

# Inspection Output (IOR)

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## Report Filters

Assets All, and including items not linked to any asset.

Results All

## Inspection Information

Inspection Name	9035 PSE HQ CRM	Operator(s)	PUGET SOUND ENERGY (22189)	Plan Submitted	02/27/2025
		Lead	Anthony Dorrough	Plan Approval	03/06/2025
Status	LOCKED	Team Members	David Cullom, Derek Norwood, Scott Anderson, Tom Green, Jason Hoxit		by Dennis Ritter
Start Year	2025	Observer(s)	Paul Jordan, Matt Frost	All Activity Start	06/25/2025
System Type	GD	Supervisor	Dennis Ritter	All Activity End	06/26/2025
Protocol Set ID	WA.GD.2024.02	Director	Scott Rukke	Inspection Submitted	07/02/2025
				Inspection Approval	07/03/2025
					by Scott Rukke

## Inspection Summary

### Inspection Scope and Summary

This was a headquarters control room management (CRM) inspection and included a control management, records, and facilities review.

### Facilities visited and Total AFOD =3

Wed - Jun 25 - Procedures & records review via MS TEAMS

Thu - Jun 26 - Facilities observation - 13635 NE 80th St - Redmond WA

Fri - Jun 27 - Inspection wrap-up & exit interview via MS TEAMS

### Summary of Significant Findings

There were no significant findings

### Primary Operator contacts and/or participants

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### Operator executive contact and mailing address for any official correspondence

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## Scope (Assets)

#	Short Name	Long Name	Asset Type	Asset IDs	Excluded Topics	Planned	Required	Total Inspected	Required % Complete
1.	9035 PSE CRM	<No Long Name>	unit	--	Bottle/Pipe - Holders Offshore GOM OCS Cast or Ductile Iron Copper Pipe Aluminum/Amphoteric	140	140	140	100.0%

1. Percent completion excludes unanswered questions planned as "always observe".

# Plans

# Plan Assets	Focus Directives	Involved Groups/Subgroups	Qst Type(s)	Extent Notes
1. 9035 PSE CRM	Control Room Management	AR, CR, DC, EP, FS, MO, GDIM, LPGIM, PD, RPT, TD, TQ, 114, GENERIC	P, R, O, S	Detail --

# Plan Implementations

Activity # Name	SMART Act#	Start Date End Date	Focus Directives	Involved Groups/Subgroups	Asset s	Qst Type(s)	Planned	Required	Total Inspected	Required % Complete
1. 9035 PSE CRM	--	06/25/2025 06/26/2025	--	all planned questions	all assets	all types	140	140	140	100.0%

1. Since questions may be implemented in multiple activities, but answered only once, questions may be represented more than once in this table.
2. Percent completion excludes unanswered questions planned as "always observe".

# Forms

No.	Entity	Form Name	Status	Date Completed	Activity Name	Asset
1.	Attendance List	9035 PSE CRM	COMPLETED	06/27/2025	9035 PSE CRM	9035 PSE CRM

# Results (all values, 140 results)

## CR.CRMGEN: General

1. Question Result, ID, References **Sat, CR.CRMGEN.CRMCRITERIA.P, 192.631(a)(2)**

Question Text *Do procedures adequately address the process and criteria to determine which facilities are control rooms?*

Assets Covered **9035 PSE CRM**

Result Notes **Control Room Management Plan Standards (CRMPS) - Section 7700.1000 - Control Room Management Plan Definitions**
2. Question Result, ID, References **Sat, CR.CRMGEN.CRMMGMT.P, 192.631(a)(2)**

Question Text *Are CRM procedures formalized and controlled?*

Assets Covered **9035 PSE CRM**

Result Notes **Formalized and controlled by the PSE Standards Group.**
3. Question Result, ID, References **Sat, CR.CRMGEN.CRMIMPLEMENT.R, 192.631(a)(2)**

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

Assets Covered **9035 PSE CRM**

Result Notes **Verified -Procedures approved on Aug 1, 2012**
4. Question Result, ID, References **Sat, CR.CRMGEN.CRMPROCLOCATION.O, 192.631(a)(2)**

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

Assets Covered **9035 PSE CRM**

Result Notes **Staff verified by having controller access procedures using his computer terminal during facilities review portion of the inspection.**

## CR.CRMRR: Roles and Responsibilities

5. Question Result, ID, References **Sat, CR.CRMRR.RESPONSIBLE.P, 192.631(b)**  
Question Text *Are there clear processes to describe each controller's physical domain of responsibility for pipelines and other facility assets?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in CRM - Section 7700.2000 - Roles and Responsibilities of Controllers.**
6. Question Result, ID, References **Sat, CR.CRMRR.QUALCONTROL.P, 192.631(b)**  
Question Text *Are there provisions in place to assure that only qualified individuals may assume control at any console/desk?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - Section 7600.1000 - Operation Qualification Plan**
7. Question Result, ID, References **Sat, CR.CRMRR.DOMAINCHANGE.P, 192.631(b)**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - Section 7700.3300**
8. Question Result, ID, References **Sat, CR.CRMRR.AUTHORITYABNORMAL.P, 192.631(b)(2)**  
Question Text *Have processes been established to define the controllers' authority and responsibilities when an abnormal operating condition is detected?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - Section 7700.2000 - Subsection 5 - Abnormal Operating Conditions**
9. Question Result, ID, References **Sat, CR.CRMRR.RESPCHANGE.P, 192.631(b)**  
Question Text *Do processes address a controller's role during temporary impromptu (unplanned) changes in controller responsibilities?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - Section 7700.2000 - Gas Controller Roles and Responsibilities**
10. Question Result, ID, References **Sat, CR.CRMRR.COMMANDVERIFY.P, 192.631(b)**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - Section 7700.2000 - Subsection 3.5**
11. Question Result, ID, References **Sat, CR.CRMRR.PRESSLIMITS.O, 192.631(b)(2) (192.619(a), 192.631(e)(1))**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Staff verified by having controller attempt to access current MAOPs using his computer terminal during facilities review portion of the inspection.**
12. Question Result, ID, References **Sat, CR.CRMRR.AUTHORITYEMERGENCY.P, 192.631(b)(3) (192.615(a)(8), NTSB P-11-9)**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - Section 7700.2000 - Subsection 3.5 - Gas Controller and responsibilities**
13. Question Result, ID, References **Sat, CR.CRMRR.EVACUATION.P, 192.631(b)(3)**

- Question Text *Do processes specifically address the controller's responsibilities in the event the control room must be evacuated?*
- Assets Covered 9035 PSE CRM
- Result Notes Located in - Section 7700.3400 - Back-up Gas Control Center Testing Procedures
14. Question Result, ID, References Sat, CR.CRMRR.COMMSYSFAIL.P, 192.631(b)(3)
- 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?*
- Assets Covered 9035 PSE CRM
- Result Notes Located in - Section 7700.3200 - Appendix A - Subsection 4 - Procedures
15. Question Result, ID, References Sat, CR.CRMRR.HANDOVER.P, 192.631(b)(4) (192.631(c)(5))
- 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?*
- Assets Covered 9035 PSE CRM
- Result Notes Located in - Section 7700.3300 - Section 4
16. Question Result, ID, References Sat, CR.CRMRR.HANDOVER.O, 192.631(b)(4) (192.631(c)(5))
- Question Text *Do observations indicate adequate hand-over of responsibility to the oncoming shift?*
- Assets Covered 9035 PSE CRM
- Result Notes Staff was able to verify by having controller give a detailed explanation of the hand-over process during facilities review portion of the inspection.
17. Question Result, ID, References Sat, CR.CRMRR.HANDOVERDOC.P, 192.631(b)(4) (192.631(c)(5))
- 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?*
- Assets Covered 9035 PSE CRM
- Result Notes Located in - Section 7700.3300 - Section 4
18. Question Result, ID, References Sat, CR.CRMRR.HANDOVERDOC.R, 192.631(b)(4) (192.631(c)(5))
- 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?*
- Assets Covered 9035 PSE CRM
- Result Notes Reviewed shift change documents - up to latest (2025)
19. Question Result, ID, References Sat, CR.CRMRR.HANDOVEROVERLAP.P, 192.631(b)(4)
- Question Text *Do processes require the controllers to discuss recent and impending important activities ensuring adequate overlap?*
- Assets Covered 9035 PSE CRM
- Result Notes Located in - Section 7700.3300 - Section 4.3
20. Question Result, ID, References Sat, CR.CRMRR.HANDOVERALTERNATIVE.P, 192.631(b)(4)
- 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?*
- Assets Covered 9035 PSE CRM
- Result Notes Located in - Section 7700.2000 - Section 5.2 thru 5.4 - Control Room Roles and Responsibility
21. Question Result, ID, References Sat, CR.CRMRR.UNATTENDCONSOLE.P, 192.631(b)(4)
- Question Text *Has the operator established an adequate process for occasions when the console is left temporarily unattended for any reason?*
- Assets Covered 9035 PSE CRM
- Result Notes Located in - Section 7700.2000 - Section 3.3 & 3.4 - Control Room Roles and Responsibility

22. Question Result, ID, References **Sat, CR.CRMRR.CONSOLECOVERAGE.P, 192.631(b)(4)**  
 Question Text *Do processes maintain adequate console coverage during shift hand-over?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - Section 7700.3300 - Section 3.6 - Control Room Roles and Responsibility**
23. Question Result, ID, References **Sat, CR.CRMRR.OTHERAUTHORITYDISALLOW.P, 192.631(b)(5)**  
 Question Text *Do processes disallow others to have authority to direct or supersede the specific technical actions of a controller?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in -7700.2000 - Gas Controller Roles and Responsibilities**
24. Question Result, ID, References **Sat, CR.CRMRR.OTHERAUTHORITYDISALLOW.R, 192.631(b)(5)**  
 Question Text *Do records indicate that the policy disallowing others to have authority to direct or supersede the specific technical actions of a controller has been communicated to controllers and others?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Reviewed Gas Control Training Manual - Module 4**
25. Question Result, ID, References **Sat, CR.CRMRR.OTHERAUTHORITYDISALLOW.O, 192.631(b)(5)**  
 Question Text *Are controllers aware of, and can reference, processes that disallow others to have authority to direct or supersede the specific technical actions of a controller?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Staff was able to verify by having controller describe awareness of the policy that others are not to be allowed to direct or supersede their actions during facilities review portion of the inspection.**
26. Question Result, ID, References **Sat, CR.CRMRR.OTHERAUTHORITYQUAL.P, 192.631(b)(5)**  
 Question Text *Does the process result in identification of required qualification elements for those authorized to direct or supersede the technical actions of a controller that are sufficient for those individuals to understand the implications of the scope of potential actions?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - 7700.2000 - Gas Controller Roles and Responsibilities**
27. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYQUAL.R, 192.631(b)(5)**  
 Question Text *Do records indicate that others given authority to direct or supersede the specific technical actions of a controller were qualified?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **No such activity/condition was observed during the inspection.**
28. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYIMPLEMENT.P, 192.631(b)(5)**  
 Question Text *Is the process defined with respect to the details of how those authorized to direct or supersede the technical actions of a controller are to implement their authority?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **No such activity/condition was observed during the inspection.**
29. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYLIST.R, 192.631(b)(5)**  
 Question Text *Is a list of individuals with authority to direct or supersede the technical actions of a controller readily available to controllers?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **No such activity/condition was observed during the inspection.**
30. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYIMPLEMENT.R, 192.631(b)(5)**  
 Question Text *Do records adequately document occurrences of when others authorized to direct or supersede the technical actions of a controller have done so?*  
 Assets Covered **9035 PSE CRM**

Result Notes No such activity/condition was observed during the inspection.

31. Question Result, ID, References NA, CR.CRMRR.OTHERAUTHORITYIMPLEMENT.O, 192.631(b)(5)

Question Text *Do others authorized to direct or supersede the technical actions of a controller demonstrate an understanding of the process to implement this authority?*

Assets Covered 9035 PSE CRM

Result Notes No such activity/condition was observed during the inspection.

## CR.CRMFM: Fatigue Management

32. Question Result, ID, References Sat, CR.CRMFM.FATIGUEMITIGATION.P, 192.631(d) (192.631(a))

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

Assets Covered 9035 PSE CRM

Result Notes Located in - Fatigue Risk Management Plan - Section 3 - Fatigue Risk Assessment

## CR.SCADA: Supervisory Control and Data Acquisition

33. Question Result, ID, References Sat, CR.SCADA.SYSTEMMOC.P, 192.631(c)(1)

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?*

Assets Covered 9035 PSE CRM

Result Notes Located in - Section 7700.6000 - Gas Control Change Management Process

## CR.CRMFM: Fatigue Management

34. Question Result, ID, References Sat, CR.CRMFM.FATIGUERISKS.P, 192.631(d) (192.631(a))

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

Assets Covered 9035 PSE CRM

Result Notes Fatigue Risk Management Plan - 7700.4000 - Section 3.6 - Fatigue Management

## CR.SCADA: Supervisory Control and Data Acquisition

35. Question Result, ID, References Sat, CR.SCADA.DISPLAYCONFIG.P, 192.631(c)(1)

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?*

Assets Covered 9035 PSE CRM

Result Notes Located in - Section 7700.3000 - SCADA Display Design

SCADA Display Design Manual - Sections 5.2 thru 5.4

## CR.CRMFM: Fatigue Management

36. Question Result, ID, References Sat, CR.CRMFM.FATIGUEQUANTIFY.P, 192.631(d) (192.631(a), 192.631(g)(1))

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

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.7000 - Section 3.5.1 - Post Incident Review of Control Room Actions

## CR.SCADA: Supervisory Control and Data Acquisition

37. Question Result, ID, References **Sat, CR.SCADA.1165HUMANFACTORS.O, 192.631(c)(1)**  
Question Text *Has section 4 of API RP 1165 regarding human factors engineering been implemented?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - SCADA Display Design Manual - Section 2 - Design Approach**

Staff was able to verify by observing the control room environment, display formats, layout, shapes and colors on control surfaces and equipment during facilities review portion of the inspection.

### **CR.CRMFM: Fatigue Management**

38. Question Result, ID, References **Sat, CR.CRMFM.FATIGUEMANAGER.P, 192.631(d) (192.631(a))**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.4000 - Section 2.1 - Fatigue Management**

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

39. Question Result, ID, References **Sat, CR.SCADA.DISPLAYOBJECTS.O, 192.631(c)(1)**  
Question Text *Has section 8 of API RP 1165 regarding display object characteristics been implemented?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - SCADA Display Design Manual - Section 2 - Design Approach**

Staff was able to verify by observing the control room environment, display formats, layout, shapes and colors on control surfaces and equipment during facilities review portion of the inspection.

### **CR.CRMFM: Fatigue Management**

40. Question Result, ID, References **Sat, CR.CRMFM.SHIFTLENGTH.R, 192.631(d)(1) (192.631(a))**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Reviewed 12-hour shift schedule records.**

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

41. Question Result, ID, References **Sat, CR.SCADA.DISPLAYDYNAMICS.R, 192.631(c)(1)**  
Question Text *Has Section 9 of API RP 1165 regarding display object dynamics been implemented?*  
Assets Covered **9035 PSE CRM**  
Result Notes **located in- SCADA Display Design Manual - Section 6 - Display Styles**

### **CR.CRMFM: Fatigue Management**

42. Question Result, ID, References **Sat, CR.CRMFM.SHIFTLENGTHTIME.R, 192.631(d)(1)**  
Question Text *Does the operator factor in all time the individual is working for the company when establishing shift lengths and schedule rotations and that periods of time off that accommodates 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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **PSE allows controllers 8-hour off-duty rest time prior to shift.**

## CR.SCADA: Supervisory Control and Data Acquisition

43. Question Result, ID, References **Sat, CR.SCADA.ADMINISTRATION.R, 192.631(c)(1)**  
Question Text *Have applicable paragraphs of section 11 of API RP 1165 administration been implemented?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Reviewed - Vashon Crossing Location screen shot to verify**

## CR.CRMFM: Fatigue Management

44. Question Result, ID, References **Sat, CR.CRMFM.SCHEDULEDTIMEOFF.R, 192.631(d)(1)**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **PSE has calculated 1-hour - 23 minutes max. commute time.**

## CR.SCADA: Supervisory Control and Data Acquisition

45. Question Result, ID, References **NA, CR.SCADA.1165IMPRACTICAL.R, 192.631(c)(1)**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **No such activity/condition was observed during the inspection.**

## CR.CRMFM: Fatigue Management

46. Question Result, ID, References **NA, CR.CRMFM.ONCALLCONTROLLER.P, 192.631(d) (192.631(a))**  
Question Text *For controllers who are on call, do processes minimize interrupting the required 8 hours of continuous sleep or require 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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **No such activity/condition was observed during the inspection.**

## CR.SCADA: Supervisory Control and Data Acquisition

47. Question Result, ID, References **Sat, CR.SCADA.SETPOINT.P, 192.631(c)(2)**  
Question Text *Does the process adequately define safety-related points?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.5000 - Section 4 - Safety Related Points**

## CR.CRMFM: Fatigue Management

48. Question Result, ID, References **NA, CR.CRMFM.ONCALLCONTROLLER.R, 192.631(d)(1)**  
Question Text *Do records for controllers on call, provide records shift schedule, when calls were made for on call and how long the individual worked?*  
Assets Covered **9035 PSE CRM**  
Result Notes **No such activity/condition was observed during the inspection.**

## CR.SCADA: Supervisory Control and Data Acquisition

49. Question Result, ID, References **Sat, CR.SCADA.SETPOINT.R, 192.631(c)(2)**

Question Text *Do records indicate safety-related points have been adequately implemented?*  
Assets Covered 9035 PSE CRM  
Result Notes Reviewed SCADA snap shot of all the safety-related points.

## CR.CRMFM: Fatigue Management

50. Question Result, ID, References Sat, CR.CRMFM.MAXHOS.P, 192.631(d)(4)

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?*

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.4000 - Section 3.6 - Fatigue Management

## CR.SCADA: Supervisory Control and Data Acquisition

51. Question Result, ID, References Sat, CR.SCADA.POINTVERIFY.P, 192.631(c)(2)

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

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.3100 - Section 3.1 - General Requirements

## CR.CRMFM: Fatigue Management

52. Question Result, ID, References Sat, CR.CRMFM.DOCSCHEDULE.P, 192.631(d)(4) (192.631(a))

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?*

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.4000 - Section 4.2 - 4.3 - Fatigue Management

## CR.SCADA: Supervisory Control and Data Acquisition

53. Question Result, ID, References Sat, CR.SCADA.POINTVERIFY.R, 192.631(c)(2)

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

Assets Covered 9035 PSE CRM

Result Notes Reviewed sample of point-to-point references in SCADA

## CR.CRMFM: Fatigue Management

54. Question Result, ID, References NA, CR.CRMFM.DAYSOFF.P, 192.631(d)(4) (192.631(a))

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?*

Assets Covered 9035 PSE CRM

Result Notes No such activity/condition was observed during the inspection.

PSE controllers work a 6-6 schedule

## CR.SCADA: Supervisory Control and Data Acquisition

55. Question Result, ID, References Sat, CR.SCADA.POINTVERIFYEXTENT.P, 192.631(c)(2)

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

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.3100 - Section 4 - Point-to-Point Verification Procedure

## CR.CRMFM: Fatigue Management

56. Question Result, ID, References **NA, CR.CRMFM.WORKHOURS.R, 192.631(d)(4)**

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.?*

Assets Covered **9035 PSE CRM**

Result Notes **No such activity/condition was observed during the inspection.**

## CR.SCADA: Supervisory Control and Data Acquisition

57. Question Result, ID, References **Sat, CR.SCADA.POINTVERIFYEXTENT.R, 192.631(c)(2)**

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

Assets Covered **9035 PSE CRM**

Result Notes **Reviewed sample of point-to-point SCADA data**

## CR.CRMFM: Fatigue Management

58. Question Result, ID, References **Sat, CR.CRMFM.CONTROLLERNUMBERS.O, 192.631(d)**

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

Assets Covered **9035 PSE CRM**

Result Notes **Verified that staffing was adequate during facilities review portion of the inspection.**

## CR.SCADA: Supervisory Control and Data Acquisition

59. Question Result, ID, References **Sat, CR.SCADA.POINTVERFIYINTVL.P, 192.631(c)(2)**

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

Assets Covered **9035 PSE CRM**

Result Notes **Located in - 7700.3100 - Section 4.6 - Point-to-Point Verification Procedure**

## CR.CRMFM: Fatigue Management

60. Question Result, ID, References **Sat, CR.CRMFM.OFFDUTYHOURS.P, 192.631(d)(4)**

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?*

Assets Covered **9035 PSE CRM**

Result Notes **Located in - 7700.4000 - Section 3.5.2 - Fatigue Management**

**Reviewed PSE Gas Control Center Schedule**

## CR.SCADA: Supervisory Control and Data Acquisition

61. Question Result, ID, References **Sat, CR.SCADA.POINTVERFIYINTVL.R, 192.631(c)(2)**

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

Assets Covered **9035 PSE CRM**

Result Notes **located in - 7700.3100 - SCADA Point-to-Point Verification**

## CR.CRMFM: Fatigue Management

62. Question Result, ID, References **Sat, CR.CRMFM.SHIFTHOLDOVER.P, 192.631(d)(4) (192.631(a))**

Question Text *Does the daily HOS limit and shift holdover process conform to shift HOS and 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?*

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.4000 - Section 3.7 - Fatigue Management

## CR.SCADA: Supervisory Control and Data Acquisition

63. Question Result, ID, References Sat, CR.SCADA.POINTVERIFY.O, 192.631(c)(2)

Question Text *Are point-to-point verifications performed adequately when required?*

Assets Covered 9035 PSE CRM

Result Notes Staff was able to verify by having a brief discussion with controller about verification between SCADA displays and related field equipment during facilities review portion of the inspection.

## CR.CRMFM: Fatigue Management

64. Question Result, ID, References Sat, CR.CRMFM.SPECIFICCOUNTERMEASURES.P, 192.631(d)(4) (192.631(a))

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?*

Assets Covered 9035 PSE CRM

Result Notes Located in - Gas Control Shift Checklist - Title Page

## CR.SCADA: Supervisory Control and Data Acquisition

65. Question Result, ID, References Sat, CR.SCADA.COMMPLAN.P, 192.631(c)(3)

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

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.3200 - Internal Communications Plan - Appendix A

## CR.CRMFM: Fatigue Management

66. Question Result, ID, References Sat, CR.CRMFM.HOSDEVIATIONS.P, 192.631(d)(4) (192.631(a))

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

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.8000 - Section 4.1 - Gas Control Procedural Deviations (Form 4722)

## CR.SCADA: Supervisory Control and Data Acquisition

67. Question Result, ID, References Sat, CR.SCADA.COMMPLAN.R, 192.631(c)(3)

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?*

Assets Covered 9035 PSE CRM

Result Notes Reviewed Gas Control Home Page - Documented in Form 4749

## CR.CRMFM: Fatigue Management

68. Question Result, ID, References Sat, CR.CRMFM.FATIGUEEDUCATE.P, 192.631(d)(2) (192.631(d)(3), 192.631(a))

Question Text *Does the program require that fatigue education/training is required for all controllers and control room supervisors?*

Assets Covered 9035 PSE CRM

## CR.SCADA: Supervisory Control and Data Acquisition

69. Question Result, ID, References Sat, CR.SCADA.BACKUPSCADA.O, 192.631(c)

Question Text *Is there a backup SCADA system?*

Assets Covered 9035 PSE CRM

Result Notes Staff was able to verify by having controller demonstrate how the backup SCADA system operates and how another controller can take over his responsibility if he were to need a bathroom break, during facilities review portion of the inspection.

## CR.CRMFM: Fatigue Management

70. Question Result, ID, References Sat, CR.CRMFM.FATIGUREVIEW.P, 192.631(d)(2) (192.631(d)(3), 192.605(a))

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?*

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.4000 - Section 3.9 - Fatigue Management

## CR.SCADA: Supervisory Control and Data Acquisition

71. Question Result, ID, References NA, CR.SCADA.BACKUPSCADADEV.P, 192.631(c)(4)

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

Assets Covered 9035 PSE CRM

Result Notes No such activity/condition was observed during the inspection.

## CR.CRMFM: Fatigue Management

72. Question Result, ID, References Sat, CR.CRMFM.FATIGUESTATEGY.P, 192.631(d)(2) (192.631(a))

Question Text *Does fatigue education address fatigue mitigation strategies (countermeasures), how off-duty activities contribute to fatigue and recognizing the effects of fatigue?*

Assets Covered 9035 PSE CRM

Result Notes Located in - Fatigue Training PowerPoint - Shiftwork and Fatigue Training for Pipelines

## CR.SCADA: Supervisory Control and Data Acquisition

73. Question Result, ID, References Sat, CR.SCADA.BACKUPSCADATEST.P, 192.631(c)(4)

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

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.3400 - Backup Gas Control Center Testing Procedure

## CR.CRMFM: Fatigue Management

74. Question Result, ID, References Sat, CR.CRMFM.FATIGUEEDUCATE.R, 192.631(d)(2) (192.631(d)(3))

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

Assets Covered 9035 PSE CRM

Result Notes Reviewed documentation of Initial training for fatigue education located in Sharepoint.

## CR.SCADA: Supervisory Control and Data Acquisition

75. Question Result, ID, References **Sat, CR.SCADA.BACKUPSCADATEST.R, 192.631(c)(4)**  
Question Text *Is the backup SCADA system tested at least once each calendar year at intervals not to exceed 15 months?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Reviewed GAs Control Home Page in Sharepoint and verified.**

- 7/30/24
- 12/24/23
- 4/7/21
- 4/2022

## **CR.CRMFM: Fatigue Management**

76. Question Result, ID, References **Sat, CR.CRMFM.FATIGUECONTENT.P, 192.631(d)(3)**  
Question Text *Is the content of fatigue training adequate for training controllers and supervisors to recognize the effects of fatigue?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - Fatigue Training PowerPoint - Shiftwork and Fatigue Training for Pipelines**

**Also in the Fatigue Risk Management Plan - Page 14 CRM Human Factor Studies**

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

77. Question Result, ID, References **Sat, CR.SCADA.BACKUPSCADAVERIFY.P, 192.631(c)(4)**  
Question Text *Is testing required to verify adequate processes are in place for decision-making and internal communications to successfully implement a transition from primary SCADA to backup SCADA, and back to primary SCADA?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.3400 - Backup Gas Control Center Testing Procedure**

## **CR.CRMFM: Fatigue Management**

78. Question Result, ID, References **Sat, CR.CRMFM.FATIGUECONTENT.R, 192.631(d)(3)**  
Question Text *Has controller and supervisor training to recognize the effects of fatigue been documented?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Reviewed Fatigue Awareness training records 2022-2024**

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

79. Question Result, ID, References **Sat, CR.SCADA.BACKUPSCADAVERIFY.R, 192.631(c)(4)**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Reviewed Test Form (4717)**

**Reviewed GAs Control Home Page in Sharepoint and verified.**

- 7/30/24
- 12/24/23
- 4/7/21

- 4/2022

80. Question Result, ID, References **NA, CR.SCADA.BACKUPSCADADEQUACY.R, 192.631(c)(4)**  
 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?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **No such activity/condition was observed during the inspection.**
- Main control room and backup are identical.**
81. Question Result, ID, References **Sat, CR.SCADA.BACKUPSCADATRANSFER.P, 192.631(c)(4)**  
 Question Text *Do processes adequately address and test the logistics of transferring control to a backup control room?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - Form 6095 - BUCC Test Form**
82. Question Result, ID, References **Sat, CR.SCADA.BACKUPSCADARETURN.P, 192.631(c)(4)**  
 Question Text *Do procedures adequately address and test the logistics of returning operations back to the primary control room?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - Form 6095 - BUCC Test Form**
83. Question Result, ID, References **Sat, CR.SCADA.BACKUPSCADAFUNCTIONS.R, 192.631(c)(4)**  
 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?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Reviewed BUUC Test Forms**

- 4/1/25
- 7/30/24
- 12/14/23
- 8/19/22 - They operated odorant pumps

## **CR.CRMAM: Alarm Management**

84. Question Result, ID, References **Sat, CR.CRMAM.ALARM.P, 192.631(e)**  
 Question Text *Is the alarm management plan a formal process that specifically identifies critical topical areas included in the program?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - 7700.5000 - Alarm Management Plan**

## **CR.CRMCMGT: Change Management**

85. Question Result, ID, References **Sat, CR.CRMCMGT.EQUIPMENTCHANGES.P, 192.631(f)(1)**  
 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?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - 7700.6000 - Section 4 - Change Management Process**

## **CR.CRMAM: Alarm Management**

86. Question Result, ID, References **Sat, CR.CRMAM.ALARMMALFUNCTION.P, 192.631(e)(1)**  
Question Text *Is there a process to identify and correct inaccurate or malfunctioning alarms?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.5000 - Section 7.1.4 - Gas Control Alarm Management Plan**

## **CR.CRMCMGT: Change Management**

87. Question Result, ID, References **Sat, CR.CRMCMGT.CONTROLLERPARTICIPATE.P, 192.631(f)(1) (192.631(f)(3))**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.600 - Section 3.1 - General Requirements**

## **CR.CRMAM: Alarm Management**

88. Question Result, ID, References **Sat, CR.CRMAM.ALARMREVIEW.P, 192.631(e)(1)**  
Question Text *Does the review of safety-related alarms account for different alarm designs and all alarm types/priorities?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.5000 - Alarm Management Plan - Section 5**

## **CR.CRMCMGT: Change Management**

89. Question Result, ID, References **Sat, CR.CRMCMGT.CONTROLLERPARTICIPATE.R, 192.631(f)(1) (192.631(f)(3))**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Verified by controller demonstrating how MOC,s are communicated and documented in email exchanges between controllers and supervisors during facilities' portion of the inspection.**

## **CR.CRMAM: Alarm Management**

90. Question Result, ID, References **NA, CR.CRMAM.CONTROLLERPERFORMANCE.P, 192.631(h) (192.631(e)(1))**  
Question Text *Does the review of safety-related alarms account for console differences that could affect individual-specific controller qualification and performance?*  
Assets Covered **9035 PSE CRM**  
Result Notes **No such activity/condition was observed during the inspection.**

**PSE consoles are all the same.**

## **CR.CRMCMGT: Change Management**

91. Question Result, ID, References **Sat, CR.CRMCMGT.EMERGENCYCONTACT.P, 192.631(f)(2)**  
Question Text *Is there a process requiring field personnel and SCADA support personnel to contact the control room when emergency conditions exist?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.6000 - Section 3.3, 4.3 - Change Management Process**

**Also GOS 2425.2500 4.6.2 Control Room Management Program**

## CR.CRMAM: Alarm Management

92. Question Result, ID, References Sat, CR.CRMAM.STALEDATA.P, 192.631(e)(1)

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

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.5000 - Section 7.1.3 - Alarm Management Plan

## CR.CRMCMGT: Change Management

93. Question Result, ID, References Sat, CR.CRMCMGT.FIELDCONTACT.P, 192.631(f)(2)

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?*

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.3500 - Section 3.2 - Required Field Notifications - Table 3.1

## CR.CRMAM: Alarm Management

94. Question Result, ID, References Sat, CR.CRMAM.MONTHLYANALYSIS.P, 192.631(e)(2)

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?*

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.5000 - Section 7 - Monthly Alarm Review

## CR.CRMCMGT: Change Management

95. Question Result, ID, References NA, CR.CRMCMGT.FIELDCHANGES.R, 192.631(f)(2)

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?*

Assets Covered 9035 PSE CRM

Result Notes No such activity/condition was observed during the inspection.

Reviewed MOC forms and discussed MOC.

## CR.CRMAM: Alarm Management

96. Question Result, ID, References Sat, CR.CRMAM.PROBLEMCORRECTION.P, 192.631(e)(2)

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

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.5000 - Section 8.2 - Annual Alarm Reviews

97. Question Result, ID, References NA, CR.CRMAM.ALARMVERIFY.R, 192.631(e)(2)

Question Text *Do records verify that monthly reviews and analysis of alarm points have been performed?*

Assets Covered 9035 PSE CRM

Result Notes No such activity/condition was observed during the inspection.

98. Question Result, ID, References Sat, CR.CRMAM.ALARMSETPOINTS.P, 192.631(e)(3)

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

Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.5000 - Section 8.1.1 - Annual Alarm Reviews

99. Question Result, ID, References **Sat, CR.CRMAM.SETTINGCONTROL.P, 192.631(e)(3)**  
 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?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **7700.5000 - Section 3.7 - Alarm Philosophy - General Requirements**
100. Question Result, ID, References **Sat, CR.CRMAM.ALARMVALUEVERIFY.R, 192.631(e)(3)**  
 Question Text *Do records demonstrate verification of correct safety-related alarm set-point values and alarm descriptors when associated field instruments are calibrated or changed and at least once each calendar year, but at intervals not to exceed 15 months?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Reviewed annual safety-related alarm set-point records in Sharepoint.**
101. Question Result, ID, References **Sat, CR.CRMAM.PLANREVIEW.P, 192.631(e)(4)**  
 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?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - 7700.5000 - Section 9 - Alarm Management Plan Review**
102. Question Result, ID, References **Sat, CR.CRMAM.PLANREVIEW.R, 192.631(e)(4)**  
 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?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Reviewed Alarm Management Effectiveness Reviews in Sharepoint.**
103. Question Result, ID, References **Sat, CR.CRMAM.WORKLOAD.P, 192.631(e)(5)**  
 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?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - 7700.5000 - Section 10.1 - Annual Workload Assessment**
104. Question Result, ID, References **Sat, CR.CRMAM.WORKLOADMONITORING.P, 192.631(e)(5)**  
 Question Text *Is the process of monitoring and analyzing general activity comprehensive?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in -7700.5000 - Section 10.1 - Annual Workload Assessment**
105. Question Result, ID, References **Sat, CR.CRMAM.CONTROLLERREACTION.P, 192.631(e)(5)**  
 Question Text *Does the process have a means of determining that the controller has sufficient time to analyze and react to incoming alarms?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - Located in -7700.5000 - Section 10.1 - Annual Workload Assessment**
106. Question Result, ID, References **Sat, CR.CRMAM.PERFORMANCEANALYSIS.R, 192.631(e)(5)**  
 Question Text *Has an analysis been performed to determine if controller(s) performance is currently adequate?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Reviewed Workload Assessments in Sharepoint.**
107. Question Result, ID, References **Sat, CR.CRMAM.DEFICIENCIES.P, 192.631(e)(6)**  
 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?*  
 Assets Covered **9035 PSE CRM**  
 Result Notes **Located in - 7700.5000 - Section 7.2 & 8.2 - Alarm Management Plan**

108. Question Result, ID, References **NA, CR.CRMAM.DEFICIENCIES.R, 192.631(e)(6)**  
Question Text *Do records indicate deficiencies found in implementing 192.631(e)(1) through 192.631(e)(5) have been resolved?*  
Assets Covered **9035 PSE CRM**  
Result Notes **No such activity/condition was observed during the inspection.**

## **CR.CRMEXP: Operating Experience**

109. Question Result, ID, References **Sat, CR.CRMEXP.REPORTABLEINCIDENTREVIEW.P, 192.631(g)(1)**  
Question Text *Is there a formal, structured approach for reviewing and critiquing reportable events to identify lessons learned?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.7000 - Section 3.6 - Post Incident Review of Control Room Actions**
110. Question Result, ID, References **NA, CR.CRMEXP.REPORTABLEINCIDENTREVIEW.R, 192.631(g)(1)**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **No such activity/condition was observed during the inspection.  
Reviewed Post Incident Review forms in Sharepoint.**
111. Question Result, ID, References **Sat, CR.CRMEXP.LESSONSLEARNED.P, 192.631(g)(2) (192.631(b)(5))**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.7000 - Section 3.6 - General Requirements**
112. Question Result, ID, References **NA, CR.CRMEXP.LESSONSLEARNED.R, 192.631(g)(2) (192.631(b)(5))**  
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.)?*  
Assets Covered **9035 PSE CRM**  
Result Notes **No such activity/condition was observed during the inspection.**

## **CR.CRMTRAIN: Training**

113. Question Result, ID, References **Sat, CR.CRMTRAIN.CONTROLLERTRAIN.P, 192.631(h)**  
Question Text *Has a controller training program been established to provide training for each controller to carry out their roles and responsibilities?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.9000 - Gas Control Training Program**
114. Question Result, ID, References **Sat, CR.CRMTRAIN.CONTROLLERTRAIN.R, 192.631(h)**  
Question Text *Has a controller training program been implemented to provide training for each controller to carry out their roles and responsibilities?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Reviewed controller training records and training Powerpoint presentations, also noted training point posters displayed within the controller facility as reminders of action points.**
115. Question Result, ID, References **Sat, CR.CRMTRAIN.TRAININGREVIEW.P, 192.631(h)**  
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?*  
Assets Covered **9035 PSE CRM**

Result Notes Located in - 7700.9000 - Gas Control Training Program

Also located on Sharepoint Page

116. Question Result, ID, References Sat, CR.CRMTRAIN.TRAININGREVIEW.R, 192.631(h)  
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?*  
Assets Covered 9035 PSE CRM  
Result Notes Reviewed Training Manual Annual Review records in Sharepoint.
117. Question Result, ID, References Sat, CR.CRMTRAIN.TRAININGCONTENT.R, 192.631(h)  
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?*  
Assets Covered 9035 PSE CRM  
Result Notes Verified training content contained information about backup control rooms.
118. Question Result, ID, References Sat, CR.CRMTRAIN.AOCLIST.R, 192.631(h)(1)  
Question Text *Has training been conducted on the abnormal operating conditions (AOCs) that are likely to occur simultaneously or in sequence identified by the operator?*  
Assets Covered 9035 PSE CRM  
Result Notes Reviewed Training Manual Module in Sharepoint and training records which included identifying AOCs.
119. Question Result, ID, References Sat, CR.CRMTRAIN.TRAININGABNORMAL.P, 192.631(h)(1)  
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?*  
Assets Covered 9035 PSE CRM  
Result Notes Located in - Section 3.3 - Gas Control Training Manual - Module 3
120. Question Result, ID, References Sat, CR.CRMTRAIN.TRAINING.R, 192.631(h)(2)  
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?*  
Assets Covered 9035 PSE CRM  
Result Notes Reviewed Task Sign-off Report - PSE utilizes tabletop exercises.
121. Question Result, ID, References NA, CR.CRMTRAIN.TRAINING.O, 192.631(h)(2)  
Question Text *Does the training program use a simulator or tabletop exercises to train controllers how to recognize and respond to abnormal operating conditions?*  
Assets Covered 9035 PSE CRM  
Result Notes No such activity/condition was observed during the inspection.  
  
Reviewed Task Sign-off Report - PSE utilizes tabletop exercises.
122. Question Result, ID, References Sat, CR.CRMTRAIN.COMMUNICATIONTRAINING.P, 192.631(h)(3)  
Question Text *Does the CRM program train controllers on their responsibilities for communication under the operator's emergency response procedures?*  
Assets Covered 9035 PSE CRM  
Result Notes Located in - Gas Control Training Manual - Module 6 - Communicating  
  
Also 7700.9000 - Section 4.1.3 - Control Room Controller Training Plan
123. Question Result, ID, References Sat, CR.CRMTRAIN.SYSKNOWLEDGE.P, 192.631(h)(4)  
Question Text *Does the training program provide controllers a working knowledge of the pipeline system, especially during the development of abnormal operating conditions?*  
Assets Covered 9035 PSE CRM

Result Notes Located in - 7700.9000 - Section 4.1.4 - Program Elements

124. Question Result, ID, References Sat, CR.CRMTRAIN.INFREQOPSLIST.R, 192.631(h)(5)  
Question Text *Has a list of pipeline operating setups that are periodically (but infrequently) used been established?*  
Assets Covered 9035 PSE CRM  
Result Notes Reviewed list of in-frequent pipeline setups in Gas Control Training Module.
125. Question Result, ID, References Sat, CR.CRMTRAIN.INFREQOPSREVIEW.P, 192.631(h)(5)  
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?*  
Assets Covered 9035 PSE CRM  
Result Notes Located in - 7700.9000 - Section 4.1.5 - Program Elements
126. Question Result, ID, References Sat, CR.CRMTRAIN.TEAMTRAINPERSONNEL.P, 192.631(h)(6)  
Question Text *Do processes establish who, regardless of location, operationally collaborates with control room personnel?*  
Assets Covered 9035 PSE CRM  
Result Notes Located in - 7700.9100 - Section 1 - Scope (49 CFR 192.63(h)(6))
127. Question Result, ID, References Sat, CR.CRMTRAIN.TEAMTRAINFREQ.P, 192.631(h)(6)  
Question Text *Do processes define the frequency of new and recurring team training?*  
Assets Covered 9035 PSE CRM  
Result Notes Located in - 7700.9100 - Section 3.7 - General Requirements
128. Question Result, ID, References Sat, CR.CRMTRAIN.TEAMTRAINCOMPLETE.P, 192.631(h)(6)  
Question Text *Do processes address all operational modes and operational collaboration/control?*  
Assets Covered 9035 PSE CRM  
Result Notes Located in- 7700.9100 - Section 3 - General Requirements
129. Question Result, ID, References Sat, CR.CRMTRAIN.TEAMTRAINEXPERIENCE.P, 192.631(h)(6)  
Question Text *Do processes include incorporation of lessons learned from actual historical events and other oil-gas industry events?*  
Assets Covered 9035 PSE CRM  
Result Notes Located in - Located in- 7700.9100 - Section 3.6.1 - General Requirements
130. Question Result, ID, References Sat, CR.CRMTRAIN.TEAMTRAINEXERCISE.R, 192.631(h)(6)  
Question Text *Do records indicate that training exercises were adequate and involved at least one qualified controller?*  
Assets Covered 9035 PSE CRM  
Result Notes Reviewed training exercise records in Sharepoint with no issues identified.
131. Question Result, ID, References Sat, CR.CRMTRAIN.TEAMTRAINEXERCISE.O, 192.631(h)(6)  
Question Text *Does implementation of a control room team exercise demonstrate performance in accordance with regulatory and process requirements?*  
Assets Covered 9035 PSE CRM  
Result Notes Verified by discussion with controller about control room team exercises during the facilities portion of the inspection, with no issues identified.
132. Question Result, ID, References Sat, CR.CRMTRAIN.TEAMTRAINIDENTINDIVIDUAL.R, 192.631(h)(6)  
Question Text *Do records demonstrate that individuals identified as of January 23, 2018 received team training by January 23, 2019?*  
Assets Covered 9035 PSE CRM  
Result Notes Reviewed training exercise records in Sharepoint with no issues identified.

## CR.CRMCOMP: Compliance Validation and Deviations

133. Question Result, ID, References **Sat, CR.CRMCOMP.SUBMITPROCEDURES.P, 192.631(i)**  
Question Text *Are there adequate processes to assure that the operator is responsive to requests from applicable agencies to submit their CRM procedures?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 2524.2500 - section 5.1 - Reporting Requirements**
134. Question Result, ID, References **Sat, CR.CRMCOMP.SUBMITPROCEDURES.R, 192.631(i)**  
Question Text *Has the operator been responsive to requests from applicable agencies to submit their CRM procedures?*  
Assets Covered **9035 PSE CRM**  
Result Notes **PSE ensures that CRM procedures will be provided upon request of UTC or PHMSA within 45 days with no past issues.**
135. Question Result, ID, References **Sat, CR.CRMCOMP.CRMCOORDINATOR.P, 192.631(i)**  
Question Text *Is there an individual that is responsible and accountable for compliance with requests from PHMSA or other applicable agencies?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 2524.2500 - Section 2.2 - Responsibilities**
136. Question Result, ID, References **Sat, CR.CRMCOMP.RECORDS.P, 192.631(j)(1)**  
Question Text *Are records management processes adequate to assure records are sufficient to demonstrate compliance with the CRM rule?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - Control Room Management Standards**  
  
**Also 7700.3100 SCADA Point-to-Point Verifications - Section 5**
137. Question Result, ID, References **Sat, CR.CRMCOMP.RECORDS.R, 192.631(j)(1)**  
Question Text *Are records sufficient to demonstrate compliance with the CRM rule?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Records for 2022 thru 2025 were readily available and access was demonstrated through Sharepoint.**
138. Question Result, ID, References **Sat, CR.CRMCOMP.ELECTRONICRECORDS.R, 192.631(j)(1)**  
Question Text *Are electronic records properly stored, safeguarded, and readily retrievable?*  
Assets Covered **9035 PSE CRM**  
Result Notes **PSE stores records in Sharepoint - No issues found**
139. Question Result, ID, References **Sat, CR.CRMCOMP.DEVIATIONS.P, 192.631(j)(2)**  
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?*  
Assets Covered **9035 PSE CRM**  
Result Notes **Located in - 7700.8000 - Section 3.2 - Control Room Procedural Deviations - General Requirements**
140. Question Result, ID, References **NA, CR.CRMCOMP.DEVIATIONS.R, 192.631(j)(2)**  
Question Text *Were all deviations documented in a way that demonstrates they were necessary for safe operation?*  
Assets Covered **9035 PSE CRM**  
Result Notes **No such activity/condition was observed during the inspection.**

Except as required to be disclosed by law, any inspection documentation, including completed protocol forms, summary reports, executive summary reports, and enforcement documentation are for internal use only by federal or state pipeline safety regulators. Some inspection documentation may contain information which the operator considers to be confidential. In addition, supplemental inspection guidance and related documents in the file library are also for internal use only by federal or state pipeline safety regulators (with the exception of documents published in the federal register, such as advisory bulletins). Do not distribute or otherwise disclose such material outside of the state or federal pipeline regulatory organizations. Requests for such information from other government organizations (including, but not limited to, NTSB, GAO, IG, or Congressional Staff) should be referred to PHMSA Headquarters Management.