

Reclamation Manual

Directives and Standards

Subject:	Power Facilities Technical Documents
Purpose:	Establish the requirements for the technical documents describing the Bureau of Reclamation operations and maintenance (O&M) procedures, practices, and schedules. The benefit of this Directive and Standard (D&S) is ensuring the reliability of Reclamation's power facilities.
Authority:	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.
Approving Official:	Director, Technical Resources
Contact:	Power Resources Office, 86-61600

1. **Introduction.** Reclamation is striving to provide a uniform set of O&M procedures, practices, and schedules to be utilized by the staff at Reclamation power facilities for the O&M of power facilities. The uniform set of O&M procedures, practices, and schedules serve as the resource for the regions to define their techniques and approaches and are intended 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 the equipment O&M requirements. This D&S establishes the requirements associated with the documents containing the procedures, practices, and schedules.
2. **Applicability.** This release applies to all Reclamation power facilities operated and maintained directly by Reclamation staff. All Reclamation offices involved in power O&M are required to implement this D&S within the limits imposed on Reclamation by Federal laws, orders, and regulations, including limitations on the expenditure of Federal funds.
3. **Definitions.**
 - A. **Facilities Instruction, Standards, and Techniques (FIST).** Reclamation documents that describe practices, procedures, and schedules and are used to establish requirements for the O&M of Reclamation power facilities and equipment.
 - B. **Power Equipment Bulletin (PEB).** Reclamation documents that provide special 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 must address. PEBs also provide general O&M information to

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Reclamation O&M offices. This information usually involves recommendations, suggestions, or information regarding practices, procedures, or equipment that is useful in the O&M of facilities.

- C. **Power Reliability Compliance Bulletin (PRCB).** Reclamation documents that provide special notification of bulk electric system (BES) reliability specific issues, actions, and mitigations when operating or maintaining BES equipment. PRCBs will provide explicit indication of 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 O&M offices.
 - D. **Reliability Compliance.** Activities associated with requirements listed in Reliability Standards or rulings by the Federal Energy Regulatory Commission (FERC) relative to the reliability of the BES.
 - E. **Technical Documents.** A synonym for FISTs, PEBs, and PRCBs.
 - F. **Variance.** An approved alternative practice, procedure, or schedule that does not meet the minimum Reclamation standard defined in a FIST manual. The document 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.
4. **Responsibilities.**
- A. **Director, Technical Resources.** The Director, Technical Resources, or as designated, is responsible for administration of FISTs, PEBs, and PRCBs.
 - B. **Director, Technical Service Center.** The Director, Technical Service Center, utilizing funding provided by the Power Resources Office Manager, is responsible for:
 - (1) developing the various FISTs as commissioned by the Power Resources Office Manager;
 - (2) incorporating comments received into the FISTs;
 - (3) publishing approved FISTs;
 - (4) publishing the various PEBs;
 - (5) archiving PEBs addressed by the subsequent FIST; and
 - (6) maintaining an adequate supply of copies of FISTs and PEBs to support the needs of the regions.

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- C. **Technical Resources, Power Resources Office Manager.** The Power Resources Office Manager is responsible for:
- (1) commissioning the FIST development by the Technical Services Center or Power Resources Office;
 - (2) overseeing the revision of FISTs and PEBs;
 - (3) approving FISTs for final publication;
 - (4) developing, coordinating, and publishing of PRCBs as commissioned by the Reliability Council;
 - (5) coordinating the revisions of FISTs;
 - (6) maintaining and evaluating variances approved by regional directors to determine if changes are needed in Reclamation's standard O&M requirements; and
 - (7) identifying the funding sources and distributing funding to support service providers' efforts to develop the FISTs, PEBs, and PRCBs.
- D. **Regional Directors.** Regional directors are responsible for:
- (1) supporting the development and review of FISTs;
 - (2) identifying staff who are authorized to approve FIST variances;
 - (3) ensuring that the regional power manager participates in the development of D&Ss related to the power O&M of Reclamation facilities;
 - (4) ensuring variances are utilized to document variations from the FISTs, as needed for the O&M of power facilities and equipment;
 - (5) ensuring that a copy of approved variances is provided to the regional power manager and Power Resources Office Manager; and
 - (6) ensuring that FISTs and associated variances are utilized and implemented for the O&M of equipment in power facilities.
- E. **Reliability Council.** The Reliability Council will direct the development of Reclamation discretionary guidance on reliability compliance.
5. **Technical Document Content.** FIST procedures, practices, and schedules that appear in black bold and bracketed text are considered Reclamation requirements for the O&M of equipment in power facilities. Variation from the Reclamation required standard practice (black bold and

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bracketed FIST text¹) is acceptable provided that an approved variance exists. FIST procedures, practices, and schedules that appear in red bold and bracketed text are related to compliance issues such as safety (Occupational Safety and Health Administration) or reliability (North American Electric Reliability Corporation) and cannot be varied from. Each FIST and PEB is a stand-alone document. Procedures, practices, and schedules defined in the FISTs will reference other publications as a source, as applicable, but cannot use the referenced publications as an extension of the published practice.

6. **Technical Document Administration.** All 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 O&M process. Each office with administrative responsibility will ensure that at least one copy of each approved version of the respective technical documents are retained in a secure archived and retrievable manner for 6 years from the date that it was superseded. The process and authority over the publication of technical documents are defined as follows:
 - A. **FISTs.** The Power Resources Office Manager commissions the Technical Services Center for the development, modification, and review of FISTs. The Technical Services Center or Power Resources Office, as commissioned, will coordinate development, modification, and review of FISTs with regional subject matter experts to the degree possible. FISTs will be submitted to the regional power managers by the Power Resources Office Manager for review and comment within their respective region for a period of time as agreed to by all the regional power managers or for a minimum of 30 days. Comments incorporated into the FISTs will reflect the majority response received by the Power Resources Office Manager; however, the Power Resources Office Manager has the final determination of the FIST content. Publication of the FISTs will be limited to errata sheets, which must include a cover page summarizing the changes and listing the pages involved. The Power Resources Office Manager will develop annotation and notification procedures. The Technical Services Center or Power Resources Office, as commissioned, will combine the approved FISTs and errata sheets for web publishing. The errata sheets will be maintained until the FISTs are republished following the review and comment process. FISTs approved by the Power Resources Office Manager will be disseminated initially by the Power Resources Office Manager to all appropriate offices. FISTs will be posted on the Internet and Intranet by the Technical Services Center.
 - B. **PEBs.** Urgent and immediate notifications of changes in FISTs will be published as PEBs directly by the Technical Services Center, Infrastructure Services Division, until the PEB information is addressed in the relevant FISTs through the review and comment process and subsequently approved for publication. As determined necessary, PEBs will also contain urgent and immediate notifications of practices, procedures, or schedules not contained in FISTs. In either case, once the relevant FISTs are published, the PEBs will be withdrawn by the Technical Services Center, Infrastructure Services Division and archival copies annotated with reference to the FISTs which address the PEBs. PEBs approved by

¹Procedures, practices, and schedules in FIST that are in plain text are suggested O&M activities and are not requirements; therefore, variation from suggested procedures, practices, and schedules do not require a variance.

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the Director, Technical Services Center, or designee, will be disseminated to all appropriate offices by the Technical Services Center, Infrastructure Services Division. PEBs will be posted on the Intranet by Technical Services Center, Infrastructure Services Division.

- C. **PRCBs.** The Reliability Council commissions the Power Resources Office to develop the PRCBs. Once approved by the Reliability Council, the PRCBs will be published electronically by the Power Resources Office Manager and disseminated via email to all offices managing BES equipment. The PRCBs will also be posted on the Intranet for 5 years or until superseded.
- D. **Variations.** The regional directors, or their designated representatives, are responsible for the approval/disapproval (signature) of variations from the FIST which must contain a unique identifier, and an effective date. Variations 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. The original will be retained by the facility. A copy of the approved variation will be maintained by the area office and provided to the regional power manager and Power Resources Office Manager.