New Hampshire Department of Environmental Services
Response to Comments and Substantive Changes
Water Quality Certification No. 2021-FERC-003
Cocheco Falls Hydroelectric Project (FERC Project No. P-4718)
October 12, 2022

From August 29, 2022 to 4pm on September 28, 2022, the New Hampshire Department of Environmental Services (NHDES) posted for public comment a draft version of Water Quality Certification No. 2021-FERC-003 (the Certification) for relicensing of the Cocheco Falls Hydroelectric Project (the Project) by the Federal Energy Regulatory Commission (FERC). The Certification is required under section 401 of the federal Clean Water Act and NH RSA 485-A:12, III to provide assurance that discharges to surface waters that may result from the Project would comply with New Hampshire surface water quality standards that are specified under NH RSA 485-A:8 and NH Code of Administrative Rules Env-Wq 1700 (Surface Water Quality Standards). On October 11, 2022, NHDES granted the Certification with conditions.

During the public comment period, NHDES received comments from Cocheco Falls Associates L.P. (CFA), licensee of the Project. In this document, NHDES lists the comments that NHDES received and provides responses to those comments. In some cases, NHDES has paraphrased the comments it received. In addition, NHDES describes changes that NHDES made to the Certification because of some of those comments and other substantive and minor changes that NHDES made to the Certification after the public comment period.

A copy of the original comments and a marked-up version of the draft Certification showing all changes to the Certification may be obtained from NHDES upon request by contacting James Tilley, Supervisor of the NHDES Water Quality Certification Program, at (603) 271-0699 or <a href="mailto:james.w.tilley@des.nh.gov">james.w.tilley@des.nh.gov</a>.

# **Responses To Comments**

## Comments from the Cocheco Falls Associates (CFA or the Applicant)

1. **Comment A.1:** In reference to Finding D-13, which describes potential environmental impacts of hydroelectric projects generally, and D-34, which describes how the Project impacts the Cocheco River and the need for a Water Quality Improvement Plan (WQIP), CFA submitted the following comments:

"This generic description of "Potential Environmental Impacts of Hydroelectric Projects" presents a generalized accounting of a broad range of hydropower impacts that may or may not occur nationwide, without regard for project size, location, or affected environment. CFA's application contains sufficient facts and data to eliminate most if not all the impacts listed."

"We disagree with the statement that: 'The Project impoundment formed by the dam of the Project has resulted in a deeper, wider, and slower moving section of the river that can stratify and is more prone to thermal stratification and adverse water quality impacts such as low dissolved oxygen than riverine sections that are not impounded.' The Cocheco Falls Dam is constructed atop a 25-foot-high natural falls (i.e., Cocheco Falls). Prior to any dam construction at this site, the hydraulic control the natural falls exerted on the upstream low gradient river created a deeper, wider, and slower moving section of the river. This natural pool, upstream of the natural falls, resulted in a section of the river that can stratify and is more prone to thermal stratification and adverse water quality impacts such as low dissolved oxygen when compared

to riverine sections with higher gradient river channels. Furthermore, in its natural state, Cocheco Falls allowed only a small amount of surface-only river flow to pass downstream in equal amounts to pool inflow. Deeper pool waters under this natural condition would be cooler and destined to isolation from warmer surface waters until a high flow event flushed out the pool. Compare this to current project conditions where gates, minimum flow discharge, fishway flows, and periodic turbine discharge under low river inflow conditions creates more dynamic hydraulic conditions in the impoundment that discourage thermal stratification even under low flow conditions. The notion that the project dam has degraded water quality compared to no project impoundment is simply not true.

Changes made: NHDES did not make changes to Finding D-13. NHDES substantially changed Finding D-34 to acknowledge that results of the water quality study conducted by CFA in 2019 showed that the Project has not impaired certain parameters of existing and designated uses, and to remove a finding that a WQIP is necessary at this time. NHDES also revised Finding D-34 to describe NHDES' determination that it would be necessary to require CFA to prepare and implement a WQIP if NHDES determined later during the term of a FERC license that the Project is causing or contributing to any violations of Surface Water Quality Standards at a magnitude, duration, and frequency that contributes to an impaired designated use in the Project influenced waters. NHDES revised Condition E-16 to reflect that revised finding.

**NHDES Response:** NHDES concurs with CFA's comment that NHDES presented a generalized description of potential environmental impacts of hydroelectric projects on surface waters when it quoted a portion of a summary report from the 2010 summit meeting on Environmental Mitigation Technology for Hydropower. NHDES included that generalized description in Finding D-13 to illustrate how hydroelectric projects can generally impact surface water quality.

NHDES does not agree with CFA that CFA's Final License Application contains facts that eliminate all the impacts that NHDES quoted in Finding D-13. Based on information maintained by NHDES, it is NHDES' understanding that the top of the Project dam is higher than the top of ledge (i.e., top of rock) of Cocheco Falls prior to construction of the dam, and the profile of the Project dam is more uniform than the profile of the natural Cocheco falls prior to construction of the dam. In Finding D-34, NHDES asserts that the impoundment formed by the dam of the Project has resulted in deeper, wider, and slower moving section of river the Project as compared to conditions that existed prior to construction of the dam. The construction of the dam has resulted alteration of flow patterns at and below the dam and has increased the likelihood of the following impacts: retention of sediments and nutrients in the impoundment; development of aquatic weeds and eutrophication; and alteration of certain water quality parameters, such as dissolved oxygen and temperature.

# 2. Comment A.2: In reference to Finding D-21, CFA submitted the following comments:

"This finding states: While American eel is present both above and below the Project dam, the dam undoubtedly slows the migration of those eels that do pass upstream and likely prevents passage of others. Project impacts to the other state listed species is unlikely under current project operations. CFA agrees with this statement, especially as it applies to freshwater mussels."

Changes made: None

**NHDES Response:** NHDES notes that CFA is referring to language that CFA included in its Final License Application that NHDES quoted in Finding D-21 to describe the status of rare, threatened and endangered species that may be in the vicinity of the Project. In Finding D-22, NHDES concurred with recommendations of USFWS that would help CFA avoid adverse effects on northern long-eared bat when conducting certain operation and maintenance activities for the Project. In Finding D-23, NHDES found that Conditions E-11 through E-17 are expected to provide reasonable assurance that aquatic species, including, but not limited to, federal and state rare, threatened and endangered species would be protected from discharges resulting from the Project.

3. **Comment A.3:** In reference to Finding D-24, which states, in part, "[i]t should be noted that the 2020/2022 303(d) list did not account for water quality monitoring conducted in 2019 for the Project [...] because the Project data was not inputted into the NHDES Environmental Monitoring Database (EMD) when NHDES completed the assessment for the list," CFA submitted the following comments:

"CFA notes that all water quality data from our 2019 study including Xcel spread sheets with 15-minute interval DO and temperature data, laboratory reports with nutrient and Chlorophyll-a results with QA/QC data, and scanned copies of field data sheets (154 MB in 130 data files) were delivered via third party file sharing service (We Transfer) to Mr. Gregg Comstock of NHDES as acknowledged by Mr. Comstock via an email on December 11, 2020 at 8:47 am."

CFA also described contents of files it submitted to NHDES.

Changes made: NHDES changed the 2<sup>nd</sup> sentence of Finding D-24 to the following (changes to the Certification are shown in **bold italics**): "It should be noted that the 2020/2022 303(d) list did not account for water quality monitoring conducted in 2019 for the Project (see Findings D-25 through D-31) because **NHDES had not yet inputted** the Project data **was not inputted that the Applicant submitted to NHDES** into the NHDES Environmental Monitoring Database (EMD) when NHDES completed the assessment for the list." NHDES also referenced the water quality data that CFA submitted to NHDES on December 11, 2020 in Finding D-27 to acknowledge CFA's submittal of the data to NHDES and in Finding D-29 to reference the data NHDES used to calculate minimum, maximum, and average temperatures and dissolved oxygen concentrations at certain monitoring locations during the 2019 water quality study.

**NHDES Response:** NHDES acknowledges and appreciates CFA's work to produce and submit to NHDES the water quality data it collected for relicensing proceedings. NHDES made changes to clarify that CFA had submitted water quality data as requested by NHDES.

4. **Comment A.4:** In reference to Finding D-28, which provides a partial summary of the results of water quality monitoring that CFA conducted from August 5, 2019 to September 9, 2019 for the Project, CFA submitted the following comments:

"It should also be noted: During the five-week sampling period approximately 201,000 15-minute DO data readings were logged below the dam in the tailrace. Even if one assumes the 9 data points are not anomalies, they represent only 0.005% of the data points collected. As discussed in the water quality report and the final license application, there is ample evidence suggesting those 9 data points are erroneous and insignificant when viewed in the context of the 99.995% of data points above 5.0 mg/L."

**Changes made**: NHDES added the following language to Finding D-28: "Because only nine 15-minute interval measurements of dissolved oxygen concentration at Location 1 (i.e., Station 1) out of several thousand were below 5 mg/L during the 2019 water quality study, NHDES determined that those nine measurements are unrepresentative of dissolved oxygen conditions at that monitoring location during the 2019 water quality study."

**NHDES Response:** NHDES concurs with CFA's comment that nine dissolved oxygen measurements are insignificant relative to the thousands of other dissolved oxygen measurements that CFA took during the 2019 water quality study at the monitoring location downstream of the dam of the Project.

5. **Comment A.5:** In reference to Finding D-32, which provides a partial summary of the results of the water quality study that CFA conducted from August 5, 2019 to September 9, 2019 for the Project, and Finding D-33, which describes the Project's general impacts on water quality, CFA submitted the following comments:

"We note that depth profile sampling at Station 2-DS (impoundment), did not record a single DO reading below the 5.0 mg/L Class B Standard in the upper 25% of the water column (or above the thermocline). The few measurements below 5.0 mg/L were below the thermocline or deeper than 25% of the water column and therefore in conformance with New Hampshire's dissolved oxygen standards in the Project impoundment. We believe there is sufficient evidence that no excursions of New Hampshire's dissolved oxygen standards occurred below the dam (see comment on Finding D-28). Further, at no time did the average daily DO saturation levels drop below 75% at any of the three Cocheco Falls continuous monitoring stations."

"As stated above in our comments on Finding D-32, there is no evidence to support the NHDES statement that the project: 'has likely contributed to dissolved oxygen excursions of New Hampshire Surface Water Quality Standards'. Furthermore, it goes without saying that the project has no control over the 'effluent discharges containing nutrients and other pollutants from the upstream sources'."

**Changes made**: NHDES revised Findings D-32 and D-33 to remove findings of "excursions" or violations of dissolved oxygen Surface Water Quality Standards during the 2019 water quality study, and to add findings that the Project has likely contributed to lower water quality in the Project impoundment when inflow to the Project was relatively low.

**NHDES Response:** NHDES acknowledges that the 2019 water quality study did not show violations of Surface Water Quality Standards for dissolved oxygen.

6. **Comment A.6:** In reference to Findings D-34 and D-35 of the draft Certification, which described NHDES' assertion that a WQIP and long-term water quality monitoring and reporting of the Cocheco River are necessary to provide assurance that Project influenced surface waters comply with surface water quality standards and not any worse than in the upstream riverine segment not influenced by the Project, and in reference to Conditions E-16 and E-17 of the draft Certification, which previously required CFA to produce and implement a WQIP and conduct long-term water quality monitoring and reporting, CFA submitted the following comments:

"Water Quality Improvement Plan (WQIP): Please define "dissolved oxygen excursions" and how this applies to assessment of compliance with New Hampshire Surface Water Quality Standards. [...]

Please provide an explanation of how the project is not meeting the water quality criteria for its designated classification including existing and designated uses. We believe our studies and data demonstrate the project is indeed meeting the Class B water quality criteria. [...]

RSA 485-A:12, III authorizes water quality monitoring (see Fact C-8 and Finding D-12) under the following conditions:

'Certification shall include any conditions on, modifications to, or monitoring of the proposed activity necessary to provide assurance that the proposed discharge complies with applicable surface water quality standards'.

#### And:

'Certification shall include any conditions on, modifications to, or monitoring of the proposed activity necessary to provide assurance that the proposed discharge complies with applicable surface water quality standards.'

CFA contends that our study data and application provide assurance that the project is in full compliance with applicable water quality standards. Therefore, water quality monitoring is not required until the next Federal licensing action for the project is initiated.

[Finding D-35] sets in place a water quality monitoring study every 5 years that is equal in scope and cost to the study required for this current 401 Water Quality Certification Application, which was triggered by the pending federal action of FERC relicensing of the project, per Clean Water Act requirements. This monitoring requirement would establish a de facto 401 water quality certification process every 5 years without a federal action triggering such a requirement. We believe this is in clear conflict with the spirit and intent of the Clean Water Act and should not be required considering the current application demonstrating project compliance with applicable water quality standards. [...]

NHDES states: 'This is because FERC licenses are typically issued for 30 to 50 years and, during that time, conditions in the watershed that could affect water quality in the Project impoundment and Project discharges to the tailrace and bypass reach, can change. For example, due to climate change "[w]armer summer temperatures will likely lead to an increase in drought (through increased evaporation, heat waves, and more frequent and extreme convective precipitation events)."

CFA wishes to receive credit for clean, carbon-free electricity they generate at the Cocheco Falls Project, helping to reduce climate change impacts. Beyond that it is unreasonable to speculate that climate change could somehow cause the project to violate applicable water quality standards in the future. [...]

This monitoring requirement would establish a de facto 401 water quality certification process every 5 years without a federal action triggering such a requirement. We believe this is in clear conflict with the spirit and intent of the Clean Water Act and should not be required considering the current application demonstrating project compliance with applicable water quality standards.

Water Quality Improvement Plan (WQIP): CFA contends that this is an unnecessary burden given that the study results indicate the Project has no negative influence on water quality, and that data indicate Class B standards were fully supported. We base this on the following comments on findings: D-28, D-32, D-33, D-34, and D-35.

Long Term Water Quality Monitoring and Reporting: CFA contends that this is an unnecessary burden given that the study results indicate the Project has no negative influence on water quality, and that data indicate Class B standards were fully supported. We base this on the following comments on findings: D-28, D-32, D-34, and D-35."

"Cocheco Falls Associates contend that [Condition E-17] is an unnecessary burden given that the study results indicate the Project has negligible or no influence on water quality, and that data indicate Class B standards were fully supported. We base this on the following data facts:

- Except for two occasions where a total of nine 15-minute interval data points (these data points are almost certainly anomalies) no other DO data collected at Station 1 in the tailrace (i.e., project discharge) were below the 5.0 mg/L Class B Standard. During the five-week sampling period approximately 201,600 15-minute DO data readings logged. Even if one assumes the 9 data points are not anomalies, they represent only 0.005% of the data points collected.
- 2. The Station 2 data logger in the Project forebay did hot record a single data point below the 5.0 mg/L Class B Standard.
- 3. Depth profile sampling at Station 2-DS, did not record a single DO reading below the 5.0 mg/L Class B Standard in the upper 25% of the water column (or above the thermocline).
- 4. Study data indicate that all other Class B water quality criteria were met.

We request NHDES explain why the 5-year compliance monitoring program is necessary given the project is in compliance with the 5.0 mg/L Class B Standard, as well as all other Class B water quality criteria."

Changes made: NHDES replaced the term "excursion" with the term "violation" in the Certification when NHDES refers to noncompliance with a Surface Water Quality Standard to clarify that noncompliance with a Surface Water Quality Standard constitutes a violation, not an "excursion", of a Water Quality Standard. NHDES replaced the term "excursion" with the term "deviation" in the Certification when NHDES describes noncompliance with requirements of certain conditions of the Certification that are only required under the Certification (see Finding D-12 and Condition E-13). NHDES retained the use of the term "excursion" in Finding D-31 where NHDES refers to New Hampshire's numeric chlorophyll-a threshold for recreation for freshwater that is specified in NHDES' 2020/2022 Consolidated Assessment and Listing Methodology (CALM). An excursion of a CALM parameter may indicate a violation of a Surface Water Quality Standard.

NHDES made substantive revisions to Findings D-30, D-34, and D-35 to acknowledge that the water quality study that CFA conducted in 2019 showed that the Project did not cause violations (i.e., NHDES previously referred to those as "excursions" in the Findings) of dissolved oxygen Surface Water Quality Standards; has not impaired certain parameters of existing and designated uses; but may have increased temperature and lowered dissolved oxygen levels in the impoundment of the

Project. As a result of the revised Findings, NHDES also revised Condition E-16 to only require CFA to develop and implement a WQIP if NHDES determines that the Project is causing or contributing to a violation of Surface Water Quality Standards at a magnitude, duration, and frequency that contributes to an impaired designated use; and revised Condition E-17 to require CFA to provide for certain monitoring and reporting of dissolved oxygen and temperature in the event the requirement to develop and implement a WQIP in Condition E-16 is triggered due to violations of dissolved oxygen or temperature Surface Water Quality Standards.

**NHDES Response:** Since the term "excursion" is not defined in rule or statute that specify Surface Water Quality Standards, NHDES instead used the term "violation" to describe noncompliance with Surface Water Quality Standards and the term "deviation" to describe noncompliance with conditions of the Certification.

NHDES is not able to provide "credit for clean, carbon-free electricity they generate at the Cocheco Falls Project, helping to reduce climate change impacts" as requested by CFA.

NHDES responses to Comment A.1., above, also describe why NHDES determined that a WQIP may be necessary to address any violations of Surface Water Quality Standards that may arise in the future at a magnitude, duration, and frequency that contributes to an impaired designated use in the Project influenced waters.

Regarding Condition E-17; NHDES determined that it is more appropriate to require CFA to conduct certain specified monitoring and reporting of dissolved oxygen and temperature within the Project boundary of the Cocheco River in the event the requirement to develop and implement a WQIP is triggered due to violations of dissolved oxygen or temperature Surface Water Quality Standards.

7. **Comment A.7:** In reference to Finding D-39, which describes NHDES' concurrence with a recommendation of the U.S. Fish and Wildlife Service (USFWS) that the Project pass 90 percent of inflow downstream of the Project's tailrace and the impoundment is refilled on the remaining 10 percent of inflow as procedures for impoundment refill, and in reference to Condition E-12.d., which requires CFA to implement those procedures, CFA submitted the following comments:

"The impoundment refill procedures in Finding D-39 are misguided and CFA disagrees with the requirement that 90% of inflow be discharged downstream and only 10% of inflow be used for refilling the impoundment.

While the Project's reservoir is not that large, passing 90% of inflow is much too high of a number while refilling the reservoir. The immediate downstream area below the dam is a natural rock falls approximately 25 feet tall. Additionally, the Project tailwater is tidal with natural flooding and draining twice a day which overwhelms the relatively minor hydraulic influence within Project capacity (300 cfs) on downstream water quality and habitat. The estuarine aquatic organisms living downstream are adapted to this tidal flooding and draining.

Conversely, many upstream aquatic organisms are not well adapted to flooding and draining of their habitat. Aquatic biota and plants that live in the littoral and riparian habitats, particularly mussels do poorly during prolonged periods of dewatering. In general, the quicker the impoundment elevation recovers the less harm will occur to dewatered plants and organisms. For these reasons CFA recommends only required downstream minimum flow be maintained

while refilling the impoundment to minimize impacts on upstream aquatic habitats and biota. [...]

CFA disagrees and requests modification of [Condition E.12.d. as discussed in Comments on Finding D-39 [CFA copied the comments, above, for its comments on Condition E.12.d. of the draft Certification]."

Changes made: NHDES revised Finding D-39 to include the following: FERC's analysis of USFWS' recommendation of a refill protocol of the Project whereby 90% of inflow be discharged downstream and only 10% of inflow be used for refilling the impoundment of the Project; FERC's recommendation of an impoundment refill procedure whereby 100% of inflow is used to refill the impoundment; New Hampshire Fish and Game Department's (NHFGD) determination that FERC's recommendation is likely more beneficial to the biota upstream than detrimental to the biota downstream of the Project, but that bypass facility flows should be maintained during refill; and NHDES' concurrence with NHFGD's recommendation. NHDES revised Condition E-12.d. to require the following: "When refilling the impoundment of the Project after drawdown for maintenance or emergencies, the Applicant shall maintain bypass facility flows specified in Condition Error!

Reference source not found..Error! Reference source not found.. to the extent practicable, and utilize the remaining inflow to refill the impoundment. This refill procedure may be modified upon mutual agreement between NHDES, NHFGD, and USFWS."

**NHDES Response:** Based on the analysis that FERC provided in its environmental assessment for the Project, and NHDES's consultation with USFWS and NHFGD, NHDES generally concurs with CFA's comment except NHDES determined that it was necessary to require CFA to maintain bypass facility flows specified in Condition E-12.b. to the extent practicable during refill of the impoundment after drawdown for maintenance or emergencies.

8. **Comment A.8:** In reference to Finding D-40, which describes NHFGD's recommendation that the Project control discharges when drawing the impoundment down for maintenance so that the impoundment level decreases by no more than approximately six (6) inches per 24-hour period and is the basis that NHDES used to require that discharges are controlled to meet that impoundment lowering rate in Condition E.12.e., CFA submitted the following comments:

"CFA concurs that during a non-emergency scheduled maintenance event a 6-inch per 24-hr period drawdown rate is achievable. However, during flashboard failure there is no way to control the rate of impoundment level drop until the fixed dam crest elevation is reached. Additionally, in the unlikely event of an unscheduled emergency repair scenario it is often in the best interest of all to get the impoundment level down to the necessary elevation for repair and return the project to normal operation as soon as possible. Therefore CFA requests that the 6-inch per 24-hour period requirement be applied to non-emergency scheduled maintenance events only."

**Changes made**: NHDES specified the following under Condition E-12: "This certification does not require the Applicant to comply with the following requirements during an "emergency condition", which is defined under Env-Wr 101.15 as the following: "(a) A situation has arisen at a dam which could jeopardize the integrity of the dam; or (b) Failure of the dam is imminent or has occurred."

NHDES Response: NHDES concurs with CFA's comment that it may not be possible under certain situations, including flashboard failure, to control discharges so that the impoundment level of the Project decreases by no more than approximately six (6) inches per 24-hour period as required under Condition E-12.e. In the introduction of Condition E-12, NHDES specified that requirements under Condition E-12, including Condition E-12.e., may be temporarily modified if required by operating emergencies beyond the control of CFA or as allowed an approved Flow/Impoundment Compliance Monitoring Plan (FICMP) that is required by Condition E-14. In addition, NHDES specified in Condition E-12.e. that the drawdown procedure be modified upon mutual agreement between NHDES and the NHFGD. Therefore, CFA could describe operating conditions and drawdown procedures in a FICMP for the Project, or temporarily modify the drawdown procedure upon approval from NHDES and NHFGD, for situations at the Project when it may not be appropriate or possible to lower the impoundment level at the rate specified in Condition E.12.e.

Considering CFA's comments, NHDES determined that the Certification should not require CFA to comply with requirements under Condition E-12 during an "emergency condition" as defined under Env-Wr 101.15 and, therefore, made the changes to Condition E-12 that specifies that the Certification does not require CFA to comply with those requirements during an "emergency condition."

9. **Comment A.9.** In reference to Finding D-41, which describes NHDES' concurrence with USFWS' recommendation that the licensee develop a Project Operation Monitoring and Reporting Plan, which NHDES refers to as a Flow and Impoundment Compliance Monitoring Plan and requires the plan under Condition E-14, CFA submitted the following comments:

"While CFA does not oppose developing a Project monitoring plan, a web-based plan seems over burdensome, and very expensive for such a small project. Also, the project has no way of determining flows in the NH Fish and Game Department's fish ladder. CFA requests that the Project not be required to develop a web-based real time reporting system."

**Changes made**: NHDES removed the requirement under Condition E-15 that would have required CFA to comply with all of USFWS's recommendations that USFWS provided to FERC in accordance with section 10(j) of the Federal Power Act.

**NHDES Response:** In the letter that USFWS filed with the Federal Regulatory Energy Commission (FERC) on October 8, 2021, USFWS recommended that the licensee of the Project be required to prepare and file for approval by resource agencies a Project Operation Compliance Monitoring and Reporting Plan that would provide for, among other things, real-time and web-based reporting of reservoir water surface elevations, power generation and unit operations, and fish passage flows and operation. Although NHDES concurs with USFWS' recommendation because a web-based plan would be useful in providing assurance that the Project would comply with certain water quality standards, NHDES determined that requiring real-time, web-based reporting in the Certification is not necessary to provide reasonable assurance that the Project would comply applicable surface water quality standards as specified under NH RSA 485-A:12, III, and that the Flow/Impoundment Compliance Monitoring Plan that NHDES requires in Condition E-14 is sufficient to provide that necessary assurance.

## Other Substantive Changes to the Certification

- 1. NHDES added paragraph C-76 to account for the "Environmental Assessment for Hydropower License" that FERC prepared for relicensing of the Project in accordance with the National Environmental Policy Act of 1969 and FERC's regulations under 18 CFR Part 380; and filed on September 21, 2022, which was during the public comment period for the draft Certification. NHDES also revised Findings D-4 and D-5 to provide descriptions of the existing and proposed Project that FERC included in the environmental assessment because NHDES determined that FERC's descriptions were more up to date than the descriptions that CFA provided in its Final License Application (see Finding D-1). NHDES amended findings Finding D-39 to include FERC's recommendation and analysis regarding the Project's impoundment refill procedures that FERC included in the environmental assessment, which NHDES used, in part, to revise condition E-12.d (see Comment A.7, above).
- 2. NHDES amended Finding D-19 to include a table that summarized minimum, maximum, and average dissolved oxygen concentrations at certain monitoring locations during the 2019 water quality study that CFA conducted for relicensing of the Project.
- 3. NHDES revised Finding D-49 to clarify the Preliminary Prescription for Fishways for the Project that the U.S. Department of Interior provided through USFWS on October 8, 2021 in accordance with section 18 of the Federal Power Act (FPA). NHDES also amended Finding D-49 to describe USFWS' reservation of authority to prescribe the construction, operation, and/or maintenance of fishways at the Project. NHDES revised Condition E-15 to clarify that NHDES is requiring CFA to comply with USFWS's Prescription for Fishways and not all of USFWS' recommendations that USFWS provided to FERC under section 10 of the FPA. NHDES revised Condition E-15 to require CFA to provide NHDES and NHFGD with a copy of the modified recommendations or prescription within 30 days of the modification if the Preliminary Prescription for Fishways is modified.
- 4. NHDES made the following revisions to Condition 12.c to match CFA's proposed operation of the Project, which made the impoundment water level requirement less stringent (changes shown in bold italics): "The target impoundment water elevation under normal operating conditions shall be the top of the flashboards (elevation 36.25 feet NGVD 29). The Applicant shall minimize the magnitude and frequency of fluctuations in the impoundment of the Project to the maximum extent practicable and shall not draw the water level in the impoundment down by more than one inch for the purpose of generating power. This requirement may be modified upon mutual agreement between NHDES, NHFGD, and USFWS. [...]"

## Minor Changes to the Certification

In addition to the changes noted in the above, NHDES made other minor changes not considered substantiative to the final Certification since the draft Certification was issued for public notice. Examples include minor format revisions, grammatical and spelling corrections, removing the word "DRAFT" in the header and watermark, changing the "Decision" status on the first page from "Pending" to the date granted, adding the decision type and date granted, updating cross-references to paragraphs due to substantive changes, replacing the term "Activity" with "Project" to reference the Project, etc.