

121 FERC ¶ 61,048  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;  
Sudeen G. Kelly, Marc Spitzer,  
Philip D. Moeller, and Jon Wellinghoff.

Hydro Matrix Limited Partnership

Project No. 11437-022

ORDER GRANTING TEMPORARY STAY

(Issued October 18, 2007)

1. On June 15, 2007, Hydro Matrix Limited Partnership (Hydro Matrix), licensee for the unconstructed Jordan Dam Hydroelectric Project No. 11437, filed a request for a temporary stay of the project license. The project is to be located at the United States Army Corps of Engineers' (Corps) Jordan Dam on the Haw River in Chatham County, North Carolina, and Hydro Matrix requested the stay to conduct a flow/vibration test at the dam's intake that is required by the Corps to satisfy its pre-construction approval requirements. As discussed below, we will grant the request in part.

**Background**

2. The Jordan Dam Hydroelectric Project was licensed on June 26, 1997.<sup>1</sup> The licensed project works included two submersible modules (structural housings) each to be installed in the stoplog slot of the existing intake tower of the Jordan Dam, located immediately upstream of the dam, and a primary transmission line 5.1 miles long and 20 feet wide. Hoists would be installed at the top of the intake tower to raise and lower the modules in the stoplog slots, and a control building would be constructed on the intake tower to operate the hoists and generating units housed in the modules. Lowering the modules would allow the generating units to use flows to generate power. Raising the modules would allow flood flows to pass through the dam freely and also accommodate dam maintenance.

3. As initially licensed, each module would consist of a steel frame containing forty 100-kilowatt (kW) generating units. However, on March 30, 2007, Commission staff

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<sup>1</sup> *Hydro Matrix Partnership, Ltd.* 79 FERC ¶ 62,213 (1997).

issued an order granting Hydro Matrix's application, filed September 26, 2006, to amend the license to require the installation of one, 2,200-kW generating unit in each module.<sup>2</sup>

4. Article 308 of the license required Hydro Matrix to commence project construction by June 26, 1999. By unpublished order issued March 30, 1999, the Commission extended the deadline for commencement of construction to June 25, 2001.<sup>3</sup> Pursuant to special legislation,<sup>4</sup> the Commission subsequently authorized six additional years to commence construction.<sup>5</sup> The extended deadline for commencing project construction was June 25, 2007.

5. Articles 301 and 307 of the license provide that Hydro Matrix shall not commence project construction without the Corps' approval of the design and construction of key project features.<sup>6</sup> Also, Article 305 requires Hydro Matrix, by 60 days prior to the commencement of construction, to submit to the Corps for approval an operating plan Memorandum of Agreement (MOA) specifying, *inter alia*, "any restrictions needed to protect the primary purposes of the Corps project."<sup>7</sup> Pursuant to these license requirements, Hydro Matrix has been consulting with the Corps in developing design plans for the project.

6. In consultation with Hydro Matrix, the Corps expressed concerns that vibration from the project's generating units could destabilize the intake tower and cause cracking in the tower's foundation and seepage under the dam. In a draft operating plan submitted for Corps approval pursuant to Article 305 on February 5, 2007, Hydro Matrix proposed to perform a flow/vibration test to address the problem following commencement of

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<sup>2</sup> *Hydro Matrix Limited Partnership*, 118 FERC ¶ 62,249 (2007). Hydro Matrix's amendment application, at 9-10, indicated that the new turbine/generator design would make the project more economically and operationally feasible than the originally licensed design.

<sup>3</sup> Section 13 of the Federal Power Act (FPA), 16 U.S.C. § 806 (2000), states that a licensee must commence the construction of project works within the time fixed in the license, which shall not be more than two years from the date thereof, and that the Commission may extend the deadline for the commencement of project construction once, for no longer than two additional years.

<sup>4</sup> Public Law No. 107-322, 1165 Stat. 2786 (2002).

<sup>5</sup> See *Hydro Matrix Partnership, Ltd.*, 109 FERC ¶ 62,089 (2004); and an unpublished order issued May 17, 2006.

<sup>6</sup> 79 FERC ¶ 62,213, *supra*, at 64,530-31.

<sup>7</sup> *Id.* at 64,531.

construction; and Hydro Matrix states that, after meeting with the Corps on May 15, 2007, Hydro Matrix believed that the Corps agreed to Hydro Matrix's proposal. However, on May 25, 2007, the Corps informed Hydro Matrix that the Corps would not approve any on-site project construction prior to Corps approval of final plans and specifications and an operating plan that adequately addressed all relevant issues, including the vibration issue.<sup>8</sup>

7. On May 31, 2007, Hydro Matrix submitted to the Corps and the Commission's Atlanta Regional Office a flow/vibration test plan to address the vibration issue. The plan scheduled the flow/vibration test for June 13 and 14, 2007 (eleven days prior to the deadline for commencing project construction). However, due to recent drought conditions, the Corps informed Hydro Matrix that the test could not be conducted as scheduled and estimated that the earliest it could be performed would be after November 15, 2007. The Corps therefore suggested a December 15, 2007 "sunset date" for the stay (which would give the Corps 30 days to review the results and make a determination).<sup>9</sup>

8. Based on the above information, Hydro Matrix requests that we stay the project license until 40 days following the completion of the flow/vibration test to the satisfaction of the Corps, but in any event no later than December 15, 2007. On August 14, 2007, the Corps filed a letter explaining that it had been working with the licensee and that it supported the stay request.

## **Discussion**

### **A. A Narrowly Tailored Stay of the Commencement of Construction Deadline is Appropriate.**

9. Section 13 of the FPA provides that, if project construction does not begin by the deadline specified in the license, the Commission is required to terminate the license, after notice to the licensee. The Commission will not grant a licensee's request for a stay merely to relieve the licensee from the statutorily prescribed construction deadline.<sup>10</sup> However, where a licensee cannot proceed with project construction because, for reasons

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<sup>8</sup> See the May 25, 2007 email from the Corps to Hydro Matrix, Exhibit A of the request for stay.

<sup>9</sup> See the June 4 and 15, 2007 emails from the Corps to Hydro Matrix, Exhibits B and C of the request for stay.

<sup>10</sup> See, e.g., *Ronald E. Rulofson*, 62 FERC ¶ 61,268 (1993).

beyond its control, it has not obtained a necessary pre-construction approval, we have found it appropriate to grant a stay.<sup>11</sup>

10. A short stay of the commencement of construction deadline is appropriate here, since Corps approval of the design and operation of the project is a prerequisite to the commencement of project construction; the Corps has recently made the flow/vibration test a prerequisite to its approval; and the flow/vibration test, although it will be conducted in the near future, cannot be completed prior to the current deadline for commencing construction due to Corps requirements beyond Hydro Matrix's control.

11. Hydro Matrix and the Corps planned on conducting the test sometime in the fall of 2007 when the drought had subsided and river flows were higher. However, it now appears that the drought will last through the fall, so that the next opportunity to conduct the test will be the spring of 2008. Therefore, to provide sufficient time to conduct the test during the next spring high-flow period and to permit the Corps to evaluate the results of the test, we will stay the construction deadline until the earlier of 40 days from completion of the flow/vibration test or June 30, 2008.

12. The license for this project was issued 10 years ago. In light of the purpose of FPA section 13 to provide for prompt development of licensed projects, the stay granted here is tailored to accommodate the Corps' flow/vibration test requirement, and nothing more. We expect that, upon completion of the test, Hydro Matrix will move forward expeditiously with project construction as authorized in the amended license. This stay is not intended to accommodate further delays should the licensee not be ready to construct the project when the stay is lifted or should test results necessitate changes to project operations or facilities.<sup>12</sup> Thus, while we grant Hydro Matrix's request to stay the construction deadline, we deny its request to stay other license requirements

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<sup>11</sup> See, e.g., *R.L. Garry Corp.*, 51 FERC ¶ 61,115 (1990), *William Ruger*, 71 FERC ¶ 61,320 (1995) (awaiting amendment, which awaits 401); *Gull Industries, Inc.*, 70 FERC ¶ 61,253 (1995) (awaiting Corps of Engineers dredge and fill permit).

<sup>12</sup> Hydro Matrix states (stay request at 7) that the outcome of the flow/vibration test will determine whether the project is financially feasible. It points out that the test will determine whether the Corps will allow the turbine modules to be lowered into the intake's stop log slots during periods when flows range between 1,200 to 7,000 cubic feet per second. It states that when these flows occur (approximately 23 percent of the time) the project would be operating at maximum capacity, and as a consequence these operations produce 40 percent of the project's generation. If the Corps refuses to allow these operations, the project would be rendered financially infeasible.

13. We note that Hydro Matrix has complied with most of the pre-construction requirements of its license,<sup>13</sup> and we expect it to comply with the remaining license requirements while the construction deadline is stayed.<sup>14</sup> Of particular note is Article 311 of the license, which requires Hydro Matrix to file a project financing plan for Commission approval and states that Hydro Matrix cannot “start any project construction or ground-disturbing activities that are inseparably associated with the project before the project financing plan is approved.” Hydro Matrix’s financing plan, filed March 26, 2007, was rejected as deficient by a March 30, 2007 staff letter. Hydro Matrix supplemented the plan in an April 20, 2007 filing, but a staff letter dated May 10, 2007, found the supplemented plan inadequate and required Hydro Matrix to file evidence of completion of appropriate due diligence and legal documentation required by the financing bank and evidence of securing the necessary funds or a commitment of funds for the project.

14. On June 11, 2007, Hydro Matrix filed a progress report, which in part explains that the financing bank’s approval of construction funds depends on the Corps’ approval of the results of the flow-vibration test that underlies Hydro Matrix’s stay request. Since

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<sup>13</sup> Article 301 - Corps' approval of the design and construction of key project features, and schedule for submission of design documents for cofferdam and other facilities; Article 302 - cofferdam construction drawings (Article 301 schedule filed October 8, 1997, stating no cofferdam involved); Article 303 - site access agreement with Corps (executed agreement filed February 3, 1999, as acknowledged in a February 8, 1999 staff letter); Articles 402 and 403 - trashrack plan, modified and approved in 119 FERC ¶ 62,238 (2007) (The order required Hydro Matrix to file a report, with agency comments, on a trash rack test by May 31, 2008, a deadline, however, based on a licensee-projected “online” date of March 2008. Therefore, in light of the stay of construction deadline to as late as June 15, 2008, we are changing the deadline to 60 days following completion of construction.); Article 405 - endangered species plan, approved in 118 FERC ¶ 62,226 (2007); and Article 408 - plan for revegetation of construction-disturbed areas, approved in 119 FERC ¶ 62,240 (2007).

<sup>14</sup> Article 305 - agreement with the Corps for project operations; Article 309 final contract drawings of project features (filed April 29, 2007; under Commission staff review); Article 311 - financing plan; Article 404 - transmission line design plan; and standard Article 5 property rights necessary to construct, operate, and maintain the project, including the transmission line. As noted, Hydro Matrix is working with the Corps to complete the operating plan and agreement. While there are other outstanding operational issues (other than the flow/vibration issue) that the Corps and Hydro Matrix have yet to agree upon, the stay is not based upon the resolution of these issues. These issues should be resolved in time for Hydro Matrix to meet the extended commencement of construction deadline.

we are not granting Hydro Matrix's request to stay the requirements of Article 311, we will require Hydro Matrix, to file a supplement to its financing plan demonstrating the firm commitment of funds, which can be made contingent on the Corps' approval of the project design and acceptance of the results of the flow/vibration test.

**B. The Start of Construction must be On Site.**

15. Hydro Matrix intends to meet the FPA section 13 deadline to commence project construction with the "manufacture of equipment," off-site.<sup>15</sup> In cases such as this where a proposed project uses an existing dam and there is no existing powerhouse, the off-site "manufacturing of equipment" start of construction can be met by the manufacture of turbines or generators where the actual time for manufacture of new turbines and generator units is equal to or greater than the period of physical construction at the site.<sup>16</sup> Hydro Matrix states that it "has already obtained two large turbines that can be installed as planned."<sup>17</sup> However, it is well-settled that obtaining manufactured turbines cannot constitute the start of construction because they already exist.<sup>18</sup> Therefore, to meet the commencement of construction deadline, Hydro Matrix must start on-site construction, such as construction of the project's control building or transmission line.

16. We are staying the deadline for commencement of construction six more months than Hydro Matrix requested to provide a better opportunity for sufficient flows being available for the flow/vibration test and to give Hydro Matrix time to complete other pre-construction license requirements and prepare to start on-site construction. We remind Hydro Matrix that the start of on-site construction must include: (1) activity that is coordinated, fairly continuous, and that reaches a sufficient degree of intensity; (2) active construction efforts on the major features of the project; and (3) actual physical construction.<sup>19</sup> It is not in the public interest or consistent with the FPA for us to allow the public waters to be reserved for an overly-long period for projects that show no

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<sup>15</sup> See request for stay at 2 and 11 (n. 6); the cover letter (at 1) of the license amendment application, filed September 26, 2006; and the revised project financing plan filed under Article 311 on March 26, 2007, at 1.

<sup>16</sup> See, e.g., *Atlantic Power Development Corporation*, 40 FERC ¶ 61,253 (1987).

<sup>17</sup> See Hydro Matrix's license amendment application, filed September 26, 2006, at 9.

<sup>18</sup> See, e.g., *Geoffrey Shadroui*, 70 FERC ¶ 61,237 (1995), citing *Cascade Water Power Development Corporation*, 69 FERC ¶ 61,167 (1994).

<sup>19</sup> See, e.g., *Utilities Commission and City of Vanceburg, Kentucky*, 39 FERC ¶ 61,031 at 61,088 (1987).

reasonable signs of being developed.<sup>20</sup> Thus, failure to timely commence project construction will require terminating the license.

The Commission orders:

(A) The request for stay of the license for Project No. 11437, filed June 15, 2007, by Hydro Matrix Limited Partnership is granted to the extent set forth in this order, and is denied in all other respects.

(B) The construction deadlines in license Article 308, as amended, are stayed until the earlier of 40 days following the completion of the flow/vibration test described in this order, or June 15, 2008.

(C) By 90 days following the issuance of this order, Hydro Matrix Limited Partnership must file a supplement to the financing plan required by Article 311 of the license for Project No. 11437 showing a firm commitment of funds for the project, as described in this order.

(D) The order issued in Project No. 11437-019 and -021 at 119 FERC ¶ 62,238 (2007) is modified to require the report on the testing of the project's trashracks under license Articles 402 and 403 by 60 days following completion of construction.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Acting Deputy Secretary.

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<sup>20</sup> See, e.g., *Mt. Hope Waterpower Project LLP*, 116 FERC ¶ 61,232 (2006) (denying a preliminary permit to an applicant that had held a license to develop the project for 14 years).