

Exhibit A

Scope of Work and Work Schedule

Nacimiento Dam and Hydroelectric Project 7th Independent Consultant's Safety Inspection Report, and Spillway Focused Potential Failure Mode Analysis

for the

Monterey County Water Resources Agency

1441 Schilling Place – North Building

Salinas, California 93901

Background

The Monterey County Water Resources Agency (MCWRA) is required by CFR 18, Part 12, Subpart D of the Federal Energy Regulatory Commission (FERC) regulations to have an independent consultant (IC) conduct the 7th five-year dam safety inspection and safety evaluation report for the Nacimiento Dam and Hydroelectric Project (Project), FERC Project No. 6378-CA. MCWRA must submit the 7th Part 12D report to FERC by December 31, 2018.

Nacimiento Dam and Hydroelectric Project is owned and operated by MCWRA. The dam and hydroelectric plant are located on the Nacimiento River, in northern San Luis Obispo County, California. The project includes an embankment dam, inflatable spillway crest gates, high and low-level outlets, and power plant. Nacimiento Reservoir is a multi-use facility operated with consideration given to many factors including dam safety, flood protection, groundwater recharge, operation of the downstream Salinas River Diversion Facility, water supply, fish migration and habitat requirements, agriculture, and recreation. The MCWRA has adopted a Nacimiento Dam Operation Policy.

Critical Infrastructure – Distribution of Project Documents Prohibited

Nacimiento Dam is classified as “critical infrastructure” under Homeland Security Presidential Directive 7, and as further defined in FERC Order No. 630, issued February 21, 2003.

Distribution of any Project documents to anyone outside the GEI Consultants work team for this Scope of Work, or for any use other than responding to this Scope of Work, is strictly prohibited. The Final 7th Part 12D Report will be marked “CEII – Critical Energy Infrastructure Information” per FERC requirements.

Scope of Work

CFR 18, Part 12, Subpart D, of the Federal Energy Regulatory Commission's (FERC) regulations prescribes the scope of the Independent Consultant (IC) evaluations and field inspection, as well as the information that must be contained in the Report. Refer to letters from FERC to MCWRA dated January 10, 2018 and March 6, 2018 which are specific to the 7th Part 12D process for Nacimiento Dam and Hydroelectric Project.

Mr. William Rettberg and Mr. Chad Masching of GEI Consultants, Inc. will act as Co-Independent Consultants (IC's), as approved by FERC.

Tasks

1. Project Record Review

The IC's will review pertinent Project background information and previous analyses to adequately prepare for the assessment of the Supporting Technical Information (STI) document, Project field inspection, and Potential Failure Mode Analyses review and Workshop. MCWRA will provide the IC's all necessary Project records and reports, including but not limited to, original construction drawings, reports, and photographs, three prior Part 12D reports, hydrology reports, inspection reports, Safety and Surveillance Monitoring Reports, Safety and Surveillance Monitoring Program, and Project modification records.

2. Supporting Technical Information (STI) document Assessment

The IC's will assess contents of the existing Project STI document and determine both its completeness and appropriateness to the current standard of practice of dam safety as well as conformance with FERC Engineering Guidelines for the Evaluation of Hydropower Projects, Revised Chapter 14, Appendix H, Part 12D Safety Inspection Report Outline - Section 7.0, Assessment of Supporting Technical Information Document. The revised Appendix H clarifies items to consider when summarizing each section of the STI. In addition, it now contains example statements that are offered as general guidance for use by the IC when making a definitive statement regarding each section of the STI. It is also critically important that the IC review, evaluate and comment on the appropriateness and current validity of all previous analyses in the STI document.

Revised Chapter 14, Appendix H, Section 7.0 may be found at:

<http://www.ferc.gov/industries/hydropower.asp>

Reformatting the entire STI document is not included in this scope. GEI Consultants will assist with updating STI document sections within cost limits for this Task. Additional reports or significant analysis that may be identified as needed to complete the STI document are not included in this scope.

Deliverables:

- a. Draft pages to insert into the STI document (PDF version submittal)
- b. Final pages to insert into the STI document (PDF version submittal)
- c. STI document Revision Log

3. FERC Pre-Inspection Conference Call with IC and MCWRA

The IC's and consultant's recorder will participate in this call. This conference call is briefly described on Page 2 of the letter from FERC to MCWRA dated March 6, 2018, and the Agenda for this conference call is found in Enclosure 5 of the same letter. This call is expected to occur in early July. This call is expected to last up to 1.5 hours. The IC is expected to at least have reviewed Attachments 1, 2 and 3 to this Scope of Work, the 6th Part 12D Report and discuss the status of its recommendations with MCWRA staff prior to this call.

Deliverables:

- a. Copy of recorder's conference call notes

4. Part 12D Project Field Inspection

The IC's will complete a Project field inspection jointly with FERC and MCWRA staff in accordance with FERC Engineering Guidelines Chapter 14 and the following:

- a. The IC's will review Project drawings, previous Potential Failure Mode Analysis reports, Safety and Surveillance Monitoring Reports, the Safety and Surveillance Monitoring Program, previous inspection reports, and other Project documents considered necessary to becoming adequately familiar with Project history prior to the field inspection. FERC can and will cancel the field inspection if the IC's are not adequately prepared, which would be unacceptable to MCWRA.
- b. The IC's, FERC inspector and MCWRA staff will meet prior to the field inspection to review project history, including any past or current deficiencies, completed remediation, previous special investigations, instrumentation, Potential Failure Modes, the Surveillance and Monitoring Program, and any other issues considered pertinent to the field inspection. The IC will also discuss dam and Hydro Plant operations with MCWRA maintenance and operations staff prior to the field inspection. These discussions are anticipated to occur at the dam site the morning of the field inspection.
- c. The IC's will perform a field inspection to determine the condition of all safety aspects of the dam and power facilities, pursuant to FERC Engineering Guidelines Chapter 14.
- d. MCWRA will provide access to the Project and its appurtenances. Access to the steep portion of the spillway chute (50% grade) may require personal harness and lifeline fall protection equipment. MCWRA has such safety equipment for its own staff only. The IC's will need to provide their own safety equipment for this portion of the spillway, if needed.
- e. After the field inspection, the IC's, FERC inspector and MCWRA staff will determine if any additional potential failure modes (PFM's) were identified during the field inspection. Any new PFM's identified will be further considered at the Potential Failure Mode Analysis Workshop.
- f. Schedule one full day in the field to complete the Project field inspection and discussions above. The field inspection is anticipated to occur the day before the PFMA Workshop.

Deliverables:

- a. Health and Safety Plan ten (10) days prior to inspection date
- b. Inspection field notes and photos

5. Potential Failure Mode Analysis & Workshop

- a. The Part 12D Core Team and IC's will participate in a facilitated Potential Failure Mode Analysis (PFMA) and Workshop. Additional personnel selected by the IC, FERC, MCWRA and/or the Facilitator may also be requested to participate in the PFMA Workshop, such as subject matter experts and MCWRA operations staff. The consultant shall provide a PFMA Workshop Facilitator from outside their firm. The IC's will choose and distribute Project materials to be reviewed. The PFMA Workshop will be conducted in accordance with FERC Engineering Guidelines Chapter 14, Section 14.3 and Appendices A, B, C, D, E, F, and G.
- b. FERC comments on the 6th Part 12D Report Potential Failure Modes included in the letter from FERC to MCWRA dated January 10, 2018 and Pages 3, 4 and 5 of the letter from FERC to MCWRA dated March 6, 2018 shall be considered during Project document review and addressed at the PFMA Workshop and in the PFMA Report.

Develop with MCWRA staff revisions to refine PFM descriptions to state loading conditions and details on the potential progression of the identified failure mode in conformance with FERC's Guidelines on developing PFMs.

- c. Review any changes or new information since the last PFMA review that would result in the development of any new PFMs.
- d. A portion of the PFMA Workshop shall be spillway focused, using the spillway field inspection and Spillway Condition Assessment Report to comply with FERC's May 1, 2017 letter to MCWRA. This portion of the PFMA must be incorporated into the 7th Part 12D Report as a readily identifiable Spillway section of the overall PFMA report.
- e. Plan for two full days for the PFMA Workshop, to be scheduled in conjunction with the field inspection. MCWRA will provide a location near the dam for the PFMA Workshop.

Core Team Members

Each Core Team member is expected to review all background material chosen by the IC's. The MCWRA Chief Dam Safety Engineer will be responsible for supplying background material to the IC's and general coordination of activities. Core Team members are shown below.

- PFMA Workshop Facilitator – Christopher Hunt, PhD, PE, GE
- Part 12D Co-Independent Consultant – William Rettberg, PE
- Part 12D Co-Independent Consultant – Chad Masching, PE
- Engineering Geologist – Chris Slack, PG, CEG
- MCWRA Chief Dam Safety Engineer – Chris Moss, PE
- FERC Inspector
- FERC Project Engineer

Deliverables:

- a. Draft Major Findings and Understandings (MFU's) from the PFMA Workshop, distributed via email to PFMA participants for review and comment. Comments will be considered by IC's for inclusion in the Draft PFMA Report.
 - b. Draft PFMA Report (editable WORD version and printable PDF version)
 - c. Final PFMA Report (Adobe Acrobat PDF version with section bookmarks and searchable text, which is generated from a native document and not simply scanned, and provide all original images of photos used in the report)
6. 7th Part 12D Report
- a. The 7th Part 12D Report for the Project will be prepared in accordance with the latest revisions of FERC Engineering Guidelines Chapter 14. The IC shall certify the Report with specific statements required by FERC Engineering Guidelines.
 - b. The IC's shall address FERC comments on the 6th Part 12D Report in the letters to MCWRA dated January 10, 2018 and March 6, 2018.
 - c. The IC's shall address FERC comments regarding the first two bullets under Project Features in the letter from FERC to MCWRA dated March 6, 2018 on Pages 4 and 5, briefly summarized below:
 - i. Provide an opinion regarding boils discovered in March 2017.

Project historical records, recent boil monitoring reports and logs are available for IC review regarding this item.

- ii. Provide opinion on overall spillway condition pursuant to FERC letter to MCWRA dated May 1, 2017.

Project historical records, a recent Spillway Condition Assessment Report and a recent non-destructive evaluation report will be available for the IC's to review regarding this item.

- d. Reports listed in the third bullet under Project Features in the letter from FERC to MCWRA dated March 6, 2018 on Page 4 will likely not be completed during this Part 12D process.

Note: FERC makes it clear in the March 6, 2018 letter to MCWRA that unresponsive Part 12D Reports will be rejected, which would be unacceptable to MCWRA.

Deliverables:

- a. Draft Part 12D Report: Provide one (1) editable Microsoft WORD version and one (1) PDF version for MCWRA review and comment
 - o Final Part 12D Report: Provide one (1) Microsoft WORD version and one (1) Adobe Acrobat PDF version of the entire report with section bookmarks and searchable text, which is generated from a native document and not simply scanned, and provide all original images of inspection photos used in the report. **NOTE:** per FERC requirements, label the Final 7th Part 12D Report “CEII – Critical Energy Infrastructure Information”

Meetings

The following meetings for the 7th Part 12D work are expected:

- o A kick-off meeting or Webex/conference call to discuss roles and responsibilities, schedule, administrative matters, etc.
- o A meeting or Webex/conference call with MCWRA staff to present and discuss Final Part 12D report findings, conclusions and recommendations, and potential plan and schedule options for addressing recommendations.
- o Work status calls at least every two weeks with MCWRA Project Manager

Work Schedule

July 5, 2018	Commence work
September 2018 (three consecutive days)	Field Inspection and Potential Failure Mode Analysis Workshop (Dam & Spillway)
November 2018	Submit Draft Part 12D Report to MCWRA
December 2018	Submit Final Part 12D Report to MCWRA
By December 31, 2018	MCWRA submit Final Part 12D Report to FERC
By Feb 28, 2019	Present Part 12D Report conclusions and recommendations to MCWRA Board of Directors

Attachments

1. Copy of FERC letter dated May 1, 2017
2. Copy of FERC letter dated January 10, 2018
3. Copy of FERC letter dated March 6, 2018