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STEVE CRISAFULLI  
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December 8, 2015

Ms. Carlotta S. Stauffer, Commission Clerk  
Office of Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Blvd.  
Tallahassee, FL 32399-0850

Re: Petition for the Commission to issue an order to show cause against Peoples Gas System for violations of Chapter 25-12, F.A.C., request for imposition of fines, and request for rate relief, by Office of Public Counsel.

Dear Ms. Stauffer:

Enclosed for filing are Appendices A & B which were inadvertently omitted from the Petition filed with the Clerk Commission on Monday, December 7, 2015 (Document No.07756-15).

Appendix A is the September 2013 Review of Peoples Gas Distribution Facility Inspections and Appendix B is the November 2015 Peoples Gas System Distribution Facility Inspections Follow-up Audit. If you should have any questions, please feel free to call or email me.

Sincerely.

A handwritten signature in blue ink that reads "Danielle M. Roth".

Danielle M. Roth, Esq.  
Office of Public Counsel

cc: Charlie Beck, Braulio Baez; Parties of Record

# APPENDIX A



**REVIEW OF  
PEOPLES GAS  
DISTRIBUTION FACILITY  
INSPECTIONS**

**SEPTEMBER 2013**

**BY AUTHORITY OF  
THE FLORIDA PUBLIC SERVICE COMMISSION  
OFFICE OF AUDITING AND PERFORMANCE ANALYSIS**

**REVIEW OF  
PEOPLES GAS  
DISTRIBUTION  
FACILITY INSPECTIONS**

**CARL VINSON  
PUBLIC UTILITIES SUPERVISOR**

**R. LYNN FISHER  
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**SOFIA DELBADO PERUSQUIA  
PUBLIC UTILITY ANALYST I**

**SEPTEMBER 2013**

**BY AUTHORITY OF  
THE STATE OF FLORIDA  
PUBLIC SERVICE COMMISSION  
OFFICE OF AUDITING AND PERFORMANCE ANALYSIS**

**PA-13-05-004**

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## 1.0 EXECUTIVE SUMMARY

### 1.1 PURPOSE AND OBJECTIVES

In June 2013, the Florida Public Service Commission's (Commission) Office of Auditing and Performance Analysis initiated an audit to examine the processes, systems, and internal controls used by Peoples Gas System (PGS or the company) to perform inspections of its distribution facilities.

The purpose of the audit was to assess the company's compliance with Commission rules regarding the distribution of natural gas and to determine the adequacy of the company's management oversight. The specific objectives of the audit were to:

- ◆ Determine the company's compliance with Chapter 25-12, Florida Administrative Code (F.A.C), Safety of Gas Transportation by Pipeline.
- ◆ Document the company's operational policies and procedures used to conduct inspections of distribution facilities.
- ◆ Assess the company's current practices for tracking and recording inspections of distribution facilities.
- ◆ Identify internal control deficiencies, operational issues, or possible corrective actions regarding the inspection of its distribution facilities.

### 1.2 SCOPE

Given these objectives, the scope of the audit focused on the company's organization responsible for maintaining the gas pipeline infrastructure and repair of gas leaks. The audit was limited to the Tampa and St. Petersburg divisions. However commission audit staff notes that most company procedures, practices, and controls described in the report also apply statewide.

Additionally, audit staff examined the different data systems the company uses to track the progress of its facility inspection activities, including the internal controls to validate that inspection work was performed correctly. Commission audit staff analyzed the following areas as they relate to the company's field operations for the period 2009 to date:

- ◆ Completion of surveys and inspections in compliance with Commission rules
- ◆ Record-keeping tools and practices
- ◆ Internal compliance inspection reviews
- ◆ Management oversight

## 1.3 METHODOLOGY

Planning, research, and data collection for this review were performed in June through August 2013. The information compiled in this audit report was gathered through company responses to audit staff's document requests and onsite interviews with key employees. Audit staff also reviewed Commission rules and regulations on gas distribution and the company's annual reports. Specific information reviewed included:

- ◆ Leak survey and inspection results and records
- ◆ Documentation of deficiencies or issues in facilities inspections
- ◆ Documentation of construction, replacement, or repair work performed
- ◆ System maps and facilities records

## 1.4 BACKGROUND AND PERSPECTIVE

### 1.4.1 COMPANY OVERVIEW

PGS provides transportation and sales of natural gas to approximately 345,000 residential, commercial and industrial customers within 25 counties throughout Florida. PGS receives its gas supplies from four different transmission pipelines, but owns and maintains its distribution system of mains and services.

### 1.4.2 STATUTORY REQUIREMENTS

Rule 25-12, F.A.C. contains the rules for Safety of Gas Transportation by Pipeline. These rules adopt the Minimum Federal Safety Standards prescribed by Title 49, CFR, Parts 191 and 192. The rules relevant to this audit are presented in **Appendix 1**.

### 1.4.3 LEAK SURVEYS

Leak surveying is the process of identifying potential gas leaks. The surveys are performed by PGS field technicians on both gas mains and service lines. Gas mains are distribution lines that carry gas from one point to another acting as a common source of supply for more than one service line. Gas services are pipelines that carry gas from the main to the customer meter.

For gas mains, the miles and locations to be surveyed are obtained from the company's Geographical Information System (GIS) which is used to capture, store, and manage geographical data, such as the company's distribution infrastructure. Leak surveys on mains are performed using a truck equipped with gas detection sensors. If leaks are detected, the survey technician generates a work order form to have the necessary repair completed and updates the GIS records.

For service lines, the miles and locations to be surveyed are obtained from the company's Customer Information System (CIS). Leak surveys on service lines are performed by field technicians using a handheld detection device. If leaks are detected, a work order is generated to investigate for necessary repair and entered into the Leak Information and Damage Reporting System (LIADRS).

#### **1.4.4 CATHODIC PROTECTION INSPECTION**

Cathodic protection is a technique of protecting metal (i.e., steel pipe) by using a sacrificial metal to act as the anode. In other words, the sacrificial metal corrodes instead of the protected metal. PGS field technicians conduct a cathodic protection survey via testing the electrical current of the anode and the pipeline to check for the correct voltage. The results of the surveys are manually recorded in a log book. The company's administrative staff then enters the survey results into an electronic file that resides in a shared folder for the division.

#### **1.4.5 OTHER INSPECTIONS**

Other statutorily required inspections include atmospheric inspections, odorization testing, and casing isolation tests. Atmospheric inspections are visual examinations performed by field technicians to detect corrosion on above-ground facilities. Atmospheric records are housed in the CIS. Odorization testing verifies the level of mercaptan, the required odorant for identifying leaking gas. A casing isolation test verifies the electrical isolation (separation) between the protective casing and the pipeline. Both the odorization and casing isolation tests are manually recorded on a form and uploaded to a shared electronic file.

#### **1.4.6 PIPELINE REPLACEMENT INITIATIVES**

In 2000, PGS implemented a replacement program for approximately 200 miles of cast iron and bare steel distribution pipes. Cast iron and steel pipes were replaced with polyethylene plastic, or coated steel pipe which resists corrosion.

More recently, PGS has also prioritized the replacement of cast iron and bare steel through its Distribution Integrity Management Program. On September 18, 2012, Order No. PSC-12-0476-TRF-GU authorized the company to accelerate its program of replacing its remaining 567 miles of cast iron and bare steel pipes in an estimated ten-year period through a surcharge.

### **1.5 FINDINGS**

Commission audit staff believes PGS lacks effective managerial controls regarding the company's leak surveys, cathodic protection inspections, and other inspections. Audit staff also believes these deficiencies stemmed from inadequate management oversight, incomplete attention to internal operational review findings, and inadequate record-keeping tools and practices. Based on its review, audit staff reached the following findings:

- Finding 1:** During the period 2010 to date, PGS did not complete timely inspections of leaks, cathodic protection, and casings as required in Rules 25-12.029, 25-12.040, 25-12.052, 25-12.053, and 25-12.062 F.A.C.
- Finding 2:** For portions of the period 2010 to date, PGS did not comply with Rules 25-12.022, 25-12.050, 25-12.055, 25-12.060, and 25-12.085 F.A.C. which address other inspections, general record keeping, and annual reports.
- Finding 3:** During the period 2010 to date, sufficient information was available to PGS management that it should have been aware that the company was not in compliance with Commission rules.
- Finding 4:** Lack of attention to compliance inspection reviews allowed detected compliance deficiencies to persist.

**Finding 5: Inadequate record-keeping and work planning systems allowed compliance deficiencies to develop and persist.**

**Finding 6: As a result of this audit, PGS has recognized the magnitude of the deficiencies, instituted significant organizational and operational changes, and developed a comprehensive corrective action plan to address the unremedied deficiencies.**

**RECOMMENDATION**

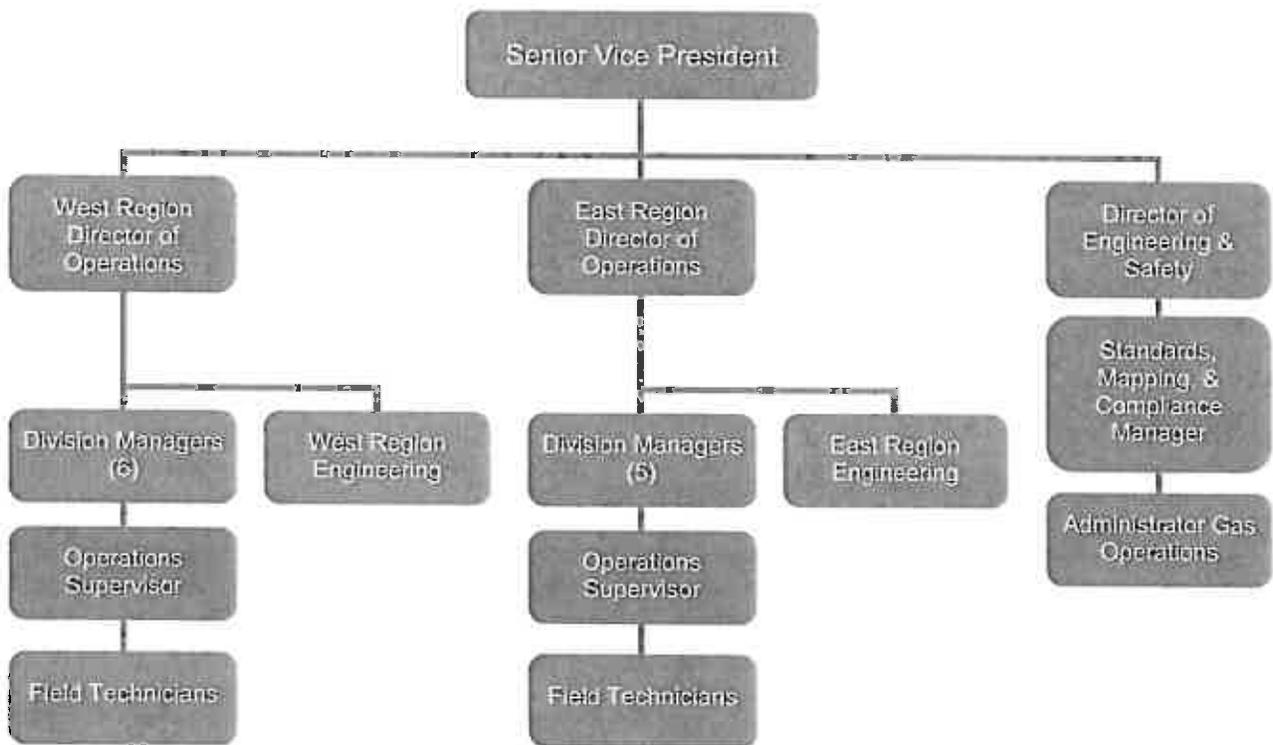
Commission audit staff recommends continuing monitoring of PGS' progress during completion of the corrective action plan. It further recommends a complete operational review encompassing company operations statewide once the action plan effort is complete. The follow-up audit purpose would be to assess the effectiveness of new systems, processes and controls statewide.

## 2.0 INTERNAL CONTROLS

### 2.1 PEOPLES GAS SYSTEM ORGANIZATION

The company's field operations consist of 16 divisions that fall under the direction of the Senior Vice President of Electric and Gas Delivery. The Senior Vice President also oversees the PGS corporate engineering staff which is headed by the Director of Engineering & Safety. The 16 divisions are grouped into East and West Regions, with each region headed by a Regional Director of Operations. The two regional directors each oversee division managers responsible for daily operations of their assigned division service areas. Each region is supported by a regional engineering support services group. **Exhibit 1** depicts the PGS field operation organization.

### PEOPLES GAS ORGANIZATIONAL CHART JULY 2013



**EXHIBIT 1**

*Source: Company Response to Document Request 1.1h*

Each technician is required to be qualified for the specific job tasks his duties require (e.g., cathodic protection inspection, leak surveying.) The field technician job responsibilities include performing leak surveys, cathodic protection inspections, and other facilities maintenance tasks. In 2012, the company implemented a new tracking program to provide centralized monitoring of employee job task qualification status. The previous program, implemented in 2002, allowed each division manager to track qualification of division

employees. Under this approach, the company had failed to ensure that employee job task qualifications were being reviewed and renewed.

## **2.2 PROGRESS TRACKING AND RECORD-KEEPING TOOLS**

PGS uses several systems and databases to plan and to track the progress of its survey and inspection activities. These computer-based tools vary in age and format and are also supplemented by the use of paper records. These different record-keeping tools create a disjointed system that is not able to detect instances where inspections are not completed.

### **2.2.1 GEOGRAPHICAL INFORMATION SYSTEM**

In 2006, PGS implemented an automated Geographical Information System (GIS) to more efficiently monitor and document company installations, inspections and locations of system main pipelines throughout the company. In 2010, the PGS divisions began using the GIS system and records to perform and track leak surveys. Planning leak surveys is complex due to the varying survey frequencies required by Commission rules (every one, three, or five years). PGS compliance review findings noted that some pipeline was coded incorrectly in the PGS systems for multiple years leading to incorrect intervals of surveys. The company plans to correct this issue by the end of 2013. Leak survey technicians gather the information to schedule surveys from the GIS records. Leak reports are manually added.

Audit staff reviewed the company's performance for the period and found that the GIS records are not maintained on a timely basis. Audit staff found that PGS' field technicians failed to enter leak survey results into the GIS database in a timely manner. Tampa and St. Petersburg division management also did not adequately track the progress of the leak surveys during the year.

Commission audit staff observed a lack of effective reporting or tracking mechanisms to allow division managers to check on work status. The progress of the divisions was checked by the regional engineering support group at the end of the year. Audit staff also noted discrepancies between the GIS total number of miles of pipeline and the miles of pipeline reported to the U.S. Department of Transportation.

### **2.2.2 CUSTOMER INFORMATION SYSTEM**

In 1986, PGS implemented an automated Customer Information System (CIS ) to more effectively monitor and document inspections performed for service pipeline. Since 1991, CIS began housing leak surveys for the service pipeline and atmospheric corrosion inspection information. Information on leak surveys performed is entered into a spreadsheet by the division administrative staff. Using a macro, the information is then uploaded into CIS.

Audit staff believes the CIS is not an effective system to use for inspections record keeping. PGS staff allocates a great deal of time and resources to the upkeep of these records. In addition, management oversight of inspection progress and related data entry was deficient.

### **2.2.3 LEAK INFORMATION AND DAMAGE REPORTING SYSTEM**

In 2004, PGS implemented the Leak Information and Damage Reporting System (LlaDRS) to automate record-keeping for leak reports and repairs. Repair forms are manually entered into LlaDRS by administrative staff. Leak repairs and resurveys are reviewed and scheduled by the division dispatcher. However, audit staff observed that leak repairs and resurveys were not being completed and documented within the allotted timeframe. This lag created difficulty in scheduling repairs and resurveys as well as hindering supervisors in tracking progress. Audit staff found that the dispatcher was not planning the workload efficiently.

### **2.2.4 CATHODIC PROTECTION RECORDS**

PGS cathodic protection inspections are completed annually by field technicians. The inspection program is required to monitor and assess the adequacy of protection for steel pipeline assets. Records are kept in monthly log books. These log books include all the locations scheduled to be surveyed for that month. The technicians complete the inspections and record the results in the log book. Administrative staff adds the most recent results to the "pdf" version of the log book. Currently, no work order system for cathodic protection inspections exists to plan, execute, and track cathodic protection inspections.

### **2.2.5 ATMOSPHERIC SURVEY RECORDS**

In 1991, PGS began documenting atmospheric surveys within the CIS database. The company developed paper forms for field technicians to complete while doing their surveys. Audit staff reviewed the company's performance results since 2006 and determined that the company did not make efforts to ensure the program was managed efficiently. Management did not track the progress and completion of these surveys.

### **2.2.6 PLANNED COMPLIANCE TRACKING SYSTEM**

PGS management has recently recognized the need to purchase a compliance tracking system. Currently, the company is reviewing technical requirements and available options. Management intends for the new system to have the capability to communicate with GIS, CIS and the work order management system. According to the company, the present general requirements for the new system are to provide the following:

- ◆ Store compliance data for business rules to trigger compliance inspection alerts for state and federal levels, inspection data entry, and compliance data for reporting
- ◆ Provide alerts for individuals across PGS to perform inspections by a certain date/time (MM/DD/YYYY & HH:MM)
- ◆ Record compliance actions for inspections
- ◆ Provide Public Service Commission and federal compliance reporting
- ◆ Provide alerts for individuals to prepare compliance reporting for state and federal regulatory agencies
- ◆ Generate distribution work orders for compliance work

Implementation of the new system is currently targeted for the fourth quarter of 2014.

## 3.0 COMPLIANCE INSPECTION REVIEWS

### 3.1 COMPLIANCE INSPECTION REVIEW PROCESS

In late 2009, PGS began implementing a regular program of compliance inspection reviews. These reviews are conducted by the Administrator of Gas Operations who is part of the System Engineering and Safety Unit. The Administrator relies on his extensive experience as a Regional Operations Manager to review and evaluate various inspection activities and related safety issues.

The surveys are performed statewide throughout the PGS service territory, providing two evaluations of each division every year. A third annual "follow-up" review is performed for each division to assess the status of resolution of prior findings for that year.

These reviews constitute a key quality assurance control that provides the company with the ability to determine whether surveys and inspections were done properly and whether they were timely. Commission audit staff found these reviews to be well done, thorough and of high potential value to managers at all levels of PGS operations. The compliance inspection reviews are the functional equivalent of internal audits.

As each compliance inspection review is completed, a written report is issued to the Division Manager and also provided to the Regional Director of Operations, the Regional Operations Manager, and the Manager of Standards, Mapping, and Compliance. Division management is required to provide responses to review findings within 30 days, providing information on corrective actions to be taken. In many instances, Commission audit staff found the division management responses to be adequate, describing changes and corrections to be made, identifying responsible employees and noting planned completion dates. In some instances the responses were not provided at all, or not within the required 30 day period. When provided, the management responses were sometimes cryptic and lacking completion dates or specific identification of employees responsible for corrective actions.

### 3.2 COMPLIANCE INSPECTION REVIEW FINDINGS

In reviewing compliance inspection review reports over the period 2009 through 2013, Commission audit staff observed that various "repeat" findings were reported over the course of time in both the Tampa and St. Petersburg divisions. These reports document that the same findings were detected as many as three or four times over a period of years. **Appendix 2** provides a summary of repeat findings identified for the Tampa and St. Petersburg divisions over the period 2009 through mid-2013.

The key areas addressed in the findings were cathodic protection, regulator stations, leak surveys, and odorization. These findings provided adequate notice for division and regional management to be aware that problems existed and continued for long periods. The time span of the repeat findings suggests that short-term issues such as resource constraints or temporary workload peaks cannot be cited as a credible cause. The duration of these deficiencies also indicates the review findings were not given significant priority by management at any level.

### 3.3 USE OF COMPLIANCE INSPECTION REVIEWS

Though they provided valuable information, compliance inspection reviews were not fully utilized. The compliance inspection review reports over the period 2009 through 2013 clearly indicate that the corrective actions promised in management responses were frequently not delivered. Tampa and St. Petersburg division managers delegated most corrective action to supervisors but did not follow-up to ensure final completion. In many instances the review report wording emphasizes the fact that prior findings had been left unresolved, making it difficult for this fact to escape the attention of management.

Commission audit staff noted that regional or higher levels of management did not prepare or approve the management responses to compliance inspection reviews. The division supervisors provided the responses. The recurrence of findings two, three, and four times indicates that regional and upper management was not holding division management accountable for resolving them. All levels of management were under-informed that surveys were not being completed on the required schedule and that errors and deficiencies continued to persist.

The review reports indicate that findings identified in Tampa or St. Petersburg had on occasion already been brought to the attention of management in another division across the state. Audit staff believes that review findings were not adequately communicated and shared between the East and West Regions or even between the divisions of the West Region. Proactive information sharing would have been beneficial since a finding pertaining to one division could trigger another division's awareness of its existence.

Similarly, Commission audit staff believes sharing the compliance inspection review findings with the TECO Energy Audit Services Department did not occur and could have proven beneficial. Compliance inspection reviews are similar in nature to internal audits in many ways and would have provided valuable information regarding the state of internal controls over important areas of operations. If shared with the Audit Services Department, the review findings and issues regarding inadequate management response could have been made known to the TECO Energy Audit Committee of the Board of Directors. This reporting function is described in Standard 2440 of the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*.

## 4.0 OVERALL OPINION

Over the period 2009 to mid-2013, PGS failed to consistently complete the leak surveys, repair inspections, and facilities inspections required by Florida Public Service Commission rules and the Code of Federal Regulations. Commission audit staff believes these deficiencies stemmed from inadequate management oversight, incomplete attention to internal operational review findings, and inadequate record-keeping tools and practices.

This review was limited to the Tampa and St. Petersburg divisions. Since most company procedures, practices, and controls are implemented statewide, Commission audit staff believes it is possible that these findings may apply to other divisions across the PGS system.

### 4.1 MANAGEMENT OVERSIGHT

The information gathered by Commission audit staff raises serious concerns regarding PGS management's oversight and monitoring of distribution facilities inspections and records in the Tampa and St. Petersburg divisions. Over the period 2009 to mid-2013, company management did not have control over which portions of its required surveys and inspections had been completed. Gaps in company data and records reveal that throughout the period, control weaknesses allowed inspections to go uncompleted, placing its customers, its employees, and the general public at risk.

Management did not pursue complete resolution of known deficiencies identified through its regular program of operational reviews, even when subsequent reviews repeatedly noted the still-unresolved deficiencies. When review deficiencies were addressed by managers, follow-up was often incomplete.

Commission audit staff found PGS management oversight at all levels to have been ineffective and deficient, allowing out of compliance conditions to continue. Division and regional managers did not complete corrective actions for review findings. While they knew that backlogs and deficiencies existed, they did not inform upper management. Management at several levels did not require accountability from regional and division managers.

Despite apparent signs of data inaccuracies, management did not pursue timely resolution of problems regarding its system maps and records. Recordkeeping was also deficient in tracking employee job task qualification for most of the period studied.

**Finding 1:** During the period 2010 to date, PGS did not complete timely inspections of leaks, cathodic protection, and casings as required in Rules 25-12.029, 25-12.040, 25-12.052, 25-12.053, and 25-12.062 F.A.C.

**Finding 2:** For portions of the period 2010 to date, PGS did not comply with Rules 25-12.022, 25-12.050, 25-12.055, 25-12.060, and 25-12.085 F.A.C. which address other inspections, general record keeping, and annual reports.

**Finding 3:** During the period 2010 to date, sufficient information was available to PGS management that it should have been aware that the company was not in compliance with Commission rules.

#### **4.2 OPERATIONAL REVIEW FINDINGS**

Over the period 2009 through mid-2013, division management responses and proposed action plans for compliance inspection review findings were often incomplete. The review reports indicate that the corrective actions promised in management responses were frequently not delivered.

The review reports indicate that findings identified in Tampa or St. Petersburg recurred up to four times in successive reviews without correction. Some of these findings had previously been identified in other divisions across the state indicating they were not circulated throughout the organization. Similarly, Commission audit staff believes sharing the compliance inspection review findings with the TECO Energy Audit Services Department did not occur and could have proven beneficial.

Commission audit staff believes insufficient attention was placed upon accountability by management at several levels. No reporting mechanisms existed for division, regional and higher management to track progress on clearing review deficiencies.

**Finding 4:** Lack of attention to compliance inspection reviews allowed detected compliance deficiencies to persist.

#### **4.3 RECORD-KEEPING TOOLS AND PRACTICES**

Systems and processes for tracking and recording survey and inspection work have not been effective. Work was not scheduled and tracked to facilitate completion on the schedule required by Commission rules.

Use of several different record-keeping tools resulted in a disjointed tracking system. Information on mains is maintained using the Geographic Information System (GIS) and information on services is accessed via the Customer Information System (CIS). Some field data including leak surveys, cathodic protection, and atmospheric surveys is captured using paper forms and logbooks prior to being entered into the electronic files on a shared folder. The time required for data entry hindered the ability to obtain an up-to-date status of work completed. Using log books to track and perform field work led to difficulties such as temporary misplacement of these key records.

PGS management has recently recognized the need to purchase a compliance tracking system. Currently, the company is reviewing technical requirements and available options.

**Finding 5:** Inadequate record-keeping and work planning systems allowed compliance deficiencies to develop and persist.

#### 4.4 CORRECTIVE ACTION PLAN

As a result of staff's audit, PGS management developed specific corrective action plans for the St. Petersburg and Tampa divisions. The action plans were based on the findings from PGS' compliance inspection reviews over the period 2009 through 2013. These plans are provided in **Appendix 3**.

The company is currently making efforts to complete required inspections and improve record-keeping processes. As reflected in **Appendix 3** and in the Company Comments chapter, PGS management has reported several tasks as "resolved". However, continued monitoring of these efforts by Commission audit staff is appropriate. Additionally, a follow-up audit may be appropriate to ensure that all improvements are implemented.

**Finding 6:** As a result of this audit, PGS has recognized the magnitude of the deficiencies, instituted significant organizational and operational changes, and developed a comprehensive corrective action plan to address the unremedied deficiencies.

#### 4.5 RECOMMENDATION

Commission audit staff recommends continuing monitoring of PGS' progress during completion of the corrective action plan. It further recommends a complete operational review encompassing company operations statewide once the action plan effort is complete. The follow-up audit purpose would be to assess the effectiveness of new systems, processes and controls statewide.

## 5.0 COMPANY RESPONSE

### 5.1 PEOPLES GAS SYSTEM RESPONSE

Commission audit staff requested that PGS provide responses to its findings and recommendations. These comments are reprinted in their entirety below.

PGS appreciates the opportunity afforded by the Commission audit staff to respond to this report. From the moment the company became aware of the audit, it cooperated fully in providing the documents sought by the audit staff, and made every effort to accommodate the staff's schedule for completion of its audit.

The audit resulting in this report involved special circumstances in terms of its origin and scope (*i.e.*, the divisions audited), and the company believes the audit's findings would not be replicated had it encompassed a statewide review of the company's compliance with applicable regulations. While PGS' management understands the audit staff's suggestion that the deficiencies identified in the company's Tampa and St. Petersburg Divisions "may" be present in other PGS divisions statewide, PGS management does not believe that is the case. The company believes it is important to note that the instances of noncompliance discussed in this report occurred within a relatively small pocket of the company's distribution system, and that the audit findings reflect conduct on the part of the company that is far from typical of the manner in which PGS operates its overall distribution system. Commission inspectors conduct routine safety inspections once or twice a year in virtually all of the company's divisions, and occasionally there are findings of noncompliance with Commission rules. In this audit, more instances of noncompliance were found than is typical. We take all Commission inspections, including the one that is the subject of this report, seriously.

The company is disappointed in the results of the audit staff's investigation because the instances of noncompliance found do not reflect the true commitment to safety and integrity that PGS maintains every day. Safety is the company's number one priority, outweighing all other considerations. It is important to note that no instance of noncompliance identified in this report resulted in any PGS team member, PGS customer, or member of the public experiencing any injury or damage to property.

Despite PGS's disappointment in the findings expressed in this report, we have seized the opportunity to correct the issues of noncompliance brought to the attention of the company's upper management, thereby providing the company not only with an opportunity to remedy the instances of noncompliance, but to examine its personnel, systems and procedures to ensure future compliance. A number of the instances were "administrative" in nature and most have already been corrected. All but two of the identified items will be corrected before the end of 2013, and those two remaining items will be corrected by the end of 2014. As of the date of this company response, 83% of the items

identified in the staff's report have been corrected. (See updated Corrective Action Plans for Tampa and St. Petersburg, which immediately follow this Company Response.) Perhaps more importantly, this disappointing exercise has resulted in the company's making a number of organizational and operational changes designed to prevent future instances of noncompliance.

While there were procedures – checks and balances -- in place at the times these instances of noncompliance occurred, those procedures were either not utilized at all, or were not utilized effectively.

### **Organizational Changes**

The organizational chart shown on page 5 of this report has changed since the company's exit interview with the Commission's audit staff. The new chart, displayed below, reflects the following changes:

- ◆ Instead of a West Region and East Region Director of Operations, those two positions have been combined in a single Director of Florida Operations, who reports directly to the Senior Vice President – Electric and Gas Delivery.
- ◆ A new position has been created for a Director – Operations Compliance, who will also report directly to the Senior Vice President – Electric and Gas Delivery.
- ◆ The Director – Gas Delivery Support (formerly known as the Director – Engineering and Safety) will continue to report directly to the Senior Vice President – Electric and Gas Delivery.

These organizational changes have been implemented in recognition of the fact that accountability starts at the top of any organization.

In addition, the Operations and Gas Delivery Support (formerly known as Engineering and Safety) organizations have started an organizational review that will be completed by the end of September 2013. This review is designed to examine whether the present organizational structure:

- ◆ Is the most effective and efficient structure for addressing operational requirements;
- ◆ Provides clarity on accountability for the execution of responsibilities;
- ◆ Has the right personnel in the right roles or positions; and/or
- ◆ Has any staffing gaps.

Sr Vice President  
Electric & Gas Delivery

Director  
Florida Operations

Director  
Operations  
Compliance

Director  
Gas Delivery  
Support

Region  
Engineering  
Ft. Lauderdale

Division Manager  
Tampa/Lakeland/Avon  
Park  
(position to be filled)

Operations  
Supervisor(s)

Field Technicians

Region  
Engineering  
Tampa

Division Manager  
St. Petersburg  
(position to be filled)

Operations  
Supervisor(s)

Field Technicians

DIMP  
(Gulf Coast)  
(position to be filled)

Division Manager  
Jacksonville

Operations  
Supervisor(s)

Field Technicians

DIMP (Atlantic  
Coast)

Division Manager  
Ocala

Operations  
Supervisor(s)

Field Technicians

Operations Budget  
Analyst  
(position to be filled)

Division Manager  
Panama City

Operations  
Supervisor(s)

Field Technicians

Division Manager  
South Florida

Operations  
Supervisor(s)

Field Technicians

Division Manager  
Orlando

Operations  
Supervisor(s)

Field Technicians

Division Manager  
Daytona/Eustis

Operations  
Supervisor(s)

Field Technicians

Division Manager  
Sarasota

Field Technicians

Administrator  
Gas Operations

Sr. Manager  
Engineering

Engineering, Gas  
Control, Safety,  
Technical Training

Sr. Manager Gas  
Operations

Operations Support,  
Instrumentation/Control,  
CP Support

Sr. Manager Project  
Management &  
Damaged Facilities

Damage Prevention,  
One Call Coordination,  
Energy Services

Standards, Mapping,  
& Compliance  
Manager

Compliance Programs,  
GIS, DIMP, TIMP

## **Operational/Procedural Changes**

In addition to the Corrective Action Plans for the Tampa and St. Petersburg Divisions (Appendix 3 to this report), the company has implemented, or is in the process of implementing, other managerial and procedural changes. While the staff audit which is the subject of this report was confined to the company's Tampa and St. Petersburg Divisions, these operational changes will be implemented statewide, throughout PGS' divisions.

Many of the changes are based on the premises that compliance can be difficult absent a thorough knowledge of the rules with which compliance is required, and the qualifications necessary to perform the tasks required for compliance.

**Acknowledgments.** All directors, managers and supervisors have been required to sign an acknowledgment form that they have read the Commission's gas safety rules (Chapter 25-12, Florida Administrative Code), and are knowledgeable with respect to the U.S. Department of Transportation's pipeline safety requirements in 49 Code of Federal Regulations, Parts 191 and 192, and PGS' Operations & Maintenance and Construction Manual. Any employee not familiar with anything in any of these documents will undergo training to become knowledgeable regarding them. The acknowledgment form also confirms the employee's commitment to perform his or her job duties in a manner that satisfies the requirements of these documents. Finally, the acknowledgment form contains a commitment by the employee to ensure that any noncompliant situation, of which he or she becomes aware, within or outside his or her job duties, will either be corrected by him or her, or properly communicated promptly to the appropriate person(s) for correction.

**Training Task Force.** Related to the employee acknowledgments discussed above, and because the root causes of some of the instances of noncompliance referenced in this report were tied to training, PGS has established a Training Task Force that will report to a steering committee chaired by the Senior Vice President – Electric and Gas Delivery, and made up of the Director of Florida Operations, the Director of Gas Delivery Support, the Director of Operations Compliance and the Manager of Human Resources. The mission of the task force will be to review completely the company's training programs to determine whether there are any gaps, and what corrective actions are required to address training documentation, knowledge, skills, qualification of employees to perform their assigned duties, standardization across the PGS operating divisions, and contractor versus company team member duties. It should be noted that the Training Task Force's focus will be on technical operational competencies as opposed to leadership or management.

**Compliance Inspection Reviews.** The internal Compliance Inspection Reviews ("internal audits") conducted by the company since 2009 are discussed in this report at pages 9 and 10. The process for these reviews will be changed going forward. They will continue to be performed twice each year, together with a follow-up visit, in each of the company's 16 operating divisions. The results of these audits will be provided to the manager of the division, the region manager,

the Director of Florida Operations, the Director of Gas Delivery Support, the Director of Operations Compliance and all other Division Managers.

The manager of the division audited will be responsible for preparing a response to the audit findings, and that response must be approved by the Director of Florida Operations. The division manager will be responsible for implementing any corrective actions that may be required by the audit findings.

The audit report and the division manager's response will be reviewed by the Director of Florida Operations, the Director of Gas Delivery Support, the Director of Operations Compliance and the Senior Vice President – Electric and Gas Delivery. The Director of Florida Operations will be responsible for providing the Senior Vice President – Electric and Gas Delivery with assurance/documentation of any required corrective actions identified by the audit report. A quarterly review of the audit reports will be conducted by the Director of Florida Operations, the Director of Gas Delivery Support, the Director of Operations Compliance and the Senior Vice President – Electric and Gas Delivery.

**Reporting Task Force.** This report, as well as some events experienced in the field, has revealed instances in which PGS team members lacked information providing “visibility” on the status of work associated with compliance activities such as the status of upcoming compliance tasks, their scheduled completion dates, and corrective actions required on any noncompliant items. To address this situation, PGS has established a Reporting Task Force that will report to a steering committee chaired by the Senior Vice President – Electric and Gas Delivery and made up of the Director of Florida Operations, Director of Gas Delivery Support, the Director of Operations Compliance and a director from TECO Energy's information technology department. The overall mission of this task force will be a total review of PGS' current compliance reporting/tracking program to determine gaps that exist, and develop corrective actions that are required to address the deficiencies identified in this report. The Commission audit staff's report contains information regarding the company's current efforts to identify and evaluate technical requirements and available options.

**Self Auditing Guidelines.** Self-auditing guidelines that have been in place in the company's East Region have been extended to all 16 company divisions in order to routinely validate actual performance against company compliance and business plans and expectations. The guidelines contemplate monthly reviews/audits of a number of operational areas, including compliance activities.

**Corporate Compliance Operating Committee.** Compliance issues will be overseen and reviewed on a periodic basis by the Corporate Compliance Operating Committee chaired by the Director of Corporate Ethics and Compliance and consisting of the company's Director of Corporate Audit, Director of Independent Risk Oversight, Director of Environmental, Corporate Safety Director, Director of Employee Relations, Director of Operations Compliance, Director of Information Security and Support, Director of Contracts and Facilities, Director of Regulatory Policy and Compliance, Senior Corporate Counsel, and Controller.

## **Conclusion**

As expressed initially in this response, PGS has been – to say the least – disappointed in the findings in the Commission audit staff report of this investigation. As also expressed initially, the exercise of this audit has – despite current procedures which should have been adequate to prevent the noncompliant situations identified in the report – caused the company to reevaluate its operational procedures that are designed to effectuate more effective compliance with Commission, U.S. Department of Transportation, and company safety and other operational requirements. Safety remains the company's number one goal and commitment. To the extent this report has resulted in the company's refocusing on, and reevaluating, its operational procedures (as well as reevaluating its managerial personnel), the ultimate result has been positive. As previously indicated, the updated Corrective Action Plans for Tampa and St. Petersburg that immediately follow this Company Response reflect that as of the date of this company response, the company has corrected 83% of the items identified in the staff's report and is working diligently to resolve the balance.

As a result of the audit process conducted by the Commission audit staff, the company has acknowledged a problem in a pocketed part of the PGS distribution system. Once the problem was brought to senior management's attention, the company gained insight and understanding of what was or wasn't being done, both from the audit process and its own internal reviews. PGS has been and remains committed to the remediation of identified issues. PGS has made changes – personnel, procedural, system and cultural – necessary to ensure that the pocket of noncompliance is more aligned with the company's current overall organization and operations, and will use what it has learned from these pocket issues to improve the company's overall Florida operations. Non-compliance is not acceptable for PGS or any TECO Energy company.

The changes in the company's organization and operational procedures summarized above are designed to prevent the future occurrence of noncompliant situations such as those referenced in this report.

Again, the company sincerely appreciates the opportunity afforded by the Commission audit staff to respond to this report.

**CORRECTIVE ACTION PLAN  
AS OF SEPTEMBER 2013  
FOR TAMPA DIVISION**

<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Management Comments</b>	<b>Status</b>
1	Cathodic Protection	Annual CP Tests not completed in proper timeframe	Corrected. Implement Tracking System to measure and ensure performance.	Resolved
2	Cathodic Protection	Bare steel tests not completed in proper time	Corrected. Implement Tracking System to measure and ensure performance.	Resolved
3	Cathodic Protection	Clark & 34 <sup>th</sup> St. rectifier documentation shows no protection for 10 months	Corrected. Implement Tracking System to measure and ensure performance.	Resolved
4	Cathodic Protection	IR drop not recorded at test location or permieter	Corrected. Implement Tracking System to measure and ensure performance.	Resolved
5	Cathodic Protection	Cased steel crossings have not been CP tested annually	Contractor secured. To complete tests by YE'13, pending permitting. Performing Bi-Annual leak surveys of casings.	Leak surveys completed. Completed 22 casings as of 7/29/13. Remaining 86 casings will be Bi-Annually Leak Surveyed until all casing test points can be established, or verified to be short free.
6	Sectionalizing/Isolation Valves	Maintenance on "fixed" list of valves w/isolation unknown	Begin evaluation w/completion by YE 2015	Ongoing
7	Facility Identification	Multimeters not identified w/required company data	Reinforce existing process per O&M Manual (Multi-Service Installations) during normal activities as well as scheduled surveys.	Resolved
8	Facility Identification	Gas main marker warning not adequately installed	Signage Addressed. Monitored through the continuous surveillance program and daily operations	Resolved
9	Atmospheric Survey	Premises not surveyed w/in proper time	Addressed. Surveying 1/3 annually	Resolved
10	Operational Qualification - Dudley	Performing task not qualified to perform	Corrected. Implement Tracking System to measure and ensure performance.	Resolved
11	Operational Qualification - Bryant	Performing task not qualified to perform	Corrected. Implement Tracking System to measure and ensure performance.	Resolved
12	Regulator Station	Documents need updating of capacity, spring range, other stations supplying system, etc	Addressed. Operations to complete during annual station maintenance	Ongoing
13	Regulator Station	Incorrect piping of vault relief w/potential over pressuring of downstream system	Corrected.	Resolved
14	Regulator Station	Proper emergency valves not installed at stations	Ongoing program to relocate emergency valves within defined distances (necessary valves do exist, but are inside defined distance requirements.)	As of 9/6/13, 5 valve installations are completed, 66 remaining valves will be installed (relocated) by 12/31/2014
15	Test Requirements	Cut/damaged service lines are not re-tested prior to re-installation	Leak orders are to be reviewed to verify test requirements have been met before being closed in LIARDS.	Resolved

**CORRECTIVE ACTION PLAN  
AS OF SEPTEMBER 2013  
FOR TAMPA DIVISION**

<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Management Comments</b>	<b>Status</b>
16	Odorization	Odorization levels exceed acceptable concentration w/in O&M Manual	Corrected	Resolved
17	Odorization	Odorant reads are performed w/o record of sniff test	Team members performing sniff tests will be olfactory tested.	Resolved
18	Transmission Main Recordkeeping	Recordkeeping of critical documentation disorganized and loosely kept	Addressed Documentation organized and kept in binders.	Resolved
19	Transmission Main Leak Survey	Bayside transmission main "houseline" piping from gate station to TECO plant has no record of being leak surveyed in 2010	Addressed. Implement Tracking System to measure and ensure performance.	Resolved
20	Transmission Main Leak Survey	Dade City transmission main has no record of being leak surveyed in 2010	Addressed Implement Tracking System to measure and ensure performance	Resolved
21	Excess Flow Valves	Valves are being installed w/in the system but not entered into CIS database	Addressed. Reinforce existing process of entering excess flow valve data into CIS	Resolved
22	Operational Qualification - Williams	Performing task not qualified to perform	Implement Tracking System to measure and ensure performance	Resolved
23	Annual D.O.T. Report	175 mi. variance between 2010 annual D.O.T. report and GIS database mi. of main in Tampa distribution system	Review and correct D.O.T. report submitted for 2013	Reviewing annual reports and Regional Engineering Department will send revised annual report for Tampa by 11/1/13
24	Cathodic Protection	Anodes are not consistently installed after repair on unprotected corrosion leaks	Reinforce existing process of anode installation during corrosion leak repair	Resolved
25	Cathodic Protection	The timeframe for CP corrective measures has been exceeded	Implement Tracking System to measure and ensure performance.	As of 7/25/13, 25 of 28 CP cards w/low reads from 2011 & 2012 are scheduled for remediation; anodes to be installed by 9/30/13
26	Cathodic Protection	10 year survey documentation shows CP was not completed w/in proper timeframe	Addressed Implement Tracking System to measure and ensure performance	Resolved
27	Cathodic Protection	44 mi. variance between reported/surveyed bare steel mains and GIS database	Analysis to be completed by September 2013	Analysis to be completed by 9/30/13
28	Combustible Gas Indicator Inspection	Monthly inspection, calibration, testing and recording of each CGI unit was not consistently performed	Addressed Documenting monthly results	Resolved
29	Leak Survey Mains	Mains are not properly identified in GIS database by leak code for accurate scheduling and management of required leak survey	Corrected.	Resolved

**WATERBURY ACTION PLAN  
AS OF SEPTEMBER 2013  
FOR TAMPA DIVISION**

Item	Compliance Topic	Summary of Issue	Management Comments	Status
30	Leak Survey/Services	Services are not properly identified in CIS database for accurate scheduling and management of required leak survey	Review and correct by YE 2014, contractor currently performing leak survey in the division	Contractor will leak survey all remaining residential service lines by 12/20/13
31	Regulator Station	Regulators and relief capacity have not been reviewed annually	Corrected. Implement Tracking System to measure and ensure performance.	Resolved
32	Gate Station	Gate station set relief pressure exceeds the MAOP of the downstream system	Corrected.	Resolved
33	Regulator Station	Stations exceeded the timeframe required for inspection and maintenance	Addressed. Implement Tracking System to measure and ensure performance.	Resolved
34	Regulator Station	Regulator station relief valves are set w/little variance for pressure build-up of the relief	Corrected	Resolved
35	Transmission Main	Bayside transmission valves have exceeded the timeframe for inspection	Addressed. Implement Tracking System to measure and ensure performance.	Resolved
36	Leak Reports/PGS #24s	A re-survey inspection was not performed on leaks w/in the proper timeframe	Reinforce re-survey inspections on PGS 24's that contain residual gas until no residual gas is present.	Resolved
37	Cathodic Protection	Inaccessible Bare steel locations were identified w/no leak survey performed	Corrected.	Resolved
38	Cathodic Protection	CP surveys identified locations exceeding the timeframe for corrective action, no remedial activity to correct conditions was identified	Addressed. Implement Tracking System to measure and ensure performance.	Resolved
39	Leak Survey/Services	Leak survey was not completed w/in proper timeframe	Contractor secured, surveys began 09/03/2013	Contractor will leak survey all remaining residential service lines by 12/20/13
40	Regulator Station	Could not complete lock-up test to verify set pressure or proper operation of the regulators	Re-evaluation of stations listings underway. Stations not scheduled for retirement to be completed by YE 2013	28 regulator stations are scheduled for replacement or retirement by 12/19/14 within CI/BS retirement plans, remaining stations will be completed by YE of 2013.
41	Regulator Station	Station emergency valve was under water and inoperable	Corrected.	Resolved
42	Operational Qualification - Smith	Performing task not qualified to perform	Corrected. Implement Tracking System to measure and ensure performance.	Resolved

**CORRECTIVE ACTION PLAN  
AS OF SEPTEMBER 2013  
FOR TAMPA DIVISION**

<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Management Comments</b>	<b>Status</b>
43	Atmospheric Corrosion	Found extensive atmospheric corrosion at 4011 East Columbus Drive inlet riser	Resolved	Resolved
44	Patrolling/Surveillance	Steel bridge attachment at SR 574 and Six Mile Creek has signs of pitting and corrosion and is in need of scraping and painting	Scheduled to be replaced in Fall 2013	Waiting on permit from FDEP, replacement of main scheduled for Fall 2013
45	Regulator Station	Several multi-feed regulator-stations were w/o the required telemetering or charts to monitor gas pressure	Review and complete by YE 2013	As of 7/25/13 telemetering equipment was ordered; the 13 installations will be completed in 2013
46	Test Requirements	Management did not consistently document plastic fusion/mechanical test when qualifying team members and contractors in 2012 through May 2013	Addressed To be reviewed annually during the PE qualification testing	Resolved
47	Test Requirements	Management did not consistently document a destructive test when qualifying individuals for plastic fusion in 2012	Addressed. Future tests are to follow revised testing procedure which was implemented in July of 2013.	Resolved
48	Odorization	Gate stations odorant injection levels exceeded defined limits of operation outlined w/in O&M Manual	Addressed To be verified monthly and audited semi-annually	Measurement & Gas Control Group will implement appropriate remote monitoring and control by 12/20/13

**CORRECTIVE ACTION PLAN  
AS OF SEPTEMBER 2013  
FOR THE ST. PETERSBURG DIVISION**

<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of issue</b>	<b>Management Comments</b>	<b>Status</b>
1	Cathodic Protection	In 2009, cards for active gas mains were found, apparently isolated from a rectifier system, w/no record of cathodic protection survey being completed since 1998	Implement "Tracking System" to measure and ensure performance. (readings taken).	Resolved
2	Cathodic Protection	Bare steel tests not completed in proper time	Implement "Tracking System" to measure and ensure performance (readings taken)	Resolved
3	Cathodic Protection	CP surveys identified locations exceeding the timeframe for corrective action; no remedial activity to correct conditions was identified	Remedial activities complete. Implement "Tracking System" to measure and ensure performance.	Resolved
4	Cathodic Protection	The 8750 Bay Pines Blvd. North rectifier has been down; found issue w/CP reads below required negative voltage of at least - 0.85 volts	Corrected & Resolved	Resolved
5	Cathodic Protection	Several test station locations were documented as gone; could not locate therefore, have not had CP reads verified or test station relocated	Records updated. Implement "Tracking System" to measure and ensure performance.	Resolved
6	Cathodic Protection	IR drop not recorded at test location or perimeter	Records updated Implement "Tracking System" to measure and ensure performance	Resolved
7	Patrolling/Surveillance	Documentation of Bridge, River, and Canal Crossings found the frequency of surveys were not w/in required timeframe	Implement "Tracking System" to measure and ensure performance.	Resolved
8	Facility Identification	Found insufficient warning signs displayed around perimeter of facility, insufficient company phone numbers for emergency contact	Signage corrected, will be checked during annual facility inspections	Resolved
9	Regulator Station	Proper emergency valves not installed at stations	Ongoing program to relocate emergency valves within defined distances. (necessary valves do exist, but are inside defined distance requirements.) St Pete valves are complete, 7 remain in Hernando.	As of 9/5/13, 7 of 7 emergency valves upstream of reg. station were installed; In Hernando 7 emergency valves remain to be installed by 12/20/13
10	Test Requirements	Cut/damaged service lines are not re-tested prior to re-installation	Leak orders are to be reviewed to verify test requirements have been met before being closed in LIARDS	Resolved
11	Operational Qualification - Elliott	Performing task #75 MOAP, not qualified to perform	Corrected. Implement "Tracking System" to measure and ensure performance.	Resolved

**CORRECTIVE ACTION PLAN  
AS OF SEPTEMBER 2013  
FOR THE ST. PETERSBURG DIVISION**

Item	Compliance Topic	Summary of Issue	Management Comments	Status
12	Regulator Station	Stations exceeded the timeframe required for inspection	Corrected Implement "Tracking System" to measure and ensure performance.	Resolved
13	Regulator Station	Required documentation for pressure regulating installation data sheets for several stations was missing	Corrected.	Resolved
14	Odorization	Documentation for odorant sampling reads have not been taken on CNG system located at I-75 and SR50	Corrected	Resolved
15	Cathodic Protection	IR drop not recorded at test location or perimeter	Implement "Tracking System" to measure and ensure performance.	Resolved
16	Cathodic Protection	Division's annual CP test points found inadequate test locations for proper monitoring of the two protected systems	Corrected	Resolved
17	Regulator Station	Regulators and relief capacity have not been reviewed annually for 2010	Corrected. Implement "Tracking System" to measure and ensure performance.	Resolved
18	Odorization	Odorization reads exceed the required timeframe for sampling	Implement "Tracking System" to measure and ensure performance	Resolved
19	Odorization	Odorization levels exceed acceptable concentration w/in O&M Manual	Corrected.	Resolved
20	Construction Notification	Documentation for newly installed gas main project found FPSC construction notification form required was not available	Resolved Reviewed by project manager as initiated	Resolved
21	Regulator Station	Documents need updating of capacity, spring range, other stations supplying system, etc.	Corrected.	Resolved
22	Cathodic Protection	found issue w/CP reads below required negative voltage of at least -0.85 volts	Corrected Implement "Tracking System" to measure and ensure performance	Resolved
23	Cathodic Protection	Documentation for several CP test points found "AC current on the line" exceeding industry of 15 volts	Corrected.	Resolved
24	Facility Identification	Multimeters not identified w/required company data	Reinforce existing process per O&M Manual (Multi-Service Installations) during normal activities as well as scheduled surveys	Resolved
25	Regulator Station	Station set relief pressure exceeds the MOAP of the downstream system	Corrected.	Resolved
26	Regulator Station	Stations exceeded the timeframe required for inspection	Implement "Tracking System" to measure and ensure performance.	Resolved

**PERMITTING ACTION PLAN  
AS OF SEPTEMBER 2013  
FOR THE ST. PETERSBURG DIVISION**

<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Management Comments</b>	<b>Status</b>
27	Odorization	Odorization reads exceed the required timeframe for sampling	Implement "Tracking System" to measure and ensure performance.	Resolved
28	Odorization	Odorization levels exceed acceptable concentration w/in O&M Manual	Corrected Implement "Tracking System" to measure and ensure performance	Resolved
29	Combustible Gas Indicator Inspection	Monthly inspection, calibration, testing and recording of each CGI unit was not consistently performed	Documenting monthly	Resolved
30	Operational Qualification - Sands	Contractor performing task not qualified to perform	Implement "Tracking System" to measure and ensure performance	Resolved
31	Cathodic Protection	Cased steel crossings have not been CP tested annually	Contractor secured. To complete tests by YE'13 pending permitting. Doing bi-annual leak survey until tests are complete. Continuing to evaluate the system and the records for any potential of unknown casings.	Leak surveys completed. Completed 12 casings as of 9-5-13. Bi-Annually leak survey efforts will continue until all casings test points can be established, or verified to be short free.
32	Leak Survey Mains	Mains are not properly identified in GIS database by leak code for accurate scheduling and management of required leak survey	Review and update by 12/2013	Resolved
33	Sectionalizing/Isolation Valves	Maintenance on "fixed" list of valves w/isolation unknown	Will begin evaluation; anticipate completion by YE 2015	An engineering validation of ST. Petersburg annually maintained valves will be completed by 12/20/13
34	Regulator Station	Could not complete lock-up test to verify set pressure or proper operation of the regulators	Corrected.	Resolved
35	Regulator Station	Field reviews show that two stations failed to lock-up when tested to determine set pressure and proper operation of the regulators	Resolved	Resolved
36	Leak Reports/PGS #24s	A re-survey inspection was not performed on leaks w/in the proper timeframe	Corrected.	Resolved
37	Regulator Station	A shutoff valve located prior to the relief was found and left in an unlocked open position	Corrected.	Resolved
38	Regulator Station	Regulator station documentation found the relief capacity is inadequate to protect the downstream system	Corrected.	Resolved
39	Leak Reports/PGS #24s	A re-survey inspection was not performed on leaks w/in the proper timeframe	Corrected. Implement "Tracking System" to measure and ensure performance.	Resolved

**CORRECTIVE ACTION PLAN  
AS OF SEPTEMBER 2013  
FOR THE ST. PETERSBURG DIVISION**

Item	Compliance Topic	Summary of Issue	Management Comments	Status
40	Regulator Station	Could not complete lock-up test to verify set pressure or proper operation of the regulators	Ongoing, will complete by YE 2013	As of 8/28/13, the St Petersburg Division performed lock-up tests on 40 of 53 reg stations, remaining tests to be completed by 12/20/13
41	Leak Survey/Services	Information for 2011 found completed leak surveys for service were not produced or available during the compliance evaluation	Corrected. Implement "Tracking System" to measure and ensure performance.	Resolved
42	Gate Station	A designated PGS emergency valve was not found or tagged for easy reference	Corrected	Resolved
43	Cathodic Protection	Review of the "Bare Steel Re-evaluation Survey" did not reference a one year date for re-evaluation as required	Records updated, and addressed to ensure compliance performance.	Records corrected, remaining evaluations scheduled to be completed by 12/20/2013
44	Atmospheric Survey	Premises not surveyed w/in the required timeframe through 12/2011	Implement "Tracking System" to measure and ensure performance	Resolved
45	Leak Survey/Services	Leak survey was not completed w/in proper timeframe through 12/2011	Scheduling Addressed. Implement "Tracking System" to measure and ensure performance.	Resolved
46	Facility Identification	Multimeters not identified w/required company data	Reinforce existing process per O&M Manual (Multi-Service Installations) during normal activities as well as scheduled surveys	Resolved
47	Regulator Station	Station #L-71 at 16 <sup>th</sup> Street North and 7 <sup>th</sup> Avenue has inadequate protection from over pressuring in the event of station failure	Corrected.	Resolved
48	Regulator Station	No protection around the 3" relief piping , approximately 7' tall, and located 1' from the roadway	Corrected	Resolved
49	Test Requirements	Management did not consistently document plastic fusion/mechanical test when qualifying team members and contractors in 2012 through April 2013	To be reviewed annually during the PE qualification testing	Resolved
50	Annual D O T. Report	143 mi. variance between 2010 annual D O T. report and GIS database mi. of main in St Petersburg distribution system	Being reviewed, to be completed in 2013	Reviewing Annual Reports and Regional Engineering Department will send a revised Annual Report for St Petersburg by 11/1/13

**DEFECTIVE ACTION PLAN  
AS OF SEPTEMBER 2013  
FOR THE ST. PETERSBURG DIVISION**

<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Management Comments</b>	<b>Status</b>
51	Odorization	Odorant is not being injected, or monthly odorant sampling reads have [not] been taken on seven-miles of pipeline serving Florida Rock out of the Brooksville North Gate Station; station with less than 25 customers does not require odorization	Corrected.	Resolved
52	Regulator Station	A relief valve did not have an approved locking device installed to deter unauthorized operation	Corrected.	Resolved

## 6.0 APPENDICES

### APPENDIX 1 COMMISSION RULES AND RELATED STATUTES

Chapter 25-12, F.A.C. contains the Florida Public Service Commission rules for Safety of Gas Transportation by Pipeline. Commission rules adopt the Minimum Federal Safety Standards and reporting requirements for pipeline facilities and transportation of gas prescribed by the Pipeline and Hazardous Materials Safety Administration in Chapter 49 of the Code of Federal Regulations (CFR), parts 191 and 192 (2011). These chapters of the CFR are represented and adopted within the Commission rules.

The specific parts of chapter 25-12 reviewed by staff during this audit include:

**Rule 25-12.022 - Requirements for Distribution System Valves** requires the installation of isolation valves to be placed upstream of each regulator station, sectionalizing valves to reduce the timing necessary for emergency shutdown, and blow down valves to aid the evacuation of gas from segments of mains between isolation valves in emergency conditions for isolation of the distribution system.

Valve installation records are required to be marked for easy identification, with a durable tag or equivalent means. All valves necessary for safe system operation must be inspected and maintained at intervals not exceeding 15 months, but at least each calendar year.

**Rule 25-12.029 – Limiting Use of Pipeline Casings** prohibits the installation of casings on metal pipeline unless necessary for the installation process of the pipeline or justifiably required by an appropriate governmental authority.

**Rule 25-12.040 - Leak Surveys, Procedures and Classifications** requires the utility to perform gas leak surveys at least once each calendar year, not to exceed 15 months, in certain locations. Surveys of bare metallic, galvanized steel, and coated tubing pipelines must be conducted at an interval not to exceed three years. Remaining system pipeline must be surveyed every five years, or more frequently if experience requires. The rule requires a leak classification system to be used on all leak records and reports based upon a grade 1, grade 2, or grade 3 type leak. The adequacy of all leak repairs is required to be checked immediately after being completed, and the date and status of rechecks are to be recorded on the leak repair records.

**Rule 25-12.050 - Facility Identification** requires that gas service line valves at multi-service installations such as apartment buildings be plainly marked by a metal tag or other permanent means designating the building or part of the building being served. However, the meter may be marked in lieu of the service line. The marking of each customer meter, gas regulating station, or above ground gas transport facility must be permanently marked to identify the operator's name and phone number. Marking will be by metal signs, line markers, plastic decals, or other appropriate means.

**Rule 25-12.052 - Corrosion Control Criteria for Cathodic Protection of Buried or Submerged Metallic Pipeline** provides the criteria for proper cathodic protection of steel, cast iron, and ductile iron pipeline. Cathodic protection is used to prevent and deter the potential corrosion of metal pipeline facilities. A negative cathodic voltage of at least 0.85 volt, must be made with the protective current applied in accordance with Appendix D to Part 192, Title 49,

Code of Federal Regulations (2011). This is the only criteria accepted for determination of the degree of cathodic protection for externally coated buried or coated submerged pipelines installed after June 1, 1975. The criteria for bare and essentially bare ineffectively coated metallic gas pipelines installed prior to July 31, 1971 require a net protective current from the electrolyte into the structure surface at predetermined current discharge points to protect the pipeline from corrosion. Each pipeline under cathodic protection is required to be tested at least once each calendar year, within an interval not to exceed 15 months to determine whether protection is in compliance with the Rule. If gas leakage from active corrosion is discovered on a pipeline, the utility is required to take subsequent corrective actions including cathodic protection to repair the leakage conditions. Repairs are required to be completed, or substantial progress toward correcting the deficiencies must be made within three months.

**Rule 25-12.053 - Cathodic Protection – Electrical Survey** requires each utility operator to have a comprehensive written procedure to evaluate electrical survey data on cathodically unprotected pipelines and identify areas of active corrosion where protection is needed. The Rule requires a combination of pipe/soil potential and soil resistivity tests to be completed for initial surveys. When active corrosion is identified and the utility has no knowledge of electrical requirements for the system, tests to determine the degree of protective current required for cathodic protection are required. The utility may not be able to complete an electrical survey of an underground pipeline system in some conditions. For instance, it may not be practical to complete a survey when large obstructions lie in a position directly above the pipeline.

**Rule 25-12.055 - Odorization of Gas** requires each utility receiving gas directly through a transmission supplier, and distributing gas in a system serving more than 25 customers to odorize all gas transported. The purpose of odorization is to ensure gas leakages can be readily detected and repaired. The Rule requires utilities to sample downstream of all injection points to assure the presence of odorant in the required concentration. At least twelve times per calendar year, at intervals not greater than 45 days, each utility is required to test gas odorization concentrations using equipment manufactured for odorant testing.

**Rule 25-12.060 - General Records** provides instruction for maintaining system records necessary for Commission review. The Rule requires the utility to keep records to show compliance with Commission rules and adopted codes. All tabulations, standards, drawings, records of incidents, procedures or studies related to compliance with Commission rules are to be recorded and maintained for review by appropriate Commission personnel. All records are required to be organized, arranged, or prepared so that compliance can be readily determined. All records are to be retained within the state of Florida unless the Commission exempts the utility from the provision. The Rule also provides retention timeframes for different types of records.

**Rule 25-12.062 - Leak Reports** are required to provide records of gas leaks identified on the utility's system. The minimum information to be kept for leak reports includes, the address of the suspected leak, date and time reported, description of the leak, date and time the utility dispatched repair personnel, date and time of arrival, date and time the condition was made safe, the location of the leak found, and the cause of the leak.

**Rule 25-12.085 - Written Annual Reports Required** are submitted to the Department of Transportation (D.O.T.) and Florida Public Service Commission by each utility to update records of their gas distribution system. These reports provide annual pipeline summary data by operators of gas pipeline facilities located within the United States. The reports are provided for

the preceding calendar year, to be received by the Commission no later than March 15<sup>th</sup> of each year.

**APPENDIX 2 COMPLIANCE INSPECTION REVIEW REPEAT FINDINGS**

COMPLIANCE INSPECTION REVIEWS REPEAT FINDINGS FOR TAMPA DIVISION 2009-2013			
Compliance Topic	Summary of Issue	Date of Finding	Management Response
Cathodic Protection	Annual CP Tests not completed in proper timeframe	5/7/10 5/20/11 2/8/13	(2011) Were not read pending repairs, will adjust scheduling as required (2011) Scheduled to ensure action is or will take place (2013) Will be added to monthly audit; to begin monthly audit program in July to ensure compliance
Cathodic Protection	IR drop not recorded at test location or penmeter	5/7/10 5/20/11 2/8/13	(2011) Reads were taken, but not documented (2011) Will document during maintenance starting in 2012 (2013) Points will be identified w/in 45 days, reads taken during 2013 annual maintenance, will begin monthly audit program in July to ensure compliance
Cathodic Protection	Cased steel crossings have not been CP tested annually	5/7/10 5/20/11 4/16/12 2/8/13	(2011) Program to begin by 8/2011 (2011) Review found no progress made (2012) Review found no progress made (2013) Goal of installing 6 per month, will be monitored annually; hiring contractor to complete by end of 2013
Facility Identification	Multimeters not identified w/required company data	5/7/10 5/20/11 2/8/13	(2011) Will establish a plan and address by June 2011 (2013) Will be monitored during atmospheric survey
Atmospheric Survey	Premises not surveyed w/in proper time	5/7/10 8/10/12	(2012) Will initiate a plan to complete (2012) Review found 6k remaining
Regulator Station	Documents need updating of capacity, spring range, other stations supplying system, etc	9/29/10 5/31/13	(2010) Operations to complete by end of 2011 (2013) Operations to complete during annual station maintenance
Regulator Station	Proper emergency valves not installed at stations	9/29/10 8/10/12 5/31/13	(2010) 6 to be done by end of 2011, will take 3 to 5 years for completion (2012). Have ID 72 non-compliant, scheduling over-time to correct (2012) TM indicated working as time and resources allow (2013) Will complete in no more than 5 years (2013) 66 remaining valves will be installed by 12/31/14
Test Requirements	Cut/damaged service lines are not re-tested prior to re-installation	9/29/10 4/16/12	(2010) Waiting on procedure development (4/12) TM retrained on process (2012) Review of issues identified found a resurvey was completed
Odorization	Odorization levels exceed acceptable concentration w/in O&M Manual	9/29/10 9/23/11	(2010) To be completed by 1/31/11 (2011) Equipment repaired, will continue to monitor
Odorization	Odorant reads are performed w/o record of sniff test	9/29/10 8/10/12 5/31/13	(2010) Had TM tested (2012) Goal of all TM tested by 10/12 (2012) No sniff test performed (2013) Resolved
Annual D.O.T. Report	175 mi. variance between 2010 annual D.O.T. report and GIS database mi. of main in Tampa distribution system	5/20/11 5/31/13	(2013) Review and correct D.O.T. report submitted for 2013
Cathodic Protection	Anodes are not consistently installed after repair on unprotected corrosion leaks	5/20/11 2/8/13	(2011) Found indication that 2010/2011 leaks were reviewed and scheduled if needed (2011) Reviewed, completed by 11/2011 (2013) Repairs w/in 2013 maintenance program implemented w/in 60 days
Combustible Gas Indicator Inspection	Monthly inspection, calibration, testing and recording of each CGI unit was not consistently performed	5/20/11 8/10/12 5/31/13	(2011) Will call vendor of software to resolve (2011) Copying and pasting information from computer (2012) Continual issue, advised how other divisions

**COMPLIANCE INSPECTION REVIEWS  
REPEAT FINDINGS FOR  
TAMPA DIVISION 2009-2013**

<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Date of Finding</b>	<b>Management Response</b>
			are completing this task (2012) Printed out and added to log, will resolve by 11/2012 (2013) Now documenting monthly and auditing to ensure compliance
Regulator Station	Regulators and relief capacity have not been reviewed annually	9/23/11 5/31/13	(2011) Will review and complete by 10/14/11 (2011) Issues identified were completed (2013) To begin semi-annual audit program starting in July
Gate Station	Gate station set relief pressure exceeds the MAOP of the downstream system	9/23/11 8/10/12	(2011) Will be reset to MOAP by 11/2011 (2012) Will contact FGT to lower pressure (2012) Two of three were completed, Tampa South remaining (2012) Review found no progress made
Leak Reports/PGS #24s	A re-survey inspection was not performed on leaks w/in the proper timeframe	4/16/12 5/31/13	(2012) All 2011 leaks have been resurveyed (2012) Review found there was no resurvey completed or documented (2013) Daily audit program started in June 2013 to ensure compliance
Leak Survey/Services	Leak survey was not completed w/in proper timeframe	4/16/12 5/31/13	(2012) Reviewed w/TM for correction (2012) Report found 13k out of compliance (2013) Begin Monthly Audit program in July to ensure compliance
Regulator Station	Could not complete lock-up test to verify set pressure or proper operation of the regulators	8/10/12 5/31/13	(2012) Will create listing by 12/31/12 (2012) Several stations completed (2013) Stations not scheduled for retirement to be completed by YE 2013

**COMPLIANCE INSPECTION REVIEWS  
REPEAT FINDINGS FOR  
ST. PETERSBURG DIVISION  
2009-2013**

<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Date of Finding</b>	<b>Management Response</b>
Cathodic Protection	The 8750 Bay Pines Blvd. North rectifier has been down; found issue w/CP reads below required negative voltage of at least -0.85 volts	12/17/09 8/5/11	(2009) Acceptable reads taken on 2/15/10 (2009) Review found same previous issue. Permitting to fix identified short. CP readings are improving as shorts are repaired. (2011) Moving rectifier, complete by 11/2011 (2011) Relocation complete, waiting on ground bed installation by end of 2011
Cathodic Protection	IR drop not recorded at test location or perimeter	12/17/09 8/5/11	(2009) IR reads are being taken (2009) Review found IR reads taken (2011) All rectifier systems have 4 end points
Regulator Station	Proper emergency valves not installed at stations	6/25/10 4/24/12	(2010) Assessing to determine quantity (2010) 10 found needing installation. Planned for 2011 (2012) Will complete this year (2012) Review found remaining 5 completed as required
Cathodic Protection	IR drop not recorded at test location or perimeter	9/9/10 8/5/11	(2010) Will add additional locations (2011) Added four end points to each rectifier
Regulator Station	Documents need updating of capacity, spring range, other stations supplying system, etc.	4/14/11 4/12/13	(2011) Reviewing all documents and updating information (2011) Review found new updated forms, w/verified equipment information (2013) Changes made, TM to review closer
Cathodic Protection	Cased steel crossings have not been CP tested annually	8/5/11 7/20/12	(2011) Identifying casings and creating a list, ongoing (2012) Have identified casings and will complete by YE 2012 (2012) List created to begin CP verification in 2012 (2012) On-going work to correct and document readings, not completed
Leak Survey Mains	Mains are not properly identified in GIS database by leak code for accurate	8/5/11 4/24/12	(2011) Working to update mapping (2011) None performed (2012) Working to update mapping
Regulator Station	Could not complete lock-up test to verify set pressure or proper operation of the regulators	4/9/12 4/12/13	(2012) Checked all stations, found 11 requiring test fittings (2012) Review found 3 of 11 complete (2013) Ongoing, will complete by YE 2013
Leak Reports/PGS #24s	A re-survey inspection was not performed on leaks w/in the proper timeframe	4/24/12 4/12/13	(2012) Reviewing past leaks to resurvey (2012) Sample review found a resurvey completed w/acceptable reads (2013) Management will monitor for completeness (2013) Biweekly audit program started in July 2013 to ensure compliance
Regulator Station	Could not complete lock-up test to verify set pressure or proper operation of the regulators	4/24/12 4/12/13	(2012) Reviewing during annual maintenance, will schedule dollars and repair (2012) List created, no progress since report (2013) Ongoing, will complete by YE 2013

**APPENDIX 3 INITIAL CORRECTIVE ACTION PLANS FOR TAMPA AND ST. PETERSBURG DIVISIONS**

<b>CORRECTIVE ACTION PLAN AS OF JULY 2013 FOR TAMPA DIVISION</b>				
<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Management Actions</b>	<b>Status</b>
1	Cathodic Protection	Annual CP Tests not completed in proper timeframe	Begin monthly audits to ensure compliance	7/25/13 600 cards for 2013 have been read; remaining 300 to be read by 12/20/13; 9 of 14 cards below .850 scheduled for remedial action w/in 90 days
2	Cathodic Protection	Bare steel tests not completed in proper time	Begin monthly audits to ensure compliance	7/25/13 2.42 of 5.38 electrical survey mi. for 2013 completed, remaining 2.96 mi to be surveyed, and engineering evaluation to determine whether more surveys are needed, to be complete by 9/30/13
3	Cathodic Protection	Clark & 34 <sup>th</sup> St. rectifier documentation shows no protection for 10 months	Resolved	Resolved
4	Cathodic Protection	IR drop not recorded at test location or perimeter	Begin monthly audits to ensure compliance	7/25/13 IR drop reads (6 rectifier systems at 37 pts taken, remaining reads to be complete by YE 2013 (3 systems at 9 points)
5	Cathodic Protection	Cased steel crossings have not been CP tested annually	Will hire contractor to complete tests by YE '13 pending permitting	7/29/13 108 steel mains in casings identified; 22 w/wires installed on casing; remaining 86 to be complete by 12/20/13
6	Sectionalizing/Isolation Valves	Maintenance on "fixed" list of valves w/isolation unknown	Begin evaluation w/completion by YE 2015	Validation of 158 annually maintained valves in Tampa to be completed by YE 2013
7	Facility Identification	Multimeters not identified w/required company data	Monitored during Atmospheric Surveys	Ongoing review; meters identified w/o markings have been corrected
8	Facility Identification	Gas main marker warning not adequately installed	Monitored by locators and construction watch	Resolved
9	Atmospheric Survey	Premises not surveyed w/in proper time	Surveying 1/3 annually	Resolved
10	Operational Qualification - Dudley	Performing task not qualified to perform	To be audited semi-annually, all employees are currently up to date	As of 7/25/13, a review of training records shows all Tampa employees have been qualified in the tasks they are currently performing
11	Operational Qualification - Bryant	Performing task not qualified to perform	To be audited semi-annually; all employees are currently up to date	As of 7/25/13, a review of training records shows all Tampa employees have been qualified in the tasks they are currently performing
12	Regulator Station	Documents need updating of capacity, spring range, other stations supplying system, etc	Operations to complete during annual station maintenance	By December 20, 2013, will have reviewed. Field verified, and updated regulator station documents pertaining to capacity, spring range and secondary supply
13	Regulator Station	Incorrect piping of vault relief w/potential over pressuring of downstream system	Resolved	Resolved
14	Regulator Station	Proper emergency valves not installed at stations	Complete in no more than 5 years	As of 7/25/13, 5 valve installations are completed, 66 remaining valves will be installed by 12/31/2014
15	Test Requirements	Cut/damaged service lines are not re-tested prior to re-installation	Daily audit program started in June 2013 to ensure compliance	Resolved

**CORRECTIVE ACTION PLAN  
AS OF JULY 2013  
FOR TAMPA DIVISION**

<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Management Actions</b>	<b>Status</b>
16	Odorization	Odorization levels exceed acceptable concentration w/in O&M Manual	Resolved Audited semi-annually	Resolved
17	Odorization	Odorant reads are performed w/o record of sniff test	Will be audited annually	Resolved
18	Transmission Main Recordkeeping	Recordkeeping of critical documentation disorganized and loosely kept	Resolved Manager Audit semi-annually	Resolved
19	Transmission Main Leak Survey	Bayside transmission main "houeline" piping from gate station to TECO plant has no record of being leak surveyed in 2010	Resolved Manager Audit semi-annually	Resolved
20	Transmission Main Leak Survey	Dade City transmission main has no record of being leak surveyed in 2010	Being leak-surveyed annually, Manager audit semi-annually	Resolved
21	Excess Flow Valves	Valves are being installed w/in the system but not entered into CIS database	Being entered into CIS; Audit during approval process	Resolved
22	Operational Qualification - Williams	Performing task not qualified to perform	To be audited semi-annually, all employees are currently up to date	Resolved
23	Annual D.O.T. Report	175 mi. variance between 2010 annual D.O.T. report and GIS database mi. of main in Tampa distribution system	Review and correct D.O.T. report submitted for 2013	Reviewing annual reports and West Regional Engineering Department will send revised annual report for Tampa by 11/1/13
24	Cathodic Protection	Anodes are not consistently installed after repair on unprotected corrosion leaks	Daily audit program started in June 2013 to ensure compliance	As of 7/29/13 Resolved
25	Cathodic Protection	The timeframe for CP corrective measures has been exceeded	Begin monthly audits in July to ensure compliance	As of 7/25/13, 25 of 28 CP cards w/low reads from 2011 & 2012 are scheduled for remediation; anodes to be installed by 9/30/13
26	Cathodic Protection	10 year survey documentation shows CP was not completed w/in proper timeframe	Begin monthly audits in July to ensure compliance	Resolved
27	Cathodic Protection	44 mi. variance between reported/surveyed bare steel mains and GIS database	Analysis to be completed by August 2013	Analysis to be completed by 9/30/13
28	Combustible Gas Indicator Inspection	Monthly inspection, calibration, testing and recording of each CGI unit was not consistently performed	Now documenting monthly w/compliance audit	Resolved
29	Leak Survey Mains	Mains are not properly identified in GIS database by leak code for accurate scheduling and management of required leak survey	Resolved	Resolved
30	Leak Survey/Services	Services are not properly identified in CIS database for accurate scheduling and management of required leak survey	Review and correct by YE 2014	Contractor will leak survey all remaining residential service lines by 12/20/13
31	Regulator Station	Regulators and relief capacity have not been reviewed annually	Begin semi-annual audit program beginning in July	By December 20, 2013, will have reviewed, field verified, and updated regulator and relief capacities

**CORRECTIVE ACTION PLAN  
AS OF JULY 2013  
FOR TAMPA DIVISION**

Item	Compliance Topic	Summary of Issue	Management Actions	Status
32	Gate Station	Gate station set relief pressure exceeds the MAOP of the downstream system	Resolved	Resolved
33	Regulator Station	Stations exceeded the timeframe required for inspection and maintenance	Resolved Audit monthly	Resolved
34	Regulator Station	Regulator station relief valves are set w/little variance for pressure build-up of the relief	Resolved	Resolved
35	Transmission Main	Bayside transmission valves have exceeded the timeframe for inspection	Resolved Manger audit semi-annually	Resolved
36	Leak Reports/PGS #24s	A re-survey inspection was not performed on leaks w/in the proper timeframe	Daily audit program started in June 2013 to ensure compliance	Resolved Resurvey of 4 leaks outstanding for 2013 completed; data entry error resulting in Grade 1s not showing resurveys has been addressed
37	Cathodic Protection	Inaccessible Bare steel locations were identified w/no leak survey performed	Reviewing	Leak surveys on inaccessible mains to be completed by 8/9/13
38	Cathodic Protection	CP surveys identified locations exceeding the timeframe for corrective action; no remedial activity to correct conditions was identified	Verify monthly and audit semi-annually	Resolved
39	Leak Survey/Services	Leak survey was not completed w/in proper timeframe	Begin monthly audits in July to ensure compliance	Contractor will leak survey all remaining residential service lines by 12/20/13
40	Regulator Station	Could not complete lock-up test to verify set pressure or proper operation of the regulators	Stations not scheduled for retirement, to be completed by YE 2013	28 regulator stations are scheduled for replacement or retirement by 12/19/14
41	Regulator Station	Station emergency valve was under water and inoperable	Resolved	Resolved
42	Operational Qualification - Smith	Performing task not qualified to perform	To be audited semi-annually, all employees are currently up to date	As of 7/25/13, a review of training records shows all Tampa employees have been qualified in the tasks they are currently performing
43	Atmospheric Corrosion	Found extensive atmospheric corrosion at 4011 East Columbus Drive Inlet riser	Resolved	Resolved
44	Patrolling/Surveillance	Steel bridge attachment at SR 574 and Six Mile Creek has signs of pitting and corrosion and is in need of scraping and painting	Scheduled to be replaced in August 2013	Waiting on permit from FDEP, replacement of main scheduled for Fall 2013
45	Regulator Station	Several multi-feed regulator-stations were w/o the required telemetering or charts to monitor gas pressure	Review and complete by YE 2013	As of 7/25/13 telemetering equipment was ordered; the 13 installations will be completed in 2013
46	Test Requirements	Management did not consistently document plastic fusion/mechanical test when qualifying team members and contractors in 2012 through May 2013	To be audited annually	All documentation for team members and contractors performing plastic fusion/mechanical fitting installations has been updated, going forward company testing and documentation will be performed by a 3 <sup>rd</sup> party and audited annually; contractor

**CORRECTIVE ACTION PLAN  
AS OF JULY 2013  
FOR TAMPA DIVISION**

<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Management Actions</b>	<b>Status</b>
				documentation will be audited by Division Management to ensure compliance
47	Test Requirements	Management did not consistently document a destructive test when qualifying individuals for plastic fusion in 2012	To be audited annually	Going forward, testing and documentation will be performed by a 3 <sup>rd</sup> party and audited annually
48	Odorization	Gate stations odorant injection levels exceeded defined limits of operation outlined w/in O&M Manual	To be verified monthly and audited semi-annually	Operations will team with corporate engineering to evaluate and implement appropriate remote monitoring by 12/20/13

**CORRECTIVE ACTION PLAN  
AS OF JULY 2013  
FOR ST. PETERSBURG DIVISION**

Item	Compliance Topic	Summary of Issue	Management Comments	Status
1	Cathodic Protection	In 2009, cards for active gas mains were found, apparently isolated from a rectifier system, w/no record of cathodic protection survey being completed since 1998	Begin monthly audits in July to ensure compliance	7/24/13 all rectifiers have either 4 or 4 test station sat the end of their system, which are reading 0.850 volts
2	Cathodic Protection	Bare steel tests not completed in proper time	Begin monthly audits in July to ensure compliance	2013 YTD Electrical Surveys, total # of miles to survey in 2013 is 5.68 mi, As of 7/24/13, 3.14 mi completed, remaining 2.54 mi to be surveyed by 11/30/13, Engineering evaluation to be completed by 9/30/13 to whether additional electrical surveys are required
3	Cathodic Protection	CP surveys identified locations exceeding the timeframe for corrective action; no remedial activity to correct conditions was identified	Begin monthly audits in July to ensure compliance	As of 7/25/13 277 CP cards have been read and all other points will be read by 12/20/13; all reads currently above 0.850 volts
4	Cathodic Protection	The 8750 Bay Pines Blvd. North rectifier has been down; found issue w/CP reads below required negative voltage of at least -0.85 volts	Relocated end of 2011 and is operational	Resolved
5	Cathodic Protection	Several test station locations were documented as gone; could not locate therefore, have not had CP reads verified or test station relocated	Begin monthly audits in July to ensure compliance	All test station locations have been reconciled
6	Cathodic Protection	IR drop not recorded at test location or perimeter	Resolved Audited annually	Resolved
7	Patrolling/Surveillance	Documentation of Bridge, River, and Canal Crossings found the frequency of surveys were not w/in required timeframe	Resolved Audited quarterly	Resolved
8	Facility Identification	Found insufficient warning signs displayed around perimeter of facility, insufficient company phone numbers for emergency contact	Resolved Audited annually during atmosphere survey	Resolved
9	Regulator Station	Proper emergency valves not installed at stations	Resolved Review Monthly	As of 7/24/13, 7 of 7 emergency valves upstream of reg. station were installed; In Hernando 12 emergency valves remain to be installed by 12/20/13
10	Test Requirements	Cut/damaged service lines are not re-tested prior to re-installation	Weekly audit program starting in July 2013 to ensure compliance	Resolved
11	Operational Qualification - Elliott	Performing task #75 MOAP, not qualified to perform	All employees will be audited semi-annually; this employee is currently up to date; all employees qualified by 7/19/13	As of 7/24/13, employee has completed the qualification tasks; a review of the training records shows all St. Petersburg employees are qualified in the tasks they are currently performing
12	Regulator Station	Stations exceeded the timeframe required for inspection	Resolved Audited Monthly	As of 7/24/13, 18 of 19 regulator stations in Hernando have been inspected, one remains to be inspected by 7/31/13
13	Regulator Station	Required documentation for pressure regulating installation	Resolved	As of 7/26/13, nineteen installation data sheets for regulator stations in Hernando

**CORRECTIVE ACTION PLAN  
AS OF JULY 2013  
FOR ST. PETERSBURG DIVISION**

Item	Compliance Topic	Summary of Issue	Management Comments	Status
		data sheets for several stations was missing	Audited Monthly	have been reviewed; current through July 2013
14	Odorization	Documentation for odorant sampling reads have not been taken on CNG system located at I-75 and SR50	Resolved by Monthly Review	Resolved
15	Cathodic Protection	IR drop not recorded at test location or perimeter	Resolved Audited Monthly	Resolved
16	Cathodic Protection	Division's annual CP test points found inadequate test locations for proper monitoring of the two protected systems	Resolved Audited Monthly	Resolved
17	Regulator Station	Regulators and relief capacity have not been reviewed annually for 2010	Resolved Audited Monthly	As of 7/26/13, nineteen installation data sheets for regulator stations in Hernando have been reviewed; current through July 2013
18	Odorization	Odorization reads exceed the required timeframe for sampling	Resolved Audited Monthly	Resolved
19	Odorization	Odorization levels exceed acceptable concentration w/in O&M Manual	Resolved Audited Monthly	Resolved
20	Construction Notification	Documentation for newly installed gas main project found FPSC construction notification form required was not available	Resolved Reviewed by Project Manager as initiated	Resolved
21	Regulator Station	Documents need updating of capacity, spring range, other stations supplying system, etc.	Audited Monthly	As of 7/26/13, nineteen installation data sheets for regulator stations in Hernando have been reviewed; current through July 2013
22	Cathodic Protection	found issue w/CP reads below required negative voltage of at least -0.85 volts	Resolved Audited Monthly	As of 7/24/13, Hernando had read 30 CP cards in compliance YTD
23	Cathodic Protection	Documentation for several CP test points found "AC current on the line" exceeding industry of 15 volts	Resolved Audited Monthly	Resolved
24	Facility Identification	Multimeters not identified w/required company data	Audited annually during atmospheric survey	Review ongoing, all meters w/o markings have been corrected
25	Regulator Station	Station set relief pressure exceeds the MOAP of the downstream system	Resolved Audited Monthly	Resolved as of 7/29/13
26	Regulator Station	Stations exceeded the timeframe required for inspection	Resolved Audited Monthly	Resolved
27	Odorization	Odorization reads exceed the required timeframe for sampling	Resolved Audited Monthly	Resolved
28	Odorization	Odorization levels exceed acceptable concentration w/in O&M Manual	Resolved Audited Monthly	Resolved
29	Combustible Gas Indicator Inspection	Monthly inspection, calibration, testing and recording of each CGI unit was not consistently performed	Resolved Audited Monthly	Resolved
30	Operational Qualification - Sands	Contractor performing task not qualified to perform	All employees will be audited semi-annually, this	Prior to the investigation, the contractor employee completed the qualification tasks, a review of training records shows

**DIRECTIVE ACTION PLAN  
AS OF JULY 2013  
FOR ST. PETERSBURG DIVISION**

Item	Compliance Topic	Summary of Issue	Management Comments	Status
			employee is currently up to date, all employees qualified by 7/19/13	all of the contractor employees were signed off prior to 7/24/13
31	Cathodic Protection	Cased steel crossings have not been CP tested annually	Will hire contractor to complete tests by YE 2013 pending permitting	As of 7/24/13, St. Petersburg identified 22 steel mains inserted in steel casings; seven have wires on the main and the casing; 15 remain to be completed by YE 2013
32	Leak Survey Mains	Mains are not properly identified in GIS database by leak code for accurate scheduling and management of required leak survey	Review and update by 12/2013, then audited monthly	All mains have been properly classified by L01, L03, and L05, L03 mains that are inaccessible will be leak surveyed by 8/9/13
33	Sectionalizing/Isolation Valves	Maintenance on "fixed" list of valves w/isolation unknown	Will begin evaluation; anticipate completion by YE 2015	An engineering validation of ST. Petersburg annually maintained valves will be completed by 12/20/13
34	Regulator Station	Could not complete lock-up test to verify set pressure or proper operation of the regulators	Ongoing, will complete by YE 2013	Installed 20 of 21 required test fittings on reg stations, one remains to be installed in August
35	Regulator Station	Field reviews show that two stations failed to lock-up when tested to determine set pressure and proper operation of the regulators	Resolved Monthly Review	Resolved in July 2013
36	Leak Reports/PGS #24s	A re-survey inspection was not performed on leaks w/in the proper timeframe	Biweekly audit started in July 2013	As of 7/24/13, all resurvey inspections on below ground leaks found in 2013, have been completed
37	Regulator Station	A shutoff valve located prior to the relief was found and left in an unlocked open position	Resolved Monthly Review	Resolved
38	Regulator Station	Regulator station documentation found the relief capacity is inadequate to protect the downstream system	Resolved Monthly Review	As of 7/29/13 in compliance
39	Leak Reports/PGS #24s	A re-survey inspection was not performed on leaks w/in the proper timeframe	Biweekly audit started in July 2013	As of 7/24/13, all resurvey inspections on below ground leaks found in 2013 have been completed
40	Regulator Station	Could not complete lock-up test to verify set pressure or proper operation of the regulators	Ongoing, will complete by YE 2013	As of 7/25/13, the St. Petersburg Division performed lock-up tests on 39 of 53 reg stations, remaining tests to be completed by 12/20/13
41	Leak Survey/Services	Information for 2011 found completed leak surveys for service were not produced or available during the compliance evaluation	Reports generated an issue resolved; Monthly Review	As of 7/24, 13, 879 of 2,823 L03 service lines remain to be surveyed; all 2,255 L05 lines have been surveyed; current through July 2013; all remaining surveys to be completed by 12/20/13
42	Gate Station	A designated PGS emergency valve was not found or tagged for easy reference	Resolved Monthly Review	Resolved
43	Cathodic Protection	Review of the "Bare Steel Re-evaluation Survey" did not reference a one year date for re-evaluation as required	Begin monthly audits in July to ensure compliance	Log book has been established; evaluation to be completed by 12/20/13
44	Atmospheric Survey	Premises not surveyed w/in the required timeframe through 12/2011	Audited monthly 1/3 every year	In compliance through July 2013
45	Leak Survey/Services	Leak survey was not completed w/in proper	Audited Monthly	As of 7/24/13, 879 of 2,823 L03 service lines remain to be surveyed; all 2,255

**CORRECTIVE ACTION PLAN  
AS OF JULY 2013  
FOR ST. PETERSBURG DIVISION**

<b>Item</b>	<b>Compliance Topic</b>	<b>Summary of Issue</b>	<b>Management Comments</b>	<b>Status</b>
		timeframe through 12/2011		L05 lines have been surveyed; current through July 2013; all remaining surveys to be completed by 12/20/13
46	Facility Identification	Multimeters not identified w/required company data	Audited annually during atmospheric survey	As of 7/24/13, the St. Petersburg Division needs to check 65 addresses where multiple meters exist as part of the atmospheric survey for company information (missing decals) and address labeling, to be checked by 9/30/13
47	Regulator Station	Station #L-71 at 16 <sup>th</sup> Street North and 7 <sup>th</sup> Avenue has inadequate protection from over pressuring in the event of station failure	Parts ordered, station off monthly review	Resolved July 11, 2013
48	Regulator Station	No protection around the 3" relief piping, approximately 7' tall, and located 1' from the roadway	Scheduled to be installed	Resolved in July 2013
49	Test Requirements	Management did not consistently document plastic fusion/mechanical test when qualifying team members and contractors in 2012 through April 2013	Resolved Monitor Annually	Resolved in July 2013
50	Annual D O T Report	143 mi. variance between 2010 annual D O T report and GIS database mi. of main in St. Petersburg distribution system	Being reviewed, to be completed in 2013	Reviewing Annual Reports and West Regional Engineering Department will send a revised Annual Report for St. Petersburg by 11/1/13
51	Odorization	Odorant is not being injected, or monthly odorant sampling reads have [not] been taken on seven-miles of pipeline serving Florida Rock out of the Brooksville North Gate Station; station with less than 25 customers does not require odorization	Resolved Audited Monthly	Resolved
52	Regulator Station	A relief valve did not have an approved locking device installed to deter unauthorized operation	Resolved Monthly Review	Resolved

# APPENDIX B



# **Peoples Gas System Distribution Facility Inspections Follow-up Audit**

NOVEMBER 2015

BY AUTHORITY OF  
The Florida Public Service Commission  
Office of Auditing and Performance Analysis

**Peoples Gas System  
Distribution Facility Inspections  
Follow-up Audit**

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# 1.0 Executive Summary

## 1.1 Purpose and Objectives

In 2013, the Florida Public Service Commission's (FPSC or Commission) Office of Auditing and Performance Analysis conducted an audit to examine the processes, systems, and internal controls used by Peoples Gas System (PGS or the company) to perform inspections of its distribution facilities. As a result of deficiencies noted, Commission audit staff's September 2013 report recommended a follow-up audit be performed at the appropriate time to assess the corrective actions taken by PGS.

This follow-up audit was initiated in July 2015. The purpose of this second audit is to assess the adequacy and effectiveness of the company's response to the 2013 findings. This assessment includes all corrective actions taken over the period October 2013 through September 2015.

The specific objectives of the 2015 audit are to:

- ◆ Determine the company's compliance with Chapter 25-12, Florida Administrative Code (F.A.C), Safety of Gas Transportation by Pipeline.
- ◆ Determine whether the company is adequately managing the inspection of its distribution facilities in compliance with the company's operational policies and procedures.
- ◆ Assess the company's current practices for tracking and recording inspections of distribution facilities.
- ◆ Identify internal control deficiencies, operational issues, or possible corrective actions regarding the inspection of its distribution facilities.

## 1.2 Methodology and Scope

Planning, research, and data collection for this review were performed in July through September 2015. The information compiled in this audit report was gathered through company responses to document requests and onsite interviews with key employees. Specific information reviewed included:

- ◆ Gas inspection results and records
- ◆ Organizational and operational changes relating to facilities inspections
- ◆ System changes related to facilities inspection and compliance tracking
- ◆ PGS compliance inspection reviews
- ◆ Commission's natural gas pipeline safety evaluations

The scope of the audit included the company's statewide operations and the organization responsible for testing and maintaining PGS distribution infrastructure. Commission audit staff sought to determine whether the company's gas inspection programs are operating effectively to ensure compliance with the Florida Administrative Code (F.A.C.) and the company's operating policies and procedures.

Additionally, audit staff examined the various processes and data systems (including their internal controls) used to track completion and proper execution of facility inspection activities. Commission audit staff analyzed the following areas as they relate to the company's field operations for the period 2014 to date:

- ◆ Completion of surveys and inspections in compliance with Commission rules
- ◆ Record-keeping tools and practices
- ◆ Internal compliance inspection reviews
- ◆ Management oversight and employee training

Commission audit staff's review places primary importance on internal controls as referenced in the Institute of Internal Auditors *Standards for the Professional Practice of Internal Auditing* and in the *Internal Control - Integrated Framework* developed by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. Work is done in compliance with Institute of Internal Auditors Performance Standards 2000 through 2500. Internal controls assessments focus on the COSO framework's five key elements of internal control: control environment, risk assessment, control activities, information and communication, and monitoring.

### 1.3 Findings of 2013 Commission Audit

Commission staff's September 2013 audit report included findings regarding violations of Chapter 25-12 F.A.C., inadequate management oversight, and inadequate record-keeping tools and practices. Although the audit scope was focused on the Tampa and St. Petersburg divisions, Commission audit staff currently believes these concerns may have, at that time, also applied to other divisions across the Peoples Gas system.

Over the period 2009 to mid-2013, PGS did not have control over required surveys and inspections, allowing for many to go uncompleted. Where inspections had been performed, record keeping was still inadequate.

Commission audit staff found PGS management oversight to have been ineffective or deficient, allowing out of compliance conditions to continue. Management at several levels did not require accountability from regional and division managers.

Commission audit staff noted the following six findings in the 2013 audit report:

- Finding 1:** During the period 2010 to date, PGS did not complete timely inspections of leaks, cathodic protection, and casings as required in Rules 25-12.029, 25-12.040, 25-12.052, 25-12.053, and 25-12.062 F.A.C.
- Finding 2:** For portions of the period 2010 to date, PGS did not comply with Rules 25-12.022, 25-12.050, 25-12.055, 25-12.060, and 25-12.085 F.A.C. which address other inspections, general record keeping, and annual reports.
- Finding 3:** During the period 2010 to date, sufficient information was available to PGS management that it should have been aware that the company was not in compliance with Commission rules.
- Finding 4:** Lack of attention to compliance inspection reviews allowed detected compliance deficiencies to persist.
- Finding 5:** Inadequate record-keeping and work planning systems allowed compliance deficiencies to develop and persist.
- Finding 6:** As a result of this audit, PGS has recognized the magnitude of the deficiencies, instituted significant organizational and operational changes, and developed a comprehensive corrective action plan to address the unremedied deficiencies.

**1.4 Overall Opinion and Findings of 2015 Commission Audit**

**Overall Opinion**

PGS compliance initiatives since the 2013 Commission audit appropriately targeted the greatest needs for improvement. However, despite progress made during 2014 and 2015, substantial additional efforts are needed to accomplish a change in culture and in practices to fully support compliance with state and federal safety regulations. Additional monitoring by the Commission is necessary to confirm such changes are accomplished.

- Finding 1:** During portions of the period October 2013 through September 2015, PGS did not complete timely leak surveys as required in Rule 25-12.040, F.A.C.

**Recommended Corrective Action**

- ◆ PGS should engage a third party to audit the accuracy of compliance activity and reporting system-wide over the period October 2013 through September 2015. The audit scope should include determining whether reporting irregularities or fraud occurred at any of its operating divisions during this period.

- Finding 2:** Management-level employees failed to maintain and document adequate awareness of and accountability for required inspection activities during

**2014 and 2015. In some cases, this allowed inspection results to be falsified and to remain undetected.**

**Recommended Corrective Actions**

- ◆ PGS should reassess whether each supervisor and manager fully understands and is committed to the changes it has sought to institute in its approach to compliance.
- ◆ All PGS managers should regularly review status reports produced by Essentials and maintain contact and accountability with supervisors regarding any deficiencies.
- ◆ PGS should engage a third party to audit the accuracy of compliance activity and reporting system over the period October 2013 through September 2015. The audit scope should include determining the adequacy of internal controls over compliance activities and reporting provided through both Essentials and PGS processes and procedures.

**Finding 3: The intended full use and benefits of Essentials had not yet been achieved as of September 2015.**

**Recommended Corrective Actions**

- ◆ PGS should finalize training needed in GL Essentials.
- ◆ PGS should continually seek and address employee input regarding both problems and improvements to GL Essentials.
- ◆ Going forward, PGS should deploy adequate resources to keep data entry of completed inspections up-to-date in GL Essentials.
- ◆ PGS should develop standardized procedures for GL Essentials, and closely monitor its use by employees to identify any retraining needs.

**Finding 4: Changes made during 2014 and 2015 to the scope, content, and structure of PGS' Division Compliance Reviews substantially reduced their value and effectiveness.**

**Recommended Corrective Actions**

- ◆ PGS should reinstitute the broader scope, thorough testing, and detailed format of Compliance Reviews conducted between 2009 and 2013. The addition of a quick-look checklist in 2014 and 2015 should be retained to provide a recap, but additional detail is needed for effective reporting.

- ◆ PGS should require a formal letter of response from division management to each Compliance Review, including an action plan of specific corrective measures, designation of accountable employees, and targeted implementation dates.
- ◆ PGS operations management should verify completion and adequacy of corrective actions taken by division management.

**Finding 5: TECO Energy Audit Services has not played a sufficient role in auditing PGS operations.**

**Recommended Corrective Actions**

- ◆ TECO Energy Internal Audit should assist with the recommended third-party audits and maintain an ongoing pro-active role in monitoring regulatory compliance within PGS operations.
- ◆ TECO Energy Internal Audit should communicate regularly with PGS operational management regarding Compliance Review results.
- ◆ TECO Energy Internal Audit management should make regular reports to the Board of Directors Audit Committee, highlighting the overall effectiveness of the PGS compliance program.

## 2.0 PGS Corrective Initiatives

Since 2013, PGS has implemented corrective initiatives to improve direct oversight and accountability of operations. These initiatives included creation of a centralized Operational Shared Services department to support gas operations on a statewide basis, an extensive inventory of compliance assets to create a standardized naming convention, a top-to-bottom assessment of repeat compliance violations reported by FPSC field staff, and an active awareness campaign involving every supervisor in PGS. Commission audit staff examined and assessed these initiatives as well as the following key areas PGS targeted for improvement:

- ◆ 2013-2014 Corrective Action Plans
- ◆ Management Oversight
- ◆ Organizational Changes
- ◆ Compliance Tracking Software
- ◆ Compliance Inspection Reviews
- ◆ Personnel Qualification Training

### 2.1 2013-2014 Corrective Action Plans

#### 2.1.1 Planned Improvements

Commission audit staff's 2013 report of PGS distribution facility inspections detailed the PGS corrective action plans addressing areas of noncompliance that occurred in the company's Tampa and St. Petersburg divisions. The corrective action plans were created by PGS upper management who seized the opportunity to identify instances of non-compliance over the course of the Commission staff's audit. PGS management identified 100 instances of non-compliance, which included findings of cathodic protection, regulator stations, odorization, atmospheric surveys, leak surveys, and leak reports. Each corrective action plan contained a list of the compliance inspection review findings, a summary of each finding, management's response to each finding, and the resolution status.

During 2014, PGS reviewed all compliance inspection reviews and PSC safety evaluations from previous years and identified several areas of repeat compliance findings throughout the whole company. The top five repeat areas of concern included:

- ◆ Failure to complete compliance obligations at proper frequency
- ◆ Failure to accurately complete leak reports
- ◆ Inaccuracy of maps, maintenance logs, and field identification
- ◆ Insufficient documentation of action
- ◆ Failure to address atmospheric corrosion

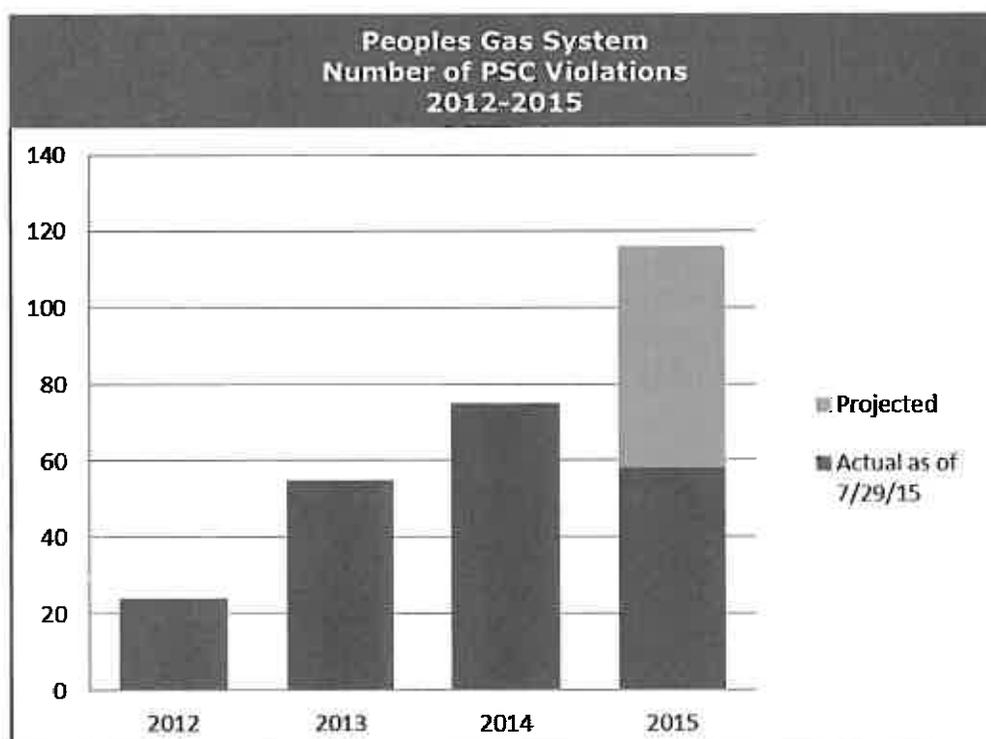
During the year 2014, management devoted a multitude of resources to address these key areas of repeat non-compliance. This included changing the scope of the 2014 compliance inspection reviews to focus solely on evaluating areas of repeat violations. In July 2014, the company held three meetings with territory team members directly involved in compliance activities to evaluate

the company's compliance status for the year and to brainstorm ways to ensure compliance for the remainder of the year.

### 2.1.2 Achieved Results

PGS had remedied 83 percent of the identified items in the corrective action plans by publication of the Commission's audit report in September 2013. Corrective actions included numerous organizational, operational, and system changes that were implemented not only in the Tampa and St. Petersburg divisions, but also affected statewide operations. Statewide corrective actions taken were updating of mapping systems, reviewing and assessing training of employees, implementation of self-auditing guidelines and purchasing of a new compliance tracking system. As part of this follow-up audit, Commission audit staff requested for PGS to provide an update of the 2013 corrective action plans for the Tampa and St. Petersburg divisions. PGS stated that all corrective action plans have since been resolved with some requiring continuing follow-up.

While the company tried to address repeat non-compliance, the company was not successful in completely correcting all the issues that it had previously identified. **Exhibit 1** depicts the total number of PSC violations the company incurred over the period 2012 through July 29, 2015. As shown, the number of violations has increased from 24 in 2012 to a projected 116 violations by year end 2015.



**Exhibit 1**

Source: Response to Document Request 1.9

During the period 2012 to 2015, the company has experienced numerous repeat findings throughout the divisions. Timeliness of inspections and corrosion control have been consistently the most pervasive violations through the whole company. Violations regarding maps and

recordkeeping, inactive service lines, and training sharply increased in 2015. However, violations regarding facilities identification and regulator stations and valves decreased in 2015.

The company states that a review lag exists in the safety evaluations of the PSC inspectors. The inspectors sample records of the previous calendar year. Thus, the company states that the number of PSC violations shown for 2015 reflects conditions occurring during 2014. The company predicts the number of violations will decrease in 2016 due to the full 2015 implementation of the Essentials compliance software.

Repeat violations have been a major issue for years. While the company's PSC violations increased in 2014 and 2015, PGS has made a substantial effort each year to address previous PSC inspection violations. In 2013, 30,000 inspections were found to be out of compliance. The company states that it has decreased this number by 62 percent in 2014, and by September 2015, the company has decreased the instances of out of compliance by 90 percent. The implementation of the Essentials compliance software in 2015 has helped the company meet compliance inspection timeframes. The company has also employed third party contractors to help perform inspections as needed.

While the company made substantial improvements in tracking and recording of compliance inspection activities, some inspections continue to be completed outside of the compliance timeframe. While the number of out-of-compliance inspections has decreased since 2013, over 3,000 inspections were found to be past due in 2015 using the Essentials software.

## **2.2 Management Oversight**

In late 2013 PGS executive management sought to change the company culture and approach regarding compliance with safety regulations. Understandably, PGS management believed prior failures by key managers to fully attend to compliance tracking demanded a change of course.

### **2.2.1 Planned Improvements**

#### ***Establishing Expectations***

The Vice President of Electric and Gas Operations communicated his expectations to all PGS operations managers and supervisors. This specifically included adherence to governing safety rules (Chapter 25-12, F.A.C. and CFR 49 Parts 191 and 192), as well as to TECO's *Code of Ethics and Business Conduct*, *TECO Core Values*, and PGS O&M and Construction manuals. Each manager and supervisor pledged to perform their duties and obligations in a responsible manner that satisfies the obligations and requirements identified in each of these documents.

#### ***Management Accountability***

In October 2013, the Director of Gas Operations instituted a weekly "huddle call" to address day-to-day compliance or operational issues with territory managers, division managers, and division supervisors. The intended benefit was to increase involvement, communication and accountability regarding daily operations.

The Director of Gas Operations also communicated his expectations for territory managers and their division managers and supervisors. He instituted a self-audit process intended to track the status of seven specified key management areas, including compliance program performance. Managers were instructed to maintain records and documentation of the reviews and audits for at least a year to demonstrate effective management and oversight within the specified areas of operations.

**Leak Survey Planning Change**

PGS management created a one-year buffer for leak survey and atmospheric survey activities to ensure compliance with future regulatory timeframes. For example, the services with a required three-year leak survey frequency were planned and dispatched using a two-year cycle. This causes a larger annual survey workload, but is intended to increase flexibility and provide a margin for error in maintaining compliance. Due both to this acceleration, and overdue work from prior years, the workload for the divisions increased. This led to a higher use of third-party contractors to help perform the inspections.

**2.2.2 Achieved Results**

**Aggressive Work Schedule**

From late 2013, PGS undertook an aggressive work schedule to correct past inspection lapses and to provide a future insurance against past-due inspections. **Exhibit 2** illustrates the percentage of inspection workload completed during 2013 and 2014. During these years, the company completed inspections that exceeded the normal annual work load. The company performed all inspections that remained incomplete from 2013 and prior years revealed by the 2013 Commission audit.

Peoples Gas System Percentage of Work Performed 2013-2014			
Year	Inspections Completed	Inspections Required	Percent of Work Completed
2013	298,845	260,164	114.9%
2014	278,640	243,039	114.6%

**Exhibit 2**

Source: Response to Document Request 1.17

**Lack of Self-audit Documentation**

During 2014 and 2015 PGS operations managers operated under a directive to conduct self-audits and document the status of seven specified key management areas, including compliance program performance. Managers were instructed to maintain records and documentation of these reviews and audits. This initiative appeared to be intended to correct past failures of territory and division managers to maintain an awareness of the status of leak surveys, cathodic protection system inspections, etc. It should be noted that these self-audits would provide an additional layer of control beyond the existing internal compliance inspection reviews discussed in Section 2.5.

Commission audit staff conducted a detailed review of the self-audit documentation provided by the 14 PGS divisions from late 2013 through August 2015. The review indicated virtually no documentation of self-audits of compliance activities. In stark contrast, detailed attention and record-keeping was performed for all of the other key management areas specified by this initiative (e.g., budget performance, payroll records, GPS vehicle tracking, and purchasing.) One division did appear to understand the requirement for tracking compliance activities, providing copies of 12 monthly status reports for 2014 and listings of surveys completed, out-of-date, or to be due in future months. In addition this single division provided evidence of periodic meetings addressing compliance status or status of implementation of Essentials.

Tracking of numerous categories of compliance activities and their timing necessarily requires written documentation, frequently updated reports, and work plans. The lack of this documentation can only be seen by Commission audit staff as evidence that managers did not follow the directive from Director of Gas Operations and that tracking of compliance did not take place. The Director had warned managers in writing during July 2014 that “the FPSC inspectors are unable to confirm that we are in compliance based on lack of documentation.”

Commission audit staff believes that PGS employees anticipated the 2015 implementation of Essentials and therefore failed to take adequate action during 2014 to track compliance activities.

#### ***Falsified Ocala Division Records***

Despite efforts placing a high priority on compliance, in mid-2015, the company became aware, that there may have been instances of fraudulent activity involving falsification of leak survey reports in the company’s Ocala division. Allegations were made to a PSC field inspector which were subsequently communicated to the company. These allegations prompted an investigation by TECO Energy’s Director of Corporate Ethics and Compliance under the direction of corporate senior management.

The investigation was thorough, including a review of the original allegations, other allegations that came to light during the inquiry, and interviews with all Ocala division personnel. Ultimately, two allegations were found to be supported by evidence. The final report verified that approximately 1,907 2014 Ocala Area leak surveys were falsified, as was a Personnel Training Journal Record. The investigation resulted in the termination of three employees, including a supervisor. Additionally, one manager was disciplined for failure to provide adequate management oversight and two employees were disciplined for failure to adhere to procedures.

Commission audit staff believes two management-level employees with Ocala division responsibilities did not honor their pledges to the Vice President of Electric and Gas Operations. All PGS managers were required to certify individually that they would adhere to Chapter 25-12, F.A.C., to CFR 49 Parts 191 and 192, to TECO’s *Code of Ethics and Business Conduct* and to *TECO Core Values* and would “perform their duties and obligations to the fullest, and in a manner that satisfies the obligations and requirements identified in each of the above documents.” Until completion of additional audits (described below), it will remain unclear whether there has been failure of other PGS employees to follow these rules.

Two basic root causes allowed the fraud to occur. First, the management employees responsible for Ocala results did not proactively maintain awareness of compliance activity and direct its

completion. Second, since Essentials was not yet implemented during 20014, PGS was at the time still using the paper compliance tracking system. The paper system was vulnerable to abuse due to several internal control weaknesses. Three Ocala division employees took advantage of these control weaknesses in an attempt to meet leak survey requirements.

### ***Planned Further Investigations***

As a result of the 2015 Corporate Ethics and Compliance investigation, the TECO Energy Audit Services Department has been tasked to oversee similar fraud investigations to determine whether the same or similar conduct has occurred elsewhere in the Company. Due to the magnitude of the investigations, the Audit Services engaged KPMG LLC and Veriforce LLC to jointly conduct the investigations. TECO Energy Audit Services personnel have teamed with KPMG and Veriforce auditors to perform the investigations throughout the state beginning in October 2015.

## **2.3 Organizational Changes**

### **2.3.1 Planned Improvements**

During late 2013 and early 2014, PGS performed an assessment of both its personnel and organization to identify needed structural changes. The company sought to increase the degree of management oversight and focus directed towards safety compliance.

Prior to October 2013, PGS gas operations were overseen by an East Region director and a West Region director. As shown on **Exhibit 3**, the new organizational plan places all gas operations under a single director who would be assisted by four Territory Managers. The operations of the 14 divisions were still overseen by managers and supervisors. To clearly designate responsibility for compliance activities, supervisor positions were added within smaller divisions, and Compliance Administrators were named for every division.

### **2.3.2 Achieved Results**

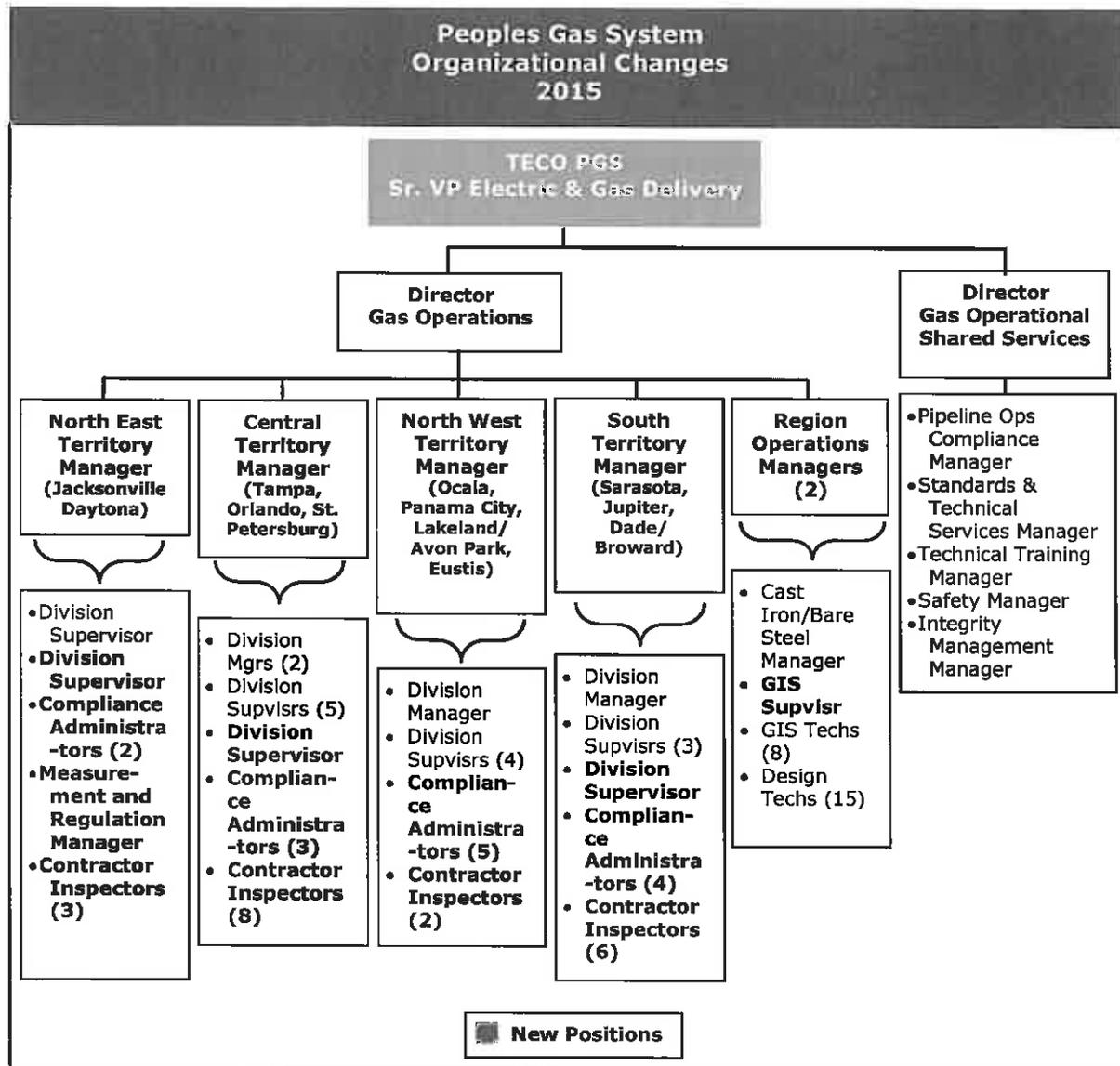
By May 2014, the company began the above restructuring of positions responsible for managing, conducting and tracking compliance activities. Where necessary, reassignments of personnel were completed based upon the re-evaluation of strengths and capabilities.

The company created a Gas Operational Shared Services group led by a director. This unit centralized certain activities such as GIS and mapping, that were once distributed among divisions. Shared Services includes Pipeline and Hazardous Materials Safety Administration (PHMSA)/FPSC Compliance, Damage Prevention, Safety, Integrity Management, Personnel Operator Qualification training, and Manuals, Standards, and Technical services.

Three new operations supervisor positions were created in the Daytona, Tampa, and Jupiter divisions. Also, a new GIS supervisor position oversees the centralization of all GIS activities to ensure consistency in maintaining asset records, compliance data, and maintenance of the company's mapping system.

The company added several construction inspector positions to perform oversight of contractor construction activities. To increase standardization and efficiency, the company substantially

reduced the number to construction contractors it uses. Additional specialized contractors still aid with compliance activities such as leak surveys and cathodic protection inspection. In the future, the company may increase the number of field technicians to decrease the use of contractors.



**Exhibit 3**

Source: Response to Document Request 1.1

## 2.4 Compliance Tracking Software

### 2.4.1 Planned Improvements

In 2013, the company recognized the need for an electronic compliance management tracking system to replace its paper system. A Reporting Task Force Steering Committee was created to oversee the purchase and implementation of the new system. After assessing various options, the

system selected was GL Noble Essentials (Essentials). It tracks the real-time compliance status of the following key compliance activities in all 14 operating divisions:

- ◆ Leak Surveys
- ◆ Atmospheric Surveys
- ◆ Cathodic Protection Inspection and Maintenance
- ◆ Regulator/Gate Station Inspection and Maintenance
- ◆ Valve Inspection and Maintenance

#### ***Mapping Accuracy Improvements***

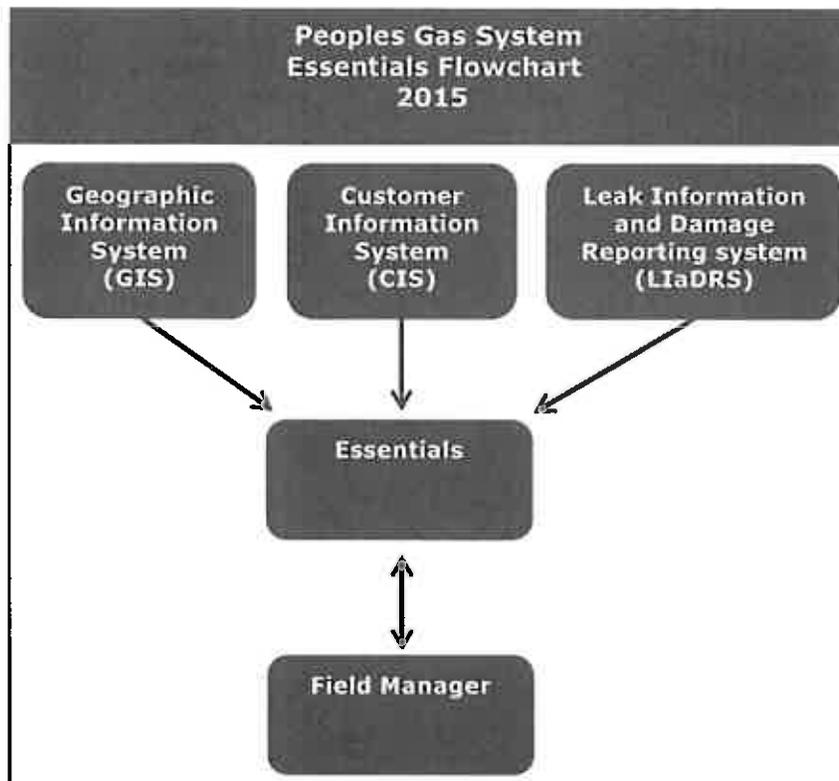
Accurate mapping of assets is essential to locating and inspecting equipment as required by applicable statutes. In preparation for implementation of Essentials, PGS Geographic Information System (GIS) team completed an inventory of all compliance-specific assets to create a standardized naming convention, updated and consolidated maps from each division into one mapping system, and ensured GIS data going into Essentials was accurate. This required adding all paper map information. Approximately 10,000 assets were added to the GIS mapping system. To maintain accuracy, the GIS team also developed a SharePoint site for the division offices to submit errors found of the GIS maps.

Essentials interfaces with several other systems as shown in **Exhibit 4**. The company's GIS and Customer Information System (CIS) provide Essentials with all main pipeline asset information and service line information, respectively. Updated GIS and CIS data are published into Essentials nightly.

Essentials also interfaces with the Leak Information and Damage Reporting System (LIaDRS). LIaDRS is the program that houses all leak incident and leak repair records. Presently, field technicians fill out a leak identification form that is manually input by a division administrator into LIaDRS. LIaDRS publishes that information to Essentials, which schedules the leak repairs. The company is considering incorporating the leak and leak repair functions in Essentials in order to house all compliance records in one system.

#### ***Field Data Input***

Field technicians use mobile laptops to run the Essentials Field Manager program. This program receives and documents all inspection activities. The division compliance administrator assigns specific work tasks to technicians. The technicians plan their own route and work sequences based on geographic locations and compliance dates. Meanwhile, the compliance administrators track the status and completion of these activities. As inspections near their compliance date, the compliance administrator receives an alert. Field technicians input completed inspections into the Field Manager application. Essentials Field Manager will not allow close out of the inspection until all required fields are filled. This control ensures collection of all needed data and electronically "timestamps" the inspection results to ensure accurate and timely inspections. Once an inspection has been completed, it cannot be changed and becomes the basis for the next inspection. Subsequently, the information from Field Manager is uploaded to the Essentials database.



**Exhibit 4**

*Source: Response to Document Request 2.1*

### ***Compliance Reports***

Though not yet available through most 2015, Essentials has the ability to produce compliance reports on all inspection activities. This would allow management at all levels to see snap-shots of the compliance status of the company and divisions. These reports are to be tracked and reviewed by the compliance administrator of each division, but management has the ability to also create and review these reports. The company is currently working with the software provider to customize reports for use by the Commission inspectors to review in future compliance reviews.

### **2.4.2 Achieved Results**

Initially, the vendor outlined a 15-month implementation schedule with completion in March 2015. PGS requested an aggressive alternative schedule to “Go Live” by January 1, 2015. This date was achieved and training for actual use of the system began. By April 2015, initial training had been completed for all 14 PGS divisions.

Essentials had to be loaded with a baseline “last inspection dates,” to use in planning future years’ inspections. According to PGS, all needed previous inspection data was entered by year-end 2014.

### ***Processing Essentials Backlog***

As a result of training required for the rollout of Essentials, PGS field technicians performed inspections and captured results for at least two months of 2015 using the paper method. At the same time, third party contractors also performed their leak surveys, atmospheric surveys and

corrosion control inspections using the paper system since they were not authorized or trained to use Essentials. These two circumstances contributed to the growth of a “backlog” of completed inspections that awaited data entry into Essentials. This backlog was still being eliminated through September 2015.

Internal Compliance Inspection Reviews for the larger divisions conducted during 2015 identified the need for more resources to input the backlog of paper based data. The company added additional resources to remedy the backlog and cleared the backlog by October 2015. According to PGS, 10 out of 14 divisions have completed the input of their backlog of information in Essentials. Furthermore, to ensure that this will not be an ongoing issue moving forward, PGS established a procedure requiring all paper input be uploaded within two weeks after the work is performed. Commission audit staff believes that given the length of time PGS management has been addressing the backlog, management could and should have imposed these procedures at the onset of the backlog problem.

#### ***Essentials Functionality Delayed***

Although the roll-out of Essentials occurred in January 2015, the full functionality of the Essentials compliance tracking software was not available for at least the first nine months of 2015. As of October 2015, all management reports can currently be run from the system to provide organized view of inspection compliance.

Through September 2015, management had to manually track compliance within the Essentials system. The proficiency with use of these management reports varies throughout the divisions. Commission audit staff believes that management is not currently utilizing Essentials and its management tools to their fullest capacity.

## **2.5 Compliance Inspection Reviews**

### **2.5.1 Planned Improvements**

#### ***Original Approach and Content***

In 2009, PGS implemented a regular program of compliance inspection reviews conducted by the Administrator of Gas Operations who is part of the System Engineering and Safety Unit. The compliance inspection reviews were performed statewide throughout PGS service territories, providing two evaluations of each division every year. Observations, action items and follow-up recommendations were very specific and the person responsible for follow-up (division management) would act on recommendations until the issue was resolved. Commission audit staff noted in its 2013 audit report that these compliance inspection reviews are a key quality assurance control that provides the company with the ability to determine whether surveys and inspections were done properly and whether they were timely. Commission audit staff further found these assessments to be well done, thorough and of high potential value to managers at all levels of PGS operations.

#### ***Revised Approach and Content***

For 2014 and 2015, PGS purposely changed the scope of the compliance inspection reviews. In 2014, the goal of the compliance inspection reviews was to verify that employees involved in

inspection activity were aware of the compliance obligations and job procedures and processes. Additionally, the 2014 compliance inspection reviews scope included an evaluation of areas of repeat violations. Assessment results were captured on a cryptic check sheet as opposed to a fully descriptive report format used from 2009 through 2013. A summary report was presented to all operating management personnel including upper management on the status of areas of repeat violations cited by the PSC and also by the Company's internal compliance inspection reviews. This presentation was used as a vehicle to identify corrective actions for repeat violations.

In 2015, the goal of the compliance inspection reviews was to verify that the statewide Essential software solution was operating as intended and properly rolled out in the Company's operating areas. A cryptic check sheet was still used, focusing upon the "on time" status of inspections and activities. No formal management responses were required to obtain commitments for corrective action, assignment to specific individual and a specific completion date.

## **2.5.2 Achieved Results**

### ***Reduced Value of Reviews***

The format, scope and nature of the 2014 and 2015 Compliance Inspection Reviews accomplish far less those of 2009 through 2013. The changes in focus for 2014 were somewhat understandable as management did need to retrain employees, reemphasize requirements, and reassign duties, etc. Likewise, in 2015 it was necessary to verify that Essentials was understood and being used and meeting the company's needs. However, this should be the duty of direct line managers and should not have been the major or sole focus of the Manager of Pipeline Compliance, other than as one step in verifying the activities complied with procedures. This change of focus appears to have diminished the effectiveness and the coverage of compliance reviews during 2014 and 2015. It is difficult to validate that all corrective action needed as a result of 2015 spot checks has been completed. Without a formal and complete management response at the time of the reviews, the Manager of Pipeline Compliance never will know if all "intended" corrections were carried out. An after-the-fact description could list what was done but may not reflect intended actions that never were completed or attempted.

### ***Lack of Communication with Audit Services***

Despite Commission audit staff's recommendation in 2013, TECO Energy Audit Services Department has yet to play a sufficient role in auditing PGS operations. While staff's 2013 audit report was discussed once with the TECO Energy Board of Directors Audit Committee, it appears that no continuing reporting regarding compliance review results took place. Even with the 2015 conversion from a paper compliance tracking system to an electronic one (Essentials), and the problematic history of late or non-existent inspections, no internal audit of the transition was initiated. As a result, the TECO Energy Board could be under-informed about PGS activities and issues such as inadequate safety and compliance.

According to the Institute of Internal Auditor's Professional Practices, internal audit activity should evaluate risk exposures relating to the organizations' governance, operations and information systems regarding the following:

- ◆ Reliability and integrity of financial and operational information
- ◆ Effectiveness and efficiency of operations

- ◆ Safeguarding of assets
- ◆ Compliance with laws, regulations, and contracts

TECO Energy Audit Services Department should take a continuing pro-active role in monitoring regulatory compliance and safety issues. Regular reports to the Audit Committee should be made regarding compliance reviews performed by the Manager of Pipeline Compliance and any irregularities or violations discovered.

## **2.6 Personnel Qualification Training**

### **2.6.1 Planned Improvements**

Compliance reviews during 2009 to 2013 had indicated continuing problems with personnel qualification training and record keeping. In 2013, PGS created a Training Task Force to oversee and evaluate the company's natural gas operator qualification training.

### **2.6.2 Achieved Results**

In June 2015, the company completed its transition from a manual operator qualification program to a standard-compliant and centralized Personnel Qualification Program. Previously, the manual operator qualification program was monitored differently by each division using a paper system allowing requalification dates to slip. The new Personnel Qualification Program is centrally managed by the Manager of Technical Training and is based on the American Society of Mechanical Engineers Standard B31Q. This new program allows the Manager of Technical Training to better track employee training as well as deliver a more consistent qualification and requalification training state-wide.

The transition to the Personnel Qualification Program took three years to fully implement. Over 250 PGS employees were requalified on all of their operator qualification tasks. There are approximately 101 tasks depending on specialized function of the technician. The qualification process consists of a combination of both classroom or online instruction and a field evaluation. The company also created an apprentice program for new hires.

## 3.0 Overall Opinion and Findings

Commission staff notes the following findings and conclusions regarding the adequacy and effectiveness of the company's response to its 2013 findings and all corrective actions taken over the period October 2013 through September 2015.

### 3.1 Overall Opinion

PGS compliance initiatives since the 2013 Commission audit appropriately targeted the greatest needs for improvement. However, despite progress made during 2014 and 2015, substantial additional efforts are needed to accomplish a change in culture and in practices to fully support compliance with state and federal safety regulations. Additional monitoring by the Commission is necessary to confirm such changes are accomplished.

### 3.2 Leak Survey Non-Compliance

**Finding 1:** During portions of the period October 2013 through September 2015, PGS did not complete timely leak surveys as required in Rule 25-12.040, F.A.C.

Failure to comply with 25-12.040, F.A.C. over a portion or all of this period resulted from fraudulent reporting of completed leak surveys during 2014 in the Ocala Division. Two basic root causes allowed the fraud to occur.

First, the management employees responsible for Ocala results did not proactively maintain awareness of compliance activity and direct its completion, as discussed in Finding 2 below. Second, since Essentials was not yet implemented during 2014, PGS was at the time still using the paper compliance tracking system. The paper system was vulnerable to abuse due to several internal control weaknesses. Three Ocala division employees took advantage of these control weaknesses in an attempt to meet leak survey requirements for addresses in this division.

Currently it is not known whether other compliance activity results (e.g. leak surveys, cathodic protection inspection, atmospheric inspection) were fraudulently reported elsewhere within PGS' operations. The company has recognized the need for a comprehensive system-wide review to investigate this key issue and has initiated a third-party review that began in October 2015. Completion of the review is expected in January 2016.

It is expected that the Essentials system will provide internal controls that will prevent the type of fraud committed in Ocala. Management should remain vigilant to ensure this is the case.

#### **Recommended Corrective Action**

- ◆ PGS should engage a third party to audit the accuracy of compliance activity and reporting system-wide over the period October 2013 through September 2015. The audit scope should include determining whether reporting

irregularities or fraud occurred at any of its operating divisions during this period.

### 3.3 Lack of Management Awareness

**Finding 2: Management-level employees failed to maintain and document adequate awareness of and accountability for required inspection activities during 2014 and 2015. In some cases, this allowed inspection results to be falsified and to remain undetected.**

All Division managers should have understood and supported company-wide efforts to make a culture change placing emphasis on compliance with safety requirements. Effective management employs sufficient controls to prevent falsification of records and communicates to employees that such behavior will not be tolerated.

Three employees collaborated in falsely reporting completion of 2014 leak surveys that were not performed for up to approximately 1,907 service addresses.

Managers must obtain sufficient information to determine whether their employees are performing required tasks. Documentation should be maintained to confirm this review by managers is adequate and is regularly performed. Managers must hold supervisors accountable for ensuring required work is performed correctly.

#### **Recommended Corrective Action**

- ◆ PGS should reassess whether each supervisor and manager fully understands and is committed to the changes it has sought to institute in its approach to compliance.
- ◆ All PGS managers should regularly review status reports produced by Essentials and maintain contact and accountability with supervisors regarding any deficiencies.
- ◆ PGS should engage a third party to audit the accuracy of compliance activity and reporting system over the period October 2013 through September 2015. The audit scope should include determining the adequacy of internal controls over compliance activities and reporting provided through both Essentials and PGS processes and procedures.

### 3.4 Incomplete Implementation of Essentials

**Finding 3: The intended full use and benefits of Essentials had not yet been achieved as of September 2015.**

The full capabilities and benefits of the Essentials compliance tracking software were not available for at least the first nine months of 2015. This resulted from developments during the

year including the need for retraining, delayed input of a backlog of surveys completed by contractors, and completion of Essentials system enhancements.

Retraining was requested by key Essentials users beginning in the second quarter of 2015, and PGS engaged GL Noble to complete the retraining. To complete the required annual inspections for 2014 and 2015, plus PGS' additional elective "accelerated" inspections, the company made use of outside contractors. Contractors completed all work using the existing paper-based process during 2015 while Essentials was being implemented. A large "backlog" of completed surveys using paper records formed, awaiting input into the Essentials system. It is not clear whether this backlog could have been prevented by management.

Through at least September 2015, Essentials management summary reports could not be run from the system to provide a comprehensive view of inspection compliance. This resulted in part from skewed results due to the backlog of completed reviews, which Essentials reflected as "past due". As a result, PGS division managers were handicapped in tracking status of compliance work unless they devised their own solutions, which some opted to do.

Though the electronic system began to be widely used late in the first quarter after initial roll-out and training, users were understandably not immediately fully comfortable and proficient.

#### **Recommended Corrective Action**

- ◆ PGS should finalize training needed in GL Essentials.
- ◆ PGS should continually seek and address employee input regarding both problems and improvements to GL Essentials.
- ◆ Going forward, PGS should deploy adequate resources to keep data entry of completed inspections up-to-date in GL Essentials.
- ◆ PGS should develop standardized procedures for GL Essentials, and closely monitor its use by employees to identify any retraining needs.

### **3.5 Reduced Effectiveness of Compliance Reviews**

**Finding 4: Changes made during 2014 and 2015 to the scope, content, and structure of PGS' Division Compliance Reviews substantially reduced their value and effectiveness.**

Key changes were made to the Compliance Review process by operations management after 2013. During 2014, the reviews were specifically focused on determining whether employees understood their compliance-related job requirements to prevent "repeat violations". Limited spot checking was performed. Similarly, during 2015, the reviews focused on the degree of understanding and acceptance of Essentials through limited spot checking. In commission audit staff's opinion, the format, scope and nature of the 2014 and 2015 Corporate Compliance

Reviews resulted in diminished value in comparison to those completed during 2009 through 2013.

Commission audit staff believes these two objectives were more properly the duty of direct line managers. The Compliance Reviews should have maintained a focus on identifying compliance failures during 2014 and 2015. This role had proven valuable in the past, having previously identified most of the deficiencies that led to the 2013 Commission audit.

During 2014, Compliance Reviews provided no detailed description of deficiencies for division management to correct. During both 2014 and 2015, no requirement existed for division management to respond to the review, describing corrective actions to be taken and setting due dates. Accountability was not required.

Any internal audit or review should clearly describe deficiencies observed and recommend solutions. Management response and commitment to corrective action should be obtained, designating a responsible party and due date to ensure timely and thorough follow-up.

#### **Recommended Corrective Action**

- ◆ PGS should reinstitute the broader scope, thorough testing, and detailed format of Compliance Reviews conducted between 2009 and 2013. The addition of a quick-look checklist in 2014 and 2015 should be retained to provide a recap, but additional detail is needed for effective reporting.
- ◆ PGS should require a formal letter of response from division management to each Compliance Review, including an action plan of specific corrective measures, designation of accountable employees, and targeted implementation dates.
- ◆ PGS operations management should verify completion and adequacy of corrective actions taken by division management.

### **3.6 Insufficient Involvement of Internal Audit Function**

**Finding 5: TECO Energy Internal Audit has not played a sufficient role in auditing PGS operations.**

Despite the risks inherent in the 2015 conversion from a paper compliance tracking system to an electronic one (Essentials), and the problematic history of late or non-existent inspections, no internal audit of the transition was initiated. This represents a significant missed opportunity.

It is Commission audit staff's understanding that by early 2014, the TECO Energy Audit Committee was fully informed of the problems and recommendations detailed in staff's 2013 audit report. In that report, Commission audit staff recommended that all Compliance Review findings should be shared with TECO Audit Services. The Director of Audit Services confirmed that this suggested communication has not taken place.

According to the Institute of Internal Auditors' (IIA) Professional Practices 2110.A2,

Internal audit activity should evaluate risk exposures relating to the organizations' governance, operations and information systems regarding the 1) reliability and integrity of financial and operational information 2) effectiveness and efficiency of operations 3) safeguarding of assets 4) compliance with laws, regulations, and contracts.

**Recommended Corrective Action**

- ◆ TECO Energy Internal Audit should assist with the recommended third-party audits and maintain an ongoing pro-active role in monitoring regulatory compliance within PGS operations.
- ◆ TECO Energy Internal Audit should communicate regularly with PGS operational management regarding Compliance Review results.
- ◆ TECO Energy Internal Audit management should make regular reports to the Board of Directors Audit Committee, highlighting the overall effectiveness of the PGS compliance program.

## 4.0 Company Response

### 4.1 Peoples Gas System Response

PGS appreciates the opportunity afforded by the Commission audit staff to respond to this report. From the moment the company became aware of the audit, it cooperated fully in providing the documents and company personnel sought by the audit staff, and made every effort to accommodate the staff's schedule for completion of its audit. The company has already implemented, or begun to implement, all of the recommended corrective actions included in this report.

Safety is the company's number one priority, outweighing all other considerations. It is important to note that no instance of noncompliance identified in this report resulted in any PGS employee, PGS customer, or member of the public experiencing any injury or damage to property.

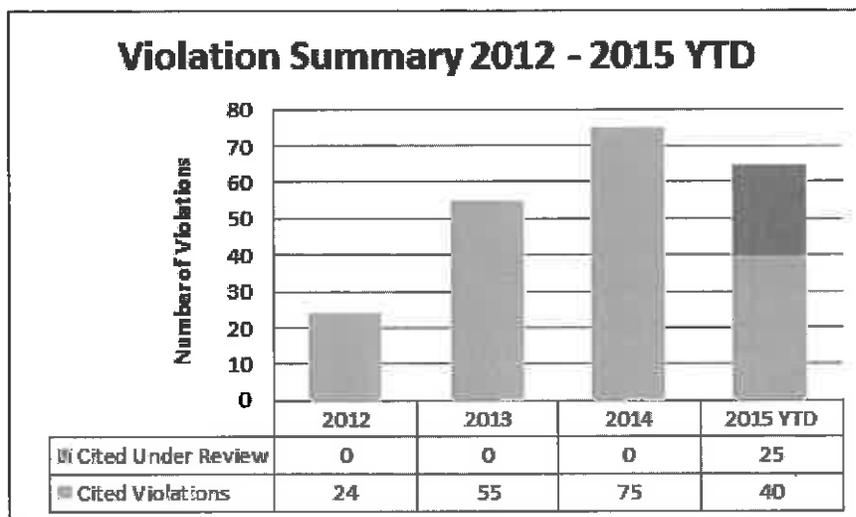
In response to the September 2013 Facilities Inspection Audit (which involved only the company's Tampa and St. Petersburg divisions), to which the current statewide audit was a follow-up, the company developed even before the audit was complete a corrective action plan to address and correct the issues of noncompliance brought to the attention of the company's upper management by the audit report. As recognized by Commission audit staff in the 2013 report, that plan involved not only correcting the identified noncompliance, but also statewide organizational changes, the creation of new positions and groups to better manage and track compliance activities, centralizing core compliance functions, instituting a statewide compliance management software solution (the "Essentials" software referenced numerous times in this report) and standardizing operator qualification training. In addition to the actions listed in the original plan the company also retained the services of Veriforce LLC, with expertise in the area of pipeline safety matters, the applicable rules, and their interpretation, to assist in evaluating and strengthening the company's compliance efforts.

These corrective actions did not commence until late 2013 and initially focused only on the St. Petersburg and Tampa divisions. In 2014 further actions taken on a state wide basis increased the time for full implementation. As noted in this report:

- All 250 of the company's field technicians were requalified to perform over 100 different tasks.
- In excess of 10,000 company assets previously tracked on paper were inventoried and added into the company's GIS mapping system.
- The compliance management software ultimately purchased by the company (the "Essentials" program referenced numerous times in this report) had to be selected, purchased, implemented and tested, and all field technicians had to be trained in its use. As with any new software program of this magnitude the company monitored the system performance during the first year of use (2015) and made system modifications along the way to ensure a successful rollout. This also included providing additional training as necessary to improve end user knowledge and acceptance.

It should be noted that each of PGS's 14 divisions and seven transmission pipelines are inspected by Commission field inspectors each year for regulatory compliance purposes (a total of at least 21 separate individual inspections annually). The company's integrity management plans and other required plans are also inspected periodically. While our goal is for zero violations, there are certain requirements in the Florida/federal pipeline safety regulations over which the company has limited control (e.g., a customer has his home painted, and the painter paints over the required sticker on one of the company's more than 367,000 gas meters, or a state or county contractor mowing the road right-of-way knocks over a pipeline marker). Any of these events could happen the day before a Commission inspection without the company's knowledge, but could nevertheless be cited as a violation.

The report suggests that the company was not successful in addressing repeat noncompliance, stating that the number of violations increased from 2012 through a projected number of violations for 2015. See Exhibit 1 to this report. It should be noted that the corrective action plan was incapable of addressing 2013 issues because that year's compliance activities had already occurred (i.e., 2013 compliance records were inspected in 2014). Further, a number of the violations cited in 2015 (involving 2014 compliance) are currently under review with the Commission staff, and the company has provided additional information requested by staff. As shown by the chart below, the company believes the number of cited violations should actually decrease for 2015.



\* 2015 YTD, through October. 18 of 21 audits complete.

The incident involving the collaboration of three PGS employees to falsify reports of premise leak surveys which were not performed in one of the company's divisions is fairly summarized in this report. As a result of the falsifications, the company will re-perform before the end of 2015 not just the surveys that may have been falsified, but all of the 2014 required leak surveys for that division (approximately 9,900). As a further result of the internal investigation conducted by the company into this incident, and as described in this report, TECO Energy Audit Services has engaged KPMG LLC and Veriforce LLC, who are (as of the date of this response) jointly conducting an audit to determine whether the same or similar conduct has occurred

elsewhere in the company. This review will cover the time period from January 2014 through the date of audit. The company presently anticipates that audit to conclude in January 2016.

Finding 3 of this report deals with Essentials. The company has seen very positive results from the use of this new compliance management software, which replaces the paper-based and non-standardized system that had been in place for many years. User acceptance is high and Essentials has provided the company with an organized way to schedule, complete and report on the over 987,000 required compliance inspections and surveys that must be conducted on a statewide basis. The Company is providing additional end user training, and dedicated resources to avoid or minimize backlog, and plans to further expand the use of Essentials in additional areas to fully leverage this software.

The company's spot checks referenced in Finding 4 of this report were very helpful from an operational and compliance perspective as PGS focused on implementing the key compliance initiatives undertaken following the 2013 audit. As communicated during the Commission follow-up audit, the company will be reinstating in 2016 the broader scope compliance reviews that include formal tracking of follow-up action items and will provide a better view of the company's compliance status and greater accountability for any corrective action that might be required.

As recommended in the Commission's audit report, the TECO Audit Services group will play a greater role in providing assurance for the compliance oversight of PGS operations. The Audit Services group will be involved with evaluating the design of appropriate internal controls as well as monitoring the effectiveness of those controls as indicated by an annual risk assessment. Audit Services will communicate regularly with both PGS operations management as well as the TECO board Audit Committee.

The Company has taken numerous positive improvement actions since the September 2013 Commission audit to bring its compliance controls and programs to an effective and sustainable level. For example, it has centralized core compliance functions (e.g., GIS), instituted Essentials statewide, and standardized operator qualification training. Those improvements have come with countless hours of employee time and effort, and the expenditure of significant resources. PGS believes the positive results of the company's implementation of the multiple compliance initiatives during the past two years will be reflected when the Commission performs its 2016 field inspections. The company is committed to continuing to examine and improve its compliance programs and internal controls to ensure the ongoing safe and reliable operation of its system.



## 5.0 Appendix

### Appendix 1 Commission Rules

Chapter 25-12, F.A.C. contains the Florida Public Service Commission rules for Safety of Gas Transportation by Pipeline. Commission rules adopt the Minimum Federal Safety Standards and reporting requirements for pipeline facilities and transportation of gas prescribed by the Pipeline and Hazardous Materials Safety Administration in Chapter 49 of the Code of Federal Regulations (CFR), parts 191 and 192 (2011). These chapters of the CFR are represented and adopted within the Commission rules.

The specific parts of chapter 25-12 reviewed by staff during this audit include:

**Rule 25-12.022 - Requirements for Distribution System Valves** requires the installation of isolation valves to be placed upstream of each regulator station, sectionalizing valves to reduce the timing necessary for emergency shutdown, and blow down valves to aid the evacuation of gas from segments of mains between isolation valves in emergency conditions for isolation of the distribution system.

Valve installation records are required to be marked for easy identification, with a durable tag or equivalent means. All valves necessary for safe system operation must be inspected and maintained at intervals not exceeding 15 months, but at least each calendar year.

**Rule 25-12.029 – Limiting Use of Pipeline Casings** prohibits the installation of casings on metal pipeline unless necessary for the installation process of the pipeline or justifiably required by an appropriate governmental authority.

**Rule 25-12.040 - Leak Surveys, Procedures and Classifications** requires the utility to perform gas leak surveys at least once each calendar year, not to exceed 15 months, in certain locations. Surveys of bare metallic, galvanized steel, and coated tubing pipelines must be conducted at an interval not to exceed three years. Remaining system pipeline must be surveyed every five years, or more frequently if experience requires. The rule requires a leak classification system to be used on all leak records and reports based upon a grade 1, grade 2, or grade 3 type leak. The adequacy of all leak repairs is required to be checked immediately after being completed, and the date and status of rechecks are to be recorded on the leak repair records.

**Rule 25-12.050 - Facility Identification** requires that gas service line valves at multi-service installations such as apartment buildings be plainly marked by a metal tag or other permanent means designating the building or part of the building being served. However, the meter may be marked in lieu of the service line. The marking of each customer meter, gas regulating station, or above ground gas transport facility must be permanently marked to identify the operator's name and phone number. Marking will be by metal signs, line markers, plastic decals, or other appropriate means.

**Rule 25-12.052 - Corrosion Control Criteria for Cathodic Protection of Buried or Submerged Metallic Pipeline** provides the criteria for proper cathodic protection of steel, cast

iron, and ductile iron pipeline. Cathodic protection is used to prevent and deter the potential corrosion of metal pipeline facilities. A negative cathodic voltage of at least 0.85 volt, must be made with the protective current applied in accordance with Appendix D to Part 192, Title 49, Code of Federal Regulations (2011). This is the only criteria accepted for determination of the degree of cathodic protection for externally coated buried or coated submerged pipelines installed after June 1, 1975. The criteria for bare and essentially bare ineffectively coated metallic gas pipelines installed prior to July 31, 1971 require a net protective current from the electrolyte into the structure surface at predetermined current discharge points to protect the pipeline from corrosion. Each pipeline under cathodic protection is required to be tested at least once each calendar year, within an interval not to exceed 15 months to determine whether protection is in compliance with the Rule. If gas leakage from active corrosion is discovered on a pipeline, the utility is required to take subsequent corrective actions including cathodic protection to repair the leakage conditions. Repairs are required to be completed, or substantial progress toward correcting the deficiencies must be made within three months.

**Rule 25-12.053 - Cathodic Protection – Electrical Survey** requires each utility operator to have a comprehensive written procedure to evaluate electrical survey data on cathodically unprotected pipelines and identify areas of active corrosion where protection is needed. The Rule requires a combination of pipe/soil potential and soil resistivity tests to be completed for initial surveys. When active corrosion is identified and the utility has no knowledge of electrical requirements for the system, tests to determine the degree of protective current required for cathodic protection are required. The utility may not be able to complete an electrical survey of an underground pipeline system in some conditions. For instance, it may not be practical to complete a survey when large obstructions lie in a position directly above the pipeline.

**Rule 25-12.055 - Odorization of Gas** requires each utility receiving gas directly through a transmission supplier, and distributing gas in a system serving more than 25 customers to odorize all gas transported. The purpose of odorization is to ensure gas leakages can be readily detected and repaired. The Rule requires utilities to sample downstream of all injection points to assure the presence of odorant in the required concentration. At least twelve times per calendar year, at intervals not greater than 45 days, each utility is required to test gas odorization concentrations using equipment manufactured for odorant testing.

**Rule 25-12.060 - General Records** provides instruction for maintaining system records necessary for Commission review. The Rule requires the utility to keep records to show compliance with Commission rules and adopted codes. All tabulations, standards, drawings, records of incidents, procedures or studies related to compliance with Commission rules are to be recorded and maintained for review by appropriate Commission personnel. All records are required to be organized, arranged, or prepared so that compliance can be readily determined. All records are to be retained within the state of Florida unless the Commission exempts the utility from the provision. The Rule also provides retention timeframes for different types of records.

**Rule 25-12.062 - Leak Reports** are required to provide records of gas leaks identified on the utility's system. The minimum information to be kept for leak reports includes, the address of the suspected leak, date and time reported, description of the leak, date and time the utility

dispatched repair personnel, date and time of arrival, date and time the condition was made safe, the location of the leak found, and the cause of the leak.

**Rule 25-12.085 - Written Annual Reports Required** are submitted to the Department of Transportation (D.O.T.) and Florida Public Service Commission by each utility to update records of their gas distribution system. These reports provide annual pipeline summary data by operators of gas pipeline facilities located within the United States. The reports are provided for the preceding calendar year, to be received by the Commission no later than March 15<sup>th</sup> of each year.