

Peer Review Plan

Heart Butte Dam – Safety of Dams Modification –Request for Approval/ Modification Report

Date: July 2, 2024

Originating Office: Bureau of Reclamation, Dam Safety Office, Dam Safety and Instructure, PO Box 25007 Attn 86-67100, Denver Federal Center, Bldg 67, Denver, CO 80225

Reclamation Roles:

Miguel Rocha, Acting Director, Dam Safety and Instructure, Bureau of Reclamation

Peer Review Lead: Kent Walker, Program Manager, Dam Safety Office, Bureau of Reclamation

Subject and Purpose: Heart Butte Dam is a high hazard dam located in southwest North Dakota. Authorized benefits of the project include irrigation, flood control, and other beneficial purposes. Through an Issue Evaluation study, Reclamation identified that static risks exceed Public Protection Guidelines and that the dam is at increasing justification to take action to reduce risk to the public. Reclamation initiated a Corrective Action Study in 2016 to identify and evaluate modification alternatives to reduce risk. Several structural and non-structural alternatives were evaluated for technical adequacy in reducing dam safety risk. An Economic Benefit Analysis report was prepared to determine the value of the project benefits based on the Principles and Guidelines for Water and Related Land Resources Implementation Studies, known as the P&Gs. Project cost estimates were prepared for each alternative for comparison purposes. A Corrective Action Study report was prepared which includes the engineering analysis and risk reduction estimates. The preferred modification alternative that was selected consists of a jet grout cutoff wall and a blanket filter drainage system on the downstream slope.

Impact of Dissemination: The scientific information developed for this dam safety project is expected to meet the definition of Influential Scientific Information (ISI) requiring peer review, as defined by Office of Management and Budget Final Information Quality Bulletin for Peer Review (70 FR 2664-2677) and Reclamation Manual Peer Review of Scientific Information and Assessments Policy (CMP P14). The Modification Report (also known as the Mod Report) is classified as ISI as it utilizes the data from engineering analysis, cost estimates, and economics benefits analysis in the decision-making process to justify the need and authorize the use of appropriated funding to construct the preferred alternative to reduce risk to the downstream population. An internal peer review has been completed in accordance with TSC's operating guidelines for each ISI used in making the decision to construct the modification. External peer reviews (Consultant Review Board) of specific ISI data and analysis included in the Corrective Action Study were completed in 2017 and 2022. A Decision Document was signed by the Regional Director, Area Manager, and Chief of Dam Safety in 2023 concurring with decision to complete final design and construction of the preferred alternative.

Peer Review Scope: The scope of the peer review includes a review of the Modification Report by a certification team. The certification team is comprised of subject matter experts in different fields of expertise. The certification team will review the specific ISI in their field of expertise and provide comments. The program manager and project team will address each comment and provide a disposition of comments. The certification team leader will review comments and disposition to ensure comments are adequately addressed. Specific ISI includes the Economic Benefits Study, Corrective Action Study and Risk Reduction Analysis, and cost estimates.

Peer reviewers will be asked to provide responses relative to the following questions:

Question 1) Does the information contained in the referenced reports, analysis, and cost estimates support the decision to construct the preferred alternative?

Question 2) Have the assumptions and uncertainties associated with the data been appropriately characterized?

Reviewers are to comment solely on the scientific information being reviewed, and not on any agency decision or policy.

Timing of Review: The review is anticipated to be conducted during the fourth quarter of FY2024. The final certification review memo is expected to be available on the U.S. Bureau of Reclamation Peer Review Agenda public website (<http://www.usbr.gov/main/qoi/peeragenda.html>) by February 28, 2025. No time deferrals are involved.

Methodology of Review: Review will be conducted by a certification team. The identities of the reviewers will be disclosed in the final Certification Review Memo. Certification review findings and comments will be summarized in the memo. The peer review process will not provide opportunities for public participation.

Number of Peer Reviewers: It is anticipated that 7-8 peer reviewers will be utilized.

Reviewer Selection Process: The peer reviewers will have at least 5 years of experience with expertise in geotechnical and civil engineering, cost estimating, dam safety risk, and economics. Peer reviewers will have education, professional experience, and peer recognition in their field, and will have contributed to their field. Reviewers will be selected by management to meet the Peer Review Scope and required expertise identified above. The public will not be asked to nominate reviewers.

Delivery of Findings: The certification peer review team members will provide their comments in a spreadsheet and the certification team leader will review the comments with the Dam Safety program manager and team. The certification team leader will prepare a memo of the team's findings. The memo will include a summary of certification team's significant comments and disposition. The memo will be transmitted to the Regional Director, Area Manager, and Chief of Dam Safety. The certification team will receive an electronic copy.

Response to Peer Review: At the conclusion of receiving peer review comments, the peer review lead will submit the Certification Memo to Reclamation's peer review agenda website.

Federal Register Notice: Federal Register notices will not be provided announcing the formation of a peer review team and completion of the final report.

Applicability of the Federal Advisory Committee Act (FACA): This peer review is not subject to the Federal Advisory Committee Act (FACA) because the review does not involve open meetings or committee chartering and reviewers are being asked to provide individual reviews on the subject matter. Reclamation is not seeking consensus advice from the reviewers as a group.

Agency Contact: Kent Walker, Program Manager, Dam Safety Office, Bureau of Reclamation, kgwalker@usbr.gov, 303-968-6753