



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 27, 2015

Mr. Mick Rafter
Vice President, Operations
Tallgrass Interstate Gas Transmission, LLC
370 Van Gordon Street
Lakewood, CO 80228

CPF 5-2015-1003M

Dear Mr. Rafter:

Between November 4 and 8, 2013, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected Tallgrass Interstate Gas Transmission, LLC's (Tallgrass) Control Room Management procedures in Lakewood, Colorado.

On the basis of the initial inspection, PHMSA identified apparent inadequacies within Tallgrass' Control Room Management (CRM) procedures, as described below:

1. §192.631 Control Room Management

(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) A controller's authority and responsibility to make decisions and take actions during normal operations.

Tallgrass did not establish adequate written procedures for defining the roles and responsibilities of a controller as required by §192.631(b)(1). At the time of the inspection, the responsibilities of all controllers were not specific and were not clearly defined. Tallgrass' Control Room Management procedures were inadequate because its Control Room Management Plan did not clearly describe a detailed written process that defines the authority and responsibility of the controllers as required by §192.631(b)(1).

2. §192.631 Control Room Management

(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:

(3) A controller's role during an emergency, even if the controller is not the first to detect the emergency, including the controller's responsibility to take specific actions and communicate with others.

Tallgrass did not establish adequate written procedures to detail a controller's role during an emergency as required by §192.631(b)(3). An operator's procedures must specifically address the controller's responsibilities in the event the control room must be evacuated. At the time of the inspection, Tallgrass' CRM procedures were inadequate because the short term and long term scenarios for Business Resumption Plan were not clearly defined, i.e., Tallgrass' CRM procedures need to be consistent for both short term and long term scenarios.

3. §192.631 Control Room Management

(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:

(4) A method of recording controller shift-changes and any hand-over of responsibility between controllers.

Tallgrass did not establish adequate written procedures to address the method of recording controller shift changes as required by §192.631(b) (4). When a controller is unable to continue or assume responsibility for any reason, the procedure did not address what action must be taken when the shift hand-over procedure includes alternative shift hand-over actions that specifically address for this situation. At the time of the inspection, Tallgrass' CRM procedures were inadequate because the Shift Change Procedure did not address delayed shift changes and there was no link to departmental policies.

4. §192.631 Control Room Management

(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) Implement sections 1, 4, 8, 9, 11.1, and 11.3 of API RP 1165 (incorporated by reference, see § 192.7) whenever a SCADA system is added, expanded or replaced, unless the operator demonstrates that certain provisions of sections 1, 4, 8, 9, 11.1, and 11.3 of API RP 1165 are not practical for the SCADA system used.

Tallgrass did not establish adequate written procedures for implementing the API RP 1165 as required by §192.631(c)(1). An operator must develop a written procedure to implement the API RP 1165 display standards to the SCADA systems that have been added, expanded, or replaced since August 1, 2012. At the time of the inspection, Tallgrass' CRM procedures were inadequate because the current displays and control system were leased from Kinder Morgan, and did not fully meet the requirements of API 1165. The specifications for the new Tallgrass SCADA system addressed API 1165, but were specific to this one project and not to Tallgrass as a whole. A policy or procedure for API 1165 implementation needs to be created and implemented that applies to Tallgrass' company-wide CRM procedures.

5. §192.631 Control Room Management

(d) Fatigue mitigation. Each operator must implement the following methods to reduce the risk associated with controller fatigue that could inhibit a controller's ability to carry out the roles and responsibilities the operator has defined:

(1) Establish shift lengths and schedule rotations that provide controllers off-duty time sufficient to achieve eight hours of continuous sleep.

Tallgrass did not establish adequate written procedures to address the shift lengths and schedule rotations for all controllers as required by §192.631(d)(1). At the time of the inspection, Tallgrass' CRM procedures were inadequate because there is no comprehensive plan that addressed identification of fatigue or addressed how fatigue risks will be reduced. With regard to minimizing interrupting the required 8 hours of continuous sleep, Tallgrass' CRM procedures specified that controllers would not be on-call. Leads were on-call, but would not be if scheduled as a controller. This must be explicitly stated in the Fatigue Management Plan.

6. §192.631 Control Room Management

(d) Fatigue mitigation. Each operator must implement the following methods to reduce the risk associated with controller fatigue that could inhibit a controller's ability to carry out the roles and responsibilities the operator has defined:

(3) Train controllers and supervisors to recognize the effects of fatigue.

Tallgrass did not establish adequate written procedures for recognizing the effects of fatigue as required by §192.631(d) (3). At the time of inspection, Tallgrass' CRM procedures were inadequate because Tallgrass' training records are only contracted to Tallgrass' contractor, Circadian. Tallgrass managers and supervisors must also be able to recognize the effects of fatigue and that must be included in the Fatigue Management Plan.

7. §192.631 Control Room Management

(d) Fatigue mitigation. Each operator must implement the following methods to reduce the risk associated with controller fatigue that could inhibit a controller's ability to carry out the roles and responsibilities the operator has defined:

(4) Establish a maximum limit on controller hours-of-service, which may provide for an emergency deviation from the maximum limit if necessary for the safe operation of a pipeline facility.

Tallgrass did not establish adequate written procedures to address a maximum limit on controller hours-of-service as required by §192.631(d)(4). At the time of inspection, Tallgrass' CRM procedures were inadequate because Tallgrass' procedure did not contain an hours-of-service (HOS) analysis. For shifts longer than 8 hours, countermeasures are made available, but not mandated after the 9th hour. Specific fatigue countermeasures must be clearly described.

8. §192.631 Control Room Management

(e) 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.

Tallgrass did not establish adequate written procedures for reviewing SCADA safety-related alarm operations as required by §192.631(e) (1). At the time of the inspection, Tallgrass' CRM procedures were inadequate because the alarm review process was vague and response priorities were not clearly defined. The safety-related alarms must account for different alarm designs and all alarm types/priorities. A review of safety related alarms needs to account for individual-specific controller qualification and performance. There is no requirement in the Tallgrass CRM Plan that addresses how a controller reacts to an alarm on a specific basis as required by API 1167, paragraph 10.

9. §192.631 Control Room Management

(e) 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:

(5) Monitor the content and volume of general activity being directed to and required of each controller at least once each calendar year, but at intervals not to exceed 15 months, that will assure controllers have sufficient time to analyze and react to incoming alarms.

Tallgrass did not establish adequate written procedures for monitoring the content and volume of general activity as required by §192.631(e) (5). At the time of inspection, Tallgrass' CRM procedures were inadequate because the process of monitoring and analyzing general activity was not sufficiently defined, and the criteria and metrics were not formalized in the Alarm Management Plan. An operator's procedure must have the means of determining that the

controller has sufficient time to analyze and react to incoming alarms. Tallgrass' procedure had no procedural requirement for documentation of criteria for controller performance per the requirement of API RP 1167.

10. §192.631 Control Room Management

(f) Change management. Each operator must assure that changes that could affect control room operations are coordinated with the control room personnel by performing each of the following:

(1) Establish communications between control room representatives, operator's management, and associated field personnel when planning and implementing physical changes to pipeline equipment or configuration.

Tallgrass did not establish adequate written procedures to address the communications between control room representatives, operator's management, and associated field personnel as required by §192.631(f)(1). At the time of the inspection, Tallgrass' CRM procedures were inadequate because they did not clearly describe the Control Room portion of Tallgrass' Management of Change (MOC) procedures. Leads and supervisors viewed all MOC's and decide whether the CR is affected. This policy needs to be amended so that it is written into the overall MOC procedure.

11. §192.631 Control Room Management

(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) Responding to abnormal operating conditions likely to occur simultaneously or in sequence.

Tallgrass did not establish adequate written procedures for responding to abnormal operating (AO) conditions as required by §192.631(h) (1). An operator is required to establish and implement a controller training program for each controller to carry out their roles and responsibilities. At the time of the inspection, Tallgrass' CRM procedures were inadequate because Tallgrass' AO procedures did not consider simultaneous or sequential scenarios.

12. §192.631 Control Room Management

(i) Compliance validation. Upon request, operators must submit their procedures to PHMSA or, in the case of an intrastate pipeline facility regulated by a State, to the appropriate State agency.

Tallgrass did not establish adequate written procedures to address the compliance validation as required by §192.631(i). An operator is required to have an individual that is responsible and accountable for compliance with requests from PHMSA or other applicable agencies. At the time of the inspection, Tallgrass' CRM procedures were inadequate because the CRM Plan did

not list a specific individual or position responsible and accountable for compliance with requests from PHMSA or other applicable agencies.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. Following the initial inspection, Tallgrass demonstrated it had written CRM procedures in order to achieve regulatory compliance. Please submit these revised procedures for final agency review and acceptance.

Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

If your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.237). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Tallgrass Intestate Gas Transmission, LLC maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Chris Hoidal, Director, Western Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 5-2015-1003M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



Chris Hoidal
Director, Western Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*

cc: PHP-60 Compliance Registry
PHP-500 J. Kenerson (#143316)