

 California ISO Your Link to Power	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

ISO MAINTENANCE REVIEWS

 California ISO Your Link to Power	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

TABLE OF CONTENTS

4.1 ISO Annual Review

- 4.1.1 Purpose and Frequency
- 4.1.2 Scope
- 4.1.3 Notification, Schedule and Location

4.2 ISO Site Visits

- 4.2.1 Purpose
- 4.2.2 Scope
- 4.2.3 Notification, Schedule and Location

4.3 ISO Review For Cause

- 4.3.1 Purpose
- 4.3.2 Scope
- 4.3.3 Notification, Schedule and Location

4.4 ISO Maintenance Review Results

4.5 ISO Maintenance Review Qualifications/Support

- 4.5.1 ISO Reviewer Qualifications
- 4.5.2 PTO Representative Qualifications and PTO Support

Attachment A: Maintenance Deferral Letter

	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

4.1 ISO ANNUAL REVIEW

4.1.1 Purpose and Frequency

The purpose of the Annual Review is to determine if the Maintenance Practices are being followed. The ISO may opt to physically visit a PTO's Transmission Facilities annually to verify inspection and maintenance performance, as reported by the PTO. The ISO may also elect to defer the Annual Review one or more years if no deviations to the PTO's Maintenance Practice are found.

4.1.2 Scope

The scope will be sufficient to measure adherence to the PTO's Maintenance Practices. The preferred scope will be followed unless an alternate scope is mutually agreed to between the ISO and PTO.

- Preferred Scope:** The ISO will randomly select, by voltage classification, up to ten percent (10%) of a PTO's Transmission Facilities to review. The voltage classification for each Station is determined by its highest voltage. If the total number of Stations under ISO operational control in a given voltage class is less than ten (10), at least one (1) station per voltage class will be selected.
- Alternate Scope:** The ISO and PTO can mutually agree to an alternate scope that is sufficient to measure adherence to the PTO's Maintenance Practices.

If the review results indicate a potential system wide problem, the ISO may determine a Review for Cause is necessary and will initiate that process. The scale of the review is based on the Maintenance Practices and facilities described in Appendix C.

	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

4.1.3 Notification, Schedule and Location

The ISO will consider PTO scope requests different from the Preferred Scope described in 4.1.2. If a mutually agreed to scope is not developed within 30 days prior to issue of the 30 day notice of the Annual Review, the ISO will defer to the use of the Preferred Scope described in 4.1.2.

The ISO will notify a PTO thirty (30) days in advance of the Annual Review and list specific Transmission Facilities and associated records to be reviewed. The review of Lines and Stations should be performed coincidentally, but may be scheduled separately upon mutual agreement, taking into consideration the PTO's routine operations, available resources, and emergency conditions.

The PTO will designate a single point of contact, (typically the TMCC representative) to coordinate the meeting site(s), assure records are accessible, and the appropriate personnel are available to assist with the review process.

4.2 ISO Site Visits

4.2.1 Purpose

The ISO may opt to physically visit a PTO's Transmission Facilities to verify Maintenance performance as reported by the PTO. Visits may incorporate, but are not limited to, one or more of the following:

- a) Confirm the validity of the records review
- b) The visual inspection of Transmission Facilities
- c) The first hand observation of a PTO's ongoing Maintenance.

	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

These Site Visits will not impede the PTO's Maintenance activities and it is presumed that Site Visits will occur in conjunction with an Annual Review. Additional Site Visits are subject to mutual agreement.

4.2.2 Scope

Site Visits conducted in conjunction with an Annual Review are limited to a PTO's Transmission Facilities, as described in Section 4.1.2 of this procedure. Site Visits conducted for any other purpose than described in Section 4.1.1 of this procedure will include written notification to the PTO, clearly state the intent, and identify the Transmission Facilities to be viewed.

4.2.3 Notification, Schedule and Location

The ISO will affirm its intent to conduct a Site Visit, in writing and with a minimum advance notice of ten (10) working days to the PTO, except for those Site Visits associated with an Annual Review. All Site Visits will take into consideration the PTO's routine operations, work cycles and any emergency conditions.

The PTO will designate a single point of contact (typically the TMCC representative).

4.3 ISO Review For Cause

4.3.1 Purpose

The purpose of a Review For Cause is to determine whether Maintenance is a contributing factor in a specific area of concern. The ISO will communicate its concerns in writing to the PTO. The ISO may opt to physically visit a PTO's Transmission Facilities to verify Maintenance performance as reported by the PTO.

 California ISO Your Link to Power	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

4.3.2 Scope

A specific area of concern will typically determine the scope of the Review for Cause and may include, but is not limited to, a review of Maintenance records, verification of Maintenance, and/or a visual inspection of the Transmission Facilities.

Areas of concern may include, but not limited to, one or more of the following:

- a) Availability Measures performance as defined in Appendix C due to Maintenance activities or unknown causes .
- b) SMRS reports indicating numerous deficiencies
- c) Significant non-compliance with Maintenance Practices
- d) Deficient Maintenance records (e.g. incomplete or inaccurate submittals during the reporting period)
- e) Ongoing ISO investigations into a system disturbance.

If the Review for Cause is initiated due to NERC, WECC, or another regulatory agency's imposed requirements on the ISO, the Review for Cause will be processed in accordance with that agency's schedule and format. However, the PTO will be allowed a reasonable amount of time to review and comment on draft reports prior to submittal to the requesting agency.

4.3.3 Notification, Schedule and Location

The ISO will affirm its intent to conduct a Review for Cause, in writing and with a minimum advance notice of ten (10) working days to the PTO, except for those reviews associated with an Annual Review. All Reviews for Cause will take into consideration the PTO's routine operations, work cycles, and any emergency conditions. The PTO will designate a single point of contact (typically the TMCC representative).

 California ISO Your Link to Power	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

4.4 **ISO Maintenance Review Results**

During an Annual Review, Site Visit, or Review for Cause, ISO and PTO representatives are expected to discuss positive Maintenance program results and identified deviations from the PTO’s Maintenance Practices, taking into consideration mitigating circumstances (e.g., declared and undeclared system emergencies, weather or storm related delays, environmental restrictions, regulatory intervention, conflicts with capital work and line outage coordination).

The ISO bases its review results on a PTO’s adherence to its own Maintenance Practices. The term “deviation” is recognized to mean a departure or variance from an established program or practice.

A PTO’s intentional deferral of Maintenance that will result in a deviation(s) from its own Maintenance Practices (including any built in program flexibility), should be submitted to the ISO for review and acknowledgement before the due date. The submittal should include a reason for the deferral and an expected completion date. If the ISO acknowledges and agrees the deferral is reasonable (based on past performance of the equipment and Good Utility Practice guidelines) and the deferred Maintenance is managed as proposed, the deviation(s) will be conceded during the review process. [See Attachment-A]

Depending on the circumstances and ensuing discussions with the PTO, the ISO will categorize deviations in the following manner:

Finding: Deviations related to a similar cause that indicates a systemic problem with adherence to the Maintenance Practices.¹

Concern: Deviation(s) related to a similar cause that indicates a local problem with adherence to the Maintenance Practices.²

¹ An action plan is required.

² An action plan may be required.

 California ISO Your Link to Power	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

Observation: Deviation(s) that do not indicate a systemic or local problem with adherence to the Maintenance Practices.

After deviations are categorized, the following will occur:

- a) Within thirty (30) days after an Annual Review, Site Visit, or Review for Cause, the ISO will transmit a draft report to the PTO addressing the categorized deviations and/or positive results.
- b) Within thirty (30) days after receipt of the draft report, the PTO may respond to the ISO with written comments confirming or refuting the categorized deviations. The response may include proposals to correct any or all categorized deviations.
- c) Within one hundred-twenty (120) days after an Annual Review, Site Visit, or Review for Cause, the ISO will transmit a final report to the PTO. During this 120-day time period the ISO and PTO will continue discussions to resolve any categorized deviations. The final report may include the PTO's completed corrective actions or proposals.
- d) The ISO and PTO will discuss a status reporting criterion to confirm arrangements made in the final report. If necessary and upon completion, the PTO will submit a final status report affirming that all undisputed corrective actions have been or will be addressed. Disputed items will be handled in accordance with the Dispute Resolution process described in the Transmission Control Agreement.

 California ISO Your Link to Power	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

4.5 ISO Maintenance Review Qualifications/Support

4.5.1 ISO Reviewer Qualifications

The ISO representative(s) assigned to an Annual Review, Site Visit, or Review for Cause will have a working knowledge of the types of Transmission Facilities being reviewed, including the PTO's Maintenance Practices and SMRS.

4.5.2 PTO Representative Qualifications and PTO Support

For an Annual Review, Site Visit, or Review for Cause the PTO will assign a knowledgeable representative to accompany the ISO representative(s) and answer questions during the review process.

	MAINTENANCE PROCEDURES	Procedure No.	4
		Version Number	3
ISO Maintenance Reviews		Approved Date	10/19/06
		Effective Date	10/19/06

Attachment A

Subject: Maintenance Deferral

Dear _____,

Thank you for your letter dated _____ regarding the requested deferral of Maintenance on _____ (list of specific Transmission Facilities) (“Letter”). According to the Letter, this deferral is due to _____ and the required Maintenance will be completed by _____. The CAISO hereby provides its concurrence based on the representations in the Letter and the fact that there have been no reports of incorrect operations or performance of these Transmission Facilities. However, this concurrence is conditionally based on the requirement that these Transmission Facilities will undergo Maintenance as detailed in the Letter.

In the interest of efficiency, when equipment replacement or upgrade is imminent, the CAISO believes in working with (PTO) to allow reasonable flexibility in applying PTO Maintenance Practices if conditions, performance and timelines are favorable and supported by Good Utility Practice. However, the CAISO is not in a position to monitor and be fully aware of the possible changing physical condition, on going exposures, or other risks associated with this equipment during the deferred Maintenance time period. Therefore, deferring this Maintenance is (PTO's) ultimate decision and as such, the CAISO assumes no responsibility and expects (PTO) to continue to be fully responsible and accountable for the safety and performance of these devices and any other (PTO) owned Transmission Facilities on an ongoing basis.

The above-specified deferred Transmission Facility Maintenance will not be considered deviations from (PTO's) Maintenance Practices during a Maintenance Review if the Maintenance is completed as described in the Letter.

Thank you again for keeping the CAISO advised of your upcoming plans and associated Maintenance.

Respectfully,

Manager – Grid Assets

California ISO