# 145 FERC ¶ 62,218 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Appalachian Power Company

Project No. 1175-015

#### ORDER ISSUING NEW LICENSE

(December 20, 2013)

#### INTRODUCTION

1. On January 31, 2012, Appalachian Power Company (Appalachian) filed, pursuant to sections 4(e) and 15 of the Federal Power Act (FPA), an application for a new major license to continue operation and maintenance of the London-Marmet Hydroelectric Project No. 1175. The London-Marmet Project consists of two developments with a combined authorized capacity of 28.8 megawatts (MW). Both developments are on the Kanawha River, a navigable waterway of the United States, in Kanawha and Fayette Counties, West Virginia. The London Development is located at the U.S. Army Corps of Engineers (Corps) London dam located at river mile (RM) 82.8 on the Kanawha River. The Marmet Development is located at the Corps' Marmet dam located at RM 67.7 on the Kanawha River. The project currently occupies 11.51 acres of federal lands administered by the Corps. As discussed below, this order issues a new license for the project.

#### **BACKGROUND**

2. The Commission issued the original license for the project on January 16, 1934. The Commission issued a new license on September 23, 1983, which expires on January 31, 2014.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> 16 U.S.C. §§ 797(e) and 808 (2012).

<sup>&</sup>lt;sup>2</sup> The project would be located at the Corps' Kanawha River London dam and Marmet dam and would occupy lands of the United States. The Kanawha River is a navigable waterway of the United States. For both of these reasons, section 23(b)(1) of the FPA, 16 U.S.C. § 817(1) (2012), requires that the project be licensed.

<sup>&</sup>lt;sup>3</sup> 24 FERC ¶ 62,351 (1983).

- 3. On June 8, 2012, the Commission issued a public notice that was published in the *Federal Register* accepting the application for filing; soliciting motions to intervene, protests, comments, recommendations, terms and conditions, and fishway prescriptions; and indicating the application was ready for environmental analysis. The notice set August 7, 2012, as the deadline for filing motions to intervene, comments, final recommendations, terms and conditions, and prescriptions. The West Virginia Division of Natural Resources (West Virginia DNR) filed a motion to intervene on July 30, 2012, and comments on August 7, 2012.
- 4. An Environmental Assessment (EA) was prepared by Commission staff and issued on December 4, 2012, analyzing the impacts of the project and alternatives to it. Appalachian Power filed comments on the EA. The intervention, comments, and recommendations have been fully considered in determining whether, and under what conditions, to issue this license.

## PROJECT DESCRIPTION

# **A.Existing Corps Facilities and Operation**

5. The Corps' London Locks and Dam is located at RM 82.8 on the Kanawha River. The 26-foot-high London dam is a gated dam with five roller gates, <sup>7</sup> spanning 100 feet between piers. The London locks have two parallel lock chambers. The landward lock is 56 feet wide by 360 feet long with miter gates <sup>8</sup> and the riverward lock is 56 feet wide by 407 feet long with miter gates. The London impoundment extends upstream from the dam approximately 9.4 miles to the base of Kanawha Falls. The impoundment has a surface area of 910 acres at the normal full-pool elevation of 614.0 feet National Geodetic Vertical Datum (NGVD) and approximately 21 miles of shoreline (including backwater into tributaries, excluding islands). The storage capacity of the impoundment is estimated to be 19,000 acrefeet.

<sup>&</sup>lt;sup>4</sup> 77 Fed. Reg. 35,956-01 (June 15, 2012).

<sup>&</sup>lt;sup>5</sup> Timely, unopposed motions to intervene are granted by operation of Rule 214(c) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(c) (2013).

<sup>&</sup>lt;sup>6</sup> Notice of Availability of Environmental Assessment, *Federal Register*, 77 *Fed. Reg.* 73,648 (2012) [hereinafter EA].

<sup>&</sup>lt;sup>7</sup> A roller gate is a hollow drum placed horizontally at the crest of a dam and rolled up or down an inclined track by pinion and rack to regulate water elevation.

<sup>&</sup>lt;sup>8</sup> A miter gate is one of a pair of canal lock gates that swing out from the side walls and meet at an angle pointing toward the upper level.

- 6. The Corps' Marmet Locks and Dam is located at RM 67.7 on the Kanawha River. The 34-foot-high Marmet dam is a gated dam with five roller gates, spanning 100 feet between piers. The Marmet locks are twin locks, each is 56 feet wide by 360 feet long and constructed of concrete gravity-type walls with miter gates. The Marmet impoundment extends from the dam upstream approximately 15.2 miles to the base of London dam. The impoundment has a surface area of 1,420 acres at the normal full-pool elevation of 590.0 feet NGVD and approximately 36 miles of shoreline (including backwater into tributaries, excluding islands). The storage capacity of the impoundment is estimated to be 12,000 acrefeet.
- 7. The Corps operates the London and Marmet dams to maintain a navigational channel at least 9 feet deep through the impoundments and upstream to the limit of navigability at RM 90.57.

# **B.** Project Facilities

- 8. The London-Marmet Project consists of two developments: the London Development and the Marmet Development. The London Development consists of: a forebay area protected by a log boom; screened intake structures; a concrete powerhouse integral to the dam containing three turbine-generator units with a total installed capacity of 14.4 MW; a tailrace 420 feet long; a substation containing two, 3-phase transformers and two auxiliary transformers; and two, 46-kilovolt (kV) transmission lines within a 0.38-mile-long transmission line corridor. Project recreation facilities at the London Development include a tailrace fishing pier and parking area.
- 9. The Marmet Development consists of: a forebay area protected by a log boom; screened intake structures; a concrete powerhouse integral to the dam containing three turbine-generator units with a total installed capacity of 14.4 MW; a tailrace 450 feet long; a substation containing two, 3-phase transformers and two auxiliary transformers; and two, 46-kV transmission lines within a 0.78-mile-long transmission line corridor. Project recreation facilities at the Marmet Development include a tailrace fishing pier and parking area.

## C. Project Operation

10. Operation of the London-Marmet Project is governed by the conditions of the existing license. To protect and enhance fish and wildlife resources, Article 39 of the current license limits fluctuations in the London impoundment to 1.5 feet (from 614.0 to 612.5 feet mean sea level (msl))<sup>9</sup> from March 1 through April 30, 2.0 feet (from 614.0 to 612.0 feet

<sup>&</sup>lt;sup>9</sup> The final license application stated that all elevations were based on the National Geodetic Vertical Datum (NGVD) of 1929. However, an operating agreement between Appalachian and the Corps filed with the Commission in 1985 (See Lower Kanawha Operating Plan as required for P-1175 license article 41, filed September 3, 1985, Accession No. 19851217-0316) referenced the same elevations using mean sea level datum. Mean sea

msl) from May 1 through June 15, and 3.0 feet (from 614.0 to 611.0 feet msl) from June 16 through February 29. Article 39 provides further that the maximum drawdown rate of the London impoundment shall be no greater than 0.5 foot per hour.

- 11. Article 41 of the existing license requires the licensee to enter into an operating agreement with the Corps to coordinate operation of Project No. 1175, the Winfield Project No. 1290, <sup>11</sup> and the Hawks Nest/Glen Ferris Project No. 2512 <sup>12</sup> "to optimize the utilization of flows in the lower Kanawha River for navigation, power production, flood control, and other beneficial public uses...." The operating agreement specifies in Appendix A that the allowable drawdown of the London impoundment is limited due to navigation priorities to 3.0 feet.
- 12. Due to the limited storage capability of the Marmet impoundment, operation of the Marmet hydro facilities must mimic the operation of London hydro facilities. To provide room in the Marmet pool for increased discharge from the London plant, the Marmet facility begins its peaking operations a few minutes prior to the start of peaking at the London plant. Appendix A of the 1985 operating agreement also specifies that the Marmet forebay elevation is allowed to fluctuate only 0.3 foot due to navigation requirements.
- 13. For the past 20 years, Appalachian has voluntarily operated the London Development in run-of-river mode with a 0.3-foot maximum impoundment fluctuation limit rather than utilizing the allowed fluctuation for peaking operation.
- 14. Appalachian described in its final license application that it maintains frequent contact with the Corps' lockmasters to ensure coordination of hydropower generation and lock operations. Appalachian stated that the Corps may request that its plant operators maintain certain water elevations for special navigation purposes. Each development has a total hydraulic capacity of 10,000 cubic feet per second (cfs). When stream flow is less than 10,000 cfs. <sup>14</sup> Appalachian controls the impoundments' elevations, within the allowable limits

level, depending on where you are located, is often the same as NGVD 29 (National Geodetic Vertical Datum of 1929).

 $\underline{http://www.hypack.com/new/portals/1/PDF/sb/07\_10/Tide\%\,20vs\%\,20Elevations.pdf}$ 

<sup>&</sup>lt;sup>10</sup> 24 FERC at 63,597.

<sup>&</sup>lt;sup>11</sup> 24 FERC ¶ 62,357 (1983).

<sup>&</sup>lt;sup>12</sup> 41 FERC ¶ 62,289 (1987).

<sup>&</sup>lt;sup>13</sup> 24 FERC at 63,597.

<sup>&</sup>lt;sup>14</sup> Appalachian developed its flow duration curves for the project based on the U.S. Geological Survey gage No. 131930000 at Kanawha Falls, 12 miles upstream of the London

for navigation established by the Corps. When stream flow is greater than 10,000 cfs, the Corps' dam operator assumes control of impoundment elevations. Releases from each development are routed back to the Kanawha River via each development's tailrace.

# D. Proposed Project Facilities and Operation

- 15. Appalachian does not propose any new project facilities except for the reestablishment of public access to the London tailrace fishing area, which was recently completed. However, Appalachian proposes that the London substation and Belle substation in the current license for the London-Marmet Project be removed from the project boundary because they are part of the interconnected grid and not primary transmission facilities.
- 16. Appalachian is proposing to limit impoundment fluctuation due to project operation to 0.3 foot from elevation 613.7 feet msl to 614.0 feet msl at the London Development. Appalachian is not proposing any changes to the current operation described above for the Marmet Development.

#### **E.** Proposed Environmental Measures

17. In addition to the operational measures described above, Appalachian proposes to: (1) reestablish public access to the London tailrace fishing area, which was recently completed; (2) implement an avian protection plan to protect migratory birds from electrocution and collision with power lines at each development; (3) install portable restrooms and trash receptacles at each development; and (4) implement an historic properties management plan (HPMP).

## F. Project Boundary

- 18. The project boundary for each of the two developments includes the forebays, powerhouses, tailraces, switchyards, recreational facilities, and transmission lines. With the exception of the transmission lines, the projects' facilities are located at the opposite ends of the Corps' dams from the locks. The dams, locks, and impoundments are not part of the licensed hydroelectric facilities.
- 19. The existing London project boundary encloses 4.4 acres of land including the forebay, powerhouse, tailrace, switchyard, primary transmission line, the London substation, tailrace fishing pier, and the stairs leading to the fishing pier. The London project boundary does not include the road used to access the tailrace fishing area, the adjacent parking area, and the path to the fishing area.

- 20. The existing Marmet project boundary encloses 8.64 acres of land including the forebay, powerhouse, tailrace, switchyard, primary transmission line, the Belle substation, tailrace fishing pier, the pathway and stairs to the fishing pier, and a parking area.
- 21. As noted above, Appalachian proposes to remove the London and Belle substations from the project boundary. This issue is discussed further in the section of this order entitled "Section 10(a)(1) of the FPA."
- 22. Most of the lands within the project boundaries are owned by the Corps except for some transmission line right-of-ways and about 1.45 acres at the Marmet Development owned by Appalachian. Federal lands within the project's boundaries at each of the developments consist primarily of the areas immediately around the powerhouse: approximately 4.73 acres for the London Development and 6.78 acres for the Marmet Development.

# SUMMARY OF LICENSE REQUIREMENTS

- 23. To ensure the uninterrupted navigational operation of the Corps dam and associated facilities, the license requires project operation consistent with a new Memorandum of Agreement (MOA) between Appalachian and the Corps. The license requires the project to be operated in run-of-river mode and requires an operation and compliance monitoring plan to ensure that Appalachian meets these requirements.
- 24. To enhance the recreational user's experience, the license requires Appalachian to develop and implement a recreation plan to include the addition of trash and restroom facilities at the tailrace fishing areas and to document maintenance and operation of the existing parking areas, paths, stairs, and tailrace fishing piers.
- 25. To minimize impacts on botanical resources and wildlife habitat, including potential habitat for species listed as threatened or endangered under the Endangered Species Act, <sup>15</sup> this license requires Appalachian to develop and implement a vegetation maintenance plan to define the type, frequency, and extent of maintenance activities within the project boundary and to schedule maintenance activities to minimize impacts on terrestrial resources including potential habitat for federally listed plants and wildlife.
- 26. To protect birds from mortality due to electrocution and collision at project transmission lines, this license requires Appalachian to develop and implement an avian protection plan.
- 27. To protect cultural resources, the license requires Appalachian to prepare and implement an HPMP for the project.

<sup>&</sup>lt;sup>15</sup> 16 U.S.C. § 1532 (2012).

## WATER QUALITY CERTIFICATION

- 28. Under section 401(a)(1) of the Clean Water Act (CWA), <sup>16</sup> the Commission may not issue a license authorizing the construction or operation of a hydroelectric project unless the state water quality certifying agency either has issued a water quality certification (WQC) for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed 1 year. Section 401(d) of the CWA provides that the certification shall become a condition of any federal license that authorizes construction or operation of the project. <sup>17</sup>
- 29. On August 6, 2012, Appalachian applied to the West Virginia Department of Environmental Protection (West Virginia DEP) for a WQC for the London-Marmet Project, which West Virginia DEP received on August 7, 2012. On July 30, 2013, West Virginia DEP issued the WQC for the London-Marmet Project that includes seven conditions. These conditions are set forth in Appendix A of this order and incorporated into the license (see Ordering Paragraph D). Of the seven conditions, conditions 4, 5, 6, and 7 are administrative in nature and are not discussed further.
- 30. Condition 1 requires Appalachian to monitor water quality for temperature and dissolved oxygen as water enters the intakes, as well as downstream of the project from May 1 through October 31 and make the information available to the resource agencies. A report of the water quality monitoring shall be provided each year of operation to West Virginia DEP (401 Certification Section) and to West Virginia DNR's Wildlife Resources Section by March 1 of the following year.
- 31. Condition 2 requires Appalachian to install and maintain portable restrooms and trash receptacles at London and Marmet fishing access sites and provide parking at each site.
- 32. Condition 3 requires Appalachian to operate each development in a "run-of-the-river" mode. This condition specifically prohibits peaking at either development. This condition is consistent with how the project has been operated voluntarily by Appalachian for the last 20 years and how Appalachian proposes to operate the project under any new license. However, the Commission can only enforce this condition to the extent that run-of-river operation would be consistent with the Corps' operation of the London and Marmet dams and the operating agreement to be established between Appalachian and the Corps as required by Article 305 of this license.

<sup>&</sup>lt;sup>16</sup> 33 U.S.C. § 1341(a)(1) (2012).

<sup>&</sup>lt;sup>17</sup> 33 U.S.C. § 1341(d) (2012).

- 33. By letter dated August 16, 2013, <sup>18</sup> American Electric Power (AEP), the parent company of Appalachian, on Appalachian's behalf appealed certain provisions of the WQC including the effective date <sup>19</sup> and condition 1, which requires water quality monitoring. That appeal remains pending. Ordering Paragraph D of this order therefore reserves Commission authority to amend the license as appropriate in light of West Virginia DEP's ultimate disposition of Appalachian's appeal.
- Regarding the effective date, the license will be become effective February 1, 2014, the day after the current license expires. As such, the effective date of the WQC is considered to be February 1, 2014. Water quality monitoring is discussed further in the section of this order entitled "Section 10(a)(1) of the FPA."

#### COASTAL ZONE MANAGEMENT ACT

- 35. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA), <sup>20</sup> the Commission cannot issue a license for a project within or affecting a state's coastal zone unless the state CZMA agency concurs with the license applicant's certification of consistency with the state's CZMA program, or the agency's concurrence is conclusively presumed by its failure to act within 6 months of its receipt of the applicant's certification.
- 36. The State of West Virginia does not have a Coastal Management Program. Therefore, CZMA consistency certification is not required for the London-Marmet Project.

#### **SECTION 18 FISHWAY PRESCRIPTIONS**

37. Section 18 of the FPA<sup>21</sup> provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate. No fishway prescriptions or reservations of authority were filed under section 18 of the FPA.

#### THREATENED AND ENDANGERED SPECIES

<sup>&</sup>lt;sup>18</sup> See copy of the letter from Frank M. Simms, American Electric Power to Scott G. Mandirola, Division of Water and Waste Management filed with the Commission on August 16, 2013.

<sup>&</sup>lt;sup>19</sup> The WQC indicated that certification would be effective 15 days after receipt unless appealed by Appalachian.

<sup>&</sup>lt;sup>20</sup> 16 U.S.C. § 1456(c)(3)(A) (2012).

<sup>&</sup>lt;sup>21</sup> 16 U.S.C. § 811 (2012).

- 38. Section 7(a)(2) of the Endangered Species Act<sup>22</sup> requires federal agencies to ensure their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of their designated critical habitat.
- 39. There are 10 federally listed species that could occur in the project area: Virginia spiraea, running buffalo clover, Indiana bat, Virginia big-eared bat, pink mucket mussel, Northern riffleshell mussel, fanshell mussel, turbercled-blossom pearly mussel, and the spectaclecase mussel. None of these species have been documented on project lands or within the waters of the Kanawha River, although suitable habitat for running buffalo clover, Indiana bat, and Virginia big-eared bat is present within project lands. In the EA, staff determined that Appalachian's periodic use of herbicides has the potential to reduce habitat value of existing forested resources and aquatic habitat and that trimming or removal of trees could impact suitable habitat for roosting bats. As such, staff recommended a vegetation maintenance plan that would specify maintenance practices that would minimize effects on wetlands, forests, and wildlife including potential habitat for listed plants and wildlife. 24
- 40. Although suitable habitat for listed mussels was likely no longer available in the project area, staff concluded in the EA that operating the project in a run-of-river mode with project-related fluctuations in the Corps' impoundments limited to 0.3 foot as proposed by Appalachian and recommended by staff would continue to maintain the current amount of wetted habitat benefiting any endangered mussels that occur in the project area.<sup>25</sup>
- 41. Staff concluded that with its recommended measures, relicensing the London-Marmet Project is not likely to adversely affect federally listed species and their habitat. The U.S. Fish and Wildlife Service (FWS) concurred with these findings in telephone correspondence on January 4, 2013. 27
- 42. Article 402 requires run-of-river operation, and Article 404 requires the vegetation maintenance plan.

<sup>&</sup>lt;sup>22</sup> 16 U.S.C. § 1536 (a) (2012).

<sup>&</sup>lt;sup>23</sup> See EA at 75-76.

<sup>&</sup>lt;sup>24</sup> Id.

<sup>&</sup>lt;sup>25</sup> See EA at 52.

<sup>&</sup>lt;sup>26</sup> See EA at 9-10.

<sup>&</sup>lt;sup>27</sup> Memorandum filed January 14, 2013, regarding the January 4, 2013, telephone correspondence between Robert Fala, U.S. Fish and Wildlife Service – West Virginia Field Office and Brandi Sangunett, Federal Energy Regulatory Commission.

#### NATIONAL HISTORIC PRESERVATION ACT

- 43. Under section 106 of the National Historic Preservation Act (NHPA)<sup>28</sup> and its implementing regulations,<sup>29</sup> federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places (National Register) (defined as historic properties) and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking. This generally requires the Commission to consult with the State Historic Preservation Officer (SHPO) to determine whether and how a proposed action may affect historic properties and to seek ways to avoid or minimize any adverse effects.
- 44. The West Virginia SHPO stated that the London-Marmet dams were considered eligible for inclusion in the National Register.
- 45. To satisfy these responsibilities, on July 18, 2013, the Commission executed a Programmatic Agreement (PA) with the West Virginia SHPO for the project, and invited Appalachian, the Eastern Band of Cherokee Indians, and the Corps to concur with the stipulations of the PA. Both Appalachian and the Corps concurred. The PA requires the licensee to develop an HPMP for the term of any new license issued for this project. Execution of the PA demonstrates the Commission's compliance with section 106 of the NHPA. Article 407 requires the licensee to implement the PA and file an HPMP within 1 year of license issuance.

# RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES PURSUANT TO SECTION 10(j) OF THE FPA

- 46. Section 10(j)(1) of the FPA<sup>30</sup> requires the Commission, when issuing a license, to include conditions based on recommendations submitted by federal and state fish and wildlife agencies pursuant to the Fish and Wildlife Coordination Act,<sup>31</sup> to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)" affected by the project.
- 47. In response to the June 8, 2012, public notice that the project was ready for environmental analysis, West Virginia DNR filed on August 7, 2012, three recommendations under section 10(j). Two recommendations were determined to be outside the scope of

<sup>&</sup>lt;sup>28</sup> 16 U.S.C. § 470 et seq. (2012).

<sup>&</sup>lt;sup>29</sup> 36 C.F.R. Part 800 (2013).

<sup>&</sup>lt;sup>30</sup> 16 U.S.C. § 803(j)(1) (2012).

<sup>&</sup>lt;sup>31</sup> 16 U.S.C. §§ 661 et seq. (2012).

section 10(j) and are discussed in the next section. This license includes conditions consistent with the remaining recommendation that is within the scope of section 10(j); to operate the project in a run-of-river mode as allowed by the Corps. Article 402 requires run-of-river operation and Article 305 makes this license subject to a Corps' approved operating plan and MOA.

## **SECTION 10(a)(1) OF THE FPA**

48. Section 10(a)(1) of the FPA<sup>32</sup> requires that any project for which the Commission issues a license shall be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce; for the improvement and utilization of waterpower development; for the adequate protection, mitigation, and enhancement of fish and wildlife; and for other beneficial public uses, including irrigation, flood control, water supply, recreation, and other purposes.

# A. West Virginia DNR Recommendations

49. West Virginia DNR made two recommendations under section 10(j) that are not specific measures to protect, mitigate damages to, or enhance fish and wildlife. Consequently, these recommendations are not considered under section 10(j) of the FPA. Instead, these recommendations are considered under the broad public-interest standard of section 10(a)(1) of the FPA.

# 1. Fish Habitat Improvement Plan

- 50. To mitigate for the anticipated loss of fishery resources due to entrainment, West Virginia DNR recommended that Appalachian implement a fish habitat improvement plan in collaboration with the West Virginia DNR. West Virginia DNR recommends that the plan include the deployment of structures in the project area targeted at fish reproduction and protection of young-of-the-year fish to increase recruitment and fish survival. The plan would focus on in-stream habitat improvements designed to promote increased spawning, nursery habitat, and bank stabilization. West Virginia DNR states that the monetary value of fish lost over the anticipated 50-year life of a license would be much higher than the anticipated cost of the habitat structures.
- 51. West Virginia DNR did not provide the specifics of its habitat improvement projects such as the location of the projects, the specific species that the habitat improvement projects would be designed for, or how much they would cost. Therefore, staff was unable to

<sup>&</sup>lt;sup>32</sup> 16 U.S.C. § 803(a)(1) (2012).

<sup>&</sup>lt;sup>33</sup> 16 U.S.C. § 803(a)(1) (2012).

evaluate the costs and benefits of the recommendation, and in the EA <sup>34</sup> did not recommend adopting West Virginia DNR's recommended fish habitat improvement plan. Staff determined that although the operation of the project would entrain some fish, the majority of the fish involved would likely consist of young fish composed of highly prolific species that have the ability to compensate for losses. Furthermore, there is no evidence suggesting that entrainment is negatively affecting fish populations in the project area. For these reasons, the license does not adopt this recommendation.

#### 2. Recreation Plan

- 52. In response to the ready for environmental analysis notice, West Virginia DNR recommended that a recreation access enhancement plan be prepared for the London-Marmet Project that would include an at-grade crossing of the CSX railroad tracks for the London tailrace access area, as well as parking areas, restroom facilities, and waste receptacles at both developments. The London tailrace access area was closed for safety reasons on February 16, 2009, due to significant deterioration of the access bridge over the CSX railroad tracks. Appalachian was unable, throughout the relicensing process, to complete negotiations with CSX, the owner of the railroad, to rehabilitate or modify the bridge so that it could be used as an access point to the London tailrace. Following its filing of the license application, Appalachian was able to reach agreement with CSX and, on October 15, 2012, access was restored to the London tailrace. In response to West Virginia DNR's recommendations, Appalachian proposed to provide restroom facilities, trash receptacles, and a 25-car graveled and lighted parking area at the London tailrace access area.<sup>35</sup> Appalachian also proposed in its final license application to provide portable restrooms and trash receptacles at the Marmet Development tailrace access area to accommodate existing and future use.
- 53. In the EA, staff recommended that a recreation plan be developed for the project that included Appalachian's proposed measures, a timeline for installing the new facilities, and a regular maintenance schedule. License Article 406 requires Appalachian to develop the recreation plan.

## **B. Project Operation and Compliance Monitoring Plan**

<sup>&</sup>lt;sup>34</sup> See EA at 78-79.

<sup>&</sup>lt;sup>35</sup> See Appalachian's reply comments to the Commission's ready for environmental analysis notice filed September 21, 2012.

<sup>&</sup>lt;sup>36</sup> See EA at 76-77.

- 54. Appalachian proposes to operate the project in a run-of-river mode. However, Appalachian did not specify how it would document compliance with run-of-river operation or how it would coordinate its operation with the Corps.
- 55. Generally, Commission licenses for non-federal projects at Corps' dams require the licensee to develop an operating plan and an MOA with the Corps.<sup>37</sup> The operating plan describes the mode of hydropower operation, impoundment flow diversion, and regulation requirements for the Corps' projects, and integration of operation of the hydroelectric facility in the Corps' emergency action plan. The MOA describes the detailed operation of the project acceptable to the Corps and any restrictions needed to protect the purposes of the Corps' projects for navigation.
- 56. In addition, in the EA, staff recommended that Appalachian develop an operation and compliance monitoring plan in consultation with the West Virginia DNR and the Corps, and enter into a new operating MOA with the Corps as described above. Article 403 requires Appalachian to develop and implement an operation compliance monitoring plan to describe how Appalachian would comply with the operational requirements of the license.

# **C. Water Quality Monitoring**

- 57. Certification condition 1 requires Appalachian to monitor the dissolved oxygen and temperature of the water entering the intakes and downstream of the hydropower project after mixing. Monitoring would be conducted from May 1 through October 31. The certification requires Appalachian to make available monitoring information to the resource agencies and provide a report each year to the West Virginia DEP and West Virginia DNR.
- 58. Appalachian's water quality study concluded that current project operation has little effect on dissolved oxygen or temperature in the system.<sup>39</sup> Observed increases in temperature from upstream to downstream through Appalachian's study area appeared to be caused by wastewater and tributary discharges rather than the hydropower project's operation.
- 59. In the EA, Commission staff concluded that operating the project in a run-of-river mode would ensure that water quality and aquatic habitats are protected.<sup>40</sup> Therefore, staff

<sup>&</sup>lt;sup>37</sup> Memorandum of Understanding between the United States Army Corps of engineers and the Federal Energy Regulatory Commission on Non-federal Hydropower Projects, March 2011. <a href="http://www.ferc.gov/legal/mou/mou-usace.pdf">http://www.ferc.gov/legal/mou/mou-usace.pdf</a>.

<sup>&</sup>lt;sup>38</sup> *See* EA at 74-75.

<sup>&</sup>lt;sup>39</sup> See EA at 31.

<sup>&</sup>lt;sup>40</sup> See EA at 74.

did not recommend dissolved oxygen and temperature monitoring at the project. Nevertheless, due to its mandatory nature, condition 1 is included as part of this license. Article 401 requires that the annual report also be filed with the Commission.

#### D. Avian Protection Plan

- 60. As raptors and other large-bodied birds would be expected to use project lands for foraging, roosting, and possibly nesting, both the London and Marmet Development transmission lines have the potential to result in mortality to these species from electrocution or collision.
- 61. Appalachian's parent company, AEP, is a member of the Avian Power Line Interaction Committee (APLIC) and is finalizing an avian protection plan for all of its holdings to address potential bird mortality issues associated with electric utility facilities. Appalachian proposes to implement AEP's avian protection plan for the London-Marmet Project, but provided no indication as to when AEP's avian protection plan would be finalized or whether it would include site-specific measures to minimize bird mortality. Appalachian states that certain elements of AEP's avian protection plan have been implemented at the project, such as training and reporting collisions, but did not provide information on known issues with electrocution- or collision-related avian mortality at the London-Marmet Project.
- 62. In the EA, staff found that because the project was located on a major river with forested riparian and upland habitats, it is likely that raptors and other large-bodied birds would occur during the year for foraging, roosting, and possibly nesting and thus be at a risk for collision or electrocution. To address this potential risk, staff recommended that Appalachian develop and implement a site-specific avian protection plan. Such a plan would be developed in consultation with relevant resource agencies, and would rely upon the continued training of Appalachian staff to identify and report avian mortality due to electrocution or collision with the project's existing electrical facilities. Through this process, if avian electrocution or collision is routinely documented and expected to continue due to the existing design of electrical facilities, then site-specific measures and practices to reduce bird mortality following APLIC guidelines could be implemented, including modifications to structures or line arrangement. Article 405 requires the avian protection plan.

# E. Project Boundary

<sup>&</sup>lt;sup>41</sup> See EA at 44.

<sup>&</sup>lt;sup>42</sup> See EA at 76.

- 63. The existing project boundary at the London Development does not include the recently reopened access road to the tailrace fishing area, the parking area, and the path from the parking area to the tailrace fishing area.
- 64. In the EA, staff recommended that the recently reopened access road to the tailrace fishing area, the parking area, and the path from the parking area to the tailrace fishing area be included in the project boundary. Staff stated that revising the project boundary at the London Development to provide adequate access to and a parking area for the stairs and fishing pier, which are existing recreation facilities, would be consistent with the Commission's regulations regarding recreational development, which requires licensees to include within their project boundaries enough land to ensure optimum development of the project's recreational resources.
- 65. In its comments on the EA, Appalachian stated that it is not the fee owner of the road used to access the tailrace fishing area and that including the road within the project boundary was inappropriate. Appalachian currently has a 5-year lease agreement with CSX for public use of the road, which is the only road providing access to the tailrace fishing area. Appalachian stated that if CSX terminates the lease, it would pursue other options for accessing the tailrace fishing area.
- 66. The Commission does not require a licensee to own all lands within a project boundary. However, it must enclose all lands necessary for public access to project features within a project boundary to ensure access will be provided by the licensee during the life of any license. Because the road is needed to fulfill the project purpose of recreation, the road must be brought into the project boundary, and Appalachian will need to retain the rights for project-related use of the road as long as the road remains a licensed project facility. In addition, should the lease expire and CSX be unwilling to renew the lease, Appalachian will be required to either: (1) use eminent domain to obtain the appropriate access rights through the state courts, or (2) file an application to amend the license to provide an alternative fishing access area.
- 67. Appalachian's Exhibit G filed on January 31, 2012, did not include the London and Belle substations in the project boundary because these substations are part of the interconnected grid and not primary transmission facilities. In the EA, staff agreed that the project's substations should not be part of the licensed project. This license is consistent with staff's finding.

<sup>&</sup>lt;sup>43</sup> See EA at 78.

<sup>&</sup>lt;sup>44</sup> 18 CFR § 2.7 (a) (2013).

<sup>&</sup>lt;sup>45</sup> See EA at 78.

#### **ADMINISTRATIVE PROVISIONS**

# A. Annual Charges

68. The Commission collects annual charges from licensees for administration of the FPA. Article 201 provides for the collection of funds for administration of the FPA and use of a government dam. As noted, the London-Marmet Project occupies about 11.51 acres of federal land administered by the Corps. The Commission does not assess a land use charge for a licensee's use of federal lands adjoining or pertaining to federal dams or other structures. Rather, it assesses the charge on the use of surplus water or water power from a government dam. The commission does not assess a land use charge for a licensee's use of federal lands adjoining or pertaining to federal dams or other structures.

# B. Exhibit F and G Drawings

- 69. The Commission requires licensees to file sets of approved project drawings on microfilm and in electronic file format. Article 202 requires the filing of the Exhibit F drawings. The Exhibit F drawings on sheets 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, and 12 are approved and made part of this license (Ordering Paragraph (C)). Sheet 7 of Exhibit F was labeled "London Development's Access Bridge" but the exhibit only states that the bridge has been removed. Because the access to the London tailrace fishing area has been replaced by an atgrade crossing as described above in this order, sheet 7 is not needed.
- 70. Exhibit G drawings are required to show a project boundary enclosing all project works and other features that are to be licensed. The Exhibit G drawing for the London Development (sheet 2) filed with the license application does not include the following project recreation facilities: the road used to access the tailrace fishing area, the adjacent parking area, and the path to the fishing area. Therefore, the Exhibit G drawing for the London Development is not approved. Sheet 1 showing the Exhibit G drawing for the Marmet Development is approved.
- 71. Article 203 requires filing a revised Exhibit G drawing (sheet 2) of the London Development that encloses and labels all project facilities, including the road used to access the tailrace fishing area, the parking area, and the path to the fishing area.

#### C. Amortization Reserve

72. The Commission requires that for new major licenses, non-municipal licensees must set up and maintain an amortization reserve account upon the effective date of the license. Article 204 requires the establishment of the account.

<sup>&</sup>lt;sup>46</sup> See 18 C.F.R. § 11.2(a) (2013).

<sup>&</sup>lt;sup>47</sup> See 18 C.F.R. § 11.3 (2013).

#### D. Headwater Benefits

73. Some projects directly benefit from headwater improvements that were constructed by other licensees, the United States, or permittees. Article 205 requires the licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

# E. Project Land Rights Progress Report

74. This license requires that Appalachian file a revised Exhibit G – sheet 2 to include the access road, parking area, and trail for the tailrace fishing area at the London Development. Standard Article 5 set forth in Form L-5 requires the licensee to acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction, maintenance, and operation of the project, within five years. In order to monitor compliance with Article 5, Article 206 requires the licensee to file no later than four years after the effective date of the license, a report detailing its progress on acquiring title in fee or the necessary rights to all lands within the project boundary. The report shall include specific documentation on the status of the rights that have been acquired as of the filing date of the progress report, and a plan and schedule to acquire all remaining land prior to the five-year deadline.

# F. Use and Occupancy of Project Lands and Waters

75. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 408 allows the licensee to grant permission, without prior Commission approval, for the use and occupancy of project lands for such minor activities as landscape planting. Such uses must be consistent with the purposes of protecting and enhancing the scenic, recreational, and environmental values of the project.

# G. Conditions for Projects at Corps' Dams

76. Pursuant to a 2011 Memorandum of Understanding between the Commission and the Department of the Army, <sup>48</sup> five special articles are included in licenses for hydroelectric projects at Corps facilities. The articles are incorporated in this license as Articles 303 through 307.

# H. Project Safety

<sup>&</sup>lt;sup>48</sup> Memorandum of Understanding between the United States Army Corps of engineers and the Federal Energy Regulatory Commission on Non-federal Hydropower Projects, March 2011. <a href="http://www.ferc.gov/legal/mou/mou-usace.pdf">http://www.ferc.gov/legal/mou/mou-usace.pdf</a>.

77. To demonstrate awareness of the roles and responsibilities of project owners and dam safety staff with regard to project safety, Article 301 requires the licensee to submit a Project Safety Program to the Commission's Division of Dam Safety and Inspections-New York Regional Engineer.

# I. Project Modifications

78. Article 302 requires the licensee to file with the Commission's D2SI-New York Regional Engineer a plan and schedule of any proposed modifications to the water retaining and/or conveyance features of the project resulting from the environmental requirements of the license to ensure that these modifications do not adversely affect the project works, dam safety, or project operation.

## STATE AND FEDERAL COMPREHENSIVE PLANS

79. Section 10(a)(2)(A) of the FPA<sup>49</sup> requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project.<sup>50</sup> Under section 10(a)(2)(A), Commission staff identified and reviewed seven comprehensive plans that are relevant to the London-Marmet Project.<sup>51</sup> No conflicts were found.

# APPLICANT'S PLANS AND CAPABILITIES

80. In accordance with sections 10(a)(2)(C) and 15(a) of the FPA,<sup>52</sup> staff evaluated Appalachian's record as a licensee in these areas: (A) conservation efforts; (B) compliance history and ability to comply with the new license; (C) safe management, operation, and maintenance of the project; (D) ability to provide efficient and reliable electric service; (E) need for power; (F) transmission services; (G) cost effectiveness of plans; and (H) actions affecting the public. I accept the staff's finding in each of the following areas.

## A. Conservation Efforts

81. Section 10(a)(2)(C) of the FPA requires the Commission to consider the extent of electricity consumption efficiency improvement programs in the case of license applicants primarily engaged in the generation or sale of electric power, like Appalachian. Appalachian

<sup>&</sup>lt;sup>49</sup> 16 U.S.C. § 803(a)(2)(A) (2012).

<sup>&</sup>lt;sup>50</sup> Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19 (2013).

<sup>&</sup>lt;sup>51</sup> The list of applicable plans can be found in section 5.5 of the EA for the project.

<sup>&</sup>lt;sup>52</sup> 16 U.S.C. §§ 803(a)(2)(C) and 808(a) (2012).

is a subsidiary of AEP, which is one of the largest investor-owned utilities in the United States. Appalachian is part of AEP System's East Zone, sometimes referred to as its PJM Zone.

- 82. In 2006, Appalachian initiated an internet service through which residential and business customers can find ways to conserve energy. Residential customers can use the site to estimate energy use costs, estimate what appliances cost to operate, and learn how much can be saved by switching to compact fluorescent bulbs. Conservation tips for hot weather and other seasons are provided. Business customers who visit the site are provided with a calculator that will provide estimates of energy costs based on customer inputs. These services provide a comparison platform to give the differences between current use and various scenarios. Appalachian's site is promoted in its customer's bills.
- 83. In 2010, the Public Service Commission of West Virginia approved the implementation of Energy Efficiency programs by Appalachian. The approved programs consist of SMART Lighting, Residential Home Retrofit, Residential Low Income, and Commercial & Industrial Incentive and are expected to achieve annual energy savings of 208 gigawatthours. Appalachian expects to seek approval for similar programs in its Virginia service territory. These programs show that Appalachian is making an effort to conserve electricity and has made a satisfactory good faith effort to comply with section 10(a)(2)(C) of the FPA.

# B. Compliance History and Ability to Comply with the New License

84. Based on a review of Appalachian's compliance with the terms and conditions of the existing license, staff finds that Appalachian's overall record of making timely filings and compliance with its license is satisfactory. Therefore, staff believes that Appalachian can satisfy the conditions of a new license.

# C. Safe Management, Operation, and Maintenance of the Project

85. Staff has reviewed Appalachian's management, operation, and maintenance of the London-Marmet Project pursuant to the requirements of 18 C.F.R. Part 12 and the Commission's Engineering Guidelines and periodic Independent Consultant's Safety Inspection Reports. Staff concludes that the project works are safe, and that there is no reason to believe that Appalachian cannot continue to safely manage, operate, and maintain these facilities under a new license.

## D. Ability to Provide Efficient and Reliable Electric Service

86. Staff has reviewed Appalachian's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. Staff's review indicates that Appalachian continuously monitors headwater and tailwater levels and takes generating units on-line and off-line as required to utilize available flow for generation.

Appalachian employs a preventive maintenance program to increase reliability and efficiency of the mechanical and electrical components of the system. Staff concludes that Appalachian is capable of operating the project to provide efficient and reliable electric service in the future.

#### E. Need for Power

- 87. Appalachian operates the London-Marmet Project to generate electricity that is merged with power being generated at AEP's other hydroelectric, nuclear, and coal- or gas-fired power plants within the United States. The AEP system and its customers have a need for generating capacity. Without the capacity of the project, the AEP system would need to find alternate resources. The needs assessment considers the projection of: (1) peak demand; (2) long-term wholesale sales positions; (3) existing capacity resources; (4) current demand-side management impacts on peak demand; (5) regional capacity; and (6) reserve margin criteria.
- 88. Internal peak demand forecasts are based on the AEP Economic Forecasting Group's 2011 forecast, completed in March 2011. The internal demand is projected to grow at a 0.9 percent compound annual growth rate (CAGR) for the period 2011 through 2025. This equates to roughly a 200- to 205-MW-per-year increase over the same 10-year period
- 89. The London-Marmet Project has a combined installed capacity of 28.8 MW. Average annual generation is equal to 147,391 megawatthours (MWh) for the London-Marmet Project. The power generated by the London-Marmet Project helps meet the electricity needs of AEP's customers. Staff concludes that power from the London-Marmet Project would help meet a need for power in the region in both the short- and long-term.

#### F. Transmission Services

90. The project includes two 46-kV transmission lines within a 0.38-mile-long corridor running parallel from the London powerhouse to the London substation and two 46-kV transmission lines within a 0.78-mile-long corridor that transmit power from the Marmet powerhouse to the Belle substation. Appalachian is not proposing changes that would affect its own or other transmission services. The current license for the London-Marmet Project includes the London and Belle substations in the project boundary. Removing the London and Belle substations from the project boundary in the new license as proposed by Appalachian is consistent with staff's determination that these substations are not primary transmission facilities and should not be part of the licensed project. The project and project transmission lines are important elements in providing power to local communities and the region.

#### G. Cost Effectiveness of Plans

91. Appalachian plans to make a minimal number of facility modifications. Based on

Appalachian's record as an existing licensee, staff concludes that these plans are likely to be carried out in a cost-effective manner.

## H. Actions Affecting the Public

92. Appalachian provided extensive opportunity for public involvement in the development of its application for a new license for the London-Marmet Project. During the previous license period, Appalachian provided facilities to enhance public use and operated the project with consideration for the protection of downstream uses of the Kanawha River. Appalachian uses the project to help meet local power needs, provide employment opportunity, and provide recreational opportunities.

## **PROJECT ECONOMICS**

- 93. In determining whether to issue a new license for an existing hydroelectric project, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corporation*, <sup>53</sup> the Commission uses current costs to compare the costs of the project and likely alternative power with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license.
- 94. In applying this analysis to the London-Marmet Project, we have considered three options: the no-action alternative, Appalachian's proposal, and the project as licensed herein. Under the no-action alternative, the project would continue to operate as it does now. The project has an installed capacity of 28.8 MW, a dependable capacity of 16 MW, and generates an average of 147,391 MWh of electricity annually. The average annual project cost is about \$5,060,000 or \$34.33/MWh. When we multiply our estimate of average generation by the alternative power cost of \$39.58/MWh, <sup>54</sup> staff gets a total value of the project's power of \$5,833,736 in 2013 dollars. To determine whether the proposed project is currently economically beneficial, staff subtracts the project's cost from the value of the project's power. <sup>55</sup> Therefore, the project costs \$773,736, or \$5.25/MWh, less to produce

<sup>&</sup>lt;sup>53</sup> *Mead Corp.* 72 FERC ¶ 61,027 (1995).

<sup>&</sup>lt;sup>54</sup> The alternative power cost of \$39.58 per MWh is based on information obtained from pages D-6 through D-8 of the license application and includes cost of on- and off-peak values as well as dependable capacity values.

<sup>&</sup>lt;sup>55</sup> Details of staff's economic analysis for the project as licensed herein and for various alternatives are included in the EA issued December 4, 2012. All costs in the EA are

power than the likely alternative cost of power.

- 95. As proposed by Appalachian, the levelized annual cost of operating the London-Marmet Project is \$5,104,000, or \$34.63/MWh. Based on the same amount of estimated average annual generation of 147,391 MWh and alternative power cost of \$39.58/MWh, staff gets a total value of the project's power of \$5,833,736 in 2013 dollars. Therefore, in the first year of operation, the project would cost \$729,736, or \$4.95/MWh, less than the likely alternative cost of power
- 96. As licensed herein with the mandatory conditions and staff measures, the levelized annual cost of operating the project would be about \$5,147,000, or \$34.92/MWh. Based on the same amount of estimated average annual generation of 147,391 MWh as licensed, the project would produce power valued at \$5,833,736 in 2013 dollars when multiplied by the \$39.58/MWh value of the project's power. Therefore, in the first year of operation, project power would cost \$686,736, or \$4.66/MWh, less than the likely cost of alternative power
- 97. In considering public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary service benefits). These benefits include the ability to help maintain the stability of a power system by quickly adjusting power output to respond to rapid changes in system load and to respond rapidly to a major utility system or regional blackout by providing a source of power to help restart fossil-fuel-based generating stations and put them back on line.

#### COMPREHENSIVE DEVELOPMENT

- 98. Sections 4(e) and 10(a)(1) of the FPA<sup>56</sup> require the Commission to give equal consideration to the purposes of power development and energy conservation; the protection, mitigation of damage to, and enhancement of fish and wildlife; the protection of recreational opportunities; and the preservation of other aspects of environmental quality. Any license issued shall be such as in the Commission's judgment will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.
- 99. The EA for the project contains background information, analysis of effects, and support for related license articles. Based on the record of this proceeding, including the EA and the comments thereon, licensing the London-Marmet Project as described in this order would not constitute a major federal action significantly affecting the quality of the human

in 2011 dollars. Staff escalates these costs to 2013 dollars in this license order.

<sup>&</sup>lt;sup>56</sup> 16 U.S.C. §§ 797(e) and 803(a)(1) (2012).

environment. The project will be safe if operated and maintained in accordance with the requirements of this license.

- 100. Based on our independent review and evaluation of the project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, as documented in the EA, I have selected the proposed London-Marmet Project, with the staff-recommended measures and certification conditions, and find that it is best adapted to a comprehensive plan for improving or developing the Kanawha River.
- 101. I selected this alternative because: (1) issuance of a new license will serve to maintain a beneficial, dependable, and an inexpensive source of electric energy; (2) the required environmental measures will protect and enhance fish and wildlife resources, water quality, recreational resources, and historic properties; and (3) the 28.8 MW of electric capacity comes from a renewable resource that does not contribute to atmospheric pollution.

#### LICENSE TERM

102. Section 15(e) of the FPA<sup>57</sup> provides that any new license issued shall be for a term that the Commission determines to be in the public interest, but not less than 30 years or more than 50 years. It is Commission policy to issue a 50-year license for a project located at a federal dam. Accordingly, I will issue this license for a term of 50 years.

#### The Director orders:

- (A) This license is issued to Appalachian Power Company (licensee), for a period of 50 years, effective February 1, 2014, to operate and maintain the London-Marmet Project. This license is subject to the terms and conditions of the FPA, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.
  - (B) The project consists of:
- (1) All lands, to the extent of the licensee's interests in these lands, described in the project description, the project boundary discussion of this order, and sheet 1 of Exhibit G filed on January 31, 2012:

Exhibit G Drawing	FERC No. 1175-	Description
Sheet 1	1012	Marmet Powerstation Project Boundary

(2) Project works consisting of:

<sup>&</sup>lt;sup>57</sup> 16 U.S.C. § 808(e) (2012).

London Development - (a) a forebay area protected by a log boom; (b) screened intake structures; (c) a concrete powerhouse containing three turbine-generator units with a total installed capacity of 14.4 MW; (d) a 420-foot-long tailrace; (e) two 46-kilovolt (kV) transmission lines within a 0.38-mile-long corridor; and (f) appurtenant facilities.

Marmet Development - (a) a forebay area protected by a log boom; (b) screened intake structures; (c) a concrete powerhouse containing three turbine-generator units with a total installed capacity of 14.4 MW; (d) a 450-foot-long tailrace; (e) two 46-kV transmission lines within a 0.78-mile-long corridor; and (f) appurtenant facilities.

The project works generally described above are more specifically shown and described by those portions of Exhibits A and F shown below:

Exhibit A: Pages A-1 through A-9 of the license application filed January 31, 2012 as supplemented by item number 4 of Appalachian's Additional Information Response filed on May 21, 2012, specifying the following acreages of federal land at the project: 4.73 acres at the London Development and 6.78 acres at the Marmet Development.

Exhibit F: The following Exhibit F drawings filed on January 31, 2012:

Exhibit F Drawings	FERC No. 1175-	Description
Sheet 1 of 12	1001	London Development General Plan
Sheet 2 of 12	1002	Marmet Development General Plan
Sheet 3 of 12	1003	London and Marmet Developments
		Elevation and Section
Sheet 4 of 12	1004	London Development Retaining Walls
Sheet 5 of 12	1005	Marmet and London Developments
		Abutment at Marmet Station
Sheet 6 of 12	1006	Marmet and London Developments
		Outdoor Switching Stations (4/46 kV)
Sheet 8 of 12	1007	London and Marmet Developments
		Pump and Filter Houses
Sheet 9 of 12	1008	London and Marmet Developments
		Plan of Stations (with horizontal
		Section 4 feet above unit floor)
Sheet 10 of 12	1009	London and Marmet Developments
		Plan of Generator Floors and Intakes
		(horizontal Section 15 feet above
		generator floor)
Sheet 11 of 12	1010	London and Marmet Developments
		Longitudinal Section Through Sections

Exhibit F Drawings	FERC No. 1175-	Description
Sheet 12 of 12	1011	London and Marmet Developments
		Cross Sections Through Stations

- (3) All of the structures, fixtures, equipment or facilities used to operate or maintain the project and located within the project boundary, all portable property that may be employed in connection with the project, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.
- (C) The exhibits A, F, and G described above are approved and made part of the license. Sheet 2 of the Exhibit G drawing filed on January 31, 2012, showing the London Powerstation Project Boundary does not conform to the Commission's regulations, and therefore, is not approved.
- (D) This license is subject to the conditions submitted by the West Virginia Department of Environmental Protection under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1) (2006), as those conditions are set forth in Appendix A to this order. The Commission reserves the authority to amend this ordering paragraph, Appendix A, and any other part of the license as the Commission deems necessary and appropriate in light of the ultimate disposition of the licensee's pending appeal of these section 401conditions.
- (E) This license is also subject to the articles set forth in Form L-5 (Oct. 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters and Lands of the United States" (*See* 54 FPC 1792), as reproduced at the end of this order, and the following additional articles:
- <u>Article 201</u>. *Annual Charges*. The licensee shall pay the United States annual charges, effective February 1, 2014, and as determined in accordance with provisions of the Commission's regulations in effect from time to time, for the purposes of:
- (a) reimbursing the United States for the cost of administration of Part I of the Federal Power Act. The authorized installed capacity for that purpose is 28.8 megawatts; and
- (b) recompensing the United States for the utilization of surplus water or water power from a government dam.
- Article 202. Exhibit Drawings. Within 45 days of the effective date of the license, the licensee shall file the approved exhibit drawings in aperture card and electronic file formats.
- (a) Four sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture

cards. Prior to microfilming, the FERC Project-Drawing Number (i.e., P-1175-1001 through P-1175-1012) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (i.e., F-1, G-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two of the sets of aperture cards along with form FERC-587 shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office. The remaining set of aperture cards (Exhibit G – sheet 1 only) and a copy of form FERC-587 shall be filed with the Bureau of Land Management (BLM) office at the following address:

Bureau of Land Management Branch of Lands (ES-930) 7450 Boston Blvd Springfield, VA 22153

Form FERC-587 is available through the Commission's website at the following <a href="http://www.ferc.gov/docs-filing/forms/form-587/form-587.pdf">http://www.ferc.gov/docs-filing/forms/form-587/form-587.pdf</a>. If the form cannot be downloaded from the Internet, a hard copy may be obtained by mailing a request to the Secretary of the Commission.

(b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the D2SI New York Regional Office. Exhibit F drawings must be separated from other project exhibits and identified as Critical Energy Infrastructure Information (CEII) material under 18 C.F.R. § 388.113(c) (2013). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension in the following format [P-1175-1001, F-1, London Development General Plan, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY - black & white raster file FILE TYPE - Tagged Image File Format (TIFF), CCITT Group 4 RESOLUTION - 300 dpi desired (200 dpi min) DRAWING SIZE FORMAT - 24" X 36" (min), 28" X 40" (max) FILE SIZE - less than 1 MB desired

Each Exhibit G drawing that includes the project boundary must contain a <u>minimum</u> of three known reference points (i.e., latitude and longitude coordinates, or state plane coordinates). The points must be arranged in a triangular format for GIS geo-referencing the project boundary drawing to the polygon data, and must be based on a standard map

coordinate system. The spatial reference for the drawing (i.e., map projection, map datum, and units of measurement) must be identified on the drawing and each reference point must be labeled. In addition, each project boundary drawing must be stamped by a registered land surveyor.

(c) The licensee shall file two separate sets of the project boundary data in a georeferenced electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or a similar GIS format) with the Secretary of the Commission, ATTN: OEP/DHAC. The filing shall include both polygon data and all reference points shown on the individual project boundary drawings. An electronic boundary polygon data file(s) is required for each project development. Depending on the electronic file format, the polygon and point data can be included in single files with multiple layers. The geo-referenced electronic boundary data file must be positionally accurate to  $\pm 40$  feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. The file name(s) shall include: FERC Project Number, data description, date of this license, and file extension in the following format [P-1175, boundary polygon/or point data, MM-DD-YYYY.SHP]. The filing must be accompanied by a separate text file describing the spatial reference for the geo-referenced data: map projection used (i.e., UTM, State Plane, Decimal Degrees, etc), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name shall include: FERC Project Number, data description, date of this license, and file extension in the following format [P-1175, project boundary metadata, MM-DD-YYYY.TXT].

In addition, for those projects that occupy federal lands, a separate geo-referenced polygon file(s) is required that identifies transmission line acreage and non-transmission line acreage affecting federal lands for the purpose of meeting the requirements of 18 C.F.R. § 11.2. The file(s) must also identify each federal owner (e.g., BLM, Forest Service, Corps of Engineers, etc.), land identification (e.g., forest name, Section 24 lands, national park name, etc.), and federal acreage affected by the project boundary. Depending on the geo-referenced electronic file format, the polygon, point, and federal lands data can be included in a single file with multiple layers.

Article 203. Exhibit G Drawings. Within 90 days of the effective date of the license, the licensee shall file, for Commission approval, a revised Exhibit G drawing for sheet 2 showing the London Development enclosing within the project boundary all principal project works necessary for operation and maintenance of the project, including the road used to access the tailrace fishing area, the adjacent parking area, the path and stairs leading to the fishing pier, and the tailrace fishing pier. The Exhibit G drawing must comply with sections 4.39 and 4.41of the Commission's regulations.

Article 204. Amortization Reserve. Pursuant to section 10(d) of the Federal Power Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of

amortization reserves. The licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the licensee shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly included in the licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10-year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 205. Headwater Benefits. If the licensee's project was directly benefited by the construction work of another licensee, a permittee, or the United States on a storage impoundment or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license. The benefits will be assessed in accordance with Part 11, Subpart B, of the Commission's regulations.

Article 206. Project Land Rights Progress Report. No later than four years after the effective date of the license, the licensee shall file a report with the Commission describing the status of acquiring title in fee or the rights for all the lands within the project boundary. The report must provide an overview map of each parcel and summary table identifying the licensee's rights over each parcel within the project boundary. The report shall also include specific supporting documentation showing the status of the land rights on all parcels of land within the project boundary that: (1) have been acquired up to the date of filing of the report, including pertinent deeds, lease agreements, and/or bill of sale information that specifically verifies the licensee's rights; and (2) the licensee's plan and schedule for acquiring all remaining project lands prior to the five-year deadline, including a history of actions taken, current owner information, the type of ownership to be acquired whether in fee or by easement, and the timeline for completing property acquisition.

Article 301. Licensee's Project Safety Program. Within 90 days from the effective date of the license, the licensee shall submit to the Commission's Division of Dam Safety and Inspections-New York Regional Engineer, a Safety Program which among other items demonstrates a clear acknowledgement of the licensee's responsibility for the safety of the project, an outline of the roles and responsibilities of the safety staff, and access of the safety official to the Chief Executive Officer (CEO). For guidance on what constitutes a good dam safety program the licensee should reference the information posted on the FERC website at <a href="https://www.ferc.gov/industries/hydropower/safety/initiatives/odsp.asp">www.ferc.gov/industries/hydropower/safety/initiatives/odsp.asp</a>.

Article 302. Project Modification Resulting From Environmental Requirements. The planning and design of any permanent or temporary modification which affects the project works or operation resulting from environmental requirements shall be coordinated as early as feasible with the Commission's Division of Dam Safety and Inspections (D2SI) –New York Regional Engineer. Within 90 days of the effective date of the license a letter is to be sent to the D2SI-New York Regional Engineer providing a plan and schedule of any proposed modifications to the project operations or to the water retaining and/or conveyance features of the project in the planning and design phase resulting from environmental requirements of the license. The schedule is to allow sufficient review time for the Commission to insure that the proposed work does not adversely affect the project works, dam safety, or project operation.

Article 303. Agreement with U.S. Army Corps of Engineers (Corps). The licensee shall, within 90 days from the effective date of the license, enter into an agreement with the Corps to coordinate its plans for access to and site activities on lands and property administered by the Corps so that the authorized purposes, including operation of the federal facilities, are protected. In general, the agreement shall not be redundant with the Commission's requirements contained in this license, shall identify the facility, and the study and construction activities, as applicable, and terms and conditions under which studies and construction will be conducted. The agreement shall be mainly composed of reasonable arrangements for access to the Corps site to conduct studies and construction activities, such access rights to be conditioned by the Corps as may be necessary to protect the federally authorized project purposes and operations. Should the licensee and the Corps fail to reach an access agreement, the licensee shall refer the matter to the Commission for resolution.

Article 304. Periodic and Continuous Inspections by the U.S. Army Corps of Engineers (Corps). The construction, operation, and maintenance of the project works that, in the judgment of the Corps, may affect the structural integrity or operation of the Corps' project shall be subject to periodic or continuous inspections by the Corps. Any construction, operation, and maintenance deficiencies or difficulties detected by the Corps' inspection shall be immediately reported to the Division of Dam Safety and Inspection (D2SI)-New York Regional Engineer. Upon review, the D2SI-New York Regional Engineer shall refer the matter to the licensee for appropriate action. In cases when construction, operation, or maintenance practices or deficiencies may create a situation posing imminent

danger to the structural integrity and safety of the Corps' project, the Corps' inspector has the authority to stop construction or maintenance while awaiting the resolution of the problem. The licensee shall immediately inform the D2SI-New York Regional Engineer of the circumstances surrounding the cessation of construction, operation, or maintenance activities. The licensee shall not resume construction, operation, or maintenance activities until notified by the D2SI-New York Regional Engineer that the problem or situation has been resolved.

Article 305. Operating Plan. Within six months of the effective date of the license, the licensee shall file, for Commission approval, an operating plan that has been approved by the Corps, which describes (a) the designed mode of hydropower operation, (b) impoundment flow diversion and regulation requirements for operation of the Corps' project during construction, as established by the Corps, and (c) integration of the operation of the hydroelectric facility into the Corps' Emergency Action Plan. In addition, the licensee, prior to start of power plant operation, shall enter into an operating Memorandum of Agreement (MOA) with the Corps describing the detailed operation of the powerhouse acceptable to the Corps. The MOA shall specify any restrictions needed to protect the primary purposes of the Corps' project. The Division of Dam Safety and Inspection (D2SI)-New York Regional Engineer shall be invited to attend meetings regarding the agreement. The MOA shall be subject to revision by mutual consent of the Corps and licensee as experience is gained by actual project operation. Should the licensee and the Corps fail to reach an agreement, the matter will be referred to the Director, Office of Energy Projects for resolution. Copies of the Corps' approved operating plan and a signed MOA between the Corps and the licensee, and any revision thereof, shall be filed with the Commission.

Article 306. No Claim. The licensee shall have no claim under this license against the United States arising from the effect of any changes made in the operation or reservoir levels of the U.S. Army Corps of Engineers' project.

Article 307. U.S. Army Corps of Engineers' (Corps) Written Approval. The licensee shall provide the Commission's Division of Dam Safety and Inspection (D2SI)-New York Regional Engineer two copies of all correspondence between the licensee and the Corps. The D2SI-New York Regional Engineer shall not authorize construction of any project work until the Corps' written approval of construction plans and specifications has been received by the D2SI-New York Regional Engineer.

Article 401. Requirement to File Reports. Condition 1 of the West Virginia Department of Environmental Protection's (West Virginia DEP) section 401 water quality certification (certification) requires the licensee to file an annual report of water quality monitoring with the West Virginia DEP by March 1 of the following year. This report documents compliance with the requirements of this license (condition 1 of the certification) and may have a bearing on future actions. Each such report shall also be submitted to the Commission by March 1.

The licensee shall submit to the Commission documentation of any consultation, and copies of any comments and recommendations made by any consulted entity in connection with each report. The Commission reserves the right to require changes to project operations or facilities based on the information contained in the report and any other available information.

Article 402. Run-of-River Operation. Beginning with the effective date of the license, the licensee shall operate the London and Marmet Developments in a run-of-river mode for the protection of aquatic resources and water quality in the Kanawha River, as required by Appendix A to this order, as long as it is consistent with any operational constraints established by the U.S. Army Corps of Engineers (Corps) according to Article 305.

Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods upon mutual agreement among the licensee, the Corps, the West Virginia Department of Environmental Protection, and West Virginia Division of Natural Resources. If run-of-river operation is so modified, the licensee shall notify the Commission and the Corps as soon as possible, but no later than 10 days after each such incident.

Article 403. Operation Compliance Monitoring Plan. Within six months of effective date of the license, the licensee shall file with the Commission, for approval, an operation compliance monitoring plan that describes how the licensee will comply with the operational requirements of this license.

The plan shall include, but not necessarily be limited to, the following:

- (a) provisions to monitor compliance with the operational requirements of the license, including implementing the operating plan required by Article 305 and operating the project in a run-of-river mode as required by Article 402;
- (b) a description of the steps the licensee will take to ensure run-of-river operation continues during planned and emergency shutdowns;
- (c) a description of all gages or recording devices that will be used to monitor operation compliance;
  - (d) the method of calibration of each gage and/or measuring device;
  - (e) the frequency of recording for each gage and/or measuring device;
- (f) procedures for recording, maintaining, and reporting the monitoring data to the Commission:

- (g) a provision to maintain a log of project operation; and
- (h) a schedule of reporting project compliance/non-compliance during normal operation and in the event of an emergency.

The licensee shall prepare the plan after consultation with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, West Virginia Division of Natural Resources, and the West Virginia Department of Environmental Protection. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 404. Vegetation Maintenance Plan. Within six months of the effective date of the license, the licensee shall file for Commission approval, a vegetation maintenance plan. The purpose of this plan is to: (1) clarify the vegetation maintenance methods used to maintain project lands, including primary transmission line corridors; (2) designate best management practices for maintenance activities that occur at or adjacent to wetlands; (3) provide a method to identify and manage invasive plant species that occur on project lands when they pose a direct risk to important wildlife habitat components (i.e., roost trees for federally or state-listed bat species) and rare plant communities including federally listed plants; and (4) identify criteria for preserving trees that offer suitable habitat for wildlife, particularly listed bat species.

The vegetation maintenance plan shall include, but not be limited to:

- (a) a description of all mechanical and chemical treatment methods used to maintain project lands;
- (b) a list of known or suspected target species for chemical treatment within natural and man-made (i.e., rip-rap) habitats;
- (c) a protocol for identifying and controlling (if necessary) invasive plant species that pose a risk to wildlife habitat, particularly for federally and state-listed bat species;

- (d) a provision for standard buffer distances to minimize the chance of herbicides entering the Kanawha River or any other waterway or wetland within, or hydrologically connected to, the London and Marmet developments;
- (e) a provision that identifies criteria by which suitable roost trees for Indiana, Virginia big-eared, or other state-listed bat species will be preserved, provided the trees are not a hazard to safety or safe operation of the project; and
- (f) a provision that, whenever possible, limits tree trimming and cutting to the winter season (September to March) to minimize the risk of mortality or harassment to roosting Indiana or Virginia big-eared bats potentially inhabiting those trees.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and the West Virginia Division of Natural Resources, and specific descriptions of how the agencies' comments and recommendations are accommodated by the plan. The licensee shall allow 30 days for the agencies to comment and make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan shall not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 405. Avian Protection Plan. Within six months of the effective date of the license, the licensee shall file for Commission approval, an avian protection plan. The purpose of this plan is to minimize the potential for bird collisions or electrocution with transmission lines or related structures.

The avian protection plan shall include: (1) training of the licensee's staff to adequately identify and document instances of avian mortality due to electrocution by or collision with the project's electrical facilities; (2) a framework for reporting avian mortality to the relevant resource agencies; and (3) provisions for the development and implementation of site-specific measures and practices to reduce bird mortality, as necessary, including modifications to structures or line arrangement in accordance with the following raptor protection guidelines: (1) Avian Protection Plan Guidelines: A Joint Document prepared by the Edison Electric Institute's Avian Power Line Interaction Committee (APLIC) and U.S. Fish and Wildlife Service; (2) APLIC's Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006; and (3) APLIC's Mitigating Bird Collisions with Power Lines: The State of the Art in 2012, or the most current editions of these documents.

The plan shall be prepared after consultation with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and West Virginia Division of Natural Resources. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan shall not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 406. Recreation Plan. Within six months of the effective date of the license, the licensee shall file a recreation plan for Commission approval. The plan shall include, but not necessarily be limited to, the following: (1) a schedule for installing restroom and trashcan facilities at both developments and a 25-car graveled and lighted parking area at the London tailrace access area; (2) a schedule for maintenance of the new and existing facilities; (3) a provision to operate and maintain the facilities over the term of the license; and (4) a discussion of how the needs of the disabled were considered in the planning and design of the facilities.

The licensee shall prepare the plan after consultation with the West Virginia Division of Natural Resources and the U.S. Army Corps of Engineers. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan shall not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan according to the approved schedule, including any changes required by the Commission.

Article 407. Programmatic Agreement and Historic Properties Management Plan. Beginning with the effective date of the license, the licensee shall implement the "Programmatic Agreement Between the Federal Energy Regulatory Commission and the West Virginia Historic Preservation Officer for Managing Historic Properties that May be

Affected by Issuing a New License to Appalachian Power Company for the Continued Operation of the London-Marmet Hydroelectric Project in Fayette and Kanawha Counties, West Virginia (FERC No. 1175-015)," executed on July 18, 2013, and including but not limited to the Historic Properties Management Plan (HPMP) for the project. Pursuant to the requirements of this Programmatic Agreement, the licensee shall file, for Commission approval, an HPMP within one year of issuance of this order. The Commission reserves the authority to require changes to the HPMP at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the HPMP, the licensee shall obtain approval from the Commission and the West Virginia State Historic Preservation Officer, before engaging in any ground-disturbing activities or taking any other action that may affect any historic properties within the project's area of potential effects.

Article 408. Use and Occupancy. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee shall also have continuing responsibility to supervise and control the use and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The type of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the

proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the impoundment shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

- (c) The licensee may convey easements or rights-of-way across, or leases of project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project impoundment. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.
- (d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 water craft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must file a letter with the Commission, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted,

and any federal or state approvals required for the proposed use. Unless the Commission's authorized representative, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

- (e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:
- (1) Before conveying the interest, the licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.
- (2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved report on recreational resources of an Exhibit E; or, if the project does not have an approved report on recreational resources, that the lands to be conveyed do not have recreational value.
- (3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project waters.
- (4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.
- (f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G drawings would be filed for approval for other purposes.

- (g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.
- (F) The licensee shall serve copies of any Commission filing required by this order on any entity specified in the order to be consulted on matters relating to that filing. Proof of service on these entities must accompany the filing with the Commission.
- (G) 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. § 825*l* (2012), and section 385.713 of the Commission's regulations, 18 C.F.R. § 385.713 (2013). The filing of a request for rehearing does not operate as a stay of the effective date of this license 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.

Jeff C. Wright
Director
Office of Energy Projects

## FEDERAL ENERGY REGULATORY COMMISSION

## TERMS AND CONDITIONS OF LICENSE FOR CONSTRUCTED MAJOR PROJECT AFFECTING NAVIGABLE WATERS AND LANDS OF THE UNITED STATES

<u>Article 1</u>. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: Provided, however, That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project area and project works shall be in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

Article 4. The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not

conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall cooperate fully with said representative and shall furnish him such information as he may require concerning the operation and maintenance of the project, and any such alterations thereto, and shall notify him of the date upon which work with respect to any alteration will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall submit to said representative a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of any such alterations to the project. Construction of said alterations or any feature thereof shall not be initiated until the program of inspection for the alterations or any feature thereof has been approved by said representative. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

**Article 5**. The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights or occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Article 6. In the event the project is taken over by the United States upon the termination of the license as provided in Section 14 of the Federal Power Act, or is transferred to a new licensee or to a nonpower licensee under the provisions of Section 15 of said Act, the Licensee, its successors and assigns shall be responsible for, and shall make good any defect of title to, or of right of occupancy and use in, any of such project property that is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and shall pay and discharge, or shall assume responsibility for payment and discharge of, all liens or encumbrances upon the project or project property created by the Licensee or created or incurred after the issuance of the license: Provided, That the provisions of this article are not intended to require the Licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to, or right of occupancy and use in, any of such project property than was necessary to acquire for its own purposes as the Licensee.

<u>Article 7</u>. The actual legitimate original cost of the project, and of any addition thereto or betterment thereof, shall be determined by the Commission in accordance with the Federal Power Act and the Commission's Rules and Regulations thereunder.

**Article 8**. The Licensee shall install and thereafter maintain gages and streamgaging stations for the purpose of determining the stage and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

Article 9. The Licensee shall, after notice and opportunity for hearing, install

additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

<u>Article 10</u>. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 11. Whenever the Licensee is directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for such part of the annual charges for interest, maintenance, and depreciation thereof as the Commission shall determine to be equitable, and shall pay to the United States the cost of making such determination as fixed by the Commission. For benefits provided by a storage reservoir or other headwater improvement of the United states, the Licensee shall pay to the Commission the amounts for which it is billed from time to time for such headwater benefits and for the cost of making the determinations pursuant to the then current regulations of the Commission under the Federal Power Act.

Article 12. The United States specifically retains and safeguards the right to use water in such amount, to be determined by the Secretary of the Army, as may be necessary for the purposes of navigation on the navigable waterway affected; and the operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Secretary of the Army may prescribe in the interest of navigation, and as the Commission my prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Secretary of the Army may prescribe in the interest of navigation, or as the Commission may prescribe for the other purposes hereinbefore mentioned.

Article 13. On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved

and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

Article 14. In the construction or maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling or obstructing traffic or endangering life. None of the provisions of this article are intended to relieve the Licensee from any responsibility or requirement which may be imposed by any other lawful authority for avoiding or eliminating inductive interference.

Article 15. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

Article 16. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife

facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

Article 17. The Licensee shall construct, maintain, and operate, or shall arrange for the construction, maintenance, and operation of such reasonable recreational facilities, including modifications thereto, such as access roads, wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during the term of this license upon its own motion or upon the recommendation of the Secretary of the Interior or other interested Federal or State agencies, after notice and opportunity for hearing.

Article 18. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

Article 19. In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Article 20. The Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 21. Material may be dredged or excavated from, or placed as fill in, project lands and/or waters only in the prosecution of work specifically authorized under the license; in the maintenance of the project; or after obtaining Commission approval, as appropriate. Any such material shall be removed and/or deposited in such manner as to reasonably preserve the environmental values of the project and so as not to interfere with traffic on land or water. Dredging and filling in a navigable water of the United States shall also be done to the satisfaction of the District Engineer, Department of the Army, in charge of the locality.

<u>Article 22</u>. Whenever the United States shall desire to construct, complete, or improve navigation facilities in connection with the project, the Licensee shall convey to the United States, free of cost, such of its lands and rights-of-way and such rights of passage through its dams or other structures, and shall permit such control of its pools, as may be required to complete and maintain such navigation facilities.

Article 23. The operation of any navigation facilities which may be constructed as a part of, or in connection with, any dam or diversion structure constituting a part of the project works shall at all times be controlled by such reasonable rules and regulations in the interest of navigation, including control of the level of the pool caused by such dam or diversion structure, as may be made from time to time by the Secretary of the Army.

Article 24. The Licensee shall furnish power free of cost to the United States for the operation and maintenance of navigation facilities in the vicinity of the project at the voltage and frequency required by such facilities and at a point adjacent thereto, whether said facilities are constructed by the Licensee or by the United States.

Article 25. The Licensee shall construct, maintain, and operate at its own expense such lights and other signals for the protection of navigation as may be directed by the Secretary of the Department in which the Coast Guard is operating.

Article 26. Timber on lands of the United States cut, used, or destroyed in the construction and maintenance of the project works, or in the clearing of said lands, shall be paid for, and the resulting slash and debris disposed of, in accordance with the requirements of the agency of the United States having jurisdiction over said lands. Payment for merchantable timber shall be at current stumpage rates, and payment for young growth timber below merchantable size shall be at current damage appraisal values. However, the agency of the United States having jurisdiction may sell or dispose of the merchantable timber to others than the Licensee: Provided, That timber so sold or disposed of shall be cut and removed from the area prior to, or without undue interference with, clearing operations of the Licensee and in coordination with the Licensee's project

construction schedules. Such sale or disposal to others shall not relieve the Licensee of responsibility for the clearing and disposal of all slash and debris from project lands.

Article 27. The Licensee shall do everything reasonably within its power, and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and to suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and shall pay the costs incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto under the license.

Article 28. The Licensee shall interpose no objection to, and shall in no way prevent, the use by the agency of the United States having jurisdiction over the lands of the United States affected, or by persons or corporations occupying lands of the United States under permit, of water for fire suppression from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license, or the use by said parties of water for sanitary and domestic purposes from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license.

Article 29. The Licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands, or other property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Arrangements to meet such liability, either by compensation for such injury or destruction, or by reconstruction or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.

Article 30. The Licensee shall allow any agency of the United States, without charge, to construct or permit to be constructed on, through, and across those project lands which are lands of the United States such conduits, chutes, ditches, railroads, roads, trails, telephone and power lines, and other routes or means of transportation and communication as are not inconsistent with the enjoyment of said lands by the Licensee for the purposes of the license. This license shall not be construed as conferring upon the Licensee any right of use, occupancy, or enjoyment of the lands of the United States other than for the construction, operation, and maintenance of the project as stated in the license.

Article 31. In the construction and maintenance of the project, the location and

standards of roads and trails on lands of the United States and other uses of lands of the United States, including the location and condition of quarries, borrow pits, and spoil disposal areas, shall be subject to the approval of the department or agency of the United States having supervision over the lands involved.

Article 32. The Licensee shall make provision, or shall bear the reasonable cost, as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation, telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction.

Article 33. The Licensee shall make use of the Commission's guidelines and other recognized guidelines for treatment of transmission line rights-of-way, and shall clear such portions of transmission line rights-of-way across lands of the United States as are designated by the officer of the United States in charge of the lands; shall keep the areas so designated clear of new growth, all refuse, and inflammable material to the satisfaction of such officer; shall trim all branches of trees in contact with or liable to contact the transmission lines; shall cut and remove all dead or leaning trees which might fall in contact with the transmission lines; and shall take such other precautions against fire as may be required by such officer. No fires for the burning of waste material shall be set except with the prior written consent of the officer of the United States in charge of the lands as to time and place.

Article 34. The Licensee shall cooperate with the United States in the disposal by the United States, under the Act of July 31, 1947, 61 Stat. 681, as amended (30 U.S.C. sec. 601, et seq.), of mineral and vegetative materials from lands of the United States occupied by the project or any part thereof: Provided, That such disposal has been authorized by the Commission and that it does not unreasonably interfere with the occupancy of such lands by the Licensee for the purposes of the license: Provided further, That in the event of disagreement, any question of unreasonable interference shall be determined by the Commission after notice and opportunity for hearing.

Article 35. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent

of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

Article 36. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

<u>Article 37</u>. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.

## APPENDIX A

Water Quality Certification Conditions for the London-Marmet Project Issued by the West Virginia Department of Environmental Protection on July 30, 2013.

## **Special Conditions**

- 1. Water Quality Monitoring. The licensee shall monitor water entering the intakes and downstream of the project after mixing. The licensee shall monitor for dissolved oxygen and temperature. Monitoring shall be conducted from May 1 through October 31. The monitoring information shall be made available to resource agencies. A report of the water quality monitoring shall be provided each year of operation to the West Virginia Department of Environmental Protection (WVDEP), 401 Certification Section, and the WRS by March 1 of the following year.
- 2. A Recreation Assessment and Angler Use Study was performed in 2010. Results indicated that restrooms and trash receptacles were the most suggested improvements at both the Marmet and Winfield angling access sites. Therefore, APC shall install and maintain portable restrooms and trash receptacles at Marmet and London Fishing Access sites to accommodate existing and future use. Parking shall be provided at both sites.
- 3. The developments shall operate in a "run-of-the-river mode." No peaking shall be permitted for either development.
- 4. Violation of any of the conditions listed above shall negate this water quality certification.
- 5. All permit modifications must be recertified.
- 6. The subject Water Quality Certification shall be updated to comply with any substantive changes to the Code of State Regulations for Water Quality Certification.
- 7. The licensee is responsible for compliance with water quality standards as contained in Title 47CSR2 of the West Virginia Code of State Regulations, Requirements Governing Water Quality Standards.