

136 FERC ¶ 61,179
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Duke Energy Carolinas, LLC

Project Nos. 2698-050 and
2686-062

ORDER ON REHEARING

(Issued September 15, 2011)

1. On May 4, 2011, the Director, Office of Energy Projects, issued to Duke Energy Carolinas, LLC (Duke) new licenses to continue operation and maintenance of the 26.175-megawatt (MW) East Fork Hydroelectric Project No. 2698 and the 24.6-MW West Fork Hydroelectric Project No. 2686.¹ The projects are located on the East and West Forks of the Tuckasegee River in Jackson County, North Carolina.² Duke filed timely requests for rehearing of the two orders. For the reasons discussed below, the Commission grants in part and denies in part the rehearing requests.

Background

2. As pertinent here, the East Fork Project consists of three hydroelectric developments which are, from upstream to downstream, Tennessee Creek, Bear Creek, and Cedar Cliff. The West Fork Project consists of two hydroelectric developments which are, from upstream to downstream, Glenville (also referred to by the licensee as Thorpe) and Tuckasegee. The Glenville/Thorpe development includes Glenville Lake and dam, Thorpe powerhouse, and a 6.43-mile-long West Fork bypassed reach. The

¹ *Duke Energy Carolinas, LLC*, 135 FERC ¶ 62,108 (East Fork) and *Duke Energy Carolinas, LLC*, 135 FERC ¶ 62,107 (2011) (West Fork).

² A portion of the East Fork Project is located in the Nantahala National Forest.

Tuckasegee development includes Tuckasegee Lake and dam, and a 1.24-mile-long bypassed reach.

3. Just below the projects, the East and West Forks of the Tuckasegee River meet to form the mainstem Tuckasegee River.

4. The new licenses contain resource measures developed as part of a settlement agreement and proposed in the license applications.³ A number of the measures relating to water quality are included in the licenses as conditions of the water quality certifications issued by the North Carolina Department of Environmental and Natural Resources, Division of Water Quality (North Carolina DWQ) pursuant to section 401 of the Clean Water Act.⁴

5. Duke has sought rehearing or clarification of requirements contained in several articles in both licenses.

Discussion

A. Recreation Flow Releases

6. To enhance angling and recreational boating opportunities in the mainstem Tuckasegee River downstream of the projects, Article 405 of the East and West Fork licenses requires Duke to coordinate releases from both projects from April through October in order to maintain specified flows in the Tuckasegee River, as measured at a gage on the mainstem Tuckasegee about 20 miles downstream of the projects.

7. Flows for angling (generally, in April, May, September, and October) must be measured at or below 500 cubic feet per second (cfs) at the downstream gage and may be released from either or both projects on any given day.⁵ The licenses establish target

³ A copy of the Tuckasegee Cooperative Stakeholder Team Settlement Agreement (Tuckasegee agreement) is included in Volume IV of Duke's License Application (filed January 26, 2004). On January 8, 2004, Duke also filed a copy of the Tuckasegee agreement in the East and West Fork Project dockets.

⁴ 33 U.S.C. § 1341(a)(1) (2006).

⁵ Article 405 of both licenses reads "about 500 cfs." Duke explains that flows exceeding 500 cfs have a negative effect on angling (primarily wade fishing) and points out, correctly, that Article 405 should read "at or below about 500 cfs." We will revise

flows of 800 cfs for boating (generally, in June, July, and August), also as measured at the downstream gage. Flows in the mainstem of the Tuckasegee River naturally range from 300 to 350 cfs during the recreation season (April through October). Accordingly, Duke must supplement those flows through releases from the East and West Fork Projects, to the extent necessary to meet the targets. For boating flows, Duke must release the required flows according to a schedule that requires releases from East Fork on certain days of the week and from West Fork on other days. In the event of scheduled or unscheduled outages at either project, Duke must make appropriate changes to the releases from the other project to ensure that the targets are met.

1. Coordination of Releases

8. Although Duke's relicense applications proposed the release schedule adopted in Article 405 for both projects, on rehearing Duke now maintains that the article does not accurately reflect the coordination required between the two projects.⁶ Duke explains that, since larger flows are released from the East Fork Project's lowermost development (Cedar Cliff), Duke should be able to use that project to meet the 800-cfs target for boating flows, and the West Fork Project to provide the 500-cfs-or-less angling flows.⁷ Duke therefore asks the Commission to modify Article 405 to permit Duke to use primarily West Fork Project flows for angling flows, and to use East Fork Project flows only if West Fork is unavailable. We note that Duke could operate in this manner under the current Article 405; however, we will modify the article as requested.

9. In addition, Duke asks that we revise Article 405 of both licenses to clarify that the articles do not require that Duke only release flows from the specified project to meet the required targets, but that flows may also be released from the other project. We agree that Duke may release flows from either or both projects on any given day, so long as the releases are made within the constraints of each license. We will revise Article 405 of the licenses to so clarify.

Article 405 accordingly.

⁶ East Fork Rehearing Request at 4-7; West Fork Rehearing Request at 3-7.

⁷ In support, Duke says that flows released from the generating units at East Fork's Cedar Cliff development and at West Fork's Tuckasegee development are 450 cfs and 250 cfs, respectively.

2. Monitoring Recreation Flows

10. Article 405 of both licenses requires that Duke release the required angling and boating flows to meet target flows as measured at a gage about 20 miles downstream of the projects, specifically “at the inactive U.S. Geological Survey (USGS) Gage No. 03510500 at Dillsboro, or a suitable replacement gage in this vicinity” (Dillsboro gage).⁸ In addition, Article 404 of the licenses requires Duke to develop a plan to monitor required flows from the projects, including “a method of monitoring flows in the vicinity of . . . the inactive USGS Gage No. 03510500 at Dillsboro, or other suitable monitoring location.”

11. On rehearing, Duke asks the Commission to remove the Dillsboro gage requirement from the East Fork Project, arguing it was the intent of the Tuckasegee agreement signatories that only the West Fork license would require maintenance of a gage in the area of the deactivated Dillsboro gage.

12. As discussed above, each project may contribute to the angling and boating flow releases, and each license requires Duke to use the Dillsboro gage to monitor and ensure compliance with these release requirements. As a result, both licenses must require maintenance of the gage. Therefore, we will not eliminate the requirement from the East Fork license as requested by Duke and deny rehearing on this issue.

3. Evaluating Recreation Flows

13. Article 407 of each license requires Duke to periodically evaluate the angling and boating flows in the Tuckasegee River and file with the Commission reports summarizing the evaluation and including recommendations, if any, to change the scheduled recreation flows. The article requires Duke to perform the evaluation in consultation with the North Carolina Wildlife Resources Commission (North Carolina WRC), North Carolina Division of Water Resources (North Carolina DWR), U.S. Department of the Interior’s Fish and Wildlife Service (FWS), the USGS, and American Whitewater.

⁸ The USGS Gage No. 03510500 at Dillsboro was replaced in 2004 by USGS Gage No. 03510577 located approximately four miles downstream at Barker’s Creek, on the mainstem Tuckasegee River. So, Duke could use the gage at Barker’s Creek or could contract with USGS either to reactivate the Dillsboro gage or to install a new gage at the Dillsboro location.

14. Duke requests that the Commission modify Article 407 to add consultation with the U.S. Forest Service (Forest Service), Tuckasegee Gorge Association, Trout Unlimited, and the Carolina Canoe Club.⁹ We find that it is appropriate to include these entities and will revise Article 407 as requested.

B. Shoreline Management Plan Review Frequency

15. Article 408 of each license requires Duke to develop and implement a Shoreline Management Plan for each project. The article further requires that Duke review the adequacy of the plans every five years to determine whether any modifications are warranted. On rehearing, Duke asks that the review period be extended to ten years, arguing that, based on its prior experience, the review process takes approximately five years to complete.¹⁰

16. We deny Duke's request. The purpose of the five-year review is to verify that the measures implemented are working as anticipated. Ten years is too long to wait for such a review. Duke should be able to conduct the limited review envisioned by Article 408 in a relatively short period of time. If down the road it becomes apparent that the plans are working as expected, then Duke may at that time ask for a longer review period.

C. West Fork Whitewater Boating

17. Article 406 of the West Fork license requires Duke, on seven weekend days between April 1 and September 30, to release 250 cfs from the Glenville dam into the 6.43-mile-long West Fork bypassed reach for whitewater boating. Article 406 requires Duke to coordinate these releases with the construction of whitewater boating put-in and take-out facilities along the bypassed reach, which are required by Article 402.

18. On rehearing,¹¹ Duke points out that Article 406 requires Duke to begin releasing the whitewater flows in April 2012, which would be before it could complete

⁹ East Fork Rehearing Request at 7; West Fork Rehearing Request at 7. Duke notes the signatories to the Tuckasegee agreement agreed that the entities should be included in the evaluation of recreation flows.

¹⁰ East Fork Rehearing Request at 7; West Fork Rehearing Request at 8.

¹¹ West Fork Rehearing Request at 7-9.

construction of the put-in and take-out.¹² Duke asserts that it is premature to begin the flows before the facilities are constructed. We agree and will modify Article 406 accordingly.

19. Because the whitewater releases from Glenville dam may increase downstream water temperatures in the bypassed reach through the release of warmer Lake Glenville surface water, Article 406 requires Duke to develop a plan to monitor the existing fishery in the West Fork bypassed reach during the whitewater flow releases to ensure that the releases do not harm the fishery.¹³

20. On rehearing, Duke asks that we delete the fishery monitoring requirement. Duke states that, after the license was issued, it met with the agencies to be consulted in preparing the plan, and the agencies agreed that the monitoring should not be required because the bypassed reach is not heavily used for recreational fishing.¹⁴

21. We deny this request. As Commission staff explained in the Environmental Assessment (EA) for the projects, Duke's use of the Taintor gate at the dam will release into the bypassed reach surface water from Lake Glenville that will become increasingly warm as the summer progresses.¹⁵ A portion of the bypassed reach has been classified by North Carolina WRC as hatchery-supported trout waters, and some natural trout

¹² Article 402 requires Duke to file its plan and implementation schedule for the recreation facilities by May 2012, which then must be reviewed and approved by the Commission. It is only upon approval of the plan that Duke can begin construction of these facilities.

¹³ In preparing the plan, Duke is to consult with the Forest Service, FWS, North Carolina WRC, North Carolina DWR, and North Carolina DWQ.

¹⁴ Duke contends that all but 600 feet of the 6.43-mile-long bypass is on private property; public access is limited; and the trout populations are "marginal" with other more popular reaches in the vicinity being actively managed by the North Carolina WRC. West Fork Rehearing Request at 9.

¹⁵ Lake Glenville surface water can reach 26 degrees Celsius in the summer. Final Environmental Assessment (EA) for the Nantahala East Projects: East Fork Hydroelectric Project No. 2698, West Fork Hydroelectric Project No. 2686, Dillsboro Hydroelectric Project No. 2602, and Bryson Hydroelectric Project No. 2601, issued July 14, 2006, at 141-42.

reproduction also occurs in this area.¹⁶ The warmer water could have a negative effect on the existing trout fishery by raising the bypassed reach water temperature to or above the level tolerated by trout.¹⁷ Because in the summer the ambient water temperature in the bypassed reach is already close to the temperatures that adversely effect trout,¹⁸ and the summer accretion flows in the bypassed reach are likely to be much smaller than the recreation flow releases, the bypassed reach will be readily influenced by the warm surface releases from the Taintor gate.¹⁹ It is therefore important for Duke to monitor the fishery to ensure that project operations do not have an unduly negative effect on it.

D. Monitoring Compliance

22. Article 411 of each license requires Duke to implement a compliance monitoring program, including the development of annual reports that document Duke's compliance with reservoir levels, minimum flow releases, and recreation flow releases (Articles 401, 404, and 405, respectively). The article also requires that Duke file the annual reports with the Commission.

23. On rehearing, Duke asks that the Commission modify Article 411 of the West Fork license to also require Duke to report on its compliance with the whitewater boating flow releases required by Article 406. We will modify Article 411 accordingly.

24. In addition, Duke asks that the Commission amend the article for both projects to require that Duke also send copies of the annual reports to the North Carolina DWR, North Carolina DWQ, North Carolina WRC, Forest Service, and FWS.²⁰ Duke's request is reasonable, and we will amend Article 411 as requested.

¹⁶ *Id.* at 112.

¹⁷ *Id.* at 141-42.

¹⁸ The optimal water temperature range for adult rainbow trout is between 12 and 18 degrees Celsius. Temperature above 25 degrees Celsius for any length of time is considered lethal to rainbow trout. Without the releases required by Article 406, the maximum water temperature in the bypassed reach occasionally exceeds 20 degrees Celsius for short periods of time. *Id.*

¹⁹ *Id.*

²⁰ East Fork Rehearing Request at 9; West Fork Rehearing Request at 11-12.

E. Woody Debris Plan

25. To improve aquatic habitat in the Tuckasegee River, Article 412 of each license requires Duke to develop a plan for Commission approval to pass downstream large woody debris that is collected at the East and West Fork Project dams.

26. On rehearing, Duke asks that the Commission remove Article 412 from the East Fork license and limit its applicability to only the Tuckasegee development in the West Fork license. Duke explains that its West Fork relicense application proposed to pass woody debris only at the Tuckasegee development, and its East Fork relicense application had no woody debris proposal, because only the Tuckasegee dam has facilities for passing large woody debris.²¹

27. Duke is correct. In the EA for the projects, Commission staff evaluated, and recommended adoption of, Duke's proposal to continue collection and passage of large woody debris as it had done under its prior license (only at Tuckasegee dam).²² We will therefore remove Article 412 from the East Fork license and modify Article 412 in the West Fork license to limit the plan to Tuckasegee dam.

F. Recreation Facilities

28. Article 402 of each license requires Duke to develop a recreation plan for Duke's existing project recreation sites and for new recreation facilities proposed by Duke. In the West Fork license, Article 402 requires Duke to construct certain facilities at the Tuckasegee development. On rehearing, Duke points out that its proposal to construct a boat put-in and gravel parking lot at the Tuckasegee Powerhouse Access Area should also be included in Article 402.²³

29. The proposed boat put-in and parking area would be located near the powerhouse on property within the project boundary. Commission staff considered them in the EA for the projects and concluded that the proposed facilities would serve project purposes

²¹ East Fork Rehearing Request at 2-3; West Fork Rehearing Request at 2-3. Duke explains that the debris passes over the other dams when flows are high.

²² EA at 356.

²³ West Fork Rehearing Request at 9-10.

and should be included in any license.²⁴ We agree and will revise Article 402 accordingly.

30. In addition, Article 402 of both licenses requires the installation of portable toilets at two recreation sites. On rehearing, Duke argues that “portable toilets” would present vandalism risks and requests that the Commission instead require non-portable “pump and haul toilets.”²⁵ To give Duke the flexibility to use the most appropriate design, we will amend Article 402 of both licenses to delete the word “portable.”²⁶

G. Proposed Corrections and Clarifications

31. Duke also seeks minor corrections and clarifications in the discussion section of each order as well as in some of the ordering paragraphs and license articles.²⁷ Except as discussed below, we take note of them, but see no need to take any action.²⁸

32. Article 404 of the West Fork license requires Duke to release from Tuckasegee dam “a year-round minimum flow of 20 [cfs], as required by Condition 6 of the [project’s] water quality certification.”²⁹ On rehearing, Duke requests that we amend

²⁴ EA at 366.

²⁵ East Fork Rehearing Request at 8-9; West Fork Rehearing Request at 10. A pump and haul facility is not portable. It is a permanent building, with an underground tank that is periodically pumped out and the wastewater hauled away.

²⁶ If Duke proposes pump and haul toilets, it should include in each plan details addressing their appearance, installation, and maintenance.

²⁷ East Fork Rehearing Request at 9-10 and Schedule A; West Fork Rehearing Request at 12 and Schedule A.

²⁸ Because it is the ordering paragraphs and license articles that impose requirements on licensees, we generally do not make corrections to the discussion portion of license orders.

²⁹ Section 4.0 of the Tuckasegee agreement, which is required by Condition 6 of the project’s water quality certification, requires Duke to maintain a year-round minimum flow from the Tuckasegee dam into the West Fork bypassed reach of “20 cfs, or inflow if less.”

Article 404 to clarify that the requirement is for “20 cfs, or inflow if less.”³⁰ We will amend Article 404 to clarify the requirement.

33. The East Fork Project occupies federal lands, but the exact acreage was not known when the license was issued. Article 203 requires Duke to file revised Exhibit G (project boundary) maps showing, among other things, “the 23.15 acres of federal lands” occupied by the project. On rehearing, Duke asks the Commission to delete the specified acres until they can be precisely determined when Duke files its revised Exhibit G maps for approval. Subsequently, Duke filed, and Commission staff approved, its revised Exhibit G drawings, which demonstrate that the East Fork Project occupies 22.86 acres of federal lands.³¹ As a result, we will modify Article 203 to reflect the project’s occupancy of 22.86 acres of federal land.

34. The West Fork license order refers to the two project developments as Tuckasegee and Glenville. On rehearing, Duke states that the correct name for the Glenville development is Thorpe development, and the correct name for Glenville powerhouse is Thorpe powerhouse.³² We note this correction and accordingly will revise Ordering Paragraph (B) and appropriate articles of the West Fork license to add Thorpe to the name of the Glenville development.

35. Ordering Paragraph (B) of the West Fork license states, in pertinent part, that the Tuckasegee dam includes a spillway “with twenty-three 9.03-foot-wide flashboards, one 18.28-foot-wide flashboard, and one 7.54-foot-wide trashrack, all 3 feet high.” On rehearing, Dukes states that there are 24 flashboard sections, not 23, and asks us to correct the ordering paragraph. There is no need to correct the ordering paragraph, which describes 24 flashboard sections: 23 that are the same size and 1 that is larger than the others.³³ We will however make another, unrelated correction to Ordering Paragraph (B) to change “trash rack” to “trash sluiceway” and to correct its dimensions.

³⁰ West Fork Rehearing Request at 10-11.

³¹ *Duke Energy Carolinas, LLC*, 136 FERC ¶ 62,209 (2011).

³² In contrast, the dam is Glenville dam and the reservoir is Lake Glenville.

³³ This description is the same as in Exhibit A of Duke’s January 26, 2004 relicensing application for the West Fork Project, at A-1.

36. Last, we will correct Article 403 by changing “meetings” to “messages.”

The Commission orders:

(A) The request for rehearing filed by Duke Energy Carolinas, LLC, on June 3, 2011, is granted to the extent discussed in this order and in Ordering Paragraphs (B) through (D) below, and is denied in all other respects.

(B) The May 4, 2011 order issuing new license for the East Fork Project No. 2698 is revised as set forth below.

- Article 203 is revised to replace “23.15 acres” with “22.86 acres” . . .”
- Article 412 is deleted.
- Article 405 is revised to read as follows:

Article 405. *Recreation Flows.* Within 1 year of license issuance, the licensee shall operate the East Fork Project in coordination with the West Fork Project to provide the following Normal Generation Schedule to Support Recreation for recreation flow releases at or above the best efficiency flow into the main stem of the Tuckasegee River:

(1) In the event the West Fork Project is unavailable to provide such flows, then in order to facilitate the preferred angling flow of at or below 500 cubic feet per second (cfs) as measured at the inactive U.S. Geological Survey (USGS) Gage No. 03510500 at Dillsboro, or a suitable replacement gage in this vicinity during the Primary Angling Periods (defined as the first weekend after Labor Day through the last weekend of October, and April 1 through the first weekend of June) the licensee shall generate in accordance with the Normal Generation Schedule to Support Recreation and shall release flows from the East Fork Project for six hours per day. During part of this time period, boating release schedules overlap. During this overlap period (the Saturday that occurs nine days before Memorial Day through the first weekend of June and Saturdays in September and October), the Normal Generation Schedule to Support Recreation shall be six hours per day on the Sunday of Memorial Day weekend plus Wednesday, Thursday, and Sunday for the period between Memorial Day weekend through the first weekend in June, and 1 of 4 Saturdays in September and October. Nothing in this paragraph (1) shall prevent the licensee from meeting the requirements of this paragraph with flow releases from the West Fork Project.

(2) In order to facilitate the preferred boating flow of about 800 cfs as measured at the inactive Dillsboro Gage, or a suitable replacement gage in this vicinity, during the Primary Boating Periods (defined as the period after the first weekend of June through Labor Day), the licensee shall generate in accordance with the Normal Generation Schedule to Support Recreation and shall release flows from the East Fork Project for six hours a day: (a) for 3 out of 4 weeks, flows on Wednesday, Thursday, and Saturday, including the Monday of Labor Day weekend and (b) for 1 out of 4 weeks, flows on Wednesday, Thursday, and Sunday. Nothing in this paragraph (2) shall prevent the licensee from meeting the requirements of this paragraph with flow releases from the West Fork Project.

The licensee shall initiate all releases required by this Article so that the released flow arrives at the inactive Dillsboro Gage, or a suitable replacement gage in the vicinity, at approximately 10:30 a.m. Eastern Time.

(3) The licensee shall also adjust for baseline flows by checking the river flow on a daily basis at the inactive Dillsboro Gage, or a suitable replacement gage. The licensee shall then project the expected river flow during the next scheduled generation release to support recreation. When projected baseline river flow (i.e., the flow rate at the gage without the licensee making the scheduled generation release to support recreation) is expected to average more than 500 cfs over the period from 10:30 a.m. to 4:30 p.m. Eastern Time, the licensee may reduce or eliminate specific recreation flow releases from the hydropower stations for that day.

Provided the sponsoring or requesting organization has consulted, at a minimum, with the North Carolina Wildlife Resources Commission, the North Carolina Division of Water Resources, the U.S. Fish and Wildlife Service, the USGS, the Tuckasegee Gorge Association, and American Whitewater and has integrated their needs with the Normal Generation Schedule to Support Recreation as much as possible, consider on a case-by-case basis requests to temporarily alter the Normal Generation Schedule to Support Recreation for special purposes. The licensee shall consider requests that shall shift the hours of generation to different times or reduce the total hours of releases to conserve the available water supply, but shall not consider requests that shall add additional hours to the Normal Generation Schedule to Support Recreation for the month.

The licensee may temporarily vary from the recreation flow releases from the project as identified above if required by conditions beyond the

licensee's control or by operating emergencies or maintenance needs as defined in the Low Inflow Protocol (Appendix A) and the Hydro Project Maintenance & Emergency Protocol (Appendix A). If the recreation flow releases are so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

(C) The May 4, 2011 order issuing new license for the West Fork Project No. 2686 is revised as set forth below.

- Ordering Paragraph (B) is revised in item (1) under “Tuckasegee Development” by changing “and one 7.54-foot-wide trashrack, all 3 feet high” to read “all 3 feet high, and one 7.54-foot-wide trash sluiceway.”
- Ordering Paragraph (B) and Articles 301, 402, 403, 406 and 409 are revised by replacing “Glenville development” with “Glenville/Thorpe development” wherever it appears.
- Article 402(C) is revised to add a third item that reads: “and (3) construct a boat put-in area and 11 parking spaces on licensee-owned land in the vicinity of the Tuckasegee Powerhouse.”
- Article 404 is revised in the first sentence to replace “20 cubic feet per second” with “20 cubic feet per second, or inflow to Tuckasegee Lake, whichever is less.”
- Article 405 is revised to read as follows:

Article 405. Recreation Flows. Within 1 year of license issuance, the licensee shall operate the West Fork Project in coordination with the East Fork Project to provide the following Normal Generation Schedule to Support Recreation for recreation flow releases at or above the best efficiency flow into the main stem of the Tuckasegee River:

(1) In order to facilitate the preferred angling flow of at or below 500 cubic feet per second (cfs) as measured at the inactive U.S. Geological Survey (USGS) Gage No. 03510500 at Dillsboro, or a suitable replacement gage in this vicinity, during the Primary Angling Periods (defined as the first weekend after Labor Day through the last weekend of October, and April 1 through the first weekend of June) the licensee shall generate in accordance with the Normal Generation Schedule to Support Recreation and shall release flows from the West Fork Project for six hours a day. During part of this time period, boating release schedules overlap. During

this overlap period (the Saturday that occurs nine days before Memorial Day through the first weekend of June and Saturdays in September and October), the Normal Generation Schedule to Support Recreation shall be six hours per day on each of the Saturday and Sunday one week prior to Memorial Day weekend, Saturday and Monday of Memorial Day weekend, and 3 of the 4 Saturdays in September and October, plus Tuesday, Friday, and Saturday for the period between Memorial Day weekend through the first weekend in June. Nothing in this paragraph (1) shall prevent the licensee from meeting the requirements of this paragraph with flow releases from the East Fork Project.

(2) In order to facilitate the preferred boating flow of about 800 cfs, as measured at the inactive Dillsboro gage, or suitable replacement gage, during the Primary Boating Periods (defined as the period after the first weekend of June through Labor Day), the licensee shall generate in accordance with the Normal Generation Schedule to Support Recreation and shall release flows from the West Fork Project for six hours per day: (a) for 3 out of 4 weeks, flows on Tuesday, Friday, and Sunday and (b) for 1 out of 4 weeks, flows on Tuesday, Friday, and Saturday. Nothing in this paragraph (2) shall prevent the licensee from meeting the requirements of this paragraph with flow releases from the East Fork Project.

The licensee shall initiate all releases required by this Article so that the released flow arrives at the inactive Dillsboro Gage, or a suitable replacement gage in the vicinity, at approximately 10:30 a.m. Eastern Time.

(3) The licensee shall also adjust for baseline flows by checking the river flow on a daily basis at the inactive Dillsboro Gage, or a suitable replacement gage. The licensee shall then project the expected river flow during the next scheduled generation release to support recreation. When projected baseline river flow (i.e., the flow rate at the gage without the licensee making the scheduled generation release to support recreation) is expected to average more than 500 cfs over the period from 10:30 a.m. to 4:30 p.m. Eastern Time, the licensee may reduce or eliminate specific recreation flow releases from the hydropower stations for that day.

Provided the sponsoring or requesting organization has consulted, at a minimum, with the North Carolina Wildlife Resources Commission, the North Carolina Division of Water Resources, the U.S. Fish and Wildlife Service, the USGS, the Tuckasegee Gorge Association, and American Whitewater and has integrated their needs with the Normal Generation

Schedule to Support Recreation as much as possible, consider on a case-by-case basis requests to temporarily alter the Normal Generation Schedule to Support Recreation for special purposes. The licensee shall consider requests that shall shift the hours of generation to different times or reduce the total hours of releases to conserve the available water supply, but shall not consider requests that shall add additional hours to the Normal Generation Schedule to Support Recreation for the month.

The licensee may temporarily vary from the recreation flow releases from the project as identified above if required by conditions beyond the licensee's control or by operating emergencies or maintenance needs as defined in the Low Inflow Protocol (Appendix A) and the Hydro Project Maintenance & Emergency Protocol (Appendix A). If the recreation flow releases are so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

- Article 406 is revised in the first sentence to replace “Within 1 year of license issuance” with “Within 1 year of license issuance, or upon completion of construction of the whitewater put-in and take-out facilities required by Article 402, whichever occurs later.”
- Article 411 is revised to add to the first paragraph a fourth item that reads: “and (4) the whitewater boating flow releases into the West Fork bypassed reach required by Article 406 were met during the previous calendar year and any deviations of the recreation flow releases.”
- Article 412 is revised in the first paragraph to replace “West Fork Project dams” with “Tuckasegee development dam.”

(D) The May 4, 2011 orders issuing new licenses for the West Fork Project No. 2686 and the East Fork Project No. 2698 are revised as set forth below.

- Article 402 is revised by deleting “portable” before “toilet” wherever it appears.
- Article 403 is revised in the second paragraph by replacing “meetings” with “messages.”
- Article 407 is revised in the first sentence to add “the U.S. Forest Service, Tuckasegee Gorge Association, Trout Unlimited, Carolina Canoe Club” before “and American Whitewater.”

- Article 411 is revised to add a third paragraph that reads:

The license shall provide a copy of the annual report to the North Carolina Division of Water Resources; North Carolina Division of Water Quality; North Carolina Wildlife Resources Commission; U.S. Forest Service; and U.S. Department of the Interior, Fish and Wildlife Service.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.