

Province of
British Columbia

Ministry of Transportation and
Infrastructure
Electrical Maintenance Services

Provincial Quality Plan

Manual

March 2012

Glossary

Auditing:

Systematic examination of the Contractor's records and of the infrastructure to determine whether the Contractor is meeting the contractual requirements, whether the Contractor is implementing the QP as described, and whether the QP is effective

Audit Report:

A document outlining the attendees at the audit, the purpose of the audit, summarizing the documents reviewed and the findings; may include recommendations and/or identify Non-conformances and opportunities for improvement; may also include photographs used to support the assessment of the Contractor's performance

Basic Contract Requirements

Clear, measurable requirements in the maintenance agreement; for example, response times, material requirements, etc; not included are those requirements that are less tangible, i.e., providing proactive maintenance, continual improvement, innovation, addressing the needs of customers/stakeholders, partnering, etc.

Correction

As it relates to Non-conformances, how the Contractor must deal with non-conforming work, i.e., what action is taken to rectify the situation

Corrective Action

As it relates to Non-conformances, how the Contractor will ensure that the situation will not be repeated in the future

Ministry Representative

The Ministry Representative (Min Rep) responsible for a Service Area, or his/her designate, is responsible for ensuring that monitoring and auditing activities in the service area are conducted in accordance with the Electrical Quality Plan; specifically, that monitoring and auditing is adequate, and that these activities are properly documented. The Ministry Representative is also responsible for ensuring that the assessment of the Contractor's performance is complete, defensible and documented

Monitoring

Ongoing visual observation by the Ministry Representative and other Ministry staff of the condition of the highway electrical infrastructure and the associated inventory to determine Contractor compliance with the contractual requirements

Monitoring Record

Document summarizing observations, both positive and negative, of the condition of the highway electrical infrastructure and the associated inventory; may include photographs used to support the assessment of the Contractor's performance

Non-conformance

The Contractor's failure to comply with one of the contractual obligations

Non-conformance Report (NCR)

Means those reports issued in writing by the Province which document the Contractor's failure to comply with the Contractor's covenants in this Agreement

Opportunity for Improvement

An imminent risk of failure to a process; something that could potentially result in a Non-conformance, but has not yet reached that point

Electrical Quality Plan

Monitoring and auditing activities conducted by ministry staff at the service area level to determine whether the Contractor is meeting contractual obligations

Root Cause

The underlying reason why something occurs

Introduction

Under the Electrical Maintenance Services Agreement, Contractors have the primary responsibility for ensuring quality. They are required to manage the work in accordance with a Quality Plan – the Contractor’s Quality Plan (CQP) and to maintain records to demonstrate compliance with the maintenance agreement. They are also required to have a quality control (QC) and a quality assurance (QA) program, and to maintain records to demonstrate compliance with their QC/QA. They must continually review the effectiveness of their quality system and the level of satisfaction of the Ministry and stakeholders, and make adjustments accordingly.

The Ministry is responsible for monitoring the work and auditing the Contractor. The level of monitoring and auditing is influenced by the Contractor’s recent performance.

This manual describes the Provincial Quality Plan (PQP).

Section 1 describes in more detail the activities undertaken by the Ministry to validate/measure the contractor’s performance.

Section 2 outlines the Ministry’s documentation requirements with respect to the Provincial Quality Plan.

Section 3 includes sample forms used by the Ministry in the administration of the PQP.

SECTION 1 - QUALITY PLAN ACTIVITIES

The main objective of the Provincial Quality Plan (PQP) is to confirm, through monitoring and quality auditing, that the Contractor is meeting the contract requirements and conforming to the accepted Contractor's Quality Plan (CQP). It is the Ministry Representative's responsibility to ensure the delivery of the CQP.

Monitoring

Monitoring is the ongoing visual observation by Ministry staff of the condition of the electrical infrastructure and the associated inventory. Monitoring may also include the observation of work in process. The purpose of monitoring is to confirm, through visual observation of the actual electrical systems that the Contractor is meeting the terms of the agreement, including the specifications and the response times.

Monitoring activities may be documented on a Monitoring Record (see Appendix A for sample). Both positive and negative comments may be recorded. Pictures should be attached to the Monitoring Record whenever practicable and all Monitoring Records should be filed electronically. If a deficiency is detected through monitoring, (i.e., non-functioning signal or a damaged Island flasher), the Min Rep notifies the Contractor immediately. Monitoring activities are documented and Records are filed and reviewed periodically for the emergence of problems or trends, and are used as input into the audit process.

Auditing

The purpose of auditing is to determine whether the contractor is meeting the contract requirements, whether the contractor is implementing the CQP as described, and whether the CQP is effective. Audits may involve a review of the contractor's documentation and/or interviews with the contractor's staff to verify compliance, as well as a physical inspection of the work on the electrical systems, either end-product or in-process.

When performing audits, the focus should be on whether the contractor's system is delivering a quality service on the electrical infrastructure. The objective is not only to determine whether the CQP is being implemented as designed, but, more importantly, to determine whether the system is adequate; i.e., it is achieving the desired result. If the CQP isn't being implemented as designed or it is not adequate, then it must be adjusted accordingly.

The Contractor receives advance warning of all audits and is informed of the results of all audits.

Non Conformances and Opportunities for Improvement

Non-conformances

The Electrical Maintenance Service Agreement describes a Non-Conformance Report as: 'reports issued in writing by the Ministry which document the Contractor's failure to comply with the Electrical Agreement.

A distinction must be made between a Non-conformance and a 'defective' condition. In the case of response-time driven activities, the Contractor must be aware of the defective condition (through notification or required patrols), and the applicable response time must have elapsed before the condition is contractually a Non-conformance, regardless of its severity. In the case of frequency driven activities, the specified interval must have elapsed.

Non-conformances should be identified mostly by the Contractor. The Province may also identify Non-conformances through their monitoring and/or auditing processes.

The Province may issue a Non-conformance report (NCR) as part of their monitoring activities, or as a result of audits. Refer to Appendix C for sample. The process is as follows:

- The Ministry Representative completes Sections 1 (NCR Tracking) and 2 (Description of the Non-conformance) of the NCR form clearly describing the NCR and referencing the relevant contractual requirement or maintenance specification and the relevant section of the CQP (if applicable).
- The Ministry Representative completes the first part of section 3 (Required correction) and indicates whether a correction is required, i.e., the work needs to be re-done. The dates for action by the Contractor, i.e., a date for the correction and a date for the corrective action, are agreed to between the two parties. If they cannot agree on a date, the Provincial Representative determines a reasonable time. The deadline for corrective action must allow time for the Contractor to gather enough data to make an informed determination of the cause of the Non-conformance and to determine the appropriate corrective action. The deadline for correction will likely be much shorter.
- The Ministry Representative records the NCR on the Non-Conformance Log.
- The Contractor completes Section 4 (Root cause analysis and corrective action plan). If the Contractor makes any changes to the CQP as a result of the NCR, a copy of the revision is provided to the Province.
- The Ministry Representative follows up with the Contractor on the designated dates (deadline for the correction and deadline for the corrective action plan].
- Both parties sign in Section 3 once the correction is completed.

- Both parties sign in Section 4 (the Contractor commits to implementing the corrective action plan and the Ministry Representative accepts the plan). The Province may agree to the proposed corrective action, or accept the contractor's assessment that the situation was an exception and no changes are required to their CQP

Opportunities for Improvement

Opportunities for Improvement (OFIs) arise where the Province identifies an imminent risk of failure to a process. It is something that could potentially result in a Non-conformance, but has not yet reached that point.

The Province may issue OFIs as part of their monitoring activities or as a result of audits. There is no obligation on the Contractor to address an OFI. (The Province issues them in the spirit of cooperation).

The OFI process is as follows:

- The Provincial Representative completes Sections 1 and 2 of the OFI form clearly describing the OFI. (Refer to Appendix D for a sample OFI form).
- There is no obligation on the Province to track OFI's.
- If the Contractor makes changes to the CQP as a result of the OFI, a copy of the revision is provided to the Province.

SECTION 2 - DOCUMENTATION

The Ministry must be able to show due diligence in the administration of the Electrical Maintenance Service Agreements and be able to demonstrate that the terms of the agreement are being met.

Records must be filed electronically.

Ministry Representative Responsibilities

The Ministry Representative needs to document:

- monitoring records and related/supporting photographs
- Audit Reports
- minutes of meetings with the contractor
- Non-conformance Reports and related/supporting photographs
- all records submitted by the contractor in accordance with the requirements of the contract, i.e., work plans, monthly reports, etc

Confidentiality of Documents

The CQP (electronic and/or hard copies) is a proprietary document; as are all records related to the CQP. They must be kept confidential; they are not to be used or disclosed for any purpose other than to administer the contract and Auditing purposes nor are they to be copied or reproduced in whole or in part. Copies of the CQP or of the contractor's records are not to be attached to Audit Reports.

The only time we would release the CQP (in whole or in part) is when there is litigation. We have an obligation to release to the Ministry lawyers documents in our possession or under our control that are deemed relevant in the litigation.

APPENDICES

APPENDIX A

Monitoring Record

APPENDIX B

Audit Report

AUDIT REPORT

Details and summary of all audits must be recorded on this form by auditors.

Audit Details:

Date: _____ Audit Report #: _____

Service Area# / Name: _____

Attendees:

MoTI: _____

Contractor: _____

NCR's / OFI's Issued:

Question #1:

What is being assessed:

(Quote or reference the section of the contract and the CQP against which you are auditing.)

Findings: _____

Evidence / Records reviewed: _____

Question #2:

What is being assessed:

(Quote or reference the section of the contract and the CQP against which you are auditing.)

Findings: _____

Evidence / Records reviewed: _____

APPENDIX C

Non-Conformance Report

NON-CONFORMANCE REPORT

SECTION 1: NCR TRACKING

DATE: _____ PREPARED BY: _____

SERVICE AREA # / NAME: _____

CONTRACTOR NAME: _____

NCR #: _____

SECTION 2: DESCRIPTION OF NON-CONFORMANCE

(Quote the contractual requirement which is not being met and/or the relevant section of the CQP. Also quote location of Non-conformance, i.e., highway number, foreman area, when applicable.)

SECTION 3: REQUIRED CORRECTION

(Does Contractor have to re-do/do the work? Select N/A if Non-conformance is not curable or opportunity to rectify has passed)

YES DEADLINE FOR CORRECTION: _____

NO MOT ACCEPTS THE NON-CONFORMING PRODUCT/SERVICE

REASON: _____

N/A REASON: _____

SIGNATURES (UPON COMPLETION OF REQUIRED CORRECTION):

CONTRACTOR REPRESENTATIVE CONFIRMS THAT THE CORRECTION HAS BEEN COMPLETED

NAME _____ SIGNATURE _____ DATE _____

MOT REPRESENTATIVE ACCEPTS THE CORRECTION

NAME _____ SIGNATURE _____ DATE _____

Original = District; Copy = Contractor

SECTION 4: ROOT CAUSE ANALYSIS AND CORRECTIVE ACTION PLAN:

SECTION 4A: DEADLINE FOR SUBMISSION OF PLAN TO MOT: Date: _____

SECTION 4B: ROOT CAUSE ANALYSIS:

(Why did the Non-conformance occur?)

SECTION 4C: CORRECTIVE ACTION PLAN:

(What is the Contractor's plan to prevent re-occurrence of the Non-conformance?)

SIGNATURES:

CONTRACTOR REPRESENTATIVE COMMITS TO IMPLEMENTING THE CORRECTIVE ACTION PLAN AND CONFIRMS THAT THE PLAN IS INTENDED TO PREVENT THE RE-OCCURRENCE OF THE NON-CONFORMANCE IDENTIFIED IN SECTION 2 OF THIS REPORT.

NAME _____ SIGNATURE _____ DATE _____

MINISTRY REPRESENTATIVE ACCEPTS THE CORRECTIVE ACTION PLAN. ACCEPTANCE DOES NOT NEGATE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THE SERVICES IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS.

NAME _____ SIGNATURE _____ DATE _____

INSTRUCTIONS:

SECTION 1, 2 AND 3 TO BE COMPLETED BY MOT

SECTION 4 TO BE COMPLETED BY THE CONTRACTOR

APPENDIX D

Opportunity for Improvement Report

OPPORTUNITY FOR IMPROVEMENT REPORT

MINISTRY OF
TRANSPORTATION AND
INFRASTRUCTURE

SECTION 1 OFI TRACKING

DATE _____ PREPARED BY _____

SERVICE AREA #/NAME _____

CONTRACTOR NAME _____

OFI # _____ (SA) ## + (DATE) YYMMDD

SECTION 2: DESCRIPTION OF OPPORTUNITY FOR IMPROVEMENT

SECTION 3: SIGNATURES

CONTRACTOR REPRESENTATIVE

NAME _____ SIGNATURE _____

DATE _____