



DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 2740-053]

Duke Energy Carolinas, LLC; Notice of Application Tendered for Filing with the Commission and Establishing Procedural Schedule for Relicensing and Deadline for Submission of Final Amendments

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection.

- a. Type of Application: New Major License
- b. Project No.: 2740-053
- c. Date Filed: July 14, 2025
- d. Applicant: Duke Energy Carolinas, LLC (Duke Energy)
- e. Name of Project: Bad Creek Pumped Storage Project (Bad Creek Project)
- f. Location: Oconee County, South Carolina.
- g. Filed Pursuant to: Federal Power Act, 16 U.S.C. §§ 791 (a) - 825(r).

h. Applicant Contact: Alan Stuart, Hydro Licensing Project Manager, Duke Energy Carolinas, LLC, Mail Code DEP-35B 525 South Tryon Street, Charlotte, NC 28202; (980) 373-2079; alan.stuart@duke-energy.com.

i. FERC Contact: Sarah Salazar at (202) 502-6863, or sarah.salazar@ferc.gov.

j. This application is not ready for environmental analysis at this time.

k. Project Description: The existing Bad Creek Pumped Storage Project includes: (1) a 363-acre upper reservoir with a storage capacity of 35,513 acre-feet, of which 31,808 acre-feet is usable storage capacity between minimum elevation 2,150 feet mean sea level (msl) and full pond elevation of 2,310 feet msl; (2) a rockfill dam across Bad Creek with crest elevation at 2,315 feet msl, 2,581 feet long, and 360 feet high; (3) a rockfill dam across West Bad Creek with crest elevation at 2,315 feet msl, 908 feet long and 170 feet high; (4) a saddle dike across a natural depression on the eastern rim of the reservoir with crest elevation at 2,313 feet msl, 960 feet long, and 90 feet high; (5) an ungated water intake structure in the upper reservoir; (6) a power tunnel totaling 5,026 feet long and 29.53 feet in diameter, connecting to four concrete, steel-lined penstocks about 386 feet long and varying from 13.78 to 8.43 feet in diameter; (7) an underground powerhouse containing four reversible pump-generating units, with a nameplate rating of 350,000 kilowatts each, for a total generating capacity of 1,400 megawatts (MW); (8) four concrete-lined draft tube tunnels about 316 feet long and 16.4 feet in diameter, connecting to two concrete-lined tailrace tunnels about 875 feet long and 24.61 feet in diameter; (9) an inlet/outlet structure equipped with four 20-foot by 30-foot, steel lift

gates, located in the existing Lake Jocassee which serves as the lower reservoir;

(10) transmission facilities consisting of (a) generator leads connecting the powerhouse to four above ground step-up transformers, (b) a 100-kV transmission line extending about 9.25 miles from the Bad Creek switchyard to the Jocassee switchyard, (c) a 525-kV transmission line extending about 9.25 miles from the Bad Creek switchyard to the Jocassee switchyard; and (11) appurtenant facilities. The project also includes an existing 4.8--mile-long road that leads from the project entrance to the powerhouse area near Lake Jocassee.

The project is an automated pumped storage plant where water is regularly moved from the upper reservoir to the lower reservoir during generation, and from the lower reservoir back to the upper reservoir during pumping. All water utilized for generation originates from the 7,980-acre lower reservoir (Lake Jocassee) which has a normal maximum elevation of 1,110 feet msl and normal minimum elevation of 1,080 feet msl. The project is licensed to operate on a weekly pump-storage cycle with the upper reservoir fluctuating between 2,310 feet msl (normal max. elevation) and 2,150 feet msl (normal min. elevation), resulting in a maximum drawdown of 160 feet and 31,808 acre-foot useable storage capacity. In practice, the project operates in a daily pump-storage cycle by maintaining the upper reservoir above 2,250 feet msl for approximately 97% of the time to maximize head and unit efficiency. The average annual generation of the project is about 1,884,685 MWh. The average annual energy required for pumping during the same period is about 2,398,114 MWh. The net energy consumption of the project is 513,429 MWh.

Duke Energy proposes to continue to operate and maintain the project as well as to construct, operate, and maintain a second generating facility, the Bad Creek II Complex, which would consist of a new: (1) upper reservoir inlet/outlet structure, (2) water conveyance system, (3) underground powerhouse, (4) powerhouse access tunnels, (5) lower reservoir inlet/outlet structure, (6) switchyard, (7) transformer yard, and (8) transmission line. The proposed powerhouse would include four new, reversible pump-turbine units with an installed generating and pumping capacity between 106 MW and 425 MW. Average annual generation would increase by up to 25,856 MWh. No modifications would be made to the existing upper and lower reservoirs. Duke Energy proposes a new project boundary that includes all lands necessary for access, or control of, the expanded project.

1. In addition to publishing the full text of this notice in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this notice, as well as other documents in the proceeding (e.g., license application) via the Internet through the Commission's Home Page (<http://www.ferc.gov>), using the "eLibrary" link. Enter the docket number, excluding the last three digits in the docket number field to access the document (P-14796). For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov, (866) 208-3676 (toll free), or (202) 502-8659 (TTY).

You may also register online at <https://ferconline.ferc.gov/FERCOOnline.aspx> to be notified via email of new filings and issuances related to this or other pending projects. For assistance, contact FERC Online Support.

m. The Commission’s Office of Public Participation (OPP) supports meaningful public engagement and participation in Commission proceedings. OPP can help members of the public, including landowners, community organizations, Tribal members and others, access publicly available information and navigate Commission processes. For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, the public is encouraged to contact OPP at (202) 502-6595, or OPP@ferc.gov.

n. Procedural schedule: The application will be processed according to the following preliminary schedule. Revisions to the schedule will be made as appropriate.

<u>MILSTONE</u>	<u>TARGET</u>
Deficiency Letter (if necessary)	August 2025
Additional Information Request (if necessary)	August 2025
Notice of Acceptance / Notice of Ready for Environmental Analysis	September 2025

o. Final amendments to the application must be filed with the Commission no later than 30 days from the issuance date of the notice of ready for environmental analysis.

Dated: July 28, 2025.

Carlos D. Clay,
Deputy Secretary.

