



**DEPARTMENT OF THE ARMY**  
NORTH ATLANTIC DIVISION, US ARMY CORPS OF ENGINEERS  
FORT HAMILTON MILITARY COMMUNITY  
BROOKLYN, NEW YORK 11252-6700

REPLY TO  
ATTENTION OF

CENAD-RBT

20 FEB 2013

MEMORANDUM FOR Commander, New England District, ATTN: CENAN-EP (Mr. Mackos),  
696 Virginia Road, Concord, MA 01742-2751

SUBJECT: Review Plan Approval for Non-Federal Hydroelectric Project, Ball Mountain Dam,  
Jamaica, VT

1. References:

- a. Memorandum, CENAE-EP-PS, 28 Jan 13, subject: Review Plan for Non-Federal Hydroelectric Projects at Ball Mountain Dam, Jamaica, Vermont (FERC #P-13226).
- b. Memorandum, CECW-PN, 17 Nov 08, subject: Clarification Guidance on the Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects.
- c. EC 1165-2-214, Water Resources Policies and Authorities - Civil Works Review Policy, 15 Dec 12.

2. The enclosed Review Plan for the Non-Federal Hydroelectric Project at Ball Mountain Dam has been prepared in accordance with References 1.b and 1.c. The Non-Federal project will be constructed by a private developer under a Federal Energy Regulatory Commission (FERC) Order and License, and will consist of two turbine-generator modules installed in existing stop log gate slots on the intake tower structure. The project will also include a turbine generator support structure erected on the existing intake tower structure deck to support the turbine generator modules; a maintenance platform and climbing jack support platform; an equipment area containing a prefabricated control building, switch gear, transformers, and other equipment; and appurtenant facilities.

3. NAD Business Technical Division is the Review Management Organization (RMO) for the Agency Technical Review (ATR). The Review Plan includes Independent External Peer Review (IEPR) which will be performed at the developer's expense. The Risk Management Center is the RMO for the IEPR. The IEPR will include critical facilities that will be modified as part of the hydroelectric project to ensure that the project is fully compatible with existing facilities and operations.

4. The Review Plan for the Non-Federal Hydroelectric Project at Ball Mountain Dam is approved. The Review Plan is subject to change as circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office

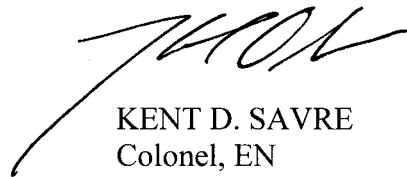
CENAD-RBT

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5. In accordance with Reference 1.c, Appendix B, Paragraph 5, this approved Review Plan shall be posted on your district website for public review and comment.

6. The Point of Contact in Business Technical Division for this action is Daniel Rodriguez, 347-370-7095 or [Daniel.J.Rodriguez@usace.army.mil](mailto:Daniel.J.Rodriguez@usace.army.mil)

Encl  
as



KENT D. SAVRE  
Colonel, EN  
Commanding

CF (w/ encl):  
CENAE-EP-PS (Mr. Hatfield)

**Review Plan  
For  
Non-Federal Hydroelectric Project**

**Ball Mountain Dam, Jamaica, Vermont  
(FERC # P-13226)**

**New England District**

**January 2013**



**US Army Corps  
of Engineers®**

A

**Review Plan  
For  
Non-Federal Hydro Project  
Ball Mountain Dam, Jamaica, Vermont**

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## **I. PURPOSE AND REQUIREMENTS**

**A. Purpose.** This Review Plan (RP) defines the scope and level of review for the Section 408 documentation to be completed during the post-licensing stage of the non-federal hydropower project at Ball Mountain Dam in Jamaica, Vermont (FERC Project #13226). This project consists of modifications to Ball Mountain Dam to construct and operate a hydroelectric plant as proposed by Eagle Creek Renewable Energy (formerly known as Blue Heron Hydro), hereinafter referred to as “the developer”. Ball Mountain Dam is a flood risk management project constructed, operated, and maintained by the U.S. Army Corps of Engineers (USACE), New England District. Consequently, the New England District, Chief of Engineering/Planning Division is responsible for the review of this project and will coordinate this review with the Chief of Operations Division.

### **B. References**

1. Engineering Circular (EC) 1165-2-214, Civil Works Review, 15 Dec 2012.
2. Engineering Regulation 1110-2-1462, 20 February 1991 Water Quality and Water Control Considerations for Non-Federal Hydropower Development at Corps of Engineers Projects.
3. Engineering Regulation 1110-2-1454, 15 July 1983 Engineering and Design-Corps Responsibilities for Non-Federal Hydroelectric Power Development under the Federal Power Act.
4. ER 1110-2-1150 31 Aug 1999 Engineering and Design for Civil Works Projects.
5. CECW-PB Memorandum, Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects [33 USC 408], 23 Oct 2006.
6. CECW-PB Memorandum for See Distribution, Clarification Guidance on the Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects, 17 Nov 2008.
7. CECW-P Document “Section 408 Submittal Package Guide, Final 11/12/08”.
8. CENAD-BTD/PSD Memorandum dated 4 March 2010, Interim Guidance for Providing Support to Non-Federal Hydropower Developers at Corps Facilities within NAD.

**C. Requirements.** This review plan was developed in accordance with EC 1165-2-214, which establishes an accountable comprehensive, life-cycle review strategy for Civil Works products. Hydroelectric power projects proposed by non-Federal entities are addressed in paragraph 13. Special cases exist where non-Federal interests undertake the study, design or

implementation of a Federal project or a modification to a USACE project. When a non-Federal interest undertakes a study, design or implementation of a Federal project, or requests permission to alter a Federal project, the non-Federal interest (the developer) is required to submit a Section 408 package documenting the District review and approval of the proposed hydroelectric power project.

The 33 U.S.C. Section 408 Approval process (Section 408) is required by the Rivers and Harbors Appropriation Act of 1899. Any proposed modification to a USACE project requires a review and determination by USACE that such proposed alteration or permanent occupation or use of a federal project is not injurious to the public interest, and will not impair the usefulness of such work. Ball Mountain Dam is a USACE project that does not currently include hydropower. USACE must issue a Section 408 approval to the developer for hydropower to be constructed at Ball Mountain Dam.

The Section 408 Package will be reviewed by USACE based on the following criteria:

1. The proposed project will not adversely affect the stability or structural integrity of the Federal project.
2. The proposed project will not adversely affect the operation of the Federal project for the authorized purposes (flood control, recreation, and environmental stewardship).
3. All environmental impacts have been adequately addressed.
4. EC 1165-2-214 outlines three levels of review, District Quality Control/ Quality Assurance, Agency Technical Review, and Independent External Peer Review (IEPR). In addition to these three levels of review, decision documents are subject to undergo policy and legal compliance review and, if applicable, model certification and approval.
5. District Quality Control (DQC). DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). Since this is not a Corps design, the Quality Control (QC) review will be undertaken by the developer and or their consultants. Basic quality control tools include a Quality Management Plan providing for seamless review, quality checks and reviews including calculation checks, supervisory reviews, etc. New England District staff (who also comprise the Agency Technical Review team) will perform a Quality Assurance (QA) review of all submitted products. QA is a complete review of all documents submitted to assure the overall integrity of the products and to verify that the products have undergone QC reviews prior to submitting the product for Agency Technical Review.
6. Agency Technical Review (ATR). The ATR will be a rigorous in-depth review conducted by a qualified team of New England District staff. The

purpose of this review is to ensure the proper application of clearly established criteria, regulations, laws, codes, principles and professional practices. The main charge to the ATR team will be to verify that the modifications to Ball Mountain Dam are done in a professional manner, safely, and will not adversely affect the operation of the project. If lacking the appropriate expertise, the district will supplement their staff with outside subject matter experts. The district will utilize vertical team coordination to assure technical requirements are met throughout the process. The ATR will be documented in DrChecks.

7. Policy and Legal Compliance Review. The New England District Office of Counsel will perform the policy and legal compliance review of the Section 408 package and certify legal sufficiency.

## II. PROJECT INFORMATION

**A. Project Authority.** Ball Mountain Dam was authorized by the Flood Control Act of 1944, as amended; under Public Law 78-534 and Public Law 83-780.

**B. Description.** The designs and technical documents to be reviewed have not been created by Corps personnel. The documents to be reviewed were developed by Eagle Creek Renewable Energy, the company that holds the FERC license to pursue hydroelectric development at Ball Mountain Dam. The USACE, New England District, is tasked with reviewing the proposed project to ensure it will not adversely affect the operational or structural integrity of the Corps flood risk management project. The Corps will review all products related to this FERC license for compliance with the Corps' ability to maintain our missions and authorized purposes, including life and dam safety, operational requirements, and environmental concerns. The review will also be conducted to determine the technical soundness and environmental acceptability of the proposed project.

**C. Background.** Ball Mountain Dam is part of a system of 14 dams that are operated to provide flood protection for the numerous communities along the Connecticut River. In addition to flood control, the Corps operates Ball Mountain Dam and Lake for fish and wildlife enhancement and recreation.

On November 1, 2010, Blue Heron Hydro, LLC, filed pursuant to Part I of the Federal Power Act (FPA), an application for an original license to construct, operate, and maintain its proposed Ball Mountain Dam Hydroelectric Project No. 13226. The FERC issued its Order and License on April 12, 2012, FERC Project No. 13226-003. Subsequent to the issuance of the FERC Order and License, Blue Heron Hydro LLC, including all rights to that license, was bought by Eagle Creek Renewable Energy Morristown, New Jersey. 33 USC 408 requires Eagle Creek Renewable Energy to obtain approval from the Corps before construction can begin.

**D. Project Description.** The proposed project would consist of the following new facilities: (1) two turbine-generator modules located in the openings of the existing Number 1 and 3 stop-log gate slots on the intake tower structure, each containing six horizontal mixed flow Obermeyer Turbines directly connected to six 183 kW submersible induction type generator

units for a total capacity of 2.2 MW; (2) a 27-foot-long, 33-foot-wide, 55-foot-tall Turbine Generator Module Support Structure fabricated of structural steel, erected on the existing intake tower structure deck to support the turbine generator modules, consisting of stop-log gate slot extensions above El. 845.0 feet, a maintenance platform at elevation 875.42 feet and a Climbing Jack support platform at El. 900.0 feet, along a horizontal access walkway extending from the upper platform to land adjacent to an existing access bridge pier at Elevation 900.0 feet; (3) electrical and mechanical and control system conduits, cables and piping attached to the existing intake tower structure and service bridge for routing to a 12-foot by 24-foot prefabricated control structure; (4) Within the control structure, a variable voltage generator output converted to a fixed voltage of 600 V and transmitted to a generator step-up transformer located on an approximately 8-foot by 8-foot concrete foundation/oil containment structure adjacent to the control structure, located near the existing strong motion detection device; (5) a transmission line from the generator step-up transformer crossing the existing Dam Access Road underground and continuing underground on the East side of the road to an existing Green Mountain Power pole structure adjacent to the Corps maintenance barn; and (6) appurtenant facilities.

The project will occupy approximately 3.59 acres of federal land under the jurisdiction of the Corps. The proposed project boundary will enclose the two turbine-generator arrays and hoists, the control panel, the conduit containing the generator leads, the pad for the step-up transformer, the equipment area, and the transmission line.

As described in this Review Plan, the District's intent is to ensure that the proposed alteration of the Federal project is not injurious to the public interest and will not impair the usefulness of Ball Mountain Dam. In order to provide assurance that their plans are technically correct and sufficient, the developer must submit enough information, data, calculations and drawings to substantially define those features of work that could impact the operation, safety, and stability of, or the Government's ability to control flow through Ball Mountain Dam.

Construction drawings and specifications may not need to be developed to the 100% level for the Section 408 submission, but sufficient detail must be provided to ensure the adequacy of the features/appurtenances provided. The New England District will consider a staged submittal process where less critical features of the project could be reviewed prior to the development of the Section 408 package. General discussion should be included on construction sequencing including access to the dam and the equipment to be installed there (temporary and permanent), in the reservoir, and elsewhere. Any deviations from normal dam operations required by the construction of the project should also be discussed. Critical aspects of plant operation that must be addressed in the submittal package include, but may not be limited to, plans for routine and emergency contacts and operations that require hydropower plant personnel to be available or on call to operate plant machinery at all times and an alert/alarm system in case of unexpected changes in this facility. More detailed operational aspects will be addressed in the Operations Memorandum of Agreement that will be developed after the Section 408 package is approved.

**E. Factors Affecting the Scope and Level of Review.** The proposed hydroelectric facility at Ball Mountain Dam raises dam safety and operational concerns. Outcomes from the structural and operational issues may have impacts on design which could increase the number or length of the review periods. The other aspect that will affect the reviews is the timeliness of documents



and correction of problems. Timeliness of submittals is not within the control of the Government. Eagle Creek has proposed an aggressive schedule for submittals and review of documents. Maintaining the proposed schedule is dependent on Eagle Creek's ability to submit complete packages, respond in a timely manner, and provide satisfactory responses to all comments.

### **III. ROLES AND RESPONSIBILITIES**

The following describes the roles and responsibilities for reviewing the proposed project.

**A. Developer Responsibilities** - Prepare and submit a Type II Independent External Peer Review Plan (a.k.a. Safety Assurance Review, SAR). Coordinate comments and resolutions. Coordinate Section 408 application requirements in addition to FERC license requirements. Submit a full 408 application package to the USACE, New England District, with resolution of all SAR/ATR comments included.

**B. District Responsibilities** - Review SAR package as prepared by developer and submit to North Atlantic Division (NAD) for review. Coordinate comments from NAD with the developer. Prepare and submit a district RP for the District's role and description of the developer's role. Coordinate the RP with the NAD for endorsement/approval. Conduct an ATR of the developer's 408 package; providing the developer with timely review comments. Ensure that all ATR comments are adequately resolved. Prepare and submit the 408 package to NAD for endorsement.

**C. Risk Management Center (RMC) Responsibilities** - Currently the RMC has described their role as limited due to status of the RMC and lack of adequate resources to work Section 408 Non-Federal development proposals. However there have been position changes within the RMC since, and the District and NAD have verified RMC's intent to act as the Risk Management Office (RMO) on this project.

**D. NAD Responsibilities** - Review RP prepared by District and provide comments. Review SAR as prepared by developer and provide comments to District for coordination. When SAR plan is formally submitted, coordinate review and approve proposed reviewers for IEPR II/SAR ensuring qualifications/independence from the project. Coordinate the 408 application package when formally submitted via the District. The complete package is the approved District RP, the developer SAR plan, and the full 408 application/proposal materials. NAD may either deny the application package, endorse and forward it to USACE for their action, or forward the package to USACE unendorsed.

### **IV. AGENCY TECHNICAL REVIEW (ATR)**

The USACE requirements for approval of non-Federal hydroelectric projects are generally described in the referenced policy memorandums and in paragraph 14.a and Appendix A of reference 3. Item (3) of paragraph 14 a. is particularly pertinent to this review plan. It states

that “Design, construction, and operation of all power facilities which would affect the structural integrity and operational adequacy of the Federal dam, including construction sequence and procedures, must be approved by USACE.” According to the EC 1165-2-214 SharePoint Site, Frequently Asked Question 2.d, states that these types of activities (modifications of existing Federal Projects to incorporate non-federal hydropower) are not a USACE product and the ATR requirements in the EC do not apply. However, following CECW-PB Policy Memorandum “Clarification Guidance on the Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects,” dated 17 Nov 2008 the New England District will perform an in-house ATR on the developer’s design and plans.

The developer will document his design in a Design Documentation Report (DDR) following the guidance in ER 1110-2-1150 31 Aug 1999, Engineering and Design for Civil Works Projects. The District PDT believes this is necessary to provide the level of confidence needed in the project modifications to recommend approval to the District Commander. The District Commander’s approval is required for the 33 USC 408 submission to the Chief of Engineers. The District will also review all environmental documentation prepared by the Federal Energy Regulatory Commission in conjunction with the issued license.

The New England District will perform the ATR. Dr Checks review software will be used to document ATR comments and aid in the preparation of the Review Report. The New England District Review team will prepare a Review Report that will accompany the 408 submittal for the project and shall:

- Disclose the names of the reviewers, their organizational affiliations, and include a short description of the credentials and relevant experiences of each reviewer.
- Describe the nature of their review and their findings and conclusions.
- Include a verbatim copy of each reviewer's comments along with their resolution.

The New England District will have the USACE Center of Expertise for Hydroelectric Design (Portland District) review the turbine design.

The ATR team is responsible for a complete reading of the 408 report and technical appendices to assure the overall integrity of the report and the recommendations before approval by the District Commander. Products requiring ATR include but are not limited to: 40%, 60%, 90% and 100% versions of the 408 submittal, as well as any design manual, construction sequencing plan, and operations and maintenance manual. The review will focus on dam safety and Corps project operability. The “charge” to reviewers is to:

- Review the proposed project to ensure it will not adversely affect the operation or maintenance of Ball Mountain Dam including structural integrity, dam safety, operational security and force protection requirements.
- Determine the technical soundness and environmental acceptability of the proposed project.

- Ensure the project is designed in accordance with published guidance, including ER's, EC's, manuals, engineering technical letters, and bulletins, focusing specifically on dam safety, operation and maintenance, and environmental concerns.
- Review the proposed project to ensure it will not affect flood control, recreation, and environmental stewardship.

The Section 408 Report will contain materials prepared by the developer, who is required to prepare a technical analysis and adequacy of design, including geotechnical analysis, structural components, hydraulics and hydrology, and operational and maintenance requirements; real estate analysis; discussion of residual risk; discussion on Executive Order 11988 (floodplains); and environmental protection compliance, including a NEPA analysis that addresses the ESA, FWCA, Marine Protection, Research, and Sanctuaries Act, Wild and Scenic Rivers Act, Coastal Zone Management Act, Clean Air Act, HTRW, NHPA, and Noise Control Act. The developer is also responsible for updating water control and O&M manuals, as necessary. The New England District will prepare its determination of technical soundness and environmental acceptability to include a policy and legal analysis. A list of the ATR team members can be found in Attachment A.

## **V. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)**

An IEPR may or may not be required to be performed for non-Federal hydropower development proposals at USACE dams. The IEPR must be funded by the developer.

**A. Decision on IEPR** - The requirement for an IEPR is found in EC 1165-2-214, Paragraph 13. "Special Cases". Based on vertical team discussion, a Type II IEPR, also known as a Safety Assurance Review, applies to this proposed modification. This SAR review needs to assure the USACE that proposed project does not elevate risk to human life over that which is inherent in the existing project. The IEPR plan needs to address the review of critical facilities and will provide an added assurance that the proposed hydropower project will be fully compatible with the existing facilities and operations. It is envisioned that the SAR will include drawings and supporting report information documenting the design of these facilities. The report of the IEPR of the hydroelectric project will be documented in the Section 408 Package.

**B. Products for Review** - The New England District and developer will list any critical facilities and the documents which cover the design of these facilities for this project. In addition, the IEPR may include environmental considerations.

**C. Required IEPR Expertise** - The IEPR panel should consist of at least a three to five person panel with expertise in the following areas: a) structural analysis; b) geotechnical engineering; c) dam safety; d) mechanical engineering; e) turbine design, and; f) fisheries as it relates to hydroelectric design. The developer is required to use the National Academies of Science (NAS) policy for selecting reviewers and is encouraged to use an Outside Eligible

Organization (OEO) for management of the effort. EC 1165-2-214, Appendix E provides information on the selection of panel members. The names and brief synopses of experience for reviewers shall be submitted to the New England District for approval.

**D. Documentation of IEPR** - Dr Checks review software will be used to document IEPR comments and aid in the preparation of the Review Report. The IEPR team will prepare a Review Report that will accompany the 408 submittal for the project and shall:

- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions; and
- Include a verbatim copy of each reviewer's comments along with their resolution.

## **VI. MODEL CERTIFICATION AND APPROVAL**

It is not anticipated at this time that the developer will utilize any engineering models in the design and evaluation of the power plant facilities that will require separate approval. Nor will any environmental models be used to assess the impact of power plant operation on the lake or river downstream.

## **VII. REVIEW SCHEDULE & COSTS**

District review of the project is estimated to cost about \$100,000 and is to be initially funded by USACE. Refer to Attachment B for the review schedule. The cost and schedule of the Type II IEPR is the responsibility of the developer.

## **VIII. PUBLIC PARTICIPATION**

The public and Governmental agencies have been offered an opportunity to comment on the hydroelectric proposal through the FERC permitting and licensing process. Documentation of that participation can be found on the FERC website.

## **IX. CENTER OF EXPERTISE (CX) COORDINATION**

The lead CX for this study is the Risk Management Center – Eastern Division  
U.S. Army Corps of Engineers  
1530 Willow Street  
Lake Forest, Illinois 60045-1359

## **X. MSC APPROVAL**

The Major Subordinate Command (MSC) that oversees the home district is responsible for approving the RP. For New England District, the MSC is the North Atlantic Division. Approval is provided by the MSC Commander. The commander's approval should reflect vertical team input (involving District, MSC, CX, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the RP is a living document and may change as the project progresses. Changes to the RP should be approved by following the process used for initially approving the plan. In all cases the MSCs will review the decision on the level of review and any changes made in updates to the project.

## **XI. REVIEW PLAN POINTS OF CONTACT**

Questions and/or comments on this Review Plan can be directed to the following employees of USACE, New England District:

Kimberly Russell (District Hydropower Coordinator) Ph. 978-318-8779

E-mail [Kimberly.a.russell@usace.army.mil](mailto:Kimberly.a.russell@usace.army.mil)

Christopher Hatfield (Section 408 Project Manager) Ph. 978-318-8520

E-mail [Christopher.l.hatfield@usace.army.mil](mailto:Christopher.l.hatfield@usace.army.mil)

### Attachment A

**ATR Team Roster** (complete when team members are identified).

<b>Name</b>	<b>Discipline/Role</b>	<b>Organization</b>	<b>Phone</b>
Chris Hatfield	Section 408 Manager	CENAE-EP-P	978-318-8520
Maruti Wagle	Structural Engineer	CENAE-EP-DG	978-318-8044
Alex Garneau	Mechanical Engineer	CENAE-EP-WG	978-318-8389
Angela Frisino	Mechanical Engineer	CENWP-EP-DG	978-318-8085
Jeanine Cline	Electrical Engineer	CENAE-EP-DG	978-318-8143
Townsend Barker	Hydraulic Engineer	CENAE-EP-WM	978-318-8621
William Lawrence	Geotechnical Engineer	CENAE-EP-WG	978-318-8786
Matt Tessier	Civil Engineer	CENAE-EP-DC	978-318-8248
Meghan Cullen	Civil Engineer	CENAE-EP-GE	978-318-8423
Kirk Bargerhuff	Environmental Scientist	CENAE-EP-VE	978-318-8029
Anastasia Papadopoulos	Dam Safety Coordinator	CENAE-EP-WG	978-318-8107
Joseph Redlinger	Real Estate Specialist	CENAE-RE	978-318-8585
Kimberly Russell	Hydropower Coordinator	CENAE-OD-TS	978-318-8779
Steve Lehmann	Operations Tech Support	CENAE-OD-TS	978-318-8669
Mark Wilmes	CT River Basin Manager	CENAE-OD-UC	978-318-8441
Joseph Mcinerny	District Counsel	CENAE-OC	978-318-8247
Michael Posovich	Hydroelectric Design Center	CENWP-HDC-C	503-808-4232
Kevin Richards	Risk Management Center – Eastern Division	CEIWR-RMC-ED	303-241-8380

### Attachment B

**Table 2. ATR Schedule.** Instruction: Complete project specific milestone, products and dates.

<b>Review Milestone</b>	<b>Review Products</b>	<b>Date Planned</b>
<b>35% ATR review</b>	P&S/DDR	February 2011 to May 2011
<b>35% backcheck</b>	30 days from when responses were provided by the developer	December 2012
<b>90% ATR review</b>	P&S/DDR	January 2013 to March 2013
<b>90% backcheck</b>	30 days from end of review	April 2013
<b>100% ATR review</b>	P&S/DDR	May 2013
<b>100% backcheck</b>	30 days from end of review	June 2013
<b>ATR Certification</b>		June 2013

ATTACHMENT C

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the **Non-Federal Hydroelectric Project at Ball Mountain Dam, Jamaica, Vermont**. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing U.S. Army Corps of Engineers policy. The ATR also assessed the Developer's District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks<sup>sm</sup>.

SIGNATURE

\_\_\_\_\_  
Name  
ATR Team Leader  
Office Symbol Company

\_\_\_\_\_  
Date

SIGNATURE

\_\_\_\_\_  
Name  
Project Manager  
Office Symbol

\_\_\_\_\_  
Date

SIGNATURE

\_\_\_\_\_  
Name  
Architect Engineer Project Manager<sup>1</sup>  
Company, location

\_\_\_\_\_  
Date

SIGNATURE

\_\_\_\_\_  
Name  
Review Management Office Representative  
Office Symbol

\_\_\_\_\_  
Date

**CERTIFICATION OF AGENCY TECHNICAL REVIEW**

Significant concerns and the explanation of the resolution are as follows: Describe the major technical concerns and their resolution.

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE

Name

Chief, Engineering/Planning Division

Office Symbol

\_\_\_\_\_ Date

SIGNATURE

Name

Chief, Operations Division

Office Symbol

\_\_\_\_\_ Date

<sup>1</sup> Only needed if some portion of the ATR was contracted





REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**NEW ENGLAND DISTRICT, CORPS OF ENGINEERS**  
**696 VIRGINIA ROAD**  
**CONCORD, MASSACHUSETTS 01742-2751**

CENAE-EP-PS

28 January 2013

MEMORANDUM FOR Commander, North Atlantic Division, U.S. Army Corps of Engineers  
CENAD-PD-CID (Attn: Ms. Linda Monte), Fort Hamilton Military Community, 301 General  
Lee Avenue, Brooklyn, NY 11252

SUBJECT: Review Plan for Non-Federal Hydroelectric Project at Ball Mountain Dam, Jamaica,  
Vermont (FERC # P-13226)

1. References:

- a. Engineering Circular 1165-2-214, dated 15 December 2012, Water Resources Policies and Authorities – Civil Works Review.
- b. Memorandum, CECW-PB, dated 23 October 2006, Subject: Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineer Projects.
- c. Memorandum, CECW-PB, dated 17 November 2008, Subject: Clarification Guidance on the Policy for the Approval of Modifications and Alterations of Corps of Engineers Projects.
- d. Document, CECW-P, "Section 408 Submittal Package Guide, Final 11/12/08".
- e. Memorandum, CENAD-BTD/PSD, dated 4 March 2010, Subject: Interim Guidance for Providing Support to Non-Federal Hydropower Developers at Corps Facilities with NAD.
- f. Memorandum, CENAD-RBT, dated 29 March 2012, Subject: Requirements for an Independent External Peer Review at Ball Mountain Dam

2. Eagle Creek Renewable Energy has proposed the construction of a Hydroelectric Project at Ball Mountain Dam, which was designed, constructed, and is operated by New England District. The major features of the proposed Hydroelectric Project include: two turbine-generator arrays, located in the openings for the existing left and right slide gates; two turbine hoist structures located on top of the existing intake tower; a control panel in the existing intake tower; an equipment area containing a pre-fabricated control building, switch gear, transformers, and other electrical equipment; and appurtenant facilities.

B

CENAE-EP-PS

SUBJECT: Review Plan for Non-Federal Hydroelectric Project at Ball Mountain Dam, Jamaica, Vermont (FERC # P-13226)

3. New England District has prepared the enclosed Review Plan for the Section 408 package to be submitted by Eagle Creek. A rigorous Agency Technical Review (ATR) will be performed by New England District. Additionally, a Type II Independent External Peer Review (IEPR) will be performed at the developer's expense. The Type II IEPR is also known as a Safety Assurance Review. This review will include critical facilities to be modified as part of the Hydroelectric Project and will ensure that the project will be fully compatible with existing facilities and operations.

4. The enclosed Review Plan is submitted for your approval. Please provide comments to the 408 Project Manager, Mr. Christopher Hatfield who can be contacted at 978-318-8520 or by email at [christopher.l.hatfield@usace.army.mil](mailto:christopher.l.hatfield@usace.army.mil).

FOR THE COMMANDER:



ANTHONY T. MACKOS, P.E.  
Chief, Engineering/Planning Division

Encls



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
WASHINGTON, D.C. 20314-1000

REPLY TO  
ATTENTION OF:

NOV 17 2008

CECW-PB

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Clarification Guidance on the Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects

1. References:

- a. CECW-PB Memorandum dated 23 October 2006, Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects.
- b. ER 1105-2-101, Planning - Risk Analysis for Flood Damage Reduction Studies, dated 3 January 2006.
- c. CECW-HS Memorandum dated January 23, 2008, Subject: Guidance for the Prioritization of Fiscal Year (FY 2008) Levee Safety Program Inspection Funds.
- d. EM 1110-2-1619, Risk Based Analysis for Flood Damage Reduction Studies, dated 1 August 1996.
- e. ER 1110-2-1150, Engineering and Design for Civil Works Projects, dated 31 August 1999.
- f. ER 1165-2-502, Delegation of Review and Approval Authority for Post-Authorization Decision Documents, dated 31 March 2007.
- g. ER 1105-2-100, Appendix H, Policy Compliance Review and Approval of Decision Documents, November 2007.
- h. ER 1110-1-12, Quality Management, dated 30 September 2006.

2. Purpose: The purpose of this memorandum is to provide additional clarification and to supplement reference 1a, which remains in effect. This memorandum addresses approval levels for various types of alterations/modifications under 33 U.S.C. 408; the application of risk analysis to the required engineering studies, review requirements, report processing requirements, and appropriate funding mechanisms and focuses primarily on flood risk management projects.

C

SUBJECT: Clarification Guidance on the Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects

3. Policy:

a. Application of 33 CFR 208.10 and 33 U.S.C. 408.

(1) 33 U.S.C. 408 authorizes the Secretary of the Army to permit alterations/modifications to existing Corps projects in certain circumstances. The Secretary of the Army has delegated this approval authority to the Chief of Engineers. In addition, the authority to approve relatively minor, low impact alterations/modifications related to the operation and maintenance (O&M) responsibilities of the non-Federal sponsors has been further delegated to the District Engineer for approval in accordance with 33 CFR 208.10. The types of alterations/modifications that can be approved by a District Engineer include placement of structures such as pump houses, stairs, pipes, bike trails, sidewalks, fences, driveways, power poles, and instrumentation provided these alterations/modifications do not adversely affect the functioning of the project and flood fighting activities. If proposed changes are limited to restoring the authorized level of protection or improving the structural integrity of the protection system and do not change the authorized structural geometry or hydraulic capacity, they may be approved in accordance with 33 CFR 208.10. The authorized level of protection is intended to be the top of the levee associated with the design water surface plus appropriate freeboard including consideration for subsidence. Alterations/modifications approved by the District Engineer in accordance with 33 CFR 208.10 are considered within the O&M responsibilities of the non-Federal sponsor and will be implemented by the non-Federal sponsor at no cost to the federal government and are not eligible for credit.

(2) The types of alterations/modifications under 33 U.S.C. 408 that require approval by the Chief of Engineers include degradations, raisings, and realignments and other alteration/modifications not discussed in paragraph 3a(1) above, to the flood protection system. In instances where it is not clear if the proposed alteration/modification is within the authority delegated to the District Engineer for approval in accordance with 33 CFR 208.10 or when the proposed alteration/modification requires approval by the Chief of Engineers, there must be an engineering analysis conducted with consideration of the full range of loading conditions to determine the impact of the alteration/modification on systems performance (flood elevations and structural integrity). Such alterations/modifications include non-Federal levee tie-ins, ramps, riverside landscaping, retaining walls, fill against a levee (such as railroad trestles and overbuild), bridges, relief wells, seepage berms, and stability berms. If the engineering analysis indicates that system performance is adversely impacted by the alteration/modification, then the proposed alteration/modification must be submitted for approval by the Chief of Engineers. The "system performance" includes the portions of the watershed above and

SUBJECT: Clarification Guidance on the Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects

below the proposed site of alterations/modifications to the extent that adverse impacts can be identified. "Adverse impacts" include any significant increase in risk to public safety.

(3) Regulatory approval under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 for a structure within the waters of the United States does not, by itself, constitute approval for a project alteration/modification.

b. Risk Analysis.

(1) Non-Federal proposals to degrade, raise, or realign existing Corps projects under 33 U.S.C. 408 should be evaluated as new construction of Federal projects and the potential impact of these changes, including system impacts, must be evaluated in accordance with Corps regulations and policy. A risk analysis will be applied to all evaluations of alterations/ modifications to Corps flood damage reduction projects to be approved under 33 U.S.C. 408 in accordance with ER 1105-2-101 and shall apply to the following:

(a) Projects, whether with or without Federal funding, where an ongoing or proposed study considers alternative solutions,

(b) Where the proposed alterations/modifications under 33 USC 408 may impact levees within the purview of forthcoming EC 1110-2- 6067 (formerly known as draft ETL 1110-2-570), Certification of Levee Systems for the National Flood Insurance Program (NFIP) dated 30 September 2008.

(c) Alterations/modifications for which the non-Federal sponsor requests or intends to request credit either under Section 104 of WRDA 1986 or Section 2003 of WRDA 2007.

(2) Risk analysis is not required when evaluating the performance of an existing system where consideration of alternative solutions, USACE certification, or credit are not involved. Even though ER 1105-2-101, Section 6, Variables in a Risk Analysis, includes geotechnical and structural analysis, the risk and uncertainty analysis for evaluation of potential system impacts is limited to the hydrologic and hydraulic parameters. Impacts will be determined by comparing performance parameters as presented in ER 1110-2-101 for the existing or base condition to the condition resulting from the project alteration/modification. The base performance conditions are defined by authorized project features. USACE has provided technical guidance in EM 1110-2-1619, but has yet to fully develop the guidance needed to analyze risk and uncertainty for the geotechnical and structural performance of a system. Until such guidance is developed, deterministic procedures are appropriate for demonstrating geotechnical and structural integrity under the full range of loading conditions. For loading conditions

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where flood waters exceed the level of protection, the analysis shall include a breach analysis to assess impacts within the system. Under no circumstances will the analysis assume failure of any component of the levee or flood wall system for the flood up to the top of protection as a means to relieving systems impacts.

(3) The district and the non-Federal sponsor should work together to provide an appropriate assessment that incorporates state of the art analyses of other areas of uncertainty. Specific areas of concern include seismic stability, impacts of the overtopping loading conditions and potential impacts to interior drainage. Specific to seismic stability, the studies need to demonstrate that under normal operating conditions failure will not result in unexpected release of flows that would impact project performance.

c. Review Requirements.

(1) All documents submitted by the non-Federal sponsor for consideration under 33 U.S.C. 408 will require an Agency Technical Review (ATR). The ATR may be accomplished by the home district in which the proposed alteration/modification is under consideration. Vertical team coordination is required to assure technical requirements are met throughout the process. This coordination can be accomplished through In-Progress-Reviews (IPR) and during interim draft documentation review.

(2) In addition, documents submitted by the non-Federal sponsor for consideration under 33 U.S.C. 408 that require approval by the Chief of Engineers must undergo a Type II Independent External Peer Review (this is the Safety Assurance Review (SAR) set out under Section 2035 of WRDA 2007) prior to submission of the request for approval to HQUSACE. When the Corps is concurrently performing investigations that will entail a safety assurance review, the SAR for the overarching study will suffice but must be completed prior to initiation of construction. In cases where no Corps investigations are ongoing, an SAR on the proposed alteration/modification must be performed. The SAR must be performed by the non-Federal sponsor prior to a request for approval of the proposed alteration/modification. Guidance on the conduct of Independent External Peer Reviews, including Type II SAR's, is under development and will be forthcoming.

(3) Nothing in this guidance alters Division or District quality management responsibilities in accordance with ER 1110-1-12 and any associated regional guidance.

d. Report Review and Approval.

(1) Requests for approval by the Chief of Engineers of proposed alterations/modifications of an existing Corps project and the supporting documentation

**SUBJECT: Clarification Guidance on the Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects**

will be forwarded to the appropriate HQUSACE Regional Integration Team (RIT). The final decision document products shall include supporting Engineering analyses to the level of detail for preconstruction engineering and design in accordance with ER 1110-2-1150. ER 1110-2-1150 is being updated and is forthcoming. The submittal package will also include the District's memorandum requesting approval and the MSC endorsement of the request as well as the items listed in paragraph 5 of reference 1.a. and the following items:

- (a) A description of all other flood and/or storm risk management actions in the watershed, including current operations and proposed changes actively underway or planned for the future;
- (b) A copy of any related credit requests and a description of the sponsor's intent to seek credit and/or reimbursement, if applicable;
- (c) A risk analysis of the proposed alterations/modifications in accordance with ER 1105-2-101;
- (d) The District's analysis of the policy and legal compliance aspects of the proposed alterations/modifications;
- (e) The District Engineer's determination that the proposed alterations/modifications will meet USACE engineering and safety standards, and will not have significant adverse affects on the functioning of the protective facilities; and
- (f) A copy of any prior HQUSACE guidance regarding alterations/modifications of the project and other damage reduction projects in the watershed.

(2) The RIT will forward the submittal package to CECW-PC for a policy compliance review in accordance with the paragraph 5 of reference 1 a. and the attached Section 408 Submittal Checklist. The policy compliance review results will be provided to the Chief of Engineers or designee prior to approval. The RIT will coordinate the results, as needed, to correct or improve the package as necessary to address significant concerns.

e. Funding.

At this time, funds have not been specifically appropriated by line item for review of proposals under 33 U.S.C. 408. Potentially available sources of funds for review activities include Inspection of Completed Works (ICW) funds and, if there is an ongoing funded project activity directly related to the 408 proposal, project funds. In certain circumstances for alterations/modifications necessary for Federal transportation projects,

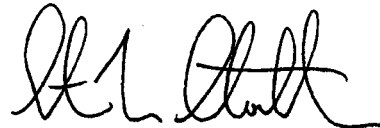


SUBJECT: Clarification Guidance on the Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects

USACE may accept and expend funds provided by an State DOT agency pursuant to section 139(j) of Public Law 109-59 (codified at 33 U.S.C. 139(j)) provided the Secretary of Transportation finds such review activities directly and meaningfully contribute to an underlying transportation project. In such cases, USACE only may accept funds in amounts necessary to permit USACE to meet the time limits for environmental review established for the project and only may accept funds for activities beyond the normal and ordinary capabilities permitted by USACE's general appropriations. HQUSACE will continue to investigate other avenues of funding for Corps activities under 33 U.S.C. 408.

4. Vertical Teaming: Since it is impossible to anticipate each and every scenario, vertical teaming is a must when there is doubt as to the appropriate course of action related to the application of this guidance. Please coordinate through the appropriate HQUSACE's RIT as needed to ensure that analyses and submittals are in accordance with policy. A guide has been enclosed to help identify the minimum required actions. Other actions should be addressed as appropriate.

FOR THE COMMANDER:



STEVEN L. STOCKTON, P.E.  
Director of Civil Works

Encl

DISTRIBUTION:  
(See pages 7 and 8)

**Final**  
**11/12/08**

**Section 408 Submittal Package Guide**

This guide is intended to ensure a complete submittal, aid the review process and serve as a guide for sponsors/applicants requesting approval of significant modifications or alterations to a locally or federally maintained Corps project requiring Chief of Engineers approval under 33 USC 408. Incomplete submittals will delay processing of applicant requests. This information will be submitted to the MSC for quality assurance review prior to making any recommendations to HQUSACE.

Applicant (Normally the Non-Federal Sponsor) Prepared Documents

1. Written request for approval of the project modification

- A detailed description of the proposed modification
- The purpose/need for the modification
- An appropriate map or drawing

2. Technical Analysis and Adequacy of Design. All necessary technical analysis should be provided. The list below is only a guide for typical items that would routinely be expected and is not intended to list every item that could be needed to make this determination.

- Geotechnical Evaluation.
  - Stability
  - Under seepage
  - Erosion Control
  - Vegetation
  - Material usage/borrow/waste/transport/hauling
- Structural
  - Bridges and related abutments
  - Pier penetrations of levee embankments
  - Diaphragm walls
  - Other structural components integral to the project
  - Gates or other operable features
- Hydraulic and Hydrology
  - Changes in inflow
  - Changes in water surface profiles and flow distribution
  - Assessment of local and system wide resultant impacts
  - Upstream and downstream impacts of the proposed alterations, including Sediment transport analysis as needed
  - Impacts to existing floodplain management

- Operation and Maintenance Requirements
  - Applicant facilities
    - Pre flood preparation
    - Post flood clean up
    - Sediment removal
  - Water control management plan
    - Impacts to other Federal projects within the basin
    - Corps facilities

### 3. Real Estate Analysis

- Reference ER 405-1-12, Chapter 12, Sections I and II.
  - Include:
    - Description of all Lands, Easements and Rights of Way required for the modification, including proposed estates
    - Description of all Lands, Easements and Rights of Way owned as a part of the authorized project
    - Maps clearly depicting both required real estate and existing real estate limits
    - Navigational servitude, facility relocations, relocation housing assistance and any other relevant factors

4. Discussion of Residual Risk. Discuss the changes to the existing level of risk to life, property as a result of the modification. Will the project incur damages more frequently as a result of flooding that will require Federal assistance under PL 84-99? Risk analysis will be used as the method for communicating residual risk.

5. Administrative record for key decisions for related actions for applicants proposed modification such as environmental reports, judges' decisions, permits, etc.

### 6. Discussion of Executive Order 11988 Considerations

- Justification to construct in the floodplain
- No practicable alternative determination, if Federal agency, Agency determination.  
Public Notice Notifications

7. Environmental Protection Compliance. All 408 actions must be in full compliance with all applicable Public laws, executive orders, rules and regulations, treaties, and other policy statements of the Federal government and all plans and constitutions, laws, directives, resolutions, gubernatorial directives, and other policy statements of States with jurisdiction in the planning area. Examples are State water and air quality regulations; State historic preservation plans; State lists of rare, threatened, or endangered species; and State comprehensive fish and wildlife management plans. The District must maintain full documentation of compliance as part of the administrative record. The submittal package provided to HQUSACE will document considerations with significant bearing on decisions regarding the 408 request. Typically the minimum submission will include the following:

- National Environmental Policy Act. The appropriate NEPA process will be determined by the district in consultation with agencies that regulate resources that may be affected by the proposed action. All resources listed in Section 122 of the Rivers and Harbors Act 1970 must be considered. The evaluation will include a description and analysis of project alternatives, the

significance of the effects of each alternative on significant resources. Direct, indirect, and cumulative effects of all reasonably foreseeable actions including the actions of others and natural succession must be considered and documented. A risk analysis must be completed to determine the significance of risks to human life & safety, and property. Mitigation plans must be well described. If Federal funds are or may be involved the mitigation plan must be incrementally justified. NEPA documents will be consistent with 33 CFR 230.

- Endangered Species Act. Coordination/consultation with the US Fish and Wildlife Service and/or NOAA Marine Fisheries Service must be complete. Each agency with jurisdiction over a species that may be affected by the proposed action must provide a letter/memo indicating completion of ESA coordination. This documentation may range from a memo saying no ESA protected species or habitats are in the project impact area through a Biological Opinion.
- Fish and Wildlife Coordination Act. Either a Final FWCA Report or a letter from the USFWS stating that a FWCA Report is not required must be included.
- Marine Protection, Research and Sanctuaries Act For projects involving ocean disposal, or dredged material disposal within the territorial seas, the discharge will be evaluated under Section 103 of the MPRSA. The disposal must meet the criteria established by the EPA (40 C.F.R. 227 and 228). The submittal will document that that materials to be discharged are consistent with the current criteria and the disposal site is suitable.
- Wild and Scenic Rivers Act. The submittal will document efforts to identify designated rivers or river reaches (including potential rivers) in the vicinity of the project, and describe follow-up coordination with the agency having management responsibility for the particular river. If a designated river reach is affected, a letter indicating completed coordination is required from the managing agency.
- Coastal Zone Management Act. If the proposed action is in a coastal zone documentation of a "determination of consistency" with the state coastal zone management program the appropriate State agency (16 U.S.C 1456) must be included.
- Clean Air Act. This is a two-part compliance process. First, the submittal must include a determination that the proposed action is consistent with the Implementation Plan of the affected jurisdiction(s), and concurrence of the appropriate regulatory agency, or a conditional permit. Second, the submittal must include a letter from the USEPA that they have reviewed and commented on the environmental impact evaluations including the NEPA documents.
- HTRW. HTRW includes but is not limited to the Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act, and the Toxic Substances Control Act. The submittal package must include documentation that the USEPA and appropriate State and Tribal agencies with jurisdiction or expertise have been given reasonable opportunity to comment on the proposed action and that their input has been fully considered. The Corps will not incur additional liability related to HTRW.
- National Historic Preservation Act. This includes all other applicable historic and cultural protection statutes. The submittal package will include documentation that the Advisory Council on Historic Preservation, and appropriate State and Tribal agencies with jurisdiction or expertise has been given a reasonable opportunity to comment on the proposed action and that their input

has been fully considered. It is not expected that actual mitigation will be completed but appropriate letters indicating completed Consultation determination of significance must be provided.

- Noise Control Act. Documentation of the significance of noise likely to be generated during construction of the proposed project and the noise that may result due to implementation must be provided. If significant noise may result, a noise mitigation plan must be provided.

### District Prepared Documents and Analysis of Applicants Request to be submitted to MSC

1. Transmittal letter to MSC Commander with district's determination of technical soundness and environmental acceptability.
  - a. A physical and functional description of the existing project
    1. Name of authorized project
    2. authorizing document
    3. Law/Section/Date of project authorization
    4. Law Sections/Dates of any post-authorization modifications
    5. Non-Federal sponsor
    6. Congressional Interests (Senator(s), Representative(s) and District(s))
  - b. Project Documents:
    1. Type of Decision Document:
    2. Agency Technical Review (ATR) approval Date
    3. Independent External Peer Review (IEPR) approval date
  - c. Policy, Legal and Technical Analysis:
    1. Is the original project authority adequate to complete the project as proposed?
    2. Has the District Counsel reviewed and approved the decision document for legal sufficiency?
    3. Have all aspects of ATR been completed with no unresolved issues remaining?
    4. Have the District Commander documented policy/legal/technical compliance of the decision document?
  - d. Written request for approval of the project modification (applicant prepared)
    1. A detailed description of the proposed modification
    2. The purpose/need/rationale for the modification
  - e. A description of any related, ongoing Corps studies and studies by others within the watershed
  - f. A description and listing of other Corps projects, ongoing and completed, in the watershed
  - g. A description of any projected/anticipated credit (section 215/104, etc.) for project modification work and date credit agreement(s) signed
  - h. Sponsor letter of understanding of their responsibility to perform all required OMRR&R for project modifications. For approved alterations/modifications, the non-Federal sponsor shall revise/update the

O&M Manual to reflect the non-Federal O&M responsibilities and the O&M Manual shall be approved by the District Engineer.

i. Real Estate Analysis Review (District/Division)

j. Agency Technical Review (ATR), ER 1110-1-12 para. 3-8. (District coordinates review)

Provide a description of the technical review team, consolidate and analyze their comments, resolution of comments and district commentary on adequacy of technical support and submit to MSC. This is the section 408 technical analysis. *Prior coordination with MSC is required to determine ATR requirements for each submittal. New Quality Management ER under review will require all Agency Technical Review (ATR), formerly ITR, .*

2. If there is an associated Section 404/10 permit action, the required public interest and technical evaluations under 33 USC 408 can be done concurrently with that action. Upon completion of the public interest determination and of the technical analyses regarding the impact of the proposed modification on the usefulness of the project, the District Engineer will make a recommendation (with supporting documentation) through the Division Commander to the Chief of Engineers (Attn: Appropriate RIT) for his consideration and approval under 33 USC 408. The District Engineer will make the final Section 404/10 permit decisions following the Chief of Engineers decision under 33 USC 408.

- Where the 408 action requires an EIS and the Corps is the Lead Agency the District will draft the ROD, but it will not be signed until the Corps has completed its 408 analysis *and the Chief of Engineer's has issued 408 approval*. The Corps' ROD and the 408 request will be processed as concurrently as possible to reduce the delay between the 408 decision and ROD. Since the 408 approval requires the highest level of approval, the ROD will be signed in HQUSACE. After the 408 request is approved and the ROD is signed, the district may issue any needed Section 404/10 permits.
- Where the 408 action requires an EA and FONSI, the Corps is the lead Federal agency the District will prepare the EA and the District Engineer will draft the FONSI analyzing the 408 request and any other Corps action, and submit it to the Chief of Engineers for review and approval. After the 408 authorization is signed by the Chief of Engineers the District Engineer may sign the FONSI and issue any needed Section 404/10 permits

3. Coordination of Section 404/10 and NEPA compliance with 408 requests When Other Agencies are Involved

- HQUSACE has determined that the EIS for projects led by another Federal agency and including a component requiring Corps 408 authorization will require two RODs. The Lead Agency under NEPA will prepare a ROD for the overall project. The Corps would be a Cooperating Agency and thus be allowed to adopt the Lead Agency's EIS. The second ROD, will be specific to the Corps' actions, including the 408 approval and/or Section 404/10 permits. The District will draft the ROD, but it will not be signed until the Corps has completed its 408 analysis *and the Chief of Engineer's has issued 408 approval*. The Corps' ROD and the 408 request will be processed as concurrently as possible to reduce the delay between the 408 decision and ROD. Since the 408 approval requires the highest level of approval, the ROD will be signed in HQUSACE. After the 408 request is approved and the ROD is signed, the district may issue any needed Section 404/10 permits.

## MSC prepared documentation and analysis of District submission

### Policy and Legal Compliance Review

1. Has the MSC certified the legal/policy/technical and quality management of the decision document?
2. MSC Legal certification approval date
3. MSC certification of policy compliance date