



MIDSTREAM

November 12, 2025

Via E-mail to David.Barrett@dot.gov

David Barrett
Acting Director, Central Region
Pipeline and Hazardous Materials Safety Administration
901 Locust St., Suite 462
Kansas City, MO 64106

Re: Response to Notice of Amendment (CPF 3-2025-016-NOA)

Dear Mr. Barrett,

This letter serves as our formal response to the alleged inadequacies identified during your May 2024 inspection, referenced under CPF No. 3-2025-016-NOA.

We've reviewed each item noted in the inspection and have taken the necessary steps to address and correct the concerns raised.

We appreciate the opportunity to resolve these matters and remain committed to maintaining compliance and transparency.

If you have any questions or need further clarification on any of the attachments, please don't hesitate to reach out.

Very truly yours,

Charles Curl
Director, Compliance
HF Sinclair Corporation

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1. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b) Roles and responsibilities. Each operator must define the roles and responsibilities of a controller during normal, abnormal, and emergency operating conditions. To provide for a controller's prompt and appropriate response to operating conditions, an operator must define each of the following:

Holly Energy's CRM Plan, (rev. 13, effective December 15, 2023) (CRM Plan) was inadequate because it failed to define the roles and responsibilities of a controller during normal, abnormal, and emergency operating conditions, per the requirements of § 195.446(b). Specifically, the CRM Plan failed to define how a controller is expected to respond to different leak detection alarms. Holly Energy used three leak detection systems in the control room: Pipeline Manager (PLM), Sim Suite and ATMOS. Each leak detection system had a different alarm system. The different leak detection alarms that were presented to controllers was not described in the CRM Plan procedure or the Alarm Management Plan, (ver. 1.0, effective July 28, 2011) (ALM Plan). The CRM Plan, section 17.9, only provided a high-level overview of how each system functions to detect leaks. While the ATMOS system was functioning on one two-mile stretch of pipeline on a single console, this was a different alarm than the alarm detailed in the CRM Plan.

Holly Energy's procedures must be amended to describe the different leak alarms that can be presented to a controller, define what they represent, and define the controller's expected response depending on the alarm. For example, whether a different controller response is expected between a warning alarm and a leak alarm.

HFSM's Response

- The Atmos leak detection reference was removed from 17.9.1, HFSM now only utilizes SimSuite and PIM, both of which produce the same alarm when presented to the Controller. The details of how each system operate is included in 17.9.1.
- Additional leak alarm instruction and information were added to 17.9.1.
- A flow chart was added to 17.9.3 to define a Controller's expected response when they receive a leak warning or leak alarm.
- See attached File 1 containing the documents with the proposed changes.

2. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b) Roles and responsibilities. Each operator must define the roles and responsibilities of a controller during normal, abnormal, and emergency operating conditions. To provide for a controller's prompt and appropriate response to operating conditions, an operator must define each of the following:

(1)

(5) The roles, responsibilities and qualifications of others who have the authority to direct or supersede the specific technical actions of controllers.

Holly Energy's CRM Plan was not adequate because it did not define the roles, responsibilities and qualifications of others who have the authority to direct or supersede the specific technical actions of controllers, per the requirements of § 195.446(b)(5). CRM Plan, section 2.8, described who can direct or supersede the specific technical actions of controllers, and that those individuals were "DOT OQ qualified" and "have the expertise to know when conditions or situations warrant the necessity to use their authority to direct or supersede the technical actions of a Controller" as well as how to implement and document the action. DOT OQ Qualifications relates to many covered tasks that have no bearing on the covered tasks required to be a trained and qualified controller. Additionally, what type of "expertise" is required to know when "conditions or situations warrant the necessity to use their authority to direct or supersede the technical actions of a Controller." This was not adequate because it was not specific enough to define what qualifications are required for an individual to have authority to direct or supersede a controller.

CRM Plan, section 9.6 Team Training, identified other individuals who would be reasonably expected to collaborate with controllers. Section 9.6 did not describe how it would be communicated who the individuals are who have authority to direct or supersede the specific technical actions of controllers to those identified as others and controllers. Section 9.6 also did not describe the process for documenting the communication of these roles and responsibilities to individuals with such authority.

The CRM Plan must be amended to provide a requirement for the qualification of those with authority to direct or supersede the specific technical actions of controllers, the method of communication with these individuals, and the timing of when the initial communication will be made to new controllers and others new to their roles.

HFSM's Response

- Revised Section 2.8 and Section and Section 9.6 to remove any wording regarding the capability of any individual to direct or supersede the technical action of a Controller. Section 2.8 states when this initial communication will be given to new Controllers.
- See attached File 2 containing the documents with the proposed changes.

3. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(c) Provide adequate information. Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:

(1)

(2) Conduct a point-to-point verification between SCADA displays and related field equipment when field equipment is added or moved and when other changes that affect pipeline safety are made to field equipment or SCADA displays.

Holly Energy's CRM Plan and ALM Plan were not adequate to define safety related points nor how they are determined, per the requirements of § 195.446(c)(2). The ALM Plan, section 2, defined "Safety Related Alarm" as "[a]ny alarm that affects safe operation of the pipeline. Any operational factor that is necessary to maintain pipeline integrity or that could lead to the recognition of a condition that could impact the integrity of the pipeline, or a developing abnormal or emergency situation. This includes but is not limited to; deviation of rate, high pressure, high level, and gas detector alarms." Table 1 of the CRM Plan provided a definition for "Safety Related Operations" as, "any operational factor that is necessary to maintain pipeline integrity or that could lead to the recognition of a condition that could impact the integrity of the pipeline, or a developing abnormal or emergency situation." What was not defined was a point affecting safety.

ALM Plan section 1.4 stated, "HEP has a process in place to ensure that SCADA safety related alarms are accurate, and they support safe operations of the pipeline." However, neither the ALM Plan nor the CRM Plan offered what this process is. CRM Plan, section 31, contains a "Safety Related Point Flow Chart" that provides flow charts equipment and operational conditions that support determination of whether a point is safety related. There is no reference to these flow charts in either the CRM Plan or the ALM Plan. The procedures did not contain any instructions on (1) when to use the flow charts, (2) which employee is responsible to determine if a point is safety related, and (3) how the determination will be documented. In practice, Holly Energy controllers would use SCADA tags that are designated safety related at the front of the alarm description. This was not identified in the procedure.

Because Holly Energy has established an alarming system that can be generated from both the field Programmable Logic Controllers (PLC) and the SCADA system, the system of tagging safety related alarms should be standardized and clarified in procedure. It is unclear if the flow charts contained in CRM Plan, section 31, are utilized by field personnel when designing and constructing the field PLCs. In practice, all alarming occurs at the PLC for safety related alarms. This practice has not been defined in procedure.

The procedure must be amended to provide more instruction on who, when, and how the "Safety Related Point Flow Charts" will be employed to designate a point and alarm safety related. There needs to be clarification on whether the field is using this process or if it is strictly for the SCADA controllers. In addition, the method of identifying safety related alarms to the controller using the word "SAFETY" in front of the alarm description must be in the procedure, as well as an explanation of the process used for alarming at the PLC and matching it to SCADA tags that are also receiving an analogue value.

HFSM's Response

- Section 6.2 was revised to include the addition of the definition of a safety related point. The definition of a safety related alarm was edited to include the location from which the alarms are generated.

- Added Section 6.6.2 to provide more instruction on who, when, and how the Safety Related Flow Chart located in CRM Section 31 is used to determine whether a SCADA point or alarm is designated as “safety-related”.
- The AMP and the CRM have been recently merged into the CRM improve consistency.
- See attached File 3 containing the documents with the proposed changes.

4. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b)

(c) Provide adequate information. Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:

(1)

(2) Conduct a point-to-point verification between SCADA displays and related field equipment when field equipment is added or moved and when other changes that affect pipeline safety are made to field equipment or SCADA displays.

Holly Energy’s CRM Plan was not adequate because its procedure for conducting a thorough point-to-point (P2P) verification was insufficient to demonstrate compliance with § 195.446(c)(2). Specifically, CRM Plan, section 32, provided an inadequate procedure to verify points between SCADA and the field. CRM Plan, section 33, provided the P2P verification check-out sheet. The check-out sheet was not referenced in the procedure to document the verification, nor did it match the verification requirements established in CRM Plan sections 32 and 33. The check-out sheet did not include: the date, the name of the field tech, the name of the Control Center representative, documentation of analog values following verification, and recording verification of displays. Additionally, there was no space to document point value or status conditions, and the form did not capture whether the point was tested in live or simulated mode. Holly Energy presented for inspection a P2P verification form for Pathfinder/Sanford and Station 10. However, this was a different form than the check-out sheet. It was the form used for the Sinclair Transportation control room prior to the Holly Energy-Sinclair merger.

If this is the form Holly Energy plans to use for P2P verification, this should be detailed in its CRM Plan. The CRM Plan also did not include a process to retest the point and document the test and the result in the event the point failed the P2P verification. Furthermore, the procedure failed to include verification of the SCADA tag to the end device and verification of the sequence of the device on the pipeline and its match to the SCADA display placement.

The CRM Plan and its associated form need to be amended to include recording of the analog values and status comparison confirmations, recording the displays that were verifying the SCADA tag to the end device, the sequence of the device on the pipeline, its match to reviewed and verified SCADA display placement, and documentation of whether the point was verified live or simulated. The CRM Plan also must include a process to retest the point and document the test and test result in the event the point failed the initial P2P verification. These items identified in the amended procedure and form will provide a thorough P2P verification in compliance with § 195.446(c)(2).

HFSM's Response

- The following changes were made to the HFSM point-to-point verification checkout sheet located in CRM Section 33:
 - A “Display Location Correct?” column was added to show if the point is in the correct sequence and location on the screen.
 - A “Live or Simulated?” column was added to show if the point test was conducted under live or simulated conditions.
 - The project/location entry area was changed to “Display Name” to detail what SCADA screen(s) were used to test the points.
- The CRM Section 32 point to point verification procedure was changed to include a reference to the field verification procedures that include analog and status value verifications, a requirement to record the display(s) that were used, the verification of the display sequence and location, the requirement document if the point check was live or simulated, and the process used to retest the point in the event that the initial point check failed.
- See attached file 4 containing the documents with the proposed changes.

5. § 195.446 Control Room Management

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b)

(c) Provide adequate information. Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:

(1)

(3) Test and verify an internal communication plan to provide adequate means for manual operation of the pipeline safely, at least once each calendar year, but at intervals not to exceed 15 months.

Holly Energy's CRM Plan, section 4, was not adequate to provide means for manual operation of the pipeline safely, as required by § 195.446(c)(3). Specifically, the CRM Plan lacked detail to support the controller's step-by-step response to loss of communication or SCADA, how complete shutdown of field facilities will be verified, how field personnel will be dispatched to key locations, and how the manual readings will be communicated and documented. It also failed to include how abnormal and emergency conditions will be reported and how monitoring leaks will be conducted and reported. CRM Plan, section 4.1.2, only restated the regulation, section 4.5 provided roles and responsibilities to notify field personnel to manually operate, and section 4.6 referenced Operations and Maintenance Manual (effective June 10, 2024) (O&M Manual), section 4.1.2.3,² which provided very high-level duties of the controller to notify field personal and to document names of field personnel at each location and all changes that were made, as well as the time communication was restored. The O&M Manual did not provide any specific plans related to an internal communication plan for the manual operation of the pipeline safely.

² This was an incorrect reference; O&M Manual section 6.10 should have been referenced.

CRM Plan, section 17.1.7, “Manual Operation,” did not directly relate to manual operations. Rather, it addressed the controllers’ responsibilities during abnormal operations. CRM Plan, section 17.9.2, “Procedure for Monitoring of Idle or Shut in Pipeline Segments and Factors to Consider Investigating Pressure Variances,” provided guidance on how to manually monitor and evaluate the pipeline to identify leaks. These procedures did not include considerations for leak monitoring during manual operations in the event of loss of communication to a large area or total loss of SCADA. Holly Energy utilized a “Job Plan Form” to prepare for its annual backup control room failover test. Holly Energy also utilized this form to document and facilitate a combined test for the Internal Communication Plan requirement, as defined in CRM Plan, section 4.8. CRM Plan, section 26(A)(iv), “Control Center Failover Plan,” required the test be developed through the “Job Plan Form” process. However, there was no requirement for the Internal Communication Plan test to be developed in the Job Plan Form. A review of the “Job Plan Form” records, documenting the tests for the years 2021, 2022 and 2023, identified that the language used, to frame the test, is almost identical for each test. Holly Energy used the “Job Plan Form” to develop a plan, each year, for the Internal Communication Plan for manual operation of the pipeline. Holly Energy had no formal Internal Communication Plan that provided the controller detailed steps to follow for: initiating the manual shutdown of the hazardous liquid pipelines, dispatching of field personnel to the gas transmission pipeline key location, the documents used to record manual field readings, the frequency for field personnel to report field conditions, how abnormal operations and emergencies will be reported to the control room, or how leak detection will be supported. Holly Energy must amend its procedures to create a formalized Internal Communication Plan for the manual operation of the pipeline safely that includes: detailed steps to follow to initiate the manual shutdown of the hazardous liquid pipelines, the dispatching of field personnel to the gas transmission pipeline key locations, the documents used to record manual field readings, the frequency for field personnel to report field conditions, how abnormal operations and emergencies will be reported to the control room, and leak detection will be supported. The procedures must also be amended to define the test of the internal communication plan that includes all the different elements of the plan, including a minimum time duration to gather enough field readings to evaluate effectiveness off the plan. Additionally, the test procedure also needs to conduct an evaluation of the test to determine effectiveness and modify as needed.

HFSM’s Response

- CRM Section 4 was completely re-written to now include a process and procedure for the testing and evaluation of the internal communications plan.
- An Internal Communication Test Form was developed to document the results of the manual operations test.
- See the attached file 4 containing the documents with the proposed changes.

6. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b)

(c) ***Provide adequate information.*** Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:

(1)

(4) **Test any backup SCADA systems at least once each calendar year, but at intervals not to exceed 15 months.**

Holly Energy's CRM Plan was not adequate to test any backup SCADA systems at least once each calendar year, but at intervals not to exceed 15 months, per the requirements of § 195.446(c)(4). Specifically, the CRM Plan lacked a detailed process for transferring operations from the primary control room to the back-up control room. CRM Plan, section 26, "Control Center Failover Plan," directed controllers to "shut down the appropriate assets under his control using normal operating procedures" and stated:

Each Controller shall take the Console Procedure Book with schedules and phone lists for their respective console to the Secondary Control Center. Notifications will need to be made to all HEP Terminals, associated Refineries, and third-party customers as soon as practical that Operations have evacuated the Primary Control Center and are relocating to the Secondary Control Center.

The CRM Plan included a map and directions to the backup control room facility. It also included instructions on how to switch from the primary to secondary SCADA system. CRM Plan section 26 (A)(iv) stated, "[t]here are many reasons for switching from the Primary Control Center to the Secondary Control Center. This makes it difficult to write a specific procedure to move from the Secondary Control Center to the Primary Control Center prior to knowing why you switched to the Secondary Control Center." While there may be many reasons to switch control centers, the process to switch should be standardized to manage a successful transition. Transferring servers, phones, accessing building space, powering up consoles, in that order or reversed, should not require much deviation. Per CRM Plan, section 26 (A)(iv), Holly Energy required a Job Plan to be written to relocate to the backup control center based on the specific reason for the relocation. The CRM Plan was missing a process to return personnel and transfer control back to the primary control room. CRM Plan, section 26(A)(iv), provided considerations of what to include in the Job Plan, but provided no details of how to test the backup SCADA systems. No form or checklist was provided. Holly Energy documented SCADA testing on a "Lessons Learned" form. This documentation was a practice that was not directed through procedure to be used to document the test. This form provided a summary of what went well, what failed, and what, if any, corrective actions needed to be taken. The CRM Plan did not have a standardized form to provide a consistent test protocol and test documentation of the back-up SCADA system. The CRM Plan also failed to include a required duration for the test.

The CRM Plan needs to be amended to provide the full process for the controllers to move the control room, transfer control, and return back to the primary control room. The CRM Plan also needs to define all elements that are to be tested and documented during the test. This also needs to include a form to provide consistency for all consoles.

HFSM's Response

- CRM Section 26 was revised to include a process to transfer control to the back up control center as well as back to the primary control center. This process would be used during testing conditions.

- CRM Section 36 was revised to include a backup SCADA checklist that would be used to document the testing of the backup SCADA system.
- See attached file 6 containing the documents with the proposed changes.

7. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b)

I Alarm management. Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator's plan must include provisions to:

(1) Review SCADA safety-related alarm operations using a process that ensures alarms are accurate and support safe pipeline operations.

Holly Energy's CRM Plan was not adequate to ensure alarms are accurate and support safe pipeline operations, per the requirements of § 195.446I(1). CRM Plan, section 2.3.1, stated that Holly Energy's controllers must, "[g]enerate work requests for equipment failures, mechanical problems and SCADA alarms." Section 6.8.1 stated, "[s]afety related alarms found out of calibration, in fault or otherwise not operating as designed will have a work order assigned by the controller responding to the alarm." In practice, as described by Holly Energy during the inspection, when a controller discovered an alarm was malfunctioning or inaccurate, the controller created a ticket in the SAP application. The process to create a ticket in SAP was not defined in the procedure. Absent a defined process, consistency of work orders cannot be ensured; thereby undermining the process used for reviewing SCADA safety-related alarm operations. While the CRM Plan did require the safety-related alarm list to be reviewed monthly by the Alarm Management Group and for the group to develop an action plan to address the process for correcting critical safety related alarms, there was no detail or expectation for how long alarms could be in repair mode or escalation if the workorder exceeded the return to service expectation.

The CRM Plan needs to be amended to provide more detail on the current practice of creating workorders for malfunctioning or inaccurate alarms and the monthly review process, including expectations for return to service and escalation if workorder expectations are exceeded.

HFSM's Response

- A reference to the HFSM Maintenance Request Procedure was added to Section 6.5.2. This procedure details how the Controller is to create a workorder in SAP.
- A process was added to Section 6.5.2 that contains guidance on handling safety-related alarms with work orders that have remained open for extended periods of time.
- CRM Section 6.13.3.1 was revised to include a review of the work orders and the Monthly Top 10 alarm list. This review would be documented on the Monthly Alarm Management Meeting form along with any associated action plans to resolve ongoing issues.
- See attached file 7 containing the documents with the proposed changes.

8. § 195.446 Control room management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section.

...

(b)

I Alarm management. Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator's plan must include provisions to:

(1)

(2) Identify at least once each calendar month points affecting safety that have been taken off scan in the SCADA host, 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.

Holly Energy's CRM Plan Section 6.18.1 was not adequate to identify at least once each calendar month points affecting safety that have been taken off scan in the SCADA host, 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 as required by § 195.446I(2).

Holly Energy's CRM Plan, Section 6.18.1, only paraphrased the regulation. It did not provide details on (1) how Holly Energy's employees would collect the prescribed information, (2) how Holly Energy's employees would evaluate the information against the associated maintenance or operating activities, and (3) how deficiencies identified through the process would be addressed. The CRM Plan also did not provide a process that described Holly Energy's practice for identifying false alarms and including these in the monthly alarm review.³

³ PHMSA's Control Room Management Frequently Asked Questions (FAQs) (effective Jan. 16, 2018) address false alarms. FAQ E.02 states "[f]or the purpose of the CRM regulations, any alarm that is presented to the controller that did not accurately reflect the actual operational parameter or condition, or an alarm that can mislead a controller to believe a condition exists, but that does not exist, is considered a false alarm."

The procedure must be amended to provide details on how to identify and correct at least once each month points affecting safety that have been taken off scan in the SCADA host, 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 as required by § 195.446I(2). The procedure must include who is accountable for gathering, reviewing and reporting the data, the source of the data, the date taken out of service (off-scan, inhibited, forced/manual) and returned to service, document the reason the point or alarm was taken out of service, a process to compare the duration of out of service to the maintenance activity, identification of the deficient points and return to service as soon as possible. It must also include how false alarms will be documented and reviewed.

HFSM's Response

- CRM Section 6.13.3 was revised to include a more detailed process that now includes who is accountable for gathering, reviewing, and reporting the data, the source of the data, the date taken out of service and returned to service, and the reason the point was taken out of service. A process for identifying false safety related alarms was also developed.

- See attached file 8 containing the documents with the proposed changes.

9. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b)

I Alarm management. Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator's plan must include provisions to:

(1)

(3) Verify the correct safety-related alarm set-point values and alarm descriptions when associated field instruments are calibrated or changed and at least once each calendar year, but at intervals not to exceed 15 months.

Holly Energy's CRM Plan was not adequate to verify the correct safety-related alarm set-point values and alarm descriptions when associated field instruments are calibrated or changed at least once each calendar year, but at intervals not to exceed 15 months, as required by § 195.446I(3). The CRM Plan, section 6.1.1, simply restated the regulation requirement with no instruction on how to conduct this review. Section 6.17.1 stated, "[t]he HEP Alarm Analyst Senior will annually review the SCADA safety related alarms." A method to identify and list the safety related alarms and descriptions, and document the verification findings, was not included in the procedure. The CRM Plan did include procedures used in the field for calibrations, and these included notification of the control room and verification of alarm set points. But they did not include alarm descriptions. Also, there was no reference to how the control room would document and verify this activity had been completed to demonstrate compliance. Holly Energy was relying on the field to complete the calibration and documentation.

The CRM Plan must be amended to provide details to conduct the verification of the correct safety-related alarm set-point values and alarm descriptions when associated field instruments are calibrated or changed, at least once each calendar year, but at intervals not to exceed 15 months, to demonstrate compliance with § 195.446I(3). The CRM Plan must detail who is responsible for conducting the annual review; documentation that includes the listing of all safety related alarms, set points, and descriptions; the standard those set points will be verified to; and documentation of deficiencies and associated corrections. For field instrument changes and calibrations, the CRM Plan must include a process to document that all verifications were made with the field personnel in SCADA for the set points and descriptions.

HFSM's Response

- CRM Section 6.13.4.2 was revised to state who is responsible for conducting the point-to-point process and where to find the listing of all safety related alarms. This Section now

contains references to CRM Section 32 and proposed O&M Section 6.5 which detail how to verify set points, descriptions, the standard those set points will be verified to, and how to document any deficiencies and associated corrections.

- The Alarm Management Plan has been integrated into Section 6 of the CRM plan.
- Alarm description, live or simulated, and display location columns have been added to the point to point verification checkout sheets.
- Work Order numbers are now being included on the safety related point check sheet.
- See attached file 9 containing the documents with the proposed changes.

10. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b)

I Alarm management. Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator's plan must include provisions to:

(1)

(5) Review the alarm management plan required by this paragraph at least once each calendar year, but at intervals not exceeding 15 months, to determine the effectiveness of the plan.

Holly Energy's CRM Plan, section 6.17.2.1, did not have adequate details to ensure that the effectiveness of the alarm management plan would be reviewed at least once each calendar year, but at intervals not exceeding 15 months to determine the effectiveness of the plan, as required by § 195.446I(5). Specifically, CRM Plan, section 6.17.2.1 only paraphrased the regulation and identified the personnel responsible to conduct the review. Missing from the CRM Plan was what would be evaluated as part of the review, metrics for determining effectiveness, and how deficiencies would be addressed and resulting plan modifications.

The CRM Plan must be amended to include the details of what will be reviewed to determine effectiveness of the alarm management plan. For example, the CRM Plan could include a review of KPIs to determine whether the alarm management plan meets the expected performance outcomes, a review to determine whether the work order ticket process facilitates quick repair, an evaluation to verify set points are not being changed without knowledge through the MOC, etc. As appropriate, the CRM Plan must include some criteria that determines the effectiveness of the plan.

HFSM's Response

- Revised Alarm Management Section 6.13.4.1 to include information on how the newly developed annual review process is conducted, documented, and how a determination as to the effectiveness of the plan is made.
- See attached File 10 containing the documents with the proposed changes.

11. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b)

(h) Training. Each operator must establish a controller training program and review the training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months. An operator's program must provide for training each controller to carry out the roles and responsibilities defined by the operator. In addition, the training program must include the following elements:

Holly Energy's CRM Plan did not adequately describe the training program and process to review the training program content once each calendar year not to exceed 15 months, as required by § 195.446(h). Holly Energy developed and implemented a compliant training program; however, they did not define any of it in the CRM Plan. CRM Plan, section 9, provided a very high level of training components and in many subsections paraphrased the regulation. CRM Plan section 9.8.1 stated: The HEP Training Program contains a process for managing changes to the course materials due to technological advances, regulatory requirements, procedural revisions, Lessons Learned captured during Incident Investigation, and through Controller feedback, etc. During the annual review of the Control Room Management Plan, the Review Board will discuss the Controller training process and make updates, if necessary, to the process and this section. This will be documented in the summary overview document referenced in CRMP Section 1.5.

Because the training program is a stand-alone program and is currently a practice rather than a procedure, the content review process was not documented. The CRM Plan must be modified to describe the training program, how it provides for training each controller to carry out the roles and responsibilities defined by the operator, and detail how the annual review of the training program content will be conducted and documented.

HFSM's Response

- Section 9.4 was revised to include details regarding employee orientation, onboarding, milestone-based technical training, OJT, ongoing, and refresher portions of the HFSM Controller training program. Section 9.8 was revised to include information on how the newly developed and implemented annual review process is conducted and documented.
- See attached File 11 containing the documents with the proposed changes.

12. § 195.446 Control Room Management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section....

(b)

(h) Training. Each operator must establish a controller training program and review the training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months. An operator's program must provide for training

each controller to carry out the roles and responsibilities defined by the operator. In addition, the training program must include the following elements:

(1)

(6) Control room team training and exercises that include both controllers and other individuals, defined by the operator, who would reasonably be expected to operationally collaborate with controllers (control room personnel) during normal, abnormal or emergency situations. Operators must comply with the team training requirements under this paragraph no later than January 23, 2018.

Holly Energy's CRM Plan did not adequately define who was required to participate in the team training meeting, per the requirements of § 195.446(h)(6). CRM Plan, section 9.6.1, identified other individuals, defined by Holly Energy, who would reasonably be expected to operationally collaborate with controllers (control room personnel) during normal, abnormal or emergency situations. However, the CRM Plan was vague in how the team training will be conducted. Holly Energy used the list contained in CRM Plan section 9.6.1, to act as a speakers list. These individuals were invited to make presentations to the controllers. This process offered the controllers opportunities to ask questions and interact and network with some of the identified individuals. However, these identified individuals were not invited to participate in the team training meeting. The CRM Plan should be modified to allow for controllers and other individuals to participate as equal members in the team training meeting. The meetings must include at least one controller.

HFSM's Response

- CRM Section 9.6 was revised to include additional detail on the Team Training process.
- See attached file 12 containing the updated CRM Section as well as documentation for the proposed upcoming team training drill that would meet the requirements of the items listed above.