

Reclamation Manual

Directives and Standards

Subject:	Power Recommendation Tracking
Purpose:	To establish requirements for tracking recommendations that result from reviews relating to the Power Operations and Maintenance (PO&M) Program. The Bureau of Reclamation benefits from this Directive and Standard (D&S) by consistently tracking recommendations concerning the improvement of PO&M and compliance activities, which ensures accountability throughout the PO&M Program.
Authority:	The Reclamation 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. 1361, 34 Stat. 116), Reclamation Project Act of 1939 (Act of August 4, 1939, ch. 418, 53 Stat. 1187), 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), acts relating to individual dams or projects.
Approving Official:	Senior Advisor, Hydropower
Contact:	Power Resources Office (PRO), 86-51000

- 1. Introduction.** Since 2001, all recommendations made as a result of power Annual Facility Reviews (AFRs), Periodic Facility Reviews (PFRs), and Comprehensive Facility Reviews (CFRs) have been tracked in the Power Review Information System (PRIS). To date, recommendations made as a result of review reports including Arc Flash Hazard Analyses, Facility Equipment Rating Reviews, Protective Relay Reviews, Reliability Compliance Audits, Serious Accident Investigations, Special Investigations, and Unexpected Event Reports have not been centrally tracked. This D&S standardizes Reclamation's approach by requiring the recommendations from these critical review reports to be tracked in PRIS to ensure that necessary work is planned, scheduled, and completed.
- 2. Applicability.** This D&S applies to all Reclamation owned and operated power facilities and personnel within Reclamation.
- 3. Definitions.**
 - A. Annual Facility Review or AFR.** A review of management, operations, Supervisory Control and Data Acquisition-Industrial Control Systems (SCADA-ICS), mechanical maintenance, and electrical maintenance performed by local facility personnel.
 - B. Arc Flash Hazard Analysis.** A study investigating a worker's potential exposure to arc flash energy, conducted to prevent injuries, determine safe working practices, and determine the appropriate level of personal protective clothing and equipment.

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- C. **Comprehensive Facility Review or CFR.** A review of management, operations, SCADA-ICS, mechanical maintenance, and electrical maintenance performed every six years by personnel external to the region.
- D. **Facility Equipment Rating Review.** A review that evaluates the loading and protective capabilities of power facility equipment.
- E. **Periodic Facility Review or PFR.** A review of management, operations, SCADA-ICS, mechanical maintenance, and electrical maintenance performed every six years by personnel internal to the region.
- F. **Power Review Information System or PRIS.** The system used to track recommendations from review reports.
- G. **Protective Relay Review.** A detailed evaluation of the application and coordination of plant protective systems under normal and abnormal conditions.
- H. **Recommendation.** An action required by facility management to implement a Reclamation PO&M practice or industry standard; or a suggested improvement. Recommendations will be categorized as follows:
 - (1) **Category 1.** Recommendations to correct severe deficiencies where immediate and responsive action is required, for example, to ensure:
 - (a) structural integrity (soundness of the facility structure and operating equipment necessary to prevent catastrophic failure); or
 - (b) compliance with legal or regulatory requirements:
 - (i) power-related safety practices (necessary to protect life or health of employees, visitors, or the public); or
 - (ii) potential violations of power system reliability/stability requirements (e.g., North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) standards).
 - (2) **Category 2.** Recommendations that cover a wide range of important matters where action is required to:
 - (a) prevent or reduce further damage to equipment;
 - (b) preclude possible structural failure or operational disruption; or
 - (c) ensure compliance with mandatory safety, management, operations, or maintenance practices; Reclamation Facilities Instructions, Standards, and Techniques (FIST) Manuals; or industry standards.

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- (3) **Category 3.** Recommendations covering matters that are believed to be sound and beneficial suggestions to improve or enhance the PO&M Program.
- I. **Reliability Compliance Audit.** The evaluation of Reclamation's compliance with NERC and WECC reliability standards.
 - J. **Review Report.** Any report including power recommendations; for example, an Arc Flash Hazard Analysis; Facility Equipment Rating Review; power AFR, CFR, or PFR; Protective Relay Review; Reliability Compliance Audit; Serious Accident Investigation; Special Investigation; or Unexpected Event Report.
 - K. **Reviewer(s).** The subject matter expert(s) that develops a review report.
 - L. **Serious Accident Investigation.** An investigation conducted following the *Interagency Serious Accident Investigation Guide* of an unplanned event or series of events that resulted in death, injury, occupational illness, or substantial damage to or loss of equipment or property.
 - M. **Special Investigation.** The investigation of specific equipment, events, or programs. Examples include investigations of significant unexpected operations at power facilities, events involving personnel safety, or specialized facility inspections such as dive inspections, facility hazardous energy control program reviews, penstock inspections, pressure vessel inspections, travel reports, and other facility assessments.
 - N. **Unexpected Event Report.** A report regarding an unanticipated action involving components or systems related to power generation or water delivery. Unexpected Event Report recommendations must be tracked in PRIS for events involving relay misoperations or requiring a corrective action plan in accordance with FIST 6-3, *Unexpected Event Reporting*.
4. **Responsibilities.**
- A. **Senior Advisor, Hydropower.** The Senior Advisor, Hydropower, is responsible for:
 - (1) establishing the power recommendation tracking requirements; and
 - (2) communicating with regional directors and resolving any recommendation issues.
 - B. **Regional Directors.** Regional directors are responsible for:
 - (1) ensuring recommendations are entered and tracked in PRIS;
 - (2) ensuring that recommendation status is updated in PRIS at least quarterly;
 - (3) ensuring area offices complete or resolve all recommendations; and

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- (4) providing an update on the status of recommendations within their region during the annual PO&M meeting.
- C. **Manager, PRO.** The Manager, PRO, is responsible for:
- (1) providing oversight of power recommendation tracking; and
 - (2) coordinating the design needs of PRIS with the appropriate office(s).
- D. **Regional Power Managers.** Regional power managers are responsible for:
- (1) ensuring that recommendations are entered in PRIS and updated at least quarterly; and
 - (2) providing review and oversight of recommendations completed or resolved by area offices.
- E. **Area Managers.** Area managers are responsible for:
- (1) ensuring all recommendations are entered into PRIS within 30 days after receiving a review report;
 - (2) ensuring that recommendation status is updated in PRIS at least quarterly; and
 - (3) reporting on the status of recommendations to the regional director and regional power manager.
- F. **Facility Managers.** Facility managers are responsible for:
- (1) planning, budgeting, scheduling, and allocating staff and resources to complete recommendations;
 - (2) submitting the status of recommendations to allow PRIS updates at least quarterly;
 - (3) completing or resolving all recommendations from review reports; and
 - (4) reporting on the status of recommendations to the area manager.
- G. **Reviewer.** A reviewer is responsible for:
- (1) conducting a review in his or her area of expertise;
 - (2) providing material for the review report;
 - (3) categorizing and providing technical justification for recommendations in the review report; and

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- (4) assigning a unique recommendation number to each recommendation (e.g., 20140620-M-2-A) (see Paragraph 5.B.).

H. **Director, Security, Safety, and Law Enforcement (SSLE).** The Director, SSLE, is responsible for administering PRIS.

5. Recommendations.

A. **Tracking.** All recommendations from review reports must be tracked to completion or resolution in PRIS. The recommendation status must be updated as a recommendation is planned and completed. At a minimum, recommendation status must be updated quarterly by January 15, April 15, July 15, and October 15.

B. **Assigning Unique Recommendation Number.** Each reviewer must assign a unique recommendation number defining the date of the review producing the recommendation; the area of the recommendation; the category of the recommendation; and a sequential identifier (e.g., A, B, C, etc.). The recommendation number will be formatted as follows: YYYYMMDD-area-category-sequential identifier (for example, 20140620-M-2-A). The areas of recommendation are:

- (1) AF – Arc Flash Hazard Analysis
- (2) E – Electrical
- (3) ER – Unexpected Event Report
- (4) FR – Facility Equipment Rating Review
- (5) G – Management
- (6) M – Mechanical
- (7) N – NERC/WECC Compliance
- (8) O – Operations
- (9) PB – Power Equipment Bulletin
- (10) RR – Protective Relay Review
- (11) S – Structural
- (12) SA – Serious Accident Investigation
- (13) SC – SCADA-ICS
- (14) SI – Special Investigation

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C. **Status.** All recommendations will be designated as completed, deleted, or incomplete in PRIS.

D. **Planning and Completion Timelines.**

(1) **Category 1.**

- (a) The reviewers must discuss and reach consensus on potential Category 1 recommendations to ensure the Category 1 definition is met. The reviewers must receive concurrence from the Manager, PRO.
- (b) The regional power manager, area manager, and facility manager must be advised of the potential Category 1 recommendation.
- (c) Based on the severity of the deficiency or condition identified at the time of the review, the reviewers must prescribe an appropriate timeframe for completing the Category 1 recommendation. Category 1 recommendations should generally be completed within one year. The reviewers must suggest remedial measures at an exit briefing or in the review report.
- (d) Within 30 days following receipt of a Category 1 recommendation, the regional director will provide plans for accomplishing the recommendation, including a preliminary cost estimate and scheduled completion date, to the following:
 - (i) Deputy Commissioner – Operations;
 - (ii) Senior Advisor, Hydropower; and
 - (iii) Manager, PRO.
- (e) When a Category 1 recommendation is completed, the regional director will submit a completion memorandum summarizing actions taken to complete the recommendation to the following:
 - (i) Deputy Commissioner – Operations;
 - (ii) Senior Advisor, Hydropower; and
 - (iii) Manager, PRO.

(2) **Category 2.**

- (a) Category 2 recommendations must be acted upon as soon as practical following receipt of the review report. Some recommendations require more time to accomplish because of the need to complete designs or secure equipment, materials, or personnel.

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- (b) Within 90 days following receipt of Category 2 recommendations, the area manager will provide plans for accomplishing Category 2 recommendations to the regional power manager by updating PRIS, including preliminary cost estimates and the scheduled completion dates.

(3) **Category 3.**

- (a) Category 3 recommendations must be completed or resolved prior to the next CFR or PFR.
- (b) Within 90 days following receipt of Category 3 recommendations, the area manager will provide plans for accomplishing Category 3 recommendations to the regional power manager by updating PRIS, or include an explanation of an alternate course of action or a decision to take no action.

E. **Information Required in PRIS.** The following information must be entered into PRIS for each complete, incomplete, or deleted recommendation:

- (1) the names, offices, and titles of parties involved in the decision to complete, update, or delete a recommendation;
- (2) a brief explanation of the action taken;
- (3) Capital Asset and Resource Management Application work orders or other supporting documentation associated with completing the recommendation;
- (4) the name of the person who updated the recommendation in PRIS; and
- (5) the date of the update.

F. **Deleting.** Prior to deleting a recommendation in PRIS, one of the following must occur:

- (1) consensus among the Manager, PRO; the area manager; the regional power manager; and, if possible, the reviewer(s) to delete the recommendation.
- (2) a subsequent reviewer(s) recommends a deletion based on sound technical judgment or changes in conditions or requirements;
- (3) the original reviewer(s) rescinds the recommendation; or
- (4) the recipient corrects an administrative error in the initial entry (e.g., a duplicate entry, or a recommendation was entered into PRIS for the wrong facility).

6. **Dispute Resolution.** The reviewer(s) will make every effort 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, regional power manager and Manager, PRO, must be consulted to identify an equitable

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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.

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: _____