

139 FERC ¶ 61,203
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

TideWorks, LLC

Project No. 13656-002

ORDER DENYING REQUEST FOR REHEARING

(Issued June 11, 2012)

1. On January 27, 2012, the Director of the Office of Energy Projects (Director) issued an order denying TideWorks, LLC's (TideWorks) application to exempt the 5-kilowatt (kW) TideWorks Hydroelectric Project No. 13656-000 from the licensing requirements of Part I of the Federal Power Act (FPA) and dismissing TideWorks' request to use the pilot license process for the same development proposal under Project No. 13656-001.¹ The project was proposed to be located on the Sasanoa River adjacent to Bareneck Island, in Sagadahoc County, Maine. On February 27, 2012, TideWorks filed a timely request for rehearing of the denial of the exemption application. For the reasons discussed below, we deny rehearing.

Background

2. The Public Utility Regulatory Policies Act of 1978 (PURPA) authorizes the Commission to exempt from the licensing requirements of Part I of the FPA a small hydroelectric project with an installed capacity of 5 megawatts (MW) or less that: (1) is located at the site of any existing dam and which uses the water power potential of such dam; or (2) would use for the generation of electricity a natural water feature, such as a natural lake, waterfall, or the gradient of a natural stream, without the need for any dam or manmade impoundment.²

¹ *TideWorks, LLC*, 138 FERC ¶ 62,058 (2012).

² *See* sections 405 and 408 of the PURPA, 16 U.S.C. §§ 2705 and 2708 (2006).

3. Exemptions are subject to the provisions of section 30(c) of the FPA.³ That section requires the Commission to include in exemptions all terms and conditions that the U.S. Fish and Wildlife Service (FWS), the National Marine Fisheries Service (NMFS), and the state fish and wildlife agency deem appropriate to prevent loss of, or damage to, fish and wildlife resources and to carry out the purposes of the Fish and Wildlife Coordination Act (section 30(c) conditions).⁴

4. On January 15, 2010, and supplemented on May 5, 2010, TideWorks filed an application to exempt its proposed TideWorks Hydroelectric Project. The project would generate power using a new 5-kW hydrokinetic turbine generating unit to be submerged in the Sasanoa River. The turbine would be attached to a new 10-foot-wide, 20-foot-long steel pontoon float, which would be connected to Bareneck Island by a new 3.5-foot-wide, 40-foot-long walkway ramp. Project power would be transmitted through a new 100-foot-long, 220-volt transmission line. The project would have an average annual generation of about 22,000 kilowatt-hours. The project would operate in a run-of-river mode using incoming tidal flows with velocities from a minimum of 7.8 feet per second (fps) to a maximum of 9.1 fps to rotate the hydrokinetic turbine and generate power.

5. TideWorks' exemption application also included documentation of agency consultation. Maine Department of Marine Resources (Maine DMR) and NMFS had concerns regarding the potential impacts of the project on the fisheries in the Sasanoa River, in particular the endangered Atlantic sturgeon and the endangered shortnose sturgeon. Maine DMR stated that it "would likely require [as a section 30(c) condition] complete screening of the unit with approach velocities to be less than 2 feet per second."⁵ Maine DMR further stated that, in the alternative, "TideWorks, LLC could conduct various field studies to determine the distribution and abundance of marine and estuarine resources in the vicinity of the project and three-dimensional modeling of flow patterns and circulation in the Sasanoa River to estimate how often and at what speed these resources would encounter the proposed project."⁶

³ Section 405(b) of PURPA, 16 U.S.C. § 2705(b) (2006), makes 5-MW exemptions subject to the requirements of section 30(c), 16 U.S.C. § 823a(c) (2006).

⁴ 16 U.S.C. §§ 661, 667e (2006).

⁵ May 5, 2010 supplement to the application at 6-7 and 19-20 (October 9, 2009 comments of Maine DMR on TideWorks' draft exemption application). Approach velocity is the speed at which water approaches a fish screen and affects the likelihood of fish impingement on the screen.

⁶ *Id.*

6. In response to the public notices of the application,⁷ FWS and Maine DMR filed section 30(c) conditions.⁸ They each included a section 30(c) condition that would require TideWorks to install a screen around the proposed submerged turbine for the protection of fish that may occur in the project area.⁹ The condition required that the screen: (1) have a clear opening of 1 inch or less; (2) maintain an approach velocity of 2 fps or less; and (3) be demonstrated to be effective.

7. As noted above, in order to operate, the project needs water with approach velocities between 7.8 and 9.1 fps. FWS' and Maine DMR's section 30(c) conditions would require screening of the turbines and approach velocities of no more than 2 fps. The project would not be able to generate power under such conditions.

8. In an attempt to resolve this issue, on January 20, 2011, Commission staff held a teleconference with TideWorks, FWS, and Maine DMR to discuss the effect of the screening conditions on the operation of the project and explore possible alternative measures.¹⁰ The entities were unable to formulate an alternative to the screens that would allow the project to operate,¹¹ and Commission staff suggested that TideWorks

⁷ On May 28, 2010, the Commission issued public notice accepting the application and establishing July 27, 2010, as the deadline to file interventions and comments. *75 Fed. Reg.* 32,450 (June 8, 2010). On August 17, 2010, the Commission issued public notice that the application was ready for environmental analysis and establishing October 18, 2010, as the deadline to submit comments, recommendations, and terms and conditions. *75 Fed. Reg.* 51,987 (August 24, 2010).

⁸ See FWS Filing of July 28, 2010, and Maine DMR Filing of July 29, 2010. FWS and Maine DMR resubmitted their conditions on October 13 and October 15, 2010, respectively. By filing of October 15, 2010, NMFS stated that, due to the lack of site-specific studies and information, it would not submit section 30(c) conditions, but that it generally concurred with FWS' and Maine DMR's conditions.

⁹ Fish species likely to occur in the project area include alewife, blueback herring, American shad, striped bass, American eel, sea lamprey, sea-run brook trout, Atlantic sturgeon, Atlantic tomcod, rainbow smelt, Atlantic salmon, and shortnosed sturgeon.

¹⁰ Other attendees of the meeting included NMFS, the U.S. Department of the Interior, the U.S. Army Corps of Engineers (Corps), and the Maine Department of Inland Fisheries and Wildlife.

¹¹ The discussion included the possibility of using other screen designs to prevent fish passage into the turbine or of conducting net recovery sampling to estimate fish passage through the turbine.

consult further with the agencies to develop alternative fish protection measures that would allow project operation.

9. On February 2, 2011, TideWorks submitted a letter stating that it was planning a follow-up teleconference with FWS, NMFS, and Maine DMR to discuss the screening conditions for the project's turbine. However, on March 1, 2011, TideWorks submitted another letter stating that it discussed the screening conditions with FWS and Maine DMR, individually, and each agency indicated that it was unwilling to revise its section 30(c) condition. As a result, TideWorks stated that the follow-up teleconference would be unproductive. Lastly, because of the agencies' unwillingness to revise their section 30(c) conditions for screening the proposed turbine, TideWorks asked to convert its exemption application to a pilot license application.¹²

10. On March 23, 2011, Commission staff notified TideWorks that it was holding in abeyance the request to convert its exemption application to a pilot license application until TideWorks consulted with the agencies and gathered more information that would be needed for a pilot licensing proposal.¹³

11. On June 16, 2011, TideWorks filed agency comments on its pilot proposal.¹⁴ It also included a report on the results of a study that analyzed the biological effects of a

¹² Although a license (traditional or pilot) is not subject to the mandatory conditioning requirements of section 30(c) of the FPA, it *is* subject to the mandatory conditioning authority of fish and wildlife agencies under FPA section 18, which requires the Commission to include in licenses conditions requiring the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by FWS or NMFS, as appropriate. 16 U.S.C. § 811 (2006). Thus, FWS could have required the screens on a project proposed for licensing (pilot or traditional).

¹³ As explained in more detail in Commission staff's white paper on licensing hydrokinetic pilot projects, a pilot license is expected to be short term (i.e., about five years) and include monitoring to determine the environmental effects of the project and measures for project removal at the end of the pilot license term. *See* http://www.ferc.gov/industries/hydropower/gen-info/licensing/hydrokinetics/pdf/white_paper.pdf.

¹⁴ TideWorks included comments from the Corps, NMFS, Maine Department of Inland Fisheries and Wildlife, Maine Department of Environmental Protection, Maine State Planning Office, and Maine DMR. The comments generally questioned whether the pilot licensing process was appropriate for the TideWorks Project and stated that it would be premature to say what conditions they would want to impose on such a pilot project.

hydrokinetic turbine (similar to the turbine proposed by TideWorks) on juvenile Atlantic salmon or adult American shad (2011 Report).¹⁵ Based on the findings in the report, TideWorks took the position that the proposed turbine would result in no injury or mortality to juvenile Atlantic salmon or adult American shad. TideWorks provided a copy of the 2011 Report to the agencies on May 16, 2011.¹⁶

12. FWS filed comments on June 20, 2011, stating that it did not believe that the pilot licensing process would be appropriate for the TideWorks Project because TideWorks is not proposing to operate the project for a short term or conduct any monitoring during the license period. FWS stated that it would consider modifying the screening condition if TideWorks conducted site-specific studies to better understand the presence, seasonality, and abundance of marine organisms. FWS did not comment on the 2011 Report.

13. On July 6, 2011, Commission staff sent a letter specifying the additional information that would be needed to meet the requirements for a pilot license application and directed TideWorks to file the information within 90 days (by October 4, 2011). TideWorks did not respond.

14. On October 25, 2011, Commission staff sent a second letter to TideWorks requesting the overdue additional information necessary to meet the requirements for a license application.¹⁷ In addition, the letter informed TideWorks that, if it no longer wished to pursue its exemption application, it could withdraw it. The letter directed TideWorks to file the required information by December 27, 2011, and informed it that failure to do so could result in the dismissal of its request to use the pilot license application process.

15. On December 7, 2011, TideWorks responded, but it did not file the information needed to process its request to use the pilot licensing or licensing process. Instead, it took issue once again with Maine DMR's and FWS' screening requirement for its

¹⁵ See S.O. Conte Anadromous Fish Research Center, "Biological Testing of Effects of EnCurrent Model ENC-005-F4 Hydrokinetic Turbine on Juvenile Atlantic salmon and adult American shad," May 2011. The study was performed in the S.O. Conte Anadromous Fish Research Center's laboratory flume facility located along the Connecticut River in Turner Falls, Massachusetts.

¹⁶ See TideWorks' December 7, 2011 Filing at 1.

¹⁷ The letter enclosed Schedule A listing four items of additional information necessary to convert the application for exemption from licensing to a draft pilot license application, and Schedule B listing two items of additional information necessary to convert the application for exemption from licensing to a license application.

proposed exemption. It objected to the agencies' requests for expensive site-specific, pre-deployment studies as a prerequisite for considering alternatives to the screening requirements. TideWorks pointed to the 2011 Report and contended that it supports a finding that there is no need for the screening requirements imposed by FWS and Maine DMR. Finally, it stated that, although it sent the 2011 Report to the agencies on May 6, 2011, it had not yet received comments from them regarding the report's findings.

16. On January 27, 2012, the Director issued an order denying TideWorks' exemption application because the screens required by the mandatory section 30(c) conditions would render the project inoperable. The January 27, 2012 order also dismissed TideWorks' request to use the pilot licensing process because TideWorks failed to file the required additional information.

17. On February 7, 2012, TideWorks filed a "response" to the Director's dismissal of its exemption application, stating that:

[i]f the US FWS and Maine DMR are *actually willing* to consider alternative measures that would allow the project to operate, documentation from these agencies stating such must be clearly outlined. To date, we continue to wait for such documentation. ... Additionally, ... on May 6, 2011 TideWorks, LLC provided all interested parties a copy of the [2011 Report]. No involved agency has provided any response to the detailed laboratory report ... [Emphasis in original.] [¹⁸]

18. On February 24, 2012, TideWorks filed a request for rehearing of the January 27, 2012 Order's denial of its exemption application.¹⁹ Attached to its rehearing request was a letter to FWS and Maine DMR, dated February 15, 2012, asking the agencies to submit their comments on the 2011 Report prior to the February 24, 2012 rehearing deadline.

Discussion

19. On rehearing, TideWorks argues that the Director should not have denied its exemption application before receiving comments on the 2011 Report from Maine DMR

¹⁸ TideWorks' December 7, 2011 and February 7, 2012 letters also requested that the Commission provide additional information on similar projects authorized by the Commission that required turbine screening. However, information about Commission-authorized projects that TideWorks considers similar to its own proposal is available to TideWorks through the Commission's public files and its eLibrary service.

¹⁹ On rehearing, TideWorks did not seek reversal of the Director's dismissal of its request to use the pilot licensing process.

and FWS. TideWorks explains that it sent a copy of the 2011 Report to the agencies on May 6, 2011, but the agencies failed to review the report or provide any comment on it for the Commission to consider. On February 12, 2012, it sent a second letter, asking for comments on the 2011 Report by February 24, 2012 (the deadline for filing its request for rehearing).²⁰ There is no indication that the agencies have responded.

20. We believe that the Director's denial of TideWorks' exemption application was appropriate. As early as 2009, during pre-filing consultation with the agencies, TideWorks knew that the requirement to screen its turbine would likely be a mandatory condition of its exemption under FPA section 30(c), and that this requirement would make it impossible for the project to operate. Commission staff has provided ample opportunity for TideWorks to work with the agencies on a feasible alternative to the screening requirement that would allow the project to operate, even convening a technical conference to assist TideWorks in working out a solution. The matter could not be resolved, and TideWorks' subsequent efforts have been unsuccessful. In the 16 months since the technical conference, TideWorks has been unable to convince FWS and Maine DMR to eliminate the screening requirement. At the same time, TideWorks has resisted undertaking site-specific studies (an alternative suggested by the agencies), contending that the studies would be unreasonably expensive. FWS and Maine DMR, on the other hand, have not altered their position, as evidenced by their lack of comments on the 2011 Report that TideWorks submitted to them in lieu of site-specific studies.

²⁰ TideWorks also alleges that Commission staff's October 25, 2011 letter and January 27, 2012 Order (in the Background section at P 7) erred by stating that TideWorks' June 16, 2011 Filing regarding consultation with the agencies on the possibility of converting exemption application to a license application contained documentation "indicating that the agencies would consider alternative measures that may allow the project to operate." TideWorks asserts that there is no documentation that the agencies would consider alternative measures. In fact, the documentation indicated that the agencies would not be able to say with certainty what measures they would recommend, or require under their mandatory conditioning authority, if presented with a license application. *See, e.g.*, Maine Department of Environmental Protection's (Maine DEP) letter dated April 6, 2011, attached to TideWorks' June 16, 2011 Filing (Maine DEP "cannot say what conditions will be attached to any certification for the TideWorks Project until after the DEP has completed its review process under the states hydropower permitting statute"); and June 20, 2011 Filing from FWS stating "[w]e would be willing to consider modifying our recommendation after we receive a screening or exclusion design to review and/or if site specific studies are conducted at the site to better understand the presence, seasonality and abundance of marine organisms."

21. Ultimately, it is TideWorks' responsibility to work out any design issues with the agencies that have mandatory conditioning authority under FPA section 30(c). Should TideWorks, FWS, and Maine DMR develop alternative measures that would allow the project to go forward, TideWorks may file a revised exemption application. Unless and until that occurs, there is no point in our moving forward with a project that will not be able to operate with conditions that we are required by law to impose. We therefore deny TideWorks' request for rehearing.²¹

The Commission orders:

TideWorks, LLC's request for rehearing, filed on February 27, 2012, in Project No. 13656 is denied.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

²¹ TideWorks also argues that similar projects approved by the Commission are not subject to the same screening requirements. Specifically, TideWorks cites to the pilot license for the Cobscook Bay Tidal Energy Project No. 12711. *ORPC Maine, LLC*, 138 FERC ¶ 62,168 (2012). Questions as to why the fish and wildlife agencies may have treated the Cobscook Bay Project differently from the TideWorks Project must be addressed to those agencies, not the Commission. In any event, we note that ORPC conducted barge-mounted pre-deployment studies of the turbine, which TideWorks has declined to do for financial reasons. See January 4, 2011 Environmental Assessment for the Cobscook Bay Project No. 12711 at 83.