

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION  
102 FERC ¶ 61,242

Before Commissioners: Pat Wood, III, Chairman;  
William L. Massey, and Nora Mead Brownell.

AquaEnergy Group, LTD

Docket No. DI02-3-001

ORDER DENYING REHEARING

(Issued February 28, 2003)

1. AquaEnergy Group, LTD has filed a request for rehearing of an October 3, 2002 Order<sup>1</sup> by the Director, Office of Energy Projects (Director), holding that the proposed Makah Bay Ocean Wave Energy Pilot Power Plant is required to be licensed under Part I of the Federal Power Act (FPA). For the reasons discussed below, we deny rehearing.

**BACKGROUND**

2. On April 29, 2002, AquaEnergy filed a declaration of intent concerning the proposed 1-megawatt Makah Bay Project. The company stated that the project would be located in Makah Bay, about 1.9 nautical miles offshore of Waatch Point in Clallam County, Washington. The project would include four floating buoys, tethered to concrete blocks located on the ocean floor; hoses for carrying pressurized sea water; a power conversion facility located on the sea floor, where the water from the hoses would be converted to electrical energy and from alternating current to direct current; submarine electrical cables running from the conversion facility to shore and under the beach through a conduit; and a power station housing equipment for connecting the power generated by the project to an existing 12-kilovolt distribution line. Power generated by the project, expected to be about 1,500 megawatt-hours annually, would be purchased by the Clallam County Public Utility District, and used within its service territory. AquaEnergy stated that the offshore portion of the project would be located in the

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<sup>1</sup>101 FERC ¶ 62,009 (2002).

Olympic Coast National Marine Sanctuary, and that the shore-based facilities would be on tribal lands within the Makah Indian Reservation.<sup>2</sup>

3. AquaEnergy asserted that the Makah Bay Project would be exempt from regulation under Part I of the FPA because: (1) the project would not be located on a navigable stream of the United States or of the State of Washington, but rather on state waters of the State of Washington; (2) the land-based portion of the project would be located on land owned by the tribal council of the Makah Indian Nation; (3) the project would not use surplus water or water power from a federal dam; and (4) the energy generated by the project would allow the Clallam Public Utility District to provide locally-generated electricity to the project area, rather than having to import energy from other sources, such that the project would not affect interest commerce.

4. AquaEnergy's filing was publicly noticed. The Department of Commerce's National Marine Sanctuary Program and National Marine Fisheries Service (Commerce) file a timely motion to intervene and comments, asserting that because the project was proposed to be located in navigable waters of the United States, and because the project would be connected to the interstate electric transmission grid and would thus be in interstate commerce, the project was required to be licensed by the Commission.<sup>3</sup> Olympic Park Associates, a private group the purpose of which is to preserve Olympic National Park, filed comments expressing concern that the Makah Bay Project might ultimately expand to include a large number of offshore buoys which would pose threats to sea mammals, commercial fishing operations, and recreational boaters.

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<sup>2</sup>FPA Section 3(2), 16 U.S.C. § 796(2), states that "reservations" means

national forest, tribal lands embraced within Indian reservations, military reservations, and other lands and interests in lands owned by the United States, and withdrawn, reserved, or withheld from private appropriation and disposal under the public land laws; also lands and interests in lands acquired for any public purposes; but shall not include national monuments or national parks.

<sup>3</sup>Commerce also expressed concern about the potential impacts of the proposed project on the Olympic Coast National Marine Sanctuary, in which the offshore facilities would be located, as well as on designated essential fish habitat for salmon and groundfish, and stated that, prior to approving the project, the Commission would be required to consult with Commerce pursuant to the National Marine Sanctuaries Act, 16 U.S.C. § 1434(d).

5. On October 3, 2002, the Director issued an order concluding that the proposed project was required to be licensed. The Director stated that, pursuant to Section 23(b)(1) of the FPA, 16 U.S.C. § 817(1), a non-federal hydroelectric project must be licensed (unless it has a still-valid pre-1920 federal permit) if it is located on a navigable water of the United States; occupies lands of the United States; utilizes surplus water or water power from a government dam; or is located on a body of water over which Congress has Commerce Clause jurisdiction, project construction occurred on or after August 26, 1935, and the project affects the interests of interstate or foreign commerce. Because AquaEnergy's project would be located on Makah Bay, a navigable waterway as defined by Section 3(8) of the FPA, 16 U.S.C. § 796(8), and because the project would be located on a Commerce Clause waterway, entail post-1935 construction, and be connected to the interstate electric power grid, the Director explained, the project must be licensed.

6. On November 1, 2002, AquaEnergy filed a timely request for rehearing. AquaEnergy contends that, as an ocean wave energy project, the Makah Bay Project is not a hydroelectric project under the terms of the FPA, and that the project would not be located on "navigable waters" within the meaning of the FPA, would not be on commerce clause waters and affect the interests of interstate commerce, and would not occupy federal lands. The company also states that certain changes to the project since the filing of the declaration of intent – the project will now be located 3.17 nautical miles offshore and will no longer include the ocean-floor energy conversion facility – strengthen its position that the Commission lacks jurisdiction over the project.

7. On November 25, 2002, Commerce filed a response to AquaEnergy's request for rehearing, reiterating its contentions that the project would require a permit pursuant to the National Marine Sanctuaries Act, and is required to be licensed under the FPA. On February 6, 2003, AquaEnergy filed a response to Commerce's response.<sup>4</sup>

## **DISCUSSION**

8. FPA Section 23(b)(1) defines those facilities that are required to be licensed by the Commission. That section provides, in pertinent part, that

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<sup>4</sup>While the Commission's regulations generally prohibit answers to requests for rehearing, see 18 C.F.R. § 385.213(d) (2002), we will accept Commerce's answer in the interest of compiling a full record in this case of first impression regarding our jurisdiction. AquaEnergy's response will also be part of the record.

[i]t shall be unlawful for any person, State, or municipality, for the purpose of developing electric power, to construct, operate, or maintain any dam, water conduit, reservoir, power house, or other works incidental thereto across, along, or in any of the navigable waters of the United States, or upon any part of the public lands or reservations of the United States (including the Territories), or utilize the surplus water or water power from any Government dam, except under and in accordance with the terms of a permit or valid existing right-of-way granted prior to June 10, 1920, or a license granted pursuant to this Act.

9. Section 3(8) of the FPA defines "navigable waters" as

those parts of streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States, and which either in their natural or improved condition . . . are used or suitable for use for the transportation of persons or property in interstate or foreign commerce. . . .

10. Section 3(11) of the FPA, 16 U.S.C. § 796(11), states that "project"

Means complete unit of improvement or development, consisting of a power house, all water conduits, all dams and appurtenant works and structures (including navigation structures) which are a part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, the primary lines or lines transmitting power therefrom to the point of junction with the distribution system or with the interconnected primary transmission system, all miscellaneous structures used and useful in connection with said unit or any part thereof, and all water-rights, rights-of-way, ditches, dams, reservoirs, lands, or interests in lands the use and occupancy of which are necessary or appropriate in the maintenance and operation of such unit.

11. AquaEnergy first argues that the Makah Bay Project is not located in navigable waters of the United States. AquaEnergy contends, without citation to case law or any specific portion of the legislative history of the FPA, that "navigable waters in the Federal Power Act refers primarily to streams and was not intended to extend to ocean

waters many miles from shore. . . . Congress . . . never contemplated extending jurisdiction to projects which might be located on ocean and tidal waters."<sup>5</sup>

12. AquaEnergy provides no support for this assertion. While it is true that in passing the Federal Power Act and its predecessors Congress focused primarily on projects located on inland waters, it did not incorporate in the statute itself the limit urged by AquaEnergy, nor does the legislative history suggest at any point that Congress intended to preclude the Commission from exercising jurisdiction over off-shore projects. Rather, the definition of "navigable waters," quoted above, encompasses streams and other bodies of water over which Congress has Commerce Clause jurisdiction, and includes the use of such waters in "foreign commerce."<sup>6</sup> While at one time the United States asserted jurisdiction over waters up to three nautical miles offshore, since 1988 it has

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<sup>5</sup>Request for rehearing at 23. AquaEnergy does cite to portions of the FPA's legislative history, request for rehearing at 19-20, but this material simply stands for the proposition that Congress was cognizant of the Nation's need to develop hydroelectric power; it sheds no light on the scope of the term "navigable waters" in the FPA.

<sup>6</sup>It is beyond dispute that "paramount rights over the ocean water and floor soils were vested in the Federal Government." *United States v. Maine*, 420 U.S. 515, 520 (1975); *United States v. California*, 332 U.S. 19, 34 (1947) ("protection and control of [the territorial sea] has been and is a function of national external sovereignty").

asserted jurisdiction up to 12 nautical miles.<sup>7</sup> Thus, the proposed project would in fact be located in navigable waters, as defined in the FPA.<sup>8</sup>

13. AquaEnergy next asserts that the Makah Bay Project will not occupy federal land, arguing that the facilities to be located on federal land -- the onshore power station that will condition the power produced by the buoys and distribute it to the electric power grid<sup>9</sup> -- are not explicitly listed in Section 23(b) as required to be licensed.<sup>10</sup> Section 23(b) references "any dam, water, reservoir, power house, or other works incidental thereto." Section 3(11) defines as a part of a project not only primary transmission lines but all "all miscellaneous structures used and useful in connection

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<sup>7</sup>See Presidential Proclamation No. 5928 (December 12, 1988), 103 Stat. 2981. This defeats AquaEnergy's assertion that there is some significance to the fact that it has moved the site of the proposed project from 1.9 to 3.17 nautical miles offshore.

AquaEnergy cites to former limits on the authority of the U.S. Army Corps of Engineers to issue permits beyond the three-mile limit, and to the Corps' regulations, which limit "navigable waters" to waters within the three-mile limit. Request for rehearing at 23-24. As we have explained, however, Congress intended for the scope of "navigable waters under the FPA to be at least as broad as under the River and Harbor Act of 1899, which governs the Corps' authority. See City of Centralia, 38 FERC ¶ 61,274 at p. 61,923 (1987). Moreover, "conclusions of another federal agency regarding navigability are not controlling with respect to our determinations of navigability under the FPA." Id. at p. 61,925 n.22.

<sup>8</sup>AquaEnergy avers that, because the technology for ocean wave hydroelectric projects had not been developed at the time that Congress passed the FPA, the statute cannot be deemed to apply to ocean wave projects. Request for rehearing at 20-21. However, the issue is not whether Congress contemplated a particular form of hydropower development, but rather whether specific projects, regardless of their technology, fall under the Commission's jurisdiction as defined by Congress. By way example, although the Commission did not license a pumped storage project until some years after the passage of the Federal Water Power Act, the fact that pumped storage technology may not have been ripe in 1920 did not preclude the Commission's jurisdiction over such projects, if they otherwise met the criteria of Section 23(b)(1).

<sup>9</sup>AquaEnergy does not mention the onshore portion of the electrical cable and the conduit under the beach leading to the power station.

<sup>10</sup>Request for rehearing at 26-28.

with" a project. As discussed below, the buoys included in the Makah Bay Project are powerhouses for the purposes of the FPA. All of the facilities leading from the buoys to the point of interconnection with the interstate grid, including undersea anchors, submarine cables, the conduit under the beach, and the land station, are part of the project.<sup>11</sup> Since these project works occupy federal lands, the project must be licensed.

14. In addition, other portions of the proposed project, including concrete anchors and submarine cables, will be located on federal lands. These project portions will be located within the boundaries of the Olympic Coast National Marine Sanctuary. That sanctuary consists of "approximately 2,500 square nautical miles of coastal and ocean waters, and the submerged lands thereunder, of the central and northern coast of the State of Washington."<sup>12</sup> By the terms of the National Marine Sanctuaries Act, 16 U.S.C. § 1431, et seq., the Secretary of Commerce has jurisdiction to manage and protect such sanctuaries. In consequence, the Sanctuary represents lands acquired and held for a public purpose.<sup>13</sup>

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<sup>11</sup>The company contends that, pursuant to FPA Section 3(11), a project's boundary terminates at the point of juncture with the distribution system. Section 3(11) includes in the definition of "project" the "primary lines or lines transmitting power [from a powerhouse] to the point of junction with the distribution system or with the interconnected primary transmission system . . .," thus indicating that facilities located downstream of the point of junction are not part of the project. However, the lines leading from the power station to Clallam Public Utility District's distribution line, see request for rehearing at 6, are the primary lines referenced in Section 3(10). The power station, which is located upstream of the primary distribution line and which AquaEnergy states will condition power so that it can be moved into the power grid (see request for rehearing at 26), and without which the project could not provide electric power for transmission and distribution, is clearly "a miscellaneous structure used and useful" in connection with the complete unit of development that includes the generating buoys, and so must be licensed. Moreover, as noted, the company ignores the on-shore portion of the electric cable and the conduit that leads to the power station, which also occupy federal land and are similarly part of the complete unit of development.

<sup>12</sup>See 15 C.F.R. § 922.150(a) (2002).

<sup>13</sup>Section 3 of the Outer Continental Shelf Lands Act of 1953, 43 U.S.C. § 1332(a), states that it is "the policy of the United States that the subsoil and seabed of the outer Continental Shelf [i.e., the seabed beyond 3 nautical miles] appertain to the United States and are subject to its jurisdiction, control, and power of disposition."

15. The location of portions of the proposed project on the Makah Indian Reservation and on the Olympic Coastal National Marine Sanctuary thus present a basis for requiring licensing of the Makah Bay Project in addition to, and independent of, its location in navigable waters.

16. Finally, AquaEnergy argues that the Makah Bay Project is not a hydroelectric project as defined by the FPA, such that it is not required to be licensed. AquaEnergy's argument rests on the particular design of the Makah Bay Project.<sup>14</sup> The company asserts that the Commission's jurisdiction is limited to "dams, reservoirs, conduits and other related structures typical of hydroelectric facilities."<sup>15</sup> According to AquaEnergy, "the Makah Bay project does not rely on a dam or other impoundment to build water pressure, it does not utilize a canal, penstock or other conduit to deliver pressurized water to turbines and it does not require a reservoir . . . ."<sup>16</sup>

17. AquaEnergy is not proposing to construct a dam, water conduit, or reservoir as part of the proposed project. This leaves the question whether the project's buoys are "powerhouses," as that term is used in the FPA.

18. We have not previously had occasion to construe the term "powerhouse" in this context. A common-sense definition of the term is provided by Webster's Third New International Dictionary, which defines "powerhouse" as "a building in which mechanical, electrical, or other power is generated." As AquaEnergy describes the buoys, they will convert wave motion into pressurized water flow by means of two-stroke pumps. The water pressure will then be converted into electricity within each buoy by being passed through a Pelton turbine, which will drive a generator.<sup>17</sup> The

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<sup>14</sup>AquaEnergy analogizes the Makah Bay Project to facilities that have been held not to require licensing by the Commission, including thermal-electric power plants, *Chemehuevi Tribe of Indians v. Federal Power Commission*, 420 U.S. 395 (1975), and projects producing hydromechanical, rather than electric, power. See *Building 69, Inc.*, 63 FERC ¶ 61,066 (1993); *Tufflite Plastics, Inc.*, 13 FERC ¶ 61,016 (1980). However, none of these projects produced hydroelectric power, as will the Makah Bay Project. The cited cases are therefore inapposite.

<sup>15</sup>Request for rehearing at 14.

<sup>16</sup>*Id.* at 16-17.

<sup>17</sup>*Id.* at 5; 36; 39.

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buoys thus being structures containing equipment for the generation of electrical power, we conclude that they are powerhouses for purposes of Section 23(b)(1).

19. The Commission recognizes the value of developing additional sources of electrical energy and utilizing innovative technology, as would the proposed project.<sup>18</sup> Our staff stands ready to assist AquaEnergy in developing and processing a license application as expeditiously as possible, should it choose to proceed, consistent with our responsibilities under the FPA.<sup>19</sup>

The Commission orders:

The request for rehearing filed by AquaEnergy, LTD on November 1, 2002, is denied.

By the Commission.

(S E A L )

Magalie R. Salas  
Secretary

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<sup>18</sup>AquaEnergy asserts that there are good policy reasons for allowing agencies other than the Commission to regulate offshore energy projects, and notes that there has been federal legislation under consideration on the matter. In cases of jurisdiction, however, we must act based on existing law, rather than policy or potential legislation.

<sup>19</sup>We also note that, given the extensive amount of permits and authorizations that the project would require, and the many agencies with which AquaEnergy would be required to deal, including the Corps of Engineers, Commerce, the U.S. Fish and Wildlife Service, the State of Washington (both for Clean Water Act and Coastal Zone Management Act certification), see request for rehearing at 8, the additional burden imposed by the FPA licensing process would likely be minor.