



U.S. Department
Of Transportation
**Pipeline and
Hazardous Materials
Safety Administration**

820 Bear Tavern Road, Suite 103
West Trenton, NJ 08628
609.989.2171

NOTICE OF AMENDMENT

OVERNIGHT EXPRESS DELIVERY

July 12, 2013

Jeffrey Bruner, President
Iroquois Gas Corporation
One Corporate Drive, Suite 600
Shelton, CT 06484

CPF 1-2013-1010M

Dear Mr. Bruner:

From October 11 to October 13, 2011, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code inspected Iroquois Gas Corporation's (Iroquois) procedures for Control Room Management in Shelton, Connecticut.¹

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within Iroquois' plans or procedures, as described below:

1. **§192.631 Control room management.**
 - (a) **General.**
 - (1) **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, except that for each control room where an operator's activities are limited to either or both of:**

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because there were no provisions for controller re-acquaintance after an extended absence. Also, temporary supervisors have no qualification time-out provisions if they have not worked the console for an extended period as prescribed in §192.631(b)(4).

¹ The deadlines for pipeline operators to implement certain control room management procedures are prescribed in §192.631(a)(2). At the time of this inspection, pipeline operators had to have implemented most procedures. Implementation of all related requirements was due no later than August 1, 2012.

2. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because there was no procedure to address controller's roles and responsibilities to stay at the console to verify all SCADA commands that have been initiated are fulfilled, and that that commands given via verbal communications are acknowledged before leaving the console as prescribed in §192.631(b)(4).

3. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because there was no procedure to address calling in another controller when a controller is unable to continue or assume responsibility for any reason as prescribed in §192.631(b)(4).

4. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP- 400, Section 6.2 references API RP-1165 (192.631(d)(1)) rather than API RP-1165 (192.631(c)(1)) as prescribed in §192.631(c)(1).

5. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP- 400, Section 6.2.1 indicates that Sections 1,4, 8 and 9 of API 1165 will be implemented "whenever the SCADA system is expanded or replaced" but does not elaborate on the threshold of changes to drive the API RP-1165 implementation as prescribed in §192.631(c)(1).

6. **§192.631 Control room management.**

(a) *General.*

(1) **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, except that for each control room where an operator's activities are limited to either or both of:**

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because the definition of Safety Related Points contained in GCOP-400, 6.3.2 states that points indicate harm and failures, rather than what is needed to insure the pipeline is remains safe as prescribed in §192.631(c)(2).

7. **§192.631 Control room management.**

(a) *General.*

(1) **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, except that for each control room where an operator's activities are limited to either or both of:**

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because the criteria described in GCOP-400, 6.3.1 that trigger a point-to-point verification are not definitive, as prescribed in §192.631(c)(2).

8. **§192.631 Control room management.**

(a) *General.*

(1) **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, except that for each control room where an operator's activities are limited to either or both of:**

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-400 6.3.3 describes field technician verification of field devices, but does not extend to verification to display changes in the control room, as prescribed in §192.631(c)(2). This is contrary to the Appendix 3 verification forms which do require verification to include SCADA displays.'

9. **§192.631 Control room management.**

(a) *General.*

(1) **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, except that for each control room where an operator's activities are limited to either or both of:**

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-400 6.3.2 does not declare an expediency of completion when a point-to-point verification is initiated, as prescribed in §192.631(c)(2).

10. §192.631 Control room management.**(a) General.**

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-400, 6.4.2 needs to distinguish between two scenario's, (1) with the backup Oxford Control Room energized, and (2) with no operational SCADA anywhere as prescribed in §192.631(c)(4).

11. §192.631 Control room management.**(a) General.**

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-400, 6.4 is inadequate for the post mortem of the test. The procedure does not address a post-test critique as prescribed in §192.631(c)(3).

12 §192.631 Control room management.**(a) General.**

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-400, 6.5 does not include explicit parameters for authority and responsibility parameters for a controller to initiate fail-over, or otherwise denote a failover regimen as prescribed in §192.631(c)(5).

13. §192.631 Control room management.**(a) General.**

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because the number of displays is not consistent between primary site and backup location. The Oxford Control Room has two displays while the Shelton Control Room has four displays. The operator could not adequately explain how this limitation does not impact controller performance as prescribed in §192.631(c)(4).

14 §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-400, 6.5.2 does not include language to test a representative sample of all types of command functions as prescribed in §192.631(c)(4).

15. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-400, 6.6.5 addresses the use of the "shift change document" but does not explicitly identify the name of the prescribed form/file. There is no explicit requirement to provide minimal information as prescribed in §192.631(c)(5).

16. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-500, 6.3.6 addresses fatigue as a factor to contact the standby controller, but does not explicitly state "self-identified" as prescribed in §192.631(d)(3).

17. §192.631 Control room management.

(a) General.(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-500, 6.3.9 references the PHMSA Incident Report, Section 8, but does not explicitly identify what constitutes an adequate investigation as prescribed in §192.631(d).

18. §192.631 Control room management.

(a) *General.*

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-400, 6.4.1 requires the recording of deviations, but only if actual conditions fall below the regulations which is inconsistent with that prescribed in §192.631(d).

19. §192.631 Control room management.

(a) *General.*

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-500, 6.2.1 requires training, but fatigue education is not explicitly included in the list of training topic areas as prescribed in §192.631(d)(2).

20. §192.631 Control room management.

(a) *General.*

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-600, 6.1.10 describes a review by the Working Group, but does not include a list of report criteria that the Working Group would be reviewing from as prescribed in §192.631(e)(2).

21. §192.631 Control room management.

(a) *General.*

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because the Working Group tasks described in GCOP-600, 6.1.10 described "points impacting safety", but did not explicitly identify inhibited and points off scan as prescribed in §192.631(e)(2).

22. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-600, 6.1.11 addresses tracking restoration of outages, but contains no explicit timeline as prescribed in §192.631(e)(2).

23. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-600, 6.1.11 stipulates that restoration or changes to alarm systems should be performed, but does not declare related timelines as prescribed in §192.631(e).

24. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-600, 6.1 does not include a list of target metrics as prescribed in §192.631(e)(5).

25. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-600, 6.3.2 does not establish a metric around alarm response as prescribed in §192.631(e)(5).

26. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-800, 6.1.1 does not include criteria to review non-reportable events that may be valuable to add to training as prescribed in §192.631(g)(2).

27. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-900, 6.5.1 although thoroughly documented with dates, contains no specific reference to record training elements and dates of completion as prescribed in §192.631(h).

28. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-900, 7.3.1 depicts a bullet list that addresses infrequent setups, but contains no actual listing or description of such setups as prescribed in §192.631(h)(5).

29. §192.631 Control room management.

(a) General.

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-100, 6.4 addresses responsibility for deviation management, but does not address overall CRM implementation as prescribed in §192.631(i).

30. §192.631 Control room management.

(a) *General.*

(1) 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, except that for each control room where an operator's activities are limited to either or both of:

Iroquois' written control room management procedures, Gas Control Operating Procedures dated 10/03/2011, were inadequate because GCOP-400, 7.3.4 addresses data storage as a process, but does not explicitly address the level of detail to be retained in the records as prescribed in §192.631(j)(1).

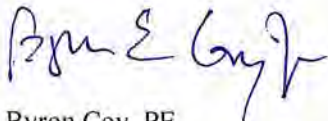
Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. 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, after opportunity for a hearing, 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 **45** days of receipt of this Notice. This period 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 Iroquois maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to, as well as any correspondence relating to this Notice to: Byron Coy, PE, Director, PHMSA Eastern Region, 820 Bear Tavern Road, Suite 103, W. Trenton, NJ 08628. Please refer to **CPF 1-2013-1010M** on each document you submit, and please provide a (signed) copy in electronic format whenever possible. Smaller files may be emailed to Byron.Coy@dot.gov. Larger files should be sent on a CD accompanied by the original (signed) paper copy to the Eastern Region Office.

Sincerely,



Byron Coy, PE
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

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