Inspection Results (IRR)

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- WA UTC (143)

Inspection Results Report (ALL Non-Empty Results) - Scp_PK WA UTC

Row	Assets	Result	Sub-Group	Qst #	Question ID	References	Question Text
1.	(and 2 other assets)	Sat	MISCTOPICS.CRM	1.	CR.CRMGEN.CRMCRITERIA.P	192.631(a)(2)	Do procedures adequately address the process and criteria that determine which facilities are determined to be control rooms?
2.	(and 2 other assets)	Sat	MISCTOPICS.CRM	2.	CR.CRMGEN.CRMMGMT.P	192.631(a)(2)	Are CRM procedures formalized and controlled?
3.	(and 2 other assets)	Sat	MISCTOPICS.CRM	3.	CR.CRMGEN.CRMIMPLEMENT.R	192.631(a)(2)	Were procedures approved, in place, and implemented on or before the regulatory deadline?
4.	(and 2 other assets)	Sat	MISCTOPICS.CRM	4.	CR.CRMGEN.CRMPROCLOCATION.O	192.631(a)(2)	Are procedures readily available to controllers in the control room?
5.	(and 2 other assets)	Sat	MISCTOPICS.CRM	5.	CR.CRMRR.RESPONSIBLE.P	192.631(b)	Are there clear processes to describe each controller's physical domain of responsibility for pipelines and other facility assets?
6.	(and 2 other assets)	Sat	MISCTOPICS.CRM	6.	CR.CRMRR.QUALCONTROL.P	192.631(b)	Are there provisions in place to assure that only qualified individuals may assume control at any console/desk?
7.	(and 2 other assets)	NA	MISCTOPICS.CRM	7.	CR.CRMRR.DOMAINCHANGE.P	192.631(b)	If the physical domain of responsibility periodically changes, has a clear process been established to describe the conditions for when such a change occurs?
8.	(and 1 other asset)	Sat	MISCTOPICS.CRM	8.	CR.CRMRR.RESPCHANGE.P	192.631(b)	Do processes address a controller's role during temporary impromptu (unplanned) changes in controller responsibilities?
9.	(and 2 other assets)	Sat	MISCTOPICS.CRM	9.	CR.CRMRR.COMMANDVERIFY.P	192.631(b)	Do the defined roles and responsibilities require controllers to

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							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?
10.	(and 2 other assets)	Sat	MISCTOPICS.CRM	10.	CR.CRMRR.AUTHORITYABNORMAL.P	192.631(b)(2)	Have processes been established to define the controllers' authority and responsibilities when an abnormal operating condition is detected?
11.	(and 2 other assets)	Sat	MISCTOPICS.CRM	11.	CR.CRMRR.PRESSLIMITS.O	192.631(b)(2) (192.619(a), 192.631(e)(1))	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?
12.	(and 2 other assets)	Sat	MISCTOPICS.CRM	12.	CR.CRMRR.AUTHORITYEMERGENCY.P	192.631(b)(3)	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?
13.	(and 2 other assets)	Concern	MISCTOPICS.CRM	13.	CR.CRMRR.EVACUATION.P	192.631(b)(3)	Do processes specifically address the controller's responsibilities in the event the control room must be evacuated?
14.	(and 2 other assets)	Sat	MISCTOPICS.CRM	14.	CR.CRMRR.COMMSYSFAIL.P	192.631(b)(3)	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?

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15.	(and 2 other assets)	Sat	MISCTOPICS.CRM	15.	CR.CRMRR.HANDOVER.P	192.631(b)(4) (192.631(c)(5))	Have processes been established for the hand-over of responsibility that specify the type of information to be communicated to the oncoming shift?
16.	(and 2 other assets)	Sat	MISCTOPICS.CRM	16.	CR.CRMRR.HANDOVER.O	192.631(b)(4) (192.631(c)(5))	Do observations indicate adequate hand-over of responsibility to the oncoming shift?
17.	(and 2 other assets)	Sat	MISCTOPICS.CRM	17.	CR.CRMRR.HANDOVERDOC.P	192.631(b)(4) (192.631(c)(5))	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?
18.	(and 2 other assets)	Sat	MISCTOPICS.CRM	18.	CR.CRMRR.HANDOVERDOC.R	192.631(b)(4) (192.631(c)(5))	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?
19.	(and 2 other assets)	Sat	MISCTOPICS.CRM	19.	CR.CRMRR.HANDOVEROVERLAP.P	192.631(b)(4)	Do processes require the controllers to discuss recent and impending important activities ensuring adequate overlap?
20.	(and 2 other assets)	Sat	MISCTOPICS.CRM	20.	CR.CRMRR.HANDOVERALTERNATIVE.P	192.631(b)(4)	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?
21.	(and 2 other assets)	Sat	MISCTOPICS.CRM	21.	CR.CRMRR.UNATTENDCONSOLE.P	192.631(b)(4)	Has the operator established an adequate process for occasions when the console is left temporarily unattended for any reason?

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22.	(and 2 other assets)	Sat	MISCTOPICS.CRM	22.	CR.CRMRR.CONSOLECOVERAGE.P	192.631(b)(4)	Do processes maintain adequate console coverage during shift hand-over?
23.	(and 2 other assets)	Sat	MISCTOPICS.CRM	23.	CR.CRMRR.OTHERAUTHORITYDISALLOW.P	192.631(b)(5)	Do processes disallow others to have authority to direct or supersede the specific technical actions of a controller?
24.	(and 2 other assets)	Sat	MISCTOPICS.CRM	24.	CR.CRMRR.OTHERAUTHORITYDISALLOW.R	192.631(b)(5)	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?
25.	(and 2 other assets)	Sat	MISCTOPICS.CRM	25.	CR.CRMRR.OTHERAUTHORITYDISALLOW.O	192.631(b)(5)	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?
26.	(and 2 other assets)	NA	MISCTOPICS.CRM	26.	CR.CRMRR.OTHERAUTHORITYQUAL.P	192.631(b)(5)	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?
27.	(and 2 other assets)	NA	MISCTOPICS.CRM	27.	CR.CRMRR.OTHERAUTHORITYQUAL.R	192.631(b)(5)	Do records indicate that others given authority to direct or supersede the specific technical actions of a controller were qualified?
28.	(and 2 other assets)	NA	MISCTOPICS.CRM	28.	CR.CRMRR.OTHERAUTHORITYIMPLEMENT.P	192.631(b)(5)	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?

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29.	(and 2 other assets)	NA	MISCTOPICS.CRM	29.	CR.CRMRR.OTHERAUTHORITYLIST.R	192.631(b)(5)	Is a list of individuals with authority to direct or supersede the technical actions of a controller readily available to controllers?
30.	(and 2 other assets)	NA	MISCTOPICS.CRM	30.	CR.CRMRR.OTHERAUTHORITYIMPLEMENT.R	192.631(b)(5)	Do records adequately document occurrences of when others authorized to direct or supersede the technical actions of a controller have done so?
31.	(and 2 other assets)	NA	MISCTOPICS.CRM	31.	CR.CRMRR.OTHERAUTHORITYIMPLEMENT.O	192.631(b)(5)	Do others authorized to direct or supersede the technical actions of a controller demonstrate an understanding of the process to implement this authority?
32.	(and 2 other assets)	Sat	MISCTOPICS.CRM	32.	CR.SCADA.SYSTEMMOC.P	192.631(c)(1)	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?
33.	(and 1 other asset)	Sat	MISCTOPICS.CRM	33.	CR.SCADA.DISPLAYCONFIG.P	192.631(c)(1)	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?
34.	(and 2 other assets)	Sat	MISCTOPICS.CRM	34.	CR.SCADA.1165HUMANFACTORS.O	192.631(c)(1)	Has section 4 of API RP 1165 regarding human factors engineering been implemented?
35.	(and 2 other assets)	Sat	MISCTOPICS.CRM	35.	CR.SCADA.DISPLAYOBJECTS.O	192.631(c)(1)	Has section 8 of API RP 1165 regarding display object characteristics been implemented?
36.	(and 2 other assets)	Sat	MISCTOPICS.CRM	36.	CR.SCADA.DISPLAYDYNAMICS.R	192.631(c)(1)	Has Section 9 of API RP 1165 regarding display object dynamics been implemented?
37.	(and 2 other assets)	Sat	MISCTOPICS.CRM	37.	CR.SCADA.ADMINISTRATION.R	192.631(c)(1)	Have applicable paragraphs of section 11 of API RP 1165 administration been implemented?

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38.	(and 2 other assets)	NA	MISCTOPICS.CRM	38.	CR.SCADA.1165IMPRACTICAL.R	192.631(c)(1)	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?
39.	(and 2 other assets)	Sat	MISCTOPICS.CRM	39.	CR.SCADA.SETPOINT.P	192.631(c)(2)	Does the process adequately define safety-related points?
40.	(and 2 other assets)	Sat	MISCTOPICS.CRM	40.	CR.SCADA.SETPOINT.R	192.631(c)(2)	Do records indicate safety-related points have been adequately implemented?
41.	(and 1 other asset)	Sat	MISCTOPICS.CRM	41.	CR.SCADA.POINTVERIFY.P	192.631(c)(2)	Are there adequate processes to define and identify the circumstances which require a point-to-point verification?
42.	(and 2 other assets)	Sat	MISCTOPICS.CRM	42.	CR.SCADA.POINTVERIFY.R	192.631(c)(2)	Have required point-to-point verifications been performed?
43.	(and 2 other assets)	Sat	MISCTOPICS.CRM	43.	CR.SCADA.POINTVERIFYEXTENT.P	192.631(c)(2)	Are there adequate processes for the thoroughness of the point-to-point verification?
44.	(and 2 other assets)	Sat	MISCTOPICS.CRM	44.	CR.SCADA.POINTVERIFYEXTENT.R	192.631(c)(2)	Do records demonstrate adequate thoroughness of the point-to-point verification?
45.	(and 2 other assets)	Sat	MISCTOPICS.CRM	45.	CR.SCADA.POINTVERFIYINTVL.P	192.631(c)(2)	Is there an adequate process for defining when the point-to-point verification must be completed?
46.	(and 2 other assets)	Sat	MISCTOPICS.CRM	46.	CR.SCADA.POINTVERFIYINTVL.R	192.631(c)(2)	Do records indicate the point-to-point verification has been completed at the required intervals?
47.	(and 2 other assets)	NA	MISCTOPICS.CRM	47.	CR.SCADA.POINTVERIFY.O	192.631(c)(2)	Are point-to-point verifications performed adequately when required?
48.	(and 2 other assets)	Sat	MISCTOPICS.CRM	48.	CR.SCADA.COMMPLAN.P	192.631(c)(3)	Has an internal communication plan been established and implemented that is adequate to manually operate the pipeline during a SCADA failure/outage?

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49.	(and 2 other assets)	Sat	MISCTOPICS.CRM	49.	CR.SCADA.COMMPLAN.R	192.631(c)(3)	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?
50.	(and 1 other asset)	NA	MISCTOPICS.CRM	50.	CR.SCADA.BACKUPSCADA.O	192.631(c)	Is there a backup SCADA system?
51.	(and 2 other assets)	NA	MISCTOPICS.CRM	51.	CR.SCADA.BACKUPSCADADEV.P	192.631(c)(4)	Has the use of the backup SCADA system for development work been defined?
52.	(and 2 other assets)	NA	MISCTOPICS.CRM	52.	CR.SCADA.BACKUPSCADATEST.P	192.631(c)(4)	Is the backup SCADA system required to be tested at least once each calendar year at intervals not to exceed 15 months?
53.	(and 2 other assets)	NA	MISCTOPICS.CRM	53.	CR.SCADA.BACKUPSCADATEST.R	192.631(c)(4)	Is the backup SCADA system tested at least once each calendar year at intervals not to exceed 15 months?
54.	(and 2 other assets)	NA	MISCTOPICS.CRM	54.	CR.SCADA.BACKUPSCADAVERIFY.P	192.631(c)(4)	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?
55.	(and 2 other assets)	NA	MISCTOPICS.CRM	55.	CR.SCADA.BACKUPSCADAVERIFY.R	192.631(c)(4)	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?
56.	(and 2 other assets)	NA	MISCTOPICS.CRM	56.	CR.SCADA.BACKUPSCADAADEQUACY.R	192.631(c)(4)	If the back-up SCADA system is not designed to handle all the functionality of the main SCADA system, does the testing determine

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							whether there are adequate procedures in place to account for displaced and/or different available functions during back-up operations?
57.	(and 2 other assets)	NA	MISCTOPICS.CRM	57.	CR.SCADA.BACKUPSCADATRANSFER.P	192.631(c)(4)	Do processes adequately address and test the logistics of transferring control to a backup control room?
58.	(and 2 other assets)	NA	MISCTOPICS.CRM	58.	CR.SCADA.BACKUPSCADARETURN.P	192.631(c)(4)	Do procedures adequately address and test the logistics of returning operations back to the primary control room?
59.	(and 2 other assets)	NA	MISCTOPICS.CRM	59.	CR.SCADA.BACKUPSCADAFUNCTIONS.R	192.631(c)(4)	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?
60.	(and 2 other assets)	Sat	MISCTOPICS.CRM	60.	CR.CRMFM.FATIGUEMITIGATION.P	192.631(d)	Does the fatigue mitigation process or procedures (plan) identify operator-specific fatigue risks?
61.	(and 2 other assets)	Sat	MISCTOPICS.CRM	61.	CR.CRMFM.FATIGUERISKS.P	192.631(d)	Does the fatigue mitigation plan adequately address how the program reduces the risk associated with controller fatigue?
62.	(and 2 other assets)	Sat	MISCTOPICS.CRM	62.	CR.CRMFM.FATIGUEQUANTIFY.P	192.631(d)	Do processes require that the potential contribution of controller fatigue to incidents and accidents be quantified during investigations?
63.	(and 2 other assets)	Sat	MISCTOPICS.CRM	63.	CR.CRMFM.FATIGUEMANAGER.P	192.631(d)	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?

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64.	(and 2 other assets)	Sat	MISCTOPICS.CRM	64.	CR.CRMFM.SHIFTLENGTH.R	192.631(d)(1)	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?
65.	(and 2 other assets)	Sat	MISCTOPICS.CRM	65.	CR.CRMFM.SHIFTLENGTHTIME.R	192.631(d)(1)	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?
66.	(and 2 other assets)	Sat	MISCTOPICS.CRM	66.	CR.CRMFM.SCHEDULEDTIMEOFF.R	192.631(d)(1)	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?
67.	(and 2 other assets)	NA	MISCTOPICS.CRM	67.	CR.CRMFM.ONCALLCONTROLLER.P	192.631(d)	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?

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68.	(and 2 other assets)	NA	MISCTOPICS.CRM	68.	CR.CRMFM.ONCALLCONTROLLER.R	192.631(d)(1)	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?
69.	(and 2 other assets)	Sat	MISCTOPICS.CRM	69.	CR.CRMFM.MAXHOS.P	192.631(d)(4)	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?
70.	(and 2 other assets)	Sat	MISCTOPICS.CRM	70.	CR.CRMFM.MINTIMEOFF.P	192.631(d)(4)	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?
71.	(and 2 other assets)	Sat	MISCTOPICS.CRM	71.	CR.CRMFM.DOCSCHEDULE.P	192.631(d)(4)	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?
72.	(and 2 other assets)	NA	MISCTOPICS.CRM	72.	CR.CRMFM.DAYSOFF.P	192.631(d)(4)	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?
73.	(and 2 other assets)	NA	MISCTOPICS.CRM	73.	CR.CRMFM.WORKHOURS.R	192.631(d)(4)	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

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							end times no later than 7:00 p.m.?
74.	(and 2 other assets)	Sat	MISCTOPICS.CRM	74.	CR.CRMFM.FATIGUECOUNTERMEASURES.P	192.631(d)(4)	For shifts longer than 8 hours, have specific fatigue countermeasures been implemented for the ninth and beyond hours?
75.	(and 2 other assets)	Sat	MISCTOPICS.CRM	75.	CR.CRMFM.DAILYHOSLIMIT.P	192.631(d)(4)	Do processes limit the daily maximum HOS limit no more than 14 hours in any sliding 24-hour period?
76.	(and 2 other assets)	Sat	MISCTOPICS.CRM	76.	CR.CRMFM.CONTROLLERNUMBERS.O	192.631(d)	Do operations include a sufficient number of qualified controllers?
77.	(and 2 other assets)	Sat	MISCTOPICS.CRM	77.	CR.CRMFM.OFFDUTYHOURS.P	192.631(d)(4)	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?
78.	(and 2 other assets)	Sat	MISCTOPICS.CRM	78.	CR.CRMFM.SHIFTHOLDOVER.P	192.631(d)(4)	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?
79.	(and 2 other assets)	Sat	MISCTOPICS.CRM	79.	CR.CRMFM.SPECIFICCOUNTERMEASURES.P	192.631(d)(4)	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

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							with controller fatigue?
80.	(and 2 other assets)	Sat	MISCTOPICS.CRM	80.	CR.CRMFM.HOSDEVIATIONS.P	192.631(d)(4)	Is there a formal process for approving deviations from the maximum HOS limits?
81.	(and 2 other assets)	Sat	MISCTOPICS.CRM	81.	CR.CRMFM.FATIGUEEDUCATE.P	192.631(d)(2) (192.631(d)(3))	Does the program require that fatigue education/training is required for all controllers and control room supervisors?
82.	(and 2 other assets)	Sat	MISCTOPICS.CRM	82.	CR.CRMFM.FATIGUEEDUCATE.R	192.631(d)(2) (192.631(d)(3))	Is fatigue education/training documented for all controllers and control room supervisors?
83.	(and 2 other assets)	Sat	MISCTOPICS.CRM	83.	CR.CRMFM.FATIGUEREVIEW.P	192.631(d)(2) (192.631(d)(3), 192.605(a))	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?
84.	(and 2 other assets)	Sat	MISCTOPICS.CRM	84.	CR.CRMFM.FATIGUESTRATEGY.P	192.631(d)(2)	Does fatigue education address fatigue mitigation strategies (countermeasures)?
85.	(and 2 other assets)	Sat	MISCTOPICS.CRM	85.	CR.CRMFM.OFFDUTY.P	192.631(d)(2)	Does fatigue education address how off-duty activities contribute to fatigue?
86.	(and 2 other assets)	Sat	MISCTOPICS.CRM	86.	CR.CRMFM.FATIGUECONTENT.P	192.631(d)(3)	Is the content of fatigue training adequate for training controllers and supervisors to recognize the effects of fatigue?
87.	(and 2 other assets)	Sat	MISCTOPICS.CRM	87.	CR.CRMFM.FATIGUECONTENT.R	192.631(d)(3)	Has controller and supervisor training to recognize the effects of fatigue been documented?
88.	(and 2 other assets)	Sat	MISCTOPICS.CRM	88.	CR.CRMAM.ALARM.P	192.631(e)	Is the alarm management plan a formal process that specifically identifies critical topical areas included in the program?
89.	(and 2 other assets)	Sat	MISCTOPICS.CRM	89.	CR.CRMAM.ALARMMALFUNCTION.P	192.631(e)(1)	Is there a process to identify and correct inaccurate or malfunctioning alarms?

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90.	(and 1 other asset)	Sat	MISCTOPICS.CRM	90.	CR.CRMAM.ALARMREVIEW.P	192.631(e)(1)	Does the review of safety-related alarms account for different alarm designs and all alarm types/priorities?
91.	(and 2 other assets)	NA	MISCTOPICS.CRM	91.	CR.CRMAM.CONTROLLERPERFORMANCE.P	192.631(h) (192.631(e)(1))	Does the review of safety-related alarms account for console differences that could affect individual-specific controller qualification and performance?
92.	(and 2 other assets)	Sat	MISCTOPICS.CRM	92.	CR.CRMAM.STALEDATA.P	192.631(e)(1)	Does the review of safety-related alarms include specific procedures and practices for managing stale or unreliable data?
93.	(and 2 other assets)	Sat	MISCTOPICS.CRM	93.	CR.CRMAM.MONTHLYANALYSIS.P	192.631(e)(2)	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?
94.	(and 2 other assets)	Sat	MISCTOPICS.CRM	94.	CR.CRMAM.PROBLEMCORRECTION.P	192.631(e)(2)	Does the alarm management plan include a process for promptly correcting identified problems and for returning these points to service?
95.	(and 2 other assets)	Sat	MISCTOPICS.CRM	95.	CR.CRMAM.ALARMVERIFY.R	192.631(e)(2)	Do records verify that monthly reviews and analysis of alarm points have been performed?
96.	(and 2 other assets)	Sat	MISCTOPICS.CRM	96.	CR.CRMAM.ALARMSETPOINTS.P	192.631(e)(3)	Is there a formal process to determine the correct alarm setpoint values and alarm descriptions?
97.	(and 2 other assets)	Sat	MISCTOPICS.CRM	97.	CR.CRMAM.SETTINGCONTROL.P	192.631(e)(3)	Have procedures been established to clearly address how and to what degree controllers can change alarm limits or setpoints, or

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							inhibit alarms, or take points off-scan?
98.	(and 2 other assets)	Sat	MISCTOPICS.CRM	98.	CR.CRMAM.ALARMVALUEVERIFY.R	192.631(e)(3)	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?
99.	(and 2 other assets)	Sat	MISCTOPICS.CRM	99.	CR.CRMAM.PLANREVIEW.P	192.631(e)(4)	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?
100.	(and 2 other assets)	Sat	MISCTOPICS.CRM	100.	CR.CRMAM.PLANREVIEW.R	192.631(e)(4)	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?
101.	(and 2 other assets)	Sat	MISCTOPICS.CRM	102.	CR.CRMAM.WORKLOADMONITORING.P	192.631(e)(5)	Is the process of monitoring and analyzing general activity comprehensive?
102.	(and 2 other assets)	Sat	MISCTOPICS.CRM	103.	CR.CRMAM.CONTROLLERREACTION.P	192.631(e)(5)	Does the process have a means of determining that the controller has sufficient time to analyze and react to incoming alarms?
103.	(and 2 other assets)	Sat	MISCTOPICS.CRM	104.	CR.CRMAM.PERFORMANCEANALYSIS.R	192.631(e)(5)	Has an analysis been performed to determine if controller(s) performance is currently adequate?
104.	(and 2 other assets)	Sat	MISCTOPICS.CRM	105.	CR.CRMAM.DEFICIENCIES.P	192.631(e)(6)	Is there a process to address how deficiencies found in implementing 192.631(e)(1) through 192.631(e)(5) will be resolved?

Row	Assets	Result	Sub-Group	Qst #	Question ID	References	Question Text
105.	(and 2 other assets)	Sat	MISCTOPICS.CRM	106.	CR.CRMAM.DEFICIENCIES.R	192.631(e)(6)	Do records indicate deficiencies found in implementing 192.631(e)(1) through 192.631(e)(5) have been resolved?
106.	(and 2 other assets)	Sat	MISCTOPICS.CRM	107.	CR.CRMCMGT.EQUIPMENTCHANGES.P	192.631(f)(1)	Is there a process to assure changes in field equipment that could affect control room operations are coordinated with the control room personnel?
107.	(and 2 other assets)	Sat	MISCTOPICS.CRM	108.	CR.CRMCMGT.CONTROLLERPARTICIPATE.P	192.631(f)(1) (192.631(f)(3))	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?
108.	(and 2 other assets)	Sat	MISCTOPICS.CRM	109.	CR.CRMCMGT.CONTROLLERPARTICIPATE.R	192.631(f)(1) (192.631(f)(3))	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?
109.	(and 1 other asset)	Sat	MISCTOPICS.CRM	110.	CR.CRMCMGT.EMERGENCYCONTACT.P	192.631(f)(2)	Is there a process requiring field personnel and SCADA support personnel to contact the control room when emergency conditions exist?
110.	(and 2 other assets)	Sat	MISCTOPICS.CRM	111.	CR.CRMCMGT.FIELDCONTACT.P	192.631(f)(2)	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

Row	Assets	Result	Sub-Group	Qst #	Question ID	References	Question Text
							control room operations?
111.	(and 2 other assets)	Sat	MISCTOPICS.CRM	112.	CR.CRMCMGT.FIELDCHANGES.R	192.631(f)(2)	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?
112.	(and 1 other asset)	Sat	MISCTOPICS.CRM	113.	CR.CRMEXP.REPORTABLEINCIDENTREVIEW.P	192.631(g)(1)	Is there a formal, structured approach for reviewing and critiquing reportable events to identify lessons learned?
113.	(and 2 other assets)	Sat	MISCTOPICS.CRM	114.	CR.CRMEXP.REPORTABLEINCIDENTREVIEW.R	192.631(g)(1)	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?
114.	(and 1 other asset)	Sat	MISCTOPICS.CRM	115.	CR.CRMEXP.LESSONSLEARNED.P	192.631(g)(2) (192.631(b)(5))	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?
115.	(and 2 other assets)	Sat	MISCTOPICS.CRM	116.	CR.CRMEXP.LESSONSLEARNED.R	192.631(g)(2) (192.631(b)(5))	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.)?
116.	(and 2 other assets)	Sat	MISCTOPICS.CRM	117.	CR.CRMTRAIN.CONTROLLERTRAIN.P	192.631(h)	Has a controller training program been established to provide training for each controller to carry out their roles and responsibilities?
117.	(and 2 other assets)	Sat	MISCTOPICS.CRM	118.	CR.CRMTRAIN.CONTROLLERTRAIN.R	192.631(h)	Has a controller training program been implemented to provide training for

Row	Assets	Result	Sub-Group	Qst #	Question ID	References	Question Text
							each controller to carry out their roles and responsibilities?
118.	(and 2 other assets)	Sat	MISCTOPICS.CRM	119.	CR.CRMTRAIN.TRAININGREVIEW.P	192.631(h)	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?
119.	(and 2 other assets)	Sat	MISCTOPICS.CRM	120.	CR.CRMTRAIN.TRAININGREVIEW.R	192.631(h)	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?
120.	(and 2 other assets)	Sat	MISCTOPICS.CRM	121.	CR.CRMTRAIN.TRAININGCONTENT.R	192.631(h)	Does training content address all required material, including training each controller to carry out the roles and responsibilities that were defined by the operator?
121.	(and 1 other asset)	Concern	MISCTOPICS.CRM	122.	CR.CRMTRAIN.AOCLIST.R	192.631(h)(1)	Has a list of the abnormal operating conditions that are likely to occur simultaneously or in sequence been established?
122.	(and 1 other asset)	Concern	MISCTOPICS.CRM	123.	CR.CRMTRAIN.TRAININGABNORMAL.P	192.631(h)(1)	Does the training program provide controller training on recognizing and responding to abnormal operating conditions that are likely to occur simultaneously or in sequence?
123.	(and 2 other assets)	NA	MISCTOPICS.CRM	124.	CR.CRMTRAIN.TRAINING.O	192.631(h)(2)	Does the training program use a simulator or tabletop exercises to train controllers how to recognize and respond to abnormal operating conditions?
124.	(and 1 other asset)	Sat	MISCTOPICS.CRM	125.	CR.CRMTRAIN.TRAINING.R	192.631(h)(2)	Do records indicate the training program used a simulator or tabletop exercises to train controllers how to recognize and

Row	Assets	Result	Sub-Group	Qst #	Question ID	References	Question Text
							respond to abnormal operating conditions?
125.	(and 1 other asset)	Sat	MISCTOPICS.CRM	126.	CR.CRMTRAIN.COMMUNICATIONTRAINING.P	192.631(h)(3)	Does the CRM program train controllers on their responsibilities for communication under the operator's emergency response procedures?
126.	(and 2 other assets)	Sat	MISCTOPICS.CRM	127.	CR.CRMTRAIN.SYSKNOWLEDGE.P	192.631(h)(4)	Does the training program provide controllers a working knowledge of the pipeline system, especially during the development of abnormal operating conditions?
127.	(and 2 other assets)	NA	MISCTOPICS.CRM	128.	CR.CRMTRAIN.INFREQOPSLIST.R	192.631(h)(5)	Has a list of pipeline operating setups that are periodically (but infrequently) used been established?
128.	(and 2 other assets)	NA	MISCTOPICS.CRM	129.	CR.CRMTRAIN.INFREQOPSREVIEW.P	192.631(h)(5)	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?
129.	(and 2 other assets)	Sat	MISCTOPICS.CRM	130.	CR.CRMTRAIN.TEAMTRAINPERSONNEL.P	192.631(h)(6)	Do processes establish who, regardless of location, operationally collaborates with control room personnel?
130.	(and 2 other assets)	Sat	MISCTOPICS.CRM	131.	CR.CRMTRAIN.TEAMTRAINFREQ.P	192.631(h)(6)	Do processes define the frequency of new and recurring team training?
131.	(and 2 other assets)	Sat	MISCTOPICS.CRM	132.	CR.CRMTRAIN.TEAMTRAINCOMPLETE.P	192.631(h)(6)	Do processes address all operational modes and operational collaboration/control?
132.	(and 2 other assets)	Sat	MISCTOPICS.CRM	133.	CR.CRMTRAIN.TEAMTRAINEXPERIENCE.P	192.631(h)(6)	Do processes include incorporation of lessons learned from actual historical events and other oil-gas industry events?
133.	(and 2 other assets)	Sat	MISCTOPICS.CRM	134.	CR.CRMTRAIN.TEAMTRAINEXERCISE.R	192.631(h)(6)	Do records indicate that training exercises were adequate and

Row	Assets	Result	Sub-Group	Qst #	Question ID	References	Question Text
							involved at least one qualified controller?
134.	(and 2 other assets)	NA	MISCTOPICS.CRM	135.	CR.CRMTRAIN.TEAMTRAINEXERCISE.O	192.631(h)(6)	Does implementation of a control room team exercise demonstrate performance in accordance with regulatory and process requirements?
135.	(and 2 other assets)	Sat	MISCTOPICS.CRM	136.	CR.CRMTRAIN.TEAMTRAINIDENTINDIVIDUAL.R	192.631(h)(6)	Do records demonstrate that individuals identified as of January 23, 2018 received team training by January 23, 2019?
136.	(and 2 other assets)	Sat	MISCTOPICS.CRM	137.	CR.CRMCOMP.SUBMITPROCEDURES.P	192.631(i)	Are there adequate processes to assure that the operator is responsive to requests from applicable agencies to submit their CRM procedures?
137.	(and 2 other assets)	Sat	MISCTOPICS.CRM	138.	CR.CRMCOMP.SUBMITPROCEDURES.R	192.631(i)	Has the operator been responsive to requests from applicable agencies to submit their CRM procedures?
138.	(and 2 other assets)	Sat	MISCTOPICS.CRM	139.	CR.CRMCOMP.CRMCOORDINATOR.R	192.631(i)	Is there an individual that is responsible and accountable for compliance with requests from PHMSA or other applicable agencies?
139.	(and 2 other assets)	Sat	MISCTOPICS.CRM	140.	CR.CRMCOMP.RECORDS.P	192.631(j)(1)	Are records management processes adequate to assure records are sufficient to demonstrate compliance with the CRM rule?
140.	(and 2 other assets)	Sat	MISCTOPICS.CRM	141.	CR.CRMCOMP.RECORDS.R	192.631(j)(1)	Are records sufficient to demonstrate compliance with the CRM rule?
141.	(and 2 other assets)	Sat	MISCTOPICS.CRM	142.	CR.CRMCOMP.ELECTRONICRECORDS.R	192.631(j)(1)	Are electronic records properly stored, safeguarded, and readily retrievable?
142.	(and 2 other assets)	Concern	MISCTOPICS.CRM	143.	CR.CRMCOMP.DEVIATIONS.P	192.631(j)(2)	Are there processes to demonstrate and provide a documented record that every deviation from any CRM rule requirement was

Row	Assets	Result	Sub-Group	Qst #	Question ID	References	Question Text
							necessary for safe operation?
143.	(and 2 other assets)	Sat	MISCTOPICS.CRM	144.	CR.CRMCOMP.DEVIATIONS.R	192.631(j)(2)	Were all deviations documented in a way that demonstrates they were necessary for safe operation?

Report Parameters: All non-empty Results

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.