#### FEDERAL ENERGY REGULATORY COMMISSION

Office of Energy Projects

Division of Dam Safety and Inspections – San Francisco Regional Office

100 First Street, Suite 2300

San Francisco, CA 94105-3084

(415) 369-3300 Office – (415) 369-3322 Facsimile

July 20, 2021

In reply refer to: Project No. 2035-CO

Mr. Robert Mahoney Director of Engineering Denver Water 1600 West 12th Avenue Denver, CO 80204-3412

Re: Gross Dam Reservoir Hydroelectric Project – Primary Outlet Works Trashrack Modification – Responses to FERC Comments on the Final for Construction Documents

Dear Mr. Mahoney:

This is in response to your June 7, 2021 letter that submitted responses and revised construction documents for the Gross Dam Primary Outlet Works Trashrack Modification at the Gross Project, FERC No. 2035. We have reviewed your responses, and they have adequately addressed the comments in the May 27, 2021 D2SI letter. As stated in your letter, please submit the lift plan and the barge anchorage plan for information prior to any related activites.

Within 90 days of completion of construction, a final construction report, which addresses the applicable items in Enclosure 1, should be submitted.

Within 90 days of completion of construction of the facilities authorized by this letter, you must file for Commission approval, revised Exhibits A, F, and G, as applicable, to describe and show those project facilities as built. If you determine that previously approved exhibits reflect the as-built facilities and no revisions are necessary, you must file a letter stating the approved exhibits reflect the as-built project facilities. To assist Commission staff in the review of any revised Exhibit A, we strongly recommend that you file a revised Exhibit A, in its entirety, in two forms:

- 1. A strikethrough format (*i.e.*, strikethrough items to be removed, and <u>underline</u> or **bold** items to be added to the exhibit), and
- 2. A final, clean copy incorporating the changes (*i.e.*, without the strikethrough, underline, and bold notations).

You must separate Exhibit F drawings from the other project exhibits, and label and file them as Critical Energy Infrastructure Information (CEII) material under 18 CFR § 388.113. The submission should consist of, as applicable: 1) a public portion consisting of a cover letter and the Exhibits A and G; and 2) a CEII portion containing only the Exhibit F drawings.

File your submittal using the Commission's eFiling system at https://www.ferc.gov/ferc-online/overview. For all Dam Safety and Public Safety Documents, select Hydro: Regional Office and San Francisco Regional Office from the eFiling menu. The cover page of the filing must indicate that the material was eFiled. For assistance with eFiling, contact FERC Online Support at FERCOnlineSupport@ferc.gov, (866) 208-3676 (toll free), or (202) 502-8659 (TTY).

In addition, within 90 days of completion of construction, Denver Water should submit the following construction certifications, which must be verified in accordance with Title 18, Section 12.13 of the Code of Federal Regulations (18 CFR 12.13):

- 1. A certification by the Design Engineer that the project was constructed in accordance with the design intent
- 2. A certification by the Quality Control Manager that the inspection and testing program resulted in the conclusion that the project was constructed in accordance with the plans and specifications reviewed by the Commission
- 3. A certification by the Licensee (LICENSEE) that the project was constructed in accordance with the design intent and in accordance with the plans and specifications reviewed by the Commission

Sample certifications are given in Enclosure 2.

If the plans and specifications are revised during the construction process, it is Denver Water's responsibility to ensure that these changes are properly coordinated between the Design Engineer, the Resident Engineer, the Project Manager, the FERC, and you, prior to proceeding with the changes. Also, you are reminded that no changes may be made to the operation of the project without first coordinating those proposed changes with the FERC. Denver Water is responsible for ensuring completion of any necessary environmental coordination with resource agencies as well as the procurement of any federal, state, or local permits required for the work.

We appreciate your continued efforts in this aspect of the Commission's dam safety program. If you have any questions, please contact me at (415) 369-3318.

Sincerely,

Yark & Blackett

Frank L. Blackett, P.E. Regional Engineer

Enclosures (2)

cc:

Bill McCormick Chief of Dam Safety Division of Water Resources 1313 Sherman Street, Rm 821 Denver, CO 80203

### Items to be Addressed in Final Construction Report for the Primary Outlet Works Trashrack Modification Project FERC No. 2035

#### FINAL CONSTRUCTION REPORTS FROM LICENSEES

The Final Construction Report should be submitted within 90 days of completion of the work. This report should include all information pertinent to dam safety in a concise form. It should be included in the project file and should be given to the independent consultant for his or her safety inspection and analyses, if applicable. As such, the report should contain a summary of information in each of the applicable sections indicated below (the information was previously presented in the monthly reports). Construction difficulties should be reported under the appropriate sections. For conciseness, test results should be presented in a tabular format, with an indication of the applicable standards. Finally, in those cases where there is nothing to report under a specific heading, a statement of non-applicability will suffice.

- 1. <u>General</u>. Briefly present the reason for construction and description of the work with dates of the beginning and end of construction. Include reservoir drawdown and filing dates, and any findings regarding the original structure.
- 2. <u>Foundations</u>. Discuss the condition of the foundation (faults, etc.) and the treatment of the foundation. Attach a foundation mapping.
- 3. <u>Embankments</u>. Describe the equipment and the types of materials used in filters and fills. Attach gradation and compaction requirements and all test results.
- 4. <u>Concrete work</u>. Describe the equipment and the types of materials used in all concrete work. Include all grout test results and describe any surface treatments.
- 5. <u>Anchors</u>. Present a summary of any drilling operations, including boring logs; results of water pressure tests; anchor design calculations, design loads, and specifications; results of grout tests; results of proof and performance tests; and a summary of the acceptance criteria.
- 6. <u>Instrumentation</u>. Present plots of existing instrumentation readings taken during construction if the readings are affected by the work. Include a plan and schedule for calibration of all new instrumentation.
- 7. <u>Drawings</u>. Attach as-built drawings reduced in size to 8.5"x11" or 11"x17". The drawings should include plan and section views, and details of the structures affected by the new work. The plan and section views should show any new instrumentation that was installed as part of the work.

# Enclosure 2 CERTIFICATION By Design Engineer

### CERTIFICATION OF CONSTRUCTION PAGE 1 OF 3

FERC Project No.	
Construction Project Description:	
Design Drawings/Specifications:	
Quality Control and Inspection Program (QCII	P) dated:
This is a certification by the Design Engineer t with the design intent.	hat the project was constructed in accordance
VERIF	TICATION
STATE OF CALIFORNIA]	
COUNTY OF], SS:	
	tes that he/she has read the above document the statements contained in that document are ledge and belief (per 18CFR Part 12,
Design Engineer (Print Name)	
Signature	_
Sworn to and subscribed before me	[STAMP]
this, 20_	<u> </u>
NOTARY PUBLIC	 [SEAL]

## Enclosure 2 CERTIFICATION By Quality Control Manager

CERTIFICATION OF CONSTRUCTION PAGE 2 OF 3

FERC Project No.	
Construction Project Description:	
Design Drawings/Specifications:	
Quality Control and Inspection Program (QCIP)	dated:
This is a certification by the Quality Control Ma resulted in the conclusion that the project was conspecifications reviewed by the Commission.  ***********************************	onstructed in accordance with the plans and
STATE OF CALIFORNIA]	
COUNTY OF], SS:	
The undersigned, being first duly sworn, state and knows the contents of it, and that all of the true and correct, to the best of his/her knowled Paragraph 12.13).	ne statements contained in that document are
Quality Control Manager (Print Name)	<del>-</del>
Signature	
Sworn to and subscribed before me	[STAMP]
this, 20	-
NOTARY PUBLIC	[SEAL]

# Enclosure 2 CERTIFICATION By Licensee or Exemptee

### CERTIFICATION OF CONSTRUCTION PAGE 3 OF 3

FERC Project No.		
Construction Project Description:		
Design Drawings/Specifications:		
Quality Control and Inspection Program (	QCIP)	dated:
by the Commission.	ccord	tee that the project was constructed in ance with the plans and specifications reviewed
		CATION
STATE OF CALIFORNIA]		
COUNTY OF	], SS:	
• •	ll of tl	es that he/she has read the above document he statements contained in that document are edge and belief (per 18CFR Part 12,
For Licensee or Exemptee (Print Name)		
Signature		-
Sworn to and subscribed before me		[STAMP]
this day of	, 20	-
NOTARY PUBLIC		- [SEAL]