

# Reclamation Manual

## Directives and Standards

<b>Subject:</b>	Power Review of Operation and Maintenance (PRO&M) Program
<b>Purpose:</b>	To evaluate the application and effectiveness of power operations and maintenance (O&M) through periodic assessments of each power facility. The Bureau of Reclamation benefits from this Directive and Standard (D&S) through its evaluation of power O&M performance and accomplishments, which ensures consistency and accountability throughout the power program.
<b>Authority:</b>	Reclamation Project Act of 1902 (Act of June 17, 1902, 32 Stat. 388); the Town Sites and Power Development Act of 1906 (Act of April 16, 1906, ch. 1631, 34 Stat. 116); Reclamation Project Act of 1939 (Act of August 4, 1939, ch. 418, 53 Stat. 887); the Flood Control Act of 1944 (Act of December 22, 1944, ch. 665, 58 Stat. 887); the Department of Energy Act of 1977 (Act of August 4, 1977, Pub. L. 95-91; 91 Stat. 565); Energy Policy Act of 2005 (Act of August 8, 2005, 119 Stat. 594); and acts relating to individual dams or projects.
<b>Approving Official:</b>	Senior Advisor, Hydropower
<b>Contact:</b>	Power Resources Office (PRO), 86-51000

1. **Introduction.** Reclamation Manual Policy P14 establishes *Power Operations and Maintenance Technical Standards*. The goal of Reclamation's power O&M Program is to properly operate and maintain Federal hydropower assets to enable the safe and reliable delivery of water and power, ensure the safety of employees and the public, and comply with regulatory standards. To further this goal, Reclamation's PRO&M Program evaluates power facility performance of power O&M activities, including facility management, Supervisory Control and Data Acquisition-Industrial Control Systems (SCADA-ICS), operations, mechanical maintenance, and electrical maintenance. PRO&M reviews promote identifying deficiencies at an early state to avoid more significant safety issues, equipment failures, or extraordinary maintenance. PRO&M reviews also identify best practices and promote power O&M information sharing throughout Reclamation.
2. **Applicability.** This D&S applies to all Reclamation owned and operated power facilities and personnel within Reclamation.
3. **Definitions.**
  - A. **Annual Facility Review (AFR).** A review of management, operations, SCADA-ICS, mechanical maintenance, and electrical maintenance performed annually by local facility personnel.
  - B. **Capital Asset Resource Management Application (CARMA).** The computer program used to schedule and track Reclamation power O&M activities.

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- C. **Comprehensive Facility Review (CFR).** A review of management, operations, SCADA-ICS, mechanical maintenance, and electrical maintenance performed every 6 years by personnel external to the region.
  - D. **Periodic Facility Review (PFR).** A review of management, operations, SCADA-ICS, mechanical maintenance, and electrical maintenance performed every 6 years by personnel internal to the region.
  - E. **Power Review Information System (PRIS).** The system used to track recommendations from power program reviews.
4. **Responsibilities.**
- A. **Senior Advisor, Hydropower.** The Senior Advisor, Hydropower, is responsible for:
    - (1) sponsoring the PRO&M program;
    - (2) communicating with regional directors and resolving any PRO&M issues;
    - (3) ensuring that all power facilities receive a CFR; and
    - (4) preparing and transmitting the Annual Power O&M Summary Report.
  - B. **Regional Directors.** Regional Directors are responsible for:
    - (1) ensuring that all power facilities receive an AFR or PFR;
    - (2) conducting an annual power O&M meeting with area managers responsible for power facilities, the regional power manager, the Manager, PRO, the Senior Advisor, Hydropower, and the Deputy Commissioner, Operations, or designee;
    - (3) ensuring facilities are reviewed per standards set forth in Facilities Instructions, Standards, and Techniques Volume 6-5, *Power Review of Operations and Maintenance Program*; and
    - (4) providing management, operations, SCADA-ICS, electrical, and mechanical reviewers for the PRO&M Program.
  - C. **Manager, PRO.** The Manager, PRO, is responsible for:
    - (1) providing oversight of Reclamation power O&M practices;
    - (2) administering the PRO&M Program;
    - (3) informing the Senior Advisor, Hydropower of PRO&M Program activities;

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- (4) communicating with area managers and regional power managers and resolving any PRO&M issues;
- (5) sponsoring the PRO&M Steering Committee;
- (6) transmitting memoranda informing area offices of upcoming CFRs; and
- (7) scheduling and conducting CFRs, which includes:
  - (a) establishing the CFR teams;
  - (b) establishing cost-estimates for the CFR;
  - (c) transmitting 120-day memoranda to area managers, including data requests;
  - (d) assisting the CFR team through the review process; and
  - (e) coordinating, publishing, and distributing CFR reports.

**D. Area Managers.** Area Managers are responsible for:

- (1) conducting AFRs and tracking completion in the Capital Asset and Resource Management Application (CARMA);
- (2) providing logistical, technical, and management assistance for CFRs and PFRs;
- (3) ensuring that electronic checksheets are prepared in a timely fashion in advance of CFRs or PFRs in accordance with the review schedule;
- (4) reporting the status of the PRO&M report findings and recommendations to the regional director and regional power manager;
- (5) funding CFRs and PFRs; and
- (6) providing management, operations, SCADA-ICS, electrical, and mechanical reviewers, as requested, in support of the PRO&M Program.

**E. Regional Power Managers.** Regional Power Managers are responsible for:

- (1) maintaining a comprehensive inventory of regional power facilities;
- (2) scheduling and conducting PFRs, which includes:
  - (a) establishing the PFR teams;
  - (b) establishing cost-estimates for PFRs;

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- (c) transmitting 120-day memoranda to area offices, including data requests;
  - (d) leading the PFR team during the review process; and
  - (e) coordinating, publishing, and distributing PFR reports.
- (3) tracking completion of PFRs in CARMA;
  - (4) assisting the PRO in scheduling and conducting CFRs;
  - (5) updating the regional resource list with PRO&M Steering Committee members;
  - (6) preparing and submitting Annual Power O&M reports

**F. PRO&M Program Manager.** The PRO&M Program Manager is responsible for:

- (1) maintaining PRO&M checksheet templates in conjunction with Technical Service Center (TSC) technical experts;
- (2) maintaining PRO&M Program documents, including CFR and PFR report templates;
- (3) assisting regional and area office staff in conducting AFRs and PFRs;
- (4) completing a quarterly PRIS recommendations summary report;
- (5) maintaining the PRO&M Program information and documents on the intranet;
- (6) developing and facilitating training on the PRO&M Program;
- (7) facilitating the PRO&M Steering Committee;
- (8) updating the master list of available PRO&M Program reviewers with the PRO&M Steering Committee members;
- (9) updating cost estimates and checksheets with the PRO&M Steering Committee;
- (10) resolving or completing all recommendations made to the PRO;
- (11) maintaining the CFR and PFR schedule as necessary; and
- (12) coordinating dispute resolution between PRO&M reviewers and facility staff.

**G. PRO&M Steering Committee.** The PRO&M Steering Committee is responsible for:

- (1) communicating information to regional, area, and field offices;

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- (2) providing feedback to and coordinating with the Manager, PRO;
- (3) developing and facilitating training for PRO&M Program reviewers;
- (4) reviewing, developing, and revising PRO&M Program documentation;
- (5) tracking and monitoring the costs associated with conducting reviews;
- (6) looking at emerging issues and tracking systemic/key issues;
- (7) collecting feedback on the PRO&M Program and revising the program based on that feedback;
- (8) coordinating the PRO&M Program with associated Reclamation programs;
- (9) providing coaching, mentoring, advice, and feedback for reviewers;
- (10) providing advice and solutions regarding the PRO&M Program;
- (11) interfacing with area managers and regional power managers to resolve issues;  
and
- (12) working to continually improve the PRO&M Program.

H. **Chief, Infrastructure Services Division, TSC.** The Chief, Infrastructure Services Division is responsible for providing team leads and SCADA-ICS, electrical, and mechanical reviewers for CFRs.

5. **Coordination with Other Reviews.** AFRs, PFRs, and CFRs should be coordinated with other review and inspection activities to reduce the impact on field staff. Schedules for all AFRs, PFRs, and CFRs must be coordinated with regional, area, and facility personnel who are most cognizant of potential conflicts. However, coordination with other activities should not be allowed to dilute or delay the reviews.

6. **Funding.**

A. AFRs, PFRs, and CFRs will be funded by each facility with costs distributed in the same manner as other power O&M costs. Projected costs should be shared with each facility for out-year budget planning.

B. Costs incurred by the PRO and the TSC in maintaining the core program, conducting training, and meeting reporting requirements which cannot be allocated to individual facilities, will be funded through the Power Program Services funding distribution.

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7. **Recommendations.** All recommendations resulting from AFRs, PFRs, and CFRs will be tracked to completion in PRIS in accordance with D&S FAC 04-02, *Power Recommendation Tracking*.
8. **Dispute Resolution.** The reviewer(s) will make every effort will be made to resolve disagreements regarding report findings or recommendations informally with facility managers before issuing a review report. When disputes cannot be resolved at this level, the area manager, the regional power manager and Manager, PRO, must be consulted to identify an equitable solution. If this is not successful, the disagreement must be documented in writing by the regional director within 30 days of the review report publication and submitted to the Senior Advisor, Hydropower, who will seek a resolution and make a final determination.
9. **Annual Power O&M Reports.**
  - A. **Scope.** Area managers and regional power managers will produce an annual power O&M report discussing power O&M at facilities under their purview. The annual reporting requirement promotes assessment of the effectiveness of area office power O&M, including accomplishments, goals, compliance with technical standards, safety, security, environmental compliance, and associated programs.
  - B. **Content.** The area and regional office Annual Power O&M reports will focus on:
    - (1) **Accomplishments.** The report will include replacements; major repairs; enhancements; production/consumption; benchmarking against Reclamation and industry standards; performance measures; and status of previous recommendations. .
    - (2) **Goals.** The report will be used to help facilitate goals including development of performance measures, upcoming repairs, plant rehabilitation or modernization, any unique or difficult issues, and operational anomalies or constraints.
    - (3) **Evaluation of Existing PO&M Practices.** The report will include any unique or challenging issues, effectiveness of the PRO&M, power incident reviews, adequacy of business practices, and compliance with technical standards and procedures.
  - C. **Transmittal.** The Regional Power Manager will send the report to the Manager, PRO, Senior Advisor, Hydropower, and the Regional Director.
10. **Annual Power O&M Summary Report.**
  - A. **Scope.** The Power Resource Office's Annual Power O&M Summary Report will draw on Annual PO&M Reports to:

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- (1) highlight power program accomplishments, Reclamation power O&M issues, successes, and the status of recommendations.
  - (2) provide an overview of the PRO&M Program, Reliability Compliance Program, and Unexpected Event Reporting Program.
- B. **Transmittal.** The Senior Advisor, Hydropower, will send the report to the Deputy Commissioner, Operations.
11. **Record Retention.** PRO&M Program records must be retained in accordance with the National Archives and Record Administration approved record retention schedules listed in Reclamation's Information Management Handbook.

## 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: \_\_\_\_\_