

**Phase Two of an Investigation of
Peoples Gas Light and Coke Company's
Accelerated Main Replacement Program**

**Recommendation Implementation Monitoring
Fourth Quarterly Report**

**Presented to:
The Illinois Commerce Commission**



**Presented by:
The Liberty Consulting Group**



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Summary

- Work continued through the second quarter of 2016, which represents the fourth of the eight quarters established for implementation monitoring of the recommendations set forth in Liberty’s May 5, 2015 Phase 1 report regarding the Accelerated Main Replacement Program (“AMRP”). The original 95 recommendations now number 89, after we eliminated or consolidated a few with others, as reported earlier. Work this quarter concentrated on successful close out of recommendation implementations.
- PGL’s implementation progress has improved - the fourth monitoring quarter has produced 18 recommendations for which the Company has completed implementation.
- This report addresses closeout activities for 25 recommendations, 18 of which we consider fully implemented.
- Of the 89 recommendations, we consider 30 as accepted/closed.
- There remains, as was the case at the end of the prior quarter, a disagreement on the sufficiency of a relatively small number of plans required to implement certain recommendations. Five plans are still “pending”.
- Below we address the details underlying work on those recommendations whose implementation activities this quarter’s report addresses. We address closure on 18 and discuss the status of another seven that remain “in progress”.
- We divide the 18 to be closed into three categories: “Accepted,” “Partially Rejected,” and “Rejected.” We consider 18 as closable on the basis of full implementation, either in full accord with the original recommendation and approved implementation plans, or on terms equally or more likely to optimize AMRP performance.
- We will continue to conduct monitoring activities on 16 of these 18, in order to examine: (a) whether execution continues as planned, and (b) whether certain additional needs (generally narrow and administrative) were met.
- Whether those gaps prove material to optimizing AMRP performance must fall to some other test, given that our scope does not include continuing “auditing” of program performance. The following discussions of each of those recommendations provide an explanation of the gaps, and our basis for continuing to believe that our recommended approach, from our perspective today, remains more likely to optimize AMRP performance.

Implementation Plan Monitoring Approach

Liberty’s May 5, 2015, Final Report on the Phase One Investigation addressed the findings, conclusions, and recommendations resulting from an essentially year-long investigation of management and execution of the AMRP. That report set forth 95 recommendations for improving AMRP planning and execution. The May 5, 2015 report ended Phase 1 of a two-phased project. Liberty’s defined scope for Phase 2 is to conduct a structured, two-year program of monitoring the effectiveness of Company implementation of those 95 recommendations.

The Phase 2 monitoring work led to the elimination of four recommendations (Numbers D.5, F.4, K.4, and L.6):

- D.5 recommended analysis to examine meter installation productivity; it was mooted by a fundamental process change that renders analysis of past productivity irrelevant with respect to future work effectiveness.
- F.4 served as an alternative to Recommendation F.3, whose acceptance by the Company mooted the eliminated recommendation.
- K.4 will by definition be successfully addressed upon implementation of the remaining Chapter K recommendations; it therefore does not require separate monitoring.
- L.6 called for pursuit of recommendations made in connection with Liberty's interim report; we determined that the other recommendations of the final report already encompass all of the interim report recommendations of lasting impact.

Two other recommendations merged into others, in order to reflect the ability to address them through a common implementation plan. Of the revised number of monitorable recommendations (89 after elimination and combination), most had what Liberty and the Company agreed were effective implementation plans at the end of the last quarter. Of the remaining nine, this report addresses close-out of four of them. That close-out leaves five still in the process by which Liberty and the Company will seek consensual implementation plans. We had hoped to reach agreement on plans for most or all of these nine recommendations this quarter, but did not complete efforts on the three that remain open.

The process of establishing effective implementation plans took longer than expected and progress in implementing plans has also been slow. Implementation has yet to reach a pace that matches expectations for final closeout consistent within the two year implementation monitoring duration. Four calendar quarters remain.

This report describes the details of monitoring efforts on 30 of the 89 recommendations whose implementation we are tracking, 18 of which we believe should be closed out. We have determined that seven recommendations PGL recommended for closure this quarter are not sufficiently complete or adequate to accept closure at this time. They consist of those shown as "In-Progress" in this report.

This report's detailed discussions of specific recommendations address 18 that we consider closed out. We have reached agreement with the Company that 18 of the 89 tracked recommendations have been implemented fully. On seven others, the Company has made improvements that we consider material, but has not agreed to certain aspects of the recommendation that we considered important in our May 5, 2015 report.

In our prior quarterly reports, we have closed out 12 recommendations. Combined with the 18 noted above, and the five considered rejected and closed, 60 recommendations remaining that Liberty and Peoples Gas must still review and verify for implementation.

This report concludes with a summary of the status of plans the recommendations from the May 5, 2015 report.

Remaining Recommendations without Agreed Plans

As noted, there remain a small number of recommendations that continue to require planning work for Liberty and the Company to reach consensus. The next sections summarize work on all those reported last quarter as subject to continuing plan development.

Judging Risk Reduction Value

Similarly, a recommendation (F.5) that seeks development of overall replacement effectiveness metrics remains open. During the investigation, Liberty and the Company discussed development of a metric that would permit, in hindsight, an evaluation of whether the actions taken in the recent past could be validated as producing the best value, in terms of risk reduction, for the amounts expended. Such metrics would use actual experience to assess what is essentially a forecasted best-results approach under risk ranking and prioritization systems. We had anticipated continuation of those discussions during the first quarter of 2016, but have deferred them in order to focus Company efforts on completing implementation of a significant number of recommendations this quarter.

Field Work Quality

F.1 called for the development, staffing, and implementation of a data quality control program. During the monitoring quarter, Liberty met with PGL concerning this recommendation and PGL agreed to continue development of a plan.

Deferral of Commission Monitoring Recommendation

Recommendation V.1 called for Peoples Gas to identify its proposed changes in AMRP reporting and to tailor them to support an Illinois Commerce Commission program for regularly monitoring program performance. Peoples Gas advised of plans to meet with Commission Staff early in 2016 to discuss and reach consensus on Commission information needs and how best to address them. Liberty agreed that such a process would represent a best first step in addressing a Commission reporting program, given changes both in Company management and in Staff resources available to support monitoring efforts. Therefore, Liberty and Peoples Gas agreed some time ago to defer a specific plan for implementing this recommendation, pending Staff/Company discussions. The Commission's subsequent, December 16, 2015 announcement of an AMRP reevaluation lends additional support to using the stakeholder sessions as a further basis for identifying routine, ongoing reporting requirements.

Summary of Expected Third Quarter 2016 Monitoring Activities

1. Liberty will return to work on constructing an overall plan for monitoring work across the remaining four quarters of monitoring work.
2. Liberty will meet in August to address next steps on the remaining recommendations not yet subjected to agreed implementation plans.
3. Liberty will prepare and then execute detailed plans for specific monitoring activities (e.g., data requests, interviews, site visits) associated with those recommendations scheduled to undergo key implementation steps during the third calendar quarter of 2016.
4. Liberty will prepare a report of monitoring activities and open plan closure at the end of the quarter.

Liberty continues to proceed with monitoring work on the basis that the stakeholder process has identified no action items required of Liberty at this time. As noted, however, we recognize that revision of fundamental AMRP parameters has significant potential for affecting the course that implementation of certain recommendations should take.

Summary of Plan Activities and Status Detailed in This Quarter’s Report

Rec. #	Recommendation	Previous Status	Current Status
C.2	Peoples Gas should more thoroughly study and report on the causes of extremely high reports of contactor damage incidents.	Plan Accepted	Accepted/ Closed
C.4	Peoples Gas should examine the ability to address low pressure and single-contingency outage risks in the neighborhood program.	Plan Accepted	Accepted/ Closed
C.6	Analyze and report on the precise nature and numbers of corrosion leaks, and determine whether protected and coated steel mains are experiencing corrosion leaks.	Plan Accepted	Accepted/ Closed
E.1	Peoples Gas should complete a full replacement of the plan for management (the Project Execution Plan) addressing all key elements of AMRP management and control	Plan Accepted	Accepted/ Closed
F.1	Peoples Gas should develop, staff, and implement a data quality control program	Pending	
F.5	Peoples Gas should determine on a system, segment and neighborhood basis the level of acceptable risk and metrics that will support appropriate adjustments in replacement rates	Pending	
F.6	Peoples Gas should develop a cost model that addresses O&M costs associated with AMRP and related work	Pending	Plan Accepted
G.1	Peoples Gas should develop a new Cost Plan Model that includes comprehensive measurement bases and critical assumptions regarding scope, quantities, productivity, labor costs, unit costs, and regulatory requirements; a reserve should be included as part of the overall program costs	Pending	Plan Accepted
G.2	Peoples Gas should establish a Cost Trend Program to monitor potential, major cost-affecting items	Pending	Plan Accepted
J.1	AMRP management should promptly design and implement a two-pronged scope control process: (a) at the program level, and (b) at the individual project level	Plan Accepted	In Progress
L.4	Peoples Gas should establish a cost support organization that: (a) resides organizationally at a level and in a place consistent with treating cost management as a high program priority, (b) serves the cost management needs of all levels of management, (c) develops a force of skilled cost professionals and assures those skills are continuously improved, and (d) has overall accountability for the development and implementation of the cost management program	Plan Accepted	Accepted/ Closed
M.1	Peoples Gas should develop a formal strategy to ensure that the Company gets above-average terms and below-average pricing in view of the long-term opportunities afforded by the AMRP	Plan Accepted	Accepted/ Closed

M.2	Peoples Gas should regularly include in program monthly reports information showing procurement fulfillment and past due rates	Plan Accepted	Accepted/ Closed
M.4	Peoples Gas should determine those contract administration tasks that it considers required, and assure that the Program Management Office executes those tasks	Plan Accepted	Accepted/ Closed
M.5	Peoples Gas should apply a program of enhanced management oversight to the contract change process	Plan Accepted	In Progress
M.6	The Project Management Office should implement enhanced analysis of its results in managing contract changes	Plan Accepted	In Progress
M.7	The Supply Chain and Project Management organizations should require contractors to provide key data that supports their plans and bids	Plan Accepted	In Progress
M.8	The Project Management Office should link the results of its contractor evaluation program to future bid evaluations and awards	Plan Accepted	Accepted/ Closed
N.3	Peoples Gas should substantially enhance the completeness and accuracy of AMRP performance information provided to the boards of directors, and ensure its consistency with information used by AMRP program management and provided to the small executive group with designated responsibility for program oversight	Plan Accepted	In Progress
P.2	Peoples Gas should provide for dedicated, executive level sponsorship of the three-year materials and equipment control initiatives program and provide a regular method of reporting progress to the Illinois Commerce Commission	Plan Accepted	Accepted/ Closed
R.1	Peoples Gas should establish a formal continuous improvement program under the Impact Team to promote a culture of and an emphasis on seeking innovations to improve efficiency in the installation of mains, services, and meters	Plan Accepted	Accepted/ Closed
R.3	Peoples Gas should assign a single manager to coordinate AMRP-level permitting improvement initiatives and to monitor and measure permitting for the duration of the program	Plan Accepted	Accepted/ Closed
S.1	Peoples Gas should invigorate its commitment to safety and permit compliance through designation of an executive level “champion,” and institute a comprehensive communications program, set aggressive goals and performance targets, perform regular measurement, perform root cause analysis, and develop responsive action plans	Plan Accepted	Accepted/ Closed
S.2	Peoples Gas should more closely examine the root causes and develop a responsive action plan to improve employee accident rates	Plan Accepted	Accepted/ Closed

T.3	Peoples Gas should develop a database of permit applications	Plan Accepted	Accepted/ Closed
T.4	Peoples Gas should work with the Chicago Department of Transportation to determine which existing and potential reports from the Department’s system are available and which could be provided to Peoples Gas	Plan Accepted	Accepted/ Closed
T.6	Peoples Gas should improve its database of citations	Plan Accepted	Accepted/ Closed
U.3	Peoples Gas should ensure that the Customer Information System fully supports AMRP communications processes	Plan Accepted	Accepted/ Closed
U.4	Peoples Gas should adequately resource the AMRP Complaints Handling Group, and should monitor complaint resolution performance and the root causes of customer complaints, for the purpose of identifying improvement opportunities	Plan Accepted	In Progress
U.5	Peoples Gas should measure on a regular basis: (a) customer satisfaction with AMRP, and (b) the effectiveness of AMRP Communications and Customer Service	Plan Accepted	In Progress

The next report sections address the results of the second calendar quarter’s monitoring efforts on these recommendations. The discussions begin with a statement of the recommendation made in our May 5, 2015 report and the conclusions underlying it.

C.2 – Third Party Damage

Peoples Gas should more thoroughly study and report on the causes of extremely high reports of contractor damage incidents.

The Company should perform a structured and analytically-based study of the cause and the safety risks imposed by contractor-caused damage. It should complete such a study within six months, and report its results to the Illinois Commerce Commission. The study should incorporate any proposed changes to prevention and mitigation efforts.

Underlying Conclusions

C.5 A number of other safety, reliability, and testing issues need to be considered in conjunction with or on top of current Peoples Gas practices in AMRP planning or execution.

Peoples Gas experiences an extraordinarily high rate of contractor-caused damage counts. The Company expresses a high degree of confidence that: (a) reporting distinctions account for its high numbers compared to those of others, and (b) it operates effective prevention and mitigation programs to address such damage. Replacement due to pipe condition, not third-party damage, comprises the scope of this engagement. Therefore, Liberty has not examined the validity of these two Company observations. However, confusion in break and repair numbers reported in Chapter F of this report and recognition that contractor damage presents both large safety risks and high costs warrant mention of this issue. The number of damage counts warrants attention by Peoples Gas and their causes need improved transparency to the Illinois Commerce Commission.

PGL Action Plan Steps

Item #	Task	Due Date	Actual
1	Establish Third Party Damage Prevention Improvement Committee - System Integrity Group, in partnership with Gas Operations management	12/31/15	Complete
2	Third Party Damage Recommendations – Third Party Damage Prevention Improvement Committee to design, prepare, and issue procedures, guidelines, communication, training, or other measures aimed at reducing third party damages	01/31/16 and on-going	Complete
3	System Integrity Group to review and assess current locating practices and watch and protect program, and recommend enhancements for implementation prior to next year's construction season	03/01/16	Complete
4	System Integrity Group to review, assess, and analyze resource needs	03/31/16	Complete
5	Near miss quarterly report	04/01/16 and annually	Complete
6	Near miss root cause analysis report	07/01/16 and annually	Complete

Expected Post-Implementation Conditions and Factors

Peoples Gas should see a decrease in the number and seriousness of contractor damages to their system as a result of improved staffing, more effective follow up, and institution of near miss reporting and root cause analysis.

Summary of Liberty's Steps to Verify Implementation

On June 8, 2016, Liberty met with PGL to discuss progress on this recommendation. In conjunction with these conversations Liberty reviewed close-out documents provided by the Company, including:

- Damage Prevention Committee meeting agendas
- 2016 Damage Prevention Report (updated weekly)
- Watch and Protect Daily Report
- 2016 YTD Near Misses Report

Observed Conditions and Factors

Peoples Gas has completed all six tasks of this recommendation intended to enhance and improve tracking and reporting of its contractor-caused damage rates. These steps addressed needs analysis, near miss reporting, and root cause investigations.

Liberty believes that with the additional focus on third party damage, Peoples Gas should be able to reduce the number and the consequences of these incidents.

Implementation Complete and Satisfactory?

Yes, the Company has met the intent of this recommendation. It is therefore appropriate to close this recommendation.

Remaining Gaps, Needs

None.

PGL Position

PGL believes it has fully implemented this recommendation.

Future Liberty Verification Activities

Data on damages and near miss reports will be provided annually, and reviewed for completeness to determine whether there continue to be systemic causes for some of the damages and if these causes can be addressed and eliminated.

General Observations

Now that PGL has implemented improved damage prevention and near miss tracking data, it should analyze the data for root causes to determine if additional measures can further reduce damages and near misses.

The following chart shows a downward trend in damage rates. However, PGL has room to improve. By comparison, similar urban utilities in New York have a substantially better damage rates at less than half the PGL rate.

2006 - 2014 Hits/1000

Year	Total Damages (Hits)	Total Locates	Hits/1,000
2006	1,044	69,885	14.9
2007	1,027	92,459	11.1
2008	943	92,765	10.3
2009	724	93,046	7.8
2010	735	91,201	8.1
2011	913	115,626	7.9
2012	1,156	161,666	7.2
2013	1,042	169,355	6.2
2014	1,099	176,226	6.2

C.4 – Low Pressures

Peoples Gas should examine the ability to address low pressure and single-contingency outage risks in the neighborhood program.

Peoples Gas should conduct a structured analysis of where low operating pressure and single contingency outage threats exist and match those locations to neighborhoods planned for work in the near term. To the extent that these two threats prove material in any neighborhood, Peoples Gas should consider the benefits of addressing them more promptly by moving the neighborhood involved up in priority order.

Underlying Conclusions

C.5 A number of other safety, reliability, and testing issues need to be considered in conjunction with or on top of current Peoples Gas practices in AMRP planning or execution.

Peoples Gas experiences an extraordinarily high rate of contractor-caused damage counts. The Company expresses a high degree of confidence that: (a) reporting distinctions account for its high numbers compared to those of others, and (b) it operates effective prevention and mitigation programs to address such damage. Replacement due to pipe condition, not third-party damage, comprises the scope of this engagement. Therefore, Liberty has not examined the validity of these two Company observations. However, confusion in break and repair numbers reported in Chapter F of this report and recognition that contractor damage presents both large safety risks and high costs warrant mention of this issue. The number of damage counts warrants attention by Peoples Gas and their causes need improved transparency to the Illinois Commerce Commission.

Similarly ensuring the operability of service valves has important safety and operations implications. The lack of a structured program for assessing operability does not conform to good utility practice.

Addressing system weaknesses identified through analysis of operating pressure and of single contingencies that can produce widespread outages comprise key elements in ensuring the provision of reliable and adequate services. The neighborhood construct work has the potential for resolving pressure and single-contingency issues, but it is not clear that Peoples Gas considers those issues directly in planning.

Limiting testing to current operating pressures on systems that generally should support operation at higher pressure unnecessarily constrains possible future upgrades, considering the difference in test requirements to verify operability at higher pressure.

PGL Action Plan Steps

Item #	Task	Due Date	Revised Date
1	Facilitate biweekly system status meeting (revision)	11/05/15	Complete
2	Facilitate weekly cold weather system status meetings during the winter months (revision)	01/04/16	Complete
3	Develop a live model that captures the day to day state of the system (revision)	04/01/16	Complete

4	Train shop engineers on how to use the live model to identify low pressure risks during a shutdown study	06/01/16	In Progress
5	Review and update engineering design standards defining limitations of temperature/pressure dependencies	08/01/16	In Progress
6	Produce a quarterly report to show low pressure and single contingency areas in comparison to the baseline	10/1/2016	In Progress
7	Develop the process and document a strategy to identify any deviations from the plan	10/1/2016	In Progress
8	Produce a project phasing summary sheet for the white paper to specify the temperature/pressure dependencies	12/1/2016	In Progress

Expected Post-Implementation Conditions and Factors

Before the onset of cold weather, PGL should have a contingency plan in place to address incomplete main replacement or pressure upgrade projects in neighborhoods with single source feeds.

Summary of Liberty’s Steps to Verify Implementation

The low-pressure plan will be reviewed in the 3Q16 and the 4Q16 depending on the onset of cold weather and cessation of construction. This plan review will highlight the areas that may have possible low pressures and single source supplies within some neighborhoods undergoing upgrading and main replacement.

Observed Conditions and Factors

Liberty has requested and received preliminary procedures and screen shots of an example of the new software representation of contingency planning to address changes in the implementation of neighborhood main replacement program due to unforeseen circumstances. These data requests confirm that PGL’s contingency planning procedures are workable and will provide the needed information to ensure all customers will receive reliable gas service if there is a change in the construction schedule.

Implementation Complete and Satisfactory?

Yes, Liberty considers this recommendation complete. Liberty will revisit this recommendation later in the year, after the construction season and with the onset of cold weather, to validate contingency planning outcomes.

Remaining Gaps, Needs

Fine-tuning of the report may be necessary to provide an additional level of confidence that there will be no low-pressure areas due to partial main replacements or upgrades.

PGL Position

PGL concurs with the closure of this recommendation.

Future Liberty Verification Activities

The low-pressure plan will be reviewed in the 3Q16 and the 4Q16 depending on the onset of cold weather and cessation of construction. This plan review will highlight the areas that may have possible low pressures and single source supplies within some neighborhoods undergoing upgrading and main replacement.

General Observations

None.

C.6 – Corrosion Leaks

Analyze and report on the precise nature and numbers of corrosion leaks, and determine whether protected and coated steel mains are experiencing corrosion leaks.

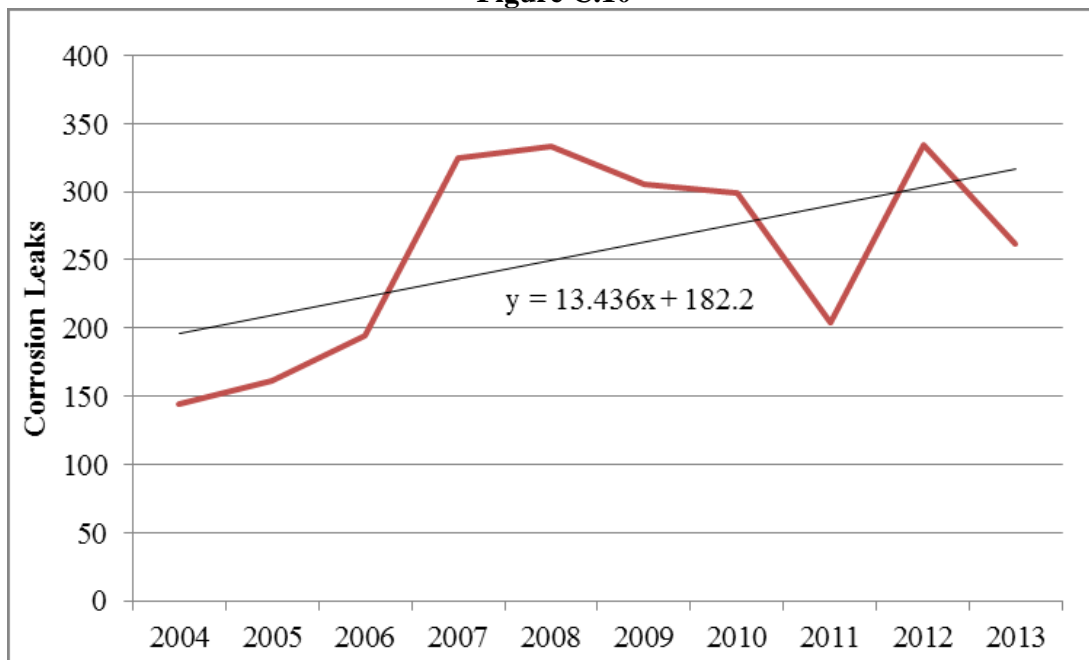
Reporting problems may explain anomalous data about corrosion leaks. In any event, Peoples Gas needs to verify sources of leaks in order to assess properly needed responses.

Underlying Conclusions

Peoples Gas reports a number of corrosion leaks that do not comport with materials common in its system.

Peoples Gas reports no bare steel main, but does report corrosion leaks. One would not expect reporting of leaks on plastic, cast iron or ductile iron to use corrosion as the classification. Liberty thus interprets the reported corrosion leaks as coming on bare steel services or on protected coated steel mains/services. The number of corrosion leaks shown in Figure C.10 causes concern. Peoples Gas believes that some of these corrosion leaks comprise pitting on cast iron, not cathodically protected steel mains.

Figure C.10



Another concern is that Peoples Gas reports 104 corrosion leaks on mains. Unless established otherwise by Peoples Gas, this observation means that Peoples Gas' protected coated mains are corroding. The industry does not usually experience a significant number of corrosion leaks on protected coated steel main, nor does the industry typically classify leaks on cast or ductile iron as corrosion. Graphitization is a form of cast iron corrosion; however, it is unusual for gas distribution companies to classify leaks on cast iron as corrosion.

PGL Action Plan Steps

Item #	Task	Due Date	Revised Date
1	Director Gas Operations & Maintenance to form team to review Leak Data	12/31/15	Complete
2	Define objectives and requirements for the Leak Data process and procedure improvements (if identified)	1/15/16	Complete
3	Design the Leak Data process and procedure improvements (if identified)	1/30/16	Complete
4	Prepare Leak Data process and procedure improvements (if identified)	2/15/16	Complete
5	Approve and issue process and procedure (if identified)	2/28/16	Complete
6	Provide orientation and training to project personnel on procedure	3/15/16	Complete
7	Document completion of the recommendation implementation (if identified)	4/1/16	6/1/16

Expected Post-Implementation Conditions and Factors

The number of corrosion leaks on cathodically protected mains and services should decrease due to proper reporting.

Summary of Liberty’s Steps to Verify Implementation

On June 8, 2016, Liberty met with PGL to discuss progress on this recommendation. In conjunction with these conversations Liberty reviewed close-out documents provided by the Company, including:

- Design the Lead Data process and procedure improvements
- Orientation and training material on the new procedures

Discussions with the Company and examination of the documentation confirm that PGL completed the six key tasks for this recommendation.

Observed Conditions and Factors

Peoples Gas must determine when it is appropriate to deliver refresher training on the proper completion of leak tickets.

Implementation Complete and Satisfactory?

PGL has completed implementation of this recommendation.

Remaining Gaps, Needs

None.

PGL Position

PGL agrees with the closure of this recommendation.

Future Liberty Verification Activities

In early 2017, Liberty will obtain the year-end number of leaks on cathodically protected mains and services to verify successful implementation.

General Observations

Peoples Gas has had an issue with leak reporting in the past. Emphasis on proper leak cause reporting may carryover and improve PGL's other leak reporting issues.

E.1 – Replace Project Execution Plan

Peoples Gas should complete a full replacement of the plan for management (the Project Execution Plan) addressing all key elements of AMRP management and control

A strong basis for the new document exists in the original Project Execution Plan. Liberty believes, however, that adding a more summary-level document to the replacement of the Plan would best serve to gain support and traction. In addition, Liberty recommends that the plan discuss a number of specific processes at a summary level:

- A cost estimating process that establishes a valid cost monitoring base and forecasts with confidence final program costs
- Scheduling that develops realistic schedules at all levels with appropriate details to support engineering, procurement, work planning, construction, and contractor activities
- Resource planning that employs staffing strategies, crew allocation, contractor management, training requirements, and productivity measurements
- A work management process that supports the facilitation of work from design to construction to completion
- A cost management program that promotes a culture of program cost control
- Cost reporting designed to precipitate corrective and improvement actions
- Scope control that identifies potential scope growth to minimize cost and schedule impacts
- Procurement strategies that take advantage of large purchases to obtain favorable pricing and supportive deliveries
- Contracting management that takes advantage of the magnitude and long-term nature of a mega-program to develop beneficial and creative relationships with contractors.

Underlying Conclusions

E.1 A strong first effort at instituting a plan for the management of the AMRP occurred in 2011, but fell into disuse after failing to gain traction.

A strong start in defining how to manage the AMRP came in 2011. Unfortunately, sound program ideas and some strong statements of objectives have not translated into a plan for management that effectively guides the AMRP today. Committing to such elements of the Project Execution Program's effectiveness and building upon the principles it established would have placed the program in a more desirable place than exists today. A number of possible inquiries may explain why the plan did not become a foundation element of AMRP management:

- Was the plan ahead of its time; i.e., put in place before the organization had the skills and capability to implement it?
- Was it too detailed, too complex?
- Did it cover too much ground?
- Was its content suitable for day-to-day reference?
- Did management properly introduce it, set good expectations for its use, and communicate a commitment to following it to the organization?
- Did its external authorship (Jacobs Engineering) detract from internal acceptance?

- Were its details prepared too soon; i.e., with insufficient time to build and develop the processes needed?
- Did management assign anyone the responsibility of maintaining and keeping it up to date?
- Did the commitments and instructions not fully align with management’s intentions, thus potentially invalidating the plan? (e.g., “Transformation of PGL from a reactive system maintenance organization to a state-of-the-art modern, progressive and proactive gas utility” does not appear to be a concept with which management agreed).

Answers to these questions would be speculative, but Liberty did find sufficient reason to conclude that a lack of management backing has played a major role. Words on paper alone do not produce results. A strong management commitment, regularly reinforced, must accompany them.

PGL Action Plan Steps

Item #	Task	Due Date
1	Identify team members and subject matter experts for each section as well as any training requirements for team members to effectively craft a PEP.	12/31/2015
2	Subject Matter/Component Plan Review of 2015 PEP and preliminary recommendations on all sections noted above.	1/31/2016
3	Project Directors affirm or redirect recommendations and adjustments	2/28/2016
4	First draft revisions due	4/30/2016
5	VP Construction approves revised PEP	5/31/2016
6	Annual validation process and potential peer project audits of compliance to the PEP	11/1/2016
7	Annual validation process and potential peer project audits of compliance to the PEP	11/1/2017
8	Annual validation process and potential peer project audits of compliance to the PEP	11/1/2018

Peoples Gas needs a Project Execution Plan (PEP) that is concise, easy to understand, followed across the organization, and supported by leadership. In order to accomplish this task, the Company initially planned to use an internal team to revise the existing PEP. After further review of the existing PEP, it was determined that the PEP would be a more valuable resource if created by the new leadership team, with support from an outside resource to coordinate the timely preparation of the new PEP. Peoples Gas contracted Ernst & Young (EY) to draft, review, and publish a new version of the PEP. EY is applying lessons learned from previous plans where possible and is developing the PEP by collaborating with the Company’s leadership to capture their input.

PGL completed the following key activities:

1. Drafted PEP table of contents
2. Reviewed and gained approval of department directors to proceed with those topics outlined in the table of contents

3. Drafted all sections of the PEP (Executive Overview, Governance, Project Management and Controls, Capital Work Sequence, Definitions, Abbreviations, References, and Appendices)
4. Reviewed and gained approval from department directors for all PEP sections on April 14
5. Distributed a draft PEP document to VP of Construction and various stakeholders across Peoples Gas on April 15
6. Conducted a PEP review session with Peoples Gas' stakeholders for May 5 by leveraging a collaborative software tool to crowd source comments and updated the PEP accordingly by implementing the feedback received
7. Issued final draft to VP of Construction and department directors
8. Included final round feedback from VP of Construction and directors
9. Incorporated feedback for PEP from executive management team in the Company.

In order to increase the level of acceptance and ownership of the PEP, PGL distributed the draft to over thirty manager- and director-level stakeholders. Accurately capturing input and feedback from such a large audience presented Peoples Gas with a challenging scenario. EY mitigated this challenge by leveraging a virtual collaborative crowd-sourcing platform called Think Tank, a process designed to efficiently engage participants in the same room or across different locations. The platform captures participants' input simultaneously, allowing for real-time discussions and resolution of issues, as they occur. This resulted in greater stakeholder alignment and acceptance of the document.

Expected Post-Implementation Conditions and Factors

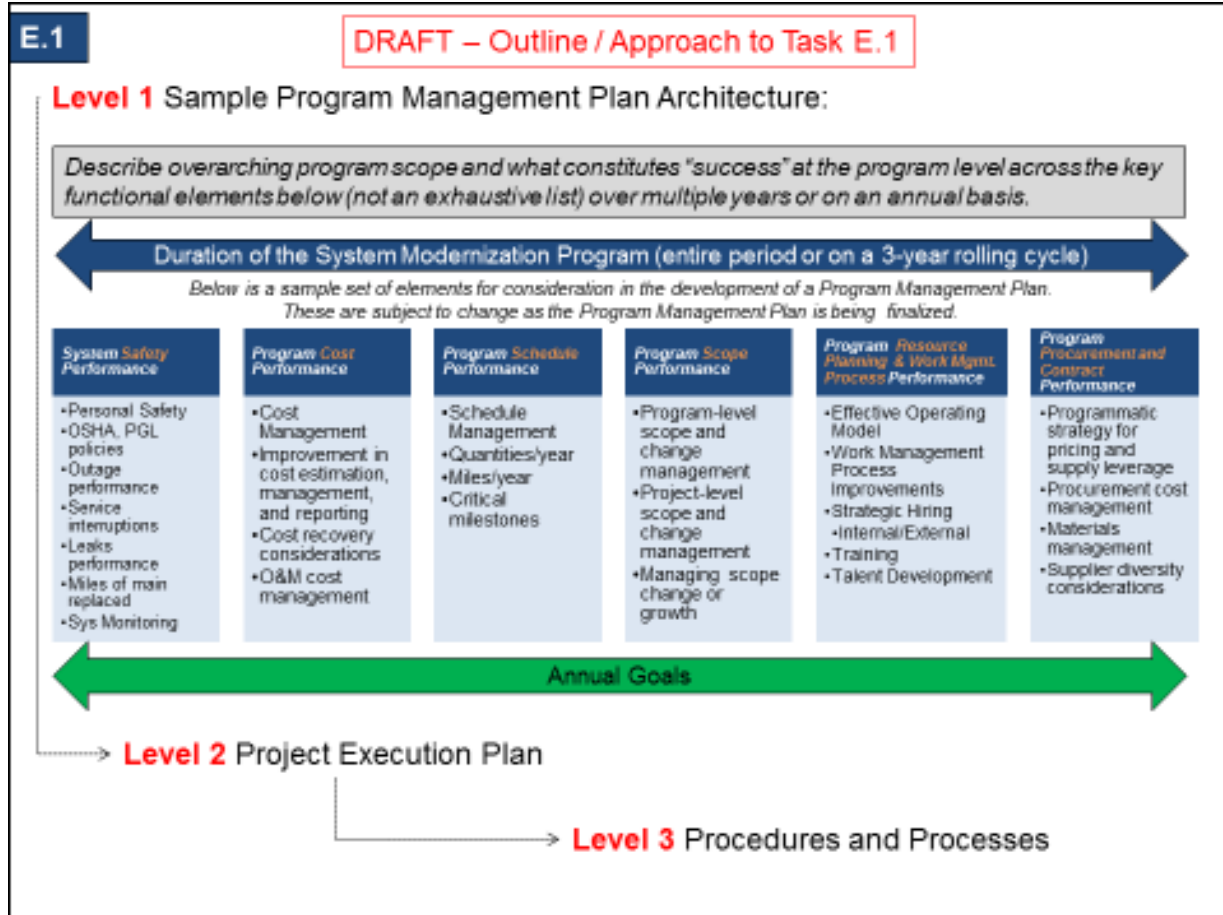
Peoples Gas recognizes that incorporating summary-level practicable process information can provide a streamlined and structured guidance document for effective control of project information, process, cost, schedule, and scope elements in the project environment. Providing the project team a succinctly structured guidance handbook helps ensure that individuals, groups, and the entire team understand the fit of their function with the master plan, process goals, their role in the process, and expectations. This guidance also provides the framework for detailed procedures and work plans. Accordingly, Peoples Gas developed a PEP that includes summary-level content on items such as Cost Estimating, Program/Project Schedule, Resource Planning, Work Management, Cost Management, Cost Reporting, Scope Control & Management, Procurement & Sourcing, and Contract Management.

Summary of Liberty's Steps to Verify Implementation

On June 8, 2016, Liberty met with the Peoples Gas Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed close-out documents provided by the Company, including:

- AMRP Project Execution Plan (PEP) Draft
- PEP Developmental Schedule
- PEP and Construction Procedure Schedule Update

On June 22, 2016 PGL submitted a preliminary version of Level 1 Program Management Plan Architecture for Liberty's review:



Observed Conditions and Factors

In general, we found the approach and development actions of the PEP by Peoples Gas appropriate and comprehensive. The only two additional topics Liberty recommended to include are resource planning and scope control. The Company has concurred, and the proposed Program Management Plan Architecture incorporates these topics. This architecture will provide a purposeful guidance and smooth transition for the next step to develop the PEP at Level 2 and subsequently all the procedures and processes at Level 3.

Implementation Complete and Satisfactory?

Yes. The Company's approach represents a suitable closeout of this recommendation.

Remaining Gaps, Needs

PGL should complete any outstanding portions of PEP.

PGL Position

Peoples Gas agrees with the closing of this recommendation.

Future Liberty Verification Activities

During the first quarter of 2017, Liberty will review the final version of the PEP for its completeness and comprehensiveness. We will also evaluate the annual validation and audit efforts regarding compliance to the PEP.

General Observations

None.

J.1 – Implementation of Two-Pronged Scope Control Process

Peoples Gas AMRP management should promptly design and implement a two-pronged scope control process: (a) at the program level, and (b) at the individual project level.

Scope control processes should contain, at a minimum, the following features:

- A baseline definition of scope: The program master plan should frame this process, supported by associated documents such as estimates and schedules. The baseline scope serves as a control foundation only if well documented. The documentation must define underlying assumptions completely and include them in the plan.
- A process for prompt identification of proposed changes: “Chapter K: Cost Estimating” proposes a cost trend report. Those proposing or discovering potential changes air them promptly. Immediate publication of proposed changes does not wait for details, cost estimates, or other, detailed supporting information. The process places a priority on prompt identification, so that management, if it chooses, can intervene before significant time passes, and options diminish.
- Technical analysis of proposed changes: Effective control requires an objective evaluation of proposed changes. Proposed changes often come in proposals by organizations with a high level of technical expertise. Proposals through an authoritative voice can tend to cause others to take them as “given.” Providing for technical analysis by a third party of commensurate stature supports sound analysis and alternative identification, which enables best-informed decision-making.
- Cost and schedule impact of proposed changes: Cost engineering personnel must evaluate changes for cost and schedule impact, and report them to management. Sponsoring organizations often underestimate these impacts. They either lack the ability to estimate them, or do not have awareness of the full implications that proposed changes may have for the project involved. Full and correct identification of the impact may lead to withdrawal of a proposed change. Even if a change occurs, management should understand impacts fully before allowing a change to proceed.
- Documentation of management’s decision-making process: Scope changes often serve as a principal driver of project cost increases. Management should demonstrate prudent handling of such changes. Making a full and complete record of management’s actions when learning of the proposed change and of management’s considerations in approving the change supports such demonstration.

Underlying Conclusions

J.1 The AMRP has not operated to date under an effective scope control program.

Liberty found concerns with AMRP project-level scope control on two levels. First, the focus on contracts obscures management visibility with respect to changes originated through other means. For example, changes made in engineering often require incorporation into bid documents. Contract change controls will not identify them. Second, the time delay between a change and its evolution into the contract change process eliminates the possibility of analysis and mitigation. A program like the AMRP requires a formal set of processes for the control of scope at the program and at the individual project levels. Scope control processes should focus on the early identification

of potential changes, structured evaluation of the need for them, determination of their schedule impacts, and alternatives for addressing the needs underlying them. A proper hierarchy of required approval levels should exist.

The AMRP lacks these scope control attributes, instead maintaining that control of contractor change requests is sufficient. The narrow approach that AMRP management has taken does not comport with program needs or with Liberty’s experience in the industry.

Liberty found no scope control processes at the overall program level. Some scope control processes do exist at the project level, but Liberty did not find them sufficient. The AMRP does seek to control scope at the project level, but only when changes directly affect a field contract. Other project-related changes (those not associated with an already-executed contract) do not face scope control processes. Also, by definition, changes associated with an already-executed contract may not come to management’s attention until after options for addressing them are substantially restricted, if not gone entirely.

At the program level, scope changes may have been included and partially documented in cost estimate updates. Liberty, however, found no indication that they underwent analysis and approval processes.

PGL Action Plan Steps

Item #	Task	Due Date
1	Internal review of current contract terms	Complete
1	Project Director to form Scope Control Task Lead	Complete
2	Define objectives and requirements for the Scope Control process and procedure	Complete
3	Design the Scope Control process and procedure	Complete
4	Prepare Scope Control process and procedure	Complete
5	Approve and issue Scope Control process and procedure	Complete
6	Provide orientation and training to project personnel on Scope Control process and procedure	5/15/2016
7	Document completion of the recommendation implementation	6/1/2016

The first step in implementing a scope control process is to identify clearly both the program and the project level scope. The new cost and schedule models developed by Burns & McDonnell (“B&M”) will form the long-term AMRP baseline (program). The project level scope will be developed and refined as neighborhoods are designed into phases. Both the project level and program level scope will feed into one another. As data and analysis become available, PGL must incorporate changes in project level scope into the overall program scope to identify trends or change initial assumptions. To establish the scope properly, management must identify all the potential cost driver groupings. Consistent and prompt reporting of these groupings is essential for scope control. For example, at a project level, one of the cost driver groupings may be the main installation. Subgroupings that make up the main installation grouping could include the contractor cost, material cost, company labor, company vehicles, restoration, and permit costs, etc. This enables proper tracking and reporting of all quantities and values. Once a deviation is identified, action can be taken to rectify the problem. Once the project level process is established it can then

be used to check against the program level scope and make recommendations and, ultimately, adjustments, as necessary.

After changes are identified a process of review and approvals must be enacted. PGL will formalize the scope control review and approval process after establishment of the grouping and tracking process. Initial considerations would have a varying level of review and approval depending on the magnitude of change, the cost and schedule impact of this change, whether at the program or project level, and consideration of other available alternatives. Following the review and approval process, the next step is to adequately document the changes from the original scope and adjust the project, program or both as necessary.

The Change Management Procedure applies to all changes identified for individual projects, programs, and annual budgets. This procedure is currently under development and in an ongoing review process.

PGL has designated the Project Controls Manager as the Scope Control Task Lead.

Expected Post-Implementation Conditions and Factors

Scope control processes should focus on the early identification of potential changes, structured evaluation of the need for the changes, determination of their schedule impacts, and alternatives for addressing the underlying needs. A proper hierarchy of required approval levels should exist.

Summary of Liberty's Steps to Verify Implementation

On June 9, 2016, Liberty met with the Peoples Gas Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed close-out document provided by the Company, including:

- Change Management Procedure Draft

On June 30, 2016, Peoples Gas submitted the following documents for Liberty to review:

- Task Support Document
- Capital Change Management Procedure Draft

Observed Conditions and Factors

The purpose of the Peoples Gas' original Change Management Procedure is to manage change requests. This procedure focuses more on how to monitor and manage changes after they incur instead of preventing the scope from expanding. PGL has not completed the scope control plan, a deliverable listed in the Recommendation Implementation Plan.

Liberty expressed this concern to Peoples Gas during the June 9 meeting. The Company committed to providing a scope control procedure to ensure it addressed the five essential components defined in the specific guidelines in the Liberty Audit Report; *i.e.*, the baseline definition of scope, the prompt identification of proposed change, technical analysis of the proposed change, the cost and schedule impacts of that change, and the documentation of management's decision-making process related to that change.

The revised Capital Change Management Procedure submitted on June 30 is an attempt to insert a new scope control concept into an existing procedure that originally was designed to track and manage contract changes. Hence, even though the wording on the purpose and scope section infer scope control intent (such as early identification, validation, and analysis), they exhibit some vagueness on the definition section, and reflect (in the procedure step section) the original concept of managing changes *after* they incur. If the scope control concept is intended to be included implicitly, it is not evident in the action steps of the procedure.

Implementation Complete and Satisfactory?

No, it is premature to close this recommendation, because PGL has not adequately addressed the five essential elements in this recommendation. There remains a lack of scope control attributes. In addition, Peoples Gas recognized the differentiation of managing scope at the program and project level in the approach section of the Recommendation Implementation Plan, but has not demonstrated this in the Capital Change Management procedure.

Remaining Gaps, Needs

Of the five essential elements of a scope control process, Peoples successfully identifies the AMRP latest cost estimate from the cost and schedule models developed by Burns & McDonnell as the long-term baseline at the program level. The establishment of scope definition at the project level, the prompt identification of proposed changes, the technical analysis, the resulting cost and schedule impact evaluation, the involvement of appropriate management review and the documentation of associated decision-making all require a fairly detailed and sophisticated process. Liberty believes there should be a separate scope control procedure that delineates all the scope control attributes. For example, the current Capital Change Management Procedure does not mention any hierarchy of required approval levels. The Scope Control Task Lead does not appear to play any role in terms of reviewing and challenging proposed changes. Another example is that Project Controls personnel appear to be involved only in tracking the changes, but not in providing cost and schedule impact evaluations of proposed changes.

PGL Position

PGL believes that the recommendation is complete.

Future Liberty Verification Activities

Liberty will review a revised version of the Capital Change Management Procedure, or, if Peoples Gas concurs, a separate Scope Control Procedure in the next quarter. Upon completion of this recommendation, Liberty plans to evaluate examples of successful scope control scenarios, complete with documentation of effective management decision-making.

General Observations

None.

L.4 – Cost Support Organization

Peoples Gas should establish a cost support organization that: (a) resides organizationally at a level and in a place consistent with treating cost management as a high program priority, (b) serves the cost management needs of all levels of management, (c) develops a force of skilled cost professionals and assures those skills are continuously improved, and (d) has overall accountability for the development and implementation of the cost management program.

Organizational decisions by necessity must be carefully tailored to the particular traits of the entity involved. One should therefore avoid prescriptive recommendations on how to structure an organization. That said, Liberty’s experience does lend itself to identifying approaches and methods that have worked in the past.

The most successful cost management organizations feature a high reporting level. Establishing organizational “clout” underscores the importance of cost and the credibility of the people responsible for the programs designed to manage it. Peoples Gas should place the cost management manager or cost director directly under the senior leader of the AMRP. In addition, the cost manager should have the flexibility to build reports as the cost organization sees fit. This empowerment will facilitate upward communication to executive management and the Board as the manager deems necessary. This placement of the cost management organization will leave no doubt as to its standing as a corporate priority. More importantly, analyses performed by the cost management organization must remain objective, candid, and free of influence from the organizations directly responsible for performing physical work.

In Liberty’s experience, a matrix approach to cost management can work. A matrix approach is often dictated when a specialized skill is needed in a local organization but will be difficult to acquire, nurture and retain in that organization. This may well be the case for the cost professionals Liberty envisions as appropriate for the AMRP. They are needed at the local level, and should report to the local manager. They could have a “dotted line” relationship back to the central cost management organization, which would be their organizational “home.” That organization would be responsible for their technical direction, supporting them with staff capabilities and providing training and career development.

Establishing a career path in cost management can be a valuable contributor to attracting and growing a strong cast of skilled cost professionals.

Underlying Conclusions

L.3 Peoples Gas lacks the cost management capability needed to support AMRP needs fully.

AMRP Management has adopted too narrow a scope for cost management. The cost group is tasked to manage the annual budget, process invoices, and manage cost reporting. The roles and responsibilities of cost management personnel do not have clear definition. Staffing is not sufficient to meet the requirements of a robustly and appropriately defined cost management function.

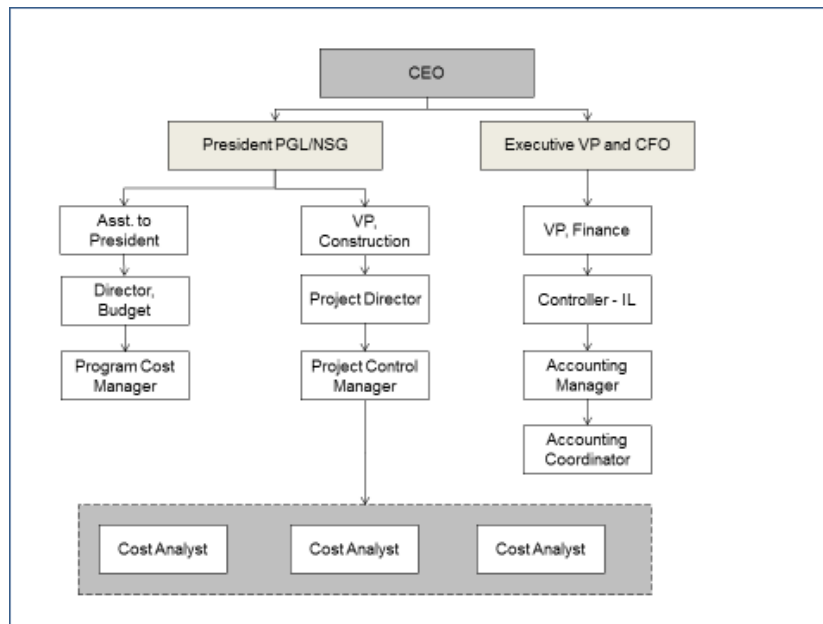
Peoples Gas needs to define key cost elements, identify tracking methods, set clear and challenging expectations for managers and cost support personnel, identify and use specific reporting

requirements, determine what is to be done with each report, establish and staff a much expanded cost management organization, and provide the skill sets required to make cost management effective. This baseline should exist for any large program, and has greater significance for one of the scope, size, and duration of the AMRP.

PGL Action Plan Steps

Item #	Task	Due Date
L.4.1	Develop new organizational structure	
L.4.2	Prepare and review annual Performance Measurement Plans (PMPs) with cost professionals related to the development and implementation of the cost management program	Complete
L.4.3	Establish responsibilities for cost professionals and communicate those responsibilities across the organization	Complete
L.4.4	Outline cost management needs of all levels of management	Complete
L.4.5	Prepare and review individual development plans (IDPs) with cost professionals	5/31/2016
L.4.6	Identify analysis and reporting to meet the need of all levels of management	6/30/2016
L.4.7	Prepare example career path for project controls organization	6/30/2016

Peoples Gas has instituted a cost support organization that resides in Project Controls, with supporting roles in Operations and Finance to assist the AMRP program proactively program. The following organizational chart shows the cost support organization and the hierarchy to the executive level.



PGL’s cost management structure will provide cost tracking, analysis, and action at both a project and program level. The direct AMRP cost support reports to the Vice President of Construction. Additional cost support comes from a Program Cost Manager who reports to the Director of Budgets for Peoples and North Shore, and from a corporate Controller, Accounting Manager, and

Accounting Coordinator that report to the Vice President and Controller in the Treasury Department. Under this organizational structure, ongoing cross-functional coordination with Accounting takes place to ensure that the reporting tools lend themselves to successful cost management for the large construction program. PGL has structured this organization to serve cost management needs at all levels of management.

As the organization is being filled with cost professionals, Peoples Gas has undertaken discussions with several engineering and consulting firms that specialize in Project Controls. Peoples Gas will include a skill assessment of individuals in the Project Controls organization, and make recommendations for development or improvement. In addition, the newly created Peoples Gas position of Project Controls Manager has responsibility for establishing expectations for the cost personnel and ensuring continual development of those cost professionals.

Although the philosophy of financial discipline is carried out throughout the company, overall accountability and implementation of the cost management plan of the AMRP will reside in the Project Controls Group.

Implementing a holistic cost management program begins with instituting a culture that maintains project cost as a top priority and ensures that this philosophy is instilled not only in the Project Controls Group, but with all the other departments involved with the AMRP. PGL is building a structure around this guiding principle.

Expected Post-Implementation Conditions and Factors

Establishing a cost support organization that reports to senior leaderships reinforces that cost is a priority and enhances the importance of a cost control philosophy. Having the cost support organization serve the needs of all levels of management provides the benefit of reporting flexibility and providing meaningful information to different departments and audiences within the organization. With this qualified group in place, plans and policies will identify the tools and procedures required to administer effectively the holistic cost management approach.

Summary of Liberty's Steps to Verify Implementation

On June 9, 2016, Liberty met with People Gas' Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed close-out documents provided by the Company, including:

- Organizational chart of Cost Support Group and the hierarchy to the executive level
- 2016 Performance Management Plans (PMPs)
- Project Controls Division of Responsibilities (DOR) Template

On June 28, Peoples Gas has submitted the following three documents for review:

- Cost Management – Reporting Needs, Deliverables, and Frequency
- Career Map – Project Management and Controls
- Individual Development Plan for Cost Analyst

Observed Conditions and Factors

Liberty found the approach and actions of Peoples Gas sufficient, assuming that cost analysts will continue to be under the purview of AMRP Project Controls Manager, and not re-assigned to the

VP of Finance. We want to ensure that cost management does not drift into an accounting-driven approach. Additionally, the cost analysts are currently located in the home base to get oriented about the new holistic cost management program. Eventually, PGL needs to rotate or re-assign these managers to the shop to learn the construction side of the business to gain better insights in their cost analyses.

Implementation Complete and Satisfactory?

Yes. PGL has designed and put into place all of the essential building blocks for an effective Cost Support Group to serve the cost management needs of the AMRP program. PGL has met the intent of this recommendation.

Remaining Gaps, Needs

The next challenge for Peoples Gas is to staff this Cost Support Group with qualified and experienced cost professionals. In the beginning, outside cost analysts or cost engineers will help shape the program and maintain cost support services. Eventually, Peoples Gas needs to staff this group with its own resources.

PGL Position

PGL concurs on the closing of this recommendation.

Future Liberty Verification Activities

During the first quarter of 2017, Liberty will review the operations and effectiveness of the Cost Support Group.

General Observations

None.

M.1 – Formal Strategy to Get Above-average Terms and Below-average Pricing

Peoples Gas should develop a formal strategy to ensure that the Company gets above-average terms and below-average pricing in view of the long-term opportunities afforded by the AMRP.

The efficiencies that can be realized by vendors in the AMRP environment, plus their motivation to secure and sustain long-term business, means that Peoples Gas has an advantageous position when it comes to negotiating terms. The Company should exert more effort towards defining where opportunities to gain procurement benefits exist, revising the procurement strategy accordingly.

Underlying Conclusions

M.2 There may be opportunities for a more aggressive effort in seeking benefits associated with the size and duration of the AMRP’s materials needs.

Peoples Gas offered only “multi-year procurements” as a strategy to seize the benefits of scale that should be expected from the AMRP. It may be possible to pursue other avenues for such benefits as well.

PGL Action Plan Steps

Item #	Task	Due Date
1	Determine initial terms, conditions, provisions to retain or eliminate for construction agreements	Complete
2	Implement interim contract terms and compensation structures for construction contractors for the 2016 season	Complete
3	Establish process to measure quality, customer services, costs, etc.	Complete

Over the past six months, the Contract Services (CS) organization has been interviewing and interacting with the seven installation contractors to determine their abilities, strengths and weaknesses, and willingness to continue providing services for the AMRP projects. All remain interested in working for the Company. For most of 2016, PGL will bid and issue work on a transactional basis, through competitive bidding on scopes of work or Bid Lettings. The new process requires that the project manager review upcoming, near term Bid Lettings internally on a weekly basis, grouped initially by location of the work, type of work, and schedule. By grouping in this manner, the contractors can offer pricing that incorporates efficiencies based on the planning of labor and equipment by location, timing, and scope of the work.

PGL plans to bid out all new work on a unit price or Time and Materials (T&M) basis. No lump sum compensation structures are anticipated. The unit price and T&M compensation structures should reduce change requests, and limit unexpected variations in the field execution. PGL has renegotiated with the current contractor to a unit price or T&M compensation structure for any work issued under a lump sum compensation structure but not started. PGL is rebidding some projects that have substantially changed in scope.

PGL will measure key performance behaviors through scorecards, including safety, quality, customer service, and supplier diversity. A portion of the contractor’s fee will be at risk/reward (currently between 2 and 3%). PGL will review terms and conditions currently in place for appropriateness before awarding work, and if needed, modify for the scope of work and schedule.

For most project work, project management reviews the scope and schedule. Before issuance of a Bid Letting, if needed, PGL will issue a Request for Information (RFI) to locate and select qualified contractors. Terms and conditions in the current master agreements are reviewed. If deemed appropriate, PGL will conduct bid review meetings and site visits. The internal project review committees will select a contractor following bid review meetings with the low bidders.

All Change Requests (which are mainly limited to site unknowns) undergo vetting by the CS group initially for scope, entitlement, price, and schedule. Project management will then review the request to determine if work should proceed, with scope, schedule, and budget review undertaken.

For the longer term strategy, a new version of unit prices is being established by breaking down the work into smaller, discrete, detailed activities before rolling out internally (engineering, project management, and construction) and the Contractors.

For 2017 and beyond, the Company anticipates aligning with two to four prime contractors for piping work. After PGL identifies work for an upcoming two to three-year period, it will obtain competitive unit prices and T&M rates. By grouping longer-term work, the Contractors will be able to schedule work more efficiently, and be more secure in their commitment of labor and equipment to the Peoples Gas' projects. This approach will result in better pricing and higher quality services.

Expected Post-Implementation Conditions and Factors

A strategy formulated by Peoples Gas to review, assess, and modify the existing agreements in the context of the Company's business goals and the contractor's motivation for continued business, would lower the risks and increase the rewards for all concerned. Long-term collaboration with contractors will also encourage Peoples Gas to significantly invest in the relationships, producing benefit from the expertise of contractor planning, scheduling, material supply capacity, and execution of work. This approach will enhance the procurement process and achieve favorable terms and pricing agreements.

Summary of Liberty's Steps to Verify Implementation

On June 8, 2016, Liberty met with Peoples Gas Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed close-out documents provided by the Company, including:

- Detailed Construction Specification Document
- Draft Scorecard
- Policies and Procedures – Table of Contents

On June 30, 2016, Peoples Gas submitted a Comparison of Unit Price Matrix Log to start to compile historical and current pricing to track progress on obtaining below average pricing for AMRP.

Observed Conditions and Factors

We found the approach and proposed actions of Peoples Gas in the right direction. Shifting from lump to unit pricing or T&M contracts was a positive step. Whether the steps taken will result in favorable terms and pricing remains to be seen. Liberty proposes that the Company establish a

historical summary of the terms and pricing of different work types and contract pricing structures, in order to analyze realization of above-average terms and below-average pricing. Peoples Gas concurs and has designed a Comparison of Unit Prices spreadsheet to track the negotiated unit pricing by contract and by type of work. The Contract Service team has obtained additional support individuals to compile the on-going data. The Projector Director and Contracts Manager will review this document on a quarterly basis.

Implementation Complete and Satisfactory?

Yes. Peoples Gas has completed its implementation in a timely fashion. It is appropriate to close this recommendation.

Remaining Gaps, Needs

None.

PGL Position

Peoples Gas agrees that the recommendation has been implemented.

Future Liberty Verification Activities

Liberty will review the historical pricing summary and validate that contract terms and pricing are moving in the favorable direction during the first quarter of 2017.

General Observations

None.

M.2 – Procurement Performance in Monthly Reports

Peoples Gas should regularly include in program monthly reports information showing procurement fulfillment and past due rates.

The large increase in material held past reported due dates that occurred in 2014 highlights the value in reporting information that permits management to determine the degree to which procurement activities support program work without unduly advancing procurement orders.

Underlying Conclusions

M.2 Procurement metrics support the availability of adequate material and equipment to support AMRP installation activities, but regular reporting of the available information does not take place.

Information showing procurement order fulfillment indicates rates consistent with ensuring material and equipment availability at levels that support program work. A metric that gives insight into materials kept on hand longer than expected shows a substantial amount, particularly in 2014. That metric highlights the need for regular reporting and analysis of both material equipment underage and overage.

PGL Action Plan Steps

Item #	Task	Due Date
1	Identify the Owner, frequency of reports, and the required distribution list	Complete
2	Meet with Peoples Gas leadership to identify key personnel accountable for day to day project management	Complete
2.a	Identify personnel who will use the Monthly Back Order Report	Complete
2.b	Identify personnel who will use the DWMS report	Complete
3	Start routing the report(s)	Complete

Currently, the Materials Management organization tracks two measures specific to all inventory materials ordered through the warehouse: Monthly Back-Order Report, and the Peoples Gas and North Shore Gas Past Due Distribution Work Management System (DWMS) reports.

The Monthly Back-Order Report is a measure of inventory availability for those items that PGL expects to be in stock and distributed through the warehouse. The Materials Management organization has committed to maintaining, or exceeding, a 95% fulfillment rate to Peoples Gas operations in an effort to ensure that material availability does not adversely affect project construction. Over the last three calendar years from 2013 to 2015, the fulfillment rate has been in excess of 96%. The appropriate construction management personnel responsible for overseeing AMRP projects review this report.

DWMS reports measure and record the details of the dollar value of on-hand inventory dedicated to projects with delayed construction start dates. This measure keys off the Requested Completion Dates provided through the Work Asset Management (WAM) system to the Advanced Planning System (APS) used by the Materials Management organization. The Requested Completion Date provides the Materials Management organization an approximate start date for projects in an effort

to keep inventory availability high, and investment in inventory low. The Materials Management organization regularly works with engineering and operations to update status of projects that have past due dates. The AMRP Construction Organization identifies the appropriate construction personnel who will be responsible for the projects and the Materials Management organization provides these reports on a monthly basis. The Past Due report provides data on the quantity and value of inventory in stock that has been reserved and set aside for projects where the construction start date is in the past. The appropriate construction management personnel responsible for managing AMRP projects to efficiently manage stranded inventory assets review this report.

In order to manage proactively material procurement and fulfillment rates, the Contract Services organization will have both Contract Specialists and Material Specialists in the field. They will report to a Lead Field Contract Specialist. The current plan has Peoples Gas procuring materials for the AMRP projects. A major component of the Material Specialist position will be to serve as a representation for the AMRP project work and to coordinate the material fulfillment between Peoples Gas and the contractor. The Material Specialist will reconcile all materials vouchered to the installed materials, scrap and returns, for each project.

In support of ensuring that materials are on hand for a project, PGL will route the above reports to the Lead Contract Specialist initially on a quarterly basis, with anticipation of reports monthly during the heavy construction months. Furthermore, as the process matures, additional reporting will be available to ensure the contractor's material needs are met. The necessary materials, including materials for any revised scope, as well as materials for High Pressure transmission projects, are available to the contractors to allow for smooth, on schedule execution of the project. It is the responsibility of both project management and contract services to ensure and to communicate to the Supply Chain the materials necessary for project execution.

PGL began routing these reports in May 2016 and only recently hired the Lead Contract Specialist onto the Contract Services team. Material Specialists are currently not in place, however, PGL is currently in the process of filling the open positions. After these two positions are fully functional, the Contract Services team will conduct a full overview of the material issuance process. This activity will include the creation and fulfillment of the project Bill of Materials, disbursement of materials, reconciliation, and project close out. The necessary materials, including materials for any revised scope, as well as materials for High Pressure transmission projects, are available to the contractors to allow for smooth and on schedule execution of the project. The Contract Services team works closely with the Project Managers and Project Controls, and Supply Chain to ensure the correct ordering and disbursement of materials per project schedule needs. Contract Services will perform a final reconciliation for each project that will include installed materials, scrap, and returned surplus materials to the storeroom.

Expected Post-Implementation Conditions and Factors

The inclusion of procurement performance information in the monthly AMRP reports, such as the Fulfillment Rate and Inventory on Hand Past Due information, will help management stay ahead of material needs, supply, and on time delivery across projects without purchasing too far in advance of the construction start-date.

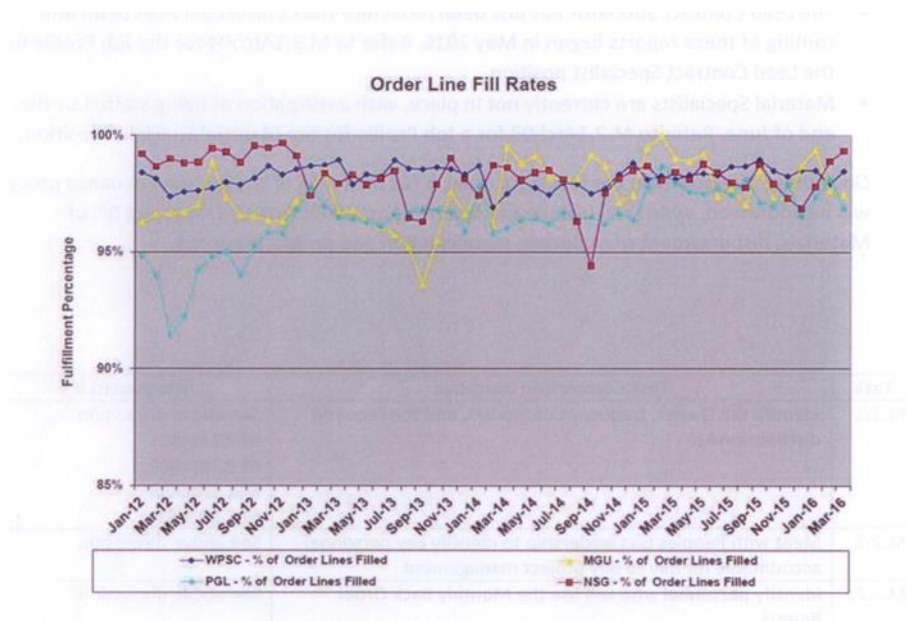
Summary of Liberty’s Steps to Verify Implementation

On June 8, 2016, Liberty met with the Peoples Gas Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed close-out documents provided by the Company, including:

- Monthly Back-Order Report
- Order Line Fill Rates Chart
- Peoples Gas and North Shore Gas Past Due Distribution Work Management System Report
- Job Profile – Material Specialist
- Job Profile – Lead Contract Specialist.

Observed Conditions and Factors

We previously suggested that the needs of the users should drive the content of reports, in this case AMRP construction and project management personnel. The proposed closeout narratives as revealed in the PGL Action Plan Steps continue to focus on the distribution of available reports. For example, the Order Fill Rates Chart shows Fulfillment Percentage by Wisconsin Public Service, Michigan Gas, Peoples Gas, and North Shore Gas, but no AMRP.



Liberty concurs that the information available in those two reports are essential for day-to-day operations. However, the concern we have is that Project Management should be telling Procurement what it needs to manage materials effectively instead of vice versa. That need, from the AMRP perspective, is what should be included in the monthly reports, at least on a quarterly basis.

Implementation Complete and Satisfactory?

Yes, Liberty considers the implementation by Peoples Gas marginally acceptable, but given the open positions, we will confirm in subsequent monitoring that they have been filled.

We suggest that management include in the monthly reports, at least on a quarterly basis, a chart showing AMRP fulfillment percentage and a table on AMRP inventory on-hand past due dates, accompanied by appropriate root-cause analysis. Peoples Gas concurs and will look for other meaningful measurements to include in the reports. It is appropriate to close this recommendation.

Remaining Gaps, Needs

PGL still needs to produce the AMRP-specific Fulfillment Chart and Inventory Table on items with past-due dates.

PGL Position

Peoples Gas concurs on the closure of this recommendation.

Future Liberty Verification Activities

Liberty will verify that the Company has filled the open Material Specialist positions. Liberty will review any new metrics in the monthly reports during the first quarter of 2017.

General Observations

None.

M.4 – Required Contract Administration Tasks

Peoples Gas should determine those contract administration tasks that it considers required, and assure that the Program Management Office executes those tasks.

AMRP management has not implemented important contract administration functions, as defined within standard contracts. The Company should review the contracts, decide which features warrant implementation, and then require the Project Management Office to implement them. The Company can remove from the standard contract features that it deems unnecessary.

Underlying Conclusions

M.5 The contract administration function, excluding change control, does not take a sufficiently broad view.

Discussions with key personnel revealed a lack of awareness of the contracts they have responsibility to administer. The contract sections discussed were important and basic to contract management, but key personnel were not aware of them.

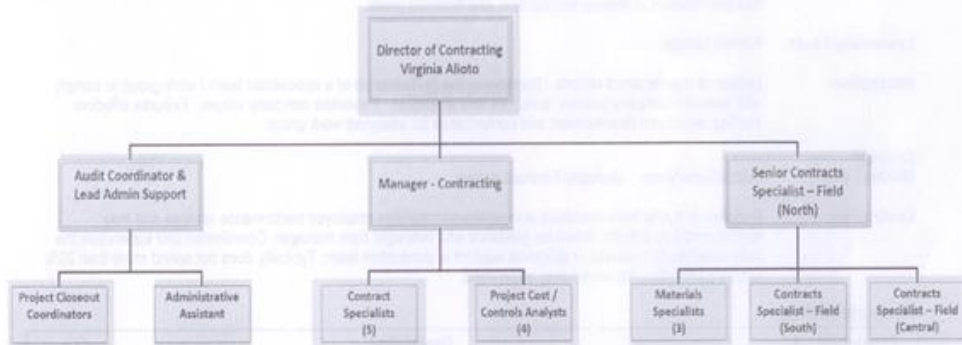
PGL Action Plan Steps

Item #	Task	Due Date
1	Internal review of current contract terms	Complete
2	Establish the contract deliverable list	Complete
3	Develop strategies, terms, and pricing structures for new contracts	Complete
4	Establish the Contract Services Organization	Complete

Peoples Gas reviewed all contract requirements to determine if changes were necessary. To achieve this goal, the Company reviewed all current contract documents and created a list of all requirements outlined in each of these documents. Then, recommendations were made on which provisions to keep, revise, or eliminate. Peoples Gas also plans to negotiate and revise contract language with the contractors to reflect the final agreed upon changes. PGL has provided the contractor list of deliverables in the revised documents. In addition, the Company has established reporting and periodic meetings, with planned attendance by both the Company and contractor personnel. Finally, the AMRP Construction Organization established a communication channel that may include a major project review committee and weekly meetings with focus groups to assess and monitor the contractors.

To ensure adequate resources to perform contract administration tasks, Peoples Gas places a high priority in establishing the Contract Service Organization to provide support for any services necessary to administer the contract services for the Capital Construction projects, both in the home office and in the field. This organization will strategize, resolve issues, verify, manage, administer, and close out projects in conjunction with engineering, project management, project controls, and construction teams.

Contract Services



The Director leads the organization, with the following direct reports: Contract Manager, Lead Field Contract Specialist, and the Lead Audit Coordinator. The Contract Manager has the home office Contract Specialists and the Cost Analysts' as direct reports; the Lead Field Contract Specialist has the other field Contract Specialists and Material Specialist as direct reports; and the Lead Audit Coordinator has the administrative assistants and Close-Out Coordinators as direct reports.

By having Contract Specialists and Material Specialists located in each of the shops, contract services will be available to support all aspects of the field-work and contract administration. The home office Contract Specialists will be aligned with each primary installation contractor, restoration contractor, and engineering firms. The Contract Specialists will determine the best form of agreement based on scope, schedule, and qualified contractors, as well as any updated or revised terms such as insurance coverage, indemnification, or warranty terms. They will work with the Project Managers to determine the above, as well as the need for pre-bid meetings, site visits, additional RFP requirements, awards and Notices to Proceed. They will also be responsible to ensure contract compliance, to conduct periodic meetings, to review contractor reports and performance scorecards, and to monitor expenditures and change orders.

The Cost Analysts will be responsible to support the Contract Specialists in developing and managing the RFP's process, checking all invoices for contract compliance and payment terms. In addition, they will be responsible for ensuring accurate accounting and verifying that work in the field is complete prior to payments.

The Contract Service Organization issues and trains every member of the group on Contract Services Policies, Procedures & Guidelines.

Expected Post-Implementation Conditions and Factors

The internal review of the current standard contract will help in evaluating if the contract terms and conditions are valuable and if the contract should be retained or revised. The preparation of the contract deliverable list to track and monitor contractor requirements in areas such as safety plans, quality plans, cost reporting (for example) is also a positive step to identify essential administrative tasks. The development of contract services policies, procedures, and guidelines provides a comprehensive approach to manage the contractors effectively. The established strategies, terms, and pricing for the new contracts are beginning to fall into place. Once the Contract Services Organization is fully staffed and trained, it will begin to realize the benefits of this recommendation.

Summary of Liberty's Steps to Verify Implementation

On June 8, 2016, Liberty met with Peoples Gas' Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed closeout documents provided by the Company, including:

- The Tables of Contents of People's Gas Contract Services Policies, Procedures and Guidelines
- Contract Services Organization Chart
- Job Profiles of Contracts Manager, Lead Contract Specialist
- Job Description of Audit Coordinator and Lead Administrative Support

Observed Conditions and Factors

We found the approach and actions of Peoples Gas sufficient, assuming that the Company has effectively reviewed and finalized the necessary features in the standard contracts. The evaluation of required administration tasks is thorough and comprehensive. To place a priority in establishing the Contract Services Organization is a right step. PGL's assignment of resources to the shop will ensure the provision of adequate services. It is also essential to perform audit functions periodically to confirm that employees are following policies and procedures.

Most of the Policies, Procedures and Guidelines have in place at PGL. We are confident that, with adequate resources, PGL will execute satisfactorily. We are concerned that the Contract Services Organization has recently formed and the staff is not yet fully qualified and trained. Over time, if the organization is fully staffed and trained, it should fully meet the intent of this recommendation.

Implementation Complete and Satisfactory?

Yes, assuming that PGL fully staffs and trains the contractor service organization by the end of June, the Company's approach represents a suitable closeout of this recommendation. Peoples Gas has established a comprehensive contract deliverable list, and developed sound strategies and pricing structures for the new contracts. However, given that positions remain open, Liberty will verify that the Company fills these positions.

Remaining Gaps, Needs

None.

PGL Position

Peoples Gas concurs on the closure of this recommendation.

Future Liberty Verification Activities

Liberty will verify that Peoples Gas appropriate fills the open positions. During the first quarter of 2017, Liberty will review a year-end assessment, performed by Peoples, regarding the effectiveness and comprehensiveness of the contract administrative tasks, as implemented by the new Contract Services Organization in the second half of 2016.

General Observations

None.

M.5 – Enhanced Management Oversight of Contract Change Process

Peoples Gas should apply a program of enhanced management oversight to the contract change process.

With the enormous dollar value of changes at issue, it is essential that the Company control, monitor, audit, and subject to the closest of management scrutiny the contract change process.

Underlying Conclusions

M.6 Management oversight of contract change management is too narrow.

AMRP management approved change orders totaling \$145 million. Despite the magnitude of this amount, Liberty observed little in the way of reporting on the results of the management program. Management reports change order costs monthly, but does not address whether those amounts are good or bad, expected or unexpected.

PGL Action Plan Steps

Item #	Task	Due Date
1	Processes, procedures, guidelines and policies are initially reviewed	Complete
2	Initial audit plan is developed	Complete
3	Initial implementation of audit plan	7/30/2016
4	M.1 Recommendation implemented	Complete
5	Metrics established	Complete
6	Processes, procedures, guidelines and policies are updated or amended, formally reviewed and approved, as appropriate.	Complete
7	Development and implementation of a process improvement plan	Complete

To enhance the management oversight of contract changes, Peoples Gas has adopted the following approach.

The company will review current processes, guidelines, policies, and procedures for contracting by Contract Services Organization. All RFPs, agreements and Change Orders will require review and approval by the Director of Contracting. The VP of Construction will also review all RFPs until revised procedures and policies are in place. Agreements and Change Orders will follow revised approval procedure and policy. PGL will revise processes, guidelines, policies and procedures for contracting to ensure senior management involvement. Additionally, the Company plans to establish and implement an audit plan for company and contractor compliance and to develop metrics to measure success of processes, guidelines, policies, and procedures. Lastly, PGL will formulate process improvement plans based on data derived from audits.

The Company has documented the revised RFP and Bid Evaluation processes in the newly drafted procedures. This summer, PGL will formally review, approve, and issue the new procedures to the newly staffed and trained Contract Services team.

Peoples Gas is revising the contract compensation structures from lump sum to unit price or time and material (“T&M”) agreements. On T&M agreements, the Company establishes either a not-to-exceed value or a Target Price with sharing of savings and overruns. The Contract Services team will request that T&M rates include equipment billed hourly, daily, weekly and monthly and that labor rates be substantiated by the appropriate local agreement wage details.

PGL will design scorecards to measure key performance behaviors, including safety, quality, customer service, and supplier diversity spend and activities. A portion of the contractor’s fee will be at risk/reward (currently between 2 and 3%). The Contract Services Team will review terms and conditions currently in place for appropriateness before it awards work, and if needed, modify for the scope of work and schedule.

To ensure the Contract Service Team members follow the new procedures, PGL has developed an audit procedure, with periodic audits to ensure compliance. In early 2017, after PGL staffs the team, work will proceed and audits will be conducted. A process improvement team will be formed to ensure any enhancements or changes to the processes are captured, documented and presented to the Director of Contracting and Contracts Manager for review and consideration.

Expected Post-Implementation Conditions and Factors

Applying a program of enhanced management oversight to the change process will ensure consistency of contract management. It will improve the enforcement of contract requirements, terms, and deliverables with contractors and will improve company compliance. Improved management oversight of the contract change process will also improve the accountability of contractors, vendors, and company in matters pertaining to contract changes.

Summary of Liberty’s Steps to Verify Implementation

On June 8, 2016, Liberty met with Peoples Gas’ Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed closeout documents provided by the Company, including:

- Listing of Contract Services Policies, Procedures & Guidelines
- Screenshot of the Review Purchase Order Information
- Quick Reference Guide for Accounts Payable Workflow/Approval
- Draft Contract Group Internal Audit Procedure
- Audit of Policies and Procedure Spreadsheet
- Draft Scorecard
- Contract Services Policies, Procedures & Guidelines Matrix

Observed Conditions and Factors

To date, PGL has instituted some positive features, including the audit and process improvement plans. The key focus of this recommendation, however, is the need for direct involvement in the oversight process by executive and senior management. During the closeout period, senior management has not yet approved the revised policies and procedures. PGL provided Liberty with only a listing and matrix of the Contract Services Policies, Procedures and Guidelines. PGL seeks to finalize and place them in service as soon as practical.

Implementation Complete and Satisfactory?

No, while Liberty found the PGL approach sufficient, recommendation closeout documents were not fully developed and PGL's proposed Change Order procedures and forms for contracting changes have not been amended to reflect the established Delegation of Authority.

Remaining Gaps, Needs

PGL should revise the Change Order Procedure for contract changes by Contract Services Organization to reflect the approval requirement by the Director of Contracting, the VP of Construction, and upper management, as mandated by established Delegation of Authority.

Likewise, PGL should revise the Request for Change Order Form to reflect the required approval by appropriate senior management for magnitude exceeding \$500K based on established Delegation of Authority.

Peoples Gas reports that it has established the metrics and scorecard to measure key performance behavior such as safety, quality, customer service, and supplier diversity. However, PGL provided only the Scorecard Cover Sheet for review and Liberty could not judge the content with respect to the intent to measure contract changes. A Scorecard sample was included in Recommendation M-8, but Contract Change Management was not one of the items measured. As a result, Liberty cannot confirm that PGL will monitor and measure contract changes with the established Scorecard. PGL should provide a fully developed scorecard to demonstrate how it would measure contract changes.

PGL Position

Peoples Gas suggests the recommendation is complete, with the exception of the implementation of the initial audit plan and process improvement plan, which PGL has developed.

Future Liberty Verification Activities

Implementation validation will proceed following the completion of this recommendation.

General Observations

None.

M.6 – Enhanced Analysis of Results of Managing Contract Changes

The Project Management Office should implement enhanced analysis of its results in managing contract changes.

It is not currently possible to draw performance conclusions on the contract change management program. The Project Management Office only publishes raw numbers; i.e., the total cost of contract changes. The resulting lack of context precludes substantial management understanding of how the program is performing. Analysis of the changes, their cause, their value versus expectations, and, most of all, analysis of whether or not they could or should have been avoided, provide the essential information that the Project Management Office is not currently providing.

Underlying Conclusions

M.7 The Company’s analysis of contract changes provides insufficient insight into the quality of performance.

Contract changes have proven very large, both on an absolute basis (\$145 million) and on a relative basis (152 percent). Management knows the general causes of such changes. Liberty did not find, however, analysis linking the changes to performance. Such analysis has importance in addressing potential areas of change, such as future contract terms and project estimates. Adding a routine level of suitable analysis is necessary to the effective management of contract change requests.

PGL Action Plan Steps

Item #	Task	Due Date
1	Tabulation of spend by major category of work	Complete
2	Cost Database installed and initial training completed	Complete
3	Initial analysis of Change Orders and determination of root causes	Complete
4	Initial review of analysis with supporting groups (engineering, construction, permitting, project management/project controls)	Complete
5	Tabulation of spend by each contractor	Complete
6	Estimating to work with Project Management to determine support for developing project budgets for change requests; software enhancement likely to support this effort	Complete
7	Review of Unifier, capabilities and interface with PeopleSoft	Complete
8	Discussions (follow up) with supporting groups (Construction, Engineering, and Project Management) on processes to reduce change orders	Complete
9	Develop strategies for process improvements	Complete
10	Begin to implement process changes	Complete
11	Approval of governance process established for Requisitions, Contracts, Field Orders, Change Orders, etc. for PeopleSoft and Unifier	Complete
12	Establish a process to track and trend change orders	Complete

The Contract Services team has reviewed and analyzed change orders from the past years. Several initiatives have begun the process to better manage contracts, inclusive of changes in scope. People Gas has procured, installed and are populating the HCSS (Heavy Bid) software to build the database by populating it with labor and equipment rates and material prices. The Company will develop associated crew loading capability by year-end. Thereafter, People Gas will be able to

project future costs and costs to complete. It is currently limited to a single knowledgeable “power user” (estimator) of the product.

The Peoples Gas Contract Services team has created a new 2016 Unit Price List for obtaining unit pricing from contractors on all phases of work. The process of building the HCSS cost database will be time consuming, but after all pay line activities have detailed associated costs built into the system, the data can be imported from the 2016 Unit Price List directly into the database.

The Contractor no longer initiates change requests. People Gas has revised the Change Request/Unifier processes accordingly and eliminated the “Field Order” process. The Field Order was originally implemented to allow for quick, low cost changes to be approved. Currently, PGL field or involved contractors provide change requests to the Contract Services team. Contract Services undertakes a review to understand the scope, determine if the contractor is entitled to a change in scope, and then determines the pricing, whether it is Time & Materials (T&M), unit price or lump sum. The Contract Service team member works closely with the Project Manager to review the scope and to determine if the out of scope work can be accomplished within the project schedule and budget, before proceeding with further approvals.

To manage the new processes, the Construction Teams (Contract Services, Construction, Project Manager, Project Controls, and Engineering), meet periodically to review new process improvements, discuss barriers, training, etc. and ultimately to improve internal customer services, decrease Change Orders and managing costs/budget. There are future planned changes, which will greatly reduce the steps in Unifier system, with possible elimination of the Unifier process, to allow for more timely processing, project management and cost controls.

PGL still issues RFPs on a transactional basis, but work is now being grouped by location, schedule, and type of work, rather than when the package was released from Engineering. Potential bidders are discussed prior to RFP issuance. For larger projects, PGL holds mandatory site visits and pre-bid meetings. Following proposals receipt, PGL holds a pre-award meeting with the potential successful bidder(s) to ensure understanding of the project and schedule. In addition, the Contract Services team addresses any potential emergent work and incorporates additional units or T&M rates into the agreement as needed.

The Contract Services team is reviewing RFPs, Requisitions, Contracts/Purchase Orders and invoices with senior management. The Contract Service procedures document approval levels of individuals and their respective approval amounts as defined by existing delegation of authority policy.

Expected Post-Implementation Conditions and Factors

The contract change process will be more efficient now that the Contract Services team works with project management, engineering, and construction departments, to analyze the reasons for contract change and determine more effective contracting strategies.

Summary of Liberty's Steps to Verify Implementation

On June 8, 2016, Liberty met with PGL's Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed close-out documents provided by PGL, including:

- Change Order Summary Documents
- Contractor Spend Spreadsheets
- HCSS Screen Shot
- Unifier update emails
- Proposed Approval Matrix
- Change Order Draft Procedure
- Change Order Request Form
- Change Order Requisition Requirements

Observed Conditions and Factors

Liberty found the approach of PGL sufficient. Currently, the deliverables are centering on building the processes or tools to acquire the necessary information, presumably to perform analysis. However, we are not sure when the analysis will be performed, and by whom (Contract Services staff, Project Controls personnel, or Project Manager).

Implementation Complete and Satisfactory?

No, PGL has not met the requirements of this recommendation. Close out documents do not sufficiently describe or demonstrate the enhanced analysis of Change Order Management performance defined by this recommendation.

Remaining Gaps, Needs

The monthly or periodic Change Order Analysis should provide management with a thorough and substantial understanding of how the Change Order Management program is performing. The analysis should not be focusing only on the magnitude and type of changes, but rather on insights regarding cause, value versus expectations, and, most of all need.

PGL Position

PGL suggests closure of this recommendation.

Future Liberty Verification Activities

Implementation validation will proceed following the completion of this recommendation.

General Observations

None.

M.7 – Requirement of Contractors to Provide Key Data

The Supply Chain and Project Management organizations should require contractors to provide key data that supports their plans and bids.

Required information should include:

- Clear descriptions of their assumptions
- Detailed resource plans (numbers and skills)
- Correlation of expenditures and labor hours to schedule
- Overtime and shiftwork plans
- Non-manual support (e.g., supervision, controls, administration, quality, safety) planned
- Any other data that the team believes will help them manage the contractor and future claims.

Underlying Conclusions

M.8 Peoples Gas does not require contractors to provide information necessary to facilitate contract management of performance and analysis of changes.

The view that risk lies with the contractor and that AMRP management therefore does not need contractor data misses an important opportunity. The magnitude of change orders makes clear that Peoples Gas bears substantial risk. Managing this risk makes it essential for the Company to understand the details behind bids. Tracking the same data later becomes essential for day-to-day management of AMRP projects. Sound project management monitors performance against a defined standard, which in this case is the contractor’s bid. It is not possible to manage performance without an understanding of the contractor’s initial assumptions. Management should be examining issues that include whether unit rates are consistent with the bid plan, whether staffing is consistent with the bid plan, whether quality goals are met, and whether adequate supervision is being provided. Addressing important management and oversight issues must become a critical Peoples Gas responsibility. Doing so requires a change from the view that such issues represent contractor responsibilities.

PGL Action Plan Steps

Item #	Task	Due Date
1	Begin discussions with internal groups on work sequence	Complete
2	Identify all projects awarded, not started for renegotiation	Complete
3	Draft processes for RFPs and Bid Evaluations	Complete
4	Meet with all firms and revise compensation structure for projects awarded	Complete
5	Review, finalize and train construction organization on new process for RFP and Bid Evaluations	Complete
6	Metrics established	Complete

The effort of Peoples Gas to obtain consistent data and input from contractors via more rigorous RFP development and review is summarized as follows:

PGL has discussed and documented a new construction sequence that will have a significant effect in managing changes in scope with the aim to reduce changes, and to place greater emphasis on planning and managing each project, while completing the work within the schedule and permits. The sequence will require field walking each project, vetting the scope with preliminary design drawings, vetting any changes after the documents have been reviewed by the Office of Underground Construction (OUC), with a final walk down including Construction, Engineering, Contract Services and Project Management representatives. These activities will generally take place prior to issuing Requests for Proposals (RFPs) for the work. Changes should then be limited to those underground obstructions that could not have been planned or uncovered during the initial reviews.

All projects awarded under the previous lump sum structures, but not started in the field, will be renegotiated to a unit price agreement.

Contract Services will issue all new RFPs either on a unit price or Time and Materials (T&M) basis. Prior to issuance of an RFP, a summary is provided to the Director of Contracting, which details the scope, bidder list, schedule, etc. for review and approval. The VP of Construction will review and approve all RFPs until Contract Services team procedures are approved and team members are trained. The new process is in use and current users have received training on an informal basis.

For projects under construction and with changes likely to occur, Peoples Gas has worked to incorporate all historical change orders into a single spreadsheet grouped by type of work and contractor (including years 2011 through 2015). While all work is a bit different, there are numerous similarities allowing for comparison of current unprocessed and future change requests.

Expected Post-Implementation Conditions and Factors

A thorough review of the proposal/bid, submitted in response to a well-formulated RFP, is important because it helps Peoples Gas and the Contractor to understand the scope of work, schedule, manpower/staffing loadings to support the work, and indirect supporting functions such as controls, quality, safety, etc. It also engenders a thorough review of assumptions and encourages a discussion of Peoples Gas' expectations for reporting and progress meetings.

Furthermore, a thorough review of the proposal via a bid review meeting and pre-job conferences with Project Management and Construction teams, defines work that is executable per the schedule and is beneficial to both Peoples Gas and the Contractor. Contract Services will review bids for price competitiveness by comparing the units or rates. The benefit will be substantially fewer change requests, increased value through competitive bidding of like units or rates, and a thorough understanding/transparency of what is included in the units or what is not.

Summary of Liberty's Steps to Verify Implementation

On June 8, 2016, Liberty met with Peoples Gas Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed close-out documents provided by the Company, including:

- Spreadsheet of Restructuring of Contracts Awarded / Not Started
- Evaluation of Proposals Procedure

- Bid Evaluation Template
- Bid Recommendation
- Non-award Letter
- Meeting Agendas
- Sample RFP Bid Letting Review letter.

In late June, Peoples Gas submitted an update on the approach to implement the recommendation.

Observed Conditions and Factors

We found the approach and actions of PGL insufficient. While the tasks that Peoples Gas listed in the Action Plan Steps address basic issues, Liberty cannot confirm that the six key parameters that we recommended are embedded in the details. PGL should provide more detail specification to ensure that contractors will supply all the data fully and accurately in a timely fashion.

During the June 8 meeting, PGL committed to revise and resubmit the close-out activities by addressing the six specific parameters outlined in the recommendation. Those parameters are a clear description of assumptions, detailed resource plans with numbers and skills, a correlation of expenditures and labor hours to schedule, overtime and shiftwork plans, non-manual support, and any other data that the team believes will help them manage the contractor and future claims. The materials submitted have failed to address our six parameters.

The update submitted in late June listed six items, mentioning several on-going procedures and activities, but did not clearly identify whether those six key parameters cover the required information that the contractors need to provide to support their plans and bids.

Implementation Complete and Satisfactory?

No, PGL has not met the intent of this recommendation. The subsequent submittal of closeout documents after the June 8 meeting failed to address our six parameters, point by point, as agreed upon in the meeting (refer to the “Liberty Visit June 2016 – Action Items” provided by PGL). Instead, the submittal included a matrix that listed all the Contract Services Policies, Procedures & Guidelines, and an existing “Request for Proposal Procedure”. Our review of this Procedure disclosed no reference to any of the six parameters that we recommended. It is therefore premature to close this recommendation.

Remaining Gaps, Needs

None.

PGL Position

PGL suggests closure of this recommendation.

Future Liberty Verification Activities

Implementation validation will proceed following the completion of this recommendation.

General Observations

None.

M.8 – Contractor Evaluation Link to Future Bids

The Project Management Office should link the results of its contractor evaluation program to future bid evaluations and awards.

The evaluation program is relatively new, just starting in 2014. In the future, its results should be applied to consideration of evaluated contractors for future bid awards.

Underlying Conclusions

M.9 Peoples Gas has a process for ongoing evaluation of contractors, but there is no indication of its use in the bid evaluation process.

It is important that Peoples Gas incorporate contractor performance into subsequent bid evaluations.

PGL Action Plan Steps

Item #	Task	Due Date
1	Develop Scorecards	Complete
2	Train team members on use/evaluation/scoring and make adjustments, as needed	Complete
3	Revise contracts and include the new terms and conditions in them	12/31/2016
4	Measure contractors' performance and evaluate the Scorecard for effectiveness. Make modifications as needed.	6/30/2017

The Contract Services team has developed the Scorecard for projects started in 2016. Defined AMRP projects will use this Scorecard. For 2016, the Scorecard will primarily measure contractor behaviors in Safety, Quality, and Customer Service. It will also include a measurement for supplier diversity participation. Contractors typically have 2 to 3% of their margin at risk/reward. Contract Services, in conjunction with the Project Manager and the Construction Project Manager, will rate each relevant attribute at the end of project for final determination of payout.

PGL is amending current contractor Master Agreements to include the use of a scorecard. PGL anticipates that in 2017 it will modify the scorecard to include actual ratings for safety and quality. PGL intends to measure Customer Service through several methods, which will include direct feedback or survey responses.

Expected Post-Implementation Conditions and Factors

An evaluation process that provides specific measurements on Contractor performance in the domains of safety, quality, customer service, cost, and schedule is a very valuable tool that benefits both Peoples Gas and the Contractor, by establishing clear expectations and central measurements. The ability to evaluate performance systematically will yield stronger performers, resolve issues that may otherwise linger, allow contractors to be proactive in addressing issues, and develop good performance characteristics. It also allows for setting realistic goals and standards for the future.

PGL has incorporated the Scorecard into the Master Agreement, determining which contractors will continue to work on AMRP projects. There will also be an incentive of 2 to 3% of the margin

at risk/reward for the contractors. Continuous improvement of contractor performance is to be expected.

Summary of Liberty's Steps to Verify Implementation

On June 8, 2016, Liberty met with PGL's Project Management & Controls Project Director to discuss actions taken and review implementation progress. Liberty reviewed close-out documents provided by PGL, including:

- Draft Scorecard.

Observed Conditions and Factors

Peoples Gas has reported establishing the metrics and scorecards to measure key performance behavior such as safety, quality, customer service, and supplier diversity. However, PGL has not yet included measurements on schedule and cost, two key criteria of excellent contractor performance.

We found the approach and actions of PGL sufficient, assuming cost and schedule measurements will be included in the near future.

Implementation Complete and Satisfactory?

Yes. PGL will measure performance of current contractors and consider performance in future bid evaluation. PGL has also offered an incentive for contractors to excel in performance. PGL has met the intent of this recommendation. It is therefore appropriate to close this recommendation.

Remaining Gaps, Needs

None.

PGL Position

PGL suggests closure of this recommendation.

Future Liberty Verification Activities

During the first quarter of 2017, Liberty will review Scorecards regarding the additions of the cost and schedule criteria. We will also validate that new contract awards are based on past contractor performance.

General Observations

None.

N.3 – Consistency of AMRP Information to the Board of Directors

Peoples Gas should substantially enhance the completeness and accuracy of AMRP performance information provided to the boards of directors, and ensure its consistency with information used by AMRP program management and provided to the small executive group with designated responsibility for program oversight.

Independent oversight of management performance for AMRP has come principally from the Integrys board, where Liberty found reporting and views more positive than warranted. Reporting on the project to the Integrys board was different from and more positive than the monthly reports at the AMRP management level.

Executive management has acknowledged important gaps in program management and control, and, as discussed in the preceding conclusions, created action plans for addressing them. Those plans, however, do not explicitly address improvement in the accuracy and consistency of project performance information at the board levels. The degree of disconnect in past reporting makes it appropriate for Company plans to identify specifically how consistency will be maintained. Reporting on a program like the AMRP must take place at many levels. It extends as far down as supervision of direct work, and all the way up to the board of director level.

Such reporting obviously should “roll up” in level of detail as one moves upward in the supervision/management/executive/director hierarchy. Supervisors in the field need to measure performance often at the crew level or across durations as short as a day, or even a shift. Information “depth” is thus paramount. Moreover, while their need for detail is extensive in their areas of responsibility, they may have little or no concern even for summary level information in other functional areas (information “breadth”). However, at higher levels in the hierarchy, the need for depth decreases as the need for breadth increases.

The difference in needs, however, does not mean that different sources for information or judgments about its significance should apply. To the contrary, the best run programs promote consistency in information reporting as it rolls up or down the hierarchy. Use of consistent sources of data and engagement by an experienced source of cost management resources form important elements in ensuring that data underpinnings remain consistent and accurate as data information flows through that hierarchy. Similarly, a suitably empowered and located cost management organization has substantial importance in ensuring that analysis of and judgments about performance data remain objective and transparent, particularly at higher levels. This report’s Chapter L: Cost Management discusses the importance of the empowerment aspect of the cost management function. For purposes of this chapter addressing oversight, the critical feature to consider is the need to address explicitly how information accuracy, summarization level, and objective, candid, and complete analysis will be maintained in order to support oversight needs.

Underlying Conclusions

N.6 There has not been sufficiently active board of director oversight and monitoring of the AMRP.

The utility board of directors nominally approves capital expenditure budgets, financings, and major contracts. As is typical of holding company structures, however, it does so through a board

consisting of inside (employee) executive and management leadership, with no representation from outsiders. AMRP update presentations came before the Peoples Gas board only rarely and they ceased after February 2012. These presentations focused on the formal approvals required as a matter of law, and not on program performance metrics. Thus, the utility board cannot be said to have operated as a source of close performance oversight, even when it was receiving occasional AMRP presentations. Liberty’s review of utility board minutes found mention of the AMRP on only four occasions, with the last being in September 2012.

Independent oversight of management performance in the typical holding company structure, as is the case for Integrys/Peoples Gas, comes from a parent board comprised predominantly of outsiders. It is neither surprising nor troubling to find utility subsidiary boards operating through internal executives and focusing on legal and pro forma governance requirements. That said, however, it becomes important to examine the parent board’s AMRP oversight role and performance, given that we did not find robust AMRP oversight at the utility board level.

Communication about AMRP project performance to the Integrys board has produced an overly positive view. Discussions with a director, for example, elicited the view of a program very well executed and managed. This report found, the Company’s own consultant has observed, and executive management (we believe) acknowledges, many important gaps in program management, control, and oversight. Management’s current acknowledgement is constructive, but demonstrates the variance between director perception and performance under the AMRP. The gap between actual program status and the picture presented to directors shows significant communications failure, whether it arises from a lack of management awareness, a lack of clear board expression of the need for better information, or some other cause. Liberty examined reporting at various levels to determine the consistency of information received at each. This review disclosed inconsistencies as program data moved “upward.” Liberty found instances where reporting on the project to the Integrys board appeared different and more positive than the monthly reports at the program and project management level.

PGL Action Plan Steps

Item #	Task	Due Date
1	Identify the reports that will be reviewed across the hierarchy in order to meet oversight requirements of the Peoples Gas Board and Corporate Management.	12/1/2015
2	Identify how reporting consistency will be maintained.	12/31/2015
3	Employ the ‘roll up’ and ‘roll down’ functionality in the reports for data views as appropriate at various management levels.	6/30/2016
4	Achieve the reporting system objectives mentioned above	6/30/2016

Peoples Gas recognizes how Project Controls Management will ensure that the project team and management are informed of program/project status on a timely basis. Methods include a reporting system that identifies deviation from the plan and budget. The two primary functions of this reporting system are to:

- Provide the Project Manager and the team with the means of continuously measuring and evaluating the progress against the goals and milestones, budget and schedule.

- Provide advance warning of undesirable trends, deviations, slippages, and other project problems as well as facilitating timely corrective action to be taken to minimize their impact on cost, schedule, and quality.

Peoples Gas understands that the achievement of the required objectives is contingent upon the completeness and accuracy of the information. The use of consistent sources of data and an engagement by an experienced source of cost management resources, form important elements in ensuring that data underpinnings remain consistent and accurate as data information flows through that hierarchy. Similarly, a suitably empowered and proactive cost management organization has substantial importance in ensuring that analysis of and judgments about performance data remain objective and transparent, particularly at higher levels.

Peoples Gas also acknowledges that continuous monitoring and reporting, as well as insightful and candid analysis is critical for management and executive reporting. The basis for this vital information is embedded throughout the various activities and performance metrics housed within this reporting system. PGL will assess schedule performance of active projects on a weekly and monthly basis, including a detailed variance report against current schedule. The following are in process to better monitor current project performance and develop broad program recovery plans: Program Plan, Integrated Project Schedule, Contractor Performance Metrics (Construction), Construction Finish Variance, Construction Recovery Plan, and Peoples Gas Shop Resources. The centralization of all these reports will ensure information consistency.

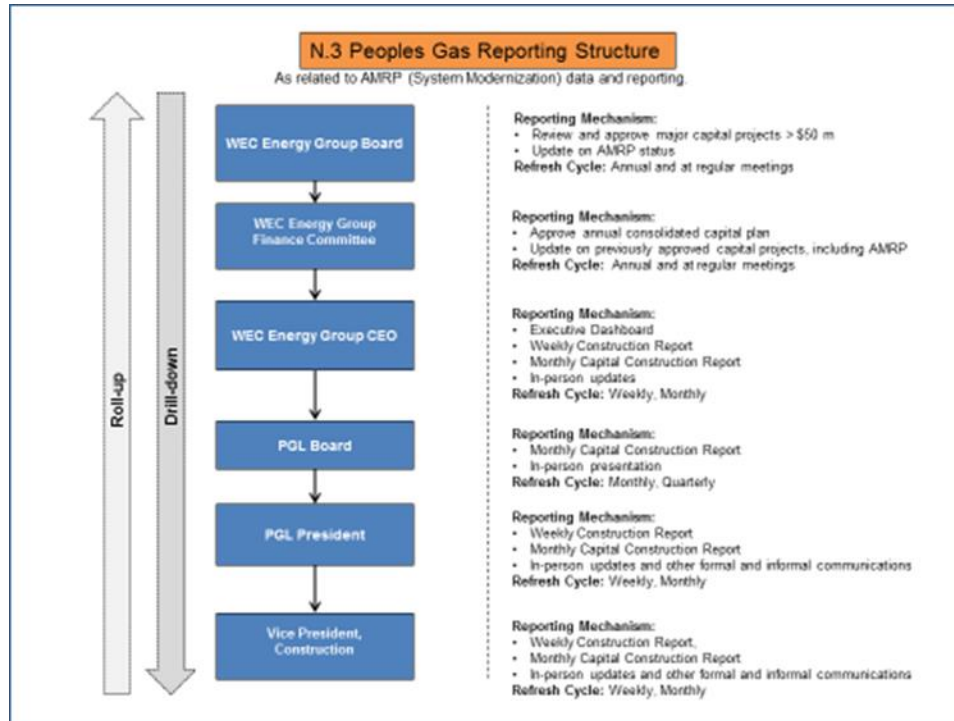
Expected Post-Implementation Conditions and Factors

PGL's development and deployment of an accurate, complete, and structured reporting mechanism will provide current, valid, and insightful data for timely and effective decision making across management levels. Improving the value of reported performance data will have near and long-term benefits for decisions that affect program success. Well-structured metrics and insightful reporting are vital to effective project management. Combining quality project reporting with active, engaged, and thoughtful oversight is critical to provide effective support to the project execution team, senior management, and the Peoples Gas Board.

Summary of Liberty's Steps to Verify Implementation

On June 8, 2016, Liberty met with Peoples Gas' Project Management & Controls Project Director to discuss actions taken and review implementation progress. PGL did not submit close-out documents for this recommendation.

Liberty requested Peoples Gas to re-examine the original recommendation to understand its intent. We also would like to review the right levels of insight versus the drill-down capability for senior executives. Peoples Gas plans to show Liberty the dashboards and the types of reports that executives are getting.



Observed Conditions and Factors

We found the approach of Peoples Gas seemed to be on the right track, but the action plan steps not suitably focused. Even though the first two tasks were reported as completed by the end of 2015, the Company has yet to respond to Liberty’s data requests on the reporting hierarchy identified in order to meet oversight requirements of the Board and on how reporting consistency is to be maintained. As for the data requests on the last two tasks that were supposed to be completed by the end of June on the “roll-up” and “roll-down” reporting functionality and reporting system objectives, the initial indication from the Company was that these data responses would be late.

At this juncture, Liberty is not sure what the eventual products for the executives and senior managers would become, whether adequate explanations would be included, what the data means, why management should care about the reports, and what actions the executives are supposed to take as a result of the information.

Implementation Complete and Satisfactory?

No. The action plan is still in progress, and this recommendation is not ready for close-out.

Remaining Gaps, Needs

Peoples Gas is still developing the “roll-up” and “roll-down” reporting functionality as well as finalizing the hierarchy of reports to be used for executive review.

PGL Position

PGL agrees that the recommendation is not quite ready for close-out this quarter.

Future Liberty Verification Activities

Not yet applicable.

General Observations

None.

P.2 – Executive Sponsorship of Materials & Equipment Control Initiatives

Peoples Gas should provide for dedicated, executive level sponsorship of the three-year materials and equipment control initiatives program and provide a regular method of reporting progress to the Illinois Commerce Commission

It is reasonable to conclude that the Company considers risks in the areas addressed by the initiatives to be relatively high and that those risks warrant a broad array of changes. With senior leadership already facing such a large AMRP change agenda, it becomes imperative to making a senior parent-level executive champion accountable for executing the initiatives. That executive should have accountability for gauging their level of acceptance and are guiding the personal conduct of executives, managers, and other employees. The executive should also be charged with reinforcing them as central to the values and culture of the enterprise. Such a champion should have the support of executive level parent (recognizing the material levels of AMRP support that come from Integrys organizations) and utility management to track and measure progress and to identify and resolve problems and progress lags quickly and effectively. The boards of directors should also require routine, continual tracking of status in implementing the initiatives. The boards should also demand from senior executive leadership methods for gauging the effectiveness of measures that have been put into place.

Integrity, or more particularly its importance in the performance of public service responsibilities, also make important regular reporting to the Illinois Commerce Commission and stakeholders of progress in implementing these initiatives.

Underlying Conclusions

P.4 The scope of the three-year materials and equipment control initiatives instigated in 2014, indicate a substantial need for improvements in those controls.

The nature and extent of the initiatives evidence a general need for enhancing controls. Moreover, Liberty’s field inspection team visited an AMRP materials storage site, where it encountered concerns about controls over access to materials used for unauthorized purposes. The scope and depth of the three-year program begun by Peoples Gas about a year ago is commendable. Its scope and length, however, make it appropriate to emphasize the need for careful attention and monitoring of progress in completing the materials and equipment initiatives promptly and in a manner designed to produce lasting improvement. This concern gains added impetus from the other initiatives being undertaken by the Company to improve AMRP management, oversight, and controls.

PGL Action Plan Steps

Item #	Task	Due Date
1	Implementation of Supply Chain reports	Completed
2	Conflict of interest training – including resources to disclose and discuss potential conflict of interest.	Completed
3	Assign an Executive Level sponsor for the material controls project	Completed
4	Annual certification of corporate policy training required by all employees	Completed
5	Solicit conflict of interest disclosures from employees	Completed

6	Physical Security video monitoring plan	Completed
7	Executive sponsor and business to update Regulatory Affairs to determine appropriate reporting to ICC	Completed
8	Implement auto cribs in PGL warehouses	Completed
9	Pre-employment ethics/integrity training plan or implementation	Completed
10	Implement corporate policy training, which includes key provisions of the Code of Business Conduct and other corporate policies (30 days post acquisition)	Completed

Expected Post-Implementation Conditions and Factors

None.

Summary of Liberty’s Steps to Verify Implementation

On June 8, 2016, Liberty met with PGL’s Assistant to the President to discuss actions taken and to review implementation progress. Liberty reviewed recommendation close-out documentation, including:

- Monthly Back Orders report (P.2.1 Atch01)
- Past Due DWMS Orders report (P.2.1 Atch02)
- Conflict of Interest Training Module for PGL employees (P.2.2 Atch01)
- Completion Report for the annual certification of corporate policy training (P.2.4 Atch01)
- Conflict of Interest Disclosure (P.2.5 Atch01)
- PGL/NSG Security Upgrade Project presentation (P.2.6 Atch01)
- Meeting minutes (P.2.7 Atch01)
- Auto cribs (P.2.8 Atch01 and 02)
- Customer Service new hire assessment (P.2.9 Atch01)
- Code of Business Conduct Training Module (P.2.10 Atch01)

Observed Conditions and Factors

PGL has completed all associated tasks and provided supporting deliverable documentation. PGL has assigned the WEC VP of Supply Chain and Fleet as the Executive Level sponsor for the material controls project.

Two key reports (Monthly Back Orders and Past Dues Orders) are generated monthly to help ensure that PGL/NSG and particularly the AMRP project have the necessary materials on hand to execute work as well as make sure that inventory levels are appropriate.

Employees have participated in and completed mandatory training relating to corporate policies, conflict of interest, and code of business conduct. Additionally, employees are required to sign conflict of interest disclosure forms following completion of training.

PGL Senior Management has approved the Security Upgrade Project as proposed. Construction will start following vendor selection. In May 2016, PGL implemented auto cribs at the South Shop. Full deployment to the other shops should be complete by September 2016.

PGL Regulatory Affairs met with the ICC recently to determine the need to meet periodically regarding the initiative. The ICC concluded that the actions PGL has implemented are satisfactory.

Implementation Complete and Satisfactory?

Yes.

Remaining Gaps, Needs

None.

PGL Position

The Company agrees that it has implemented this recommendation.

Future Liberty Verification Activities

Liberty will review status of the auto crib deployment following its expected completion during the 4th quarter of 2016. Liberty will also review status of the Security Upgrade Project in the beginning of 2017.

General Observations

None.

R.1 – Continuous Improvement

Peoples Gas should establish a formal continuous improvement program under the Impact Team to promote a culture of and an emphasis on seeking innovations to improve efficiency in the installation of mains, services, and meters.

A Company-established Impact Team that has been examining AMRP performance for some time generated a number of initiatives. Most have Integry's-wide application. This team, or a successor identified by new AMRP leadership, should focus more specifically on improvement opportunities created by the highly repetitive nature and the long duration of AMRP construction work (specifically with respect to main, service, and meter installations). Employees working on the AMRP likely form a primary, if not the most likely, source of identification of improvement initiatives. A formal continuous improvement program, complete with emphasis on quantifying costs and benefits will promote a cost awareness culture, and improve efficiency on an on-going basis.

Underlying Conclusions

R.1 Peoples Gas has implemented some improvements to work management practices, which focus on construction, but has not captured all opportunities for gaining efficiency in performing repetitive AMRP activities.

To take advantage of the long duration and repetitive nature of AMRP work, management needs to focus on opportunities to increase productivity in the installation of mains, services, and meters, which comprise the three largest components of overall costs. This report's Chapter I: Resource Planning addresses productivity monitoring. Moving past the construction ramp-up period and informed by experience to date, Peoples Gas should be at the point of producing close to maximum installation efficiency. For instance, Liberty expected the unit rate of work-hours per meter installed by the internal workforce would show improvement (i.e., reduction). Likewise, the unit cost of main installation and service installation should lower, or at least remain flat. Failure to monitor such rates, however, precludes a clear understanding of the direction of such rates over time. The Company needs to accompany improvements in monitoring such rates with efforts to examine the potential for process improvements that will produce efficiency gains.

PGL Action Plan Steps

Item #	Task	Due Date
1	Integrate Business Effectiveness (former "Team Impact") with Business Systems	Complete
2	Outline all process improvement projects and subsequent timelines	Complete
3	Create framework for long-term plan for system and process integration	Complete
4	Establish criteria for selecting and prioritizing projects	Complete
5	Establish means for tracking and reporting on projects	Complete
6	Ensure effectiveness of implemented projects through Validation Plans	Complete (Per PGL) Ongoing (Per Liberty)

This revised recommendation implementation plan now contains six tasks, versus the five previously proposed.

Expected Post-Implementation Conditions and Factors

Peoples Gas has recognized that they need to have program of continuous improvement that is partially driven by the owner organization and not only driven by the corporation. Thus future improvement projects will be sourced via discussions with operating organizations in order to best serve their needs and to improve on the ‘as is’ condition with regard to safety, cost, and system performance.

Summary of Liberty’s Steps to Verify Implementation

Liberty has reviewed the documentation on the various revisions to the implementation plan for this recommendation and the data requests on the implementation of the revised tasks.

Observed Conditions and Factors

Liberty and Peoples Gas spent considerable time fine-tuning this recommendation so that it would meet all of the necessary criteria and would be an achievable recommendation.

Implementation Complete and Satisfactory?

Yes, this recommendation is considered implemented and but verification will occur after the completion of the initial projects. PGL’s successful completion of the five tasks makes it appropriate to consider this recommendation implemented. The sixth task actually comprises an implementation effectiveness review of the type Liberty considers appropriate for post-implementation verification. That step will take place after completion of an improvement project, with that project to be selected by Liberty across the remainder of the implementation monitoring process.

Remaining Gaps, Needs

None.

PGL Position

The Company agrees that it has implemented this recommendation.

Future Liberty Verification Activities

Liberty will review the output of initial improvement projects completed during the monitoring period.

General Observations

This recommendation will be used to assist in the implementation of Recommendation F.1 that concerns data quality.

R.3 – Assign a Single Manager to Coordinate AMRP Permitting

Peoples Gas should assign a single manager to coordinate AMRP-level permitting improvement initiatives and to monitor and measure permitting for the duration of the program

Liberty made recommendations regarding permit coordination in this report’s Chapter S: Safety and Compliance. That chapter addressed improving communications with the City, reorganizing the External Affairs organization, creating a function dedicated to liaison with the City, improving performance, enhancing project planning, developing a database for permit applications, and integrating permitting into project scheduling. To ensure that these improvement needs get proper and timely attention, the AMRP team should assign at a senior program management level the responsibility to implement needed changes, and then to continue to resolve any permit coordination problems.

Underlying Conclusions

R.4 Permit coordination adversely affected progress in the field and imposed cost inefficiencies.

The AMRP Monthly Status Report contains a schedule section that summarizes schedule variances. The 2014 year-end report listed almost 80 percent of project phases as behind schedule. Many of these delays cited permit issues or still pending approvals from the City’s Office of Underground Construction as the cause. Schedule delays generally produce cost increases.

PGL Action Plan Steps

Item #	Task – Project Controls	Due Date
1	Centralize permitting function for AMRP work to one manager	Complete
3	Centralize all permitting coordination to one Manager/Leader	Complete

Expected Post-Implementation Conditions and Factors

None.

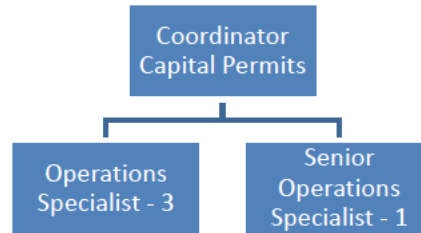
Summary of Liberty’s Steps to Verify Implementation

On June 8, 2016, Liberty met with PGL’s Director of Gas Operations Planning to discuss actions taken and review implementation progress. Liberty reviewed recommendation close-out documentation, including:

- Job Description for the Gas Operations Planning Manager
- Organization design chart for the AMRP Permitting Group

Observed Conditions and Factors

PGL has completed Tasks 1 and 2 and provided supporting deliverable documentation. As of January 1, 2016, Peoples Gas had centralized AMRP permitting responsibilities under the Construction Planning Manager (see chart below):



The roles and responsibilities of the permits coordinator are to manage the permitting workforce to ensure the following:

- Ensure permits are requested and received prior to construction start dates through coordination with Scheduling Group, AMRP Project Managers, and PGL District Shop Managers.
- Attend weekly meeting with CDOT permitting to discuss escalated permitting issues and permits pending.
- Coordinate with PGL District Shops and CDOT agencies to ensure proper documentation is submitted for the clearing of permits with identified “Holds”.
- Submittal of applications to IDOT for work to be performed on an IDOT street.
- Weekly reporting for permits received versus requested.

Implementation Complete and Satisfactory?

Yes.

Remaining Gaps, Needs

None.

PGL Position

The Company agrees that it has implemented this recommendation.

Future Liberty Verification Activities

None.

General Observations

None.

S.1 – Safety and Compliance Commitment

Peoples Gas should invigorate its commitment to safety and permit compliance through designation of an executive level “champion,” and institute a comprehensive communications program, set aggressive goals and performance targets, perform regular measurement, perform root cause analysis, and develop responsive action plans.

Integrays and Peoples Gas resources both must contribute to produce effective safety performance and compliance with permit requirements. The parent has engaged in a number of efforts to standardize operations across its entities. Liberty was unable to find a single, senior-level person responsible for championing AMRP safety and compliance. Increasing the focus on such performance through designating an executive lead with specific responsibility for the AMRP will materially assist in bringing greater structure and attention to safety and compliance performance. A strong executive-level communications program, including top leadership, is necessary to underscore the value that the Company places on such performance, its commitment to making tangible, measureable improvements in that performance, and its intention to hold people accountable for securing those improvements.

Underlying Conclusions

S.1 The number and the severity of the past violations and continuing self-reporting violations indicate a need for management to increase emphasis on compliance with requirements as an integral element of work performance.

Liberty’s work for the Illinois Commerce Commission some five years ago raised concerns about upper management’s focus on public safety. The emphasis that management places on instilling an aggressive commitment to safety remains an issue. Certainly, the scope and magnitude of AMRP work brings greater occasion for safety violations and incidents. That change, however, serves only to increase the importance that the Company must place and continue to emphasize regarding public and worker safety. The number and nature of Illinois Commerce Commission safety inspection items and self-reported violations show a continuing need for improvement. The reported violation data and the observation of Liberty’s field investigation team merit a re-examination of the approach and programs that assure public and worker safety.

PGL Action Plan Steps

Item #	Task	Due Date	Status (per PGL)
1	Root Cause Analysis Techniques training	Ongoing	Training started
2	Establish a Senior Safety Steering Committee	12/31/15	Complete
3	Review and enhance or consolidate existing Safety committees	12/31/15	Complete
4	Establish a Contractors Safety Committee	02/28/16	Complete
5	Review and update Safety Business Plan (refer to S.1 Attachment 2 for plan actions)	Ongoing basis	Ongoing

Expected Post-Implementation Conditions and Factors

We would expect to the safety record for both Peoples and the contractors working on Peoples infrastructure improvements to have an improvement, year after year, of their safety records. We

would also anticipate that if the newly reorganized and revitalized safety committees were effective to see a decrease in the severity of safety incidents

Summary of Liberty's Steps to Verify Implementation

Liberty examined written documentation demonstrating implementation of the new safety committee and the exceptions to the root cause training

Observed Conditions and Factors

Liberty has confirmed that PGL's safety committee is meeting and that lower level groups are focused on safety and compliance. Liberty reviewed PGL's new safety business plan.

Implementation Complete and Satisfactory?

Yes.

Remaining Gaps, Needs

None.

PGL Position

The Company agrees that the recommendation is complete.

Verification Activities

At year-end 2016, Liberty will review annual safety data.

General Observations

All five of the subtasks for this recommendation were implemented prior to or during the first half of 2016. These subtasks include root cause analysis techniques training, establishing a senior safety steering committee reporting to the safety champion (the Senior Vice President of Gas Operations), improving the existing safety committees, establishing a contractor safety committee, and continuously reviewing and updating the corporate/company safety business plan.

Responses to data requests (007-S.1a, -S.1b and attachments and 007-S.2b) verify the new safety champion, the make-up of the new senior safety steering committee, and the new safety business plan. DRs DB S.1.1 and DB S.1.3 verify that PGL has trained individuals on root cause analysis and has enhanced the existing safety committees.

S.2 – Safety Incident Improvements

S.2 Peoples Gas should more closely examine the root causes and develop a responsive action plan to improve employee accident rates. (Conclusion S.2)

Discussions between Liberty and senior leadership, which began last September, produced consensus on the need for specific organizational and programmatic change to address worker safety. The recommended emphasis on commitment to safety and making a senior executive responsible for championing a safety culture comprises an important first step.

Liberty recommends, and understands that the Company accepts, the need for immediate-term changes while longer-term efforts progress. Peoples Gas proposed provisionally to use American Gas Association Best Practices as a method to improve safety performance. Those practices undoubtedly have merit. Following them rigorously should make near term improvements in safety. The Association, however, considers them confidential. Therefore, a broad commitment to use them will not leave the two-year monitoring effort that follows this audit with a clear baseline for measuring the effectiveness of implementation.

Underlying Conclusions

S.2 The Peoples Gas employee accident rates on AMRP work exceed those of contractor personnel, and require an increased focus on safety.

An outside reviewer (PwC) also observed a lack of definition of and approved processes for quality management. PwC also observed that, while the safety program conformed to industry standards, its results did not meet expectations. Historical worker safety performance by Peoples Gas personnel has fallen significantly below that of AMRP contract resources, and significantly below the goals established for the program. Only exceptional (by comparison) contractor performance has served to keep overall safety performance at expected levels.

PGL Action Plan Steps

Item #	Task	Due Date	Revised Date
1	Establish a Senior Safety Steering Committee	12/31/15	Complete
2	Review and enhance of existing Safety committees	12/31/15	Complete
3	Establish a Contractors Safety Committee	02/28/16	Complete
4	Review and update Safety Business Plan (refer to S.1 Attachment 2 for plan actions)	Ongoing basis	Ongoing

Expected Post-Implementation Conditions and Factors

Similar to recommendation S.1, the subtasks on this recommendation call for implementation either prior to or during the first quarter of 2016, and mirror the subtasks of S.1 with the exception of the root cause analysis training.

Summary of Liberty’s Steps to Verify Implementation

DRs received to date show the same implementation as S.1 per DRs 007-S.2b and –S.1b. Additionally, DB S.2.2 is identical to DB S.1.3.

Observed Conditions and Factors

Liberty will monitor employee and contractor accident rates for improvements

Implementation Complete and Satisfactory?

Peoples Gas agrees that this recommendation is complete.

Remaining Gaps, Needs

None

PGL Position

Peoples Gas agrees with this recommendation

Future Liberty Verification Activities

Liberty will review the yearly accident rates.

General Observations

None

T.3 – Permit Application Database

Peoples Gas should develop a database of permit applications.

Peoples Gas cannot expect to rely on the Chicago Department of Transportation database as its management tool. The City designed it to meet the needs of the Chicago Department of Transportation’s permitting operation, not the business of constructing and maintaining a gas system. The Chicago Department of Transportation database is not under PGL's control, does not include a number of parameters that Peoples Gas should be tracking, and cannot be validated by the CompA spreadsheet database, which can be developed and implemented very quickly, on a going-forward basis, to improve the Company’s knowledge and control over its permitting operations. The permit database should include all permit applications to the Chicago Department of Transportation. From the Department’s perspective, the distinction between AMRP and non-AMRP work is not material.

Underlying Conclusions

T.3 The Peoples Gas methods for managing permit applications and compliance have not been adequate to meet the needs of the AMRP.

Liberty found that Peoples Gas does not maintain a database of permit applications. A proper tracking system, which such a database would support, should form a basic tool for managing a repetitive activity with thousands of individual elements.

PGL Action Plan Steps

Item	Task	Due Date
1	Creation of the restoration permit tracking spreadsheet	Completed
2	System Request changes for AWP for permitting	Completed
3	Implementation of AWP system changes	Completed
4	Documentation of changes in process and data as part of CDOT Hansen changes	Completed
5	System request for system reporting changes based upon Hansen changes	Completed
6	Documentation of Permit reporting available	Completed

Expected Post-Implementation Conditions and Factors

Liberty would expect to see improved coordination of permitting, fewer expired permits, and better tracking of permits placed on hold / permits that have been extended. PGL should keep the restoration permitting spreadsheet up-to-date and conduct periodic database audits.

Summary of Liberty’s Steps to Verify Implementation

On March 30, 2016, Liberty met with PGL to discuss actions taken and to review implementation progress. Liberty requested and reviewed documentation to describe efforts to-date, including:

- Permit Reporting & Permit Data Quality Plan
- Restoration Spreadsheet for Capital Restoration Permits
- Training materials to support the upgraded/revised CDOT Hansen system

- Revised procedures to create permit requests, update permit status (including holds and extensions).

On June 8, 2016, Liberty met with PGL to discuss actions taken since March 30th. Liberty requested and reviewed documentation to describe efforts to-date, including:

- Semi-Annual Permit Quality Process documentation (T.3.2Atch01)
- Document of Available Permit Reporting (T.3.6Atch01)
- Results from Semi-Annual Audit of Permitting Quality & Deficiency Corrective Plan to address issues (T.3_Atch03_Addendum)

Observed Conditions and Factors

CDOT has upgraded its permitting system (Hansen) and PGL has made most of the required changes to its AWP to accommodate CDOT changes. However, some of the new data fields have not been completely debugged (permit holds and extensions); PGL has implemented manual entry work-arounds until CDOT addresses the issues on its system. PGL is manually updating several AWP fields (holds and extensions) until CDOT resolves the issues.

PGL's IT group will implement a patch to the AWP system in July to integrate fully the restoration permitting data flow between PGL and CDOT. Until this patch has been completed and tested, a spreadsheet tracks restoration permit status.

PGL has also centralized permitting under one manager, to improve permit coordination and tracking. The manager in charge of permitting has responsibility for the permitting tracking database and the monthly audit of permitting data quality. PGL has conducted monthly data quality audits since December 2015. Liberty reviewed the results of these monthly audits (audit period December 2015 through April 2016) as well as the status of PGL's remediation efforts.

Implementation Complete and Satisfactory?

Yes, PGL has completed all Action Plan steps satisfactorily and provided the appropriate supporting documentation. PGL has met the intent of this recommendation. It is therefore appropriate to close this recommendation.

Remaining Gaps, Needs

None.

PGL Position

The Company agrees that implementation is complete.

Future Liberty Verification Activities

During the first quarter of 2017, Liberty will review permitting data quality audit results.

General Observations

None.

T.4 – CDOT Permit Reporting

Peoples Gas should work with the Chicago Department of Transportation to determine which existing and potential reports from the Department’s system are available and which could be provided to Peoples Gas.

Department representatives indicated to Liberty the existence of regular internal reports of permitting activity that it could provide to the Company. It may be able to create some custom reports as well. The Company would be well served to meet with the Department to explore that option, for the purposes of better managing its construction and operations and understanding the City’s perspective on Company activities. Reports from the City are not a substitute for a Company database, but will help until one is developed, and will enable Peoples Gas to see what the City sees on a continuing basis.

Underlying Conclusions

T.4. Peoples Gas does not take advantage of the reporting capabilities of the Chicago Department of Transportation system.

The City maintains an in-house database of permit applications from all entities. The City uses this database to coordinate and track permit-related activities and status. That system cannot substitute for the database that Peoples Gas needs, but it nevertheless generates a number of regular, periodic internal reports. Some of them may prove useful to AMRP management. Chicago Department of Transportation personnel expressed to Liberty a willingness to provide relevant reports to Peoples Gas through the Portal, and to consider providing custom reports. The Company has not made overtures to the City to take advantage of this potential tool for ensuring effective coordination with the City.

PGL Action Plan Steps

Item	Task	Due Date
1	Analyze AMRP data gaps for permitting and projects	Completed
2	Schedule regular on-going meetings with CDOT	Completed
3	CDOT Implementation of Hansen Upgraded Permit System	Completed
4	WAM (AWP) Permit data changes implemented	Completed
5	Analysis of CDOT Hansen System Reporting	Completed
6	Implementation of Reporting Changes from Analysis of CDOT Hansen System	Completed
7	Document completion of the recommendation implementation	Completed

Expected Post-Implementation Conditions and Factors

Liberty would expect ongoing permitting data reporting to support management of AMRP and non-AMRP permits, including monthly reporting of total permits requested, received, approval time, and completion as well as exception reports to identify upcoming permit expirations.

Summary of Liberty’s Steps to Verify Implementation

On June 8, 2016, Liberty met with the Manager of Gas Distribution Design to discuss actions taken and review implementation progress. Liberty discussed and reviewed deliverables for each task, including:

- Permit Quality Plan (T.4.3 Atch01).
- Hansen Training Presentation (T.4.3 Atch02).
- Permitting Ordering Procedures (T.4.4 Atch01).

Observed Conditions and Factors

PGL has established weekly meetings with CDOT to discuss permitting status and needs (Tuesday mornings). Attendees include representatives from CDOT's Permitting Office and PGL's Construction Planning Group.

CDOT completed implementation in December 2015. PGL has modified WAM (AWP – Arm Web Portal) to reflect CDOT's upgraded Hansen Permitting System. Discussions since the upgrade have determined that the new system eliminated all prior reporting capabilities of the CDOT system. Further discussions have determined that CDOT has no immediate plans to replicate prior reporting capabilities in the new system. Instead, CDOT has provided an online query capability, to which PGL has access. CDOT may consider system enhancements for reporting in 2017. PGL will continue to explore this in future upgrades to the CDOT system.

Additionally, PGL currently uses the CDOT DOT Maps tool to identify possible permitting conflicts with other agencies and moratorium restrictions. PGL is also providing AMRP project schedules as an input to the CDOT DOT Maps system to facilitate further coordination.

Implementation Complete and Satisfactory?

Yes, PGL has completed all Action Plan steps satisfactorily and provided the appropriate supporting documentation. PGL has met the intent of this recommendation. It is therefore appropriate to close this recommendation.

Remaining Gaps, Needs

None.

PGL Position

The Company agrees that it has implemented this recommendation.

Future Liberty Verification Activities

None.

General Observations

None.

T.6 – Citations Database

Peoples Gas should improve its database of citations.

Fundamentally, Peoples Gas needs to improve its management and construction practices to reduce dramatically the number of citations. However, in the meantime and even with a much reduced number of citations, a database is a fundamental management tool to provide feedback to management and to the Shops and crews as to how the Company is performing in complying with applicable rules and regulations. As with the permit database, the citations' database operates as a side record rather than a tool embedded in AMRP management processes.

Underlying Conclusions

T.6 Peoples Gas is cited extensively for non-compliance with Chicago Department of Transportation Rules and Regulations for both AMRP and non-AMRP work.

Peoples Gas provided a partial database of citations dating back to 2008. It demonstrates that the Company has been cited for violations many hundreds of times, perhaps over a thousand times per year by Chicago Department of Transportation inspectors. In 2013, total fines associated with citations approached a half million dollars for the year.

The results indicated by the citations dashboard in 2014 and the citation database, although incomplete, support the City's statements, summarized earlier, that restoration represents a chronic problem area. The largest numbers of violations appear to be related to restoration, followed by no permit or working outside the limitations of the permit.

PGL Action Plan Steps

Item	Task	Due Date
1	Project Director to form Citations Database implementation team	Completed
2	Define objectives and requirements for the Citations Database process	Completed
3	Design the Citations Database development and analysis approach	Completed
4	Prepare Citations Database process and procedures	Completed
5	Approve and issue Citations Database process and procedures	Completed
6	Provide Citations Database orientation and training to project personnel	Completed
7	Roll out Citations Database	Completed

Expected Post-Implementation Conditions and Factors

Liberty would expect to see improved coordination of permitting, fewer expired permits, and better tracking of permits placed on hold / permits that have been extended. Better coordination of permitting should reduce the number of citations received.

Summary of Liberty's Steps to Verify Implementation

On March 30, 2016, Liberty met with PGL to discuss actions taken and to review implementation progress. Liberty requested and reviewed the revised Citations Database process and procedures.

On June 8, 2016, Liberty met with the Manager of Gas Distribution Design to discuss actions taken and review implementation progress. Liberty discussed and reviewed deliverables for each task, including:

- Citations Training Presentation (T.6.6 Atch01).
- Citations Report (T.6.3 Atch02).

Observed Conditions and Factors

Citation tracking now employs a database to facilitate root cause analysis and management review. PGL has assigned responsibility for Citation tracking to the group responsible for permit tracking. This coordination should benefit PGL and AMRP going forward.

PGL has sufficiently documented the Citation Processes & Procedures. In early May 2016, PGL assigned responsibility for the administration of the Citations database and provided training on related processes and procedures.

Implementation Complete and Satisfactory?

Yes, PGL has completed all Action Plan steps satisfactorily and provided the appropriate supporting documentation. PGL has met the intent of this recommendation. It is therefore appropriate to close this recommendation.

Remaining Gaps, Needs

None.

PGL Position

The Company agrees that it has implemented this recommendation.

Future Liberty Verification Activities

Liberty will review the Citations Report in January 2017 to verify the effectiveness of the new processes.

General Observations

None.

U.3 –CIS Fully Supports AMRP Communications

Peoples Gas should ensure that the Customer Information System fully supports AMRP communications processes.

Integritys plans to replace Cfirst within the next two years. Whether or not that replacement takes place, Peoples Gas should make sure that its customer information system supports the AMRP communications process. In addition, Peoples Gas should integrate its customer information system with its fieldwork management system. Sound integration will allow Peoples Gas to track field progress and communicate that progress across the organization and to customers. This integration will eliminate the need to maintain a standalone database in the field and improve Customer Service responsiveness.

Underlying Conclusions

U.4 The Customer Service organization adequately supports the AMRP meter access appointment setting process, but the customer information system does not facilitate the process from end-to-end.

An external vendor, iQOR, has provided call center services for Peoples Gas since 2011. The Integritys Business Support Customer Service organization provides for training, handling escalated issues, and monitoring Call Center quality and performance. Customer service representatives receive AMRP-specific training to support inquiries, enable appointment setting, and handle complaints. Customers can schedule appointments for service markings or meter moves by calling a toll-free number that reaches the Contact Center. Representatives undergo training to ask for any special access instructions, inform customers of the process, and update the customer record as needed with owner information. After-hours, the Company’s telephone system (“IVR”) can assist callers in setting appointments and can take messages regarding the program. The website assists with AMRP communications, providing program brochures, frequently asked questions, and scheduling appointments.

Peoples Gas uses its customer information system (linked to a geographic information system) to identify accounts within a neighborhood scheduled for AMRP work. The system selects customers for a series of letters explaining the program and asking for assistance in moving the meter. The customer information system also records the sending of these letters to customers. However, Peoples Gas has not integrated the customer information system with its fieldwork management system. Field management thus implemented a standalone database to track letters to customers, manage appointment availability, confirm appointments, and track “in service” status after service activation by a Peoples Gas crew. However, the Customer Service organization and the Contact Center do not have access to this field database. The corporate information systems organization does not manage or support the work management database.

Integritys plans to replace Cfirst (the customer information system) within the next two years, as part of an initiative (called “the Integritys Customer Experience,” or “ICE”), to provide a common billing system for all operating companies.

PGL Action Plan Steps

Item	Task	Due Date
1	Identify changes to communications processes resulting from Item #1 in U.2 “Finalize construction sequence and adopt appropriate meter marking and meter move protocols.”	Completed
2	Finalize changes to communication process and implementation plan resulting from Item #2 in U.2 “Develop consistent and standardized methodology for setting and tracking both front end and back end customer appointments.”	Completed

PGL is conducting a pilot to test a streamlined process to relocate meters in conjunction with the AMRP main replacement program. PGL has streamlined the process to achieve operational efficiencies as well as reduce customer communication and coordination requirements. The current practice requires three customer appointments to mark and move a meter - - one to mark the service, one to set the meter bar, and a third to set the meter. The pilot program combines the first two site visits into one (marking service and setting the meter bar on the first trip).

In the pilot, field personnel will knock on doors in an attempt to schedule appointments for meter moves. Field personnel are provided scripted talking points to assist with the appointment setting process or a door hanger instructs customers to call the shop to set appointments. Shop personnel document the appointments that have been set each day, and update notes appropriately in the CIS.

Additionally, PGL has begun measuring customer satisfaction with the meter move process. PGL asks customers who have had their meter moved to provide feedback on their experience. Any complaints undergo follow-up and reporting through the We Care process.

Expected Post-Implementation Conditions and Factors

Liberty would expect to see appointments properly documented within Cfirst (short-term process). Additionally, customer complaints and confusion regarding appointments/missed appointments should decline with the new process.

Summary of Liberty’s Steps to Verify Implementation

On June 8, 2016, Liberty met with the Vice President of Customer Service and the Manager of Customer Communications to discuss actions taken and review implementation progress. Liberty discussed and reviewed deliverables for each task, including:

- Capital Construction Program Communications Plan (U.1.1 Atch01).
- AMRP Step-by-Step (U.3.1 Atch01).
- Beverly Pilot Communication Letter (U.3.1 Atch02).
- Draft AMRP Restoration Communication (U.3.1 Atch03).
- Meter Move Door Hanger (U.3.1 Atch04).
- AMRP Construction & Communications Process (U.3.2 Atch01).
- Customer Talking Points for Pilot Program (U.3.2 Atch02).
- PGL Daily We Care Report (U.3.2 Atch03).

Observed Conditions and Factors

PGL is piloting the short-term process in the Beverly 8 & 9 AMRP work, which began in April. The pilot involves moving approximately 150 meters and PGL expects to complete the pilot by the end of June 2016. Following the completion of the pilot, management will review results and reconfigure the process as needed. PGL has yet to define the long-term process.

PGL has scheduled implementation of its new customer information system (ICE) for early 2017. PGL will follow the same process with the new system until its new field automation system (PragmaCAD) has been fully implemented and integrated with ICE to support this process.

Implementation Complete and Satisfactory?

Yes, PGL has made sufficient program on both action items. PGL has met the intent of this recommendation. It is therefore appropriate to close this recommendation.

Remaining Gaps, Needs

None.

PGL Position

The Company agrees that it has implemented this recommendation.

Future Liberty Verification Activities

These action items represent a new communications and installation process that PGL is piloting within AMRP. Liberty will conduct verification activities on this new process on a quarterly basis throughout the remainder of the monitoring period. Verification activities will include review of We Care satisfaction results as well as associated customer complaint levels.

General Observations

None.

U.4 –Complaints Group Resourcing and Performance Monitoring

Peoples Gas should adequately resource the AMRP Complaints Handling Group, and should monitor complaint resolution performance and the root causes of customer complaints, for the purpose of identifying improvement opportunities.

The Construction Complaints group has insufficient staffing, considering the current volume of pending and active complaints. The group needs additional manpower to open and assign complaints. The Company should contact customers within 24 to 48 hours to acknowledge receipt of the complaint. Additionally, management should monitor complaint resolution to ensure proper investigation of issues and effective resolution by the responsible organizations. Peoples Gas should address this problem as soon as possible.

Peoples Gas should investigate the root cause of AMRP-related customer complaints, and complaints from other stakeholders. These root cause analyses should drive improvement in policy, procedure, protocol, and communication.

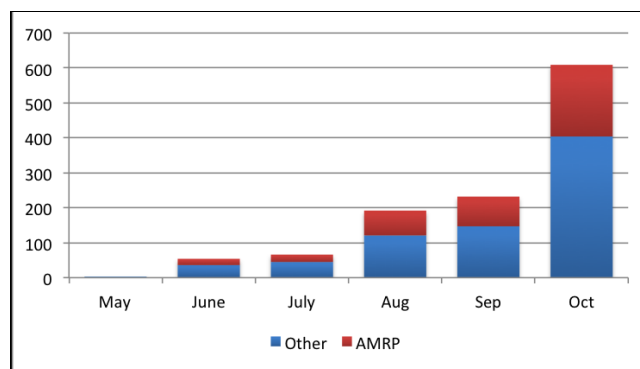
Underlying Conclusions

U.6 Peoples Gas’ AMRP complaint handling group is overwhelmed by the volume of complaints.

Peoples Gas established the Construction Complaints group (reporting to the Division Street Radio Room in Gas Operations) in 2012 to coordinate complaint resolution. Currently, this group has insufficient staff to handle the volume of complaints received. Peoples Gas policy stipulates that customers will be contacted within 24 to 48 hours of their complaints, in order to gather as much information as possible about the situation. However, the Construction Complaints Team has not met this goal.

As of October 31, 2014, 400 AMRP-related complaints remained pending. Peoples Gas received some of them in June 2014. The Company reports that those numbers have fallen by about half since then. The Construction Complaints group handles all construction complaints, including those related to the AMRP. A large number experience significant delay in being assigned for handling. Some customers who voiced complaints in June 2014 have not yet heard from a Peoples Gas complaint-handling representative.

Figure U.2: Unopened Construction Complaints (Awaiting Assignments)



A complaint may take weeks or months to resolve, depending upon its nature. As of last fall, it had taken an average of 103 days to resolve complaints. The Company reports that this duration has since fallen to 75 days. The pace of assignment and resolution is still unacceptable.

PGL Action Plan Steps

Item	Task	Due Date
1	Create and implement a new organizational structure with adequate resources for monitoring and resolving all PGL/NSG customer complaints	Complete
2	Appoint full time leaders and resources to the Customer Effectiveness team	Complete
3	Appoint full time Construction Support for Customer Effectiveness team	Complete
4	Appoint full time O&M Support for Customer Effectiveness team	In progress – Q3 2016
5	Evaluate the current customer complaint resolution process and design a new desired state with process efficiencies, consistency and adequate information/communication with the customer	In progress – Q3 2016
6	Document procedures for complaint resolution, including roles and responsibilities as well as reporting protocols for field support (Construction-Complete)	Complete
7	Evaluate and implement a central process or system to provide for better data analysis and oversight of all customer complaints regardless of how received or what activity it relates to	Complete
8	Organize a Cross Functional Task Force to resolve the Customer Complaint Backlog	Complete
9	Address all backlogged customer complaints	Complete
10	Communicate to customers for all 2015 carryover complaints due to restoration/weather	Complete
11	Close all remaining 2015 carryover customer complaints	In Progress (2 remaining)
12	Review effectiveness of field support organization as it relates to prompt resolution of customer complaints and ability to develop trend analysis and determine root cause	Complete
13	Develop metrics and continually reevaluate to ensure continuous improvement	Q1 2016; repeated at least annually

Expected Post-Implementation Conditions and Factors

Liberty would expect to see a fully-staffed organization operating under clear procedures, producing sustained, substantial reductions in complaint resolution time, detailed tracking of complaint sources, numbers, nature, and resolution times, and a focus on identifying and addressing the root causes of any adverse trends.

Summary of Liberty’s Steps to Verify Implementation

On March 30, 2016, Liberty met with the Manager of Customer Effectiveness to discuss actions taken and to review implementation progress. Liberty requested and reviewed documentation, including:

- Proposed PGL Field Complaints Dashboard
- Customer Letters addressing upcoming restoration (for outstanding complaints)

- PGL Field Complaints Backlog Status Dashboard
- Construction Complaints process (future).

On June 8, 2016, Liberty met with the Vice President of Customer Service to discuss actions taken and review implementation progress. Liberty discussed and reviewed deliverables for each task, including:

- Customer Effectiveness Organization Chart (U.4.8 Atch01).
- PGL Field Complaint Backlog Dashboard (U.4.9 Atch01).
- 2015 Backlog Restoration Letter (U.4.10 Atch01).
- Spring 2016 Restoration Letter (U.4.10 Atch02).
- PGL Complaints Dashboard (U.4.13 Atch01).
- AMRP Construction & Communications Process (U.3.2 Atch01).
- Customer Talking Points for Pilot Program (U.3.2 Atch02).
- PGL Daily We Care Report (U.3.2 Atch03)

Following the meeting in early June, PGL provided a copy of the “Complaint Design Document” which describes PGL’s initial ideas for a central complaint repository.

Observed Conditions and Factors

In the fall of 2015, PGL established a team to address the backlog of customer complaints. Liberty discussed with PGL changes in employee ability to resolve small claims. The Company has reduced the 2015 complaint backlog to two outstanding claims, which await settlement.

PGL has three dedicated resources in place within Construction to deal with complaints. Additionally, PGL is in the process of hiring three Customer Service Managers and three Customer Service Supervisors within the Operations & Maintenance groups. In total, nine individuals will be available to handle and resolve any future AMRP or Construction-related complaints. As of June 8th, the three O&M Customer Service Supervisors had been selected, but were not in place.

PGL created the Customer Effectiveness organization to monitor complaints (Company-wide) and ensure proper resolution. Customer Effectiveness reports to PGL Strategy & Performance, which reports directly to PGL’s President.

PGL has charged Customer Effectiveness to make sure the “voice of the customer” is heard throughout PGL. In addition to managing customer complaints, Customer Effectiveness administers the “We Care” customer satisfaction initiative, and holds weekly “dissatisfied meetings” to discuss We Care results with all business units. We Care currently surveys customers who have had a meter marking appointment or a meter moved as part of AMRP to better understand satisfaction/dissatisfaction with that process. Currently, the weekly We Care Dissatisfied Customers meeting does not discuss Construction Complaints.

Customer Effectiveness has set up a SharePoint site as a central repository for customer complaints received through the We Care Program, Construction, AMRP, Customer Claims, ICC, and the Customer Contact Center. PGL is still developing the SharePoint site to gather customer feedback

and input. Additionally, the Customer Effectiveness Group is in the process of designing a methodology to conduct root cause analysis of the central complaint repository. However, design work is in the early stages and PGL has yet to settle on the tools to conduct the analysis and reporting and how the organization will use this information to improve operations.

Implementation Complete and Satisfactory?

No, Liberty does not concur with the Company's request to close this recommendation. While PGL has addressed the 2015 complaint backlog (as of June 2016), the complaint resolution, tracking, root cause analysis and reporting has not been fully defined.

Remaining Gaps, Needs

PGL's complaint resolution process is not fully defined or operational.

PGL Position

The Company has requested closure this recommendation.

Future Liberty Verification Activities

Implementation validation will proceed following the completion of this recommendation.

General Observations

None.

U.5 – Customer Satisfaction with AMRP

Peoples Gas should measure on a regular basis: (a) customer satisfaction with AMRP, and (b) the effectiveness of AMRP Communications and Customer Service.

Peoples Gas should begin measuring customer satisfaction with the AMRP process. An AMRP project can extend over weeks and months. Peoples Gas should measure satisfaction for individual components of the process, such as customer letters, program information, website, appointment setting, service marking, service installation, meter installation, and restoration.

Peoples Gas should measure and track satisfaction with program components to identify opportunities to improve the customer experience and internal policies and procedures.

In order to measure the effectiveness of AMRP Communications and Customer Service, Peoples Gas needs to identify and routinely chart performance against specific metrics. These metrics should include, but not be limited to, customer satisfaction, complaints per customer, missed or late appointments (by Peoples Gas), average time to respond to inquiries and complaints, and time to resolve complaints. Performance should be trended and reported along with other Project Management Office metrics on a weekly or monthly basis throughout the life of the program.

Underlying Conclusions

U.7 Peoples Gas does not measure the AMRP customer experience.

Peoples Gas routinely measures transactional customer service, both in the Contact Center and in the field. The Company also participates in the JD Power and Associates Residential Customer Satisfaction program. However, the Company does not, specifically track customer satisfaction with AMRP-related work.

Peoples Gas attempted to measure satisfaction with AMRP very early in the program. It discontinued measurement, citing difficulties due to the length of the AMRP customer experience. Months can pass between construction and restoration. Peoples Gas is not measuring customer satisfaction with the AMRP program.

PGL Action Plan Steps

Item	Task	Due Date
1	Begin making calls to customers who have had an AMRP Service Marking Appointment	Completed/Ongoing
2	Begin making calls to customers who have had an AMRP Meter Move Appointment*	Completed/Ongoing
3	Begin analysis to track trends, investigate them and put process improvements in place.	Completed/Ongoing
4	Formalize and report meaningful metrics that measure customer satisfaction; continually update	Completed/Ongoing
5	Track, separate out, measure and report on AMRP specific complaints pertaining to appointments and scheduling	Completed/Ongoing
6	Begin making calls to customers who have had their property restored as part of AMRP	06/30/16

Expected Post-Implementation Conditions and Factors

Liberty would expect to see clear procedures defining the measurement, analysis, and reporting customer satisfaction with AMRP and the effectiveness of AMRP communications and customer service.

Summary of Liberty’s Steps to Verify Implementation

On June 8, 2016, Liberty met with the Vice President of Customer Service to discuss actions taken and to review implementation progress. Liberty discussed and reviewed the PGL Daily We Care Report (U.5.2 Atch01 and Atch02). Following the onsite meeting, PGL provided a sample report of Customer Dissatisfaction Root/Cause analysis of We Care results.

Observed Conditions and Factors

The Customer Effectiveness organization has responsibility for the monitoring and oversight of PGL customer satisfaction. Customer Effectiveness reports to PGL Strategy & Performance, which reports directly to PGL’s President. Customer Effectiveness administers the “We Care” customer satisfaction initiative and holds weekly “dissatisfied meetings” to discuss We Care results with all business units. We Care currently surveys customers who have had a meter marking appointment or a meter moved as part of AMRP to better understand satisfaction/dissatisfaction with that process.

The We Care program began surveying satisfaction with AMRP service marking last fall. During 1Q 2016, We Care began surveying customer satisfaction with AMRP-related meter moves. PGL has not begun surveying customers regarding satisfaction with AMRP restoration efforts.

Implementation Complete and Satisfactory?

No, Liberty does not concur with the Company’s request to close this recommendation. PGL has not designed or implemented Item 6.

Remaining Gaps, Needs

PGL’s process to measure customer satisfaction with AMRP-related activities is underway but not fully implemented. PGL has not begun measuring satisfaction with AMRP restoration activities. AMRP Restoration complaints make up the majority of construction complaints received. PGL should design and implement surveying to gather customer feedback on this process.

PGL Position

The Company has requested to close this recommendation.

Future Liberty Verification Activities

Implementation validation will proceed following the completion of this recommendation.

General Observations

None.

Appendix A: Recommendation Status

Rec. #	Recommendation	Previous Status	Current Status
C.1	Peoples Gas should include as an element of the neighborhood work planning process an evaluation of the merits of taking an exception to the double decking approach	Plan Accepted	
C.2	Peoples Gas should more thoroughly study and report on the causes of extremely high reports of contactor damage incidents	Plan Accepted	Accepted/ Closed
C.3	Peoples Gas should undertake measures to verify the operability of external service shutoff valves	Plan Accepted	Accepted/ Closed
C.4	Peoples Gas should examine the ability to address low pressure and single-contingency outage risks in the neighborhood program	Plan Accepted	Accepted/ Closed
C.5	Peoples Gas should test both services and mains to 100 psig	Plan Accepted	Accepted/ Closed
C.6	Analyze and report on the precise nature and numbers of corrosion leaks, and determine whether protected and coated steel mains are experiencing corrosion leaks	Plan Accepted	Accepted/ Closed
D.1	As part of the new planning effort now underway, Peoples Gas should provide a clear and unambiguous description of the AMRP, including quantities for all parameters important to management of the project	Plan Accepted	Accepted/ Closed
D.2	Peoples Gas should accompany regularly reported performance data with insightful analysis in order to make the data immediately meaningful to management oversight and supportive of timely and responsive improvement and corrective initiatives and activities	Plan Accepted	
D.3	Peoples Gas should provide a realistic schedule assessment based on an effective program plan	Plan Accepted	
D.4	Peoples Gas should prepare a soundly derived, detailed resource plan and provide for full coordination between the annual budget and resulting resource requirements	Plan Accepted	
D.5	In light of apparent decreases in productivity, Peoples Gas should promptly complete an analysis of productivity associated with the installation of meters	Deleted	
D.6	Peoples Gas should promptly complete a new program cost estimate consistent with good estimating practices	Plan Accepted	Accepted/ Closed
E.1	Peoples Gas should complete a full replacement of the plan for management (the project execution plan) addressing all key elements of AMRP management and control	Plan Accepted	Accepted/ Closed

E.2	Current developmental plans for a new Project Execution Plan should specifically address prior failures and how they will be avoided in the new plan	Pending	Accepted/ Closed
E.3	Peoples Gas should prepare a long-term AMRP management resource plan that specifically addresses (a) requisite skills needed both on an immediate and on a longer term basis; (b) current gaps in internal capabilities; (c) the optimum balance of owner versus contractor personnel; (d) acquisition and development of resources; and (e) succession plans	Plan Accepted	
E.4	Peoples Gas should move toward a project organization that makes significantly more use of dedicated resources under a strong project manager approach	Pending	Rejected/ Closed
E.5	Peoples Gas should prepare a specification for a new program management function, correcting the weaknesses in the current process	Plan Accepted	Accepted/ Closed
E.6	Peoples Gas should assign a project manager to most, if not all, AMRP neighborhood projects	Plan Accepted	Partially Rejected/ Closed
F.1	Peoples Gas should develop, staff, and implement a data quality control program	Pending	
F.2	Peoples Gas should develop a database of the soils data already collected and populate it further with soils data taken at all new excavations	Plan Accepted	Accepted/ Closed
F.3	Peoples Gas should conduct a structured study of alternative criteria and weightings for the Main Ranking Index and for the neighborhood approach	Plan Accepted	Accepted/ Closed
F.4	Should Peoples Gas not change the current criteria and weightings, then the utility should develop additional measures to reduce leak rates further	Deleted	
F.5	Peoples Gas should determine on a system, segment and neighborhood basis the level of acceptable risk and metrics that will support appropriate adjustments in replacement rates	Pending	
F.6	Peoples Gas should develop a cost model that addresses O&M costs associated with AMRP and related work	Pending	Plan Accepted
G.1	Peoples Gas should develop a new Cost Plan Model that includes comprehensive measurement bases and critical assumptions regarding scope, quantities, productivity, labor costs, unit costs, and regulatory requirements; a reserve should be included as part of the overall program costs	Pending	Plan Accepted
G.2	Peoples Gas should establish a Cost Trend Program to monitor potential, major cost-affecting items	Pending	Plan Accepted
H.1	Peoples Gas should develop a Scheduling Master Plan	Plan Accepted	Accepted/ Closed

H.2	Peoples Gas should develop a complete project schedule for every new project, and it should address all aspects of the work required, from engineering to construction and through completion	Plan Accepted	
H.3	Peoples Gas should resource-load schedules to address all physical work resources (including internal workforce and contractors) and construction inspectors	Plan Accepted	
H.4	Peoples Gas should regularly perform schedule variance analyses to identify recurring or systemic issues, and plan corrective actions	Plan Accepted	
H.5	Peoples Gas should complete promptly its efforts to ensure that construction schedules become quantity-based for both the internal workforce and the contractors	Plan Accepted	
I.1	Peoples Gas should develop a long-term resource staffing plan that reflects the numbers, skills, and experience needs of all key positions	Merged	
I.2	Peoples Gas should develop the in-house capability to replace gas main and install services on a larger and more long-term basis	Plan Accepted	
I.3	Peoples Gas should act immediately to address the need for sufficient internal resources to perform back end AMRP work as planned and scheduled	Plan Accepted	
I.4	Peoples Gas should bring enhanced productivity measurement and management to resource planning	Plan Accepted	
I.5	Peoples Gas should more closely monitor contractor resources and production	Plan Accepted	
I.6	Peoples Gas should establish a centralized resource planning group or function	Plan Accepted	
I.7	Peoples Gas should evaluate regularly the performance (e.g., wage rates, quality, productivity, expertise, safety, dependability) between the internal and external workforce	Plan Accepted	
J.1	AMRP management should promptly design and implement a two-pronged scope control process: (a) at the program level, and (b) at the individual project level	Plan Accepted	In Progress
K.1	Peoples Gas should establish a cost estimating capability by formulating a clearly communicated cost estimating philosophy, formalizing a cost estimating process, preparing procedures, and developing effective tools	Plan Accepted	
K.2	Peoples Gas should maintain and keep updated a set of historical databases that address cost estimating variables	Plan Accepted	
K.3	Peoples Gas should perform project cost estimate reconciliations to understand major cost deviations, analyze performance and document lessons learned	Plan Accepted	

K.4	Peoples Gas should expand the development of cost estimates at the individual project level and at the program level	Deleted	
K.5	Peoples Gas should establish a centralized cost estimating organization to maintain and sharpen the cost estimating skills	Plan Accepted	
L.1	Peoples Gas should implement a holistic cost management program	Plan Accepted	
L.2	Peoples Gas should establish a structured, well defined approach to managing AMRP costs at three levels: the long-term total program outlook, the individual project level, and the annual budget view	Plan Accepted	
L.3	Peoples Gas should define appropriate roles for cost management professionals, including all activities, responsibilities, and accountabilities important to holistic cost management	Plan Accepted	
L.4	Peoples Gas should establish a cost support organization that: (a) resides organizationally at a level and in a place consistent with treating cost management as a high program priority, (b) serves the cost management needs of all levels of management, (c) develops a force of skilled cost professionals and assures those skills are continuously improved, and (d) has overall accountability for the development and implementation of the cost management program	Plan Accepted	Accepted/ Closed
L.5	Peoples Gas should provide training for managers, supervisors and cost support personnel in cost management techniques consistent with the holistic approach	Plan Accepted	
L.6	Peoples Gas should continue aggressively to pursue the recommendations made by Liberty in discussions leading to the interim report	Deleted	
M.1	Peoples should develop a formal strategy that assures the Company gets above-average terms and below-average pricing in view of the long-term opportunities afforded by the AMRP	Plan Accepted	Accepted/ Closed
M.2	Peoples Gas should regularly include in program monthly reports information showing procurement fulfillment and past due rates	Plan Accepted	Accepted/ Closed
M.3	Peoples Gas should develop a formal strategy that assures the Company gets optimum terms and pricing in view of the long-term opportunities afforded to contractors by the AMRP	Merged	
M.4	Peoples Gas should determine those contract administration tasks that it considers required, and assure that the Program Management Office executes those tasks	Plan Accepted	Accepted/ Closed
M.5	Peoples Gas should apply a program of enhanced management oversight to the contract change process	Plan Accepted	In Progress
M.6	The Program Management Office should implement enhanced analysis of its results in managing contract changes	Plan Accepted	In Progress

M.7	The Supply Chain and Program Management organizations should require contractors to provide key data that supports their plans and bids	Plan Accepted	In Progress
M.8	The Program Management Office should link the results of its contractor evaluation program to future bid evaluations and awards	Plan Accepted	Accepted/ Closed
N.1	Peoples Gas should clearly define and document the AMRP governance roles of the Executive Steering Committee with mission statements, charters, and roles and responsibilities for project oversight, monitoring and decision authority	Plan Accepted	
N.2	Peoples Gas should promptly execute its current plans to provide for more regular and effective oversight of AMRP and for follow-through and corrective actions to address performance shortfalls	Plan Accepted	
N.3	Peoples Gas should substantially enhance the completeness and accuracy of AMRP performance information provided to the boards of directors, and ensure its consistency with information used by AMRP program management and provided to the small executive group with designated responsibility for program oversight	Plan Accepted	In Progress
N.4	Peoples Gas should expand top-level AMRP performance metrics and reports to include more actionable information, and to compare actual performance with plans and budgets meaningfully	Plan Accepted	Partially Rejected/ Closed
N.5	Peoples Gas should upgrade AMRP performance metrics to include annual or cumulative progress versus the long-term (20-year) plan goals and metrics for the executive oversight group and the boards	Plan Accepted	
N.6	Peoples Gas should employ outside assistance in designing and implementing the initiatives it committed to undertaking to improve AMRP management, control, and oversight	Pending	Rejected/ Closed
O.1	The AMRP Program Management Office should overhaul its approach to reporting, with emphasis on defining and meeting the needs of managers and staff	Plan Accepted	Accepted/ Closed
O.2	Management should establish a framework for performance improvement based on analysis of project performance and corrective actions	Plan Accepted	
O.3	In the course of its current improvement initiatives, Peoples Gas should redefine and reestablish its standards for program performance	Plan Accepted	
O.4	Program Management Organization should establish a culture and a regular, defined, comprehensive program that provides insightful analysis of program performance, and should acquire the capability to perform such analyses	Plan Accepted	

O.5	Peoples Gas should expand the role of its project controls professionals to allow for more analysis of project progress and performance and, in turn, support of management by facilitating corrective action	Plan Accepted	
P.1	Peoples Gas should conduct a comprehensive assessment of AMRP risks associated with potential mismatches between work performed and work charged, and develop an ongoing program of annual testing designed to mitigate the risks identified	Plan Accepted	
P.2	Peoples Gas should provide for dedicated, executive level sponsorship of the three-year materials and equipment control initiatives program and provide a regular method of reporting progress to the Illinois Commerce Commission	Plan Accepted	Accepted/ Closed
P.3	Peoples Gas should promptly: (a) correct the gap that exists with respect to ensuring the accuracy of material and equipment costs charged to the AMRP, (b) develop a method for reliably and accurately determining independently the magnitude of error in AMRP material and equipment costs being included in rate recovery, and (c) devise and implement a similarly independent testing program to verify that no material risk of similar error exists with respect to AMRP costs subject to rate recovery	Plan Accepted	
Q.1	Peoples Gas should address a number of construction standards and should enhance training, documentation, and auditing in a number of areas related to construction standards	Pending	
Q.2	Peoples Gas should adopt measures to ensure consistent use of construction inspection checklists, develop a structured program for analyzing the information they produce to identify and respond to field performance issues disclosed, and clearly empower inspectors to halt unsafe work	Plan Accepted	
Q.3	Peoples Gas needs promptly to conduct short-term and long-term analyses of its requirements for skilled and experienced field resources, develop incentives for moving personnel into new positions and incenting senior workers to remain, and ensure that training and development efforts anticipate (and not merely react to) vacancies	Plan Accepted	
Q.4	Identify and pursue means to increase the stability in and the numbers of field supervision and inspection personnel	Plan Accepted	
Q.5	Clarify responsibilities for key field roles and institute training programs to support them more fully	Plan Accepted	
Q.6	Peoples Gas should examine the benefits of equipping technicians with sub-meters accurate GPS devices in areas that have lines of sight to satellites	Plan Accepted	Accepted/ Closed
R.1	Peoples Gas should establish a formal continuous improvement program under the Impact Team to promote a culture of and an emphasis on seeking innovations to improve efficiency in the installation of mains, services, and meters	Plan Accepted	Accepted/ Closed

R.2	Peoples Gas should assign a project control engineer or cost analyst to each of the three Shops to handle the analysis of all AMRP construction work performed by the internal workforce and contractors	Pending	Partially Rejected/ Closed
R.3	Peoples Gas should assign a single manager to coordinate AMRP-level permitting improvement initiatives and to monitor and measure permitting for the duration of the program	Plan Accepted	Accepted/ Closed
S.1	Peoples Gas should invigorate the commitment to safety and permit compliance through the designation of an executive level “champion,” and institute a comprehensive communications program, set aggressive goals and performance targets, perform regular measurement, perform root cause analysis, and develop responsive action plans	Plan Accepted	Accepted/ Closed
S.2	Peoples Gas should more closely examine the root causes and develop a responsive action plan to improve employee accident rates	Plan Accepted	Accepted/ Closed
T.1	Peoples Gas needs to continue to focus on improving communications and relationships with the City and with its Department of Transportation, but must recognize that it will take improved permitting and work performance to create and sustain relationships at the level needed to optimize AMRP performance	Plan Accepted	
T.2	Peoples Gas should expand the scope of AMRP project schedules to incorporate permitting requirements	Plan Accepted	
T.3	Peoples Gas should develop a database of permit applications	Plan Accepted	Accepted/ Closed
T.4	Peoples Gas should work with the Chicago Department of Transportation to determine which existing and potential reports from the Department’s system are available and which could be provided to Peoples Gas	Plan Accepted	Accepted/ Closed
T.5	Peoples Gas should improve the database of rail crossing permits	Plan Accepted	Accepted/ Closed
T.6	Peoples Gas should improve its database of citations	Plan Accepted	Accepted/ Closed
U.1	Peoples Gas should alter the AMRP Communications Plan	Plan Accepted	
U.2	Peoples Gas should standardize the process to set AMRP customer appointments	Plan Accepted	In Progress
U.3	Peoples Gas should ensure that the Customer Information System fully supports AMRP communications processes	Plan Accepted	Accepted/ Closed
U.4	Peoples Gas should adequately resource the AMRP Complaints Handling Group, and should monitor complaint resolution performance and the root causes of customer complaints, for the purpose of identifying improvement opportunities	Plan Accepted	In Progress

U.5	Peoples Gas should measure on a regular basis: (a) customer satisfaction with AMRP, and (b) the effectiveness of AMRP Communications and Customer Service	Plan Accepted	In Progress
V.1	Peoples Gas should work promptly to identify the AMRP reporting changes that it proposed to implement near term, and tailor them to meet the reporting cycles and content this chapter describes as appropriate for supporting the monitoring needs of the Illinois Commerce Commission	Pending	