

# Results and Notes Review

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## CR.CRMGEN: General

**Question ID,** [CR.CRMGEN.CRMCRITERIA.P](#) , 192.631(a)(2)

### References

Question Text *Does the process adequately address criteria by which the operator determines which of its facilities are control rooms?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan document, Definition Section, Control Room, page 5

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMGEN.CRMGMGT.P](#) , 192.631(a)(2)

### References

Question Text *Are CRM procedures formalized and controlled?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM-A100 Document Version Control

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMGEN.CRMIMPLEMENT.R](#) , 192.631(a)(2)

### References

Question Text *Were procedures approved, in place, and implemented on or before the regulatory deadline?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan document, Introduction, page 1

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMGEN.CRMPROCLOCATION.O](#) , 192.631(a)(2)

**References**

Question Text *Are procedures readily available to controllers in the control room?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Procedures were available to controllers in the control room.

Temporary (none)

Inspector Notes

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**CR.CRMRR: Roles and Responsibilities**

**Question ID,** [CR.CRMRR.RESPONSIBLE.P](#) , 192.631(b)

**References**

Question Text *Are there clear processes to describe each controller's physical domain of responsibility for pipelines and other facility assets?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan document, Roles and Responsibilities (b), Physical Domain of Responsibility, page 13

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.QUALCONTROL.P](#) , 192.631(b)

**References**

Question Text *Are there provisions in place to assure that only qualified individuals may assume control at any console/desk?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Roles and Responsibility Section - Controllers, page 10

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.DOMAINCHANGE.P](#) , 192.631(b)

**References**

Question Text *If the physical domain of responsibility periodically changes, has a clear process been established to describe the conditions for when such a change occurs?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes Only one consul, physical domain of responsibility does not change.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.AUTHORITYABNORMAL.P](#) , 192.631(b)(2)

**References**

Question Text *Have processes been established to define the controllers' authority and responsibilities when an abnormal operating condition is detected?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Roles and Responsibility Section - Controllers, page 11-12

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.RESPCHANGE.P](#) , 192.631(b)

**References**

Question Text *Do processes address a controller's role during temporary impromptu (unplanned) changes in controller responsibilities?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes Physical domain of responsibility does not change.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.COMMANDVERIFY.P](#) , 192.631(b)

**References**

Question Text *Do the defined roles and responsibilities require controllers to stay at the console to verify all SCADA commands that have been initiated are fulfilled, and that commands given via verbal communications are acknowledged before leaving the console for any reason?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Roles and Responsibility (b), Physical Domain of Responsibility, page 13.

Temporary (none)

Inspector Notes

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**Question ID, [CR.CRMRR.PRESSLIMITS.O](#) , 192.631(b)(2) (192.619(a); 192.631(e)(1))  
References**

Question Text *Are controllers aware of the current MAOPs of all pipeline segments for which they are responsible, and have they been assigned the responsibility to maintain those pipelines at or below the MAOP?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes MAOPs of all pipeline segments are available to controllers in written and electronic form.

Temporary (none)

Inspector Notes

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**Question ID, [CR.CRMRR.AUTHORITYEMERGENCY.P](#) , 192.631(b)(3)  
References**

Question Text *Do processes define the controllers' authority and responsibility to make decisions, take actions, and communicate with others upon being notified of, or upon detection of, and during, an emergency or if a leak or rupture is suspected?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Roles and Responsibilities (b), Emergency Operating Conditions, page 12.

Temporary (none)

Inspector Notes

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**Question ID, [CR.CRMRR.EVACUATION.P](#) , 192.631(b)(3)  
References**

Question Text *Do processes specifically address the controller's responsibilities in the event the control room must be evacuated?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM B200 Control Room Evacuation

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.COMMSYSFAIL.P](#) , 192.631(b)(3)

**References**

Question Text *Do processes specifically address the controller's responsibilities in the event of a SCADA system or data communications system failure impacting large sections of the controller's domain of responsibility?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Roles and Responsibilities (b), Controller Responsibility **During a SCADA Outage, Page 13.**

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.HANDOVER.P](#) , 192.631(b)(4) (192.631(c)(5))

**References**

Question Text *Have processes been established for the hand-over of responsibility that specify the type of information to be communicated to the oncoming shift?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM C100 Shift Change.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.HANDOVERDOC.P](#) , 192.631(b)(4) (192.631(c)(5))

**References**

Question Text *Do processes require that records document the hand-over of responsibility, document the time the actual hand-over of responsibility occurs, and the key information and topics that were communicated during the hand-over?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM C100 Shift Change Section 3

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.HANDOVERDOC.R](#) , 192.631(b)(4) (192.631(c)(5))

**References**

Question Text *Are there records that document the hand-over of responsibility, document the time the actual hand-over of responsibility occurs, and the key information and topics that were communicated during the hand-over?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed sample of shift change documentation, 2011(1), 2014(2)

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.HANDOVEROVERLAP.P](#) , 192.631(b)(4)

**References**

Question Text *Do processes require the controllers to discuss recent and impending important activities ensuring adequate overlap?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM C100 Shift Change.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMRR.HANDOVERALTERNATIVE.P](#) , 192.631(b)(4)

**References**

Question Text *When a controller is unable to continue or assume responsibility for any reason, do the shift hand-over processes include alternative shift hand-over actions that specifically address this situation?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM C100 Shift Change.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMRR.UNATTENDCONSOLE.P](#) , 192.631(b)(4)

**References**

Question Text *Has the operator established an adequate process for occasions when the console is left temporarily unattended for any reason?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes Operators will not leave consol unattended for any reason.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMRR.CONSOLECOVERAGE.P](#) , 192.631(b)(4)

**References**

Question Text *Do processes maintain adequate console coverage during shift hand-over?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM C100 Shift Change.

Temporary (none)  
Inspector Notes

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## **CR.SCADA: Supervisory Control and Data Acquisition**

**Question ID,** [CR.SCADA.SYSTEMMOC.P](#) , 192.631(c)(1)

**References**

Question Text *Do processes clearly define the types of changes to the SCADA system(s) that constitute additions, expansions, or replacements under the meaning of the CRM rule?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Provide Adequate Information 192.631(c), Page 14.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.SCADA.DISPLAYCONFIG.P](#) , 192.631(c)(1)

**References**

Question Text *Are there written processes to implement the API RP 1165 display standards to the SCADA systems that have been added, expanded, or replaced since August 1, 2012?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM display system will implement the API RP 1165 DISPLAY STANDARDS IN THE NEXT 12 MONTHS, BY 2016. SCADA HMI Project Charter.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.1165HUMANFACTORS.R](#) , 192.631(c)(1)

**References**

Question Text *Has section 4 of API RP 1165 regarding human factors engineering been implemented?*

**Result** **NA**

Assets Covered Unit NWN CRM Portland

Result Notes Per 192.631(c)1 - No requirement until they change something, which they are planning on doing.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.DISPLAYOBJECTS.O](#) , 192.631(c)(1)

**References**

Question Text *Has section 8 of API RP 1165 regarding display object characteristics been implemented?*

**Result** **NA**

Assets Covered Unit NWN CRM Portland

Result Notes Per 192.631(c)1 - No requirement until they change something, which they are planning on doing.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.DISPLAYDYNAMICS.R](#) , 192.631(c)(1)

**References**

Question Text *Has section 9 of API RP 1165 regarding display object dynamics been implemented?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes Per 192.631(c)1 - No requirement until they change something, which they are planning on doing.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.ADMINISTRATION.R](#) , 192.631(c)(1)

**References**

Question Text *Have applicable paragraphs of section 11 of API RP 1165 administration been implemented?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes Per 192.631(c)1 - No requirement until they change something, which they are planning on doing.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.1165IMPRACTICAL.R](#) , 192.631(c)(1)

**References**

Question Text *If any/all applicable paragraph(s) of API RP 1165 have not been implemented, has it been demonstrated and documented that the unimplemented provisions are impractical for the SCADA system used?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes Per 192.631(c)1 - No requirement until they change something, which they are planning on doing..

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.SETPOINT.P](#) , 192.631(c)(2)

## References

Question Text *Does the process adequately define safety-related points?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Definition Section, Safety Related and Safety Related Alarm, Page 7

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.SETPOINT.R](#) , 192.631(c)(2)

## References

Question Text *Do records indicate safety-related points have been adequately implemented?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Report: Safety Related Tag Set points and Descriptions

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.POINTVERIFY.P](#) , 192.631(c)(2)

## References

Question Text *Are there adequate processes to define and identify the circumstances which require a point-to-point verification?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Provide Information, Point to Point Validation, page 14-15.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.POINTVERIFY.R](#) , 192.631(c)(2)

## References

Question Text *Have required point-to-point verifications been performed?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Annual Transducer Calibration and One Time Transducer Validation.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.POINTVERIFYEXTENT.P](#) , 192.631(c)(2)

**References**

Question Text *Are there adequate processes for the thoroughness of the point-to-point verification?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Field Operations Manual (FOM), 519 Instrumentation, Point-to -Point Validation, page 614-616.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.POINTVERIFYEXTENT.R](#) , 192.631(c)(2)

**References**

Question Text *Do records demonstrate adequate thoroughness of the point-to-point verification?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reports: One Time Transducer Validation Report and Annual Validation Report.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.POINTVERIFYINTVL.P](#) , 192.631(c)(2)

**References**

Question Text *Is there an adequate process for defining when the point-to-point verification must be completed?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Standard Practice, SPO/SPW 741, Section 3.2

Temporary (none)

**Question ID,** [CR.SCADA.POINTVERFIYINTVL.R](#) , 192.631(c)(2)

**References**

Question Text *Do records indicate the point-to-point verification has been completed at the required intervals?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Annual Transducer Calibration and One Time Transducer Validation.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.COMMPLAN.P](#) , 192.631(c)(3)

**References**

Question Text *Has an internal communication plan been established and implemented that is adequate to manually operate the pipeline during a SCADA failure/outage?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM C300, Internal Communications for Manual Operations.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.COMMPLAN.R](#) , 192.631(c)(3)

**References**

Question Text *Has the internal communication plan been tested and verified for manual operation of the pipeline safely at least once each calendar year but at intervals not exceeding 15 months?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed records for Manual test , they more the sites around each year.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.BACKUPSCADA.O](#) , 192.631(c)

## References

Question Text *Is there a backup SCADA system?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Yes, DR server located at Sherwood Operations Center. There is a separate server, not yet a backup control room.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.BACKUPSCADADEV.P](#) , 192.631(c)(4)

## References

Question Text *Has the use of the backup SCADA system for development work been defined?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM C400, Developmental SCADA server

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.BACKUPSCADATEST.R](#) , 192.631(c)(4)

## References

Question Text *Is the backup SCADA system tested at least once each calendar year at intervals not to exceed 15 months?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Review of previous Backup SCADA system tests on 12-/4/2014, 2/17/2014, 7/10/13.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.BACKUPSCADAVERIFY.R](#) , 192.631(c)(4)

## References

Question Text *Does the testing verify that there are adequate processes in place for decision-making and internal communications to successfully implement a transition from primary SCADA to backup SCADA, and back to primary SCADA?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Testing appears adequate, Reviewed GMS Failover Worksheet.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.BACKUPSCADADEQUACY.R](#) , 192.631(c)(4)

**References**

Question Text *If the back-up SCADA system is not designed to handle all the functionality of the main SCADA system, does the testing determine whether there are adequate procedures in place to account for displaced and/or different available functions during back-up operations?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes Back-up SCADA system has the same functionality as the main SCADA system.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.BACKUPSCADATRANSFER.P](#) , 192.631(c)(4)

**References**

Question Text *Do processes adequately address and test the logistics of transferring control to a backup control room?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM B200, control room evacuation.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.BACKUPSCADARETURN.P](#) , 192.631(c)(4)

**References**

Question Text *Do procedures adequately address and test the logistics of returning operations back to the primary control room?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM B200, control room evacuation.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.SCADA.BACKUPSCADAFUNCTIONS.R](#) , 192.631(c)(4)

**References**

Question Text *Is a representative sampling of critical functions in the back-up SCADA system being tested to ensure proper operation in the event the backup system is needed?*

**Result Sat+**

Assets Covered Unit NWN CRM Portland

Result Notes Gas Control SCADA test FOR 12-04-14, APPEARS TO BE ADEQUATE.

Temporary (none)

Inspector Notes

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## CR.CRMFM: Fatigue Management

**Question ID,** [CR.CRMFM.FATIGUEMITIGATION.P](#) , 192.631(d)

**References**

Question Text *Does the fatigue mitigation process or procedures (plan) identify operator-specific fatigue risks?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes NWN uses Circadian as their consultant for Fatigue Mitigation.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.FATIGUERISKS.P](#) , 192.631(d)

**References**

Question Text *Does the fatigue mitigation plan adequately address how the program reduces the risk associated with controller fatigue?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Fatigue Risk Management Plan, Section 1.0 Executive Summary, page 3.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMFM.FATIGUEQUANTIFY.P](#) , 192.631(d)

**References**

Question Text *Do processes require that the potential contribution of controller fatigue to incidents and accidents be quantified during investigations?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan document, Operating Experience, page 22.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMFM.FATIGUEMANAGER.P](#) , 192.631(d)

**References**

Question Text *Is there a designated fatigue risk manager who is responsible and accountable for managing fatigue risk and fatigue countermeasures, and someone (perhaps the same person) that is authorized to review and approve HOS emergency deviations?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Fatigue Mitigation Manager - Tilgner, Douglas

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMFM.SHIFTLENGTH.R](#) , 192.631(d)(1)

**References**

Question Text *Is the scheduled shift length less than or equal to 12 hours (not including shift hand-over) or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Shift length is 12 hours - Sample Schedule 09-08-14 through 11-30-14 and HOW Tracking Worksheet

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMFM.SHIFTLENGTHTIME.R](#) , 192.631(d)(1)

**References**

Question Text *Does the operator factor in all time the individual is working for the company when establishing shift lengths and schedule rotations or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?*

**Result** Sat

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed HOS Tracking Worksheet

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMFM.SCHEDULEDTIMEOFF.R](#) , 192.631(d)(1)

**References**

Question Text *Are all scheduled periods of time off at least one hour longer than 8 hours plus commute time or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?*

**Result** Sat

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed HOS Tracking Worksheet

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMFM.ONCALLCONTROLLER.R](#) , 192.631(d)(1)

**References**

Question Text *For controllers who are on call, does the operator minimize interrupting the required 8 hours of continuous sleep or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?*

**Result** NA

Assets Covered Unit NWN CRM Portland

Result Notes NWN does not use on-call controllers.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.MAXHOS.P](#) , 192.631(d)(4)

**References**

Question Text *Do processes limit the maximum HOS limit in any sliding 7 day period to no more than 65 hours or is there a documented technical basis to show a reduction of the risk associated with controller fatigue?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan document, Fatigue Mitigation, Shift Length and Rotations, Page 17.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.MINTIMEOFF.P](#) , 192.631(d)(4)

**References**

Question Text *After reaching the HOS limit in any sliding 7 day period, is the minimum time off at least 35 hours or is there a documented technical basis to show a reduction of the risk associated with controller fatigue?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan document, Fatigue Mitigation, Shift Length and Rotations, Page 17.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.DOCSCHEDULE.P](#) , 192.631(d)(4)

**References**

Question Text *Is there a formal system to document all scheduled and unscheduled HOS worked, including overtime and time spent performing duties other than control room duties?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Hours of Service (HOS) Tracking worksheet

Temporary (none)

**Question ID,** [CR.CRMFM.DAYSOFF.P](#) , 192.631(d)(4)

**References**

Question Text *For normal business hour type operations (i.e., five days per week), are no more than five days worked in succession before at least two days off?*

**Result** **NA**

Assets Covered Unit NWN CRM Portland

Result Notes NWN uses 12 hour work schedules.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.WORKHOURS.R](#) , 192.631(d)(4)

**References**

Question Text *For normal business hour type operations (i.e., five days per week), do records indicate shift start times no earlier than 6:00 a.m. and shift end times no later than 7:00 p.m.?*

**Result** **NA**

Assets Covered Unit NWN CRM Portland

Result Notes NWN uses a 12 hour work schedule.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.FATIGUECOUNTERMEASURES.P](#) , 192.631(d)(4)

**References**

Question Text *For shifts longer than 8 hours, have specific fatigue countermeasures been implemented for the ninth and beyond hours?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Fatigue Risk Management Plan, Section 4.5.5, Specific Fatigue Mitigation Countermeasures, page 23.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.DAILYHOSLIMIT.P](#) , 192.631(d)(4)

**References**

Question Text *Do processes limit the daily maximum HOS limit no more than 14 hours in any sliding 24-hour period?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Fatigue Mitigation (d), Shift Guidelines, page 17.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.CONTROLLERNUMBERS.O](#) , 192.631(d)

**References**

Question Text *Do operations include a sufficient number of qualified controllers?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Sample Schedule 09-08-14 through 11-30-14

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.OFFDUTYHOURS.P](#) , 192.631(d)(4)

**References**

Question Text *Do processes ensure that controllers are provided with at least thirty-five (35) continuous off-duty hours when limits are reached following the most recent 35-hour (minimum) off-duty rest period or is there a documented technical basis to show that the maximum limit on controller HOS is adequate to reduce the risk associated with controller fatigue?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan document, Fatigue Mitigation, Shift Length and Rotations, Page 17.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.SHIFTHOLDOVER.P](#) , 192.631(d)(4)

**References**

Question Text *Does the shift holdover process conform to shift holdover guidelines or is there*

*a documented technical basis to show that the maximum limit on controller HOS is adequate to reduce the risk associated with controller fatigue?*

**Result** Sat

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan document, Fatigue Mitigation, Shift Length and Rotations, Page 17.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.SPECIFICCOUNTERMEASURES.P](#) , 192.631(d)(4)

**References**

Question Text *Do processes require specific fatigue countermeasures during applicable time periods, or is there a documented technical basis to show that the maximum limit on controller HOS is adequate to reduce the risk associated with controller fatigue?*

**Result** Sat

Assets Covered Unit NWN CRM Portland

Result Notes Fatigue Risk Management Plan, Section 4.5.5, Specific Fatigue Mitigation Countermeasures, page 23.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.HOSDEVIATIONS.P](#) , 192.631(d)(4)

**References**

Question Text *Is there a formal process for approving deviations from the maximum HOS limits?*

**Result** Sat

Assets Covered Unit NWN CRM Portland

Result Notes Fatigue Risk Management Plan, Section 4.2.3 Sufficient Sleep Opportunity 4.2.3, page 16.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.FATIGUEEDUCATE.P](#) , 192.631(d)(2) (192.631(d)(3))

**References**

Question Text *Does the program require that fatigue education/training is required for all*

*controllers and control room supervisors?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Fatigue Risk Management Plan, Section, Refresher and Ongoing Training 4.3.2, Page 18-19.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.FATIGUEEDUCATE.R](#) , 192.631(d)(2) (192.631(d)(3))

**References**

Question Text *Is fatigue education/training documented for all controllers and control room supervisors?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Fatigue Training Certificate Records

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.FATIGUEREFRESHER.R](#) , 192.631(d)(2) (192.631(d)(3))

**References**

Question Text *Is refresher fatigue education provided at regular intervals?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Fatigue Training Records

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.FATIGUEREVIEW.P](#) , 192.631(d)(2) (192.631(d)(3))

**References**

Question Text *Do processes require that the effectiveness of the fatigue education/training program be reviewed at least once each calendar year, not to exceed 15 months?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Fatigue Risk Management Plan, Section 4.3.3, Evaluation of Training, page 19.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.FATIGUESTRATEGY.P](#) , 192.631(d)(2)

**References**

Question Text *Does fatigue education address fatigue mitigation strategies (countermeasures)?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Online Training Outline, Circadian

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMFM.OFFDUTY.P](#) , 192.631(d)(2)

**References**

Question Text *Does fatigue education address how off-duty activities contribute to fatigue?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Online Training Outline, Circadian

Temporary (none)

Inspector Notes

---

**Question ID,** [CR.CRMFM.FATIGUECONTENT.P](#) , 192.631(d)(3)

**References**

Question Text *Is the content of fatigue training adequate for training controllers and supervisors to recognize the effects of fatigue?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Online Training Outline, Circadian

Temporary (none)

Inspector Notes

---

**Question ID,** [CR.CRMFM.FATIGUECONTENT.R](#) , 192.631(d)(3)

**References**

Question Text *Has controller and supervisor training to recognize the effects of fatigue been documented?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Fatigue Training Records

Temporary (none)

Inspector Notes

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### CR.CRMAM: Alarm Management

**Question ID,** [CR.CRMAM.ALARM.P](#) , 192.631(e)

**References**

Question Text *Is the alarm management plan a formal process that specifically identifies critical topical areas included in the program?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed alarm management plan

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.ALARMMALFUNCTION.P](#) , 192.631(e)(1)

**References**

Question Text *Is there a process to identify and correct inaccurate or malfunctioning alarms?*

**Result** **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure CRM E400, Managing Inaccurate Alarms and Unreliable Data

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.ALARMREVIEW.P](#) , 192.631(e)(1)

**References**

Question Text *Does the review of safety-related alarms account for different alarm designs and all alarm types/priorities?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Alarm Management Plan: Alarm Annunciation and Response, page 3.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.CONTROLLERPERFORMANCE.P](#) , 192.631(e)(1)

**References**

Question Text *Does the review of safety-related alarms account for individual-specific controller qualification and performance?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes More for controllers and SCADA systems where multiple consoles are in play or accounting for someone with color blindness or other disability that would require modification. They will have multiple methods of alerting controllers such as color, size shape and Alpha numeric.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.STALEDATA.P](#) , 192.631(e)(1)

**References**

Question Text *Does the review of safety-related alarms include specific procedures and practices for managing stale or unreliable data?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure CRM E400, Managing Inaccurate Alarms and Unreliable Data, 3.3.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.MONTHLYANALYSIS.P](#) , 192.631(e)(2)

**References**

Question Text *Do processes require the monthly identification, recording, review, and analysis of points that have been taken off scan, have had alarms inhibited, generated false alarms, or that have had forced or manual values for periods of time exceeding that required for associated maintenance or operating activities?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM E200, Alarm and Auditing Verification, Scope and Policy Statement.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.PROBLEMCORRECTION.P](#) , 192.631(e)(2)

**References**

Question Text *Does the alarm management plan include a process for promptly correcting identified problems and for returning these points to service?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM E200, Alarm and Auditing Verification, Policy Statement Section 2

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.ALARMSETPOINTS.P](#) , 192.631(e)(3)

**References**

Question Text *Is there a formal process to determine the correct alarm setpoint values and alarm descriptions?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM E100, Accuracy of Safety Related Setpoint

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.SETTINGCONTROL.P](#) , 192.631(e)(3)

**References**

Question Text *Have procedures been established to clearly address how and to what degree*

*controllers can change alarm limits or setpoints, or inhibit alarms, or take points off-scan?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Alarm Management Plan, Suppressing Alarms, page 5

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.PLANREVIEW.P](#) , 192.631(e)(4)

**References**

Question Text *Are there processes to review the alarm management plan at least once each calendar year, but at intervals not exceeding 15 months, in order to determine the effectiveness of the plan?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Alarm Management Page 18, Alarm Management Plan Review

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.PLANREVIEW.R](#) , 192.631(e)(4)

**References**

Question Text *Do records indicate review of the alarm management plan at least once each calendar year, but at intervals not exceeding 15 months, in order to determine the effectiveness of the plan?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes annual review checklist reviewed 2014 & 2013

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.WORKLOAD.P](#) , 192.631(e)(5)

**References**

Question Text *Does the CRM program have a means of identifying and measuring the work load (content and volume of general activity) being directed to an individual controller?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Workload Analysis Completed by Pipeline Performance Group(PPG, Atlanta Georgia) various Sections. 3rd party does the performance review.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.WORKLOADMONITORING.P](#) , 192.631(e)(5)

**References**

Question Text *Is the process of monitoring and analyzing general activity comprehensive?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Workload Analysis Completed by Pipeline Performance Group(PPG, Atlanta Georgia) various Sections. 3rd party does the performance.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.CONTROLLERREACTION.P](#) , 192.631(e)(5)

**References**

Question Text *Does the process have a means of determining that the controller has sufficient time to analyze and react to incoming alarms?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Workload Analysis, page 3-4. PPG does during the annual review.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.PERFORMANCEANALYSIS.R](#) , 192.631(e)(5)

**References**

Question Text *Has an analysis been performed to determine if controller(s) performance is currently adequate?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed performance scoring for employee to review how the performance is done. Annual Performance Review.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.DEFICIENCIES.P](#) , 192.631(e)(6)

**References**

Question Text *Is there a process to address how deficiencies found in implementing 192.631(e)(1) through 192.631(e)(5) will be resolved?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Policy and Procedure, CRM E-200 Alarm Auditing and Verification, Policy

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMAM.DEFICIENCIES.R](#) , 192.631(e)(6)

**References**

Question Text *Do records indicate deficiencies found in implementing 192.631(e)(1) through 192.631(e)(5) have been resolved?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Alarm deficiency log 2014. Reviewed note for alarm removal due to equipment removal. Note regarding **\*\*1\*\*** on 3/21/14.

Temporary (none)

Inspector Notes

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## CR.CRMCMGT: Change Management

**Question ID,** [CR.CRMCMGT.EQUIPMENTCHANGES.P](#) , 192.631(f)(1)

**References**

Question Text *Is there a process to assure changes in field equipment that could affect control room operations are coordinated with the control room personnel?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan documentation, Change Management (f), page 20.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMCMGT.CONTROLLERPARTICIPATE.P](#) , 192.631(f)(1) (192.631(f)(3))  
**References**

Question Text *Are control room representative(s) required to participate in meetings where changes that could directly or indirectly affect the hydraulic performance or configuration of the pipeline (including routine maintenance and repairs) are being considered, designed and implemented?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan documentation, Change Management (f), page 20.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMCMGT.CONTROLLERPARTICIPATE.R](#) , 192.631(f)(1) (192.631(f)(3))  
**References**

Question Text *Do records indicate that control room representative(s) participate in meetings where changes that could directly or indirectly affect the hydraulic performance or configuration of the pipeline (including routine maintenance and repairs) are being considered, designed and implemented?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Signed Engineering Procedure, for 11-13-14 showing work and coordination that occurs prior to and during a change in configuration.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMCMGT.EMERGENCYCONTACT.P](#) , 192.631(f)(2)  
**References**

Question Text *Is there a process requiring field personnel and SCADA support personnel to contact the control room when emergency conditions exist?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan documentation, Change Management (f), page 20.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMCMGT.FIELDCONTACT.P](#) , 192.631(f)(2)

**References**

Question Text *Does the process require field personnel and SCADA support personnel to contact the control room when making field changes (for example, moving a valve) that affect control room operations?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan documentation, Change Management (f), page 20.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMCMGT.FIELDCHANGES.R](#) , 192.631(f)(2)

**References**

Question Text *Do records indicate field personnel and SCADA support personnel contacted the control room when making field changes (for example, moving a valve) that affect control room operations?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Signed Engineering Procedure, for 11-13-14 showing work and coordination that occurs prior to and during a change in configuration.

Temporary (none)  
Inspector Notes

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## CR.CRMEXP: Operating Experience

**Question ID,** [CR.CRMEXP.ABNORMALREVIEW.P](#) , 192.631(g)(1)

**References**

Question Text *Is there a formal, structured approach for reviewing and critiquing reportable events to identify lessons learned?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan documentation, Operating Experience (g), page 22.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMEXP.ABNORMALREVIEW.R](#) , 192.631(g)(1)

**References**

Question Text *Do records indicate reviews of reportable events specifically analyzed all contributing factors to determine if control room actions contributed to the event, and corrected any deficiencies?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes None during time frame.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMEXP.LESSONSLEARNED.P](#) , 192.631(g)(2)

**References**

Question Text *Does the program require training on lessons learned from a broad range of events (reportable incidents/accidents, near misses, leaks, operational and maintenance errors, etc.), even though the control room may not have been at fault?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan documentation, Operating Experience (g), page 22.

Temporary (none)  
Inspector Notes

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**Question ID,** [CR.CRMEXP.LESSONSLEARNED.R](#) , 192.631(g)(2)

**References**

Question Text *Has operating experience review training been conducted on lessons learned from a broad range of events (reportable incidents/accidents, near misses, leaks, operational and maintenance errors, etc.)?*

**Result NA**

Assets Covered Unit NWN CRM Portland

Result Notes None during time frame.

Temporary (none)

## CR.CRMTRAIN: Training

**Question ID,** [CR.CRMTRAIN.CONTROLLERTRAIN.P](#) , 192.631(h)

### References

Question Text *Has a controller training program been established to provide training for each controller to carry out their roles and responsibilities?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Gas Control Training Program, various documents.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.CONTROLLERTRAIN.R](#) , 192.631(h)

### References

Question Text *Has a controller training program been implemented to provide training for each controller to carry out their roles and responsibilities?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Review Training Records for PJ for 2013, and JC in 2006.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.TRAININGREVIEW.P](#) , 192.631(h)

### References

Question Text *Have processes been established to review the controller training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Training Program Guidance Document.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.TRAININGREVIEW.R](#) , 192.631(h)

**References**

Question Text *Have processes been implemented to review the controller training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed content of training and seems to be adequate. Reviewed annual review checklist for 2014 & 2013.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.TRAININGCONTENT.R](#) , 192.631(h)

**References**

Question Text *Does training content address all required material, including training each controller to carry out the roles and responsibilities that were defined by the operator?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed training test for New John, seems to be adequate.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.AOCLIST.R](#) , 192.631(h)(1)

**References**

Question Text *Has a list of the abnormal operating conditions that are likely to occur simultaneously or in sequence been established?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Gas Control Training Manual, Examples of Abnormal Operating Conditions, page 53.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.TRAININGABNORMAL.P](#) , 192.631(h)(1)

**References**

Question Text *Does the training program provide controller training on recognizing and responding to abnormal operating conditions that are likely to occur simultaneously or in sequence?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Gas Control Training Manual, Examples of Abnormal Operating Conditions, page 53.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.TRAINING.R](#) , 192.631(h)(2)

**References**

Question Text *Do records indicate the training program used a simulator or tabletop exercises to train controllers how to recognize and respond to abnormal operating conditions?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Table Top Example during Control Room Inspection 12-16-2014.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.TRAINING.O](#) , 192.631(h)(2)

**References**

Question Text *Does the training program use a simulator or tabletop exercises to train controllers how to recognize and respond to abnormal operating conditions?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Table Top Example during Control Room Inspection 12-16-2014.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.COMMUNICATIONTRAINING.P](#) , 192.631(h)(3)

**References**

Question Text *Does the CRM program train controllers on their responsibilities for communication under the operator's emergency response procedures?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Gas Control Training Manual, Communication, page 59 & 72.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.SYSKNOWLEDGE.P](#) , 192.631(h)(4)

**References**

Question Text *Does the training program provide controllers a working knowledge of the pipeline system, especially during the development of abnormal operating conditions?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Gas Control Training Program, Pipeline 101 Section, page 13-17.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.INFREQOPSLIST.R](#) , 192.631(h)(5)

**References**

Question Text *Has a list of pipeline operating setups that are periodically (but infrequently) used been established?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes LNG Plant Training manual, Infrequent procedures, page 96, LNG Plant Tail.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMTRAIN.INFREQOPSREVIEW.P](#) , 192.631(h)(5)

**References**

Question Text *Do processes specify that, for pipeline operating set-ups that are periodically (but infrequently) used, the controllers must be provided an opportunity to review relevant procedures in advance of their use?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed Tail Gas Procedure seems adequate.

Temporary (none)

Inspector Notes

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## CR.CRMCOMP: Compliance Validation and Deviations

**Question ID,** [CR.CRMCOMP.SUBMITPROCEDURES.P](#) , 192.631(i)

### References

Question Text *Are there adequate processes to assure that the operator is responsive to requests from applicable agencies to submit their CRM procedures?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM plan document, compliance validation (i), PAGE 24, Received CRM Procedures 1 month prior to inspection.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMCOMP.SUBMITPROCEDURES.R](#) , 192.631(i)

### References

Question Text *Has the operator been responsive to requests from applicable agencies to submit their CRM procedures?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM plan document, compliance validation (i), PAGE 24, Received CRM Procedures 1 month prior to inspection.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMCOMP.CRMCOORDINATOR.R](#) , 192.631(i)

### References

Question Text *Is there an individual that is responsible and accountable for compliance with requests from PHMSA or other applicable agencies?*

Result **Sat**

Assets Covered Unit NWN CRM Portland

Result Notes NWN coordinator is Andrea Scott, Kerry is the Manager of code compliance.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMCOMP.RECORDS.P](#) , 192.631(j)(1)

**References**

Question Text *Records management processes adequate to assure records are sufficient to demonstrate compliance with the CRM rule?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Records appear to **be adequate**

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMCOMP.RECORDS.R](#) , 192.631(j)(1)

**References**

Question Text *Are records sufficient to demonstrate compliance with the CRM rule?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes Records appear to be adequate to assure compliance with CRM rule.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMCOMP.ELECTRONICRECORDS.R](#) , 192.631(j)(1)

**References**

Question Text *Are electronic records properly stored, safeguarded, and readily retrievable?*

**Result Sat**

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan document, General (a) page 9, backups are done by IT daily.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMCOMP.DEVIATIONS.P](#) , 192.631(j)(2)

**References**

Question Text *Are there processes to demonstrate and provide a documented record that every deviation from any CRM rule requirement was necessary for safe operation?*

**Result** Sat

Assets Covered Unit NWN CRM Portland

Result Notes CRM Plan Document, Compliance and Deviations, Page 25.

Temporary (none)

Inspector Notes

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**Question ID,** [CR.CRMCOMP.DEVIATION.R](#) , 192.631(j)(2)

**References**

Question Text *Were all deviations documented in a way that demonstrates they were necessary for safe operation?*

**Result** Sat

Assets Covered Unit NWN CRM Portland

Result Notes Reviewed deviation records in the CRM Plan under deviations.

Temporary (none)

Inspector Notes

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