

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued November 24, 2014

Decided May 15, 2015

No. 13-1250

TURLOCK IRRIGATION DISTRICT AND MODESTO IRRIGATION
DISTRICT,
PETITIONERS

v.

FEDERAL ENERGY REGULATORY COMMISSION,
RESPONDENT

TUOLUMNE RIVER TRUST, ET AL.,
INTERVENORS

Consolidated with 13-1253

On Petitions for Review of Orders of the
Federal Energy Regulatory Commission

John A. Whittaker IV argued the cause for petitioners Turlock Irrigation District and Modesto Irrigation District. With him on the briefs was *Erica E. Stauffer*.

Mary Catherine Race argued the cause for petitioner Tuolumne River Trust and Intervenors. On the briefs were *Richard Roos-Collins, Julie Gantenbein, Nicholas Niiro, Robert A. Salerno, and Peter H. Day*.

Lisa B. Luftig, Attorney, Federal Energy Regulatory Commission, argued the cause for respondent. On the brief were *David L. Morenoff*, Acting General Counsel, *Robert H. Solomon*, Solicitor, *Lona T. Perry*, Senior Attorney, and *Robert M. Kennedy Jr.*, Attorney.

John A. Whittaker IV and *Erica E. Stauffer* were on the brief for intervenors Turlock Irrigation District and Modesto Irrigation District in support of respondent.

Richard Roos-Collins, *Julie Gantenbein*, *Nicholas Niiro*, *Robert A. Salerno*, and *Peter H. Day* were on the brief for intervenors Tuolumne River Trust and Conservation Groups in support of respondent.

Before: PILLARD, *Circuit Judge*, and SILBERMAN and SENTELLE, *Senior Circuit Judges*.

Opinion for the Court filed by *Senior Circuit Judge SENTELLE*.

SENTELLE, *Senior Circuit Judge*: In the proceeding under review, the Federal Energy Regulatory Commission determined that La Grange Hydroelectric Project (“Project”) fell within the mandatory licensing provisions of the Federal Power Act, 16 U.S.C. § 817(1), for three independent reasons, which we will discuss more fully below. The owners of the Project, Turlock Irrigation District and Modesto Irrigation District (collectively, “Districts”) petition for review of FERC’s order, *Turlock Irrigation Dist. & Modesto Irrigation Dist., Order on Rehearing, Clarifying Intervention Status, and Denying Stay Pending Judicial Review*, 144 FERC ¶ 61,051 (July 19, 2013), contending that the Project does not fall within FERC’s licensing jurisdiction. The Tuolumne River Trust and other conservation groups (collectively, “Trust”) petition for review of FERC’s order, arguing that FERC erred by not finding that it

had licensing jurisdiction for four reasons instead of three. For the reasons set forth more fully below, we conclude that FERC's jurisdictional determinations were supported by substantial evidence and deny the Districts' petition for review. We dismiss the Trust's petition as it raises no justiciable case or controversy.

BACKGROUND

Between 1891 and 1893, the Districts constructed the regional La Grange facility, which consisted of a dam at River Mile¹ ("RM") 52.2 of the Tuolumne River, impounding the waters of the river and creating a reservoir for the purpose of irrigating river valley farmland. See Appendix 1 for a map of the region. In 1924, the Districts expanded the facility and its purpose by the construction of the La Grange Powerhouse for the production of hydroelectricity. The Powerhouse was comprised of a smaller unit with two 500 kilowatt generators, and a larger unit with a 3750 kilowatt generator. In 1989, Turlock replaced the Powerhouse's turbines and generating units.

In June 2011, FERC received an inquiry from the National Marine Fisheries Service concerning the status of the theretofore unlicensed La Grange Hydroelectric Project. In response to the inquiry, Commission staff undertook a review of the Project to determine whether it is subject to the Commission's mandatory licensing jurisdiction under the Federal Power Act ("FPA"). *Turlock Irrigation Dist. & Modesto Irrigation Dist.*, 141 FERC ¶ 62,211 (Dec. 19, 2012). FERC provided notice to the Districts and other interested parties of its pending jurisdictional determination. On December 19, 2012, the Director of the Division of Hydropower Administration and Compliance issued an order determining that the Project did require licensure within

¹River Miles are measured from the mouth of a river (RM 0).

the jurisdiction of the Commission under the FPA and ordered the Districts to proceed to come into compliance with the requirements of licensure. *Id.* In the decision, the Director concluded that the licensure was required under three governing provisions of 16 U.S.C. § 817(1): the Project was (1) located on a navigable water of the United States, (2) occupied public lands of the United States, or (3) if the stream were not navigable, it was in any event one over which Congress had jurisdiction under its authority to regulate commerce. Thereafter, the Districts and the Trust petitioned the Commission for rehearing of the staff-level decision. The Districts argued that the Project was not within the licensure provisions of the FPA. The Trust contended that the Director's opinion erred in not assigning a fourth reason for imposing the licensing requirement: the Trust argued that the Project required licensure because it formed a complete unit of development with the Don Pedro Project, a neighboring federally licensed hydroelectric project. The Commission ruled against the Districts on all three grounds of their appeal. It further concluded that it need not determine whether the fourth ground asserted by the Trust was applicable, as it would not change the result in any event. The Districts and the Trust now petition this court for review of the Commission's order. For the reasons set forth below, we deny the petition of the Districts and dismiss the petition of the Trust.

ANALYSIS

The Federal Power Act renders unlawful the unlicensed construction, operation, or maintenance of any "dam, water conduit, reservoir, power house, or other works incidental thereto across, along, or in" any waters meeting statutory criteria. More specifically, and as relevant here, such licensure is required where the impounded waters are "navigable waters of the United States, or upon any part of the public lands or reservations of the United States . . . or . . . over which Congress

has jurisdiction under its authority to regulate commerce with foreign nations and among the several States” 16 U.S.C. § 817(1). The Commission found the Tuolumne River to be covered by all three of the quoted criteria. The Trust argues that while the Commission reached the right result that the Project is required to be licensed, it should have ordered that the Project be licensed as part of a single unit with another hydroelectric project, the Don Pedro Project, 2.6 miles upstream from the La Grange Project.

I. *The Trust’s Petition*

Before determining the merits of the cause, we must first satisfy ourselves that we have jurisdiction. One element of jurisdiction is standing. There is no question that the Districts have standing to bring their current petition. They are entities regulated by the order under review, and the relief prayed would alleviate the harm asserted. They allege, and it is evident, that the acts of the Commission have caused the injury of which they complain, that is, that they must submit to licensure. It is equally evident that the relief sought in the current litigation, the vacating of the Commission’s order, would alleviate that harm. The same is not true of the Trust.

The Trust seeks to have the Project made subject to the licensure requirements of the FPA. The Commission entered an order declaring that the Project is subject to the licensing requirements of the FPA. The Trust does not seek to have the court change the decision, but only asks the court to tell the Commission that it should do so for four reasons instead of three. Unlike Becket, the Trust does not speak of “do[ing] the right deed for the wrong reason.” T.S. Eliot, *Murder in the Cathedral*, Act 1. Rather, it accuses the Commission of doing the right thing for too few reasons. This does not establish standing. Because standing “is an essential and unchanging part

of the case-or-controversy requirement of Article III,” *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992), the Trust must establish it has standing before we may exercise jurisdiction over its claims, *County of Delaware, Pa. v. Department of Transp.*, 554 F.3d 143, 147 (D.C. Cir. 2009).

It is well established “that the irreducible constitutional minimum of standing contains three elements.” *Lujan*, 504 U.S. at 560. “To establish constitutional standing, a petitioner must show an actual or imminent injury in fact, fairly traceable to the challenged agency action, that will likely be redressed by a favorable decision.” *Exxon Mobil Corp. v. FERC*, 571 F.3d 1208, 1219 (D.C. Cir. 2009). An injury in fact is “an invasion of a legally protected interest which is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical.” *Lujan*, 504 U.S. at 560 (quotations and citations omitted).

The Trust did not suffer an injury in fact because the Trust received exactly what it sought. FERC accepted some of the jurisdictional theories advanced by the Trust, and found that the La Grange Project was required to be licensed. The Trust argues that it is aggrieved because FERC’s refusal to license La Grange and the Don Pedro Project in a single proceeding doubles the cost the Trust must bear in order to actively participate in both licensing proceedings, and frustrates the creation of a coordinated fish passage through the two dams, thus resulting in a decline to the fish population. This decline in fish population, they argue, reduces the number of tourists who come to observe the spawning salmon, thus reducing the money the Trust will make from guided tours.

Neither of the Trust’s asserted injuries satisfies the constitutional requirement of injury in fact. We have previously recognized that the expenditure of resources on advocacy is not a cognizable Article III injury. *See Center for Law and Educ. v. Department of Educ.*, 396 F.3d 1152, 1162 n.4 (D.C. Cir. 2005)

("[T]o hold that a lobbyist/advocacy group had standing to challenge government policy with no injury other than injury to its advocacy would eviscerate standing doctrine's actual injury requirement." (citing *Sierra Club v. Morton*, 405 U.S. 727, 739–40 (1972))). This is true whether the advocacy takes place through litigation or administrative proceedings. See *Nat'l Ass'n of Home Builders v. EPA*, 667 F.3d 6, 12 (D.C. Cir. 2011) (concluding that time and money spent "submitting comments to the EPA" and "testifying before the United States Senate" does not suffice to establish an injury in fact). "The mere fact that an organization redirects some of its resources to litigation and legal counseling in response to actions or inactions of another party is insufficient to impart standing upon the organization." *Nat'l Taxpayers Union, Inc. v. U.S.*, 68 F.3d 1428, 1434 (D.C. Cir. 1995) (quotations and citation omitted). The Trust's decision to expend more of its resources by participating in both Don Pedro's and La Grange's licensing proceedings is the type of alleged harm that we have repeatedly held does not qualify as an injury in fact.

The Trust, relying on this Court's decision in *Equal Rights Center v. Post Properties, Inc.*, argues that if a "defendant's allegedly wrongful action prompts an organization to 'increase[] the resources [it] must devote to programs independent of its suit,' . . . the organization has shown an injury in fact." 633 F.3d 1136, 1138 (D.C. Cir. 2011) (quoting *Spann v. Colonial Village, Inc.*, 899 F.2d 24, 27 (D.C. Cir. 1990)). But *Equal Rights Center* is inapposite. As we noted in that case, an organization must allege that the defendant's conduct "perceptibly impaired" the organization's ability to provide services in order to establish injury in fact. 633 F.3d at 1138–39 (citing *Havens Realty Corp. v. Coleman*, 455 U.S. 363, 378–79 (1982)). The Trust does not allege impairment of its ability to provide services, only impairment of its advocacy. As we noted above, this will not suffice.

The Trust's second asserted injury, a decline in tourism revenue, is also insufficient to satisfy the injury in fact requirement. It is purely conjectural. The Trust theorizes that if La Grange and Don Pedro are not licensed in a single proceeding, then the two projects will not have a coordinated fish passage, which will lead to a decline in the fish population, potentially reducing the number of tourists to the river and, consequently, the amount of money the Trust will make off of tourism. "This theory stacks speculation upon hypothetical upon speculation, which does not establish an 'actual or imminent' injury." *New York Regional Interconnect*, 634 F.3d at 587. We may reject as overly speculative the Trust's assumption regarding the future behavior of third parties. *See Crete Carrier Corp. v. EPA*, 363 F.3d 490, 494 (D.C. Cir. 2004).

Moreover, the Trust's prediction that separate licensing proceedings will result in the lack of a coordinated fish passage hypothesizes as to the outcome of future legal proceedings, and is thus "too speculative to invoke the jurisdiction of an Art[icle] III Court." *Platte River Whooping Crane Critical Habitat Maintenance Trust v. FERC*, 962 F.2d 27, 35 (D.C. Cir. 1992) (quoting *Whitmore v. Arkansas*, 495 U.S. 149, 157 (1990)). The record before us does not establish that FERC cannot coordinate fish passage between La Grange and Don Pedro despite separate licensing. *See* Nov. 14, 2014 FERC 28(j) Letter and attachment at 2, 7–8. Indeed, FERC suggested at oral argument that it intended to do so. Oral Arg. Rec. at 30:50–32:05, 33:25–34:00. The FPA empowers FERC to formulate comprehensive plans for, among other things, "enhancement of fish and wildlife." 16 U.S.C. § 803(a)(1). On this record, it is wholly speculative to suggest that separate licensing will lead to an uncoordinated fish passage.

The Trust also seeks to proceed under associational standing, arguing that a decline in fish population will diminish its members' ongoing use and enjoyment of the river for fly fishing. To establish standing as an association, the Trust must

demonstrate that at least one of its members meets the three element test set forth in *Lujan*. See *NO Gas Pipeline v. FERC*, 756 F.3d 764, 767 (D.C. Cir. 2014). However, the notion that a lack of a coordinated fish passage will lead to a decline in the fish population which in turn will lead to a decrease in tourism is doubly speculative, and thus cannot be the basis for an injury in fact for either the Trust or its members. As noted above, we need not accept the Trust's assertion that fish passage will not be coordinated. Moreover, we have repeatedly held that litigants cannot establish an Article III injury based on the "independent action[s] of some third party not before th[is] court." *Florida Audubon Soc. v. Bentsen*, 94 F.3d 658, 670 (D.C. Cir. 1996) (en banc) (quoting *Simon v. E. Ky. Welfare Rights Org.*, 426 U.S. 26, 42 (1976)). This is because "predictions of future events (especially future actions taken by third parties)" are too speculative to support a claim of standing. *United Transp. Union v. ICC*, 891 F.2d 908, 912 (D.C. Cir. 1989). The Trust's theory of standing rests upon unsupported presumptions regarding fish population, and guesswork about what future tourists *might* do. This is insufficient to support a claim of standing.

Because the Trust has failed to establish standing either for itself or on behalf of its members, we dismiss its petition for lack of jurisdiction.

II. *The Petition of the Districts*

As suggested above, our jurisdiction to entertain the petition of the Districts is unquestionable, and we therefore will proceed to determine whether their allegations merit relief. They do not. The Districts argue that FERC acted arbitrarily and capriciously and without substantial evidence in making its determination that the Tuolumne River was navigable, that the reservoir was upon public land to the United States, and that even if the stream were not navigable, it was nonetheless one over which Congress had jurisdiction under its authority to

regulate commerce. We disagree as to all three jurisdictional findings.

When reviewing FERC's hydroelectric licensing decisions, "[w]e defer to the agency's expertise . . . so long as its decision is supported by 'substantial evidence' in the record and reached by 'reasoned decisionmaking,' including an examination of the relevant data and a reasoned explanation supported by a stated connection between the facts found and the choice made." *U.S. Dept. of Interior v. FERC*, 952 F.2d 538, 543 (D.C. Cir. 1992) (quoting *Electricity Consumers Resource Council v. FERC*, 747 F.2d 1511, 1513 (D.C. Cir. 1984)). If supported by substantial evidence, FERC's findings of fact are conclusive. *See Consolidated Hydro, Inc. v. FERC*, 968 F.2d 1258, 1261 (D.C. Cir. 1992) (citing 16 U.S.C. § 825l(b)). Moreover, "we are particularly reluctant to interfere with the agency's reasoned judgments" when its orders "involve complex scientific or technical questions." *NRG Power Marketing, LLC v. FERC*, 718 F.3d 947, 953 (D.C. Cir. 2013) (quoting *B&J Oil & Gas v. FERC*, 353 F.3d 71, 76 (D.C. Cir. 2004)).

A. Navigability Determination

The Districts first challenge FERC's finding that La Grange is located on a navigable water of the United States. The Districts argue that FERC's navigability finding is not supported by substantial evidence. They also argue that FERC failed to present credible evidence of the potential commercial use to which the Tuolumne River may be put. We disagree, and conclude that FERC reasonably found that the Tuolumne River is suitable for use in interstate commerce, and that this finding was supported by substantial evidence.

Under the FPA, navigable waters are defined as:

[T]hose parts of streams . . . which either in their natural or improved condition notwithstanding interruptions between the navigable parts of such streams or waters by falls,

shallows, or rapids compelling land carriage, are used or suitable for use for the transportation of persons or property in interstate or foreign commerce.

16 U.S.C. § 796(8). A waterway is navigable within that definition if “(1) it *presently* is being used or is suitable for use, or (2) it has been used or was suitable for use in the *past*, or (3) it could be made suitable for use in the *future* by reasonable improvements.” *Rochester Gas & Elec. Corp. v. Federal Power Commission*, 344 F.2d 594, 596 (2d Cir. 1965) (emphases in original); *see also FPL Energy Maine Hydro LLC v. FERC*, 287 F.3d 1151, 1155 (D.C. Cir. 2002) (same). “Navigability can be established based on any of these three requirements; each alone is sufficient.” *FPL Energy*, 287 F.3d at 1155. In making the determination of navigability of the Tuolumne, FERC relied on evidence bearing on each of the three.

As to the present navigability, the Commission found that the Tuolumne River is presently navigable from its confluence with the navigable San Joaquin River at least to the La Grange Project tailrace—the channel carrying water away from the powerhouse—and with a short portage to the base of the La Grange Dam at RM 52.2. *Turlock Irrigation Dist.*, 144 FERC ¶ 61,051 P 34. The evidence supporting this finding included a declaration submitted by the Trust reporting the experience of a kayaker who had navigated the waters from a point approximately 1.5 miles downstream of the La Grange Dam to the base of the Dam. Additionally, the Commission relied on evidence from the California Department of Fish and Game to the effect that the Department’s employees have traveled upstream to an area of the river just below the powerhouse.

We have previously found “evidence of recreational use,” as well as evidence of “[a]ny similar personal or private use not involving recreation,” relevant to establishing a river’s “suitability for commercial navigation.” *FPL Energy*, 287

F.3d at 1157 (quoting *Kennebec Water District*, 88 FERC ¶ 61,118, 61,304 (July 28, 1999)). As the Supreme Court has recognized, “personal or private use by boats demonstrates the availability of the stream for the simpler types of commercial navigation.” *U.S. v. Appalachian Elec. Power Co.*, 311 U.S. 377, 416 (1940).

The governmental boat use provides sufficient evidence that the River is currently navigable. The evidence in the record establishes that between October 2011 and January 2012, California DFG crews conducted weekly salmon surveys, generally traveling upstream to RM 51.5, and at times as far as RM 51.9, a point upstream of the Project’s tailrace. Joint Appendix 358–60. This evidence of weekly trips is more substantial than the evidence of boating we found sufficient in *FPL Energy*. 287 F.3d at 1159 (concluding that “[three] test canoe trips provide sufficient evidence that the Stream is navigable”); *see also Montana Power Co. v. Federal Power Commission*, 185 F.2d 491, 493–94 (D.C. Cir. 1950) (concluding that use of the river by “several steamboats” was sufficient to support a navigability finding).

The Districts contend that FERC was required to demonstrate “that the river between the Powerhouse and Dam” was navigable. Districts’ Br. 12. We disagree. The FPA does not require FERC to show that the river is navigable “*through* the La Grange site,” Districts’ Reply Br. 5 (emphasis added), only that some part of the project is located on navigable waters, *see* 16 U.S.C. § 817(1) (requiring licensing if the “dam, water conduit, reservoir, power house, or *other works incidental thereto*,” are located “in any of the navigable waters of the United States” (emphasis added)). The tailrace is one of the project works that make up the La Grange Project. *See* Report of Turlock Irrigation District to FERC on the La Grange Project at 1 (Oct. 11, 2011), Joint Appendix 72 (listing the tailrace as part of the La Grange Project); *see also* 16 U.S.C. § 796(12) (defining “project works” as the “physical structures of a

project”). Therefore, FERC need only show that the river up to the tailrace is navigable in order to assert jurisdiction over the La Grange Project. *See, e.g., Sheldon Jackson College*, 54 FERC ¶ 61,263, 61,763–61,764 (Mar. 8, 1991) (licensing required where only a hydroelectric project’s tailrace was located on navigable waters).

The Commission also found that the Tuolumne was navigable in the past at least up to the falls where the La Grange Dam is now located. This finding was based on an 1850 *Stockton Times* article, which stated that during the winter of 1849, gold seekers used whale boats to travel up the Tuolumne River as far as Jacksonville, a town located 20 miles upstream of the La Grange Dam. The Commission also relied upon an 1851 finding by the California legislature that the Tuolumne was navigable up to the “foot of the rapids” that then existed at the present day site of the La Grange Dam. *Turlock Irrigation Dist.*, 144 FERC ¶ 61,051, PP 57–64.

The Districts argue that the 1850 newspaper article FERC used to establish that whaleboats traveled up the Tuolumne River is unreliable as it conflicts with the Districts’ expert report discussing the physical characteristics of the River in 1850. They also argue that FERC’s reliance on the 1851 findings of the California legislature that the Tuolumne River was navigable up to the “foot of the rapids” was misplaced because “[s]tate law is not determinative of navigability under federal law,” *State of Wisconsin v. Federal Power Commission*, 214 F.2d 334, 336–37 (7th Cir. 1954), and because the California legislature later changed its findings and moved the head of navigation downstream.

In disputing the reliability of the 1850 newspaper article, the Districts rely on the expert report of their historian, which states that based on “the falls at La Grange, the river gradient, upstream falls or rapids and the topography of the river canyon

that would have made portaging extremely difficult . . . it seems safe to conclude that navigation by whale boats *above* La Grange was virtually impossible.” Report of Dr. Alan Paterson at 12, Joint Appendix 302 (emphasis added). As we stated above, FERC need only show that the river was navigable up to the Project’s tailrace. Accordingly, the Districts’ contention that the river above the falls was non-navigable does not undermine FERC’s conclusion that the river was navigable in the past up to the La Grange Dam. *See Turlock Irrig. Dist.*, 144 FERC ¶ 61,051 P 60 (“[I]t is sufficient to find, as we do here, that the river was navigable in the past at least up to the falls, where the La Grange Dam is now located.”).

The Districts are correct that the 1851 findings of the California legislature are not determinative of navigability under federal law. *See Brewer-Elliott Oil & Gas Co. v. U.S.*, 260 U.S. 77, 87 (1922) (“[T]he navigability of the stream is not a local question for the state tribunals to settle.”). Indeed, fundamental to our system of government is the notion that the laws of the United States “form the supreme law of the land, ‘anything in the constitution or laws of any state to the contrary notwithstanding.’” *M’Culloch v. Maryland*, 17 U.S. (4 Wheat.) 316, 406 (1819) (quoting U.S. CONST. art. VI, cl. 2). But this point is not dispositive, as nothing prevents FERC from citing state navigability determinations as evidence of the historic navigability of a river for federal law purposes. Nor does evidence that the California legislature later amended its determination defeat a finding of navigability. “When once found to be navigable, a waterway remains so.” *Appalachian Elec. Power Co.*, 311 U.S. at 408.

FERC’s evidence of historic navigability is not overwhelming. Nor is it so compelling as to completely foreclose any argument that the River was non-navigable. But evidence of past navigability need not be large to sustain a finding of navigability. *See id.* at 416. When viewed as a whole, the evidence is sufficient to support FERC’s finding that

the River was used in the past up to the falls where La Grange is now located.

Lastly, the Districts argue that FERC failed to present credible evidence of the potential commercial use to which the Tuolumne River may be put. This argument also fails. We have previously rejected the notion that “FERC’s navigability test was flawed because FERC failed to identify the possible commercial use to which the Stream may be put.” *FPL Energy*, 287 F.3d at 1158. As we explained, “[t]he test is whether the waterway is presently ‘suitable for use for the transportation of persons or property in interstate or foreign commerce,’ not whether the waterway is presently suitable for a specific type of commercial activity named by FERC and approved of by an opposing party.” *Id.* (quoting 16 U.S.C. § 796(8)).

To uphold FERC’s navigability determination, “we need only find that the evidence on which the finding is based is substantial.” *FPL Energy*, 287 F.3d at 1160. The “substantial evidence” standard “requires more than a scintilla, but can be satisfied by something less than a preponderance of the evidence.” *Id.* We conclude that FERC’s evidence of actual use in the past, together with current use of the Tuolumne River by California DFG crews, constitutes substantial evidence supporting FERC’s finding that La Grange is located on a navigable water of the United States.

B. Federal Lands Determination

The Districts take issue with FERC’s determination that the La Grange Reservoir extends onto federal lands. The Districts argue that FERC acted arbitrarily by ignoring their water level gradient analysis, which purported to show that the reservoir ended about 5,300 feet upstream of the dam, short of federal lands. They also argue that FERC’s attempt to calculate the precise point where the reservoir ends disregards the practical limitations of the data, namely that the results of FERC’s

backwater analysis can have no better than a 0.5 to 1.0 foot degree of accuracy. We reject both arguments, and hold that FERC properly relied on the results of its backwater analysis to conclude that the La Grange reservoir extends onto federal lands.

The FPA requires licensure of a hydroelectric plant if its “dam, water conduit, reservoir, power house, or other works incidental thereto” are located “upon any part of the public lands or reservations of the United States.” 16 U.S.C. § 817(1). The Commission found that the La Grange reservoir extends onto federal lands located approximately 5,800 feet upstream of the La Grange Dam. To support this determination, the Commission relied upon its backwater analysis, as well as a contour analysis submitted by the National Marine Fisheries Service.

Contrary to the Districts’ arguments, FERC also considered the Districts’ water level gradient analysis when making its federal lands determination. It found the results “misleading.” *Turlock Irrig. Dist.*, 141 FERC ¶ 62,211 P 31. As FERC explained in its order, the Districts’ analysis “assumes that reservoir water surface gradients generally appear flat and uniform, whereas river gradients in steeper areas appear higher and follow the river bed.” *Id.* However, because reservoirs are influenced by the terrain, they can have a gradient such that their surface level varies, depending on where it is measured. *Id.* Accordingly, FERC found that focusing on the gradient of the water surface elevation “can lead to incorrect conclusions about the extent of the reservoir.” *Id.*

Instead, FERC relied on the results of its backwater analysis to determine whether the La Grange reservoir extends onto federal lands. FERC has previously defined “backwater” as “the amount the depth of flow has been increased by an obstruction such as a dam.” *Turlock Irrig. Dist.*, 141 FERC ¶ 62,211 P 28. (citing *Public Utility Dist. No. 1 of Pend Oreille*

County, Washington, 77 FERC ¶ 61,146, 61,543 n.11 (Nov. 13, 1996)). Under this definition, the upstream extent of the reservoir is the point where the depth of the river for “with-dam” and “without-dam” conditions are equal. *Turlock Irrig. Dist.*, 141 FERC ¶ 62,211 P 28. When performing this analysis, FERC calculates the depth for “with-dam” and “without-dam” conditions, plots the data as two lines on a graph, and then, relying on “eye observation,” determines the point of tangency, *i.e.*, the point where the two lines meet. *Turlock Irrig. Dist.*, 144 FERC ¶ 61,051 P 76. This point denotes the end of the reservoir. *Id.*

Both FERC and the Districts used this method to determine the end point of the reservoir, and their calculations regarding the depth of the river for “with-dam” and “without-dam” conditions were the same. *Compare* Joint Appendix 175–79 (the Districts’ calculations), *with* Joint Appendix 421–27 (FERC’s calculations). FERC and the Districts differed, however, in their interpretation of this data. The Districts interpreted the data as suggesting that the reservoir ended somewhere around 5,300 feet, before the federal lands boundary. FERC found that the Reservoir extended more than 11,300 feet upstream of the La Grange Dam, reaching BLM land. FERC opined that this discrepancy in interpretation was a result of the graphs upon which the Districts relied:

The Districts reach a different conclusion because they plot their results on smaller graphs with a more compressed scale and use thicker lines to depict the with-dam and without-dam conditions. This makes the two lines appear to converge at a point somewhere between 4,700 and 5,300 feet upstream of the La Grange Dam, downstream of the BLM land boundary. [FERC] [s]taff, using slightly larger graphs with a less compressed scale and thinner lines, determined the correct point of tangency as occurring much farther upstream, more than 11,300 feet upstream of the La

Grange Dam, and well upstream of the BLM boundary. . . . Staff used the same method as the Districts, but its graphs showed the results more clearly.

Turlock Irrig. Dist., 144 FERC ¶ 61,051 P 77.

The Districts frame their arguments as objections to the techniques or models employed by FERC, but they are actually objecting to FERC's interpretation of the data. The Districts complain that FERC's interpretation of the data is erroneous because it ignores the 0.5 to 1.0 foot degree of accuracy limitation inherent in any backwater analysis. They assert that "[a]pplying this degree of accuracy, the upstream end of the La Grange Reservoir would extend no further than 5,400 ft upstream of the La Grange Dam." Districts' Request for Rehearing at 23 (Jan. 18, 2013). Without more, such conclusory statements do not provide sufficient evidence for us to overturn FERC's interpretation.

The Districts nowhere identify a methodology for taking the degree of accuracy into account. In fact, in their 34-page request for rehearing, the Districts devote only two sentences to this issue, neither of which explains how FERC ought to adjust its interpretation of the data based on the degree of accuracy. Despite this lack of explanation, the Districts ask us to overturn FERC's determination. This we will not do. "We are reluctant to interfere with an agency's choice of methodology so long as it is not irrational." *California v. Watt*, 668 F.2d 1290, 1320 (D.C. Cir. 1981). In the absence of evidence establishing that FERC's interpretation was erroneous, we reject the Districts' argument that FERC acted arbitrarily in its interpretation of the backwater analysis.

However, even if we were to disregard FERC's interpretation of the backwater analysis, we could still sustain FERC's conclusion that the reservoir extends onto BLM land based on the contour analysis survey performed by the National Marine Fisheries Service. FERC often relies on contour lines to

determine the length of a reservoir. *See* 18 C.F.R. § 4.41(h)(2)(i)(A)(1) (contour lines are the “preferred method” for describing project boundaries); Districts’ Request for Rehearing at 25, Joint Appendix 452 (“A brief sampling of other licenses shows that the Commission often uses a contour line for establishing a reservoir’s upstream boundary.”). In this case, the Fisheries Service used a contour elevation projected from the La Grange Dam’s spillway crest elevation of 296.46 feet mean sea level to demonstrate that the La Grange Reservoir extends onto BLM land. FERC found that this analysis “conclusively demonstrate[s] that the La Grange Reservoir occupies federal lands.” *Turlock Irrig. Dist.*, 144 FERC ¶ 61,051 P 86.

The Districts argue that the Fisheries Service’s analysis was flawed because it used the spillway crest elevation of 296.46 feet mean sea level as the normal maximum surface elevation, as opposed to using the level at which the Districts normally operate La Grange. FERC rejected this argument, noting that the “normal maximum surface elevation of a reservoir is typically defined as the crest of the dam or spillway.” *Turlock Irrig. Dist.*, 144 FERC ¶ 61,051 P 85. “[B]ecause the top of the [La Grange Dam] is almost entirely a spillway,” the spillway crest defines the reservoir’s normal maximum surface elevation, “not some lower elevation that a project operator may choose to maintain for operational reasons.” *Turlock Irrig. Dist.*, 141 FERC ¶ 62,211 P 32 n.64. This conclusion is consistent with FERC’s data documenting the elevation of the reservoir between the years 2009 and 2011, *Turlock Irrig. Dist.*, 144 FERC ¶ 61,051 P 85 n.119, as well as the Districts’ backwater analysis, which used 296.46 feet mean sea level as the normal water surface elevation, Joint Appendix 158.

“[W]hen agency orders involve complex scientific or technical questions . . . we are particularly reluctant to interfere with the agency’s reasoned judgments.” *B&J Oil and Gas*, 353 F.3d at 76. Where, as in this case, the agency has “examined the

relevant data and has articulated an adequate explanation for its action,” we will defer to the agency’s decision. *City of Waukesha v. EPA*, 320 F.3d 228, 247 (D.C. Cir. 2003) (quotations and citation omitted).

C. Commerce Clause Determination

Finally, the Districts challenge FERC’s finding that the La Grange Project is subject to FERC’s mandatory licensing jurisdiction based on Congress’s “authority to regulate commerce with foreign nations and among the several States.” 16 U.S.C. § 817(1). In order to assert jurisdiction based on Congress’s Commerce Clause authority, FERC must find that the project (1) is located on Commerce Clause waters, (2) affects interstate commerce, and (3) was “constructed” or enlarged after 1935. *See L.S. Starrett Co. v. FERC*, 650 F.3d 19, 23 (1st Cir. 2011) (citing 16 U.S.C. § 817(1)). FERC interprets “construction” as any increase in a project’s generating capacity, *i.e.*, an increase in either the installed capacity or actual capacity of a project. *See id.* at 27 (upholding FERC’s interpretation of “construction”). The installed capacity is the “maximum potential generating capacity of a turbine generator,” whereas the actual capacity is the “measured capacity upon installation, which is affected by various site conditions.” *Id.* at 21 n.3.

FERC found that La Grange is located on Commerce Clause waters, that the Project affects interstate commerce through its connection to the interstate electrical grid, and that the Project’s generating capacity increased in 1989 when the Districts replaced the Powerhouse’s turbines and generating units. FERC relied upon an engineering report submitted by the Districts to support these findings. *Turlock Irrig. Dist.*, 144 FERC ¶ 61,051, PP 87–103.

The Districts do not dispute that the Project is located on Commerce Clause waters and affects interstate commerce. Instead, they challenge FERC’s finding that “post-1935

construction . . . occurred when the Project’s generating capacity increased in 1989.” *Id.* at P 87. Before we address the Districts’ specific challenges, however, some background is necessary.

A hydroelectric project generates energy using a turbine, which converts flowing water to mechanical power, and a generator, which converts the mechanical power to electric energy. *Id.* at PP 90–91. With unlicensed projects, FERC determines whether there has been an increase in the generating capacity of a project by looking to whether the project’s “installed capacity” has increased. The “installed capacity” of a unit is the lesser of the rating output of the unit’s generator, determined by looking at the nameplate or manufacturer’s rating, or the unit’s turbine. *Id.* at PP 91–92.

FERC determined that La Grange’s original generators were rated at 1,000 kW and 3,750 kW, for a combined total of 4,750 kW, while the replacement generators were rated at 1,231 kW and 3,693 kW, for a combined total of 4,924 kW. *Id.* at PP 94–95. Because the combined rated output of the replacement generators was 174 kW higher than the combined rated output of the original generators, FERC concluded that the 1989 rehabilitation increased La Grange’s installed capacity, and thus, La Grange required licensure. *Id.* at PP 95–103.

The Districts present three arguments for overturning FERC’s determination. First, the Districts argue that FERC never demonstrated that 4,750 kW was the correct pre-rehabilitation rating for the old generators. Second, the Districts assert that FERC erred in comparing the generating capacity of the new turbines to the generating capacity of the generators. Such an “apples to oranges” analysis, they argue, is flawed because it assumes the generators are 100 percent efficient, instead of taking into account the “standard efficiency factor” of the generators. Lastly, the Districts argue that even if FERC’s finding was correct, FERC abused its discretion in asserting

jurisdiction over such a de minimis increase in generating capacity. All three of the Districts' arguments lack merit.

First, FERC adequately demonstrated that 4,750 kW was the correct pre-rehabilitation rating for the old generators. FERC based the 4,750 kW number on an engineering report prepared by the Districts' contractor, Bechtel ("Bechtel Report"), and submitted to FERC by the Districts. The Bechtel Report notes that La Grange is made up of two turbine generator units, a smaller unit "with two-500 kW generators coupled to each side," and a larger unit "with one directly coupled 3750-kW Allis-Chalmers generator." Joint Appendix 103.

The Districts contend that the Bechtel Report never explicitly refers to those ratings as the nameplate or manufacturer's rating, and thus, they reason, it was arbitrary for FERC to rely on those ratings as if they were the nameplate rating. Conspicuously absent from the Districts' brief is an alternative explanation for the ratings listed in the Bechtel Report. The Districts never explain what those ratings refer to, or why Bechtel would provide ratings other than the nameplate rating. The Districts note that because the original units were taken from another site, the generators' capacity "may have been different from what may have been stated on the units." Districts' Br. 26. However, speculation as to the actual capacity of the generators is irrelevant to a determination of the rated output of the generators. *See L.S. Starrett Co.*, 650 F.3d at 21 n.3 (noting difference between installed capacity and actual capacity). In the absence of proof to the contrary, it was reasonable for FERC to assume that the ratings listed in the Bechtel Report were the manufacturer's ratings for the generators.

Second, the Districts argue that FERC erred by comparing the generating capacity of the old generators to the generating capacity of the new turbines rather than the new generators—an erroneous "apples to oranges" comparison, in the Districts'

view. This argument fails. FERC's analysis followed standard industry practice and was based on the information the Districts provided. The chart upon which FERC relied to find the rated output of the new generators listed the capacity of the new units (pairs of turbines and generators) in kilowatts, the standard expression of generator capacity, and horsepower, the standard expression of turbine capacity. Joint Appendix 108; *see* Districts' Rehearing Request at 29, Joint Appendix 456 (noting that "[t]urbines are rated as horsepower," and "[g]enerator capacity is . . . rated as kilowatt output"). FERC's comparison of the old generators to the new generators rests on FERC's finding that the kilowatt values in the chart reflected the capacity of the generators, while the horsepower values reflected the capacity of the turbines. *Turlock Irrig. Dist.*, 144 FERC ¶ 61,051 PP 96–98. That finding is reasonable in light of standard unit-labeling practice. The Districts argue that this finding is wrong, as evidenced by the fact that the kilowatt figures and the horsepower figures match when horsepower is converted to kilowatts. The Districts emphasize that generator capacity cannot actually match turbine capacity because no generator is 100 percent efficient, and that the figures FERC used thus must not be generator figures at all, but are alternate expressions of turbine capacity in kilowatts and horsepower. However, "[s]tandard engineering practice . . . require[s]" that a generator's capacity be matched to the capacity of a turbine. Report of Turlock Irrigation District to FERC on the La Grange Project at 8 (Oct. 11, 2011), Joint Appendix 79; *Turlock Irrig. Dist.*, 144 FERC ¶ 61,051 P 90 ("[T]he rated output of a generator is chosen to match the output of the turbine" (citing *Engineering and Design, Hydropower*, at 5-20, *Department of the Army, Corps of Engineers, Engineer Manual EM1110-2-1701* (Dec. 31, 1985))). The fact that the turbine and generator figures were reported as matching therefore appears unsurprising. The Districts failed to provide any clearer or better data requiring a contrary conclusion. Thus, it was

reasonable for FERC to assume that the kilowatt values in the chart reflected the capacity of the new generators.

Lastly, we reject the Districts' argument the FERC should have declined to exercise jurisdiction over La Grange because the increase in generating capacity was minimal. FERC contends that it does not have the discretion to decline to exercise jurisdiction over a hydroelectric project that meets the statutory requirements. We need not go that far to resolve this issue. It is sufficient to find, as we do here, that FERC did not abuse its discretion in asserting jurisdiction over the La Grange Project on the basis of post-1935 construction that resulted in an increase in generating capacity of 174 kW. *See L.S. Starrett Co.*, 650 F.3d at 21–22 (affirming FERC's assertion of jurisdiction over a project that increased in generating capacity by 86 kW).

CONCLUSION

For the reasons stated above, we deny the Districts' petition for review because we conclude that FERC's jurisdictional determinations were supported by substantial evidence, and reached by reasoned decisionmaking. We dismiss the Trust's petition for review for lack of jurisdiction.

So ordered.