

**FEDERAL ENERGY REGULATORY COMMISSION**  
**Washington, D. C. 20426**

**OFFICE OF ENERGY PROJECTS**

Project No. 906-031—Virginia  
Cushaw Hydroelectric Project  
Cushaw Hydro, LLC

July 30, 2020

VIA FERC Service

David A. Craymer  
Cushaw Hydro, LLC  
Virginia Electric Power Company  
5000 Dominion Blvd., 1ne  
Glen Allen, VA 23060

Subject: Notification of Temporary Deviation from Required Flows - Article 403

Dear Mr. Craymer:

Thank you for your letter filed July 6, 2020, in which you provide information about a deviation from the required flows pursuant to Article 403 of the Cushaw Project No. 906.

Article 403 of the project license<sup>1</sup> requires you to file an Operations Compliance Plan for Federal Energy Regulatory Commission approval to describe how you would monitor and document compliance with run-of-river operation, as required under the Virginia Department of Environmental Quality's (Virginia DEQ) Water Quality Certification (WQC) Part I, condition E.<sup>2</sup> Your approved Operations Compliance Plan, as revised,<sup>3</sup> describes, in part, how you would operate the project in a run of the river fashion by matching river flows with turbine operations, in order to maintain a continuous flow over the primary spillway (the main dam) at all times.

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<sup>1</sup> Order Issuing New License (123 FERC ¶ 62,222), issued June 13, 2008.

<sup>2</sup> Issued November 11, 2007, and attached to the license order in Appendix A.

<sup>3</sup> Order Approving Revised Operational Compliance Monitoring Plan Pursuant to Article 403 (161 FERC ¶ 62,203), issued December 14, 2017.

Your filing indicates that for a period of three hours on June 3, 2020, the continuous flow over the spillway did not occur. You report that the project does not have 24-hour-a-day staffing: the evening shift operator sets up the turbines in the evening to ensure the required flow conditions are maintained overnight, and that the day shift operator reviews the conditions and makes operational adjustments in the morning upon arrival. On the morning of June 3, 2020, the day shift operator was tending to other operational concerns and did not appropriately make the flow adjustments needed. At 9:00 a.m., the operator noted that the discharge over the spillway was not occurring, and immediately decreased the water flow through the turbines in order to raise the reservoir level and initiate flow over the spillway. This process took approximately three hours, as bringing the reservoir level up too quickly would cause an interruption to the run of river operation. You provide a hydrograph for the time period which indicates that flow in the river recorded 3 miles downstream was approximately 5,060 cubic feet per second (cfs) when the operator began to raise the reservoir level, decreased to a low of 3,400 cfs during the refill, and was re-established at a normal flow of 4,700 cfs at 2:30 p.m.

You state that there is a strong backwater effect into the short bypassed reach when the project is generating at full capacity and flows are above the annual mean flow (3,694 cfs, based on data recorded 2006-2019). You have previously conducted biological investigations in the bypass during low river flow conditions and with flow over the spillway stopped for approximately four hours. In those investigations you did not identify significant biological impacts in the bypass. Therefore, based on that information and the short duration of time that there was no flow over the spillway, you state that much of the bypassed reach would have remained inundated during the deviation and no significant biological impacts are likely to have occurred.

In order to prevent a similar deviation from occurring in the future, you state that you reviewed the events with the day shift operator on duty, and re-emphasized the importance of maintaining flow over the spillway in particular, and the importance of license compliance in general. You state that the operator on duty that day was the most junior operator for the three projects. You also communicated this information to all the operators on staff.

You indicate that you have notified agency staff of the deviation within 10 days of the event in accordance with Article 403. Specifically, you provided email notification to Commission and U.S. Fish and Wildlife (FWS) staff, and a phone call to Virginia DEQ staff. FWS requested a report on any or perceived environmental impacts and to copy the Virginia Department of Game and Inland Fisheries (Virginia DGIF) on the response. You included an assessment of environmental impacts in your final report and included a copy to the Virginia DGIF.

After review of the available information, the deviation that occurred at your project on June 3, 2020, will be considered a violation of Article 403 of your license. The deviation was caused due to the dayshift operator not making the appropriate morning operational adjustments first-thing upon arrival at the project. Commission staff appreciate your actions of reviewing compliance protocols with operations staff in order to prevent the recurrence of similar incidents. No further Commission action is needed at this time; however, this violation will be made part of the compliance history of the project and considered in the course of our review of any other violations to determine appropriate Commission action.

Thank you for your notification and explanation of the deviation. If you have any questions regarding this matter, please contact Holly Frank at (202) 502-6833 or [holly.frank@ferc.gov](mailto:holly.frank@ferc.gov).

Sincerely,

Thomas J. LoVullo  
Chief, Aquatic Resources Branch  
Division of Hydropower Administration  
and Compliance