

149 FERC ¶ 61,040
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Chairman;
Philip D. Moeller, Tony Clark,
and Norman C. Bay.

AG Hydro, LLC

Project No. 11910-002

ORDER TERMINATING LICENSE

(Issued October 16, 2014)

1. On December 13, 2013, Commission staff issued a notice finding that AG Hydro, LLC, licensee for the proposed 10-megawatt (MW) Applegate Dam Hydroelectric Project No. 11910, had failed to commence construction of the project by the statutory deadline and notifying AG Hydro of the consequent probable termination of its license. On January 13, 2014, AG Hydro responded, opposing the termination and contending that it had started construction by the deadline. For the reasons set forth below, we find that project construction did not timely commence, and we terminate the license as required by section 13 of the Federal Power Act (FPA).¹

Background

2. The Applegate Dam Project was licensed on December 17, 2009.² The project was to be located at the U.S. Army Corps of Engineers (Corps) Applegate Dam on the Applegate River near the town of Medford in Jackson County, Oregon, and would use the Corps' dam, reservoir, and outlet works.³

¹ 16 U.S.C § 806 (2012).

² *Symbiotics, LLC*, 129 FERC ¶ 62,207 (2009). In May 2010, the Commission approved the transfer of the license from Symbiotics, LLC to AG Hydro. *Symbiotics, LLC and AG Hydro, LLC*, 131 FERC ¶ 62,126 (2010).

³ The Corps facilities consist of: (1) a 242-foot-high, 1,325-foot-long dam that impounds a reservoir with a surface area of 988 acres; (2) an ogee crest spillway, with

(continued...)

3. The license authorized: (1) installation of a steel liner in the Corps' 921-foot-long outlet tunnel; (2) construction of two 5-foot-wide by 15-foot-high hydraulically operated vertical gates to be located in the outlet tunnel;⁴ (3) construction of a 12-foot-diameter, 105-foot-long penstock that would exit the outlet tunnel and split into two 8-foot-diameter steel penstocks leading to the powerhouse; (4) construction of a 50-foot-wide by 60-foot-long powerhouse that would contain two vertical Francis turbine generator units, with a combined installed capacity of 10 MW; (5) installation of two 8-foot-diameter butterfly valves in the penstocks leading to the turbines; (6) construction of a 5-foot-diameter steel bypass pipe that would divert water in excess of the turbine capacity from the 12-foot-diameter penstock through a Howell-Bunger valve to the Corps' primary stilling basin; (7) construction of a 50-foot-wide by 25-foot-long switchyard to be located adjacent to the proposed powerhouse; and (8) construction of a 15-mile-long, underground 69-kilovolt (kV) transmission line that would interconnect the project with a substation in Ruch, Oregon.⁵

4. Article 301 of the license required the licensee to commence construction of the project works within two years of the issuance date of the license, i.e., by December 17, 2011.

5. By letter of February 12, 2010, Commission staff identified the construction-related requirements of the license that must be met before construction could commence. The letter directed the licensee to submit a schedule for providing the required information and plans for Commission approval.

flow controlled by two Taintor gates; (3) a 237-foot-high multiple-level, temperature controlled intake tower, situated upstream of the dam in the reservoir; (4) two intake ports on the tower that feed an outlet conduit leading to; (5) a 921-foot-long, 9-foot-high by 14.5-foot-wide concrete outlet tunnel that discharges into; (6) a primary stilling basin; and (7) a secondary stilling basin, which returns flow to the Applegate River.

⁴ The vertical gates would be used to maintain hydraulic pressure in the steel-lined outlet tunnel.

⁵ *AG Hydro, LLC*, 135 FERC ¶ 62,140 (2011). As licensed, fourteen miles of the 15-mile-long transmission line would have been above ground and the first mile of transmission line from the powerhouse would have been buried. As amended, the complete 15-mile-long transmission line would be buried from the powerhouse to the substation in Ruch, Oregon.

6. On March 17, 2010, the licensee responded, providing a schedule and acknowledging that it could not commence construction until it complied with the appropriate license articles and received authorization by the Commission.⁶
7. Subsequently, the licensee submitted its plans and specifications and supporting design documents to the Division of Dam Safety and Inspections-Portland Regional Engineer (D2SI) as required by license Article 302. On November 21, 2011, D2SI staff notified the licensee that the plans it had submitted could not be considered final due to issues raised by the Corps regarding the proposed conduit lining design and that Commission staff could not begin review of final plans (the approval of which is a prerequisite to commencing project construction) until the design issues were resolved.⁷
8. On December 7, 2011, the licensee filed a request for extension of the start of construction deadline. It noted in its request that the Corps had expressed concern with the analysis of the conduit lining design and that “more time is needed to complete the design and [Corps] review in order to start construction.” Commission staff granted a two-year extension (the maximum permitted under section 13 of the FPA),⁸ and the final deadline to start project construction became December 17, 2013.
9. On February 24, 2012, AG Hydro filed a draft of an application proposing to amend the license to eliminate use of the Corps’ intake structure and to instead construct a new intake structure. The filing explained that the Corps had determined that AG Hydro’s steel liner design was unacceptable and that the National Marine Fisheries

⁶ The licensee responded that “off-site construction may begin as early as fall 2010” and that “on-site construction” could begin when it had filed the required plans and drawings and received Commission approval. However, Article 304 specifically states that “the licensee shall not start *any* project construction or ground-disturbing activities, before the project financing plan is approved.” In its March 17, 2010 letter, the licensee also stated that it would submit a formal project financing plan to the Commission in the spring of 2011. To date, the licensee has not submitted a financing plan.

⁷ The licensee had filed drawings stamped “Not for Construction,” design specifications, a Quality Control and Inspection Plan, a Temporary Emergency Action Plan, a Soil Erosion and Sediment Control Plan, a Stormwater Management Plan, and a Supporting Design Report.

⁸ See March 6, 2012 Commission staff order (unpublished), granting the licensee’s December 8, 2011 extension request.

Service had asked for major modifications to the project.⁹ On May 7, 2012, the Corps commented that AG Hydro's changes proposed in the draft application were not feasible, and that "considerable effort remains to develop a feasible design [and] means of construction"¹⁰ AG Hydro did not file a response addressing the Corps' comments and did not file a final amendment application.

10. On November 19, 2013, AG Hydro filed a letter purporting to "provide documentation of the construction activities associated with [project] development." The letter stated that "manufacturing (bending metal) of the turbine components including the generators, draft tubes, intakes, isolation valves and other associated components is essentially complete. These components are currently being stored at the manufacturing facility in China." The letter attached 14 photos that AG Hydro asserted showed these manufactured components.

11. On December 13, 2013, Commission staff notified AG Hydro of the probable termination of the license for failure to commence project construction by the December 17, 2013 deadline. The letter pointed out that the licensee had failed to fulfill the requirements of several articles for which it needed Commission approval prior to commencing construction of the project.

12. The letter further pointed out that even if the licensee had completed the pre-construction requirements, it would have to provide evidence to support a claim of start of construction based on fabrication of the generating equipment. The licensee would have to demonstrate that:

- It had begun (by the start of construction deadline) the actual fabrication of turbines or generators in accordance with engineering specifications for the particular project;
- the manufacture of the turbines or generators had begun pursuant to a legally enforceable signed contract for their manufacture;
- it had notarized affidavits from the equipment manufacturer attesting to the start of fabrication of the turbines/generators and associated electrical equipment;

⁹ See letters from Colonel John W. Eisenhower, Corps (undated) and from Keith Kirkendall, National Marine Fisheries Service (dated November 3, 2011), included in Appendix A of AG Hydro's draft amendment application, at 2.

¹⁰ Corps May 7, 2012 Filing at 6.

- it had notarized affidavits from the equipment manufacturer attesting to receipts of payment for work performed under the contract; and
- it had a manufacturing and payment milestone schedule for said equipment.

13. AG Hydro responded on January 13, 2014,¹¹ stating that “construction on the project began with the commencement of production and manufacturing of two Francis-type generator and turbine units (7.18 MW and 2.82 MW), and associated parts.” AG Hydro included in its filing: (1) six photographs of blueprints with Chinese text that AG Hydro asserts are for the Applegate Dam Project;¹² (2) a copy of a September 2, 2010 contract between Hydrotech Engineering, LLC (Hydrotech) and AG Hydro for the manufacture of turbine generating equipment; (3) two addenda to the contract, both executed November 15, 2010, (Addendum No. 1 changed the turbine sizes from 6.8 MW and 3.2 MW to 7.18 MW and 2.82 MW, and Addendum No. 2 added an installment payment schedule to the down payment due date); (4) a November 11, 2010 invoice from Hydrotech showing payment due of one-half of an initial 5 percent down payment for hydro generating equipment and a 30 percent payment to be paid at the time the notice to proceed is issued by AG Hydro; (5) a copy of a cancelled check dated December 2, 2010, from Symbiotics, LLC, to Hydrotech for the one half of the 5 percent down payment; (6) a December 22, 2010 letter from Riverbank Power Corp (parent company of AG Hydro) authorizing a wire transfer to Hydrotech for the rest of the down payment and the 30 percent Notice to Proceed payment; (7) letters from the project engineer of Mead and Hunt (an independent engineer), dated September 15, 2011, and from Hydrotech dated September 9, 2011, certifying the start of physical work as of February 1, 2011, and attaching four photos of elbow tubes and draft tubes taken on July 1, 2011. The

¹¹ The licensee filed a request for rehearing of the notice of probable termination. Because the notice was not a final order, the request for rehearing was rejected as premature. *AG Hydro*, 146 FERC ¶ 61,080 (2014). We have considered the request for rehearing as a response to notice of probable termination.

¹² The photos of blue-prints are not legible and are in Chinese, without English translation. The only legible information in the title block of the drawings is the name of Hydrotech’s manufacturing partner (Dongfang Electric Company–DEC and Dongfang Electrical Machinery Company) along with a few barely legible component names. The only dates shown in the drawings reference 2006 (which pre-dates the license); however, there is no date in the title blocks to indicate when they originated or were modified. Additionally, there is no specific information on the drawings that details the component shown (e.g., Main Axis for Turbine #1) or the design capacity.

January 13, 2014 filing indicates that only the elbow sections and draft cones for both generating units have been fabricated.¹³

Discussion

14. Section 13 of the FPA states in pertinent part:

[T]he licensee shall commence the construction of the project works within the time fixed in the license, which shall not be more than two years from the date thereof The periods for the commencement of construction may be extended once but not longer than two additional years In case the licensee shall not commence actual construction of the project works . . . within the time prescribed in the license or as extended by the commission, then, after due notice given, the license shall . . . be terminated upon written order of the Commission.

15. Commencement of project construction under section 13 of the FPA occurs upon the start of work on facilities or machinery considered significant and permanent elements of the project.¹⁴ Because construction requirements range from building new dams and powerhouses to refurbishing existing ones, the acts which constitute commencement of construction will vary from project to project.

16. As a general matter, construction commences with on-site work, such as building a powerhouse or other project works. In relatively rare cases where the actual time for the off-site manufacture of site-specific turbines or generators is equal to or greater than the period of physical construction at the site (as, for example, where a project will use an existing dam or existing powerhouse, such that there is relatively little on-site work to be done), the start of manufacturing of turbines or generators can be considered the commencement of project construction,¹⁵ provided that the manufacture is commenced pursuant to an enforceable contract.¹⁶ In order to be considered to have commenced

¹³ See AG Hydro's January 13, 2014 filing, September 15, 2011 letter from project's independent engineer, Mead and Hunt, and the four pictures attached to the letter.

¹⁴ See, e.g., *Marseilles Hydro Power, LLC*, 123 FERC ¶ 61,041 (2008).

¹⁵ See, e.g., *Atlantic Power Development Corporation*, 37 FERC ¶ 61,131 (1986).

¹⁶ See *UAH-Braendly Hydro Associates*, 46 FERC ¶ 61,178 (1989).

construction in such cases, the licensee must (1) satisfy the pre-construction requirements in the license before manufacturing starts, (2) show actual fabrication of turbines or generator in accordance with the engineering specifications for the turbines or generators specifically authorized in the license, and (3) demonstrate that off-site fabrication would take longer than on-site activities.¹⁷ AG Hydro has failed to make any of these showings.

A. Licensee Failed to Complete Pre-Construction Requirements

17. Several articles of the license require the licensee to file plans for Commission review and approval prior to commencing construction. Without having filed and obtained approval of the items required by these articles, any construction undertaken by a licensee would not qualify for section 13 purposes because the licensee had not been authorized to commence such construction.

18. Article 302 requires the licensee to submit contract drawings and specifications for pertinent features of the project at least 90 days prior to the start of construction. The article specifically states that no construction may commence until the Division of Dam Safety and Inspections Portland Regional Engineer has reviewed and commented on the plans and specification, determined that all preconstruction requirements have been satisfied, and authorized start of construction. AG Hydro has not filed contract drawings and specifications.

19. Article 304 requires the licensee to submit a project financing plan at least 90 days prior to the start of any construction or ground-disturbing activities. AG Hydro has not filed a financing plan. In its January 13, 2014 filing, AG Hydro claims that due to delays in the final design review by the Corps, it was unable to include the Applegate Project in the financing plan it prepared for two other projects.¹⁸ It states that as a result it chose to self-finance the manufacturing of the turbine-generator units and other equipment. The fact that AG Hydro may have elected to self-finance some portion of project activities does not excuse it from the obligation to obtain approval of whatever financing plan it proposed before commencing construction.

20. Article 305 requires the licensee to submit facility design and construction plans. The licensee filed design plans with the Corps and the Commission in August 2011. The Corps dismissed the filing in November 2011. Shortly thereafter, the licensee filed a

¹⁷ See *Marseilles Hydro Power, LLC*, 123 FERC ¶ 61,041, *reh'g denied*, 124 FERC ¶ 61,036 (2008).

¹⁸ January 13, 2014 letter at 3-4. The two other projects were the Dorena Lake Dam Project No. 11945 and Clark Canyon Dam Project No. 12429.

draft amended design in February 2012, and by May 2012, the Corps responded that the proposed changes did not demonstrate a feasible concept. The licensee took no further actions to satisfy Article 305.

21. Article 309 requires the licensee to submit to the Corps a regulating/operating plan at least 60 days prior to the start of construction and to submit to the Commission a copy of the regulating/operating plan. AG Hydro filed no such plan.

22. Article 311 requires the licensee to file with the Commission the Corps' written approval of construction plans and specifications, and states that the Regional Engineer shall not authorize construction of any project work until after receiving the Corps' written approval of the plans and specifications. The licensee did not receive the Corps' approval for the design plans and specifications and therefore did not satisfy Article 311.

23. Compliance with pre-construction license requirements is extremely important. The Commission explained in *Marseilles Hydro Power, LLC (Marseilles Hydro)*¹⁹ that Article 302's requirement that a licensee submit contract drawings and specifications for pertinent features of the project at least 90 days prior to the start of construction applies to the off-site construction of turbines and generators because

The language of Article 302 does not distinguish between the start of on-site and off-site construction, and properly so, since off-site construction of project equipment like turbine generators can affect the design of on-site project features such as powerhouses. Adopting [the licensee's] interpretation of Article 302 would unduly limit the Commission's reserved authority in Article 302 to make necessary changes in project features. Indeed, this proceeding demonstrates precisely why Article 302 must apply to both off-site and on-site activity: if the company's theory were to prevail, a licensee could make significant changes to project components, without prior Commission knowledge or approval, and then assert that beginning work on the unauthorized components constituted the start of construction. Were we to lose control over the project design and implementation process, we could not adequately protect the public interest.

24. The same logic applies with respect to the need for a licensee to make the filings required by Articles 304, 305, 309, and 311 before we will consider construction to have commenced. Article 304 requires a licensee to file a financing plan. Allowing licensees to commence construction without first demonstrating that they have in place sufficient

¹⁹ 123 FERC ¶ 61,041, at P 22 (2008) (*Marseilles Hydro*).

funds to fully develop the project would pose the risk of partially constructed projects that cannot be completed. This could have significant financial and environmental impacts, and may make it difficult for us to free the project site for other uses or for development by other entities. Articles 305, 309, and 311 require the filing of design, construction, and operating plans, which the Corps must approve. It would be bad policy, and, again, would invite the risk of project failure, were the Commission to consider construction to have begun on a project that is to be located at a Corps dam prior to the Corps, without whose agreement the project simply cannot be built, having approved the basic construction documents.

25. Here, the deadline for commencement of construction passed without the licensee having submitted to the Commission any of the pre-construction filings required by Article 302, 304, 305, 309, and 311. Since fulfillment of these license requirements was a prerequisite to the start of construction, whatever construction was commenced was unauthorized and therefore cannot serve to meet the construction deadline.

B. License Ordered Turbines Differing from Those Authorized in the License

26. In its license application, at Exhibit A, AG Hydro stated that the project “will have an installed capacity of 10 MW from two units of 5 MW each.”²⁰ The license order approved portions of the Exhibit A, along with other exhibits, and made them part of the license.²¹ Accordingly, the licensee is authorized to construct the project with two 5-MW turbines. AG Hydro, however, has filed a report from its engineering consultant stating that the licensee placed an order for one 7.18-MW and one 2.82-MW turbine.²² These turbines differ from those authorized.

²⁰ License application at p. A-2 (filed August 31, 2004); *see also id.* at p. A-5 (chart noting that the project will include two turbines, “Capacity (per turbine): 5,000 kW”).

²¹ *See* 129 FERC ¶ 62,207 at Ordering Paragraph (C), approving Exhibit A, section A-2 entitled “Proposed Modifications and New Facilities.”

²² *See* AG Hydro January 13, 2014 Independent Engineer’s Report. As noted in P 14 above, the generator sizes were changed from 6.8 MW and 3.2 MW (sizes specified in the September 2010 contract), to 7.18 MW and 2.82 MW (sizes specified in the November 2010 Addendum I to the contract). We note that none of these sizes was authorized in the license.

27. We faced this exact issue in *Marseilles Hydro*, where the licensee claimed that its construction of turbines that differed from those authorized in the license constituted the commencement of construction. We rejected that contention, explaining that

Our concern about such unauthorized changes in project detail is far more than academic. We carefully analyze the safety and environmental impacts of proposed projects. Unreviewed changes in project works may have significant impacts. For example, a larger turbine may not be able to be safely supported by the same structure as a smaller one, or a difference in configuration or flows from an altered model of turbine may have greater adverse impacts on fish passing through a project. We cannot allow substantial changes to project design without Commission approval, and we do not consider the manufacture of facilities other than those authorized to constitute the commencement of construction. ^[23]

We confirmed this conclusion on rehearing, stating that

we do indeed need to retain control over design changes such as those to project turbines and generators in order to carry out our public interest responsibilities. Because different turbines have different characteristics, changes in the number, size, and configuration of turbines may have a direct effect on a project's ability to meet water quality requirements such as those related to minimum flows, dissolved gases, and water temperature. Different turbines also have different effects on particular fish species that pass through them. Thus, we cannot allow a licensee to significantly alter a licensed project without prior Commission authorization, as [the licensee] proposed to do here, and then claim that beginning work on unauthorized works constitutes the commencement of construction. ^[24]

28. Based on the foregoing, AG Hydro's contracting for the construction of turbines differing from those authorized in the project license did not constitute the commencement of construction.

²³ *Marseilles Hydro*, 123 FERC ¶ 61,041 at P 18; *Electric Plant Board of the City of Augusta, Kentucky*, 112 FERC ¶ 61,342, at P 23 (2005). See also *CPS Products, Inc.*, 111 FERC ¶ 61,071, at P 13 (2005).

²⁴ *Marseilles Hydro Power LLC*, 124 FERC ¶ 61,036 at P 20.

C. Licensee Has Not Demonstrated that Off-Site Construction Would Take Longer than On-Site Construction

29. As noted above, the project would include on-site construction of: (1) steel lining of the existing outlet tunnel with a penstock to the new powerhouse; (2) a powerhouse containing two vertical Francis type turbines with a combined installed capacity of 10 MW; (3) a new 15-mile-long, underground 69-kilovolt (kV) transmission line; and (4) appurtenant facilities.

30. As described in its license application,²⁵ the licensee would install a steel liner in the existing reinforced concrete flood control conduit. The liner would tie into the existing 0.5-inch thick steel liner in the regulating outlet gate/conduit transition structure, and would be pressure grouted to the existing concrete outlet structure. The licensee would construct a 105-foot-long steel penstock from the outlet structure to the 50-foot-wide by 60-foot-long proposed powerhouse on the west bank of the primary stilling basin and immediately downstream of the toe of the dam. The licensee would also install two 5-foot-wide by 15-foot-high hydraulically operated vertical gates, to be located about 24 feet upstream of the outlet portal. These gates would divert the flow to the turbines through the penstock about 14 feet upstream of the gate.

31. The powerhouse installation would include the installation of the turbines, generators, and other embedded parts and valves. It would consist of a concrete substructure and concrete block building housing two generators. The two units would be located in diagonal corners of the powerhouse. Control equipment would be located on the second floor. A gantry crane would be provided for assembling and dismantling units. A step-up transformer, switching structures, and steel transmission take-off tower would be erected behind the powerhouse. The licensee would also have to install 15 miles of underground transmission line.

32. In its license application, the licensee stated that it estimated that on-site construction (without the later-approved 15-mile underground transmission line) would take 12 months (approximately 360 days).²⁶ In response to an additional information request by Commission staff, the licensee on October 31, 2007, provided an amended schedule of onsite construction to minimize the effects of project construction on bald eagles (and, to a lesser extent, spotted owls) in the area. The amended schedule has

²⁵ Final license application for the Applegate Dam Project No. 11910, filed on August 31, 2004, at A-2 through A-5.

²⁶ *Id.* Exhibit C at C-2.

construction occurring over 14 months.²⁷ Commission staff in the Environmental Assessment for the Applegate Project estimated that on-site construction would take 21 months (approximately 630 days).²⁸

33. The licensee, in its January 13, 2014 filing, provided a copy of its contract for procurement of turbine generating equipment. Attachment B of the contract shows that manufacturing of the contract equipment would take 330 days.²⁹

34. AG Hydro has failed to demonstrate that the actual time for the manufacture of site-specific turbines or generators is equal to or greater than the period of physical construction at the site; therefore, we cannot consider the start of manufacturing of turbines or generators to be the commencement of project construction.

35. AG Hydro has also not made a convincing argument that it would take longer to manufacture the turbines than to construct the transmission line. Construction time includes not just the time to physically install facilities, but also the time that it will take to prepare plans, order equipment, and get necessary regulatory approval. Given that the transmission line will cross federal lands managed by the Forest Service, BLM, and the Corps, obtaining permission from those agencies may well take significant time, and AG Hydro has provided no information to show either that it has begun that process or how long it will take.

Conclusion

36. For the reasons discussed above, we find that AG Hydro failed to commence project construction by the deadline established pursuant to section 13 of the FPA. We therefore must terminate the license.

The Commission orders:

²⁷ Letter filed on October 31, 2007, Figure 5.

²⁸ See the Final Environmental Assessment for the Applegate Project No. 11910 issued on May 2, 2008 at 5. The EA noted that the work would be timed to reduce the effects on fisheries and wildlife in the project area.

²⁹ The contract stated it would take 420 days, but delivery accounts for a total of 90 days (30 days for embedded parts, 30 days for the main turbine/generators, and 30 days for the turbine/generators rotating parts); therefore, it would appear that manufacturing would only take 330 days.

(A) The license for the Applegate Dam Hydroelectric Project No. 11910 is terminated for failure to commence construction by the statutory deadline. The license will remain in effect until the close of business, November 17, 2014. But, if the Commission is closed on this day, then the license will remain in effect until the close of business on the next day in which the Commission is open. New applications for this site may not be submitted until after the license termination is effective.

(B) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the FPA, 16 U.S.C. § 8251 (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2014). The filing of a request for rehearing does not operate as a stay of the effective date of this order, or of any other date specified in this order. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.