This guide discusses both.

¹⁶⁴ In general, if FERC's regulations on NEPA conflict with CEQ's, CEQ's regulations win out. 40 C.F.R. § 1507.3(a) (1978). The 2020 CEQ regulations were more draconian and prohibited other agencies like FERC from conducting a more thorough NEPA review than the basic review the 2020 CEQ regulations envisioned. 40 C.F.R. § 1507.3(b) (2020). It's likely that the new regulations will revert largely to the 1978 version, which gives agencies like FERC more flexibility in setting regulations.

¹⁶⁵ It has historically been understood that CEQ's *regulations* on NEPA (which were subjected to notice-and-comment) apply to independent regulatory agencies like FERC. See 40 C.F.R. § 1507.3 (1978); see also CEQ's 40 Questions Memorandum to Agencies, 46 Fed. Reg. 18,026 (as amended 1986), 24 (Question 31a), <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>. Note, however, that one judge on the influential D.C. Circuit in 2021 questioned whether CEQ had authority to issue those regulations in the first place. *Food & Water Watch v. U.S. Dep't of Agric.*, 1 F.4th 1112, 1118-19 (D.C. Cir. 2021) (Randolph, J., concurring) (explaining how that question creates doubts whether “CEQ's regulations bind executive and independent agencies alike”); see also Thomas C. Jackson & Jeffrey H. Wood, “Advisor or Authority? Role of Council on Environmental Quality in NEPA Regulations,” National Hydropower Association, July 12, 2021, <https://www.hydro.org/powerhouse/article/advisor-or-authority-role-of-council-on-environmental-quality-in-nepa-regulations/> (highlighting this issue). Although FERC has acted as if CEQ's regulations bind it in the past, FERC may dispute whether CEQ's guidance documents or executive orders apply to it if it has not expressly adopted them (for example, by incorporating them into the EIS). An experienced NEPA attorney is an essential advocate during litigation to navigate these issues.

¹⁶⁶ Regulations and statutes are published online for free; Cornell Law School's Legal Information Institute has all of the regulations in a relatively easy-to-navigate format: <https://www.law.cornell.edu/>. They are also available on many government websites.

What should I know about the Natural Gas Act and its related regulations?

The **Natural Gas Act**¹⁶⁷ gives FERC “the exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal” located onshore or in near-shore waters (under Section 3)¹⁶⁸ and to approve interstate “transportation facilities” like pipelines (under Section 7).¹⁶⁹

For **FERC**, there are two key sections of the NGA relevant to LNG challenges: Section 3 and Section 7. **Section 3** grants FERC the authority to approve or deny a developer’s application to build an LNG terminal.¹⁷⁰ The terminal is the large facility that pretreats and liquefies the gas, which is then loaded onto LNG tankers. **Section 7**, meanwhile, grants FERC the authority to approve or deny a developer’s application to build an interstate gas pipeline and the pipeline’s associated components like compressor stations, header systems, valves, and related facilities.¹⁷¹

Note that this guide focuses on unique issues that arise when challenging LNG terminals—in other words, Section 3 authorizations. However, applications for most new LNG projects will be **joint** Section 3 and Section 7 applications, because the applicant typically needs to supply its new terminal via pipeline.¹⁷² (Expansions—e.g., the addition of a liquefaction train—are more likely to involve only Section 3.) Advocates should **always** challenge both Section 3 and Section 7 aspects of the project—as in the Jordan Cove project, sometimes the pipeline is more vulnerable than the terminal! Advocates can use this guide to identify issues to raise to challenge pipelines and their components, which will need many of the same permits highlighted in this guide, including Army Corps of Engineers permits, state section 401 certifications, and state air permits (for the compressors). However, some of the legal standards for approving pipelines are different from those for terminals. The approval of a pipeline also gives the developer the power of eminent domain, which a terminal developer does not receive. This guide attempts to flag major differences between the approvals for terminals and pipelines when relevant; however, advocates should consult experienced counsel when litigating pipelines to ensure all concerns are presented under the appropriate standard of review.

FERC’s regulations put the burden on the applicant to provide FERC with all necessary information to decide on the application.¹⁷³ The NGA has several important facets:

- **FERC is lead agency.** The Natural Gas Act establishes FERC as the lead agency “for the purposes of coordinating all applicable Federal authorizations,” and each federal and state agency involved

¹⁶⁷ 15 U.S.C. § 717 *et seq.*

¹⁶⁸ 15 U.S.C. § 717b(e)(1). The Department of Energy delegated to FERC the authority under Natural Gas Act § 3(e), 15 U.S.C. § 717b(e), to license LNG terminals. *Also see* 42 U.S.C. § 7172(e) and DOE Delegation Order No. 0204-112, 49 Fed. Reg. 6684, 6690 (Feb. 22, 1984).

¹⁶⁹ 15 U.S.C. § 717f(c).

¹⁷⁰ 15 U.S.C. § 717b(e)(1) (Under Section 3, the Federal Energy Regulatory Commission (FERC) has “the exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal” located onshore or in near-shore waters.) The Department of Energy delegated to FERC this authority under Natural Gas Act § 3(e), 15 U.S.C. § 717b(e), to license LNG terminals. *Also see* 42 U.S.C. § 7172(e) and DOE Delegation Order No. 0204-112, 49 Fed. Reg. 6684, 6690 (Feb. 22, 1984).

¹⁷¹ 15 U.S.C. § 717f (as part of FERC’s powers to permit “transportation facilities”). Other components might include metering and pig launcher/receivers to maintain the pipe.

¹⁷² For an example of a joint certification see FERC’s order under Section 3 and 7 authorizing the Rio Grande LNG terminal and its associated Rio Bravo pipeline: “Order Granting Authorizations Under Sections 3 and 7 of The Natural Gas Act.” 169 FERC ¶ 61,131 (Nov. 22, 2019) (since withdrawn) <https://cms.ferc.gov/sites/default/files/whats-new/comm-meet/2019/112119/C-2.pdf>.

¹⁷³ 18 C.F.R. § 157.5(c).

must “cooperate” with FERC and “comply with the deadlines” established by FERC. (An agency’s failure to comply with FERC-established deadlines can be grounds for parties to a FERC application to appeal.¹⁷⁴) Because of FERC’s role as lead agency, other federal agencies involved often rely on FERC’s NEPA analysis. In addition, advocates may be able to track the deadlines and progress at other agencies more easily by keeping up with the applicant’s FERC filings. For example, the applicant must file publicly available documents with FERC describing its progress of getting Corps permits, often leaving more clues than would be available from just the Corps’ website or its public notices.

- For terminals in particular, there is a presumption in favor of granting an authorization.** Section 3 of the Natural Gas Act establishes a presumption favoring the licensing of terminals to import or export LNG. It provides that FERC “shall” grant an “Authorization to Construct and Operate” a proposed LNG terminal project “unless” it finds that construction and operation of the facility “**will not be consistent with the public interest.**”¹⁷⁵ There is no definition of “public interest” in the Natural Gas Act¹⁷⁶ or in FERC’s regulations, meaning FERC has broad latitude how it identifies and weighs factors that affect “the public interest.” Unfortunately, FERC’s interpretation of “public interest” often does not currently take into much consideration what neighboring communities and environmental groups would consider to be “public interest.” That’s not to say advocates’ arguments for a different or more inclusive definition of public interest should not be included in comments or litigation—just that because FERC’s interpretation of public interest will be given deference by the reviewing courts that otherwise might overturn FERC’s certification of a facility under the NGA, advocates may not have much immediate success arguing that the construction of LNG terminals are not in the public interest. There have been some wins related to the NGA, however—for example, in August 2021, the D.C. Circuit found that FERC’s NGA public-interest analysis for two terminals was faulty because it had based its public-interest conclusion on EIS documents that contained flawed environmental-justice and climate-change analyses (analyses required by NEPA).¹⁷⁷ Because FERC had erred, the Court remanded the certificate orders on the two LNG projects at issue back to FERC to redo its analysis.¹⁷⁸

PRACTICE TIP:

Even if FERC interprets a statute and its responsibilities one way, it is ok to raise comments and arguments that contradict FERC. A reviewing court, or, eventually, FERC itself, may agree with you! Just make sure to work with an experienced attorney during the litigation phase (and when planning litigation!), as the outcome of litigation in one challenge may affect all other terminals.

Broad change on what goes into the public interest analysis would likely need to come from Congress, which has the power to change the statutes that circumscribe FERC’s review. In the current political climate it would be a difficult change to pass into law, but Congress could clarify the definition of public interest by, for example, removing FERC’s very broad latitude in choosing

¹⁷⁴ 15 U.S.C. § 717n(b) and (c); *id.* § 717r(d)(2) (describing which court has jurisdiction over an appeal based on delay).

¹⁷⁵ 15 U.S.C. § 717b(a). See 18 C.F.R. § 153 et seq.

¹⁷⁶ See 15 U.S.C. § 717a (providing no definition).

¹⁷⁷ *Vecinos para el Bienstar de la Comunidad Costera v. FERC*, No. 20-10453 (“Rio Grande Op.”) at 17 (Aug. 3, 2021), [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf). Attached as App. 2.

¹⁷⁸ *Id.*

the factors used to determine the public interest and instead narrowly defining those factors in a way that would disfavor fossil fuel projects (e.g., requiring that FERC disfavor projects that contribute to climate change). It could amend the NGA to no longer presume that LNG projects are in the public interest.

- **The NGA approval standard for a terminal is more lenient than for pipelines.** The standard for approval of an LNG terminal under Section 3 of the NGA differs significantly from the standard for approving interstate gas pipelines under Section 7 of the NGA. Under Section 3 of the NGA, FERC is supposed to authorize a terminal unless it finds that the terminal “will not be consistent with the public interest.”¹⁷⁹ Under Section 7 of the NGA, FERC can only authorize a pipeline if it finds that the pipeline is “required by the present or future public convenience and necessity; otherwise such application shall be denied.”¹⁸⁰ Both analyses require FERC to balance the public benefits of a project against the adverse consequences; with respect to Section 7, however, FERC must additionally analyze whether the project is “needed.”

Because of the additional analysis required, the pipeline can be easier to challenge than the terminal itself. The larger size of the pipeline can also make it more vulnerable. It may affect more parties (such as landowners facing eminent domain), meaning more potential opponents with unique concerns; it may cross more habitat, meaning more affected species and waterbodies.

- **The NGA requires that applicants for terminals use the elongated pre-filing process.** The NGA requires that applicants seeking to build LNG terminals go through a pre-filing process before they may file an official application for authorization (pipeline applicants often choose to participate as well).¹⁸¹ The pre-file process requires FERC to seek additional public input. The process must last at least six months; only after these six months may the applicant file an official application for the project (if it has completed other necessary steps as well). The pre-filing process is discussed in further in Sections 4.C.3–4.C.5.
- **Terminals can’t use eminent domain to obtain the land needed for the project; pipelines can.** A project applicant that is constructing a terminal will not be able to use federal eminent domain to take the land needed for the terminal’s construction: LNG export terminals (approved under section 3 of the Natural Gas Act) are not statutorily authorized to use eminent domain to obtain property for their development.¹⁸² Any state or local agency with public land stewardship authority retains its power to decide whether to approve land lease or easement applications. In some states, such as Texas, the public lands commissioner is independently elected. In other states, such as Louisiana, the position is an executive branch appointment.

However, LNG-related pipelines are a different matter. Once a pipeline is certified by FERC, the project sponsor can avail itself of the eminent domain condemnation powers that interstate gas pipeline project sponsors enjoy under 15 U.S.C. § 717f(h), regardless of whether the land is privately or state-owned.¹⁸³ This is another reason why it is so important to challenge the pipeline

¹⁷⁹ 15 U.S.C. § 717b(a). See 18 C.F.R. § 153 et seq.

¹⁸⁰ 15 U.S.C. § 717f(e).

¹⁸¹ 15 U.S.C. § 717b-1(a).

¹⁸² Compare 15 U.S.C. § 717b with 15 U.S.C. § 717.

¹⁸³ In a pipeline case decided by the U.S. Supreme Court in 2021, the Court held that a developer that has received a FERC certificate to build a pipeline may use eminent domain to obtain both private and state lands that it needs for the pipeline’s construction. *PennEast Pipeline Co., LLC v. New Jersey*, 594 U.S. ___, No. 19-1039, 2021 WL 2653262, (U.S. June 29, 2021) (“By

part of a project as well.

In sum, the NGA gives FERC the power to approve LNG terminals that are in the “public interest” and places FERC at the head of other permitting agencies. However, there’s one more very important statute at play—NEPA—that provides an advocate many hooks to challenge FERC’s certification. (And generally if FERC errs when implementing NEPA, it also will have erred in implementing the NGA!)

What does the National Environmental Policy Act’s environmental review require?

All projects that entail a federal action, including those that require a federal permit, must go through an environmental review unless they are categorically excluded by statute or regulation. (LNG terminals are not excluded in FERC’s review.) The **National Environmental Policy Act (NEPA)**¹⁸⁴ is the statute that dictates the scope of that environmental review; regulations authored by the federal **Council on Environmental Quality (CEQ)** and each implementing agency (here, FERC) are also important. Because FERC is lead agency for LNG terminal projects, FERC has primary responsibility for complying with NEPA for LNG projects.¹⁸⁵ If FERC’s NEPA documents do not address the requirements of all federal agencies issuing approvals under federal law, those agencies must conduct their own NEPA analyses.

WHO IS CEQ AND WHY DOES IT MATTER?

CEQ is the White House Council on Environmental Quality, a federal agency tasked with ensuring that agencies implement NEPA correctly. As of January 2022, CEQ’s role in LNG projects is in flux and a little uncertain. For decades CEQ’s regulations—which all agencies implementing NEPA are expected to follow—were unchanged (the “1978 regulations”). In 2020, CEQ revamped them but their reign will be short-lived, as they are being rewritten again under the Biden Administration. For more, see Section 4.B.3.

its terms, [15 U.S.C.] § 717f(h) authorizes FERC certificate holders to condemn all necessary rights-of-way, whether owned by private parties or States.”). It’s interesting to note that even though the PennEast developers won at the Supreme Court, by September 2021 they canceled the pipeline—because the project had not yet received all of its required permits, including a water quality certification in New Jersey! Disavino, Scott. “*PennEast becomes the latest to scuttle a natural gas pipeline project.*” (Sept. 27, 2021). <https://www.reuters.com/business/energy/penneast-end-development-pennsylvania-new-jersey-natgas-pipe-2021-09-27/>.

¹⁸⁴ 42 U.S.C. §§ 4321-4347. The White House Council on Environmental Quality establishes federal regulations for implementing NEPA (see 40 C.F.R. §§ 1500-1508); these are being rewritten as of January 2022. Agencies can also establish separate but consistent NEPA regulations, which FERC has done. See 18 C.F.R. Part 380 et seq.

¹⁸⁵ Indeed, the NGA specifically envisions that applicants will comply with NEPA’s pre-filing process, usually reserved for the most complicated of projects. 15 U.S.C. § 717b-1(a).

NEPA does not dictate an outcome but rather a process. Specifically, it mandates an environmental review process and the subsequent issuance of a decision document based on that review (in FERC’s case, the certificate order or an order denying the application), in which decision-makers decide whether a project should be granted a permit or approval, and under what conditions or restrictions, if any.¹⁸⁶ FERC does not necessarily violate NEPA if it approves the most environmentally damaging alternative of a project.

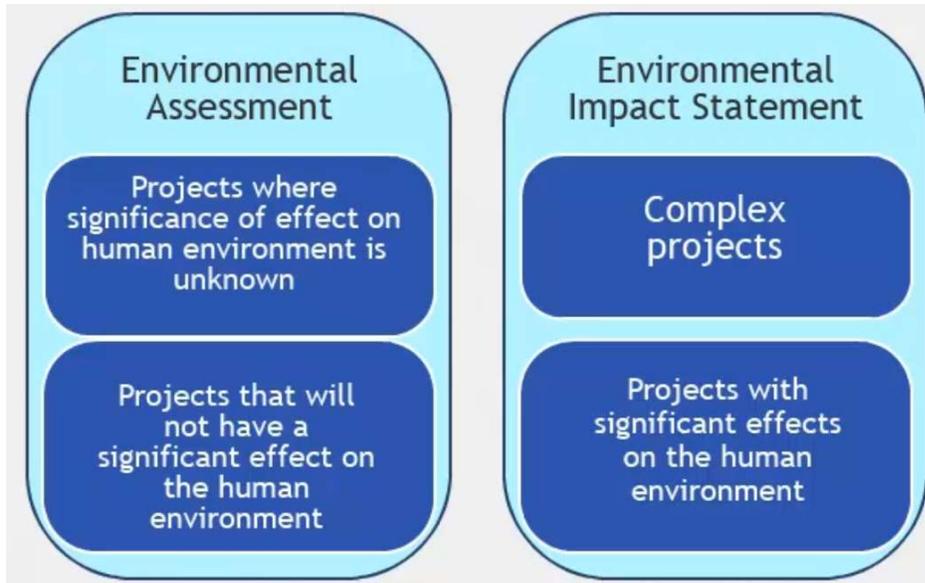
PRACTICE POINTER:

Other federal agencies are not absolved of their NEPA responsibilities just because FERC is lead agency for NEPA purposes. Each federal permitting agency involved in the process must make sure that FERC’s NEPA analysis is sufficient for its own permits before it may rely on FERC’s analysis—for example, the Corps still must confirm that FERC’s NEPA analysis sufficiently covers the environmental impacts caused by the LNG work the Corps is permitting. If it does not, the Corps must work with FERC to remedy FERC’s analysis or the Corps must conduct its own NEPA analysis. If NEPA is not followed for any federal permit, that is grounds to challenge that permit in court.

If the agency implementing NEPA has reason to believe that an applicant’s project likely will have significant impacts on the environment, it must fulfill its NEPA duties by documenting its analysis in an Environmental Impact Statement (EIS) (typically released for public comment twice as a draft and a final—but if circumstances change during or after the certification process sometimes more than two documents are needed, in which case FERC may issue a supplemental EIS—both draft and final).¹⁸⁷ But if the agency believes there will be no significant environmental impacts from a project, it may do an Environmental Assessment (EA) first (a much shorter, less involved environmental review). If at the end of the EA process the agency concludes that there are likely significant impacts from the project, it will then do a full EIS. (For more on these documents and what to expect in LNG projects, see Section 4.C.14). The basic analytical framework remains the same, however.

¹⁸⁶ See 40 C.F.R. § 1500.1(a) (2020) (“The purpose and function of NEPA is satisfied if Federal agencies have considered relevant environmental information, and the public has been informed regarding the decision-making process. NEPA does not mandate particular results or substantive outcomes. NEPA’s purpose is not to generate paperwork or litigation, but to provide for informed decision making and foster excellent action.”). This is similar to the purpose described in the 1978 regulations: “NEPA’s purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on an understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.” 40 C.F.R. § 1500.1(c) (1978). The 1978 regulations also highlighted the importance of public participation in the NEPA process: “NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.” *Id.* § 1500.1(b) (1978).

¹⁸⁷ 15 U.S.C. § 717n(b)(1). Also see 15 U.S.C. § 717b-1(a).



¹⁸⁸ The NEPA analysis is driven by the applicant’s **stated project purpose**¹⁸⁹ (e.g., an applicant might claim that its purpose is to export 27 million metric tonnes of LNG sourced from the Permian Basin¹⁹⁰) and **actual project plans** (e.g., a detailed plan to achieve the purpose by constructing an LNG terminal in a preferred location). A NEPA

analysis must document the **expected environmental impacts** from the project plans, a range of **reasonable alternative plans** that would still achieve the project purpose, and the impacts from those alternatives. This includes a **no-action alternative**, which is meant to evaluate the environmental effects of not pursuing the project. The NEPA analysis must show that FERC has taken a “hard look” at a project’s impacts, informed the public of these impacts, solicited and responded to relevant public comments, and determined whether the adoption and implementation of an alternative(s) would be preferable to the proposed action—if it has not, then FERC’s certificate order may be vulnerable in court to being overturned.

¹⁸⁸ FERC, “Module 2 – Overview of the FERC Process for Reviewing Proposed Natural Gas Projects” at 10:19, https://www.ferc.gov/sites/default/files/2020-06/module_2_0.mp4.

¹⁸⁹ How FERC decides to define the project’s stated purpose is important for two big reasons. First, the project’s stated purpose determines what alternatives are reasonable to include in the NEPA environmental review process. Second, because FERC is “lead agency” for LNG applications, other federal permitting agencies often look to FERC’s definition of the project purpose before conducting their own analyses as to whether *they* should grant permits. For example—and as is explained further in Chapter 6.B.3—the Corps’ regulations state that the Corps may only grant a Clean Water Act section 404 permit to projects that represent the “least environmentally damaging practicable alternative” (“LEDPA”). The Corps identifies the universe of possible alternatives from which to select this LEDPA in part by first determining what the project’s “basic” and “overall” purposes are—concepts similar but not identical to FERC’s determination of project purpose. Department of the Army, Memorandum, “Updated Standard Operating Procedures for the U.S. Army Corps of Engineers Regulatory Program,” July 1, 2009, 15-16, <https://www.spd.usace.army.mil/Portals/13/docs/regulatory/qmsref/eis/Regulatory%20SOP%20July%202009.pdf> (outlining the Corps’ and the lead agency’s responsibilities when it comes to defining “basic project purpose,” “overall project purpose and alternatives analysis,” and NEPA’s “purpose and need”). Despite differences in the definitions of these related terms, the Corps defers when possible to FERC’s interpretation of the project’s purpose in part because of FERC’s role as lead agency. See MOU, *supra* note 156. Therefore, challenging FERC on its definition of project purpose can pay dividends in a challenge to the Corps’ permits.

¹⁹⁰ FERC often simply copy-pastes the project applicant’s proposal, without giving it the proper scrutiny. This can allow an applicant to improperly narrow the NEPA review such that only its project can meet the stated purpose.

- **Alternatives.** One of the alternatives considered must be the “no-action” (i.e., “no-build”) alternative,¹⁹¹ which serves as a baseline against which the impacts of the proposed action are compared and contrasted. There is no rule on the number of alternatives that must be considered; the final NEPA document for Jordan Cove LNG explicitly considered approximately two dozen alternatives, including alternative terminal locations and alternative power supplies for the compressor equipment.¹⁹² Alternatives may be only slight changes to the project; as in the example of alternative power sources or alternate pipeline or road routes.

When deciding whether an alternative should be adopted, FERC historically¹⁹³ has evaluated each alternative using three criteria: “(1) does the alternative meet the stated purpose of the project; (2) is it technically and economically feasible and practical; and (3) does it offer a significant environmental advantage over a proposed action.”¹⁹⁴ In evaluating aboveground facility locations (like LNG terminals, as opposed to pipelines), FERC considers: “the amount of available land, current land use, adjacent land use, location accessibility, engineering requirements, stakeholder comments, and impacts on the natural and human environments.”¹⁹⁵ Because pipelines are linear routes between two points instead of fixed, there will likely be more alternative locations—at least for certain pipeline segments—and FERC’s analysis is slightly different, as the Jordan Cove FEIS points out.¹⁹⁶

For specific comments that might be raised on a NEPA alternatives analysis, see Section 4.E.2.

- **Environmental impacts.** NEPA requires that FERC analyze the impacts expected from the proposed project and each alternative to the existing natural and human environment. Impacts are to be analyzed by resource type, category, and duration. Impacted resources are wide-

ALTERNATIVES RECAP:

FERC has stated that: “[t]o determine if an alternative would be preferable to a proposed action, we generally evaluate an alternative using three criteria:

1. does the alternative meet the stated purpose of the project;
2. is it technically and economically feasible and practical; and
3. does it offer a significant environmental advantage over a proposed action.”

An example of this analysis is in Part 1 of the final EIS for the Jordan Cove LNG terminal and pipeline.

See App. 3a, Jordan Cove FEIS Part 1 at 3-1 to 3-52.
https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf

¹⁹¹ See 40 C.F.R. § 1502.14(c) (2020) and 40 C.F.R. § 1502.14(d) (1978) (both requiring no-action consideration).

¹⁹² Including the no-action alternative; “systems” alternatives (alternatives that would make use of existing infrastructure); LNG terminal site alternatives (including in other states and inland); power supply alternatives for equipment; and pipeline route alternatives. App. 3, Jordan Cove FEIS, 3-1 to 3-52. https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf. In the end, only one alternative from the final EIS was integrated into the project—a change to the pipeline route that would avoid long-term and permanent impacts to certain forest habitat. Jordan Cove FEIS, 3-26 & 3-52. (Some of the other pipeline route alternatives that were raised earlier in the NEPA process had already been integrated.) Jordan Cove FEIS, 3-2.

¹⁹³ As is discussed in the next section (4.B.3), CEQ’s NEPA regulations were updated in 2020. They narrowed the definition of what alternatives can be considered. These regulations are expected to quickly become obsolete and the alternatives analysis is expected to revert to the something more similar, if not identical, to the old regulations. Consult an attorney to determine which regulations your alternatives arguments should be based on.

¹⁹⁴ Jordan Cove FEIS, 3-3.

¹⁹⁵ Jordan Cove FEIS, 3-4 (summary); 3-5 – 3-18 (application).

¹⁹⁶ Jordan Cove FEIS, 3-3 (summary); 3-18 – 3-50 (application).

ranging, from geological to cultural to socioeconomical to biological and chemical (See Section 4.E for a full list and possible issues to raise in comments for each). When determining how significant of an impact a proposal or alternative will have on a specific resource, FERC historically has considered: the duration of the impact; the geographic, biological, and/or social context in which the impact would occur; and the magnitude and intensity of the impact (see Section 4.B.5). (These are all factors that an advocate should consider and address when filing comments.)

All in all, NEPA requires federal agencies to assess the potential environmental effects of “major federal actions”¹⁹⁷ that may significantly affect the quality of the human environment **before** deciding whether and in what form to act.¹⁹⁸ Agencies are required to provide meaningful opportunities for public participation in this process and to show-their-work when assessing potential environmental effects—although some project information might **not** be disclosed because it is privileged or of a sensitive nature (e.g., in terms of national security, economic security, or public health and safety), the conclusions that are made from that information must be public.¹⁹⁹ NEPA **does not** mandate particular results or substantive outcomes. However, an agency that does not follow NEPA’s requirements opens itself up to a federal lawsuit over its final action in which the agency’s compliance with NEPA will be scrutinized under the Administrative Procedure Act’s standard of review: whether the agency acted in an arbitrary and capricious manner in conducting the NEPA analysis.²⁰⁰ Most LNG projects will end up having to be litigated in federal court under this Act to ensure that FERC or other agencies have complied with NEPA.

Who is CEQ and why does CEQ matter?

The Council on Environmental Quality (CEQ) is the federal agency with responsibility for overseeing all NEPA assessments and regulations.²⁰¹ LNG applicants do not need a permit from CEQ—but permitting agencies that implement NEPA have historically been required to follow CEQ’s regulations, as well as their own NEPA regulations.

Unfortunately, as of January 2022, CEQ’s regulations are in flux. CEQ first issued NEPA regulations in 1978 (the “1978 regulations”). These 1978 regulations were heavily revised in 2020 and weakened NEPA implementation and the scrutiny placed on projects.²⁰² For example, the 2020 regulations prohibit agencies from scrutinizing potential impacts of a proposed project beyond what CEQ’s rules require.

¹⁹⁷ A legal term that would include issuing federal permits to build LNG pipelines and terminals.

¹⁹⁸ 42 U.S.C. § 4332(2)(C).

¹⁹⁹ This latter category is known as Critical Energy Infrastructure Information (“CEII”) and discussed further in Section 4.D.3. Federal agencies sometimes withhold too much information; sometimes an advocate must challenge the withholding either through the agency’s appeals process or by filing a Freedom of Information Act (“FOIA”) request—a tool discussed in Section 6.C.12, using the Corps as an example agency. An experienced attorney can help decide if, how, and when to request information that appears to be missing.

²⁰⁰ The Administrative Procedures Act standard is codified here: 5 U.S.C. § 706(2).

²⁰¹ 42 U.S.C. § 4344(3).

²⁰² *Brookings* describes the rule changes as follows: The 2020 rule established a new, presumptive two-year deadline for agencies to prepare EIS documents. It also limited the role of climate change in environmental assessment, by eliminating the requirement for agencies to consider the “cumulative effects” of their actions and restricting the analysis to effects with a “reasonably close causal relationship” in NEPA assessments, which limits greenhouse gas emission considerations. The rule also allowed agencies to exclude projects using “minimal federal funding” from the NEPA review process. *Brookings*, “Tracking regulatory changes in the Biden era,” Last updated Jan. 18, 2022, <https://www.brookings.edu/interactives/tracking-regulatory-changes-in-the-biden-era/>.

A redline of the rules showing the changes from 1978 to 2020 can be found here: <https://ceq.doe.gov/docs/laws-regulations/ceq-final-rule-redline-changes-2020-07-16.pdf>. The Biden Administration has since announced that it will revise the regulations in two phases to restore three key regulatory provisions that were gutted by the 2020 rules. The first phase of revisions has been proposed but as of January 2022 is not yet in effect.²⁰³

As of January 2022, the 2020 rules are in effect and will remain so until a court vacates them or CEQ finalizes its new rules. The 2020 rules state that they apply to any new NEPA review begun after September 14, 2020, **but for NEPA projects that were on-going on that date**, agencies may choose whether use the 1978 rules or 2020 rules.²⁰⁴ Therefore it can be tricky to determine which rules—the 1978 or 2020 version—govern older projects. At least one court has cast doubt on whether the 2020 rules would change any agencies’ NEPA analysis;²⁰⁵ but other courts have reviewed pre-2020 NEPA analyses under the 2020 regulations.²⁰⁶ It’s therefore possible that even if an agency conducts its NEPA analysis under the 2020 rules now, by the time the agency’s decision is appealed to federal court, the Biden Administration’s new rules will be the measuring stick by which the NEPA analysis is judged! Because of this uncertainty it is best to consult with an attorney or agency staff to determine which rules apply.²⁰⁷

As another part of CEQ’s 2020 rewrite, CEQ directed all implementing agencies (like FERC) to rewrite their own NEPA regulations. Few if any agencies complied with CEQ’s direction before the Biden Administration’s CEQ announced it would be scrapping the 2020 rules and postponed

A NOTE ABOUT CITATIONS

When possible, this guide cites to both versions of CEQ’s rules, with the year the rules were promulgated in parentheses after the citation (e.g., 40 C.F.R. § 1502.14(c) (2020) and 40 C.F.R. § 1502.14(d) (1978) both describe the requirement to consider a no-action alternative). Once the rules are revised again, it is almost certain that the citations will change again so do not simply copy-paste comments and citations from prior challenges—make sure to use the current rules!

²⁰³ CEQ Proposed Rule: National Environmental Policy Act Implementing Regulations Revisions. 86 Fed. Reg. 55,757 (Oct. 7, 2021), <https://www.federalregister.gov/documents/2021/10/07/2021-21867/national-environmental-policy-act-implementing-regulations-revisions> (proposing that the definition of “impacts” be restored to include direct, indirect **and** cumulative effects; restoring the definition of “reasonable alternatives” and broadening agencies’ authorities to define a project’s purpose and need).

²⁰⁴ Council on Environmental Quality, “Memorandum for Heads of Federal Departments and Agencies: Implementation of Updated National Environmental Policy Act Regulations,” July 16, 2020, 2, <https://ceq.doe.gov/docs/laws-regulations/memo-implementation-updated-regs-2020-07-16-withdrawn.pdf> (citing 40 C.F.R. § 1506.13).

²⁰⁵ Emily Orlor, et al., “Federal Court Dismisses Challenge to Trump’s NEPA Regulations,” Arnold & Porter, June 23, 2021, <https://www.arnoldporter.com/en/perspectives/blogs/environmental-edge/2021/06/court-dismisses-challenge-to-trump-nepa-regs> (describing a decision by a Virginia district court to not vacate the 2020 regulations).

²⁰⁶ *E.g., Ctr. for Biological Diversity v. Walsh*, No. 18-CV-00558-MSK, 2021 WL 1193190, at *5 (D. Colo. Mar. 30, 2021), appeal dismissed, No. 21-1200, 2021 WL 5917523 (10th Cir. July 28, 2021) (opining in a U.S. Fish & Wildlife Service case that: “Although APA cases focus on the decision-making process at a fixed point in the past, courts have recognized that they “[are] not limited to determining whether an agency’s action was ‘reasonable’ in light of the law as it existed at the time of its decision; instead, **the APA requires a court to determine whether a decision is ‘in accordance with law’ as it exists at the time of review.**”) (citing *New York v. U.S. Dept. of Health and Human Servs.*, 414 F.Supp.3d 475, 535 (S.D.N.Y. 2019), quoting *Georgetown Univ. Hosp. v. Bowen*, 698 F.Supp. 290, 297 (D.D.C. 1987).) (emphasis added). See also *Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1328 (D.C. Cir. 2021) (finding that FERC failed to comply with the 2020 regulation (which was unchanged from the 1978 version that FERC used when certifying the Rio Grande LNG project at issue) without explicitly finding that the court was required analyze the case under the 2020 regulations).

²⁰⁷ And even if it is the 2020 regulations, there may be room to argue that the 1978 regulations—or the revised regulations—should apply. That legal argument is beyond the scope of this guide, but might be relevant.

agencies' obligations to rewrite their own regulations. As of January 2022, FERC has not updated its rules.

This regulatory uncertainty has three practical implications for advocates: (1) FERC's NEPA regulations are the best place to start for understanding whether FERC complied with its NEPA duties for any given LNG project; (2) arguments about and the citations to CEQ's NEPA regulations may be different from those used in briefing filed before September 2020; and (3) if possible, consult with an experienced NEPA attorney (or the agency itself) to know what regulations to cite for a particular project. In general, and until new regulations replace the 2020 version, advocates writing comments are advised to treat the 1978 CEQ regulations as a binding floor for FERC's NEPA analysis unless and until an experienced attorney informs them otherwise.²⁰⁸ (As always, seek the advice of an attorney if you are in litigation!)

A different rule-of-thumb applies for CEQ's guidance documents (i.e., CEQ documents that are not subject to the rulemaking public notice-and-comment period). Unless FERC has specifically incorporated CEQ's guidance in its own guidance or regulations (which it has done)—or if it has adopted CEQ's guidance in a specific project (for example, if FERC states in EIS documents or in the certificate order that it is following CEQ's guidance)—FERC probably will not agree that its NEPA analysis must conform to CEQ's guidance. So the strongest argument that FERC has failed in its NEPA obligations will rely on more than just a CEQ guidance document. An experienced NEPA attorney is an essential advocate during litigation to help navigate these issues.

What human and natural resources are reviewed for impacts under NEPA?

For LNG facilities, FERC reviews the following resources for impacts; each resource usually will have its own subsection in the EA/EIS documents:

- geological resources;
- soils and sediments;
- water resources and wetlands,
- vegetation;
- wildlife and aquatic resources;
- threatened, endangered and other special status species;
- land use;
- recreation and visual resources;
- socioeconomics;
- transportation;
- cultural resources;
- air quality and noise; and
- reliability and safety.

Flaws or gaps in FERC's analysis of impacts to any of these resources are important to raise in comments. But it is not an exhaustive list of what an advocate may raise in the NEPA review process—advocates can and should raise **any** impacts the terminal may have and are encouraged to examine and comment on whether FERC has considered all necessary data or if it has drawn correct

²⁰⁸ It has historically been understood that CEQ's NEPA *regulations* (which were subjected to notice-and-comment) apply to independent regulatory agencies like FERC. See 40 C.F.R. § 1507.3 (1978); see also CEQ's 40 Questions Memorandum to Agencies, 46 Fed. Reg. 18,026 (as amended 1986) at p. 24 (Question 31a) <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>. Note, however, that one judge on the influential D.C. Circuit in 2021 questioned whether CEQ had authority to issue those regulations in the first place. *Food & Water Watch v. U.S. Dep't of Agric.*, 1 F.4th 1112, 1118-19 (D.C. Cir. 2021) (Randolph, J., concurring) (explaining how that question creates doubts whether "CEQ's regulations bind executive and independent agencies alike"); see also Jackson, C. Thomas and Jeffrey H. Wood, "Advisor or Authority? Role of Council on Environmental Quality in NEPA Regulations," National Hydropower Association, July 12, 2021, <https://www.hydro.org/powerhouse/article/advisor-or-authority-role-of-council-on-environmental-quality-in-nepa-regulations/> (highlighting this issue).

conclusions from the data. No other LNG permit or approval requires that such a breadth of issues be considered before the project moves forward—another reason why a FERC challenge is strategically important.

What types of impacts to human and natural resources must be considered under NEPA?

NEPA requires that the agency consider the impacts of the proposed project and its alternatives. These impacts are often characterized in the NEPA documents as direct, indirect, and/or cumulative.²⁰⁹ The terms “primary” and “secondary” impacts are sometimes also used, to describe direct and indirect impacts, respectively. In addition, knowing the difference between upstream and downstream impacts is important in understanding what is and isn’t considered in a NEPA analysis of LNG terminals.

Note that the regulatory uncertainty at CEQ makes this section in particular potentially difficult to navigate, because some of these impacts and factors were changed or eliminated by the 2020 regulations—and some of those changes are in the process of being reversed! Pay attention to which set of regulations governs the project you are challenging and which version is described below.

- **Direct impacts.** Direct impacts (*i.e.*, effects) are impacts directly caused by the action and occur simultaneously and at the same place as the action.²¹⁰ For example, a direct effect of construction may be the felling of trees and leveling of the land where the terminal is to be built, destroying habitat or cultural resources. Direct impacts would be included under both the 1978 and 2020 CEQ regulations.
- **Indirect impacts.** Under the 1978 CEQ regulations, indirect effects are caused by the action and are reasonably foreseeable²¹¹ at the time of the action but may occur later or at a distance. For example, indirect effects of the LNG project may be: a change in land use nearby (*e.g.*, that undeveloped or wild lands near the facility become commercial or residential to support the new workers drawn by the project) or the economic hardship that befalls commercial and recreational fishing industries if runoff and dredging during the project’s construction destroys fish hatcheries.

²⁰⁹ One excellent summary of this information is found here: Gillian Giannetti, *FERC Takes a Step Backward on Environmental Impacts*, NRDC, <https://www.nrdc.org/experts/gillian-giannetti/ferc-takes-step-backward-environmental-impacts>.

²¹⁰ 40 C.F.R. § 1508.8 (1978). The 2020 definition of effects or impacts does not divide effects into direct or indirect and is found in § 1508.1(g) (2020): “Effects or impacts means changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives.” The 2020 regulations also explained that: “A “but for” causal relationship is insufficient to make an agency responsible for a particular effect under NEPA. Effects should generally not be considered if they are remote in time, geographically remote, or the product of a lengthy causal chain. Effects do not include those effects that the agency has no ability to prevent due to its limited statutory authority or would occur regardless of the proposed action.” CEQ’s phase I proposal restores the 1978 definitions, but as of January 2022, is not yet final. CEQ, *Proposed Rule: National Environmental Policy Act Implementing Regulations Revisions*, 86 Fed. Reg. 55,757 (Oct. 7, 2021), <https://www.federalregister.gov/documents/2021/10/07/2021-21867/national-environmental-policy-act-implementing-regulations-revisions>.

²¹¹ In 2020, CEQ defined effects and impacts without specifically referring to them as indirect or direct. It defined “reasonably foreseeable” to mean “sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision.” 40 C.F.R. § 1508.1(aa) (2020). In the 1978 regulations, the term was only defined in the context of § 1502.22 to include (but not be limited to) “impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.” When commenting, it is sufficient to use a common-sense definition of this term; an experienced attorney can help during litigation to make sure arguments conform to what the current version of the regulations require.

As of January 2022, FERC does not treat the impacts of upstream gas production or downstream gas use as indirect effects for LNG terminals²¹²—examining these impacts is understood to be DOE’s responsibility in the NEPA process.²¹³ (Yet leaving these emissions to DOE’s consideration is a method to avoid NEPA analysis altogether because, as of January 2022, DOE excludes LNG export projects from NEPA altogether: For more about the DOE-FERC division of labor, see Chapter 5 Section D.2.) The 2020 regulations define effects more narrowly and do not explicitly distinguish between indirect and direct effects; however, because the revised rules are expected to revert to the 1978 definitions, advocates may be on solid legal ground referencing the 1978’s more expansive definition in comments—unless and until an attorney informs them otherwise.

- **Duration of impacts (i.e., “temporal scope”).** Under the 1978 CEQ regulations, FERC typically looks at impacts across four time periods: temporary, short-term, long-term, and permanent. According to NEPA documents from one LNG project: “A **temporary** impact generally occurs during construction with the resource returning to preconstruction condition almost immediately afterward. A **short-term** impact could continue for up to three years following construction. An impact is considered **long-term** if the resource would require more than three years to recover. A **permanent** impact would occur if an activity modifies a resource to the extent that it would not return to preconstruction conditions during the life of the Project. Permanent impacts may also extend beyond the life of the Project.”²¹⁴ This “temporal scope” of impacts is also relevant when considering cumulative impacts.

The 2020 regulations narrowed the temporal scope of impacts to be considered to exclude effects that are “remote in time, geographically remote, or the product of a lengthy causal chain.”²¹⁵ Revised regulations may hew closer to the 1978 regulations—just be aware that if you decide to use the 1978 regulations to guide your comments during this interim period before the new regulations are final, FERC or a reviewing court may ultimately decide some comments aren’t legally relevant once the new regulations are released.²¹⁶

²¹² For example, the air pollution created during gas extraction are upstream effects because they happen before the gas is transported to the LNG terminal. The emissions created through burning gas at power plants are downstream effects because they happen after the gas is transported from the LNG terminal.

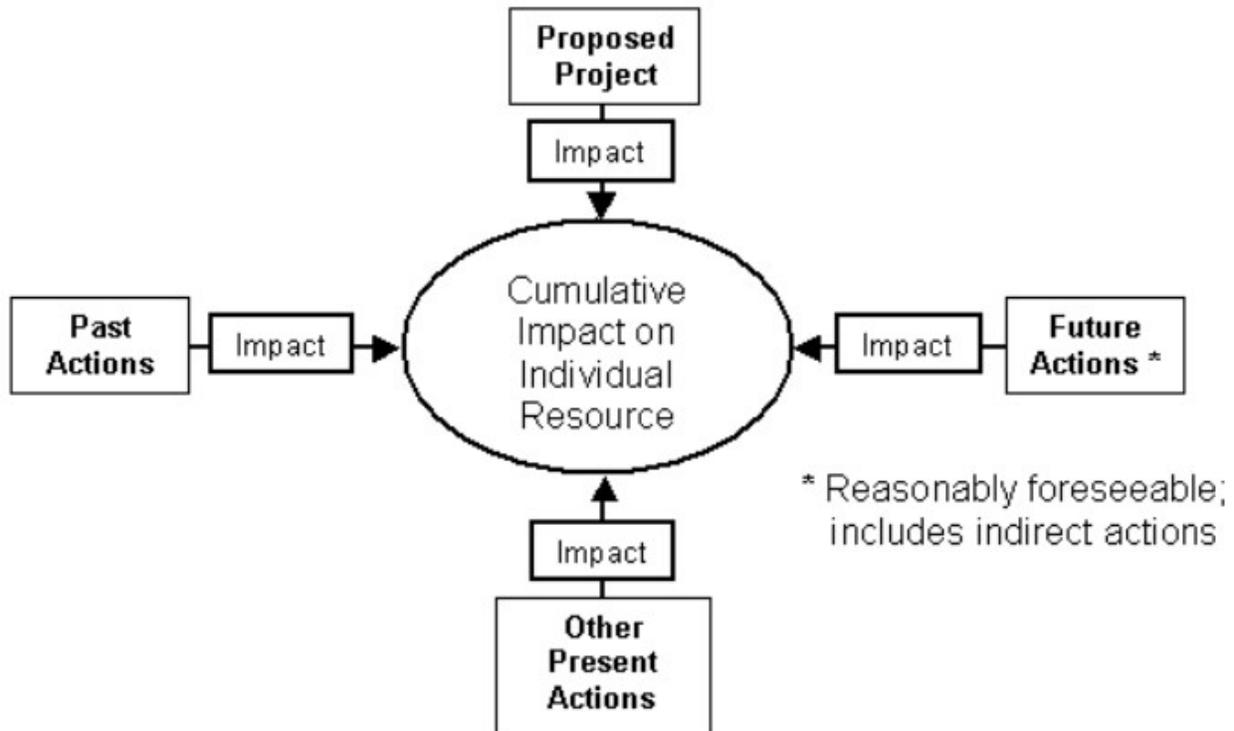
²¹³ Giannetti, *Hot Potato*, *supra* note 143.

²¹⁴ FEIS for the Jordan Cove Energy Project, Part I (Nor. 2019) t 4-1 (pdf p. 207) https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf (emphasis added).

²¹⁵ 40 C.F.R. § 1508.1(g)(2) (2020).

²¹⁶ An outcome that is unfortunate, but not a reason to self-censor and not raise issues of legitimate concern.

- Cumulative impacts.** Under the 1978 regulations and current²¹⁷ proposed revision, cumulative impacts are the impacts that result to the same resources from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions, be they federal, state, or private, in the same geographic area or time period.²¹⁸ The 2020 regulations directed agencies to ignore cumulative impacts completely; the replacement regulations may require agencies to consider cumulative impacts and so advocates should include such impacts in comments. The Federal Highway Administration, another agency that applies NEPA, depicts the definition of cumulative impacts helpfully as follows:²¹⁹



Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.²²⁰ FERC provides guidance²²¹ to applicants on how to address cumulative impacts; this guidance is equally helpful for advocates seeking to understand these impacts better and make sure no cumulative impacts have been overlooked during the NEPA process.²²²

²¹⁷ As of January 2022.

²¹⁸ 40 C.F.R. § 1508.7 (1978).

²¹⁹ Federal Highway Administration, U.S. Department of Transportation, “NEPA and Transportation Decisionmaking: Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process.” Figure 1. Cumulative Impact Diagram, <https://www.environment.fhwa.dot.gov/nepa/QAimpact.aspx>.

²²⁰ 40 C.F.R. § 1508.7 (1978).

²²¹ FERC, “Guidance Manual For Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. I, Feb. 2017, 37-42, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

²²² FERC’s guidance documents are referenced and described here as useful resources for advocates because its guidance documents contain more plain-English explanations of its and CEQ’s regulations implementing the NEPA statute. However, if

As of January 2022 and based on CEQ's 1978 regulations, FERC recommends that applicants approach the cumulative impacts analysis by: first, **determining the resources** that are indirectly and directly impacted;²²³ second, **determining the geographic scope** of impacts; and third, **identifying the temporal scope** of the impact. (This same method should be used by advocates when making cumulative effects arguments.) The geographic and temporal scope for each resource potentially affected should be examined individually and will likely be different from resource to resource.

Geographic scope is related to the magnitude of the impact (e.g., how far does pollution travel from the site). It may follow natural boundaries (like watersheds) or be influenced by natural factors (like wind direction). For example, the geographic scope for looking at cumulative impacts to fishery resources might be a stream, river basin, estuary, or parts thereof; or spawning area and migration route.²²⁴ Meanwhile, the geographic scope for cumulative impacts to air resources might be a metropolitan area, airshed, or global atmosphere.²²⁵ For impacts to socioeconomic / human resources, an administrative boundary (like county) might be more appropriate.

Once the geographic and temporal scopes for each resource potentially affected by the project is determined, the applicant should identify other past, present, and reasonably foreseeable actions (federal, non-federal, and private) that could contribute to cumulative impacts on each resource. Actions that could contribute cumulatively are those that have direct or indirect impacts that need to be considered in conjunction with the direct and indirect impacts of the current project to adequately disclose the additive impact to a resource within the geographic scope considered. Note that past, present and reasonably foreseeable actions could be located outside of the geographic scope of the current project's direct and indirect impacts on a resource but still might result in a cumulative impact. For example, climate change—which occurs on a global scale—could exacerbate the risks the project already poses to the local ecosystem and migratory species.

In the past LNG applicants have avoided considering actions that occur outside the geographic scope of impacted resources, writing off their potential to contribute with little or no analysis. What should be considered in cumulative impacts is heavily disputed and often the subject of litigation, so advocates working on specific projects should heavily scrutinize the project and its NEPA documents for missing or faulty cumulative impacts analyses.

there is a conflict between these sources of information, a reviewing court will look first to the NEPA statute, then to CEQ regulations, then to FERC's regulations to determine whether FERC erred in conducting its NEPA analysis. The guidance documents themselves do not place legal responsibilities on FERC, although failure to follow guidance documents could be evidence that FERC was "arbitrary and capricious" in issuing the certification—a finding that could require the agency to void its certification and redo portions of the NEPA analysis.

²²³ Under CEQ's 1978 regulations, NEPA does not require cumulative impacts on a resource to be considered if the project does not have a direct or indirect impacts on a resource.

²²⁴ FERC, "Guidance Manual For Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. I." Feb. 2017, Attachment 2, Table 2, 246, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf> (reproducing CEQ's table from the January 1997 document "Considering Cumulative Effects Under the National Environmental Policy Act").

²²⁵ *Id.*

How does FERC decide if it will issue an EA first or go straight to an EIS?

To comply with NEPA when reviewing a proposal to construct an LNG terminal, FERC must conduct and publish a written environmental review, either in the form of an Environmental Assessment (EA) first or by going straight to an Environmental Impact Statement (EIS).²²⁶

FERC's regulations state that it will "normally" prepare an EIS for an LNG terminal, but it has the option not to do so if the project "may not be a major federal action significantly affecting the quality of the human environment."²²⁷ If the application is for a new project, FERC will almost certainly skip the EA process and go straight to the preparation of an EIS. It becomes more difficult to predict what FERC will do when the application is for a modification or expansion of a terminal, and FERC's choice affects when and what information becomes publicly available, the proper window to intervene, and the number of opportunities to comment. Thus, it is important for advocates to have a basic understanding of the EA and the EIS processes, even though most often large projects that are being challenged will only involve EIS documents.

An **EIS** is the most comprehensive review required under NEPA; together, the documents created to satisfy NEPA (the draft and final EIS documents and appendices) can run thousands of pages.²²⁸ An EIS is prepared when significant environmental impacts are expected based on the size and type of project or FERC's prior experience. FERC routinely prepares EIS documents for new LNG terminals without conducting an EA first,²²⁹ so a project involving the construction of a new terminal should always trigger an EIS without the need for an EA first. For the public participation process in an EIS, see Section 4.C.

However, as noted, NEPA reviews of terminal expansions may start with an EA first. An **EA** is a less stringent document that FERC as lead agency prepares to determine **if** the project will likely have significant environmental effects. If after going through the EA process FERC realizes that the project will likely have significant impacts, it must go back and complete a full EIS. If FERC determines that an EIS is not needed—a highly unlikely conclusion for LNG terminals—it will issue a single EA and a Finding of No Significant Impact ("FONSI").²³⁰

Unlike an EIS, in which a draft is published and open to public comment before a final EIS is issued, there is no draft EA. Under the 1978 regulations, FERC must provide public notice of the final EA.²³¹ A comment period of 30 days has been typical after a final EA issues. FERC typically addresses the

²²⁶ Some activities are "categorically excluded" by law from needing an EA or EIS (see 18 C.F.R. § 380.4 for FERC's list; CEQ's regulations can be found at: 40 C.F.R. § 1501.4 (2020) and 40 C.F.R. § 1508.4 (1978)); the construction of an LNG terminal should not fall into one of these categories. See 18 C.F.R. § 380.5. If it appears a project is being treated as within a categorical exclusion—i.e., no EA or EIS is being issued, consult a lawyer with FERC and NEPA experience. Each agency can create its own categorical exclusions, however; and DOE has recently added some LNG projects to that list, excluding them from NEPA review. For more information on DOE's categorical exclusions, see Section 5.B.3 and 5.D.3.

²²⁷ 18 C.F.R. § 380.6(a) and (b).

²²⁸ Even excluding appendices, the Final EIS documents in the Jordan Cove project are so large they are split into three parts: https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf; (364 pages); https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_2.pdf; (364 pages); https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf (364 pages).

²²⁹ 18 C.F.R. § 380.6(a)(1) (listing LNG projects as those for which an EIS will "normally be prepared first").

²³⁰ Agencies must make FONSI's available to the public under the 1978 and 2020 regulations; the regulations for FONSI's are found here: 40 C.F.R. § 1501.6 (2020) and 40 C.F.R. § 1501.4 (1978). If a FONSI is issued for a LNG project, consult with an experienced NEPA attorney to determine next steps.

²³¹ 40 C.F.R. § 1501.4(e)(1) (1978). The 2020 regulations direct agencies to involve the public in the EA process, 40 C.F.R. § 1501.5(e) (2020); and provide notice of the availability of environmental documents like EAs. *Id.* § 1506.6(b) (2020).

substantive comments received in its approval order but does not modify the EA based on the submitted comments.

FERC may attempt to first conduct an EA when permitting the expansion of a terminal; if so, advocates should take advantage of the EA comment period to hammer home that the impacts of the project are significant and require an EIS. The same types of comments that you might raise in the EIS comment period should be raised during the EA period. For examples, see Section 4.E. In addition, if an advocate suspects that only an EA will issue for a project, the advocate should intervene as soon as the project application is filed because no draft EIS will issue that might prolong the intervention window.

Both EA and EIS documents may contain FERC's staff's recommendation to the Commission as to mandatory conditions that should be included in the approval order. For an example of conditions attached to a project, see the Rio Grande LNG Certificate order, pages 64-91 <https://cms.ferc.gov/sites/default/files/whats-new/comm-meet/2019/112119/C-2.pdf>.

Who drafts the environmental documents?

For new LNG terminals, the applicant must propose at least three potential third-party contractors to help prepare the EIS documents, and FERC staff chooses one to perform the work.²³² (An Environmental Assessment document may be drafted by FERC staff, by a third-party contractor, or by the applicant.)²³³ In all cases, FERC staff review and approve the document before it is finalized. If a third party drafts the EA or EIS, there should be a publicly available MOU between FERC, the applicant, and the contractor.²³⁴ At a minimum for LNG terminal projects, FERC's regulations require that any third-party contractor used be identified in FERC's public notice of approval of the applicant's pre-filing request (typically the second or third document filed in the pre-file docket).²³⁵ Third-party contractors are often consultants from large engineering firms that regularly conduct environmental compliance projects for industry clients.

Which federal agencies consult with FERC during the environmental review process?

Other federal agencies are involved in FERC's review for two main reasons. First, other federal agencies have their own permitting process that must be considered as part of FERC's EIS and thus these agencies work closely with FERC on the EIS (e.g., the Corps issues permits and often relies on FERC's EIS to satisfy its own NEPA requirements). Second, other agencies may advise FERC on the environmental impacts to natural and human resources within their realm of expertise (e.g., the Coast Guard does not issue a permit to LNG facilities, but FERC consults with it on the impacts of a proposed LNG facility on port safety and security). All cooperating agencies and agencies that are authorized to develop and enforce environmental standards must comment on EIS documents during the comment period, even if it is simply to reply that it has no comment.²³⁶

²³² 18 C.F.R. § 157.21(d)(8).

²³³ FERC, "Guidance for Applicant-Prepared Draft Environmental Assessments For Certain Proposed Natural Gas Projects," Apr. 28, 2011, <https://www.ferc.gov/sites/default/files/2020-04/draft-ea-guidance.pdf>.

²³⁴ An example of such a memorandum can be found here: "Memorandum of Understanding Between The Federal Energy Regulatory Commission; Mountain Valley Pipeline, LLC; And Cardno, Inc," Jan. 12, 2018, http://www.mountainvalleypipeline.info/wp-content/uploads/2019/03/Public_Attachment-N-4.pdf.

²³⁵ See 18 C.F.R. § 157.21(e). For an example of this notice, see the Rio Grande LNG project, Docket No. PF15-200, Accession Number 20150413-3036 ("Letter acknowledging Norton Rose Fulbright US LLP's 3/20/15 request for approval of pre-filing request for the Rio Grande LNG, LLC's planned Rio Grande LNG Export Project et al under PF15-20.") (Identifying Edge Engineering and Science, LLC).

²³⁶ 40 C.F.R. § 1503.2 ("Duty to comment") (substantively the same for both 2020 and 1978 versions).

Advocates are encouraged to scrutinize the comments and analysis conducted by consulting agencies because it may reveal ways that the permit or permitting process violates laws beyond just NEPA or NGA. If such flaws are identified, they should be raised in comments on the EIS at a minimum.

Table 4.1: Federal Agencies that Advise or Coordinate with FERC on LNG Applications

FEDERAL AGENCY	ROLE IN FERC REVIEW OF LNG TERMINAL APPLICATIONS
<p>Environmental Protection Agency and Army Corps of Engineers</p>	<p>EPA and the Corps comment on the NEPA documents. If the Corps is to rely on FERC’s NEPA analysis to support its own permits, it must review the NEPA documents closely to make sure they are sufficient to satisfy the Corps’ own obligations. EPA consults on matters of its experience (air, water, hazardous substances, noise etc.) and given its responsibility to also ensure that the Corps 404(b) permit has been properly issued, may offer its own comments to the Corps or FERC on the sufficiency of FERC’s NEPA analysis.</p>
<p>National Marine Fisheries Service (in U.S. Dept. of Commerce) and U.S. Fish & Wildlife Service (in U.S. Dept. of the Interior)</p>	<p>FERC must comply with the Endangered Species Act,²³⁷ Magnuson Stevens Fishery Conservation and Management Act,²³⁸ and Marine Mammal Protection Act.²³⁹ The National Marine Fisheries Service and U.S. Fish and Wildlife Service advise FERC on a project’s potential impact on terrestrial and aquatic wildlife and habitat, including endangered species.²⁴⁰</p>
<p>Pipeline and Hazardous Materials Safety Administration (PHMSA) (in the U.S. Department of Transportation (DOT))</p>	<p>PHMSA issues a letter of determination on whether an LNG facility would be able to comply with USDOT safety standards.²⁴¹ It sets minimum standards for location, design, construction, operation, and maintenance of large LNG facilities outside navigable waters.²⁴² FERC may issue stricter requirements.²⁴³</p>

²³⁷ The Endangered Species Act, § 7, requires federal agencies to ensure that the project does not jeopardize the existence of any endangered or threatened species, or destroy or adversely modify their critical habitat. 16 U.S.C. § 1536(a)(2).

²³⁸ 50 U.S.C. § 191.

²³⁹ 16 U.S.C. § 1362 – 1407.

²⁴⁰ A Marine Mammal Protection Act Level B harassment authorization may be required for underwater noise associated with pile driving during construction.

²⁴¹ FERC, “Memorandum of Understanding Between the Department of Transportation and the Federal Energy Regulatory Commission Regarding Liquefied Natural Gas Transportation Facilities” [pursuant to Executive Order 13807], 2018, https://www.ferc.gov/sites/default/files/2020-05/FERC-PHMSA-MOU_0.pdf.

²⁴² Pipeline Safety Act, 49 U.S.C. § 60101, *et seq.* Also see: 49 C.F.R. §§ 192 and 193. Compliance is overseen by the PHMSA, typically in collaboration with the state’s department of transportation.

²⁴³ FERC and USDOT, Notice of Agreement Regarding Liquefied Natural Gas, 31 FERC ¶ 61,232 (1985).

FEDERAL AGENCY	ROLE IN FERC REVIEW OF LNG TERMINAL APPLICATIONS
U.S. Coast Guard	The Coast Guard advises on the impact of the LNG project on safety and security of U.S. ports, waterways, and coasts. The captain of the port issues a Letter of Recommendation, with a “Water Suitability Assessment.” ²⁴⁴ The letter is not binding and thus cannot be appealed. ²⁴⁵ One of the pre-filing requirements is that the applicant has been in communication with the Coast Guard and that the Coast Guard has issued a Preliminary Water Suitability Assessment.
Department of Energy	Authorizes the export of gas and consults on the terminal’s potential effect on military operations (if applicable).
The Federal Highway Administration (FHWA) and the Federal Aviation Administration (FAA) (in DOT)	If the LNG project requires changes to the highway system, DOT’s Federal Highway Administration may consult. Likewise, DOT’s Federal Aviation Administration may also be a consulting agency, for example, when the terminal is proposed to be sited near an airport.
U.S. Department of the Interior Bureau of Land Management (BLM)	The BLM is typically involved only when a project proposes to use land that is under the BLM’s management. BLM must make sure that projects on its lands are consistent with the lands’ resource management plan (“RMP”); if not, the RMP(s) must be amended. BLM lands are more likely to be impacted by the pipeline portion of a project as opposed to the terminal (as was the case in Jordan Cove). For more see 43 U.S.C. §§ 1711-1712 and the regulations in 43 C.F.R. § 1600.
U.S. Department of Agriculture Forest Service (Forest Service)	As with BLM, the Forest Service is typically involved only when the project proposes to use lands under the Forest Service’s management. Activities on land managed by the Forest Service must be consistent with the land management plans for each unit (LRMP) or the plan must be amended. Forest Service lands are more likely to be impacted by the pipeline portion of a project, as it was in Jordan Cove. For more see 16 U.S.C. § 1600 et seq. and the regulations in 36 C.F.R. § 219.
U.S. Department of the Interior Bureau of Reclamation (Reclamation)	Reclamation has jurisdiction only in the 17 western states (including Texas but not Louisiana) and oversees water resource management in that area. If the proposed project may impact Reclamation’s projects, it too may be a consulting agency and it might rely on FERC’s EIS to fulfill its own NEPA duties. Reclamation was consulted on the pipeline portion of the Jordan Cove proposal.

²⁴⁴ 33 C.F.R. § 127.009. Also see: Maritime Transportation Security Act of 2002, 46 U.S.C. § 701; Ports and Waterways Safety Act, 33 U.S.C. §§ 1221-1236; Executive Order 10173, 15 Fed. Reg. 7005 (Oct. 18, 1950), and Coast Guard Authorization Act of 2010, P.L. 111-281, § 813, 124 Stat. 2905, 2999. Also see U.S. Coast Guard, “Guidance Related to Waterfront Liquefied Natural Gas (LNG) Facilities,” NVIC 01-11, Jan. 24, 2011, <https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/5ps/NVIC/2011/NVIC%2001-2011%20Final.pdf>.

²⁴⁵ *Columbia Riverkeeper v. United States Coast Guard*, 761 F.3d 1084 (9th Cir. 2014).

FEDERAL AGENCY	ROLE IN FERC REVIEW OF LNG TERMINAL APPLICATIONS
U.S. Department of the Interior National Park Service (NPS)	The NPS may be a cooperating agency for a proposed LNG project if lands under its management may be impacted. For example, NPS was consulted on the Rio Grande LNG proposal because several cultural heritage sites were in the vicinity of the project’s proposed pipeline and terminal.

A full list of federal consulting agencies (and information about the state agencies and tribal governments involved) is typically included in the notices FERC publishes about the project to the Federal Register and the project’s docket. This information is usually summarized early in the draft and final EIS documents.

Are there reforms at FERC on the horizon relevant to LNG terminals?

Several reforms at FERC may make challenging LNG terminals easier, at least procedurally.

First, in 2021—for the first time ever—FERC formed an Office of Public Participation,²⁴⁶ as part of its statutory requirement to do so.²⁴⁷ Although the exact scope of its assistance is still being determined, the Office is required by law to assist the public and intervenors in participating in proceedings.²⁴⁸ The law also contemplates that the Office may be responsible for providing financial assistance to certain intervenors—again, the scope of this assistance is still being determined.²⁴⁹ The Office of Public Participation’s website is the official source for updates and changes as the office formalizes its mission and functions: <https://www.ferc.gov/OPP>. Elin Katz officially assumed the role of OPP Director in late 2021.²⁵⁰

Second, FERC is in the process of reviewing and updating its 1999 Policy Statement on the Certification of New Interstate Natural Gas Facilities. Although this review focuses on certifying pipelines, not terminals, it may change how advocates approach challenges to LNG infrastructure in general. FERC began this review in 2018, soliciting comments on four main topics: “(1) the reliance on precedent agreements to demonstrate need for a proposed project; (2) the potential exercise of eminent domain and landowner interests; (3) the Commission’s evaluation of alternatives and environmental effects under NEPA and the Natural Gas Act (NGA); and (4) the efficiency and effectiveness of the Commission’s certificate processes.”²⁵¹ After a pause, FERC reopened comments and added environmental justice communities as a topic for comment, namely “how it identifies and addresses potential health or environmental effects of its pipeline certification programs, policies and activities on environmental justice communities.”²⁵² Updates to FERC’s policies on these topics—even if made in the context of pipelines—could directly influence FERC’s

²⁴⁶ “FERC Establishes Office of Public Participation.” <https://www.ferc.gov/news-events/news/ferc-establishes-office-public-participation>.

²⁴⁷ See 16 U.S.C. § 825q-1 (mandating that the OPP be established).

²⁴⁸ 16 U.S.C. § 825q-1(b)(1).

²⁴⁹ 16 U.S.C. § 825q-1(b)(2).

²⁵⁰ See “Glick Announces Appointment of Elin Katz as Director Of FERC’s New Office of Public Participation.” FERC. <https://www.ferc.gov/Elin-Katz-Director-Of-OPP>.

²⁵¹ Notice of Inquiry, Certification of New Interstate Natural Gas Facilities, (Docket No. PL18-1-000) (Issued Feb. 28, 2021) 74 FERC ¶ 61,125, at PP 1-2 <https://www.ferc.gov/media/c-1-pl18-1-000>.

²⁵² FERC Revisits Review of Policy Statement on Interstate Natural Gas Pipeline Proposals (Feb. 18, 2021) <https://www.ferc.gov/news-events/news/ferc-revisits-review-policy-statement-interstate-natural-gas-pipeline-proposals>.

review of all aspects of an LNG project, including the terminal. For more information on potential changes to the Gas Policy and advocate comments that were filed, see <https://www.nrdc.org/experts/gillian-giannetti/nrdc-50-orgs-send-clear-message-its-time-ferc-reform-0>.²⁵³

Third, the previously open fifth commissioner's seat was filled in late 2021 by Willie Phillips, a Democrat, bringing the Commission to a full roster with three Democrats and two Republicans.²⁵⁴ It is hoped that this new Commission, which is chaired by Democrat Richard Glick, will be more mindful of impacts to environmental justice communities and the impacts LNG projects have on climate change.

Step-by-step, how does FERC satisfy its NGA and NEPA requirements and review LNG terminal applications?

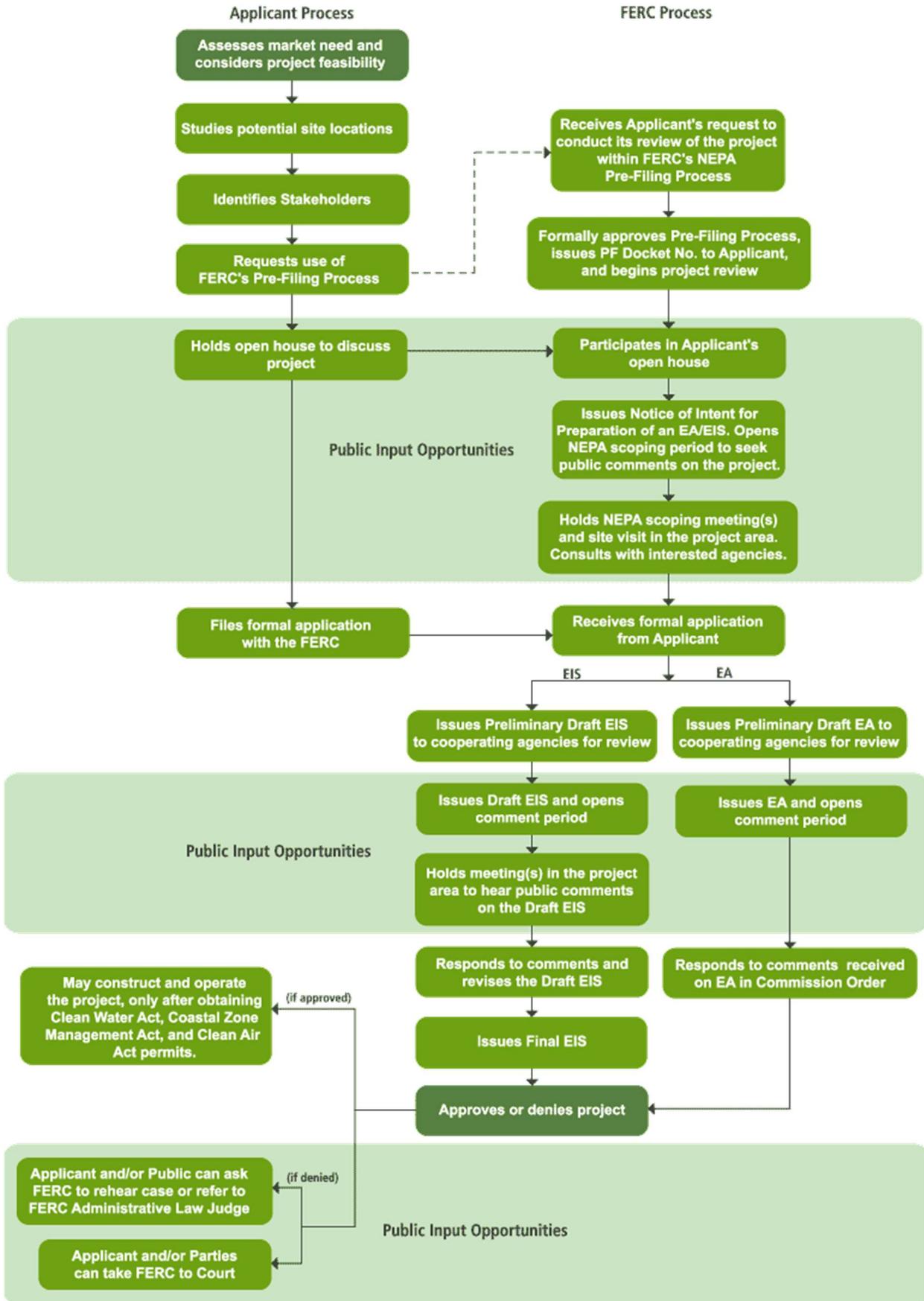
Does FERC publish a flowchart of steps relevant to its certification process?

Yes. The following is a flowchart of the pre-filing and application processes for an LNG terminal:

<https://www.ferc.gov/media/pre-filing-environmental-review-process>:

²⁵³ A link to the comments filed are here: <https://sustainableferc.org/wp-content/uploads/2021/05/PL18-1-NOI-PIO-Comments-FINAL.pdf>.

²⁵⁴ FERC, "Willie L. Phillips Sworn in as FERC Commissioner," Dec. 3, 2021, <https://cms.ferc.gov/news-events/news/willie-l-phillips-sworn-ferc-commissioner>. See also "President Biden Intends to Nominate Willie L. Phillips, Jr. as a Commissioner of the Federal Energy Regulatory Commission (FERC)," White House Briefing Room Statement and Releases, Sept. 9, 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/09/president-biden-intends-to-nominate-willie-l-phillips-jr-as-a-commissioner-of-federal-energy-regulatory-commission-ferc/>.



Several of the steps in this process are described in depth in the sections below.

1. Applicant's idea for a project (see Section 4.C.2)
2. Applicant requests use of FERC's pre-filing process (see Section 4.C.3)
3. Applicant submits information to satisfy pre-filing requirements (see Section 4.C.4)
4. Applicant meets pre-filing criteria and pre-filing docket number is issued, starting the pre-filing process (see Section 4.C.5)
5. Information the applicant provides during the pre-filing process: resource reports (see Section 4.C.6)
6. Open House (see Section 4.C.7)
7. Notice of Intent to Prepare environmental documents (see Section 4.C.8)
8. Scoping comments solicited / scoping meeting held (see Section 4.C.9)
9. Formal application filed and accepted by FERC, ending the pre-filing process (see Section 4.C.10)
10. General application process begins (see Section 4.C.11)
11. Cooperating agency reviews preliminary draft EIS (see Section 4.C.12)
12. Draft EIS comment period (see Section 4.C.13)
13. EIS format (see Section 4.C.14)
14. Draft EIS public meetings (see Section 4.C.15)
15. Final EIS drafted and issued (see Section 4.C.16)
16. Supplemental environmental documents (see Section 4.C.17)
17. The Commission's Order (see Section 4.C.18)
18. Request for rehearing, the rehearing order and filing an appeal in federal circuit court (see Sections 4.C.19 - 4.C.20)

How does an LNG project begin?

An LNG project begins with the applicant assessing the viability of an LNG export facility. This likely will involve assessing the gas market, consulting with financial backers, figuring out the preliminary engineering design, soliciting sources and consumers of the gas, studying potential project sites, and identifying likely stakeholders. It is during this phase that the applicant shapes its "stated project purpose," which must not be neither too narrow nor too broad and will become a critical reference point for FERC's NEPA analysis and the analyses conducted by other permitting agencies. FERC is not involved with the applicant's proposal at this point.

How does an applicant begin the process of seeking FERC's approval for a project?

Once an applicant has fleshed out the initial details of a project on its own, it is ready to approach FERC for an initial consultation. FERC requires that applicants proposing to construct an LNG terminal use an involved “pre-filing” process before filing a formal application.²⁵⁵ (Although applicants for pipeline project don't need to use the pre-filing process, they often do—and not just when applicants apply for the terminal and pipeline at the same time!) FERC's pre-filing procedures are codified at 18 C.F.R. § 157.21 and as with any regulations, may change after this guide's publication.

Before an applicant may request to use the pre-filing process, it must conduct an initial consultation, or “pre-filing meeting,” with FERC's Director of Office of Energy Projects.²⁵⁶ (Note that despite the fact that FERC sometimes refers to this consultation as a “pre-filing meeting,” pre-filing has not officially yet begun, and no pre-file docket will have been opened yet.)

This is the first official opportunity the applicant has to introduce FERC to its proposed project. During this initial consultation, FERC considers what NEPA document will be most appropriate for the project and whether a third-party contractor will be hired to draft the NEPA documents. FERC also requests that an applicant bring a draft of its pre-filing request and a draft request for a third-party contractor to the meeting.²⁵⁷

The pre-filing request must contain all of the information required by 18 C.F.R. § 157.21(d), which is discussed in further detail in the next section. FERC works with the applicant during and after the initial consultation to help ensure that the pre-file request is complete before the applicant files it. Mere weeks may elapse between FERC reviewing the applicant's draft pre-filing request during the initial consultation and the applicant finalizing the request and formally sending it to FERC for approval. (See Rio Grande LNG example in textbox.²⁵⁸)

INITIAL CONSULTATION & PRE-FILING TIMING: A TEXAS EXAMPLE

Each project will differ, but here is the schedule that the Rio Grande LNG took to get to pre-filing:

Feb. 24, 2015: Initial consultation with FERC's OEP, during which FERC reviewed the applicant's draft pre-filing process request and discussed the project and the applicant's progress toward complying with 18 C.F.R. §§ 157.21(a), (c), & (d).

Mar. 20, 2015: Rio Grande LNG applicant sends FERC a letter formally requesting to use the pre-file system (“the pre-filing request” or as 18 C.F.R. § 157.21(d) calls it, the “initial filing”)

Apr. 13, 2015: OEP approves the request to use the pre-file system and issues a pre-file docket number; the March pre-file request is docketed as the first document. **Pre-filing has begun.**

²⁵⁵ 18 C.F.R. § 157.21(a). The rules also apply to modifications that involve significant state and local safety considerations not previously addressed, such as the addition of LNG storage tanks or increases in throughput. 18 C.F.R. § 157.21(a) (“Examples of such modifications include, but are not limited to, the addition of LNG storage tanks; increasing throughput requiring additional tanker arrivals or the use of larger vessels[.]”)

²⁵⁶ 18 C.F.R. § 157.21(c).

²⁵⁷ FERC, “Guidance Manual For Environmental Report Preparation: For Applications Filed Under The Natural Gas Act,” Vol. I, Feb. 2017, 3-1-3-2, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

²⁵⁸ The details of Rio Grande LNG's schedule can be found in the pre-file request (PF15-200, Accession Number 20150320-5280 at 11) and in FEIS Volume 1 at ES-3 (https://www.ferc.gov/sites/default/files/2020-05/FEIS-volume-1_0.pdf).

Once FERC's Director of OEP reviews the applicant's formal request to pre-file and confirms that all of the required information is included, FERC will create a publicly accessible pre-file docket number for the project and file a notice in that docket approving of the applicant's use of the pre-file process. But even though the project may progress quickly from the initial consultation to FERC approving the applicant's use of the pre-file process, the applicant must conduct significant legwork before the approval to pre-file issues—as the next section describes.

What must the applicant submit in preparation for the pre-filing process?

As mentioned in the previous section, before FERC approves an applicant's pre-file request and opens the pre-file docket, the applicant must provide FERC with certain information as required by 18 C.F.R. §§ 157.21(d).²⁵⁹

These regulations require the applicant:

- to provide a description of the project;
- to propose a permitting schedule for FERC;
- to describe the zoning and availability of the proposed site and marine facility location;
- to identify the agency designated by the state's governor to consult with FERC regarding state and local safety considerations and identify those contact persons;
- to list the environmental and engineering firms engaged for the project development as well as other persons and organizations who have been contacted about the project;
- to already have begun drafting a public participation plan that includes a project website and a single point of contact for the public;
- to certify that the process of involving the Coast Guard in the project has already begun;
- to document the progress made toward obtaining other state and federal permits, specifically the applicant must include an estimated timetable for when the applicant will formally seek other necessary permits and approvals. The applicant must demonstrate that it has already contacted these other agencies to inform them that the applicant will be requesting to pre-file with FERC; and
- to acknowledge that a complete environmental report and complete application are required at the time of filing the actual application for a Section 3 authorization and/or Section 7 certificate (i.e. at the end of the pre-file process).²⁶⁰ The "complete environmental report" is actually thirteen "resource reports" drafted by the applicant or its consultants that provide a starting point for FERC to begin drafting the EIS documents. Resource reports are covered in more detail in Section 4.C.6.

²⁵⁹ 18 C.F.R. § 157.21(a)(3).

²⁶⁰ 18 C.F.R. § 157.21(d).

The close collaboration between FERC and the applicant to ensure that the applicant’s pre-file request complies with FERC’s regulations means that FERC, the applicant, and likely other agencies will already have invested significant time into the LNG project even before the applicant formally requests to pre-file. This early relationship, however, is not transparent to the public and can make it difficult for communities and advocates to be seen as equal participants in the permitting process, even though prospective landowners, community members, and anyone else affected by the project have—on paper—the right to provide input as soon as the pre-filing process begins.

What happens once an applicant meets the pre-filing criteria?

Once the applicant has prepared a final draft of its pre-file request, it formally sends that request to FERC. FERC’s Director of OEP then reviews the request for compliance with the relevant sections of 18 C.F.R. § 157.21.²⁶¹ If it is compliant (which it should be by then because FERC and the applicant have collaborating on it), FERC issues a notice of that finding and a pre-filing docket number (prefaced by “PF”²⁶²) is issued, which begins the official pre-filing process.²⁶³

The pre-filing process clock begins on the date of FERC’s notice that the project qualifies for pre-filing status. This date triggers the start of many deadlines for the applicant and FERC, which FERC’s regulations succinctly lay out the *default* timeline as follows:

WHAT WILL BE ON THE RECORD?

FERC staff and applicants communicate a lot during the pre-filing and the application process. But not all of these communications will be made public. During the pre-filing stage, most communications—even those related to the merits—may be off-the-record. (For example, FERC expects that regular weekly or bi-weekly conference calls with the applicant will be necessary during pre-filing.)

Advocates—including prospective landowners and community members—also have the right to meet with FERC off-the-record during the pre-filing process. This is a too-often underutilized tool of advocacy that should not be overlooked!

Once pre-filing ends and the application process starts, FERC is bound by the “*ex parte*” regulations at 18 C.F.R. § 385.2201 about what it can and can’t discuss with an applicant in private. During the application stage, unless FERC is answering an applicant’s procedural questions, or facilitating consultation with an agency that isn’t a party (and agencies typically aren’t parties), it generally must file a record of the conversation in the public docket. If an advocate believes that communications are improperly not being made public, a FOIA request may be a good first step towards uncovering such oversights!

See <https://www.ferc.gov/sites/default/files/2020-04/cultural-guidelines-final.pdf> at 3-3 (describing FERC’s expectations for communicating with the applicant during pre-filing) and at 2-3 (explaining off-the-record conversations).

²⁶¹ Namely, 18 C.F.R. §§ 157.21(a) (describing the pre-filing procedures), (c) (requiring the initial consultation) and (d) (describing the contents of the pre-file request)

²⁶² For more on FERC’s abbreviations, see FERC’s Docket Prefix List: <https://elibrary.ferc.gov/eLibrary/assets/docket-prefix.pdf>.

²⁶³ Publicly available documents can be found on FERC’s e-Library using the project’s docket number. FERC’s e-Library is accessible here: <https://elibrary.ferc.gov/eLibrary/search>.

THE APPLICANT'S DEFAULT TIMELINE DURING PRE-FILING

FERC's default rules state that "Upon the Director's issuance of a notice commencing a prospective applicant's pre-filing process, the prospective applicant must:

1. Within **seven** days and after consultation with Commission staff, **establish the dates and locations at which the prospective applicant will conduct open houses and meetings with stakeholders** (including agencies) and Commission staff. *[See Section 4.C.7]*
2. Within **14** days, conclude the contract with the selected third-party contractor. *[See Section 4.B.7]*
3. Within **14** days, **contact all stakeholders not already informed about the project**, including all affected landowners as defined in paragraph § 157.6(d)(2) of this section.
4. Within **30** days, submit a stakeholder mailing list to Commission staff.
5. Within **30** days, file a draft of **Resource Report 1**, in accordance with § 380.12(c), **and a summary of the alternatives considered or under consideration**. *[See Sections 4.B.4, 4.C.6, and 4.E.2]*
6. On a **monthly basis**, file status reports detailing the applicant's project activities including surveys, stakeholder communications, and agency meetings.
7. Be prepared to provide a description of the proposed project and to answer questions from the public at the scoping meetings held by OEP staff.
8. Be prepared to attend site visits and other stakeholder and agency meetings arranged by the Commission staff, as required.
9. Within **14 days of the end of the scoping comment period, respond to issues raised during scoping**. *[See Section 4.C.9]*
10. Within **60 days of the end of the scoping comment period, file draft Resource Reports 1 through 12**. *[See Section 4.C.6]*
11. At least **60** days **prior** to filing an application, **file revised draft Resource Reports 1 through 12**, if requested by Commission staff.
12. At least **90** days **prior** to filing an application, file **draft Resource Report 13** (for LNG terminal facilities)." *[See Section 4.C.6]*

28 C.F.R. § 157.21(f)(1)-(12).

In addition to these deadlines, an applicant must also produce a Public Participation Plan for stakeholder communications.²⁶⁴ Also note that the prescribed timeframes above may be modified by FERC when project-specific issues warrant a change. Therefore, do not assume that the default timeline applies to any specific LNG project—keep abreast of FERC's docket and the applicant's communications filed therein to track whether a different timeline has been set.

²⁶⁴ 18 C.F.R. § 157.21(d)(11).

What environmental information does the applicant need to provide during the pre-filing process?

Environmental information that an applicant must compile during the pre-filing process is organized into thirteen **Resource Reports**. (These resource reports are the environmental documents that the applicant acknowledged in its pre-file request that it would be required to prepare and submit as part of its actual application.) FERC requires the applicant to file *drafts* of these reports during the pre-filing process so that it may provide feedback before the applicant files them with its application for certification / authorization.

FERC uses these reports as a starting point for its own environmental review that it must conduct; if information is missing from the reports, FERC should request it of the applicant. Advocates can access the resource reports on FERC’s pre-filing docket for the facility although there may be data gaps because the applicant is still obtaining that information. Modules 4 and 5 of FERC’s e-learning series is a basic overview of these reports.²⁶⁵

Each report must:

1. *Address conditions or resources that might be directly or indirectly affected by the project;*
2. *Identify significant environmental effects expected to occur as a result of the project;*
3. *Identify the effects of construction, operation (including maintenance and malfunctions), and termination of the project, as well as cumulative effects resulting from existing or reasonably foreseeable projects;*
4. *Identify measures proposed to enhance the environment or to avoid, mitigate, or compensate for adverse effects of the project;*²⁶⁶

The thirteen Resource Reports are as follows:²⁶⁷

Table 4.2: Resource Reports

1	General Project Description	6	Geological resources	11	Reliability and safety
2	Water use and quality	7	Soils	12	PCB contamination
3	Fish, wildlife, and vegetation	8	Land use, recreation and aesthetics	13	Engineering and design material
4	Cultural resources	9	Air and noise quality		
5	Socioeconomics	10	Alternatives		

²⁶⁵FERC, E-Learning, <https://www.ferc.gov/industries-data/natural-gas/environment/e-learning>.

²⁶⁶ 18 C.F.R. 380.12(b). The reports must also include supporting documents and agency contacts that support the reports’ conclusions. *See id.*

²⁶⁷ See 18 C.F.R. § 380.12.

(Note that the draft and final EIS will not be organized the same way as the Resource Reports, but NEPA requires that all of these topics be discussed in-depth.)

Many of these Resource Reports are similar to those that would be required for non-LNG project applications. However, Resource Reports 11 (Reliability and Safety) and 13 (Engineering and Design Material) are specific to LNG facilities and are required for proposals for new LNG facilities, expansions of existing LNG facilities, or re-commissioning of existing LNG facilities.²⁶⁸ In 2017, FERC published a guide for applicants drafting Reports 11 and 13; while this is quite a lengthy document and creates no new legal responsibilities for applicants,²⁶⁹ it can be helpful for advocates who want to understand this material better.²⁷⁰ FERC's guidance for drafting the remainder of the reports is likewise lengthy, but also summarizes the pre-filing process and is a good resource for advocates that want an in-depth understanding of the relationship between FERC and the applicant at this stage.²⁷¹

PRACTICE TIP:

An applicant may workshop various facilities and locations for its project before settling on a final version to propose in its FERC application. Application materials and resource reports still often reference and analyze these rejected options—sometimes even in lieu of the applicant's actually proposed facility.¹ Advocates should keep an eye out for such errors, which may also make their way into agency consultation letters or cultural resource survey reports. These errors may reveal alternatives that should have been considered or other flaws in proposal.

¹<https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf> at 4-4.

During the pre-filing process, FERC and the applicant will engage in a back-and-forth as FERC comments on the reports and requests additional information of the applicant. This dialogue should be publicly available on FERC's docket. The applicant incorporates additional information during the pre-filing process into the reports; once the application is filed after the pre-file process concludes, additional missing information is responded to separately from the reports.²⁷²

FERC uses the first draft of Resource Report 1 (General Project Description) to issue its Notice of Intent to prepare a NEPA document; that document also must include the alternatives to the project that will eventually be explored in more detail in Resource Report 10. For LNG terminals, the alternatives should include alternative locations for the project.²⁷³ Unless a different schedule has been agreed upon, the applicant must submit draft Resource Reports 1 (a second draft) through 12

²⁶⁸ See 18 C.F.R. § 380.12.

²⁶⁹ In other words, if an applicant doesn't do the recommended or suggested things in this guidance, it isn't likely that that failure will be the sole reason that a court overturns an issued certification. Instead, base arguments on the NEPA statutes, regulations, and caselaw, which do create legally binding requirements.

²⁷⁰ FERC, "Guidance Manual for Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. II, Feb. 2017, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-2.pdf>.

²⁷¹ FERC, "Guidance Manual for Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. I," Feb. 2017, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

²⁷² FERC, E-Learning, Module 4, Minutes 5:27, <https://www.ferc.gov/industries-data/natural-gas/environment/e-learning>.

²⁷³ FERC, "Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act, Vol. I," Feb. 2017, 28, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

within 60 days of the end of the scoping period. Resource Report 13 must be filed at least 90 days before the applicant may file its application for the project.

What happens during open house(s) hosted by the applicant?

During the pre-file process, the applicant must hold at least one open house to publicly and formally introduce the project to stakeholders.²⁷⁴ The open houses should be scheduled within seven days of pre-filing approval. Generally, open houses are held within 30-45 days after receiving a PF number, although this timeframe may change depending on the project and the availability of FERC and/or the third-party contractor, who attend to address questions about the environmental review process. Unlike public hearings that are held later in the process, open houses are facilitated by the applicant itself (and the applicant is responsible for notifying stakeholders).²⁷⁵

Advocates and impacted communities should attend any open house that is held, but these will likely be most useful to raise public awareness about the project and mobilize communities. Advocate comments made at applicant-led open houses will not be part of the official public record and advocates cannot rely on these meetings to get points into the record that can be used later in challenging FERC's certification. However, open houses are an opportunity to gather information about the applicant and proposed project—facts that later can be incorporated into comments or litigation. It is highly advisable to work with skilled community organizers when preparing to attend any public meeting or hearing, including the applicant's open house.

What is the Notice of Intent to prepare NEPA documents?

FERC uses the information that the applicant has provided thus far in the pre-file process to prepare a Notice of Intent to prepare a NEPA document. Under the 1978 regulations, FERC's issuance of the Notice of Intent to prepare a NEPA document formally starts the NEPA process and scoping period,²⁷⁶ even though no application will have yet been filed. (Note that the 2020 CEQ regulations expressly allow the scoping process to begin before the Notice of Intent and requires a Notice of Intent only after a determination that the proposal is sufficiently developed to allow meaningful public comment and that an EIS is required.²⁷⁷)

The Notice of Intent announces the dates and locations of scoping sessions, if applicable, that FERC will host. Public comments provided at the scoping session become part of the public record. The scoping sessions are FERC-led sessions, although the applicant almost always attends as well.

The Notice of Intent to prepare a NEPA document identifies the closing date of the official scoping period. After the close of the scoping period, the applicant must address the scoping comments received by updating its resource reports. Note that it has been FERC's state policy to "continue to accept and respond to [public] comments at any time during and after the pre-filing period [i.e., even during the application phase] until it is no longer practical."²⁷⁸ Advocates should not delay in filing

²⁷⁴ During the initial project planning stages, FERC considers stakeholders to include local community leaders, local special interest groups, and non-governmental organizations. See *Suggested Best Practices*, at 13. Environmental groups that have not already been contacted before the pre-filing process should be contacted in time for the open house. *Id.* at 20.

²⁷⁵ *Id.* at 19.

²⁷⁶ Although the regulations could be read to require scoping *prior to* FERC determining of whether or not to require an environmental impact statement, FERC historically has generally only issued a request for scoping comments if it makes a finding of significant effect and issues a notice of intent to prepare an EIS.

²⁷⁷ 40 C.F.R. § 1501.9(d) (2020).

²⁷⁸ FERC, "Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act, Vol. I," at 29.

comments, however—be they scoping comments or on the NEPA document itself—and should treat FERC’s policy as one that allows for the public to continue to raise issues that might become apparent only after official deadlines for comment have closed.

What happens during the “scoping comments” period, i.e., the first major comment deadline for a project?

As explained in the previous section, during the pre-filing process FERC will issue a notice of intent for the preparation of its environmental documents (an EA or EIS), which will include a request for scoping comments. FERC will invite the participation of affected federal, state, and local agencies, any affected Indian tribe, the developer, and other interested persons. Scoping comments and the scoping meeting are used to determine the range of issues that should be examined in an environmental impact review.²⁷⁹ Scoping is also used to identify and eliminate from detailed study the issues which are not significant or which have been covered by a previous environmental review.

Specifically, the scoping comment period is an opportunity to help FERC identify information that it should solicit from the applicant.²⁸⁰ FERC advocates have found that sometimes FERC will request information of the applicant based on a scoping comment. Thus, advocates should use this opportunity to raise issues that are site-specific that the applicant or FERC might not be aware of or otherwise pay attention to, such as the existence of unique cultural resources, or specific uses of the shipping channels and land by neighboring communities that might be impacted. Scoping is also useful to identify possible indirect and cumulative impacts that should be addressed in NEPA documents.

Once the scoping period closes, the applicant has at least 14 days to respond to issues raised in comments. If the applicant needs an extension of this time period, it must file a statement in the docket stating when it expects to respond to comments. As noted in the previous section, FERC will continue to accept comments after the scoping period closes, but the applicant may not be required to address those comments in its resource reports. (The issues raised in such comments should be addressed by the NEPA documents, however.)

What must the application contain for FERC to accept it and start the application process?

An applicant must wait at least 180 days from its pre-filing date and satisfy all of the pre-filing steps described above in Section 4.C.5 before it may submit an application for certification and/or authorization to FERC.²⁸¹ Substantively, the applicant must also provide all of the information required by law, which largely focuses on having finalized Resource Reports that satisfy FERC’s initial concerns about the project and the scoping issues raised during pre-filing. The resource reports are contained in Exhibit F-1 of the application (“the Environmental Report”). These resource reports must contain all the information required by Appendix A of 18 C.F.R. § 380 and § 380.12. The resource reports must address the comments raised by FERC and stakeholders during the pre-filing process.

In addition to requiring the resource reports, FERC directs an applicant to submit its requests for other required federal authorizations, including those delegated to state agencies *before or at the*

²⁷⁹ 18 C.F.R. § 157.21(f)(9) and (g)(2).

²⁸⁰ See 40 C.F.R. § 1501.7 (1978) and 40 C.F.R. § 1501.9 (2020).

²⁸¹ 18 C.F.R. § 157.21(e). Also see 18 C.F.R. § 157.21(a)(2)(i). Historically, it has taken much longer than six months for projects to complete the pre-filing process and progress into the application stage.

same time as it files its FERC application.²⁸² This includes applications for permits and certifications needed under the Clean Water Act section 401, Coastal Zone Management Act consistency reviews, and the Clean Air Act. If the applicant has not requested these authorizations by the time it files its FERC application, it must explain why. For terminals (i.e., Section 3 applications), information regarding other pending applications, including the submittal date and anticipated approval date, can be found in Exhibit H.²⁸³

Once FERC accepts the application as complete, FERC issues a public Notice of Application within ten business days of the filing of the complete application.²⁸⁴ A notice of a schedule for the environmental review will be issued within 90 days of the notice of the application. Both notices will be published in the Federal Register and in the project's docket. The project will be issued a new docket number with the preface "CP."²⁸⁵ All subsequent information about the project will be filed in this docket, so advocates should ensure that they subscribe to this new docket (although anyone who was originally subscribed to the PF docket should automatically be subscribed to the CP docket). It is also a good time (and the first time) to file a notice of intervention. For more on that process, see Sections 4.D.6 - 4.D.7.

What happens during the application process?

During the application process, FERC does three main things:

- **Prepares NEPA documents.** This involves preparing the necessary environmental decision-making documents; either an EIS (both draft and final) or an EA and an EIS (both draft and final EIS). If an EIS is required, FERC will also prepare a "preliminary draft" in addition to the draft EIS—the preliminary draft is circulated to the cooperating agencies before the actual draft is released for public comment (see Section 4.C.12).
- **Responds to comments.** In the final EIS and in its certificate order, FERC must respond to all substantive comments made, either individually or by grouping similar comments together.
- **Continues coordinating with consulting agencies and other permitting entities.** FERC must continue to work with and coordinate with consulting agencies to ensure that its NEPA documentation is sufficient for the other agencies to rely on. FERC must also respond to concerns that other agencies may raise about the project. To do so, FERC prepares a preliminary draft EIS which is issued to agencies for comment even before the public has access to the document.

During the application process, an advocate will want to:

- Formally intervene as soon as possible (see Sections 4.D.6 - 4.D.7)
- File comments during the comment periods for the draft EIS and final EIS (see Section 4.E for example topics and comments)
- Participate in any public meetings

²⁸² FERC, E-Learning, "Module 2 – Overview of the FERC Process for Reviewing Proposed Natural Gas Projects," 14:22, https://www.ferc.gov/sites/default/files/2020-06/module_2_0.mp4.

²⁸³ For pipelines (i.e., Section 7 applications), this information is found in Exhibit J.

²⁸⁴ 18 C.F.R. § 157.9(a).

²⁸⁵ Publicly available documents can be found on FERC's e-Library using the project's docket number. FERC's eLibrary is accessible here: <https://elibrary.ferc.gov/eLibrary/search>.

Do cooperating agencies review a preliminary version of the draft EIS before it is released for public comment?

Yes. Before the draft EIS is released for public comment, FERC circulates a “preliminary draft EIS” to the cooperating agencies. Each cooperating agency reviews this document and must submit comments back to FERC within the allotted time frame, typically 30 days.

At least some of this interagency dialogue about the project will be published on FERC’s docket. Other correspondence may be discoverable by filing a FOIA request: for example, FERC’s regulations make discoverable under the Freedom of Information Act interagency memoranda that “transmit comments of Federal agencies on the environmental impact of the proposed action.”²⁸⁶

Because once the draft EIS issues for public comment, cooperating agencies have already had many opportunities to raise concerns about the project, it is important to have been in contact with these cooperating agencies early—during the pre-filing process if possible.

Will there be an opportunity to comment on the draft EIS once it is published?

Yes. The draft EIS comment period can be thought of as the second major deadline for public comment, after the scoping comment period. Once FERC has received comments from cooperating agencies and addressed any issues that arose, it then releases the draft EIS for public comment. The Notice of Availability of the draft EIS is filed in the docket and the Federal Register. The Notice will briefly describe the project and consulting agencies’ roles and will announce the deadline for comments and the dates of the public comment sessions. An example notice (from the Rio Grande LNG project) can be found here: <https://www.govinfo.gov/content/pkg/FR-2018-10-18/pdf/2018-22727.pdf>.

The comment period typically lasts 45 days but may be longer or shorter—consult the notice for each project to be sure of the proper timeframe. Advocates (or any other party or agency) may request an extension of the comment period, but do not assume it will be granted. The comment period for the draft EIS is also the last period in which an advocate may timely intervene (the “second window” of intervention, described in more detail in Section 4.D.6). Interventions outside of this time frame will be allowed at the discretion of FERC if the would-be intervenor can show extraordinary circumstances or good cause.²⁸⁷ Advocates should avoid intervening out of time if at all possible. For the mechanics on how to intervene, see Section 4.D.7.

What does an EIS look like?

Although the regulations are a good source of information on what an EIS must contain, one of the best ways to familiarize oneself with an EIS is to review an already published one. A few examples—namely the final EIS documents in the Jordan Cove project—can be found on FERC’s website and are found in this guide’s appendix:

Part 1: https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf (App. 3a)

Part 2: https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_2.pdf (App. 3b)

²⁸⁶ 18 C.F.R. 380.9(b).

²⁸⁷ 18 C.F.R. § 157.10. See also 18 C.F.R. § 380.10(a) (“Any person who files a motion to intervene on the basis of a draft environmental impact statement will be deemed to have filed a timely motion, in accordance with § 385.214, as long as the motion is filed within the comment period for the draft environmental impact statement.”).

Part 3: https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf (App. 3c)

CEQ’s 2020 regulations at 40 C.F.R. § 1502.10 direct agencies like FERC to include the following sections in each environmental impact statement: (1) Cover; (2) Summary; (3) Table of contents; (4) Purpose of and need for action; (5) Alternatives including the proposed action (sections 102(2)(C)(iii) and 102(2)(E) of NEPA); (6) Affected environment and environmental consequences (especially sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA); (7) Submitted alternatives, information, and analyses; and (8) List of preparers.²⁸⁸ More details on the contents of each of these eight items is provided in the 2020 CEQ regulations that follow, namely 40 C.F.R. §§ 1502.11 – 1502.18.

FERC’s regulations at 18 C.F.R. § 380.7 also require two additional sections. First, a section on literature cited in the EIS. Second, a staff conclusions section at the end—these include the recommended conditions that FERC staff proposes to the Commissioners, who may accept, deny, or modify any of these in the final Order. Specifically, the staff conclusion section includes summaries of:

- (a) The significant environmental impacts of the proposed action;
- (b) Any alternative to the proposed action that would have a less severe environmental impact or impacts and the action preferred by the staff;
- (c) Any mitigation measures proposed by the applicant, as well as additional mitigation measures that might be more effective;
- (d) Any significant environmental impacts of the proposed action that cannot be mitigated; and
- (e) References to any pending, completed, or recommended studies that might provide baseline data or additional data on the proposed action.²⁸⁹

The Jordan Cove example cited above has five main sections: (1) Introduction; (2) Description of the Proposed Action; (3) Alternatives; (4) Environmental Analysis; and (5) Conclusions. The fourth section is most detailed, with subsections for each resource impacted, as well as a final section addressing cumulative impacts. As discussed in Section 4.B.4, the resources impacted are:

- geological resources;
- soils and sediments;
- water resources and wetlands,
- vegetation;²⁹⁰
- wildlife and aquatic resources;
- threatened, endangered and other special status species;
- land use;
- recreation and visual resources;
- socioeconomics;
- transportation (not always in an EIS as a separate section);
- cultural resources;
- air quality and noise;
- reliability and safety;

²⁸⁸ Item (7) was added in the 2020 regulations; it omitted the recommendation to include an index and a list of agencies, organizations, and persons to whom copies of EIS are sent. See 40 C.F.R. § 1502.10 (1978).

²⁸⁹ 18 C.F.R. § 380.7.

²⁹⁰ The Jordan Cove EIS focuses on “upland” vegetation; this category is more often just styled “vegetation.”

The final EIS will take a similar format as the draft EIS, and most of the text will be the same as the draft EIS. Lines that have been changed or added from the draft EIS will be highlighted by a vertical line running along the left-hand margin.

What should I expect at draft EIS public meetings?

For LNG projects, FERC often will hold at least one public meeting for any interested party to attend and provide comments on the draft EIS. These hearings may be combined with the hearings hosted by other agencies. A court reporter is typically present to record all of the comments made; those comments become part of the public record that FERC must address in the final EIS.

Notice of a public meeting will be published on FERC's docket and in the Federal Register. An example of a public notice for meetings that were held to discuss the draft EIS for the Alaska LNG facility can be found here: <https://www.energy.gov/sites/default/files/2019/08/f66/ferc-deis-meetings-eis-0512-alaska-lng-2019-08-02.pdf>. The notice of availability of a draft EIS may also set dates for public meetings as well. Additional information on the format of the public meeting for each specific project should be available on the project's docket; while the Federal Register may be a source for the notice, it may not contain all of the information on how the meetings will be conducted.

Like any public meeting, this is an opportunity to mobilize support and bring attention to the project and the impacts it will have. Meetings are a good focal point for political and news coverage. It is a good idea to work with experienced community organizers to maximize the benefit that can be gained from these meetings.

What is involved in the drafting of a final EIS and its publication?

FERC will prepare a final EIS once comments have been received on the draft EIS. FERC must consider substantive comments timely submitted on the draft EIS when preparing the final EIS.²⁹¹ FERC may address comments individually or as a group if the comments are related. FERC's possible responses to comments include:

- Modifying alternatives including the proposed action;
- Developing and evaluating alternatives not previously given serious consideration by FERC;
- Supplementing, improving, or modifying its analyses;
- Making factual corrections; or
- Explaining why the comments do not warrant further agency response, citing the sources, authorities, or reasons that support FERC's position and, if appropriate, indicate those circumstances that would trigger agency reappraisal or further response.²⁹²

Once the final EIS is complete, FERC must provide public notice of the final EIS.²⁹³ Recall that the final EIS is not FERC's final decision on the project; rather, the final EIS is the document prepared by the third-party contractor and FERC staff that the FERC commissioners will use when making a final decision on whether to approve the project (via Certificate order). The public and any participating

²⁹¹ 40 C.F.R. § 1503.4(a) (2020). The 1978 version did not include this language that the comments to be addressed were only the timely and substantive ones. Id. (1978).

²⁹² 40 C.F.R. § 1503.4(a)(1)-(5) (1978). The 2020 regulations included all five possible responses, except the fifth response was rewritten to allow agencies to simply: "Explain[] why the comments do not warrant further agency response, recognizing that agencies are not required to respond to each comment." 40 C.F.R. § 1503.4(a)(5) (2020).

²⁹³ 40 C.F.R. § 1506.6(b) (the 1978 and 2020 regulations are substantively similar on this point).

agency may still comment on the final EIS—and advocates should if there are still problems with the project and FERC’s analysis! FERC’s failure to prepare a proper final EIS and make a non-arbitrary, reasoned decision in the commissioner’s Certificate Order can be grounds for overthrowing the certification in court, so any possible grounds that could be raised should be. And any issues not raised in comments run the risk of being ignored by a reviewing court (under the legal principle of exhaustion).

Might FERC decide that a supplemental environmental document (an EA or EIS) is needed?

A supplement to an EA or a draft or final EIS is required when any of the following occurs:²⁹⁴

- An agency makes substantial changes to the proposed action that are relevant to its environmental concerns.
- There are significant new circumstances or information relevant to the environmental concerns that have bearing on the proposed action or its impacts.

If an agency decides to supplement its EIS, it prepares, publishes, and files the supplemental EIS in the same fashion as a draft or final EIS. Public comments are normally solicited. Sometimes, the supplement will be an EA only, as with one of the proposed amendments to the Golden Pass LNG facility after it was first certified.²⁹⁵ The decision to supplement may happen at any point in the application process, after an initial environmental document has been published. It may even be required by court order after certification if a reviewing court finds that FERC should have conducted one or has otherwise erred in its NEPA analysis.

It can be hard to predict when FERC will require a supplemental assessment. Changes to a project that would increase its design capacity without any additional construction have caused FERC to prepare supplemental environmental documents.²⁹⁶ But a design change that went from six trains to five while increasing the capacity of the remaining trains by roughly 20% did not strike a majority of FERC Commissioners as something that should be reanalyzed with a supplemental environmental assessment.²⁹⁷ Despite this uncertainty, advocates should not be discouraged from arguing that a supplemental assessment should be conducted if new information comes to light or the applicant proposes substantial changes to its design. As Commissioners retire and are replaced, FERC’s attitude toward supplemental assessments may change.

When will FERC decide on the application and what will that Order look like?

Historically, FERC has no timeline by which it must respond to an application and can take as long as it needs.²⁹⁸ The final decision need not be agreed to by all commissioners, just a majority. This final

²⁹⁴ EPA, “National Environmental Policy Act Review Process,” <https://www.epa.gov/nepa/national-environmental-policy-act-review-process>; see also 40 C.F.R. § 1502.9(d) (2020) and 40 C.F.R. § 1502.9(e) (1978). Typically, there is no new scoping period. 40 C.F.R. § 1502.9(d)(3) (2020) and 40 C.F.R. § 1502.9(e)(4) (1978).

²⁹⁵ A supplemental EA was issued in Golden Pass LNG. FERC, “Order Amending Section 3 Authorization,” 174 FERC ¶ 61,053, ¶¶ 10-13, Docket No. CP20-459-000 https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjy1p_XuMvzAhVnn-AKHd7QA6gQFnoECACQAQ&url=https%3A%2F%2Fwww.ferc.gov%2Fsites%2Fdefault%2Ffiles%2F2021-01%2FCP20-459-000.docx&usg=AOvVaw2jyKJRFkyInbuKwOX9DBmn.

²⁹⁶ As was the case in an application by Golden Pass LNG. See *Id.*

²⁹⁷ “Order Addressing Arguments Raised On Rehearing,” 174 FERC ¶ 61,048 (Docket No. CP16-454-002) (Glick, dissenting) at ¶¶ 1-2 <https://www.ferc.gov/sites/default/files/2021-01/C-7-CP16-454-002.pdf>.

²⁹⁸ In the past, the average time from *FEIS* to *certificate order* has been around eight months, but FERC has taken much longer, and the review process from *application* to *order* typically lasts years. The 2020 regulations imposed a two-year time limit for drafting environmental impact statements, but these rules are in the process of being rewritten and this timetable is not expected to impact LNG projects. See 40 C.F.R. § 1501.10(b)(2).

decision is memorialized in a certificate order (or authorization order, if the project proposes only a terminal, with no pipeline). If the FERC commissioners approve a project, the applicant must officially accept the order and its conditions within 30 days. Note that the order does not give the applicant official permission to begin construction—that is a separate process that may be put on hold if an advocate requests rehearing of the order.

The Order explains FERC’s decision and includes conditions on the project. It may also include concurring or dissenting opinions. These opinions do not change the outcome of the certification but can show what individual Commissioners believe is important about a project or the NEPA process. It is important to read the decision and any concurrences or dissents on any order (the Certificate Order or Order on Rehearing) carefully and fully, because the dissenting or concurring opinions may be more persuasive to a reviewing court than if the same point therein is made solely by an advocate. For example, the dissent on the Rio Grande LNG certificate order strongly disagreed with the majority’s treatment of greenhouse gas impacts, echoing the concerns of advocates.²⁹⁹ The D.C. Circuit agreed that the majority’s approach was wrong, and now FERC must actually grapple with greenhouse gas impacts going forward. Whether or not the D.C. Circuit was ultimately persuaded to adopt this position because of the dissenting opinion, if advocates challenge a FERC Order in court, it is useful to be able to argue to a court that some of the Commissioners supported their position.

What steps should an advocate take if FERC certifies a project?

After FERC certifies a project, the next step an advocate must take to continue challenging the certification is to file an application for rehearing within thirty days after the issuance of the certificate order.³⁰⁰ FERC then has thirty additional days on which to act on the application—if FERC fails to act within that time, the application is deemed denied, and an advocate may proceed with litigation in either the D.C. Circuit or the Circuit where the applicant has its principal place of business.³⁰¹ Although the word “rehearing” might imply that there will be a court-type hearing and oral argument, FERC almost never solicits oral argument and instead always simply reviews the paper request. The rehearing request is a litigation-type document that must include the facts and legal argument to explain why FERC was wrong to issue its certificate order. See Section 4.F for sample requests for rehearing.

During the rehearing process, FERC considers whether to modify its Order. Do not expect FERC to alter its Order much, if at all. FERC has thirty days to act on the rehearing request before it is deemed denied as a matter of law. It may however modify the Order after that deadline, as long as it does so before the record for appeal is filed in the federal circuit court.³⁰² An example of FERC’s order on a rehearing request can be found here: <https://www.ferc.gov/sites/default/files/2021-01/C-7-CP16-454-002.pdf>.

²⁹⁹ See “Commissioner Richard Glick Dissent Regarding Rio Grande LNG, LLC.” FERC. (Nov. 21, 2019) <https://www.ferc.gov/news-events/news/commissioner-richard-glick-dissent-regarding-rio-grande-lng-llc>. Two Commissioners also dissented from FERC’s Order on Rehearing in the Rio Grande LNG project, agreeing with advocates that a supplemental EIS should have been issued given the late-breaking design changes that the applicant made to the facility. See “Order Addressing Arguments Raised On Rehearing,” 174 FERC ¶ 61,048 (Docket No. CP16-454-002) (Glick, dissenting) at ¶¶ 1-7 <https://www.ferc.gov/sites/default/files/2021-01/C-7-CP16-454-002.pdf>. Although the reviewing court did not address this issue, it shows the importance of paying attention to dissents to understand where FERC may be headed as the composition of FERC changes.

³⁰⁰ 15 U.S.C. § 717r(a).

³⁰¹ *Id.* at (a) & (b).

³⁰² “Recent Changes in Commission Rehearing Practice - Item A-3.” FERC Staff presentation. (Sept. 17, 2020) <https://www.ferc.gov/news-events/news/recent-changes-commission-rehearing-practice-item-3>.

After rehearing is concluded, FERC may authorize the applicant to proceed with construction while an appeal in federal court is pending.³⁰³ If there is a potential that construction may move forward while an appeal is pending, advocates should consult experienced litigation attorneys to determine if a court order halting construction is necessary.

Where do I litigate after FERC issues its order on rehearing?

Appeals can be brought in the local Circuit Court of Appeals (which is likely the Fifth Circuit for Louisiana and Texas facilities if the applicant has its principal place of business in those states) or in the D.C. Circuit.³⁰⁴ It is imperative that an advocate seek the advice of experienced litigation counsel after the rehearing order issues, because when and where (either the D.C. Circuit or the regional federal circuit court) is best to file an appeal will vary based on the project. This process and decision are specific to each project and is beyond the scope of this guide.

What issues should I raise on appeal and what is the court's role?

Understanding which issues to litigate requires a knowledge of judicial precedent—what previous courts have said about FERC and the environmental review process—and a careful examination of the facts raised in the specific project being challenged. If you are at this stage and have not done so yet you should consult with an advocate experienced in litigating FERC certifications for LNG terminals. Remember, litigation decisions made for one terminal can impact all future terminals.

There are two main standards of review to keep in mind, depending if your argument is based on a flaw in the NEPA analysis or with the NGA's public interest review. (Other laws also may be relevant—consult with an experienced attorney to not miss issues for the particular project!)

In August 2021, the D.C. Circuit described its role in reviewing an agency's execution of NEPA as:

*We review an agency's NEPA analysis under the arbitrary and capricious standard of the APA [the Administrative Procedures Act]. Nevada v. Dep't of Energy, 457 F.3d 78, 87 (D.C. Cir. 2006). Our mandate is not to "flyspeck" an agency's environmental analysis," id. at 93, but "simply to ensure that the agency has adequately considered and disclosed the environmental impact of its actions," WildEarth Guardians v. Jewell, 738 F.3d 298, 308 (D.C. Cir. 2013) (quoting City of Olmsted Falls v. FAA, 292 F.3d 261, 269 (D.C. Cir. 2002)). "Accordingly, we ask whether the agency examined the relevant data and articulated a satisfactory explanation for its action, including a rational connection between the facts found and the choice made." Birkhead v. FERC, 925 F.3d 510, 515 (D.C. Cir. 2019) (per curiam) (internal quotation marks and alterations omitted) (quoting Motor Vehicle Mfrs. Ass'n, Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)). We also ask whether the agency addressed "opposing viewpoints." Nevada, 457 F.3d at 93; cf. 40 C.F.R. § 1502.9(c) ("At appropriate points in the final statement, the agency shall discuss any responsible opposing view that was not adequately discussed in the draft statement and shall indicate the agency's response to the issues raised.").*³⁰⁵

³⁰³ 18 C.F.R. 157.23(2).

³⁰⁴ 15 U.S.C. § 717r(a).

³⁰⁵ *Vecinos para el Bienstar de la Comunidad Costera v. FERC*, No. 20-10453 ("Rio Grande Op.") at 9 (Aug. 3, 2021) [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf) (citing the 2020 CEQ subsection, which was substantively identical to the 1978 version). Attached as App. 2.

This standard of review is slightly different when it comes to a review under the NGA. For example, the “flyspecking” prohibition is NEPA-specific. Under the NGA a court will not supplant its opinion for that of FERC’s, but the court does need to ensure that the public interest review is rational—FERC still may not act in an arbitrary and capricious manner.³⁰⁶ In reviewing a challenge under the NGA’s public interest standard, the D.C. Circuit considers whether FERC acted arbitrarily and capriciously and has described its role and the NGA as follows:

The NGA requires the Commission to determine whether a proposed project comports with the public interest. The NGA’s requirements differ depending on whether the proposed project is an LNG facility or pipeline. The Commission must authorize the construction and operation of a proposed LNG facility unless it determines that the facility “will not be consistent with the public interest.” 15 U.S.C. § 717b(a). By contrast, the Commission may not authorize the construction and operation of a proposed interstate LNG pipeline unless it determines that the pipeline “is or will be required by the present or future public convenience and necessity.” Id. § 717f(e).^[307]

...

*We review the Commission’s orders approving LNG facilities and pipelines [under Sections 3 and 7 of the NGA], like its NEPA analyses, under the arbitrary and capricious standard of the APA. *Minisink Residents for Env’tl Pres. & Safety v. FERC*, 762 F.3d 97, 105–106 (D.C. Cir. 2014); *Midcoast Interstate Transmission, Inc. v. FERC*, 198 F.3d 960, 967 (D.C. Cir. 2000). Where the Commission rests a decision, at least in part, on an infirm ground, we will find the decision arbitrary and capricious. *Williams Gas Processing-Gulf Coast Co. v. FERC*, 475 F.3d 319, 330 (D.C. Cir. 2006).³⁰⁸*

Note that the court reviews agency action under the arbitrary-and-capricious standard of the federal Administrative Procedures Act: this applies to action under NEPA and the NGA. As NRDC explained the arbitrary-and-capricious standard.³⁰⁹

When reviewing a Commission action, the relevant inquiry [that a court will make] is whether the Commission has “articulate[d] a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’”³¹⁰ The Commission’s decisions will be reversed where such action is “arbitrary, capricious, an abuse of discretion, or otherwise not

³⁰⁶ The NGA states that “The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive,” which courts recognize as simply another way of stating that review is under the arbitrary-and-capricious standard. See e.g., *Board of W.L. S. Fund v. F.E.R.C.*, 294 F.3d 1317, 1329 (11th Cir. 2002). In 2015 opinion, the D.C. Circuit basically agreed, stating:

“We have previously reviewed the Commission’s interpretation of its authority to issue such a certificate [of public convenience and necessity] by applying the two-step analytical framework of *Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984). See *Okla. Natural Gas Co. v. FERC*, 28 F.3d 1281, 1283-84 (D.C.Cir. 1994); *N. Natural Gas Co. v. FERC*, 827 F.2d 779, 784 (D.C.Cir.1987).

The *Chevron* case describes this arbitrary-and-capricious standard.

³⁰⁷ As the Jordan Cove challengers further explain, “[t]hese analyses require the Commission to balance the public benefits of a project against the adverse consequences, and, with respect to Section 7, to analyze whether the project is ‘needed.’” App. 8 (NRDC Request for Rehearing on the Jordan Cove Energy Project) at 8.

³⁰⁸ *Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1326 (D.C. Cir. 2021).

³⁰⁹ App. 8 (NRDC Request for Rehearing on the Jordan Cove Energy Project) at 2.

³¹⁰ *Motor Vehicle Mfrs. Ass’n, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962)).

in accordance with law.”³¹¹ Agency action is arbitrary and capricious if, for example, the agency “entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.”³¹²

Advocates should not be intimidated by these standards when framing comments—it can be helpful to include these standards **but it is not required for comments** and so should never be a barrier to commenting on environmental documents. However, it is imperative that advocates seeking rehearing or contemplating litigation seek the advice of experienced attorneys so that arguments can be properly presented through these standards of review. The legal landscape changes with every court decision, and thus in-depth litigation advice is beyond the scope of this guide.

Will any of the administrative process be in Spanish (or other non-English language)?

FERC and applicants have historically been resistant to translating any of the major project documents—like Environmental Impact Statements—into any language other than English. Thus far, only minor summary documents or handouts have been translated; translation services are usually available at open houses and public meetings (although sometimes only on request). Sustained activism will be needed to push agencies and applicants to translate substantive decision documents. In the Rio Grande LNG project, for example, FERC justified its decision to not translate EIS documents by the following:

*[I]n an effort to include Spanish language speakers in the NEPA process, Spanish language Project materials were made available to the public during the scoping meeting and public comment meeting held in Port Isabel as described in section 1.3.1 of the final EIS. In addition, a translator was available to assist Spanish language speakers. During the public scoping meeting, very few of the Spanish language materials that were made available were utilized by attendees. **As such, we determined that translation of the draft EIS into Spanish was not necessary.**³¹³*

In other words, FERC has indicated that its policy as to whether it will require EIS documents to be translated is based on the number of Spanish-speaking individuals attending the scoping meeting. This attitude, plus FERC’s new focus on environmental justice issues, indicates that it may finally be possible to build toward a future in which translation of substantive decision documents becomes standard—but it will likely require significant up-front advocacy and a demonstrated need for the services.

What are the opportunities for public engagement during the certification process, and how should I participate?

FERC’s rules and the governing statutes allow for advocate involvement in three main stages—the pre-filing comment period, the application comment period, and the appeal, if the project is certified.³¹⁴ Participation in the comment periods and intervention in the process before certification is a necessary prerequisite to any appeal. Issues to be appealed must have been raised at the right

³¹¹ 5 U.S.C. § 706(2)(A); 15 U.S.C. § 717r (providing for judicial review of Commission orders).

³¹² E.g., *Motor Vehicle Mfrs. Ass’n*, 463 U.S. 29 at 43 (quoting *Burlington*, 371 U.S. at 168).

³¹³ Rio Grande LNG Project: Final Environmental Impact Statement: Volume III, Part 3 at 3.

<https://www.ferc.gov/sites/default/files/2020-05/FEIS-volume-III-part-3.pdf> (emphasis added).

³¹⁴ See FERC Flowchart above at Section 4.C.1 (light green “Public Input Opportunities”); also available at “Pre-Filing Environmental Review Process.” FERC. (May 29, 2020) <https://www.ferc.gov/media/pre-filing-environmental-review-process>.

time during the comment period—otherwise, they may not be argued in court!³¹⁵ The following addresses some of the questions advocates may have about the mechanics of participating in the FERC certification process. Advocates may also find FERC’s online how-to-guides helpful for these and other questions: <https://www.ferc.gov/how-guides>.

Does FERC have an online portal for the projects it is reviewing?

Yes. FERC has created a single entry point for all of its electronic access applications, which it calls “FERC Online”: <https://ferconline.ferc.gov/FERCOOnline.aspx>.

From this site, advocates can subscribe to (i.e., get email alerts for) dockets, file html comments and pdf comments, and search FERC’s eLibrary. Note that FERC’s online interface may not work as well on certain browsers, like Firefox.

How do I find the FERC docket for a specific LNG facility?

The direct online portal to FERC’s docketing system is found here: <https://elibrary.ferc.gov/eLibrary/search>. As with FERC Online, advocates should take the time early on to become familiar with this eLibrary system as it is the main portal for staying up-to-date with FERC’s process on each project.

Searches of FERC’s docketing system can be conducted in a variety of ways; using the docket number is typically easiest. If you don’t know the docket number, input the facility name into the “Keyword Search”; that should pull up documents filed for that facility.

All publicly available documents related to the proposed terminal should be available on the docket for the specific project, including EIS documents and even sometimes notices or permits issued by other federal agencies. In addition to the docket for each facility, FERC also publishes its environmental documents (draft and final EIS, EAs) here: <https://www.ferc.gov/industries-data/natural-gas/environmental-overview/environmental-documents-2021>. It can be helpful to use this site to find the environmental documents filed for other facilities—sometimes useful comparisons can be made across projects.

Why can’t I access all of the documents on the docket?

FERC requests that applicants minimize the amount of information that is not publicly available,³¹⁶ but some documents may not be publicly accessible because they contain *privileged*³¹⁷ or *Critical Energy/Electric Infrastructure Information* (CEII).³¹⁸

Privileged information may be found in documents that contain a manufacturers’ proprietary or business confidential design information.³¹⁹ Reports describing and locating cultural resources near the facility also may be privileged pursuant to the National Historic Preservation Act.

CEII is specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure that (1) relates details about the production, generation, transmission, or distribution of energy, (2) could be useful to a person planning an attack on critical infrastructure; (3)

³¹⁵ In other words, there is an exhaustion requirement.

³¹⁶ “CEII Filing Guide.” FERC. (Aug. 7, 2020) <https://www.ferc.gov/ceii-filing-guide>.

³¹⁷ 18 C.F.R. § 388.112 (governs privileged treatment of documents submitted to FERC).

³¹⁸ 18 C.F.R § 388.113 (governs CEII treatment of documents submitted to FERC).

³¹⁹ See “Filing Natural Gas Pipeline Flow Diagrams and Associated Information.” FERC. (Aug. 7, 2020). <https://www.ferc.gov/filing-natural-gas-pipeline-flow-diagrams-and-associated-information>.

is exempt from mandatory disclosure under the Freedom of Information Act; and (4) gives strategic information beyond the location of the critical infrastructure. CEII may include specific engineering details of a project. FERC's examples of CEII for LNG facilities includes: "detailed piping and instrumentation diagrams, equipment and tank detail drawings, detailed hazard detection and control location specifics, and some sections of Emergency Response Plans."³²⁰ Some CEII information may be made available to the public or advocates that have intervened in the FERC process if they sign FERC's non-disclosure agreement and follow the steps outlined in 18 C.F.R. 388.113(g)(4).³²¹ However, this may set off a lengthy administrative and judicial appeals process.³²² Advocates should review all publicly available documents as they are filed to see if information appears to be missing or if CEII information would be useful so that a request for this information can be made early in the application and certification process with sufficient time for an appeal.

Note that in FERC's opinion: "design assumptions, engineering and operating philosophies, most design specifications of equipment and pipelines, and narrative descriptions of pipeline operations should be publicly available,"³²³ as well as general descriptions of hazard detection and control.³²⁴ All in all, the applicant and FERC should provide sufficient information to the public such that FERC's certification of the project and compliance with all environmental laws can be reviewed.

How do I receive automatic notifications of filings for the project?

Advocates challenging a facility should sign up to receive automatic email notifications any time a new document is filed with FERC. Subscribing to electronic notifications can be done here: <https://ferconline.ferc.gov/eSubscription.aspx>.

Note that subscribing is a passive action different from intervening or filing a comment. Advocates that want to challenge a project must intervene in the case.

How do I learn about open houses and stakeholder meetings during pre-filing?

The best way to learn about open houses and stakeholder meetings is to subscribe to the project's pre-filing docket. Because these sessions are applicant-led, there is no standard format for them. However, FERC publishes guidelines for applicants on best practices for engaging with the public, which can be helpful in understanding what will be discussed and what good outreach should look like. FERC's July 2015 brochure, "Suggested Best Practices for Industry Outreach Programs to Stakeholders," was developed in response to the lack of good stakeholder outreach programs from the many applicants.³²⁵ This document states FERC's position on the type, quantity, and tenor of outreach that applicants for LNG facilities should be doing at each stage of the FERC process. Advocates confronted with reticent applicants can use this document to motivate applicants to be more open and flexible regarding community outreach. Note that it's possible that as the Office of Public Participation becomes more established this guidance will be updated.

³²⁰ "CEII Filing Guide for Resource Reports 1, 11 and 13." FERC. (Aug. 7, 2020) <https://www.ferc.gov/ceii-filing-guide-resource-reports-1-11-and-13>.

³²¹ 18 C.F.R. 388.113(g)(4) (describing how intervenors may request access to CEII).

³²² See 18 C.F.R. 388.113(g)(4) (allowing any person to object to disclosure); 18 C.F.R. 388.113(j) (describing how to appeal CEII designations to FERC and a federal court, including time limits).

³²³ "Filing Natural Gas Pipeline Flow Diagrams and Associated Information." FERC. (Aug. 7, 2020) <https://www.ferc.gov/filing-natural-gas-pipeline-flow-diagrams-and-associated-information>.

³²⁴ "CEII Filing Guide for Resource Reports 1, 11 and 13." FERC. (Aug. 7, 2020) <https://www.ferc.gov/ceii-filing-guide-resource-reports-1-11-and-13>.

³²⁵ "Suggested Best Practices for Industry Outreach Programs to Stakeholders." FERC. at 4. (July 2015) <https://www.ferc.gov/sites/default/files/2020-04/stakeholder-brochure.pdf>.

When and why should I intervene in FERC proceedings?

Intervention is the formal process for becoming a participant in FERC proceedings—it will allow you to receive updates and documents and is a necessary prerequisite to legally challenge the FERC proceeding. Intervening is simultaneously the most basic threshold step in challenging an LNG project and the step with the biggest potential pitfall—even though the actual paperwork needed to intervene is quite simple! That pitfall is making sure your intervention will not be ruled untimely.³²⁶

Specifically, for all projects, there is an **initial window** in which advocates can timely intervene. This initial window is set in FERC’s public notice of the application, which will set the deadline for filing comments and motions to intervene.³²⁷ (Intervention is not possible during the pre-filing process, because there has been no official application for the project yet.) After the deadline in the notice of application passes, this initial window closes. Subsequent motions-to-intervene will be treated as untimely—unless they are filed within the *second window* for intervention that may open.

A **second window** for timely intervention opens if a DEIS issues for the project. The deadline for when this second window closes will be stated in FERC’s notice of the DEIS’s availability.³²⁸ Any motion to intervene filed after that second deadline closes will be untimely, and FERC has complete discretion whether to grant the latecomer intervenor status—or not. Note that not all LNG applications will require DEIS documents—although all large projects should. For example, it might be that an expansion of a terminal is minor enough that FERC decides that it only merits an EA. There is no second window for intervention for EA-only projects. Therefore, if at all possible, intervene as soon as you learn of the project—and during the initial window if it is still open. If it is not, do not wait for a second window to file; if one opens, simply refile your intervention motion. For an example intervention motion

filed by NRDC during the second window created when the Jordan Cove DEIS issued, see Appendix 4 (pages 1-4 are the motion to intervene; the remainder of the filing are comments on the DEIS).

BEWARE THE INTERVENTION “DONUT HOLE”!

If you miss the initial intervention window created by the Notice of Application, then your intervention request is considered **untimely** and at risk of being denied—until a DEIS issues, during which a motion would be **timely** once again. If you decide to file a motion for untimely intervention in the donut hole, you should also file a renewed motion for timely intervention during the DEIS comment period.

Advocates are working on persuading FERC to remove this barrier to public participation, but until FERC changes its policies, advocates will need to pay close attention to the deadlines to avoid forfeiting all of their legal rights!

³²⁶ See Giannetti, Gillian. “FERC May Stifle Public Voice on New Gas Pipelines.” NRDC. (March 26, 2018)

<https://www.nrdc.org/experts/gillian-giannetti/ferc-may-stifle-public-voice-new-gas-pipelines> (describing the barriers to public participation created by FERC’s current rules on timely intervention).

³²⁷ Advocates should adhere to the deadlines set in any such public notice instead of following the general rule-of-thumbs stated in this guide.

³²⁸ The intervention deadline should coincide with the comment deadline, as 18 C.F.R. § 380.10(a)(1) states that “Any person who files a motion to intervene on the basis of a draft environmental impact statement will be deemed to have filed a timely motion, in accordance with § 385.214 [FERC’s general rules on intervention, found at 18 C.F.R. §385.214], as long as the motion is filed within the comment period for the draft environmental impact statement.”

To reiterate, motions-to-intervene that are filed **after** the initial window closes, but **before** the second window opens—i.e., those that fall within the “donut hole”—will be treated as **untimely**.³²⁹ FERC has complete discretion to deny such an untimely request to intervene, which robs the would-be-intervenor of the right to appeal its decision. Advocates that have filed a motion to intervene in the “donut hole” should file a renewed motion to intervene as soon as the second window reopens.

As for the **benefits** of intervention, intervention allows individuals and organizations to become participants in a proceeding and have the right to request rehearing of FERC’s orders and seek relief from FERC’s final agency actions in the U.S. Circuit Courts of Appeals. Intervention is essential in preserving your legal right to challenge a project. It also is required for landowners to challenge a taking of their property—recall that unlike terminal projects, pipeline projects allow developers to use eminent domain.³³⁰ Thus advocates who do not timely intervene during the period specified by FERC may lose the right to request rehearing, appeal the project’s certification, and stop a taking.³³¹

If no one opposes a **timely** motion to intervene within 15 days after the intervention motion is filed, the would-be intervenor automatically becomes an intervenor unless FERC finds the motion defective for not including the information required by 18 C.F.R. § 385.214(b) (see Section 4.D.7). **Untimely** interventions are subject **entirely** to FERC’s discretion, and the unfortunate untimely would-be intervenor may not learn that their intervention was unsuccessful until the FERC order issues!

EVEN LANDOWNERS MUST INTERVENE TO PROTECT THEIR RIGHTS

Simply being an affected landowner **does not** grant party status—and to challenge a taking, you must be a party to the FERC action. So make sure to timely intervene! This is often more relevant in the context of a pipeline challenge, but the premise that landowners are not automatically made parties is true for terminals as well.

Intervenors also are added to the “Service List.” Intervenors on the Service List will receive the applicant’s filings, FERC documents related to the case, and materials filed by other interested parties. Note that non-intervenors may still file comments on the proposed project and subscribe to receive automatic notices of new filings in the FERC docket, but they do not have the right to request rehearing or to appeal certifications.

Also note that as a practical matter, the FERC docketing system occasionally experiences technical difficulties. While FERC has the discretion to consider untimely motions to intervene, an advocate

³²⁹ FERC has discretion to allow untimely interventions—and may be becoming more forgiving under Chairman Glick’s leadership—but advocates should never rely on FERC’s discretion to preserve their rights. Wilson, Miranda & Vasquez, Christian. “FERC meeting: Gas fights, EJ shifts and a ‘legal weapon.’” E&E News. (Jan. 21, 2022) <https://www.eenews.net/articles/ferc-meeting-gas-fights-ej-shifts-and-a-legal-weapon/>.

³³⁰ Giannetti, *Stifle Public Voice*, *supra* note 326; See 15 U.S.C. § 717f(h) (“When any holder of a certificate of public convenience and necessity cannot acquire by contract, or is unable to agree with the owner of property to the compensation to be paid for, the necessary right-of-way to construct, operate, and maintain a pipe line or pipe lines for the transportation of natural gas, and the necessary land or other property, in addition to right-of-way, for the location of compressor stations, pressure apparatus, or other stations or equipment necessary to the proper operation of such pipe line or pipe lines, **it may acquire the same by the exercise of the right of eminent domain.**”) (emphasis added). There are calls to make landowners automatic parties, but as of January 2022, that is not yet the case.

³³¹ FERC allows out-of-time motions to intervene, but these will not be granted unless good cause can be shown why the untimely intervention motion should be granted. See 18 C.F.R. § 385.214(b)(3).

should file a motion to intervene well before it is due, if possible. This avoids wasting resources fighting over procedural issues and ensures that an advocate’s intervention rights are preserved.³³² Do not wait until the last possible moment to intervene!

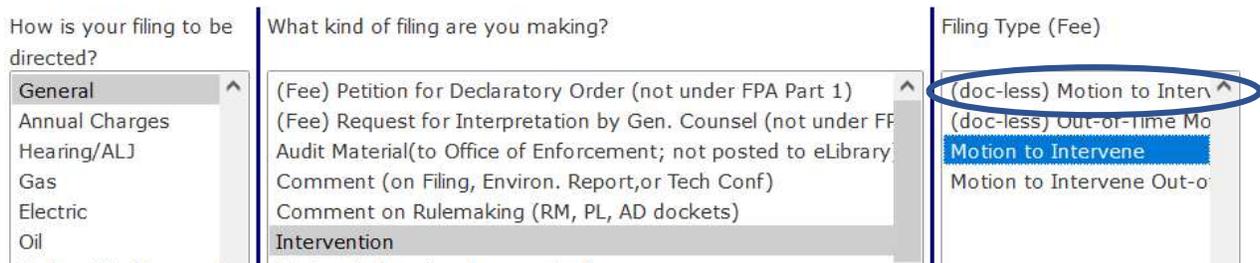
How do I intervene in the proceedings?

Intervention in a proceeding is fairly straightforward. FERC publishes a step-by-step guide with screenshots and detailed instructions on the mechanics of intervention here: <https://www.ferc.gov/how-intervene>. Though the steps are summarized below, please be aware that the procedures may change after this guide’s publication.

An intervention motion may be sent to FERC via the U.S. Postal Service, but FERC strongly suggests that such motion be filed through its online system. In general, once a would-be-intervenor has registered for FERC’s online system (eRegister here: <https://ferconline.ferc.gov/eRegistration.aspx>), a motion to intervene can be filled electronically through FERC’s eFiling system here: <https://ferconline.ferc.gov/eFiling.aspx>.

An intervention motion may be filed as “doc-less” or as a pdf by selecting the filing type below (the pdf option for a timely motion is highlighted below; for a doc-less timely motion the circled option should be selected).

Filing Type



Note that a doc-less motion does not allow you to include comments, attachments, or other requests—those can be filed separately. If you want to include comments or attachments, choose the pdf option highlighted above. A doc-less motion is the easiest (and therefore recommended) option for intervening because you do not need to prepare a separate document; you simply fill out a text box during the filing process with sufficient information to show intervenor status as required by FERC’s rules (see below).

The required contents of an intervention motion are specified at 18 C.F.R. § 385.214. A timely would-be-intervenor must state their position on the proceedings, identify why they have a right to participate, describe the interest that will be affected if the project is certified, and describe how their participation is in the public interest.³³³ The intervention motion need not present arguments or identify problems with the project or NEPA documents like one might include in comments—indeed, a simpler motion is often better, as the effort to create a detailed document could be better saved for the comments document. FERC’s guide to filing a doc-less intervention motion suggests

³³² Even if the overdue filing is the fault of FERC’s docketing system being offline, and not the advocate’s fault, it may be difficult to have overdue filings accepted. Out-of-time motions to intervene are sometimes accepted, but an advocate should avoid having to file out-of-time by filing as soon as the application is submitted.

³³³ 18 C.F.R. § 385.214(b).

including the following information (untimely motions will also need to show good cause under 18 C.F.R. § 385.214(b)(3) and (d)(1)).³³⁴

Document-less Intervention Description

Type in this box the reason you filing to intervene in a proceeding. It should include:

- Your status (for example are you a landowner, organization, party)
- Describe how the project has a direct or substantial interest to you or your organization and that the determination of the project may have an affect on you or your organization.
- Describe how filing for intervention will not allow you or your party to be represented adequately unless allowed to participate fully in the proceedings.
- Cite to the Commission’s regulations pursuant to Section 214, C.F.R. 385.214 to motion to intervene.
- Write full name or organization and contact information (address, email, phone number) that you are comfortable having in the public record.

Characters remaining:

For any issues regarding FERC Online, please contact [FERC Online Support](#) or call Local: 202-502-6652 | Toll-free: 866-208-3676. Please include a current mail address, telephone number, and e-mail address.

An example of a doc-less motion to intervene that was filled in the Jordan Cove challenge by the Center for Biological Diversity is attached in Appendix 5. A sample pdf intervention motion is provided in Appendix 6 (WELC’s pdf motion to intervene in the Jordan Cove case); it need not be a lengthy document (see also Appendix 7 (Sierra Club’s pdf motion to intervene in the Jordan Cove case)). An example of a pdf Jordan Cove intervention motion that was combined with comments is found in Appendix 4 (NRDC’s motion and comments during the DEIS comment period).

An intervention motion must be served on the applicant(s) and subsequent submissions by an intervenor must be served on all parties to the proceeding.³³⁵ “Service” means sending a copy of any document that you file to all other parties on the service list. For parties that have provided email addresses in FERC’s online system, service can be achieved by simply forwarding the “Acceptance for Filing” to each party’s email address. Alternatively, and for parties for which an email address is not provided, service can be achieved by mailing a copy of the filing to the party via first class mail. All filings must include a certificate of service, the format of which can be found in Rule 2010, 18 C.F.R. § 385.2010 (e). The Office of Public Participation may be a resource for any questions, otherwise consult with a legal practitioner to ensure that all proper steps in service have been made. Several “how-to” intervene questions are also answered on FERC’s FAQ page: <https://www.ferc.gov/frequently-asked-questions-faqs>.

³³⁴ “How to Intervene.” FERC. (Aug. 13, 2021). <https://www.ferc.gov/how-intervene>.

³³⁵ Contact information for parties can be downloaded from the service list at the eService link on FERC Online: <https://www.ferc.gov/docs-filing/ferconline.asp>.

When and why should I file comments?

If an issue wasn't raised by an advocate in the comment periods, usually it can't be raised in litigation.³³⁶ This "exhaustion" of issues requirement means that it is imperative that advocates raise all issues that might be future grounds for litigation in a timely manner during the comment periods, either as written comments or at official public comment meetings held by FERC.

NEPA regulations also establish certain requirements for the form and substance of comments. To ensure that FERC will respond to comments, an advocate should adhere as closely as possible to these requirements. In particular, comments on an environmental impact statement or on a proposed action should:³³⁷

- be specific;
- address either the adequacy of the statement or the merits of the alternatives discussed or both;
- provide as much detail as necessary to meaningfully and fully inform the agency of the commenter's position;
- explain why the issues raised are important to the consideration of potential environmental impacts and alternatives to the proposed action, as well as economic and employment impacts and other impacts affecting the quality of the human environment;
- reference the corresponding section or page number of the draft environmental impact statement, propose specific changes to those parts of the statement, where possible, and include or describe the data sources and methodologies supporting the proposed changes.

FERC accepts both scoping comments³³⁸ and "regular" comments³³⁹ during the pre-filing period. There is no requirement to file such "regular" comments during pre-filing. But an advocate might do so if the information the applicant has been providing to FERC in response to FERC's information requests is incorrect or incomplete. Any of these "regular" comments made during the pre-filing period that are not addressed by the applicant or FERC should be filed again once the application is filed; this demonstrates that the concerns raised during pre-filing remain. Comments and objections on the draft EIS should be raised within the comment period on the draft EIS provided by the agency, consistent with the 2020 version of 40 C.F.R. § 1506.11.³⁴⁰ The length of this comment period will be published in the docket once the draft EIS is available. If FERC also requests comments on the final EIS before the final decision (consistent with 40 C.F.R. § 1503.1(b) (2020)³⁴¹), comments and objections should be raised within the comment period provided by the agency. Even if FERC does

³³⁶ 40 C.F.R. § 1500.3(b); see also *id.* § 1503.3(a) ("Comments and objections of any kind not provided within the comment period(s) shall be considered unexhausted and forfeited, consistent with § 1500.3(b) of this chapter.") It **may** be possible to raise an issue in litigation that was only raised by someone else during the comment period, but you must have personally raised that issue during your rehearing request. Consult an experienced attorney to be sure.

³³⁷ 40 C.F.R. § 1503.3(a) (2020) (the bulleted list is almost verbatim from this section of CEQ's regulations). 40 C.F.R. § 1503.3 (1978) provided less specificity. On this topic, advocates are encouraged to follow the 2020 regulations until they are replaced.

³³⁸ *I.e.*, comments identifying issues that the environmental review should explore without necessarily taking a position on whether the proposed action is good or bad (see Section 4.C.9).

³³⁹ *I.e.*, comments that take a position on the proposed action or identifying substantive flaws in an environmental document, which are the vast majority of comments filed in any challenge covered in this guide. The qualifier "regular" is used in this section of the guide just for clarity.

³⁴⁰ In the 1978 regulations, timing was discussed in 40 C.F.R. § 1506.10 (1978) and is largely similar.

³⁴¹ The 1978 regulations are similar, see 40 C.F.R. § 1503.1 (1978); but does not include the requirement that comments can be submitted electronically "with reasonable measures to ensure the comment process is accessible to affected persons." 40 C.F.R. § 1503.1(c) (2020).

not request comments on the final EIS, an advocate should point out any issues that the final EIS has not resolved. Note that you are not limited to commenting on an EIS and its sufficiency under NEPA—you can and should challenge anything that is concerning about the project, even if it falls outside NEPA’s bounds.

If you miss the comment deadline, or additional information comes to light after the comment deadline, it is important to file those comments anyway. FERC has in the past exercised its discretion to consider some overdue comments and informs applicants that it does its best to consider all comments submitted, so an advocate that inadvertently misses a deadline for comment should file as soon as possible.

How do I file comments?

There are four possible ways to file comments. For lengthy comments, the second method is recommended.

1. You can file your comments electronically using the eComment feature on FERC’s website (www.ferc.gov) under the link to Documents and Filings. The eComment system can also be found at FERC Online through this link: <https://ferconline.ferc.gov/QuickComment.aspx>. This is an easy method for submitting brief, text-only comments on the Project. This system cannot accept comments in pdf format or with graphics, however.
2. For comments that are not simply text, you can file your comments electronically using the eFiling feature on the Commission’s website (www.ferc.gov) under the link to Documents and Filings. The eFiling system can also be found at FERC Online through this link: <https://ferconline.ferc.gov/eFiling.aspx>. With eFiling, you can provide comments in a variety of formats by attaching them as a file with your submission. New eFiling users must first create an account by clicking on eRegister on FERC Online. Once you are registered and begin the eFiling process, make the following selections so that your comment is properly received:

Filing Type

How is your filing to be directed?	What kind of filing are you making?	Filing Type (Fee)
<ul style="list-style-type: none"> General Annual Charges Hearing/ALJ Gas Electric Oil 	<ul style="list-style-type: none"> (Fee) Petition for Declaratory Order (not under FPA Part 1) (Fee) Request for Interpretation by Gen. Counsel (not under FP) Audit Material(to Office of Enforcement; not posted to eLibrary) Comment (on Filing, Environ. Report, or Tech Conf) Comment on Rulemaking (RM, PL, AD dockets) Intervention 	<ul style="list-style-type: none"> Comment

3. You can file a paper copy of your comments by mailing. Be sure to reference the Project docket number and then send to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426.
4. You can attend a public meeting and give oral comments, which will be transcribed by a court reporter and made part of the official record.

Note that FERC encourages commentors who are having difficulty with filing to reach out to FERC staff at (866) 208-3676 or FercOnlineSupport@ferc.gov. The Office of Public Participation may also be able to provide help if it is not too close to the filing deadline for comments.

How do I file a request for rehearing?

Filing a request for rehearing is done through the same online eFiling portal as filing a motion to intervene or a comment. As discussed in Section 4.C.19, a request for rehearing must be filed before

Filing Type

How is your filing to be directed?	What kind of filing are you making?	Filing Type (Fee)
<ul style="list-style-type: none"> General Annual Charges Hearing/ALJ Gas Electric 	<ul style="list-style-type: none"> Motion (other than Intervention) Petition for Declaratory Order under FPA Part 1 Protest Request for Interpretation by Gen. Counsel under FPA Part 1 Request for Rehearing 	<ul style="list-style-type: none"> Request for Rehearing

an advocate can file a lawsuit challenging the certification—and an advocate must have timely intervened in order to request rehearing (see Section 4.D.6). A request for rehearing can be filed electronically through FERC’s eFiling system here: <https://ferconline.ferc.gov/eFiling.aspx> and by selecting the filing types as follows:

What major issues should I look for and raise in comments?

Although each facility is different and there is no substitute for a thorough investigation of the project and a deep-dive reading of the filings and environmental documents, there are many similar issues that recur across projects. The following section highlights some of these issues, as well as some of logistical and substantive point to keep in mind when commenting.

First, NEPA requires that FERC take a “**hard look**” at the impacts of a project.³⁴² This is more than a cursory recitation of the impacts. If it seems that FERC has not really analyzed the impacts of a project, including the best available science, point this out in comments as FERC failing in its duties to take a “hard look” at the project. When commenting, it makes sense to raise every issue that an agency should have considered but didn’t; however, keep in mind that NEPA regulations state that “minor, non-substantive errors that have no effect on agency decision making shall be considered harmless and shall not invalidate an agency action.”³⁴³ This rule comes into play more during litigation, but is a good reminder that advocates should focus on the biggest and most obvious flaws in FERC’s analysis.

The typical way the NGA can be leveraged in comments is through its requirement that the project (both the terminal and pipeline) be in the **public interest** and be **needed** (for the pipeline). Question whether FERC can find that a project be in the public interest without considering the environmental harms of a project. If FERC does not clearly consider these harms before making its public-interest finding under NGA, point this out. Arguments about whether a pipeline is needed is beyond the scope

³⁴² The purpose of the EIS is to “force[] the agency to take a ‘hard look’ at the environmental consequences of its actions, including alternatives to its proposed course,” and to “ensure[] that these environmental consequences, and the agency’s consideration of them, are disclosed to the public.” *Sierra Club v. FERC*, 867 F.3d 1357, 1367 (D.C. Cir. 2017).

³⁴³ 40 C.F.R. 1500.3(d).

of this guide but can be found in challenges brought on rehearing against Jordan Cove (App. 8), Rio Grande LNG (App. 9), and any other project involving a pipeline.

Don't forget that you can raise issues beyond NEPA and the NGA. Is there some other federal law that might be violated, especially one another agency is responsible for? Raise those issues too.

Also, anywhere FERC relies on a plan, report or study that has not been publicly released, that is a place to highlight FERC's failure to allow meaningful public participation (a requirement under NEPA) and evidence that FERC has not conducted a fulsome review of the public interest (a requirement under the NGA). FERC should disclose which reports and studies have not been released prior to its Certificate order; if not mentioned elsewhere, this should at least be clear from the "Environmental Conditions" appendix to the Order.

As for **logistical matters**, all evidence and studies must be attached as exhibits to the comments. Do not rely on a URL citation; that link may be defunct by the time FERC and a review court examines the documents. When possible, mimic the font and styling that FERC and the applicant use in submitting comments (typically Times New Roman, 12 pt). Do not underestimate the subliminal forces at play when agencies and courts decide how much weight to accord advocate arguments.

Advocates will need to rely heavily on the draft and final environmental documents when commenting. But that should not be the only place advocates look to understand the project's potential impacts. Talk to community members and organizers to identify issues. Research online to see what the applicant has said about the project. Look at statements the applicant makes to investors. Check what the applicant has said in filings with other agencies. Investigate all the actors. Who is receiving the gas? What have they been told? Where is the gas coming from? Does FERC know about that? Independent and in-depth research at the beginning can help formulate solid scoping comments for FERC to request more information from the applicant and can help illuminate flaws in the assumptions underlying the agency's environmental impact assessment.

Some of the **substantive issues** to raise in comments fall into the categories set out in the resource reports and in the EIS documents (see Sections 4.B.4 and 4.C.6), but some are overarching issues that might be more easily addressed in their own section. The following sections address all of these:

- project purpose;
- reasonable alternatives;
- mitigation measures;
- public interest;
- geological resources;
- soils and sediments;
- water resources and wetlands;
- vegetation;
- wildlife and aquatic resources;
- threatened, endangered and other special status species;
- land use;
- recreation and visual resources;
- socioeconomics;
- environmental justice;
- transportation;
- cultural resources;
- air quality and noise;
- climate change;
- reliability and safety;
- new and changed circumstances

In addition, in each of the following sections, experts are suggested when appropriate.

PRACTICE TIP: EXPERTS FOR THE FERC CHALLENGE

Experts can be very helpful in drafting and supporting comments. In particular, consider identifying and retaining the help of these experts for your FERC challenge as soon as possible:

- Economics expert to review the socioeconomic sections of environmental documents (including industry’s effects on job creation and real property values); ideally this person will have experience as an ecological economist, to quantify the lost value from replacing wetlands and other natural areas with industry;
- Air quality expert with experience in air modeling, especially in modelling coastal regions, as the ocean often impacts the air flow and currents that disperse pollutants in a different manner than if the project was located inland.

If funds permit, also consider:

- An industrial safety expert knowledgeable in reliability and safety issues related to vessels as well as terrestrial industrial sites;
- A wetlands delineation expert that can help identify wetlands on site and impacts to those ecological systems. This expert would also be useful in challenging Corps permits.

Project purpose

An EIS must “briefly specify the underlying purpose and need for the proposed action.”³⁴⁴ When authorizing a project like an LNG terminal, CEQ’s 2020 regulations directed agencies to “base the purpose and need on the goals of the applicant and the agency’s authority”—a rigid requirement that should be removed in the rewrite of regulations.³⁴⁵ Getting the purpose and need statement right is critical to ensuring a legally sufficient environmental analysis under NEPA, as the purpose and need statement dictates the range of “reasonable” alternatives that an agency must consider.³⁴⁶

The project purpose should be recited in the introductory sections of the DEIS, EIS, and Certificate Order. Other agencies typically defer to FERC’s interpretation of a project’s purpose, which in turn defers to the applicant. If that appears to be the case, scrutinize the project purpose. If FERC has not done its own assessment of the project purpose (which it historically has not done), that can be an error for failing to take a “hard look” at this aspect of NEPA. If FERC defines (or accepts) a project definition that is so narrow as to render the project a foregone conclusion under NEPA, that also is an

³⁴⁴ 40 C.F.R. § 1502.13 (2020). The 1978 regulations clarified that defining the purpose was for the alternatives analysis—the 2020 regulations omitted this language. See 40 C.F.R. § 1502.13 (1978).

³⁴⁵ 40 C.F.R. § 1502.13. The 2020 regulations directed agencies to base the purpose and need on the applicant’s goals and agency’s authority; this directive is omitted from the 1978 regulations, which left more discretion to the agency to define purpose. 40 C.F.R. § 1502.13 (1978). The Biden Administration has indicated that it will return to the 1978 version and not hamper agencies in defining a project’s purpose. “CEQ Proposes to Restore Basic Community Safeguards during Federal Environmental Reviews.” White House Press Release. (Oct. 6, 2021) <https://www.whitehouse.gov/ceq/news-updates/2021/10/06/ceq-proposes-to-restore-basic-community-safeguards-during-federal-environmental-reviews/>.

³⁴⁶ *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991).

error. A too-narrow definition transforms the alternatives analysis into a “check the box” exercise, instead of a thoughtful and meaningful review as NEPA requires.

There is a lot of caselaw about project purpose under NEPA. For advocates who are submitting comments and are not yet in litigation, it can be helpful to review the comments other advocates have made about project purpose, even if the facility is in a different part of the country (with a different circuit court).³⁴⁷ Arguments about project purpose made during litigation should be drafted in conjunction with an attorney experienced in litigating NEPA issues.

Reasonable alternatives (18 C.F.R. 380.12(l), Resource Report 10))

Identification of a project’s purpose is centrally relevant to the array of potential that FERC must consider in its reasonable alternatives analysis. Under CEQ’s 1978 regulations, NEPA requires agencies to “[r]igorously explore and objectively evaluate all reasonable alternatives,” including “the alternative of no action.”³⁴⁸ CEQ’s 1978 regulations stated that the alternatives analysis “is the heart” of an EIS, and “should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.”³⁴⁹ This language is omitted in the 2020 version, which allows for a less rigorous alternatives analysis, but the Biden Administration has indicated that it plans on restoring NEPA’s alternatives analysis to what it was in the 1978 regulations.³⁵⁰ Unless an attorney informs them otherwise, advocates should be on solid legal ground using the 1978 language until revised regulations are released.

NEPA requires a “detailed statement” of “alternatives to the proposed action.”³⁵¹ The purpose of this section is “to insist that no major federal project should be undertaken without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means.”³⁵² Even if an alternative wouldn’t fall within FERC’s jurisdiction, under the 1978 regulations it may need to be considered if it is reasonable.³⁵³

In the past, FERC has used three criteria to guide its alternatives analysis: (1) whether an alternative meets the stated purpose of the project; (2) whether an alternative is technically and economically feasible and practical; and (3) whether an alternative offers a “significant environmental advantage” over the proposed action.³⁵⁴ If FERC has improperly defined the project purpose, it will necessarily have not conducted a reasonable alternatives analysis.

³⁴⁷ E.g., see App. 8 (Jordan Cove Rehearing Request) at 46-48 (describing project purpose).

³⁴⁸ 40 C.F.R. § 1502.14 (1978).

³⁴⁹ 40 C.F.R. § 1502.14 (1978).

³⁵⁰ “CEQ Proposes to Restore Basic Community Safeguards during Federal Environmental Reviews.” White House Press Release. (Oct. 6, 2021) <https://www.whitehouse.gov/ceq/news-updates/2021/10/06/ceq-proposes-to-restore-basic-community-safeguards-during-federal-environmental-reviews/>.

³⁵¹ 42 U.S.C. § 4332(2)(c).

³⁵² *Env’tl. Def. Fund v. U.S. Corps of Eng’rs*, 492 F.2d 1123, 1135 (5th Cir. 1974); see also *Calvert Cliffs’ Coordinating Comm., Inc. v. U.S. Atomic Energy Comm’n*, 449 F.2d 1109, 1114 (D.C. Cir. 1971) (the alternatives requirement “seeks to ensure that each agency decision maker has before him and takes into proper account all possible approaches to a particular project (including total abandonment of the project) which would alter the environmental impact”).

³⁵³ 40 C.F.R. § 1502.14(c) (1978). The 2020 regulations omitted this requirement, but it could be reincorporated in the rewrite.

³⁵⁴ This three-factor evaluation criteria is recited in FERC’s EIS documents as guiding the alternatives analysis. See, e.g., Gulf LNG Liquefaction Project FEIS, 3-1 (April 2019) <https://www.energy.gov/sites/prod/files/2019/04/f62/final-eis-0504-gulf-lng-2019-04-chps-3-5.pdf>.

Another issue that may arise related to project purpose and reasonable alternatives is when the applicant changes the proposed project in a way that conflicts with its previous definition of the project's purpose. This was an issue with the Rio Grande LNG project, which had defined its purpose to include exporting a specific quantity of LNG. Right before the project was certified, the applicant revealed that it could build a smaller facility and still fulfill that purpose.³⁵⁵ Advocates argued that this late change showed that FERC should have considered the option of building a smaller facility in its reasonable alternatives analysis, just as advocates had previously argued.

Also consider whether there are alternatives that FERC has not considered; at the macro level: e.g., to project location, size, type of project; or at the micro-level: different mitigation options, construction and operation methods, or electricity sources that could minimize adverse effects. Alternatives should be discussed and considered in each section of the environmental documents discussing impacts to resources—if not, that is a valid issue to raise in comments.

Also examine whether FERC has compared the project to a true “no-action” alternative. A no-action alternative “allows policymakers and the public to compare the environmental consequences of the **status quo** to the consequences of the proposed action.”³⁵⁶ When an agency evaluates a proposal, “‘no action’ . . . mean[s] the proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward.”³⁵⁷ If instead FERC assumes that in the no-action alternative some other company would build an export terminal to export the gas—an assumption FERC has historically made as a matter of course—that is contrary to NEPA and something an advocate should point out.

For an example of robust comments on reasonable alternatives, see Appendix 8b (Alaska LNG Rehearing Request) at 30-42; Appendix 8 (Jordan Cove Rehearing Request) at 46-56.

Mitigation measures

If the environmental documents do not discuss the necessary and appropriate mitigation measures for the impacts expected on each resource, that is an issue that should be raised in comments. CEQ's NEPA guidance requires an EIS to consider mitigation for all project impacts:

The mitigation measures discussed in an EIS must cover the range of impacts of the proposal. The measures must include such things as design alternatives that would decrease pollution emissions, construction impacts, esthetic intrusion, as well as relocation assistance, possible land use controls that could be enacted, and other possible efforts. Mitigation measures must be considered even for impacts that by themselves would not be considered “significant.” Once the proposal itself is considered as a whole to have significant effects, all of its specific effects on the environment (whether or not “significant”) must be considered, and mitigation measures must be developed where it is feasible to do so.³⁵⁸

³⁵⁵ See App. 9 (Rio Grande LNG Rehearing Request) at 11-13.

³⁵⁶ *Ctr. for Biological Diversity v. U.S. Dep't of the Interior*, 623 F.3d 633, 642 (9th Cir. 2010).

³⁵⁷ 46 Fed. Reg. 18,026, 18,027 (Mar. 23, 1981). (available at <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>).

³⁵⁸ 46 Fed. Reg. 18,026, 18,031 (Mar. 23, 1981) (emphasis added) (available online at <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>).

FERC also has an obligation to consider mitigation under the Natural Gas Act. The NGA authorizes the Commission to approve applications for LNG terminals “in whole or part, with such modifications and upon such terms and conditions as the Commission find necessary or appropriate.”³⁵⁹

Mitigation measures that can be proposed in an EIS will depend on the resource impacted but could include protecting habitat and wetlands in another location to compensate for permanent damage to resources at the project site. They could include using construction and operation methods to reduce harm to local wildlife populations, including scheduling construction around nesting season, installing sound barriers, and reducing light pollution at night. They could also involve lowering the speed limit for vessels in the channel, to reduce potential collisions with other vessels and animals. Mitigation could also be financial assistance to local communities and businesses that would be impacted. Advocates are encouraged to be creative when thinking about the range of potential mitigation measures and the inadequacy of mitigation measures proposed by the applicant or FERC.

Keep mitigation in mind when reviewing each impact described in the environmental documents. Are there potential mitigation measures not considered? Which community groups and experts should have been consulted about mitigation and its feasibility but weren't? Are some of those considered or required infeasible or otherwise flawed, perhaps based on site-specific conditions? Has FERC acted arbitrarily and capriciously in requiring mitigation in some circumstances but not others, either as compared to other similar projects, or by providing less or no analysis in rejecting some mitigation measures for the project but not other measures? All of these points can and should be raised in comments.

Note that in late 2021 and into 2022, FERC has been examining how it can both quantify the direct and indirect greenhouse gas emissions resulting from a project proposed under section 3 or 7 of the Natural Gas Act and identify the appropriate level of mitigation for such emissions. On November 19, 2021, FERC held a technical conference to explore methods, approaches, and legal authority for incorporating climate mitigation requirements into orders authorizing LNG projects.³⁶⁰

PIPELINES MUST BE IN THE PUBLIC INTEREST, TOO!

Under Section 3 of the NGA, FERC is supposed to authorize a terminal unless it finds that the terminal “will not be consistent with the public interest.” Under Section 7 of the NGA, FERC is supposed to only authorize a pipeline if it finds that the pipeline is “required by the present or future public convenience **and** necessity; otherwise such application shall be denied.” Both analyses require FERC to balance the public benefits of a project against the adverse consequences; with respect to Section 7, FERC must **additionally** analyze whether the project is “needed.” So don't leave out public-interest arguments about the pipeline!

³⁵⁹ 15 U.S.C. § 717b(e)(3)(A).

³⁶⁰ “*Technical Conference on Greenhouse Gas Mitigation: Natural Gas Act Sections 3 and 7 Authorizations; Notice Inviting Technical Conference Comments.*” 86 FR 66,293 (Nov. 22, 2021) <https://www.federalregister.gov/documents/2021/11/22/2021-25403/technical-conference-on-greenhouse-gas-mitigation-natural-gas-act-sections-3-and-7-authorizations> (seeking comments after the conference). Filings related to this topic can be found under Docket PL21-3-000.

Public interest (NGA argument)

Another issue that may be relevant comes from FERC’s obligations under the Natural Gas Act, not NEPA. Section 3 of the NGA requires that FERC conduct a public interest analysis of a proposed export terminal. (A similar review is required for pipelines, but under Section 7 of the NGA, which has slightly different requirements, as described in Section 4.B.1.) FERC often fails to weigh environmental effects in its public interest review (especially when it comes to a project’s climate effects). This responsibility to weigh environmental and climate impacts is separate and apart from FERC’s NEPA obligations; as NRDC and other advocates explained in the rehearing request for the Jordan Cove terminal and related pipeline:

FERC’s obligation to review an LNG export terminal project’s consistency with the public interest necessarily requires a consideration of “all factors bearing on the public interest”³⁶¹ that “reasonably relate to the purposes for which FERC was given certificate authority,”³⁶² i.e., public interest factors that relate to the building and operation of an LNG terminal.³⁶³ Just as with a pipeline, environmental effects related to an LNG terminal’s construction and operation are unquestionably within that review.

Review the section of the Certificate Order that discusses whether the project is in the public interest. If FERC’s analysis does not include the project impacts that it identified in the EIS documents (e.g., effects on wildlife, aquatic resources, climate), this is an issue that could be raised.³⁶⁴

Geological resources (18 C.F.R. 380.12(h), Resource Report 6);

The EIS should include a summary of the geotechnical investigations, soil conditions, and proposed foundation design as well as impacts related to geological resources. Impacts to geological resources can take the form of: impacts to mineral resources and aquifers; changing topographical contours from leveling the aboveground site and dredging; impacts from hurricanes, tornados, and storm surges; earthquake and tectonics; geomagnetic disturbances; and any other site-specific impacts.

Because they are largely aboveground, LNG terminals are unlikely to have impacts on underground mineral resources. Depending on the porosity of the soils, connectivity to surface waters, and depth of the aquifer, a terminal conceivably could have impacts to an aquifer (e.g., in the case of spills)—this could be a good scoping question if it is not clear where the aquifers are. Changing contours of the landscape conceivably also could have impacts to the local watershed or create a landslide danger.

PRACTICE TIP: SOILS AND PIPELINES

Soil and sediment impacts may be a bigger concern for the pipeline portion of the project, as more excavation may be taking place. Soils may be disturbed at water crossings and by access roads built to access remote pipeline locations. The construction and placement of pipelines can also damage shallow aquifers, destroy valuable farmland, and erode soils.

³⁶¹ *Atl. Refining Co. v. Pub. Serv. Comm’n of N.Y.*, 360 U.S. 378, 391 (1959).

³⁶² *Office of Consumers’ Council v. FERC*, 655 F.2d 1132, 1147 (D.C. Circ. 1980).

³⁶³ App. 8 (Jordan Cove Rehearing Request) at 38-39.

³⁶⁴ See App. 8 (Jordan Cove Rehearing Request) at 38-43 (demonstrating how such an argument might be phrased).

But the biggest geological concern for terminals located on the Gulf Coast is likely hurricanes and storm surges. Most applicants will recognize this and have mitigation proposals in the environmental documents. However, it can be useful to ask for information on and examine the assumptions that an applicant has used to predict hurricane frequency and maximum wind strength and storm surges. The facility must be designed with climate change in mind; predictions based on the historical record run the risk of dramatically underestimating dangers from storms. Here, it can be useful to cite hurricane and storm damage that other industrial facilities have sustained in the area. Hurricanes and associated winds or wind-borne debris can damage or destroy aboveground structures or dislodge LNG tankers from their docking berths, causing LNG spills.³⁶⁵ Often, the facility must follow specific design assumptions as described in the Pipeline and Hazardous Materials Safety Administration's regulations (see 49 C.F.R. Part 193 et seq.). In other words, comments related to geological resources may also apply to comments on safety and reliability.

Soils and sediments (18 C.F.R. 380.12(i), Resource Report 7);

Though LNG challengers have not previously expressed many comments or concerns regarding impacts on soils and sediments, it is possible that a specific project may have such impacts. For example, advocates challenging Alaska LNG raised the concern that FERC had not taken a sufficiently "hard look" at how soil disturbance and the accumulation of dust from construction activities and road construction on the permafrost could alter its freeze-thaw cycles, permanently changing the hydrology and geomorphology near the project.³⁶⁶ Other soils may be more vulnerable to wind or water erosion or compaction, or have differing revegetation potential. Each site is different.

In general, soils and sediments can be affected during the construction and operation of an LNG terminal. Without proper shore stabilization, runoff can increase, potentially affecting the ability of coastal areas to withstand storms and hold nutrients. Runoff can also degrade water quality by increasing turbidity and decreasing dissolved oxygen (see Section 4.E.7). Fill dirt may be needed for construction as well; is it clear where the fill will come from, if and how the fill will be tested for contaminants, how the fill will be stored and how the potential for runoff will be reduced? Also consider whether the soil onsite might be difficult to excavate; for the Alaska LNG project, FERC recognized that blasting may be needed for site development, which could deposit flyrock outside of the excavated area, accumulating to "create a layer of fill on top of wetlands, crush vegetation, cover existing soils, and diminish water storage capacity."³⁶⁷

To better understand the potential soil impacts, make sure to include this issue in scoping comments. Filing scoping comments can spur FERC to seek more information from the applicant, which can illuminate some of the potential concerns. The EIS documents should summarize the geotechnical investigations on site, which will include details as to soil type and foundation design.³⁶⁸ Another way to investigate potential soil and sediment impacts is to talk to a geologist with expertise in the local conditions and research the soil impacts that other nearby industrial and commercial

³⁶⁵ Texas LNG FEIS (March 2019) at 4-206 <https://www.energy.gov/sites/prod/files/2019/03/f60/final-eis-0520-texas-Ing-2019-03-volume-1.pdf> (describing an incident in which severe winds dislodged an LNG carrier from its berth, damaging the carrier, loading arms, and shore piping, and causing a LNG spill that fractured other equipment). See also *id.* at 4-237 - 4-245 (describing the hurricane analysis and other natural hazards)

³⁶⁶ See App. 8 (Center for Biological Diversity's Request for Rehearing in Alaska LNG), at 100-01, 106-07.

³⁶⁷ App. 8 (Center for Biological Diversity's Request for Rehearing in Alaska LNG), at 106 (quoting the FEIS).

³⁶⁸ See e.g., Texas LNG FEIS (Mar. 2019) at 4-234 - 4-238. <https://www.energy.gov/sites/prod/files/2019/03/f60/final-eis-0520-texas-Ing-2019-03-volume-1.pdf>.

facilities have been asked to address and any adverse soil impacts from the operation of those facilities.

Water resources and wetlands (18 C.F.R. 380.12(d), Resource Report 2)

Although the Army Corps of Engineers is the federal agency that issues permits to applicants for impacts to water resources and wetlands, FERC has an independent duty to analyze and present for public comment the impacts to waters and wetlands from the proposed project and its alternatives. Advocates commenting on these resources are encouraged to review Chapter 6 Section B.9, which identifies issues to raise on water and wetlands impacts. Recommended experts are identified in Section 6.B.10. This section here simply recaps some important points to consider and be aware of:

- Is there sufficient support in the NEPA documents for the Corps permits?

FERC's NEPA analysis of water resources and wetlands is tied to the permits that the Corps issues. The Corps is responsible for issuing permits for the activities that involve impacts to navigable waters (section 10), waters of the United States (from dredge and fill activities, section 404), the ocean (from dumping of dredge and fill, section 103) and other pre-existing Corps projects (section 408). (See Chapter 6). As part of its own permitting process, the Corps must ensure that NEPA is complied with—it either may issue its own EIS/EA documents or, more typically, relies on FERC's environmental review documents (the DEIS and FEIS) to satisfy its own requirements.

If the Corps relies on FERC's NEPA review instead of conducting its own, FERC's NEPA analysis must provide sufficient analysis and factual support to support the Corps permits—in other words, it must be able to support the analyses required by the Corps' own guidelines, such as the Corps' public interest review (which applies to section 404, section 10, and section 103 permits) and compliance with the 404(b)(1) Guidelines (for a 404 permit). The EIS must show how impacts to the aquatic ecosystem have been avoided, minimized, and compensated for. The EIS must assess the practicability of the proposed action and alternatives, otherwise the Corps must conduct an independent analysis. It must show that the activities permitted by the Corps do not impermissibly impact water quality and endangered species. The EIS or the Corps' own analysis must satisfy the following, that: “[t]he Corps' responsibility under NEPA to consider the environmental consequences of a permit extends even to environmental effects with no impact on jurisdictional waters at all.”³⁶⁹ And it must address the public interest factors as required by the Corps' public interest review.

LNG-SPECIFIC ACTIVITIES TO SCRUTINIZE

Pile-driving—a process by which the LNG terminal's deep foundations are installed—and dredging are two activities that damage water resources (as well as wildlife). Both dislodge a lot of dirt and sediment, increasing the turbidity and lowering the dissolved oxygen content in the water. The decreased water quality can kill aquatic species and disrupt their life cycles. A lot of research is available online as to these impacts and appropriate mitigation—research that can be brought to FERC's attention by attaching the studies to comments.

³⁶⁹ *Save our Sonoran v. Flowers*, 408 F.3d 1113, 1122 (9th Cir. 2005).

- Are there discrepancies between the documents the applicant publishes with FERC and the Corps? Advocates challenging Alaska LNG noticed that FERC and the Corps were told that different quantities of wetlands would be impacted—by at least 1,300 acres. No apparent reason was given for this discrepancy, leaving open an arbitrary-and-capricious argument for advocates.³⁷⁰
- Have all of the mitigation plans been made public before certification? (Often this simply does not happen). If plans are available, is the mitigation proposed actually mitigation of not-already-protected wetlands? For the Rio Grande project, the applicant had proposed “preserving” land already within an ecological preserve—some of which was not even wetlands.³⁷¹

This is an area in which two birds may be addressed with one stone—analysis and experts used to address this section of the FERC challenge may also be used in the challenge with the Corps. For examples of comments about FERC’s analysis of wetland impacts, see Appendix 8b (Alaska LNG Rehearing Request) at 101-07; Appendix 10 (Rio Grande DEIS Comments) at 60-63;

Vegetation (18 C.F.R. 380.12(e), Resource Report 3)

Vegetation information that the environmental documents should discuss include the acreage of vegetation cover types that would be affected, including unique ecosystems or communities such as remnant prairie or old-growth forest, or significant individual plants, such as old-growth specimen trees.³⁷² Impacts to biodiversity of vegetation should also be explored, as well as aboveground and underwater vegetation.

This is an area in which consulting agencies play a large role—and FERC is required to provide copies of its correspondence with these agencies to the public as well as the applicant’s responses to the agencies’ recommendations.³⁷³ Review all agency opinions and correspondence—it may be that disagreements exist between agencies, which would be persuasive if highlighted for a reviewing court. Impacts to vegetation outside of wetlands have not been as closely scrutinized by advocates as impacts in other areas. Impacts to non-wetlands vegetation also can also be greater with pipeline projects than with the terminal itself. Don’t forget that plants can be endangered or protected species as well—if so, the Endangered Species Act would apply.³⁷⁴ In addition, if unique vegetation exists on site that would be difficult or impossible to replace once destroyed (or provides critical habitat to wildlife), that may be support for a court to issue a preliminary injunction that would prohibit any construction to take place pending an appeal.³⁷⁵

Wildlife and aquatic resources (18 C.F.R. 380.12(e), Resource Report 3)

FERC must also take a hard look at impacts to wildlife and aquatic resources (impacts to endangered or threatened species are addressed in Section 4.E.10). Consulting agencies for wildlife impacts may include the Fish and Wildlife Service, the National Marine Fisheries Service, the Forest Service, the Bureau of Land Management, and state wildlife agencies.

³⁷⁰ App. 8 (Alaska LNG Rehearing Request) at 104-07.

³⁷¹ App. 9 (Rio Grande DEIS Comments) at 61-63.

³⁷² 18 C.F.R. 380.12(e)(3).

³⁷³ 18 C.F.R. 380.12(e)(5) & (8).

³⁷⁴ U.S. Forest Service, “Laws and Regulations to Protect Endangered Plants,”

https://www.fs.fed.us/wildflowers/Rare_Plants/conservation/lawsandregulations.shtml (last visited 3/31/22).

³⁷⁵ See *Idaho Sporting Cong. Inc. v. Alexander*, 222 F.3d 562, 569 (9th Cir. 2000) (finding injunctive relief appropriate where “old growth forests plaintiffs seek to protect would, if cut, take hundreds of years to reproduce”).

As a first step, identify species in the area that would be sensitive to the construction and operation of a large industrial facility and associated boat traffic to see if FERC and the consulting agencies have overlooked any. Consider what species may be impacted by construction, elimination or alteration of habitat, pollution (air, water, and soil), light, noise (aboveground and underwater), and vessel / vehicle strikes (from tankers and supporting vessels, like tugboats, and increased truck and employee traffic). If the facility will bring increased human presence or traffic to the area, are there species that will be threatened by increased interactions with humans (e.g., humans feeling endangered by big cats or bears, and thus proactively killing more of them)? Construction—vibrations from pile driving, habitat destruction—can affect both terrestrial and aquatic species, as can night lighting.

Identifying species can be done by talking to conservation organizations, scientists, and community members and other familiar with wildlife the area (such as birders, whale-watchers, outdoor enthusiasts, hunters, fishermen, shrimpers). State and federal wildlife agencies should compile lists of species in or that migrate through the area, including those that are threatened, endangered, or have some other special status. If there is a wildlife refuge nearby (either terrestrial or marine) there should be documentation online about the species the refuge is designed to protect—or reach out to the stewards of these areas and interview them directly. If there is a local natural history museum in the area, that could be a good resource as well, especially for insects, amphibians, and macroinvertebrates³⁷⁶ that might go unnoticed by recreational and commercial users of the area. Indicator species like these can also be crucial because they may form the backbone of an ecosystem.

Don't forget to consider the flora as well—coastal and marine areas host a variety of sensitive plants that the entire ecosystem depends on. The Corps' districts' websites should have detailed information about the type of sensitive aquatic resources that are found in the area.³⁷⁷ But don't rely on the Corps' information to identify aquatic species and flora in the area that are likely to experience harm—use all the resources described above to go beyond the Corps' databases. Some plant species that may be overlooked include lichen, which is very sensitive to air pollution,³⁷⁸ as well as Spanish moss. Disturbed soils also can provide breeding grounds for invasive species to outcompete native species,³⁷⁹ and any herbicide or pesticide use associated with the proposed project can permanently

³⁷⁶ Benthic macroinvertebrates are organisms that live underwater, lack a backbone, and can be seen by the naked eye. Semi-aquatic or aquatic species like these will be the ones that show the first negative effects from water pollution because of their porous skins and immersion in potentially contaminated water. E.g., crayfish are very sensitive to changes in water acidity. Daly, N. "These animals offer key clues for environmental change." National Geographic. (Sept. 17, 2021) <https://www.nationalgeographic.com/animals/article/these-animals-offer-key-clues-for-environmental-change>. Mollusks and pteropods (small sea snails and slugs) are also very vulnerable to ocean acidification. N. Bednaršek *et al.*, *Pteropods on the Edge: Cumulative Effects of Ocean Acidification, Warming, and Deoxygenation*, 145 PROGRESS IN OCEANOGRAPHY 1 (2016).

³⁷⁷ See, e.g., "Wetland Delineation Manual and Regional Supplement." Galveston District. <https://www.swg.usace.army.mil/Missions/Regulatory/Wetlands/Delineation-Manuals/>; see also the New Orleans District's wetlands materials: <https://www.mvn.usace.army.mil/Missions/Regulatory/Jurisdiction-Wetlands/> See also the Headquarters' Technical and Biological Information links: <https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/techbio/>.

³⁷⁸ "Lichen Bio-Monitoring Proposed." Sierra Club (Brandt Mannchen) Aug. 2, 2019. <https://www.sierraclub.org/texas/houston/blog/2019/08/lichen-bio-monitoring-proposed>. See also "Canaries in a Coal Mine: Using Lichens to Measure Nitrogen Pollution." Science Findings, USDA. March 2011. <https://www.fs.fed.us/pnw/science/scifi131.pdf>.

³⁷⁹ Invasive species may be naturally present, or hitch rides on construction equipment that is not sufficiently cleaned between sites.

affect both vegetation and wildlife. Habitat fragmentation is also a concern, although potentially more of an issue with pipelines.

There is no question that LNG terminals **will** harm wildlife—and documented evidence of impacts from terminals should be incorporated into advocate comments. For example, in 2013, over 7,500 migratory songbirds were killed when they flew too close to a flare at Canaport LNG, Canada’s first LNG terminal.³⁸⁰ To avoid this particular type of tragedy in the future, FERC’s certification should—at a minimum—require that the operator build a facility that minimizes flaring as much as possible, actively monitor bird-migration projections, plan maintenance activities during times that avoid peak migration and adverse weather conditions, use an auditory deterrent, and consider using enclosed ground flares as an alternative.³⁸¹ FERC’s responsibilities to assess impacts to migratory birds stems from the Migratory Bird Treaty Act—advocates challenging projects that impact birds are encouraged to do further research into FERC and FWS’s obligations to comply with that law.³⁸²

The analysis of cumulative impacts to wildlife and aquatic resources is also often inadequate. Look at FERC’s analysis of cumulative impacts and consider whether it has properly considered all likely sources of impacts to wildlife. It can be helpful to review both EIS documents and advocate comments filed in other terminal challenges to better understand the possible impacts to wildlife from LNG terminals.³⁸³

Threatened, endangered and other special status species

FERC’s regulations require that it ensure compliance with the Endangered Species Act.³⁸⁴ This means that FERC must consult with the federal agencies with expertise on endangered species—the Fish and Wildlife Service for terrestrial species and the National Marine Fisheries Service for marine species.³⁸⁵

- Biological Assessments

Typically, the consultation proceeds informally first: to determine whether there are listed species and critical habitat that may be affected by the proposed project. The result of the informal consultation is typically a biological assessment, which describes the listed species and critical habitat that may be affected, reports the results of the site surveys that were conducted to identify the species and habitat, analyzes the effects of the proposed project and the project alternatives on these species and habitat, and proposes mitigation that would eliminate or minimize these potential impacts.³⁸⁶ If it appears that listed species or critical habitat is likely to be adversely affected, then the agencies conduct formal consultation and the consulted agency must provide FERC a biological

³⁸⁰ Smith, Connell. “Canaport LNG pleads guilty in bird kill case.” CBC News (Nov. 5, 2015) <https://www.cbc.ca/news/canada/new-brunswick/irving-canaport-bird-kill-plea-1.3305351>. For more of the gruesome details, see Cave, Rachel. “‘You could see the carnage everywhere’: First responder remembers 2013 bird die-off” CBC News (Nov. 12, 2015) <https://www.cbc.ca/news/canada/new-brunswick/bird-kill-canaport-Ing-saint-john-2013-1.5353502>.

³⁸¹ See “‘You could see the carnage everywhere’: First responder remembers 2013 bird die-off” Rachel Cave, CBC News (Nov. 12, 2015) <https://www.cbc.ca/news/canada/new-brunswick/bird-kill-canaport-Ing-saint-john-2013-1.5353502> (describing the retrofits and changes to the facility’s operating procedures after the slaughter).

³⁸² See e.g., *Memorandum of Understanding Between the Federal Energy Regulatory Commission and the U.S. Department of the Interior United States Fish and Wildlife Service Regarding Implementation of Executive Order 13186, “Responsibilities of Federal Agencies to Protect Migratory Birds”* (March 30, 2011) <https://cms.ferc.gov/sites/default/files/2021-04/mou-fws.pdf>.

³⁸³ For example, the Jordan Cove LNG EIS documents (App. 3b (FEIS Part 2, 4-185 – 4-316)). See also App. 8 (Jordan Cove Rehearing Request), 75-87.

³⁸⁴ 18 C.F.R. 380.13.

³⁸⁵ 18 C.F.R. 380.13(b) & (d).

³⁸⁶ 18 C.F.R. 380.13(b)(5)(ii); see also 50 C.F.R. 402.12(f) (ESA regulation describing the contents of what a Biological Assessment may contain).

opinion within 45 days of the close of formal consultation.³⁸⁷ If a biological opinion is issued, an advocate should be sure to scrutinize it because that means even FERC and the consulting agency believe that listed species will be harmed by the proposed project.

- Biological Opinions

Flaws in the EIS's treatment of wildlife and aquatic resources may originate in the consulting agencies' "biological opinions"—official statements that the agencies must submit when the proposed project is likely to adversely impact a threatened, endangered or other special status species or if that species' critical habitat is threatened. Biological opinions may not be available until after FERC issues a certificate order, so substantive comments on these opinions may need to be made at the last minute, in the rehearing request, as advocates challenging Alaska LNG were forced to do.³⁸⁸ Before these opinions become available, advocates can comment generally about what these opinions should be based on and should find, as well as point out how meaningful public participation is impossible without these opinions being available early in the EIS process. And if FERC relies on a flawed biological opinion to certify, a court may find that it has violated the ESA in doing so and overturn the certificate order.³⁸⁹

Biological opinions must consider certain factors and be based on the "best available science."³⁹⁰ Read the opinion and research whether the agency has issued other reports or recovery / conservation plans on the same topic that contradict its opinion for this project. For example, in Alaska LNG, NMFS's recovery plan for beluga whales prioritized tugboat noise as among the most important "anthropogenic noise sources that could potentially interfere with recovery . . . based on signal characteristics and the spatio-temporal (space and time) acoustic footprint."³⁹¹ Advocates challenging that LNG facility looked to the academic literature and found additional studies not cited by NMFS showing how whales are even more adversely affected by noise than the agency's opinion represented.³⁹²

The biological opinion must also conduct a jeopardy analysis and, if relevant, a proper incidental take statement. The ESA requires the agency to aggregate the cumulative effects, environmental baseline, and proposed action in light of the status of the species to determine whether they collectively jeopardize the species' continued existence.³⁹³ Moreover, in conducting a jeopardy analysis, FWS and NMFS must consider the impacts of an action on both a species' survival **and**

³⁸⁷ 18 C.F.R. 380.13(d)(4).

³⁸⁸ See App. 8b, Center for Biological Diversity's Request for Rehearing for Alaska LNG, at 122.

³⁸⁹ See *Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 698 F.3d 1101, 1127-28 (9th Cir. 2012) ("an agency cannot meet its section 7 obligations by relying on a biological opinion that is legally flawed or by failing to discuss information that would undercut the opinion's conclusions"). Note that for most terminals, the Ninth Circuit is not controlling case law—the Fifth Circuit or D.C. Circuit will be, depending on where the case is brought. Thus, advocates in Texas and Louisiana filing a lawsuit in the Fifth Circuit would want to support their legal arguments with citations from the Fifth Circuit. (And vice versa for filing a lawsuit in the D.C. Circuit.)

³⁹⁰ The ESA requires the consultation process and the resulting biological opinion be based on "the best scientific and commercial data available." 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(g)(8).

³⁹¹ See App. 8b, Center for Biological Diversity Request for Rehearing in Alaska LNG, at 123 (quoting NMFS, Cook Inlet Beluga Whale Recovery Plan at III-11). See also *id.* at 132-33 (identifying factors and scientific information not considered in FWS's biological opinion on sea otters and polar bears, such as the FWS's stock assessment and other academic studies).

³⁹² See *id.* at 124.

³⁹³ See 50 C.F.R. §§ 402.02, 402.14(g)(4).

recovery.³⁹⁴ For an example of arguments related to this issue, see Appendix 8b, the Center for Biological Diversity and other advocate’s rehearing request in the Alaska LNG challenge.³⁹⁵

As for incidental take, the ESA requires that, if the agency’s biological opinion concludes that the action (or the implementation of reasonable and prudent alternatives) will not cause jeopardy, but that it is reasonably likely to result in the take³⁹⁶ of an endangered species, a FWS or NMFS biological opinion must include an incidental take statement (ITS). The ITS must specify the impact—*i.e.*, the amount or extent—of incidental taking that may occur.³⁹⁷ An ITS must also include “reasonable and prudent measures . . . necessary . . . to minimize such impact,”³⁹⁸ and must specify the permissible level of taking, “thus . . . serv[ing] as a check on the agency’s original decision that the incidental take of listed species resulting from the proposed action will not [jeopardize the continued existence of the species].”³⁹⁹ In the biological opinion drafted for Rio Grande LNG’s impacts on ocelots and jaguarundi, advocates argued in rehearing that the opinion failed to set a clear limit on how many animals could be taken—anywhere from one in total to one every twelve months!⁴⁰⁰

In addition, when the endangered species to be taken are marine mammals, the take must first be authorized pursuant to the Marine Mammal Protection Act (MMPA) and the ITS must include any additional measures necessary to comply with the MMPA take authorization.⁴⁰¹ For examples of how other advocates addressed flawed incidental take analyses, see Appendix 8b, Center for Biological Diversity and other advocate’s rehearing request in the Alaska LNG terminal.⁴⁰²

Land use (18 C.F.R. 380.12(j), Resource Report 8))

Land use is typically a larger issue for pipelines as opposed to export terminals, simply because of the difference in project footprint. A few land-use issues that can arise for terminals include:

- Coastal land use. Export terminals are typically sited in coastal zones, which require the state coastal agency to issue a “coastal consistency statement” (sometimes called a “coastal use permit”) verifying that the project does not conflict with the state’s Coastal Zone Management Plan. This consistency statement may not be issued until after FERC certifies the project. If that is the case, this would make FERC unable to fully weigh coastal impacts in its public interest analysis, which is required by the Natural Gas Act, and would mean that the public would not be fully informed as to the project’s impacts before a certification decision is made, contrary to NEPA. (Whether FERC or a reviewing court agrees that these are reasons to overturn a permit

³⁹⁴ See 50 C.F.R. § 402.02 (defining jeopardy); see also *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 524 F.3d 917, 931 (9th Cir. 2008) (confirming that “the jeopardy regulation requires NMFS to consider both recovery and survival impacts”).

³⁹⁵ See App. 8b, Center for Biological Diversity Request for Rehearing in Alaska LNG, at 127-31 (dissecting NMFS’s jeopardy analysis); *id.* at 133-35 (dissecting FWS’s jeopardy analysis).

³⁹⁶ Note that under the ESA, the word “take” means not only to kill wildlife, but to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect.” 16 U.S.C. §1532(19).

³⁹⁷ 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1)(i).

³⁹⁸ 16 U.S.C. § 1536(b)(4).

³⁹⁹ 16 U.S.C. § 1536(b)(4); *Center for Biological Diversity v. Salazar*, 695 F.3d 893, 911 (9th Cir. 2012).

⁴⁰⁰ App. 9 (Rio Grande Rehearing Request) at 42-43. For the advocates’ other arguments related to the Endangered Species Act for this facility see *id.* at 40-44 (pointing out (1) the biological opinion does not specify the conservation measures that reduces impacts to ocelots and jaguarundi and (2) how FERC erred for failing to require compliance with, or even refer to the conservation measures that the biological opinion assumes will be included and relies on in reaching its no-jeopardy conclusion).

⁴⁰¹ 50 C.F.R. § 402.14(i)(1)(iii).

⁴⁰² See App. 8b, Center for Biological Diversity Request for Rehearing in Alaska LNG, at 131-32 (dissecting NMFS’s incidental take analysis); *id.* at 135-37 (dissecting FWS’s incidental take analysis).

may be uncertain, but it is still important to raise all possible issues in comments to preserve them for litigation.)

- Greenfield projects. Some export terminals are proposed on sites that have never before been industrialized. This is referred to as a “greenfield” site, as opposed to a “brownfield” site. Impacts to land use are greater for greenfield sites. It can be helpful to enlist the opinion of an ecological economist to help quantify the change in value from taking a pristine site to industrial; this cost information should be made part of the overall cost-benefit analysis of the project.

Work with local community groups and organizers to see if there are any concerning land-use issues for a proposed project that should be addressed in scoping comments or that have not been addressed in environmental documents.

Recreation and visual resources (18 C.F.R. 380.12(j), Resource Report 8))

This is another area in which working closely with local communities is absolutely essential to understanding what impact the terminal will have on recreation and the visual landscape.

- Recreation

Identify the official and unofficial recreational areas near the proposed project site. This will require talking to locals, reading local government tourism guides, and exploring online maps and tourism websites—and nothing compares to spending significant time in the area. Look out for state, federal, local, and neighborhood parks, bike routes, trails, equestrian sites, overlooks, waterbodies, golf courses, roads frequented by recreational drivers, forests, beaches, wildlife refuges, fishing piers, swimming areas, boating, amusement parks, hotels, star-gazing spots, airports, campgrounds, ballparks, or even stretches of vacant land, to name just a few areas. Keep in mind that different areas may be in use at different times of the day, week, month, or year. Infrequent use does not necessarily mean less important use. Are there annual festivals or gatherings that draw out-of-town visitors and tourist dollars? All of this can be harmed by the construction and operation of an LNG terminal.

The harm can be complete destruction of a recreational site or its removal from public access. LNG activities may limit the time it is actually enjoyable to use. It can become so polluted, noisy or visually unpleasant that it is no longer a desirable place to spend time. Recreation can also be an activity, such as fishing or birding, that depends on the health of the nearby ecosystem. For example, even though the fishing pier may still be accessible, fish populations may have plummeted because of impacts from dredging on their hatcheries such that fishing is no longer possible from that location.

Noise during construction can be particularly harmful to recreational areas. For one terminal, construction pile-driving was “expected to last 20 hours a day for 2 years,” with the loudest noises at nighttime.⁴⁰³ Recreational areas that are businesses will unlikely be able to withstand such disturbance and may shutter. As part of the NEPA process, FERC must take a hard look at these sorts of impacts, which also overlap with socioeconomics.

Although the proposed project may do many harms to recreation, it may also increase certain recreational activities in a way that harms the environment. For example, if the terminal or pipeline is

⁴⁰³ App. 3c Jordan Cove FEIS (Part 3) at 4-558.

to be located in a previously undeveloped area, the new access roads may entice hunters or more people with off-roading equipment.

FERC's environmental review should also include mitigation measures that would actually mitigate impacts for the given area. This is again another area in which it is invaluable to work closely and early with local communities and organizers.

- Visual resources

Identifying recreational areas can help determine the vantage points from which the terminal will have visual impacts. Do not forget to assess visual impacts from people's homes as well, especially for environmental justice communities. Property values can be depressed when an industrial facility is visible from a home or even the entrance to a neighborhood, no matter how "clean" the facility might be.⁴⁰⁴ Industrial flares like those at LNG facilities can be a particularly significant visible blight. Visual harms can also come from the destruction of nearby topography or vegetative cover, leaving scars on the landscape, or making other previously hidden buildings visible. Large LNG vessels and increased vehicle traffic can cause visual impacts, even if the facility is not visible from the same vantage point. If the local economy is based largely on tourism (e.g., bringing in tourist dollars by touting its natural beauty and environment) an LNG terminal that is visible at any point from the airport to a tourist destination can deter visitors, even if it is not in view from a hotel window. And it isn't just seeing the facility itself that can impact visual resources.

Nighttime visual impacts may be greater during construction if large floodlights are used to complete activities or protect equipment at night. Operational LNG terminals also emit light at night—many areas will likely be lit around the clock for the security of the facility and its personnel, and bright flares may be frequent as well. This can obstruct the view of stars and confuse migratory birds or even turtles, which can wreak havoc on their reproductive cycles.⁴⁰⁵

Impact to visual resources is also an excellent issue to highlight in scoping comments; it is probably much easier for an applicant to create the photographic simulations of its project from different viewpoints than commenters, and it is likely much more difficult for out-of-town FERC employees and applicants to identify the important viewpoints in the area. Specifically request that the terminal, channel, and impacted landscape be visualized from specific vantage points throughout the community. These visualizations will also help community members, politicians, and the press conceptualize the impact of the project.

⁴⁰⁴ See App. 10 (Rio Grande DEIS Comments), 18-19 (citing studies showing the impact of industrial facilities on property values).

⁴⁰⁵ "Information About Sea Turtles: Threats from Artificial Lighting." Sea Turtle Conservatory. <https://conserveturtles.org/information-sea-turtles-threats-artificial-lighting/>.

Socioeconomics (18 C.F.R. 380.12(g), Resource Report 5)

For socioeconomics, the NEPA analysis must identify and quantify the impacts of constructing and operating the proposed project on towns and counties in the vicinity of the project.⁴⁰⁶ This includes identifying the socioeconomic impact area, “evaluat[ing] the impact of any substantial immigration of people on governmental facilities and services and [identifying] plans to reduce the impact on the local infrastructure.” It should describe the on-site manpower requirements and payroll during construction and operation, including the number of local construction workers and daily commuters or temporarily relocating workers from outside the impact area. It should explore whether there is sufficient housing in the impact area, and how many and what type of residences will be displaced, including how the properties will be acquired and the type and amount of relocation assistance that will be paid out. In this section, there should also be a fiscal analysis evaluating incremental local government expenditures in relation to incremental local government revenues that would result from construction of the project.

Incremental expenditures include, but are not limited to, school operating costs, road maintenance and repair, healthcare services, public safety, and public utility costs. This can be a good place to link the tax implications of the project (see Chapter 9 on Tax Abatements).

FERC typically includes its discussion of environmental justice impacts in this section as well (see Section 4.E.14 of this guide for the environmental justice issues).

The details of FERC’s socioeconomics analysis are usually most convincingly refuted with an expert opinion. That opinion should be informed by information from the community, community organizers, business owners, local governments—any stakeholder in the regional economy. Consulting with these stakeholders and an economics expert early on can be helpful because it allows potential issues that FERC should press the applicant to explore to be raised in the scoping comments.

Environmental justice

FERC historically has failed to adequately address environmental justice issues. But there are now hints that FERC’s attitude is changing. In 2020, FERC created a new position of senior counsel for environmental justice and equity, which was filled by a long-time environmental-justice advocate. In addition, the D.C. Circuit’s August 2021 opinion in the Texas LNG and Rio Grande LNG cases

PRACTICE TIP: ECONOMIC EXPERTS

Experts can make your arguments more persuasive by providing “expert opinions,” which FERC and a reviewing court may value more than advocate arguments. To support arguments about socioeconomic impacts, consider if there are funds to hire experts in economics to assess the impacts of a proposed project. An ecological economist—i.e., one with knowledge of the economic benefit of the natural area and the ultimate economic harm to local economies—can also be very helpful, as well as a more traditional economist. Batker Consulting, LLC is one firm of ecological economists that has worked with environmental advocates on economic impacts of projects.

⁴⁰⁶ 18 C.F.R. 380.12(g).

remanded FERC's orders, in part to redo its environmental-justice analysis. There may be hope that FERC will become more responsive to environmental justice concerns.

Many federal agencies are bound to consider environmental justice when making decisions because of Executive Order 12898, which was signed in 1994.⁴⁰⁷ Because FERC is an independent agency, FERC considers itself exempt from Executive Order 12898. Nonetheless, there are strong arguments that an environmental-justice review is required by NEPA and the NGA, and FERC includes environmental-justice analyses in its environmental documents.⁴⁰⁸ Once FERC includes an analysis in its NEPA documents—as it does with environmental justice—it may not conduct that analysis in an arbitrary-and-capricious manner.⁴⁰⁹

Strong environmental-justice arguments will compare FERC's analysis in any given EIS to the methods and tools FERC has historically used, the methods and tools other agencies use, and court decisions on the topic. FERC's environmental documents should first identify both the marginalized/minority and low-income populations in the vicinity of the project. NEPA guidance documents state that **Minority populations** are generally defined using a “No Threshold” analysis **or** both a “Fifty Percent” and “Meaningfully Greater” analyses together in concert.⁴¹⁰

In the Jordan Cove and Rio Grande LNG environmental reviews, FERC used the “Fifty Percent” and “Meaningfully Greater” methods to define the minority populations near the project site that may be adversely impacted—not the “No Threshold” analysis. The “Fifty Percent” test is designed to highlight areas of majority-minority populations that may be affected by the project (i.e., areas where minority groups comprise more than 50 percent of the total population). The “Meaningfully Greater test” highlights populations of minorities when they exist in a greater proportion in the affected population when compared to the proportion of minorities in appropriate benchmark (reference).⁴¹¹

⁴⁰⁷ A copy of Executive Order 12898 can be found here: <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>. The D.C. Circuit recently summarized the order's requirements in Rio Grande LNG case as follows: Executive Order 12,898, § 1-101, 59 Fed. Reg. 7,629 (Feb. 11, 1994), requires that, “[t]o the greatest extent practicable and permitted by law,” federal agencies “shall make achieving environmental justice part of [their] mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of [their] programs, policies, and activities on minority populations and low-income populations.” *Id.* To that end, the Order requires federal agencies to conduct “environmental justice” analyses by “collect[ing], maintain[ing], and analyz[ing] information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations.” *Id.* § 3-302(b).

Vecinos para el Bienstar de la Comunidad Costera v. FERC, No. 20-10453 (“Rio Grande Op.”) at 6 (Aug. 3, 2021), [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf). Attached as App. 2.

⁴⁰⁸ For example, in the Jordan Cove FEIS, FERC stated: “Although the FERC is an independent regulatory agency and not part of the Executive Branch, **we carry out our programs in the spirit of EO 12898** and this EIS addresses the potential environmental justice impacts of the Project.” App. 3c, (Jordan Cove FEIS, Part 3) at 4-622.

⁴⁰⁹ See *Communities Against Runway Exp. v. FAA*, 355 F.3d 678, 689 (D.C. Cir. 2004) (“The FAA [another independent agency] exercised its discretion to include the environmental justice analysis in its NEPA evaluation, and that analysis therefore is properly subject to ‘arbitrary and capricious’ review under the APA.”).

⁴¹⁰ “Promising Practices for EJ Methodologies in NEPA Reviews.” Federal Interagency Working Group on Environmental Justice & NEPA Committee, 2016 Report at 21-23 https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf. See also CEQ 1997, p. 25-26. https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf For an example of FERC's application of this guidance, see App. 3c, Jordan Cove FEIS Part 3 at 4-622-4-627. https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf.

⁴¹¹ The benchmark region used for comparison is also referred to as the “reference community” See “Promising Practices for EJ Methodologies in NEPA Reviews.” Federal Interagency Working Group on Environmental Justice & NEPA Committee, 2016 Report at 21-23 https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf. “Meaningfully greater” requires use of a reasonable,

Minority populations may consist of a group of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals who experience common conditions of environmental effect (such as migrant workers or Native Americans). Further, a minority population exists if there is “more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds [Fifty Percent or Meaningfully Greater].”⁴¹² These are not necessarily intuitive analyses—reading the guidance documents is a good place to start but if you can speak to a person familiar with environmental-justice analyses, that can be very helpful! Note that the upshot is that under CEQ’s guidance, impacts to a handful of individuals from a minority population may not be enough to trigger an actionable NEPA environmental justice issue—unless CEQ or FERC changes its policies, Congress passes new laws, the president updates its executive orders, or a court revises its understanding of agencies’ environmental-justice responsibilities.

Low-income populations are defined by the annual statistical poverty thresholds set by the U.S. Census Bureau. A low-income population exists when: (1) the percent of the population in households where the household income is less than or equal to twice the federal poverty level is greater than the percent in the reference community; or (2) if the area meets the Census Bureau’s definition of a poverty area.⁴¹³

FERC must also identify **Tribal communities**. In addition to statutory requirements for consultation with Indigenous tribes, Indigenous populations must be considered in an environmental justice analysis. FERC’s historical analytical methods have failed to consider the impacts to Tribal communities. For example, in its analysis of environmental justice impacts for the Atlantic Coast Pipeline, FERC failed to analyze the effects on American Indians despite the fact that 25% of North Carolina’s American Indians lived along the proposed pipeline route—instead of considering the unique health and environmental risks for this population, FERC lumped the American Indian populations together with all other “minority” communities.⁴¹⁴

How far from the project boundaries FERC goes in identifying communities to analyze must be “reasonable and adequately” explained⁴¹⁵—and be related to the radius of effects from the project. For example, in the Rio Grande LNG challenge, the D.C. Circuit rejected as arbitrary FERC’s unjustified use of a two-mile radius to identify environmental-justice populations when air impacts were expected to stretch 31 miles.⁴¹⁶

After the populations are identified, FERC must identify whether impacts on human health or the environment would be **disproportionately high and adverse** for marginalized and low-income

subjective threshold (e.g., ten or twenty percent greater than the reference community).” *Id.* at 25. FERC has used 20% in the past (e.g., for the Jordan Cove project).

⁴¹² CEQ 1997, p. 26 https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf.

⁴¹³ “Promising Practices for EJ Methodologies in NEPA Reviews.” Federal Interagency Working Group on Environmental Justice & NEPA Committee, 2016 Report at 26-28 https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

⁴¹⁴ See Montana, Cole. “Pipeline Case Brief: FERC Enables Environmental Injustice.” NRDC. (April 15, 2019) <https://www.nrdc.org/experts/montina-cole/pipeline-case-brief-ferc-enables-environmental-injustice> (discussing FERC’s misguided use of census tract data which masks communities of color; failure to assess adverse, disproportionate impacts on communities of color; and suggesting how FERC could improve its analysis).

⁴¹⁵ *Communities Against Runway Expansion, Inc. v. FAA*, 355 F.3d 678, 689 (D.C. Cir. 2004).

⁴¹⁶ *Vecinos para el Bienstar de la Comunidad Costera v. FERC*, No. 20-10453 (“Rio Grande Op.”) at 15 (Aug. 3, 2021), [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf). Attached as App. 2.

populations and appreciably exceed impacts on the general population or other comparison group. FERC should be referencing its resource-specific environmental analyses to identify significant impacts that might have disproportionately high and adverse effects on environmental-justice communities.

FERC primarily uses EPA’s environmental justice screening and mapping tool (EJSCREEN) to identify communities.⁴¹⁷ Advocates are encouraged to become familiar with it and check FERC’s work. But some environmental-justice communities will not appear on this tool; community organizations and community organizers can help identify populations that are overlooked. Also check whether FERC has covered all of the impacts to environmental justice communities; are there special characteristics about these communities that make them even more vulnerable to impacts? For example, are these communities already suffering from higher incidents of asthma, which would make them even more sensitive to ozone and other air pollutants that the facility is emitting? Are the communities disproportionately dependent on industries that will be harmed by the terminal, such as fishing, ecotourism, or the hospitality industry? For additional examples of advocates raising environmental justice issues, see Appendix 9 (Rio Grande Rehearing Request) 31-38; Appendix 8 (Jordan Cove Rehearing Request) 87-99, 107-115; Appendix 8b (Alaska LNG) 116-19.

Transportation

Not all project environmental documents will address transportation concerns in a separate section—for example, there is no requirement for a resource report solely devoted to transportation issues. Instead, the facts and impacts may be incorporated into other sections. All terminals will have transportation issues; an advocate submitting scoping comments or reviewing a DEIS that does not have a separate transportation section may want to ask FERC to summarize the potential impacts to transportation in a dedicated section, instead of scattered throughout the environmental documents.

Some transportation issues to consider are the effects from increased:

- *Marine transportation.* During construction and maintenance, this will include dredging vessels and barges that deliver equipment and supplies to the facility. During operation, this includes LNG tanker traffic as well as increased support vessel traffic, like tugboats. Some facilities are designed to produce so much LNG that vessel transit may be almost daily. Both tankers and tugboats can be noisy, and the higher their allowed speed, the more likely they will hit, kill or maim aquatic life. LNG tankers will also likely mean that the channel will need to be dredged deeper and more frequently even after initial construction, which can kill aquatic life, disrupt ecosystems, and harm the reproductive lifecycle of organisms that other animals feed on. In addition, LNG marine traffic can reduce the ability of other vessels to access the channel and waterways, either because of the size of the channel or because of safety concerns related to the risk of explosions. If others use the channel for their livelihood (e.g., commercial shippers, shrimpers, fishers, tour companies), LNG traffic may create economic harms that the EIS must discuss. An even greater impact to local quality of life may happen when the terminal is one of the first industrial facilities on a channel that was previously used only recreationally or for light commercial use.

⁴¹⁷ “EJSCREEN: Environmental Justice Screening and Mapping Tool.” EPA. <https://www.epa.gov/ejscreen>.

- Motor vehicle traffic. Increased motor vehicle traffic is tied to increased pollution, traffic accidents, congestion, noise, and wildlife deaths. Operation of an LNG terminal may increase traffic at non-traditional times, creating a nuisance whereas previously there was none (e.g., increased night noise in neighborhoods). It will almost certainly increase the volume of hazardous materials transported through nearby communities (e.g., fuel, nitrogen, waste). It may also require new construction, either adding lanes to existing infrastructure or new roads altogether. Who pays the cost for this construction and maintenance should be explored during the environmental review—it may diminish the “benefits” to the local economy if taxpayers and not the developers are expected to foot the bill. These harms must be weighed against any benefits to the local economy (e.g., if more local goods and services are purchased). If traffic is expected to be a concern for the project, the state transportation agency may require the applicant to conduct a *Traffic Impact Analysis* for the project—advocates can and should request during scoping that one be conducted.
- Heavier vehicles on local roads. Consider whether there will be increased traffic on pre-existing roads, especially heavier loads than the roads may be designed for. Roads are engineered to support specific loads: for example, the thickness of the pavement and amount and size of rebar in the pavement will be less on local roads that were not designed for large truck traffic as opposed to larger feeder roads or highways. When larger, heavier trucks than the road is designed for drive on local roads, the road is damaged.⁴¹⁸ This slows down all traffic, increases the danger of accidents or damage to resident vehicles, becomes an eyesore, and greatly increases the burden on local governments for repair and maintenance. If the road is damaged enough (or is simply gravel to begin with), it may increase particulate emissions locally, hurting humans, wildlife, and vegetation alike. As with all increased motor traffic, who bears the cost of construction and maintenance should be addressed as part of FERC’s review before the project is certified.
- Railroad traffic. Review the proposed project; will there be increased railroad traffic during construction or operation? Some industrial facilities will have railroad spurs incorporated into the facility to ship out product or receive materials, operating fuel, or catalysts. Others will use existing spurs and transport the materials the remaining distance by road. Rail traffic increases the likelihood of accidents, wildlife strikes, pollution, and noise.
- Air traffic. There are at least two aspects of air traffic that relate to LNG terminals. First, local airports will see increased traffic from increased numbers of employees and contractors servicing the facility. Contrary to what some applicants may argue, many of the people servicing the facility will not be local to the area, especially if the area is new to industrial or LNG development. Second, LNG terminals and airports may pose safety concerns to each other. The FAA is a consulting agency when air traffic issues may arise and has in the past presumed that LNG marine vessels (at multiple locations during transit), LNG storage tanks, amine regenerator columns,⁴¹⁹ and thermal oxidizer stacks are obstructions to air traffic and hazards to air navigation.⁴²⁰ FERC found that for Jordan Cove, takeoffs, landings, and runway operations could

⁴¹⁸ This concern is especially true on the production side of oil and gas, with all of the tanker trucks needed to transport water, proppant, chemicals, and waste to remote locations, but can apply similarly to servicing any industrial facility. See Samuels, Alex. “Texas is making billions from oil and gas drilling, but counties say rural roads are being destroyed.” The Texas Tribune. (Apr. 12, 2018). <https://www.texastribune.org/2018/04/12/texas-oil-gas-drilling-rural-roads-damages/>.

⁴¹⁹ Used to remove carbon dioxide and hydrogen sulfide from the gas stream before the gas is liquefied.

⁴²⁰ App. 3b, Jordan Cove FEIS Part 2 at 4-657.

be affected (*i.e.*, delayed) by operation of the terminal and that airport operations could be significantly impacted.⁴²¹ Thermal plumes from the facility were also a concern, and one that FERC likely would not have considered without commentors raising the issue during the DEIS review.⁴²²

- ***Off-highway vehicles.*** Depending on where a project is located, the construction of new roads may allow the public access into previously undeveloped areas, attracting users of off-road vehicles that can significantly damage wild ecosystems. Has that been considered in the EIS or raised in scoping comments? In addition, off-highway vehicles are used in construction and are typically permitted to use fuel that emits more pollutants (including sulfur) than on-road vehicles.⁴²³ Increased idle times (with concurrent increased emissions) increase air pollution that may not be captured in FERC's analysis. Off-highway vehicles driving on unpaved roads increase road dust—mitigation measures should be required to avoid these emissions (e.g., regular road watering), which can affect local human populations as well as ecosystems.

Other transportation-related issues to consider depending on the project are the construction of additional access roads (for facilities remote from existing roads), whether federal lands will be impacted, and the need for helicopter traffic. Every project is different; this is one area in which sustained collaboration with local communities will unearth potential impacts that would be invisible to an outside organization drafting comments from afar.

Cultural resources (18 C.F.R. 380.12(f), Resource Report 4)

FERC publishes its own “Guidelines for Reporting on Cultural Resources Investigations for Natural Gas Projects,” a short summary of its procedures, which an advocate should read before filing comments about cultural resources.⁴²⁴ While not binding law, and drafted with applicants in mind as the audience, it summarizes the regulations and laws the FERC adheres to when analyzing impacts to cultural resources. It also includes a glossary of terms in Appendix A.

A FEW DEFINITIONS

Area of potential effects (APE)

“means the geographic area within which the project may cause direct and/or indirect effects (including physical, visual, vibratory, or audible effects) to the character or use of historic properties. This includes all areas of construction, such as rights-of-way, compressor stations, meter stations, staging areas, extra work spaces, storage yards, communication sites, access roads, and other ancillary facilities.”

Cultural resources “are any prehistoric or historic site, district, object, cultural feature, building or structure, cultural landscape, or traditional cultural property (including artifacts, records, and related material remains). *The project sponsor identifies all cultural resources in the APE, and agencies and consulting parties consult to determine if any qualify as historic properties.*” (emphasis added)

⁴²¹ *Supra.*

⁴²² *Supra.*

⁴²³ See e.g., C. Kassar and P. Spitler, *Fuel to Burn*, Center for Biological Diversity & Clean Air Initiative (May 2008) https://www.biologicaldiversity.org/publications/papers/Fuel_to_Burn_for_Web.pdf.

⁴²⁴ “Guidelines for Reporting on Cultural Resources Investigations for Natural Gas Projects.” FERC Office of Energy Projects (July 2017) <https://www.ferc.gov/sites/default/files/2020-04/cultural-guidelines-final.pdf>. Keep in mind that FERC may update its guidance; check FERC's website before relying on this document.

One important term to understand when commenting on cultural resources is the proposed project's defined "**area of potential effects**" or "APE." "[T]he same project may have one APE (direct) for archaeological sites and a different APE (indirect) for aboveground resources subject to visual, audible, vibratory, or atmospheric effects."⁴²⁵ Scrutinize both APEs—how did the applicant arrive at these distances for the direct impacts to archeological sites (usually belowground) and indirect impacts to historical/cultural sites? For example, in Jordan Cove, FERC defined the terminal's direct APE as the footprint of all potential ground-disturbing activities; the indirect APE was defined identically to the direct APE (after the EIS found that no historical properties had a view of the facility, and that no odors, noise, or other atmospheric effects would impact such properties).⁴²⁶ For the Texas LNG terminal, advocates were able to show that the indirect APE was set to a distance that the National Park Service specifically said would be insufficient.⁴²⁷

FERC generally relies on the applicant to identify **cultural resources** within this area—which can obviously be problematic as the applicant will not know the area as well as local communities and the applicant is not incentivized to uncover all possible cultural resources.

This is also a topic in which FERC will be receiving written comments and opinions from agencies and entities such as: the state historic preservation officer; tribal historic preservation officers; and land-management agencies. Their comments should be publicly available and may conflict with FERC's ultimate decision on the project. (The correspondence between the consulting agencies and the applicant may not be publicly available, however.⁴²⁸) Make sure to review these documents and when relevant cite them in comments—remember that reviewing courts are more likely to value official agency opinion more than advocate arguments.

FERC will often certify a project before all of the cultural resources are studied and cultural resource reports are available. This runs afoul of Section 106 of the National Historic Preservation Act, which requires that: "the head of any Federal department or independent agency having authority to license any undertaking" to consider the undertaking's effect "on any historic property"⁴²⁹ before "issuance of any license."⁴³⁰ If that's the case for a proposed project, raise that issue as a failure to allow for meaningful public participation and evidence that FERC failed to take a hard look at (under NEPA) or fully weigh the public interest of (under the NGA) cultural impacts before certifying.

For examples of comments on cultural resource impacts, see Appendix 8b (Alaska LNG Rehearing Request) at 16-17; Appendix 11 (Texas LNG Rehearing Request) at 22-25.

⁴²⁵ *Id.* at 13. "Indirect effects are those effects on historic properties, which are removed in time and/or space from their proximate causes (e.g., increased access to an archaeological site resulting in an increased potential for vandalism of that site)." *Id.* at 28.

⁴²⁶ Jordan Cove LNG FEIS at 4-676 – 4-677 https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf.

⁴²⁷ See App. 11 (Texas LNG Rehearing Request) at 24-25 & 25 n.98 (quoting a National Park Service letter to FERC). This was admitted in the DEIS and then removed without explanation in the FEIS. *Id.*

⁴²⁸ "Guidelines for Reporting on Cultural Resources Investigations for Natural Gas Projects." FERC Office of Energy Projects (July 2017) at 2-3 ("Off-the-Record Communications") <https://www.ferc.gov/sites/default/files/2020-04/cultural-guidelines-final.pdf>.

⁴²⁹ A historic property is "any prehistoric or historic district, site building, structure, or object included on, or eligible for inclusion on, the National Register." 54 U.S.C. § 300308.

⁴³⁰ 54 U.S.C. § 306108. See also 18 C.F.R. § 380.14 (FERC's regulations as to how it must comply with the National Historic Preservation Act).

Air quality and noise (18 C.F.R. 380.12(k), Resource Report 9))

- Air quality

There are many ways FERC's analysis of the air quality impacts may fail to satisfy NEPA. Note that a discussion of greenhouse gas impacts is in Section 4.E.18.

The amount and impact of air pollution emitted by the proposed project is an area that FERC may not sufficiently explore in its environmental analysis. Look at FERC's **air quality** analysis. If significant impacts to air quality are expected, look to see if FERC has fully explored the ramifications to sensitive ecosystems and sensitive populations (e.g., elderly, sick, young, or pregnant populations). Sometimes FERC will admit that more analysis or more information is necessary but not follow up. Point that out!⁴³¹

If FERC has concluded that air impacts are insignificant, see whether FERC has actually supported its conclusion. Conclusory statements unsupported by facts and analysis do not meet the "hard look" standard that NEPA requires. This applies equally to FERC's analysis of cumulative impacts of air pollution. Look at how FERC estimates the cumulative impacts from the pre-existing air sources. If it is conclusory, unsupported, or simply flawed (e.g., ignores certain sources or foreseeable increases) highlight that as well.⁴³²

In addition, several courts have held that NEPA requires FERC to disclose and examine in its environmental documents the effects of air pollution even if that air pollution would not violate other laws, like the Clean Air Act. EPA's assessments show that some air pollution that does not violate air quality standards may still cause human health impacts.⁴³³ Thus, if the environmental documents do not take a hard look at pollution, regardless of its quantitative level or status as a pollutant regulated under the Clean Air Act, an advocate could highlight that in comments.⁴³⁴

Another air-related issue is **pollution control equipment**. Pollution control technology is equipment that is attached to pollution-emitting parts of the facility like compression turbines or boil-off gas units to reduce the pollution that would otherwise be emitted. Although FERC will largely defer to what the state decides is the proper air pollution control equipment required under the Clean Air Act (see Chapter 8 for more information), NEPA and the Natural Gas Act require that FERC take its own independent "hard look" and public interest analysis (respectively). Therefore, it is fair game to raise the same concerns with FERC as with the state air quality agency. For example, is there a control technology that the state and FERC have overlooked (or dismissed) that has a higher pollution-reduction efficiency than studies show, other terminals have estimated, or will be required by the actual air permit? For example, LNG terminals across the country have estimated very different

⁴³¹ For an example of advocates doing just that, see the discussion of sulfur deposition in the Center for Biological Diversity's Rehearing Request on the Alaska LNG Project. See App. 8b (Alaska LNG Rehearing Request), 96-100.

⁴³² For an example of advocates disputing FERC's analysis of cumulative ozone emissions, see Sierra Club's Rehearing Request on the Rio Grande LNG Project. See App. 9 (Rio Grande Rehearing Request), 29-30.

⁴³³ For an example of advocates supporting their concerns that the ozone, nitrogen dioxide, and carbon monoxide have health effects at levels below certain air quality thresholds (specifically, the NAAQS) with EPA data, see the discussion in Sierra Club's Rehearing Request on the Rio Grande LNG Project. See App. 9 (Rio Grande Rehearing Request), 30-31.

⁴³⁴ For an example of advocates doing just that, see the discussion of black carbon in the Center for Biological Diversity's Rehearing Request on the Alaska LNG Project. See App. 8b (Alaska LNG Rehearing Request), 93-95 (citing cases in support of its assertion that: "Agencies are required to consider in their NEPA documents impacts at levels below regulatory limits and also must consider impacts of actions even if those actions do not violate a substantive state or federal law.").

particulate matter emissions rates from flares, even though the technology used is largely the same.⁴³⁵

Many export terminals also have inadequate **air monitoring**. Advocates should push hard for FERC to require the applicant to install air quality monitors for the pollutants expected from the facility (e.g., particulate matter, carbon monoxide, nitrogen oxides (“NO_x”), sulfur dioxides (“SO_x”), volatile organic compounds (“VOCs”), and hazardous air pollutants (“HAPs”). Biomonitoring of these pollutants in plants and other indicator species could also be a cost-effective way to get more granular data of the impacts on neighboring communities. Lichen is already monitored as part of United States Forest Service programs to track air quality⁴³⁶ and other species like moss have been used around industrial facilities, at least in academic settings, for decades.⁴³⁷ Spanish moss, ubiquitous in the Gulf Coast region, has also been studied as a biological indicator for metal air pollution and environmental equity.⁴³⁸ If biomonitoring makes sense given the unique facts of a specific project, there are a number of scientific studies that support the fact that this can be a low-cost, high-resolution⁴³⁹ method of monitoring pollution, particularly in comparison with more traditional monitoring stations and portable devices.⁴⁴⁰ The scientific literature praises biomonitoring for how helpful it could be in environmental justice studies of pollution.⁴⁴¹

Spending funds to hire an **air quality expert** can be particularly worthwhile, especially because FERC’s analysis will likely be based on air models that can be difficult to understand without prior experience with them. The air quality expert that is retained should have previous experience with the models that are used. The expert should be comfortable with what the proper baseline assumptions for the region should be—the wrong assumptions can falsely make a dirty facility look much cleaner. Experts can also help identify better pollution control technology and air monitoring equipment that the terminal should have considered implementing.

- Noise

LNG terminals can be noisy for many reasons. Impacts can be temporary, such as during construction, or permeant, such as during operation. At either point the noise could be continuous or

⁴³⁵ The advocates challenging the Rio Grande LNG terminal made similar arguments, relying in part on arguments advanced in the fight against the state air permit. See App. 9 (Rio Grande Rehearing Request), 30.

⁴³⁶ United States Forest Service, *Lichen Monitoring in US National Forests and Parks Reports, Publications and Other Resources*, <https://gis.nacse.org/lichenair/?page=reports>.

⁴³⁷ See App. 12: J.A. Fernández, et al., *Use of native and transplanted mosses as complementary techniques for biomonitoring mercury around an industrial facility*, *The Science of the Total Environment* 256:151-61 (2000), 152.

<https://pubmed.ncbi.nlm.nih.gov/10902842/>. (“Mosses have been used as active and passive biomonitors to estimate the deposition of contaminants in the areas surrounding industrial installations such as: geothermal power plants (Bargagli et al., 1997), waste incinerators (Carpi et al., 1994), chlor-alkali plants (Calasans and Malm, 1997; Lodenius, 1998), etc.”).

⁴³⁸ See e.g., App. 12: Y. Abdullah, *The Use of Spanish Moss as a Biological Indicator to Examine Relationships Between Metal Air Pollution, Vegetation Cover, and Relationships Between Metal Air Pollution, Vegetation Cover, and Environmental Equity in Tampa, Florida Environmental Equity in Tampa, Florida* (Nov. 2020) Dissertation, 2 <https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=9702&context=etd>.

⁴³⁹ In other words, many more samples can be quickly, cheaply, and efficiently taken per area than with traditional methods that may require expensive or permanent equipment.

⁴⁴⁰ *Id.* (Sections 2.2 and 4.2 are literature reviews of Spanish moss as a pollution measurement method and environmental inequity, respectively. The References also include a wealth of resources.)

⁴⁴¹ *Id.* at 3 (“High-spatial-resolution sampling of bioindicators will create opportunities for researchers who examine the role of vegetation in air pollution mitigation to broaden their studies. This helps them measure different types of air pollutants with a higher spatial resolution and lower cost. Previous studies have examined the role of vegetation in mitigating pollutants such as NO₂, VOC, and particulate matter (e.g., Setala et al., 2013; Tong et al., 2016). However, metals have rarely been introduced in these studies. Spanish moss, as an air pollution bioindicator, makes this type of application flexible and achievable since it can provide data with high spatial resolution and high density at a low cost versus traditional air pollution measures (Harmens et al., 2010; Schrimppff, 1983; Wannaz et al., 2006).”).

just intermittent. FERC must take a hard look at these impacts and should propose mitigation methods or alternatives that would decrease noise impacts. If FERC doesn't, point that out.

An example of temporary, intermittent noise is the disturbance caused by **pile-driving**. Pile-driving is the process of installing piles—the deep vertical portion of the foundation that terminals need. (The depth is comparable that needed for a large building or skyscraper, as opposed to a shallow foundation for a house). Pile-driving can be very loud—even underwater—and the sound itself can kill or maim aquatic species. It can also disrupt marine mammals' abilities to communicate normally, which could affect their ability to mate or hunt.

There are ways to mitigate the impacts from pile-driving noise, which FERC should analyze in its environmental review. For example, certain pile-driving methods create less noise than others. FERC could also require noisy activities to take place outside of migration or breeding season.⁴⁴²

Dredging can also create noise during construction (and maintenance) that disturbs underwater life. And of course, aboveground dredging, pile-driving, and other construction noise may affect sensitive species and human populations as well.⁴⁴³ FERC must explain its analysis as to whether these impacts will be significant and whether they will disproportionately affect environmental justice communities.

Other sources of noise are permanent, such as the noise from everyday operation of the facility—from industrial equipment and vehicle traffic. Permanent intermittent noise includes vessel traffic in the channel going to and from the terminal. The tugboats that accompany LNG tankers in particular can be overlooked noise sources. For some aquatic species, exposure to ship noise can decrease the time spent hunting and potentially significantly impact populations.⁴⁴⁴ Consider if there are other foreseeable noise sources based on the unique design and location of the facility, as well as if there are wildlife or human populations nearby that would be adversely affected.

PRACTICE TIP: IS IT FERC'S ERROR OR ANOTHER AGENCY'S?

FERC's analysis of noise impacts to wildlife may be based on the biological opinion issued by the Fish & Wildlife Service or the National Marine Fisheries Service. When commenting, make sure to note if the biological opinion aligns with FERC's analysis. If so, it may be that the biological opinion is legally flawed (see Section 4.E.10). If not, and if the agency is more concerned about noise impacts to wildlife than FERC is, highlight this. Pointing to another agency's opinion can be more persuasive to a reviewing court that FERC failed in its duties than raising the same arguments by advocates alone.

⁴⁴² See App. 8b (Alaska LNG Rehearing Request), 35-36 & 73-75, 86-87, 11-12 (describing noise impacts to beluga whale populations and potential alternatives / mitigation measures that were not considered or methods that were considered but are not supported by scientific studies).

⁴⁴³ As was the case in the Jordan Cove project, for several environmental justice communities. See App. 8 (Jordan Cove Rehearing Request), 91.

⁴⁴⁴ See App. 8 (Jordan Cove Rehearing Request), 82-83 (describing the adverse impacts that scientific studies have shown that killer whales experience from low-frequency ship noise); App. 8b (Alaska LNG Rehearing Request), 35-36; 73-75 & 80 (describing noise impacts to beluga whale populations and potential alternatives / mitigation measures that were not considered).

And as with all impacts, if FERC only conducts a cursory analysis of noise, or fails to take a hard look at cumulative impacts, highlight that. Depending on these failures, this could be grounds for overturning the certificate order.

Climate Change

Under the 1978 CEQ regulations, the direct, indirect, and cumulative effects of climate change should be incorporated into NEPA documents.⁴⁴⁵ It is very clear that FERC has the responsibility for weighing the direct greenhouse gas emissions from a project (and cumulative emissions, under the 1978 CEQ regulations).⁴⁴⁶ As of January 2022, exactly which agency (FERC or DOE) is responsible for weighing a project's indirect greenhouse gas emissions is still in turmoil.⁴⁴⁷ However, with FERC as lead agency tasked with preparing NEPA documents, FERC should include the indirect emissions in its EIS (even if DOE is ultimately the one that relies on that analysis in authorizing the gas export). If FERC has not conducted a thorough and accurate assessment of a project's direct, cumulative, and indirect greenhouse gas emissions, that failure should be highlighted in comments.

FERC historically has failed to adequately address climate change, as the D.C. Circuit scolded in its August 2021 order remanding the Rio Grande LNG certification.⁴⁴⁸ FERC previously had argued that even though it was able to quantify the amount of greenhouse gases emitted, it was unable to determine the significance of a project's contribution to climate change.⁴⁴⁹ This is despite the fact that several methods for doing just that have been developed and are generally recognized as acceptable tools for calculating significance. One such tool, the "social cost of carbon" method, assigns a dollar value of harm per unit of greenhouse gases emitted.⁴⁵⁰

The D.C. Circuit has made clear that even if FERC continues to assert that it cannot estimate the significance of a project's impact on climate, FERC's own regulations require it to evaluate the impacts based on theoretical approaches or research methods that are generally accepted in the scientific community.⁴⁵¹ The court did not require FERC to begin using the social cost of carbon, but did require it to explain how its previous approach is consistent with its regulations—and if not, to remedy it by using some method to quantify the impact each proposed project will have on climate change.

FERC has taken some steps toward improving its climate-change analyses. As of the end of 2021, FERC is examining how it can determine the quantity of direct and indirect greenhouse gas

⁴⁴⁵ The 2020 regulations prohibited agencies from considering cumulative effects; the replacement regulations are expected to reincorporate the need to assess cumulative effects. See Section 4.B.3 for more on the changes to CEQ's regulations.

⁴⁴⁶ See *Venture Global Calcasieu Pass, LLC*, 166 FERC ¶ 61,144 (2019), at p. 2 (Comm'r LaFleur, concurring) (the Commission "has the clear responsibility to disclose and consider the direct and cumulative impacts of the proposed LNG export facility, in order to satisfy our obligations under NEPA and section 3 of the NGA.").

⁴⁴⁷ Giannetti, *Hot Potato*, *supra* note 143 ("The division of labor between FERC and DOE has allowed the two agencies to play a game of emissions hot potato, each disclaiming an obligation to incorporate an LNG project's upstream and downstream emissions (aka their 'indirect emissions') into their reviews.")

⁴⁴⁸ *Vecinos para el Bienstar de la Comunidad Costera v. FERC*, No. 20-10453 ("Rio Grande Op.") at 12-13 (Aug. 3, 2021), [https://www.cad.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cad.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf). Attached as App. 2.

⁴⁴⁹ *Id.* at 11.

⁴⁵⁰ See "D.C. Circuit Requires Further Consideration of Social Cost of Carbon in NEPA Analysis." (Aug. 17, 2021) <https://www.insideenergyandenvironment.com/2021/08/d-c-circuit-requires-further-consideration-of-social-cost-of-carbon-in-nepa-analysis/>. See also Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990. Interagency Working Group on Social Cost of Greenhouse Gases, United States Government (Feb. 2021) https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf?source=email.

⁴⁵¹ 40 C.F.R. § 1502.21(c) (2020) and 40 C.F.R. § 1502.22(b) (1978).

emissions resulting from a project proposed under section 3 or 7 of the Natural Gas Act and the appropriate level of mitigation for such emissions. On November 19, 2021, FERC held a technical conference to explore methods, approaches and legal authority for mitigation requirements into orders authorizing LNG projects.⁴⁵²

Advocates are encouraged to continue to push FERC to adopt methods that adequately quantify each proposed project's effects on climate change, including direct, indirect, and cumulative emissions—beyond simply reporting an estimate of the tons of greenhouse gases emitted, but also analyzing the severity of the impacts from those emissions. This will involve learning about the different methods that the scientific, regulatory, and international communities have developed, including the social cost of carbon, which may change as the science develops. Also consider whether FERC has overlooked or underestimated emissions associated with the project, perhaps by relying on flawed assumptions. Reviewing the state air permit can be helpful because the applicant has likely had to justify its emissions estimates in front of the state agency—and its estimates and the underlying assumptions supporting those estimates are likely memorialized in publicly available documents.

Reliability and safety (18 C.F.R. 380.12(m), Resource Report 11))

Environmental documents for an LNG terminal must address safety risks. FERC requires that the draft EIS discuss measures to protect the public from failure of the facility; the hazards and environmental impact that could reasonably ensue from such failure; design and operational measures to avoid or reduce risk; measures to keep the public away from hazardous areas' and measures to "minimize problems arising from malfunctions and accidents (with estimates of probability of occurrence)."⁴⁵³ For example, included in the EIS for the Puget Sound Energy's proposed Tacoma LNG facility was "Potential spill of LNG and impacts on human health and safety" and "Changes to emergency service needs at the Port of Tacoma manufacturing/industrial center."⁴⁵⁴

Commenting on reliability and safety can be involved because three different agencies—the USDOT PHMSA, the Coast Guard, and FERC—share oversight and responsibility for LNG terminal safety, and each has its own regulations. PHMSA and the Coast Guard are consulting agencies. All three agencies have entered into memoranda of understanding that govern their interaction.⁴⁵⁵ Advocates investigating reliability and safety issues are encouraged to read prior EIS documents, which summarize the interactions of these agencies and the topics they cover.⁴⁵⁶ An **expert** in industrial

⁴⁵² "Technical Conference on Greenhouse Gas Mitigation: Natural Gas Act Sections 3 and 7 Authorizations; Notice Inviting Technical Conference Comments." 86 FR 66,293 (Nov. 22, 2021) <https://www.federalregister.gov/documents/2021/11/22/2021-25403/technical-conference-on-greenhouse-gas-mitigation-natural-gas-act-sections-3-and-7-authorizations> (seeking comments after the conference). Filings related to this topic can be found under Docket PL21-3-000.

⁴⁵³ 18 C.F.R. 380.12(m) ("Resource Report 11").

⁴⁵⁴ "Summary of Final Environmental Impact Statement: Tacoma Liquefied Natural Gas Facility." City of Tacoma, Planning and Development Services. (May 5, 2016) at 2. [https://cms.cityoftacoma.org/planning/pse/Tacoma%20LNG%20FEIS%20Summary%20\(5-5-16\).pdf](https://cms.cityoftacoma.org/planning/pse/Tacoma%20LNG%20FEIS%20Summary%20(5-5-16).pdf).

⁴⁵⁵ See "PHMSA Inter-Agency Memoranda of Understanding." U.S. DOT PHMSA. <https://www.phmsa.dot.gov/pipeline/liquified-natural-gas/phmsa-inter-agency-memoranda-understanding>; "Interagency Agreement Among The Federal Energy Regulatory Commission United States Coast Guard And Research And Special Programs Administration For The Safety And Security Review Of Waterfront Import/Export Liquefied Natural Gas Facilities." <https://www.ferc.gov/sites/default/files/2020-07/2004-interagency.pdf>.

⁴⁵⁶ E.g., the Jordan Cove FEIS (Part 3) summarizes the agencies' interactions and responsibilities on FEIS 4-738 – 4-808. See App. 3c, Jordan Cove FEIS (Part 3) (also available at https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf).

safety and reliability can also be helpful in navigating the issues here; in any event, community input will be invaluable and should be sought early on.

A few safety issues that may be valid to raise for proposed projects include:

- Weak regulatory oversight

Given FERC's regulation requiring the EIS to cover issues related to accidents and safety risks, it would likely be possible for an advocate to raise the issue of agencies' weak safety oversight or outdated safety rules. The Louisiana Legislative Auditor found that from FY2015- FY2019, the average time the state environmental agency took to identify a violation after it occurred was 2.2 years, and it took an additional 2.6 years on average to issue enforcement actions based on those violations.⁴⁵⁷ The U.S. Government Accountability Office (GAO) has warned Congress that all the technical standards in FERC and Coast Guard regulations are outdated, and most of PHMSA's are also outdated.⁴⁵⁸ Of particular concern, it noted that:

*PHMSA's regulations refer to a 2001 standard for LNG fire protection established by the National Fire Protection Association, which has updated this standard five times since 2001, most recently in 2019. The version of this standard incorporated in PHMSA's regulations requires LNG export companies to use a 1992 pressure-testing standard, which is 25 years out of date.*⁴⁵⁹

Similarly, it warned, the Coast Guard's regulations incorporate a 1994 standard for fire extinguishers that has been updated by the relevant standards-developing organization five times since then, including new standards for electronic monitoring.⁴⁶⁰ While FERC and PHMSA both reported that they would undertake GAO's recommended reviews, as of the end of 2021, the problems have not been resolved.⁴⁶¹ Even if the updates occur, it is not clear that the agencies will continue to update their technical safety standards in a timely manner.

- Emergency response plan

The NGA requires that the applicant develop an emergency response plan, which the Commission must approve before issuing final approval to begin construction. The Plan must be prepared in consultation with the Coast Guard and state and local agencies, and it must include a cost-sharing plan: namely the direct costs that the applicant will reimburse State and local agencies for safety and security at the LNG terminal and in proximity to the vessels that serve the facility.⁴⁶² This document and other safety-related documents may not be available before FERC certifies a project. Applicants may not even have met with local city planners or public safety directors to work on the Emergency

⁴⁵⁷ Louisiana Legislative Auditor. "Monitoring and Enforcement of Air Quality: Department of Environmental Quality." (Jan. 20, 2021) p. 13.

[http://app.lla.state.la.us/PublicReports.nsf/0/4F3372ABDDF0F271862586630067C25D/\\$FILE/00022660A.pdf?OpenElement&.7773098](http://app.lla.state.la.us/PublicReports.nsf/0/4F3372ABDDF0F271862586630067C25D/$FILE/00022660A.pdf?OpenElement&.7773098).

⁴⁵⁸ U.S. GAO. "Natural Gas Exports: Updated Guidance and Regulations Could Improve Facility Permitting Processes." GAO-20-619. (Aug. 2020) pp. 26-27 <https://www.gao.gov/assets/gao-20-619.pdf>. As of May 5, 2021, the GAO had not received any update from the agencies regarding any corrections of the problem. Electronic correspondence with Frank Rusco, Director of GAO's Natural Resources and Environment Division, May 5, 2021.

⁴⁵⁹ *Id.* at 29.

⁴⁶⁰ *Id.* at 31.

⁴⁶¹ Also see status updates on the GAO website: "Natural Gas Exports: Updated Guidance and Regulations Could Improve Facility Permitting Processes." <https://www.gao.gov/products/gao-20-619>.

⁴⁶² 15 U.S.C. § 717b-1(e).

Response Plan, or even just to discuss potential hazards.⁴⁶³ If so, an advocate could and should object on the grounds that FERC cannot properly examine or disclose the potential impacts of the project as NEPA requires without the plans, studies, and safety verifications being completed (and being made available for public review), nor can it properly determine whether the proposed project is in the public interest as the NGA requires.

Even without consulting an expert, many safety concerns will become obvious by looking at the proposed location and investigating the current emergency response capabilities of nearby areas.⁴⁶⁴ Don't forget to scrutinize FERC's treatment of cumulative impacts. Are there other industrial facilities nearby that create compounding hazards that should be addressed?⁴⁶⁵ This is another area in which collaborating with local organizations can be essential to identifying the flaws and oversights in FERC's NEPA analysis.

New or Changed Circumstances

Another situation that can arise is the revelation of new information or changed circumstances after an EIS has already been made final. If the agency is presented with substantial changes in the proposed action or new and significant circumstances or information relevant to environmental concerns, a "Supplemental EIS" may be required.⁴⁶⁶ This argument can be raised at any stage of the proceedings.



PRACTICE TIP: ATTACH ALL EVIDENCE BEFORE SUBMITTING COMMENTS!

Don't forget to include all outside information that supports your comments! If you do not include the evidentiary sources, photos, reports, etc. that support your arguments in comments, or attach them, it may irrevocably cripple any subsequent litigation. With only a few exceptions, litigators are limited to using what was included in comments in a lawsuit. Do not just provide a URL; it may be defunct by the time FERC reviews your comments.

Where can I find examples of comments filed with FERC against LNG terminals?

Reading previous comments can be an excellent way to identify common issues that might apply to the proposed project being challenged. These comments are included as part of the appendix and are by no means a comprehensive list of comments. Keep in mind that some of the issues raised here may no longer be the strongest arguments to raise in litigation—which why is once a certificate issues and litigation is contemplated it is so important to seek the advice of experienced legal counsel. Here are some excellent examples of comments and briefing on previous LNG projects:

⁴⁶³ As was the case in the certification of Rio Grande LNG. See App. 9 (Rio Grande Rehearing Request), 38-39.

⁴⁶⁴ For example, in the Rio Grande LNG challenge, advocates identified the lack of trained firefighters and the fact that evacuation routes would take residents directly next to the proposed terminal with few other direct options. See App. 10 (Rio Grande DEIS Comments), 16-18.

⁴⁶⁵ Perhaps even a rocket launch site. See App. 10 (Rio Grande DEIS Comments), 63-69 (describing the inadequacies of the analysis of the threat created by the SpaceX launch site). Additional safety concerns are raised in the following pages, see *id.* at 69-73.

⁴⁶⁶ See 40 C.F.R. § 1502.9(c)(1) (1978) and 40 C.F.R. § 1502.9(d)(1) (2020).

Alaska LNG, Kenai Peninsula, Alaska

- Appendix 8b: **Rehearing Request on the Certificate Order** by Center for Biological Diversity and others (June 22, 2020).

Annova LNG, Brownsville, Texas

- Appendix 13: **Rehearing Request on the Certificate Order** by Sierra Club and others (Dec. 23, 2019).

Cameron LNG, Cameron Parish, Louisiana⁴⁶⁷

- Appendix 14: **Comments on the DEIS** by Sierra Club and others (March 3, 2014): https://environmentalnewsstand.com/sites/environmentalnewsstand.com/files/documents/apr2014/epa2014_0622b.pdf.

Jordan Cove LNG, Coos Bay Oregon

- Appendix 15: **Comments on the DEIS** by the Western Environmental Law Center (Feb. 2015) <https://law.lclark.edu/live/files/19245-2015-03-group-comments-on-deis-for-jordan-cove-lng>.
- Appendix 16: **Supplemental Comments on the DEIS** by Oregon Shores Conservation Coalition (July 5, 2019).
- Appendix 8: **Rehearing Request on the Certificate Order** by NRDC (April 20, 2020).

Pointe LNG, Plaquemines Parish, Louisiana

- Appendix 17: **Scoping comments** by Sabin Center for Climate Change Law (March 7, 2019): [https://climate.law.columbia.edu/sites/default/files/content/docs/EIA-Comment-2019-03-Planned-Pointe-LNG-Project-EIS%20\(1\).pdf](https://climate.law.columbia.edu/sites/default/files/content/docs/EIA-Comment-2019-03-Planned-Pointe-LNG-Project-EIS%20(1).pdf).

Rio Grande LNG, Brownsville, TX

- Appendix 10: **Comments on the DEIS** by Sierra Club, Texas Rio Grande Legal Aid, et al (December 3, 2018): https://drive.google.com/file/d/1cqUfLVDddizYUkg_e1VYtQ-sb1e0UzGF/view.
- Appendix 9: **Rehearing Request on the Certificate Order** by Sierra Club and others (December 23, 2019).
- Appendix 2: **D.C. Circuit Opinion: Vecinos para el Bienstar de la Comunidad Costera v. FERC**, No. 20-10453 (“Rio Grande Op.”) at 12-13 (Aug. 3, 2021), [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf).

Sabine Pass LNG, Cameron Parish, Louisiana

⁴⁶⁷ The 2014 Cameron LNG rehearing request was rejected because it was filed 25 seconds after the deadline for requests. See *Cameron LNG, LLC*, 148 FERC ¶61,237 Dkt. No. CP13-25-002 (Sept. 26, 2014) (Accession No. 20140926-3039). Lesson learned: don't delay!

- Appendix 18: **D.C. Circuit Opinion** (June 28, 2016)
[https://www.cadc.uscourts.gov/internet/opinions.nsf/9E12F2D01393992385257FE000502CB2/\\$file/14-1249-1621989.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/9E12F2D01393992385257FE000502CB2/$file/14-1249-1621989.pdf).

Texas LNG, Brownsville, TX

- Appendix 19: **Scoping comments** by Sierra Club and others (May 21, 2015).
- Appendix 20: **Scoping comments** by Defenders of Wildlife (Sept. 3, 2015) (applies to the other Brownsville terminals as well: Rio Grande LNG & Annova LNG).
- Appendix 21: **Scoping comments** by Sierra Club and others (Sept. 4, 2015) (applies to the other Brownsville terminals as well: Rio Grande LNG & Annova LNG).
- Appendix 22: **Comments on the DEIS** by Sierra Club and others (Dec. 17, 2018).
- Appendix 11: **Rehearing Request on the Certificate Order** by Sierra Club and others (December 23, 2019).