

# Reclamation Manual

## Directives and Standards

---

<b>Subject:</b>	Power Facilities Technical Documents
<b>Purpose:</b>	Establishes the requirements for technical documents describing the Bureau of Reclamation power operations and maintenance (PO&M) procedures, practices, and schedules. The benefit of this Directive and Standard (D&S) is ensuring Reclamation hydroelectric power is to be generated in a safe, reliable, cost-effective, and environmentally acceptable manner, consistent with project authorizations and applicable laws and regulations.
<b>Authority:</b>	Reclamation Project Act of 1902 (Act of June 17, 1902, ch. 1093, 32 Stat. 388), the Town Sites and Power Development Act of 1906 (Act of April 16, 1906, ch. 1361, 34 Stat. 116), Federal Power Act of 1920 (Act of June 10, 1920, ch. 285, 41 Stat. 1063), Reclamation Project Act of 1939 (Act of August 4, 1939, ch. 418, 53 Stat. 1187), Energy Policy Act of 1992 (Act of October 24, 1992, 106 Stat. 2776), Energy Policy Act of 2005 (August 8, 2005, 119 Stat. 594), and acts relating to individual dams or projects.
<b>Approving Official:</b>	Senior Advisor, Hydropower
<b>Contact:</b>	Manager, Power Resources Office (PRO) (86-51000)

---

1. **Introduction.** Power facility technical documents (Technical Documents) establish uniform PO&M procedures, practices, and schedules to be implemented by staff at Reclamation power facilities. These documents serve as the resource for the regions to define their techniques and approaches. The intent is to provide a sufficient level of detail to ensure consistent application and still provide flexibility for the use of innovative techniques and approaches to meet PO&M requirements. This D&S establishes the requirements associated with the development, approval, and implementation of Technical Documents.
2. **Applicability.** This release is applicable to any Reclamation office or employee engaged in and/or supporting PO&M at Reclamation reserved works power facilities within the limits imposed on Reclamation by Federal laws, orders, and regulations, including limitations on the expenditure of Federal funds.
3. **Requirements and Responsibilities.**
  - A. The Senior Advisor, Hydropower oversees the PO&M program and is responsible for the overall development, improvement, and maintenance of Technical Documents defining PO&M program requirements. Technical Documents consist of Facilities Instructions, Standards, and Techniques (FISTs) Manuals, Power Equipment Bulletins (PEBs), and Power Reliability Compliance Bulletins (PRCBs). Technical Documents

# Reclamation Manual

## Directives and Standards

---

are components of the Reclamation Manual (RM); however, permanent deviations are in place authorizing the Senior Advisor, Hydropower to deviate from certain RM formatting and release procedure requirements.

- B. FISTs establish Reclamation PO&M practices, procedures, and schedules; PEBs deliver urgent and immediate notifications of equipment-specific issues, actions, and mitigation requirements not available in FIST Manuals. As determined by the PRO Manager, PEBs may be incorporated into a FIST as part of a FIST revision. Should the PEB be incorporated into a FIST, the PEB is to be withdrawn by the PRO Manger with archival copies annotated to the FIST which addressed the PEB. PRCBs establish PO&M requirements to ensure Reclamation facility compliance with applicable North American Electric Reliability Corporation (NERC) and Western Electricity Coordination Council (WECC) reliability standards.
- C. The following requirements and responsibilities apply when developing, approving, and implementing Technical Documents:
  - (1) **Development.**
    - (a) As directed by the Senior Advisor, Hydropower, the PRO Manager will administer Technical Document development, including the commission and coordination with development support resources and identification and distribution of funding to support resources. These resources may include PRO staff, regional power managers (RPM) and subject matter experts, and the Technical Service Center (TSC).
    - (b) The Director, TSC is responsible for executing service agreement terms and conditions, commissioned by the PRO to support Technical Document development.
    - (c) Regional directors shall support the development and review of Technical Documents and ensure the RPM participate in Technical Document development.
    - (d) The following process requirements apply to FIST Manual and PRCB development:
      - (i) The PRO Manager will consult with the RPM on the need for new, major changes or deletion of Technical Documents. Drafting and/or review teams will be coordinated with the RPM as appropriate. A project timeline for substantive changes will be developed.
      - (ii) The Senior Advisor, Hydropower will sign a memorandum distributing draft Technical Documents to the RPM, RM coordinators, labor relations, RM Manager and team members for internal 45-day review

# Reclamation Manual

## Directives and Standards

---

instead of the traditional RLT members. An email, instead of a formal memorandum, from the RM coordinator with consolidated comments from the reviewers will meet the intent for submitting review comments.

- (iii) The Senior Advisor, Hydropower in coordination with the RM Manager, will post the draft FIST RM release for a 30-day external review. This will be completed by e-mail to the RM Manager with approval to post the draft release for the external review.
  - (iv) The PRO program leads will address all substantive internal and external comments using the required RM comment disposition matrices.
  - (v) The internal and external comment disposition matrices for the FIST Manuals will be posted by the RM Manager to the RM Intranet site, and the internal comment disposition matrix for the PRCBs will be posted by PRO to the PRO SharePoint. The PRO Manager will coordinate with the relevant reviewers from the appropriate directorates on disposition of their comments.
- (e) The following process requirements apply to PEB development:
- (i) The PRO Manager will consult with the RPM on the need for new PEBs.
  - (ii) The PRO Manager will coordinate a 2-week review of all draft PEBs with the RPM prior to publishing.
  - (iii) The PRO Manager will post the PEB to the Reclamation Intranet Power Program site including comment disposition matrix if comments were submitted.

### (2) **Approval.**

- (a) The Senior Advisor, Hydropower will approve all Technical Documents for final publication and disseminate approved documents as appropriate. FIST Manuals will be posted to the Reclamation Internet Power Program site, PRCBs and PEBs will be posted to Reclamation Intranet Power Program site. Any superseded Technical Documents will be archived.
- (b) Technical Documents must be published with an effective date to afford the offices responsible for implementing the Reclamation standard practice sufficient time to incorporate the practice into the local PO&M process.

# Reclamation Manual

## Directives and Standards

---

### (3) **Implementation.**

- (a) Regional directors must ensure Technical Documents and associated deviations and/or variances (see Paragraph 5 of this D&S) are properly implemented.
- (b) RPM must provide PO&M program oversight within their respective region, with area and facility managers directly responsible for PO&M program implementation ensuring facilities are maintained in a safe and reliable manner in accordance with all Technical Document requirements.
- (c) The PRO Manager must make determinations based on review of data that the Internal Controls in place can anticipate, highlight, and resolve programmatic and control problems or risks.
- (d) The Capital Asset and Resource Management Application (CARMA) will be used to schedule and document completion of all PO&M activities - which include Technical Document requirements.
  - (i) Regional CARMA job plan approval processes and work order processes shall be developed and documented by regional directors.
  - (ii) Area office or facility managers are responsible for facility-level administration and implementation of CARMA job plans and work orders – including all requirements described below, collectively providing that PO&M activity documentation is approved, performed, maintained, and reviewed:
    - (aa) Ensuring job plans are approved in accordance with defined regional processes and provide sufficient directions for accomplishing work in a consistent manner.
    - (bb) Ensuring work is performed as described in work orders. Completed work orders are to be reviewed for technical sufficiency by individuals knowledgeable and experienced with the work described, in accordance with the regional work order approval process. If a work order task cannot be completed, ensuring facility staff are to document the reason, consult with a supervisor, and schedule necessary corrective action(s).
    - (cc) Ensuring PO&M evidence is maintained in accordance with record retention policies, including attachment of all files that contain information supporting completed work orders (e.g., additional instructions, check sheets, test results, notes, etc.).

# Reclamation Manual

## Directives and Standards

4. **Technical Document Content.** Technical Documents are premised on the belief there may be multiple ways to accomplish tasks and facilities have discretion as to how tasks will be accomplished based on equipment configurations and available resources. Reclamation's regions, PRO, and the TSC agree that when consistent Reclamation-wide practices are needed to maintain the Federal investment, they will be designated by **bold and bracketed text**. The regions, PRO, and TSC will collaborate to ensure that Reclamation-wide required PO&M practices are designated by **bold and bracketed text**.

### A. Requirements in Bold and Bracketed Text.

- (1) **{Red, bold, and bracketed text}** delineates mandatory PO&M requirements that Reclamation has determined must be consistent among all power facilities.
  - (a) A senior executive (generally the regional director) must request a deviation from requirements in **{red, bold, and bracketed text}** by submitting a deviation request as required by RM D&S, *Request for Deviation from a Reclamation Manual Requirement and Approval or Disapproval of the Request* (RCD 03-03).
  - (b) See RM, *Delegations of Authority*, Paragraph 4.Q.(2) for delegations related to the approval of RM deviations.
- (2) **[Black, bold, and bracketed text]** also delineates required power O&M activities.
  - (a) An office must request a variance from requirements in **[black, bold, and bracketed text]** through the regional chain of command by submitting a Variance Form (POM-300).<sup>1</sup>
  - (b) The regional director or authorized staff determines whether to approve the request.

### B. Plain Text.

- (1) Information in plain text (non-bold and bracketed text) includes instructions, background information, and best practices to ensure that equipment is operated and maintained in reliable condition and must be consulted when developing job plans.

<sup>1</sup>The Variance Form (POM 300) is available at:  
<https://teamssp.bor.doi.net/printanddup/forms/POM%20Forms/POM-300.pdf>

# Reclamation Manual

## Directives and Standards

---

- (2) Regional, area office, and facility staff shall ensure that PO&M tasks and frequencies discussed in plain text are planned and executed to maintain power facilities in safe and reliable condition.
  - (3) Regional directors have discretion to assign responsibilities for the implementation of PO&M activities described in plain text through the regional job plan approval process.
- C. **Document Philosophy.** Technical Documents are stand-alone documents. Procedures, practices, and schedules defined in these documents will reference other publications as a source as applicable but cannot use the referenced publications as an extension of the RM.
5. **Deviations and Variances.**
- A. A deviation is a memorandum approving a request for a deviation from a FIST requirement in **{red, bold, and bracketed text}** granted in accordance with RCD 03-03. Per RCD 03-03 the Senior Advisor, Hydropower is responsible for approving or disapproving deviation requests and will notify the requestor of the decision.
  - B. Procedures, practices, and schedules that appear in **[black, bold, and bracketed text]** must be followed or have an approved variance. A variance outlines and explains an alternative practice, procedure, or schedule that does not meet the minimum Reclamation standard defined in the Technical Document.
    - (1) Regional directors, or their designated representatives, are responsible for the approval/disapproval (signature) of variances which must contain a unique identifier and an effective date. Variances which are revised, modified, or superseded, must also be approved/disapproved (signed) by the regional director, or their designated representative and contain a unique identifier and a revision date.
    - (2) The variance will include direct reference to industry practices, manufacturer's instructions, standing operating procedures, designer's operating criteria, maintenance experience, or professional judgment. The level of detail must be sufficient to determine the frequency of maintenance, general procedures for conducting the maintenance, and effective dates. The original will be retained by the facility. A copy of the approved variance will be maintained by the area office and provided to the RPM and PRO Manager.
  - C. Regional directors are responsible for identifying regional staff authorized to approve variances and to request deviations from the RM to the Senior Advisor, Hydropower. Applicable to both variances and deviations, regional directors are responsible for ensuring the following:

# Reclamation Manual

## Directives and Standards

---

- (1) variances and deviations are documented per RM requirements;
  - (2) copies of approved variances are provided to the RPM and the PRO Manager; and
  - (3) in addition to Technical Document requirements, associated variances or deviations are properly implemented.
- D. The PRO Manager will maintain and evaluate approved variances and requested deviations to determine if changes are needed in Reclamation's standard PO&M requirements. The PRO Manager will also determine if local implementation of PRO&M requirements (including variances) are valid.
6. **Definitions.**
- A. **Deviation.** A memorandum approving a request for a deviation from a Reclamation Manual requirement granted in accordance with RM D&S RCD 03-03. Technical Document procedures, practices, and schedules that appear in **{red, bold, and bracketed text}** must be followed or have an approved deviation.
  - B. **Facilities Instruction, Standards, and Techniques or FIST.** Reclamation Technical Documents that describe practices, procedures, and schedules used to establish requirements for the PO&M of Reclamation power facilities.
  - C. **Power Equipment Bulletin or PEB.** Reclamation Technical Documents that provide expedient notification of equipment-specific issues, actions, and mitigations when operating or maintaining that equipment. PEBs will provide explicit indication of the action which the Reclamation offices may address. PEBs also provide general PO&M information to Reclamation offices. This information usually involves, information regarding PO&M practices, procedures, equipment or recommendations.
  - D. **Power Reliability Compliance Bulletin or PRCB.** Reclamation Technical Documents that outline how Reclamation complies with Electrical Reliability Standards. PRCBs provide special notification of bulk electric system (BES) reliability specific issues, actions, and mitigations when operating or maintaining BES equipment, and provide explicit indications for the action which the Reclamation offices must address. PRCBs are also used to provide more general BES reliability information which must be conveyed to the Reclamation PO&M offices.
  - E. **Regional Job Plan Approval Process.** The regional director establishes and documents the approval authority and steps by which a job plan will be created, revised and approved to ensure consideration and incorporation of all Technical Document requirements into the maintenance and operational practices of a power facility.

# Reclamation Manual

## Directives and Standards

---

- F. **Reliability Compliance.** Activities associated with requirements listed in Reliability Standards or rulings by the Federal Energy Regulatory Commission relative to the reliability of the BES.
  - G. **Technical Documents.** A synonym for FISTs, PEBs, and PRCBs, which are documents that define Reclamation's PO&M requirements.
  - H. **Variance.** An approved document outlining and explaining an alternative practice, procedure, or schedule that does not meet the minimum Reclamation standard defined in a Technical Document. Technical Document procedures, practices, and schedules that appear in [**black, bold, and bracketed text**] must be followed or have an approved variance.
7. **Review Period.** The originating office will review this release every 4 years.

## RECLAMATION MANUAL TRANSMITTAL SHEET

Effective Date: \_\_\_\_\_

Release No. \_\_\_\_\_

Ensure all employees needing this information are provided a copy of this release.

### Reclamation Manual Release Number and Subject

### Summary of Changes

NOTE: This Reclamation Manual release applies to all Reclamation employees. When an exclusive bargaining unit exists, changes to this release may be subject to the provisions of collective bargaining agreements.

### Filing instructions

Remove Sheets

Insert Sheets

All Reclamation Manual releases are available at <http://www.usbr.gov/recman/>

Filed by: \_\_\_\_\_

Date: \_\_\_\_\_