

**The Peoples Gas Light and Coke Company's
Compliance with Condition of Approval 5 from
Illinois Commerce Commission Final Order in
Docket No. 14-0496**

September 4, 2015

PUBLIC

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Re: The Peoples Gas Light and Coke Company's Accelerated Main Replacement Program; Docket No. 14-0496; Condition of Approval 5

Dear Chairman and Commissioners:

On June 24, 2015, the Illinois Commerce Commission ("Commission") approved a Reorganization under which Wisconsin Energy Corporation ("Wisconsin Energy") would, among other things, acquire The Peoples Gas Light and Coke Company ("Peoples Gas"). The Reorganization closed on June 29, 2015, and Wisconsin Energy is now WEC Energy Group, Inc. ("WEC"). The Commission's June 24, 2015 Order included 47 Conditions of Approval ("COA"). Several relate to Peoples Gas' Accelerated Main Replacement Program ("AMRP"). The AMRP is a vitally important program for Peoples Gas and WEC.

Condition of Approval 5 serves as Peoples Gas' first formal opportunity to inform the Commission and the Staff how the Liberty Recommendations are shaping the AMRP. COA 5 states:

5. Wisconsin Energy and Peoples Gas shall provide the Commission and its Staff with the following Improvement Plans

within 75 days of this Final Order: 1) an implementation plan for each of Liberty's recommendations, 2) an AMRP scheduling master plan, 3) an AMRP cost plan model, and 4) an AMRP transition plan that provides detailed changes to the AMRP needed as a result of the Reorganization in order to ensure a seamless transition that avoids a diminishment in service.

In working to prepare an implementation plan for Liberty's recommendations and a transition plan, Peoples Gas determined that these items are inextricably related and are best addressed in a consolidated, holistic fashion. Accordingly, Peoples Gas has prepared the attached consolidated implementation and AMRP transition plan in compliance with COA 5(1) and (4).¹ Further, pursuant to Peoples Gas' President's letter to the Commission on July 27, 2015, this submission provides an update on Peoples Gas' AMRP scheduling master plan and cost plan model required by COA 5(2) and (3).

Condition of Approval 5(1)

Although WEC has owned Peoples Gas for only two months, it has moved quickly to focus on the AMRP and, as described below and in the attached report, many key changes have occurred. However, WEC and Peoples Gas caution that two months is insufficient to have fully developed a strategy and detailed implementation plans for AMRP.

Upon closing, WEC appointed new management at Peoples Gas and began taking steps to improve AMRP performance. The Liberty Consulting Group's ("Liberty") comprehensive audit of the AMRP provides substantial data and analysis to support concrete recommendations for improving the AMRP. WEC finds Liberty's Final Report, issued May 5, 2015, to be a valuable tool as it assesses and begins to make changes to the AMRP management and program implementation.

As Peoples Gas began the process of ramping up work on the AMRP with the inception of planning in 2010 and construction in 2011, this long-term program has experienced uncertainty, including different cost recovery mechanisms. With WEC's knowledge of the Liberty Interim Report² prior to its acquisition of Peoples Gas and with closing of the acquisition following shortly after the Liberty Final Report issuance, WEC is able to coordinate its program management changes with Liberty's recommendations. Many of these changes reflect industry best practices that WEC has applied to major infrastructure projects for the Wisconsin Energy utilities and intends to apply to Peoples Gas. WEC will introduce new practices and

¹ While submitted in compliance with COA 5(1), it is also relevant to COA 9.

² In January 2015, Liberty issued an Interim Report that Wisconsin Energy reviewed as part of the above-captioned proceeding.

build on processes that Peoples Gas had in place and processes that Peoples Gas was developing to improve the AMRP in areas such as long-term planning, cost controls, vendor contracting, and coordination with third parties, notably various departments within the City of Chicago and the Illinois Department of Transportation. The majority of the Liberty recommendations touch on these areas.

Specifically, for COA 5(1), Liberty's audit assessed nineteen distinct elements of the AMRP. The Final Report includes 119 Conclusions and 95 Recommendations. For the large majority of these recommendations, Peoples Gas has implemented or is in the process of implementing Liberty's proposal. For a small number, Peoples Gas is assessing the recommendation or has implemented or is implementing an alternative that, while not identical to the recommendation, is consistent with the underlying objectives. For recommendations for which Peoples Gas has proposed an alternative, it is doing so under COA (9), which provides, in relevant part, that "[i]f the Company determines that a recommendation is impossible, impractical, or unreasonable it may propose an alternative, with supporting documentation, to Commission Staff."

Notably, as acknowledged by Liberty and as evidenced in the attached report, Peoples Gas did not wait for issuance of the Final Report to begin making program improvements. Continuous improvement to enhance prudent practices is a tenet of Peoples Gas' capital program management. As is also apparent from the attached report, WEC began addressing program management changes immediately. While much work remains, WEC and Peoples Gas have made substantial progress in restructuring program management, developing enhanced processes and systems, and implementing specific recommended changes. Definitive action plans are in place for achieving other improvements. Specific plans for other items remain under development, which is not surprising given that WEC acquired Peoples Gas only two months ago.

Condition of Approval 5(4)

As discussed above, the changes made or that are in the process of being made to the AMRP to ensure a seamless transition are inextricably entwined with changes being made to implement Liberty's recommendations. Accordingly, the consolidated plan accompanying this submission addresses the AMRP transition plan with the implementation of Liberty's recommendations to comply with COA 5(4). In particular, a detailed overview of the changes being made to the AMRP post-acquisition is provided in Chapter B (Peoples Gas Executive Response) of the attached submission. Additionally, Peoples Gas' transition plan for the AMRP is elucidated in the implementation responses to Liberty's recommendations in Chapters D, E, L, N, O, and R of the attached submission. Further, Peoples Gas provides the following summary of post-acquisition management changes that are related to or may impact the AMRP.

Effective with closing of the Reorganization, Peoples Gas has new management. Peoples Gas named a new President, who reports directly to WEC's Chairman and Chief Executive Officer, and three Vice Presidents who report directly to the President. These new Vice Presidents will manage Construction, Customer Service, and Operations. Peoples Gas also began the major process of moving project management substantially in house, rather than relying heavily on an outside contractor. This reliance on an outside contractor was an appropriate and necessary way to begin AMRP operations, but the transition to in-house management is now the best path forward. Additionally, the Vice President of Construction has recently reorganized his management team to include a Director of Engineering, Director of Construction, Director of Contracting, and a Project Director. The Project Director has a group of project managers that will have full responsibility for overseeing individual projects from conceptual planning and long-term scheduling, through engineering, permitting, execution, and close-out. This project manager role is consistent with the Project Director, to whom they report, who has responsibility to manage, oversee, and report on project controls and overall program progress. This new organization, including using internal resources for program management, directly addresses many of Liberty's fundamental recommendations.

Conditions of Approval 5(2) and 5(3)

As Peoples Gas had notified the Commission in the July 27, 2015 letter from the company's President, Mr. Charles Matthews, Peoples Gas is not able to provide a new completed scheduling master plan and cost plan model at this time as contemplated by COA 5(2) and 5(3), respectively, due to the decision to relieve the Jacobs Engineering Group of its project management responsibilities for the AMRP. Pursuant to Mr. Matthews' letter, Peoples Gas provides the Commission with an update on the status of these plans.

For COA 5(2) and 5(3), Peoples Gas recognizes that the creation of a scheduling master plan and cost plan model on a multi-decade, multi-billion dollar project requires the retention of a nationally recognized engineering firm. Following a structured selection process, Peoples Gas has engaged Burns & McDonnell to support the creation of a scheduling master plan and a cost plan model to replace the existing scheduling plan and cost models for which Peoples Gas' new management concluded that a fresh and independent analysis was appropriate. Burns & McDonnell began working with Peoples Gas staff on September 4. There are intermediate milestones with final recommendations due to Peoples Gas in mid-November. This will support Peoples Gas providing a final assessment to the Commission by November 30.

September 4, 2015
Illinois Commerce Commission
Page 5

The Peoples Gas Light and Coke Company respectfully submits the report in compliance with Condition of Approval (5) from the Order in the above-captioned proceeding.

Respectfully submitted
The Peoples Gas Light
and Coke Company

Andrew Hesselbach
Vice President, Construction

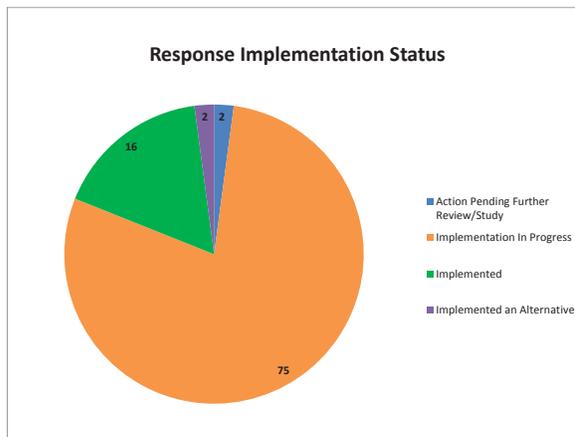
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Table of Contents

1. Recommendation Implementation Status Tracker.....	1
2. Chapter B – Executive Response Summary.....	2
3. Responses by Chapter	
• Chapter C.....	17
• Chapter D.....	34
• Chapter E.....	42
• Chapter F.....	45
• Chapter G.....	53
• Chapter H.....	56
• Chapter I.....	65
• Chapter J.....	69
• Chapter K.....	70
• Chapter L.....	75
• Chapter M.....	84
• Chapter N – See Chapter B	
• Chapter O – See Chapter B	
• Chapter P.....	96
• Chapter Q.....	100
• Chapter R – See Chapter B	
• Chapter S.....	109
• Chapter T.....	112
• Chapter U.....	122
• Chapter V – See Chapter B	
4. Appendix	
• Glossary of Terms.....	129
• Attachments to Responses.....	131

Response Implementation Tracker - 9/4/15

Recommendation #	Implementation Status
C.1	Implementation In Progress
C.2	Implemented
C.3	Implemented an Alternative
C.4	Implemented
C.5	Implemented an Alternative
C.6	Implemented
D.1	Implementation In Progress
D.2	Implementation In Progress
D.3	Implementation in progress
D.4	Implemented
D.5	Implementation In Progress
D.6	Implemented
E.1	Implementation In Progress
E.2	Implementation in progress
E.3	Implementation in progress
E.4	Implementation in progress
E.5	Implementation in progress
E.6	Implementation in progress
F.1	Implementation In Progress
F.2	Implementation In Progress
F.3	Implemented
F.4	Implemented
F.5	Implementation In Progress
F.6	Implementation In Progress
G.1	Implemented
G.2	Implementation In Progress
H.1	Implementation In Progress
H.2	Implemented
H.3	Implementation In Progress
H.4	Implementation In Progress
H.5	Implemented
I.1	Implementation In Progress
I.2	Implementation In Progress
I.3	Implementation In Progress
I.4	Implementation In Progress
I.5	Implementation In Progress
I.6	Implementation In Progress
I.7	Implementation In Progress
J.1	Implementation In Progress
K.1	Implementation In Progress
K.2	Implemented
K.3	Implementation In Progress
K.4	Implementation In Progress
K.5	Action Pending Further Review/Study
L.1	Implementation In Progress
L.2	Implementation In Progress
L.3	Implementation In Progress
L.4	Implementation In Progress
L.5	Action Pending Further Review/Study
L.6	Implementation In Progress
M.1	Implementation In Progress
M.2	Implementation In Progress
M.3	Implementation In Progress
M.4	Implementation In Progress
M.5	Implementation In Progress
M.6	Implementation In Progress
M.7	Implementation In Progress
M.8	Implementation In Progress
N.1	Implementation In Progress
N.2	Implementation In Progress
N.3	Implementation In Progress
N.4	Implementation In Progress
N.5	Implementation In Progress
N.6	Implementation In Progress
O.1	Implementation In Progress
O.2	Implementation In Progress
O.3	Implementation In Progress
O.4	Implementation In Progress
O.5	Implementation In Progress
P.1	Implementation In Progress
P.2	Implementation In Progress
P.3	Implemented
Q.1	Implementation In Progress
Q.2	Implementation In Progress
Q.3	Implementation In Progress
Q.4	Implementation In Progress
Q.5	Implementation In Progress
Q.6	Implemented
R.1	Implementation In Progress
R.2	Implementation In Progress
R.3	Implementation In Progress
S.1	Implementation In Progress
S.2	Implementation In Progress
T.1	Implementation In Progress
T.2	Implemented
T.3	Implementation In Progress
T.4	Implementation In Progress
T.5	Implemented
T.6	Implemented
U.1	Implementation In Progress
U.2	Implementation In Progress
U.3	Implementation In Progress
U.4	Implementation In Progress
U.5	Implementation In Progress
V.1	Implementation In Progress



Chapter B. Peoples Gas Executive Response

On June 29, 2015, Wisconsin Energy Corporation, now known as WEC Energy Group, Inc. (“WEC”), completed its acquisition of Integrys Energy Group, Inc., and with it the ownership of The Peoples Gas Light and Coke Company (“Peoples Gas”). This step began the formal process of transitioning Peoples Gas to a more independent, self-managed, and capable organization that is focused on improving its own performance from within, with the critical support and financial strength that WEC can provide. The Liberty audit and the potential opportunities for improvement it identifies correlate very closely to the programmatic structures that WEC expects when managing a large capital project at its legacy utility companies. For this reason, Peoples Gas’ responses contained in this submittal align closely with Liberty’s audit recommendations.

Despite the ability to anticipate many of the general areas of opportunity for improvement at Peoples Gas prior to the acquisition’s closing, it is relevant to keep in mind that actual steps to recruit and hire outside talent and on-board them to the Peoples Gas management team, and to expand the understanding of how Peoples Gas’ operations function, could not begin in earnest until two months prior to this submittal. The compressed timeframe from transaction closing to submission of these audit responses has resulted in reduced specificity contained in some responses. For example, Peoples Gas’ new directors for project controls and contract management were not available to join the Peoples Gas staff until August 20 and August 31, respectively. Accordingly, Peoples Gas expects that additional details will be available as Liberty conducts the Phase II verification process.

As such, Peoples Gas hopes that the readers of the responses will observe an organization heading quickly down the path of either full alignment with audit recommendations or an appropriate discussion where Peoples Gas believes a slightly different approach should be taken based on a given set of circumstances that Peoples Gas is facing.

In Liberty’s audit report findings, Peoples Gas identified and categorized the below list of Liberty recommendations as ones relating to overarching organizational design, project management office (“PMO”) transition, program/project management, and performance metrics and reporting. In order to address these recommendations holistically, informed by the vision of the new organization, this document will respond to these recommendations thematically. The four main themes are:

1. Organizational Design
2. PMO Transition
3. Program/Project Management
4. Performance Metrics and Reporting

In this document, Peoples Gas outlines plans that are presently in the process of implementation and expects to provide Liberty with an update on the status of their progress by November 30, 2015. The new Peoples Gas construction team looks forward to working with Liberty and the ICC Staff as the Accelerated Main Replacement Program (“AMRP”) continues to move forward.

B.1. Organizational Design

Recommendations:

#	Recommendation
E.4	Peoples Gas should move toward a project organization that makes significantly more use of dedicated resources under a strong project manager approach
E.5	Peoples Gas should prepare a specification for a new program management function, correcting the weaknesses in the current process
E.6	Peoples Gas should assign a project manager to most, if not all, AMRP neighborhood projects
I.6	Peoples Gas should establish a centralized resource planning group or function
L.3	Peoples Gas should define appropriate roles for cost management professionals, including all activities, responsibilities, and accountabilities important to holistic cost management
L.6	Peoples Gas should continue aggressively to pursue the recommendations made by Liberty in discussions leading to the interim report
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
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

Response:

Since the closing of WEC acquisition of Peoples Gas on June 29, 2015, the new management leadership team has been focused on building a Peoples Gas organization that pulls back into itself many of the core functions that had been provided by either Integrys Business Support, LLC or third party contractors. Prior to closing, WEC saw indications of some of the same opportunities to enhance the prior structure as were identified in the Liberty audit. Liberty provided examples of what it considered the organizational weaknesses with regard to the management of the AMRP and how this structure created challenges. Over the last fifteen years, WEC has a history of completing projects and programs successfully through the use of dedicated resources that are organizationally linked at the execution and executive level to the projects and programs they serve.

WEC knew that selecting the right leadership team and getting the best candidates into select leadership roles would be critical to the success of the AMRP. The Day One leadership team included a mix of WEC and existing Peoples Gas employees. Since the closing, additional team members and managers have been added. Some have been recruited from outside of the organization and others have moved over from other WEC projects, in either case, based on strong past performance for WEC. Peoples Gas is continuing the process of filling out the construction team. Peoples Gas expects that some of these positions will be filled by select individuals that are being pursued as Jacobs Engineering transitions out of its project management role. Peoples Gas expects the remaining openings on the capital construction team will be filled over-time



from a mix of internal and external candidates. In all cases, these roles are Chicago-based and will report directly to the Peoples Gas organizational structure. Additionally, the priorities and performance evaluations of all members of the team will be based on factors connected directly to capital construction and the AMRP program.

While Peoples Gas has taken complete direct ownership and control of AMRP project decision making and oversight, contract resources will be used in select pockets where in-house resources are not readily available or greater experience is required. For example, there is a near-term need for experienced project controls analysts and Peoples Gas has already contracted for an operational audit of this function and resources to supplement in-house talent. Over time, Peoples Gas will train-up and bring this capability in-house.

To better explain the larger Peoples Gas leadership team and more specifically the Peoples Gas construction organization responsible for the execution of AMRP, please see a high level organizational chart of Peoples Gas Construction group in the appendix attached to this response.

Project Organization

Consistent with the other themes of direct ownership and accountability, Peoples Gas agrees with Liberty on the benefits of the use of project managers to shepherd, guide, monitor, and advocate for individual sub-projects within the AMRP. As indicated in the Construction group's high level organization chart, the Project Director has a group of project managers that have "cradle to grave" responsibility for overseeing individual projects from conceptual planning and long-term scheduling, through engineering, permitting, execution, and close-out. This role is consistent with the Project Director to whom they report who has responsibility to manage, oversee, and report on project controls and overall program progress. It is relevant that this role is separate from the Director of Construction and the construction managers in the district offices who focus on successful field execution, safety, and inspection. Peoples Gas currently has several project managers, but additional resources are needed to fully cover all individual projects. This is also an excellent training position for future leaders with the Peoples Gas construction program.

Another critical role of the Project Director is that of leader of the project controls activities. The project controls element covers many facets, but one of particular interest to Peoples Gas leadership and identified in Recommendation R.2 focuses on statistical monitoring and performance analysis. This is critical to providing frontline management and senior leadership with the pulse on performance and the ability to quickly highlight potential problems as well as providing opportunities for lessons learned across the shops. There are several options as to how this function could be carried out most effectively and efficiently. For example, certain field scheduling resources have a natural view into the daily rhythm and trends in work execution. However, they may not have sufficient time or this work would need to be supplemented with a centralized resource. In any event, the analysis is critical and the new Project Director responsible for this function is currently evaluating the appropriate resource mix, available talent, and options to supplement existing resources.

Centralized Resource Planning and Coordination

One of the unique challenges to the AMRP is how the planning, permitting, execution, and close-out of AMRP components are linked either internally or through the eyes of external stakeholders and with other operational or customer service functions. For example, as Liberty correctly points out in Recommendation I.6, there is a need for centralized resource planning. Peoples Gas has assigned the director of Gas Operations Planning to lead this effort for shared resource planning and permit compliance. While the roles and responsibilities of this function have not yet been precisely cast, Peoples Gas agrees with the structure.

Peoples Gas envisions two stages of planning to deliver a coordinated and centralized resource base. One is the orchestration amongst the construction resources (i.e., inspectors, project managers, contractor crews) and the resources that support services across Peoples Gas. For example, Peoples Gas' in-house construction crews also support emergency leak repair response as well as service cut-offs and reconnections when operations and service crews are stretched thin. Second, there is the need to coordinate process and field standards across the organization, even if resources are not shared, because the City of Chicago and other stakeholders rightfully expect every aspect of Peoples Gas to work in a coordinated fashion and with full knowledge of what the other is doing while delivering consistently high quality. For these reasons, the construction and operations groups have established a joint planning process for those resources to coordinate functions that face external stakeholders, such as elected officials and permitting agencies.

Key to these centralized planning and permitting functions will be the application of performance metrics. For example, a consistent understanding and utilization of performance metrics would help reduce the potential for inefficient permitting practices. Improved internal coordination will also enhance the oversight of individual contractors and their respective performance. WEC intends to address these issues by tracking performance, upholding accountability and instituting a robust program and project management culture at Peoples Gas with the appropriate levels of oversight over both internal and contractor resources.

Project Management and Controls

In order to empower the tracking and use of performance metrics to measure program success, a strong project controls structure needs to be in place. In response to Recommendation L.1, Peoples Gas has put forth an integrated project controls framework¹, a version of which will inform the future governance and controls of the AMRP. In discussing the role of appropriately designed and enforced project controls, Peoples Gas agrees with Liberty on the critical function that cost controls play as part of an overall project controls structure. To this end, Peoples Gas has taken two specific steps. First, it has hired an experienced Project Director with substantial experience in

¹ For additional details on Peoples Gas' proposed Integrated Project Controls model, please refer to the response to Recommendation L.1.

project management and controls. The Project Director will own responsibility for integrated project controls. Second, Peoples Gas has retained a third party expert to perform a two phase analysis of project controls and cost control management. At the conclusion of the two phase analysis, Peoples Gas will be able to identify the main project control gaps that the organization faces and deploy corrective actions to address these issues. The analysis will also help identify gaps in data collection, transmittal, and processing to ensure that going forward there is a consistent and standard process for tracking all AMRP project management functional elements, specifically, costs. Overseeing this process will be a cost management structure that sets the standards of tracking, reporting, and accountability on all facets of cost management.

B.2. PMO Transition

Recommendation:

#	Recommendation
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

Response:

Current State Assessment

Prior to the acquisition's closing, WEC had the opportunity to review construction reports and the Liberty interim report. Consistent with Liberty's observations, WEC has identified opportunities to improve program management through changes to the organizational structure as well as by reviewing the competencies, experience, and level of commitment of internal resources to the program. The following is a summary of the historical elements that Peoples Gas is in the process of addressing to help ensure improved performance in the future:

- Substantial outsourcing of core project management functions;
- Functions internal to Integrys were split between Peoples Gas and its service company affiliate, with a matrixed reporting structure and management oversight that remained separated below senior executive level management;
- Lack of a process to identify critical project team roles and a plan to develop or acquire and bring in-house such skill sets;
- Lack of a skills gap analysis, which includes near and long-term plans to develop talent that supports the changing needs of the program as well as natural attrition and potential changes in third party resource availability.

First Steps

In order to develop and implement specific and effective change, WEC needed to accomplish three tasks:

- Install senior leadership at Peoples Gas to guide the overall company and identify a single centralized executive leader for the AMRP / capital construction program.
- Secure and bring in-house key AMRP / capital construction program leaders with strong experience that includes²:
 - field construction management;
 - project controls and program governance;

² Please refer to B.Executive Response_Attachment_1 in the appendix for a copy of the proposed Peoples Gas Construction Group organizational chart.

- engineering; and
- contract and procurement management.
- Gain a more detailed understanding of:
 - The organization it had acquired and the changes that were taking place under the more recent new leadership at Peoples Gas prior to the acquisition;
 - Interactions between construction activities and the operating areas that routinely share resources;
 - Expectations and areas of concern for external stakeholders such as the Illinois Commerce Commission, Chicago Department of Transportation, and elected officials;
 - Jacobs Engineerings' role as the manager of the PMO;
 - Capabilities of the construction contractors and the general availability of contract resources; and
 - Organizational capabilities and the skill sets of existing team members

New Peoples Gas leadership, with support from WEC, has been progressing quickly through the learning curve on the above items, but full planning and implementation will unfold over the next 18 to 24 months. As discussed in Section B.3 below, AMRP and related projects that qualify for recovery as Qualifying Infrastructure Plant (QIP) account for approximately 85% of all Peoples Gas capital construction. For this reason, Peoples Gas determined that consolidated management of all capital construction was mutually beneficial and bifurcating capital project management detracted from both AMRP and non-AMRP investments. Based on this consolidated approach, all discussions below and in other areas of our response to the Liberty findings are in reference to a consolidated project management team.

Peoples Gas has taken action on the following items which are designed to deliver quick substantial improvements to the program capabilities:

- Peoples Gas' leadership structure is comprised of a President reporting directly to the Chairman and CEO of WEC.
- Numerous core functions (i.e., engineering and AMRP program management) that had been managed by the service company now report directly into Peoples Gas under a Vice President – Construction who reports to the President of Peoples Gas.
- Peoples Gas has brought management of the AMRP project management office in-house and will fully unwind its agreement with Jacobs Engineering by the fall of 2015.
- Peoples Gas has established a dedicated Director of Engineering, as well as bringing in-house three additional directors for the capital construction program with skills in field execution, project controls, and contract management and procurement.

- Entered into an arrangement with an expert project controls firm to perform an audit of the project controls and systems that are in-place and identify areas for improvement in systems, processes, and team member capabilities.
- Established a central planning and scheduling function for the coordination and management of common functions across the operations and construction programs. Two specific areas of focus include permit coordination and planning with the Chicago Department of Transportation (“CDOT”) and management of shared field resources.

Next Steps

The first priority for Peoples Gas is to provide strong leadership and immediate improvements to the structure and capabilities of the leadership team and the AMRP in general. In the coming months, this leadership team will grow its understanding of the team and individual capabilities of team members. From this exercise, a more structured approach to talent assessment and development needs will take place. For example, while an experienced project controls leader has been added to the team, the project controls audit noted above will provide greater insight at the detailed individual contributor level to guide where training is needed or process or systems opportunities exist.

B.3. Program/Project Management

Recommendations:

#	Recommendation
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
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
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
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
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
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
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
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
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

Response:

Peoples Gas agrees with Liberty that governance roles need to be clearly understood and well established. In the case of the AMRP, Peoples Gas has implemented a different organizational structure from that pursued under Integrys management. As discussed in the response above in Section B.1, WEC is substantially changing the profile of AMRP management by bringing in-house all of the critical capabilities which were largely outsourced up until July of 2015. Additionally, given the long timeline associated with AMRP execution, Peoples Gas has determined that managing the AMRP should look more like an on-going component of the organization rather than a

project team with an executive oversight committee that is assembled for a defined period of time and then disbanded with individuals returning to their regular work activities. In other words, steering committees and other similar structures that are often assembled for oversight of short or medium term projects are not necessarily the best fit for the AMRP. For this reason, Peoples Gas has designed the management and oversight structures for the AMRP as part of the capital construction management function of Peoples Gas. This structure is further enforced when considering that the AMRP plus the other capital spending that is eligible for Rider QIP recovery accounts for approximately 85% of all capital spending. Clear and consistent management processes, procedures, and execution benefit all capital construction activities.

Additionally, much of the new Peoples Gas leadership brings project management expertise from years of work on numerous large and successful capital projects. This new team (discussed further below) is further supplemented by external talent to assist with improvements to project and cost controls, cost and schedule planning, and management.

Based on a more typical business unit structure, oversight, authorization, and guidance follow the hierarchy of Peoples Gas and then WEC. For example, there are four director functions (i. engineering, ii. construction, iii. project controls, cost controls, and reporting (Project Director), and iv. contracting) reporting to the Vice President of Construction. This team is responsible for execution of the program. The Vice President reports to the President of Peoples Gas, who reports to the Chairman and CEO of WEC. Authorizations, reporting, and project approvals go systematically up through this chain. The Peoples Gas and WEC boards will also provide oversight through regularly scheduled progress reviews and authorization processes.

Peoples Gas understands the role of a continuous improvement program to promote a culture of and an emphasis on seeking innovations to improve efficiency in the installation of mains, services, and meters. Peoples Gas believes that the continuous improvement mindset needs to be embedded into the work culture and practiced at all levels of the organization similar to safety and quality, and as such, may be administered and assessed outside of just a standalone team or group. Nonetheless, such efforts can benefit from an outside facilitator or technology subject matter expert. Peoples Gas has just begun the process to assess project management technology improvement opportunities with the help of a WEC subject matter expert.

AMRP Master Plan

Recommendation H.1 points out the importance of planning, but in particular having a high quality master plan. Peoples Gas agrees with the importance of such a plan. It was the very criticality of this plan that was a major contributor in leading to the decision by Peoples Gas to pursue a refreshed analysis and the retention of a nationally recognized engineering firm to complete such an analysis as discussed in response to Condition of Approval 5. When complete, the new schedule and cost plan model will be a central management tool for the AMRP going forward. Peoples Gas expects that the model will be much more than a one-time snapshot of the program's future. The model will be maintained and adjusted to account for changing conditions, costs, resources, progress, and priorities.

Project Controls

Sections L.4 and O.5 of the Liberty report provide additional recommendations on the role and structure of project controls (cost support). Peoples Gas is well aligned with Liberty's recommendations and in Section B.1 Peoples Gas identified the high-level reporting profile and independence of the Project Director who is the leader and advocate for the controls and cost support organization. Further, Peoples Gas agrees that to be effective, the team members need a degree of depth and experience to flourish. Peoples Gas acknowledges that this is currently an element of the organization that could be fortified and accordingly is employing a small number of contract resources to perform portions of these functions for current program activities and is separately retaining an outside firm that is expert in this area to provide an assessment and recommendations on both processes, systems, and the transition to full in-house capabilities. With the combination of the Project Director's experience and the guidance of their assessment, Peoples Gas intends to develop this skill set internally during 2016.

Begin Confidential.

[Redacted content]

[REDACTED]

[REDACTED]

End Confidential.

Communication with the City of Chicago

In Section T of the Liberty report, numerous specific issues are identified that can and have strained the relationship between Peoples Gas and CDOT. While solid relational connections are imperative to improving the coordination and understanding of each other's challenges, consistent and high quality performance by Peoples Gas is the cornerstone. This was mutually echoed in a recent meeting between the senior leadership of Peoples Gas and CDOT leadership and staff. Peoples Gas recognizes that this will be a journey that is dependent on many factors, and the plans put in place and steps already taken will allow the program to continually improve execution and its ability to meet these expectations while steadily improving communications and coordination efforts with the City of Chicago. Please refer to Peoples Gas' response to Recommendation T.1 for further detail on actions already implemented to improve the coordination and relationship with the City, as well as planned next steps.

B.4. Performance Metrics and Reporting

Recommendations:

#	Recommendation
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
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
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
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
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
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
O.2	Management should establish a framework for performance improvement based on analysis of project performance and corrective actions
O.3	In the course of its current improvement initiatives, Peoples Gas should redefine and reestablish its standards for program performance
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

Response:

Data-driven Management

Well-structured metrics and insightful reporting are vital to effective project management. Peoples Gas agrees with Liberty’s assertion that combining quality project reporting with active and engaged oversight is critical, and it provides the support the project execution team needs to be successful. The WEC business practice is consistent with this approach to project management.

Peoples Gas agrees that providing accurate and unvarnished program performance data at all levels of the organization is critical to program oversight and the successful guidance of the program, particularly when data indicates that changes are needed. Peoples Gas will improve upon the formats and content of reports generated in the past. Going forward, the Peoples Gas team will make greater use of monthly and annual forecasting as a means to more accurately predict, plan, and schedule work activities.

Peoples Gas recognizes that, without quality forecasting, deploying timely and productive inflight corrective actions can be cumbersome. Utilizing an appropriate complement of informative and actionable data metrics is consistent with WEC's expectations of a project management team.

Performance Metrics

Peoples Gas agrees that it 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 of Peoples Gas and WEC. Given the substantial length of the program, neither "life of project" nor short-term metrics can be successfully used in isolation. For example, evaluation of resources that the project will need over five or ten years would be a great fit with "life of project" profiles. This data may provide valuable insight to proactively project hiring and training needs. At the other extreme, short-cycle profiles of weekly or monthly over-time worked by each crew may be essential to assessing crew utilization and productivity. Many other project management requirements can be met with weekly or monthly production or financial reporting. While the transition is still underway and the project team is being reformed, Peoples Gas expects that by the end of November 2015 improved data sets and reports on core metrics will be up and running.

Below is a sample of the core metrics that will help guide the program in the coming months and years. Depending on the internal audience and business need, the data may be consolidated or broken down by district office, contractor, neighborhood, or project manager. Furthermore, the data would routinely illustrate variances to the original budget value, monthly revised forecasts, and actual values.

- Miles of main installed
- Miles of main retired
- Number of meters installed
- Project completion with-in permit window
- Customer satisfaction ranking
- Leak rates
- Permit compliance metrics
- Work completion within 30, 60, 90 days
- Aging report on as-builts completed from the point of field work completion
- Restoration quality rankings
- Crew utilization and over-time values
- Crew / contractor metric on hits to third-party infrastructure
- Suite of safety metrics associated with observations, first-aid cases, and other OSHA values
- Engineering design quality metric
- Crew / contractor quality and performance metrics

Metrics-driven Accountability

The metrics above will be used to drive business decisions associated with many aspects of the capital construction program, including:

- Program progress, cost, and schedule reporting
- Safety reporting for individuals, shops, crews, and contractors
- Contractor performance and alignment with Peoples Gas goals
- Evaluation of project management, crew, and contractor performance
- Engineering quality, compliance with standards, and efficiency
- Performance compared to third party expectations (e.g., CDOT)
- Permit compliance (e.g., construction durations through restoration)
- Customer satisfaction with internal and contractor crews
- Managerial effectiveness
- Team members' personal performance plans
- Root cause analyses
- Materials management and waste
- Capital utilization efficiency
- Regulatory reporting (e.g., ICC, OSHA, PHMSA)

A solid program to collect, manage, and utilize project data is essential to high quality project management. Peoples Gas will link the above noted data and metric methodologies with an engaged and supportive executive team to guide the AMRP.

Owner:

Vice President, Construction

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation C.1:

Peoples Gas agrees and is implementing this recommendation. The data shows that Peoples Gas has not used double decking without exception. System redundancy limiting the number of customers affected by an outage and the risk reduction of third party damage to long-sided services continue as key attributes to the double decking design philosophy. Additionally, Peoples Gas' current procedures take the cost of double decking and other system design factors into account in assessing if double decking is appropriate. An updated cost model and design guidelines will refine this consideration.

Peoples Gas has an established model in place that compares the cost of the installation of one gas main versus the cost to double deck main on a block. The model has been used in conjunction with other factors, described below, to establish when double decking is the preferred option or when it should be excluded.

In addition to using the model to determine the number of services where a double decking design should be employed, a case-by-case review of the block configuration related to the service spacing and density is considered in the design planning process. For example, in non-symmetrical block service distributions, with services skewed on one side of the street, a split configuration involving a combination of a single main and double deck main is designed to accommodate the service locations within the block.

An updated cost analysis incorporating newly defined restoration requirements will be completed to better define the service count breakeven point to be used as a first review guideline in the decision to proceed with a double deck or single main installation. The results of this analysis will be included in the planning process and used as a guideline tool to evaluate the relative merits of a double decking proposal or exception. This, in combination with the documentation of additional design guidelines such as considerations related to service pipe densities, will provide the basis for the single main or double deck design decision during the planning process. The model and associated documentation will be reviewed and updated as requirements and/or regulation impacting construction costs or system integrity change. An example of a type of regulation change would be if the Chicago Department of Transportation were to allow the boring of services under city streets.

The benefits of implementing this recommendation include ensuring that the double decking model, design guidelines and philosophy have been updated to account for

new requirement and/or regulation changes and updated construction rates to promote design optimization on a project by project basis.

Below is a summary by year of the amount of double decking designs since 2011.

Year	Double Deck feet (miles)*	Total feet (miles)	% of Total
2011	479,900 (90.9)	713,900 (135.2)	67.2%
2012	615,400 (116.5)	896,700 (169.8)	68.6%
2013	445,100 (84.3)	634,200 (120.1)	70.2%
2014	696,900 (132.0)	846,900 (160.4)	82.3%
Totals	2,237,300 (423.7)	3,091,700 (585.5)	72.4%

*Estimates based on assumptions of multiple mains in same street and same year installation.

Action Item	Forecasted Completion Date
Update model with current construction rates (main/service installation & restoration)	10/02/15
Update model with 150' asphalt rule	10/02/15
Update process & guideline documentation	10/02/15
Implement the updated process	10/02/15

Owner:
Director, Gas Engineering

Liberty Recommendation C.2

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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation C.2:

Peoples Gas understands that an analytically-based study of the root causes and safety risks associated with pipeline safety is an important factor in reducing third party damages. Third party damage, measured as hits per thousand locates, has been declining, and Peoples Gas continues to make efforts to implement preventive measures to address the causes of third party damages.

Peoples Gas investigates all excavation damages and performs a root cause analysis to determine fault and identify lessons learned for future improvement efforts. The System Integrity Group has primary oversight of damage prevention efforts. From 2006 to 2014 there has been a significant increase in locate requests due to infrastructure activity in the City of Chicago. The volume has increased from 69,885 to 176,226 locate tickets. The hits per thousand ratio has significantly decreased, from 14.34 in 2006 to 6.2 in 2014, with the increase in locate volume (see Table 1 below). As these data show, significant improvements have occurred. Beginning in April 2014, Peoples Gas started filing with the Illinois Commerce Commission (“ICC”) an annual report that includes these data (Sec. 5-111(b)(2) of the Public Utilities Act (220 ILCS 5/5-111(b)(2))).

Table 1: 2006 - 2014 Hits/1000

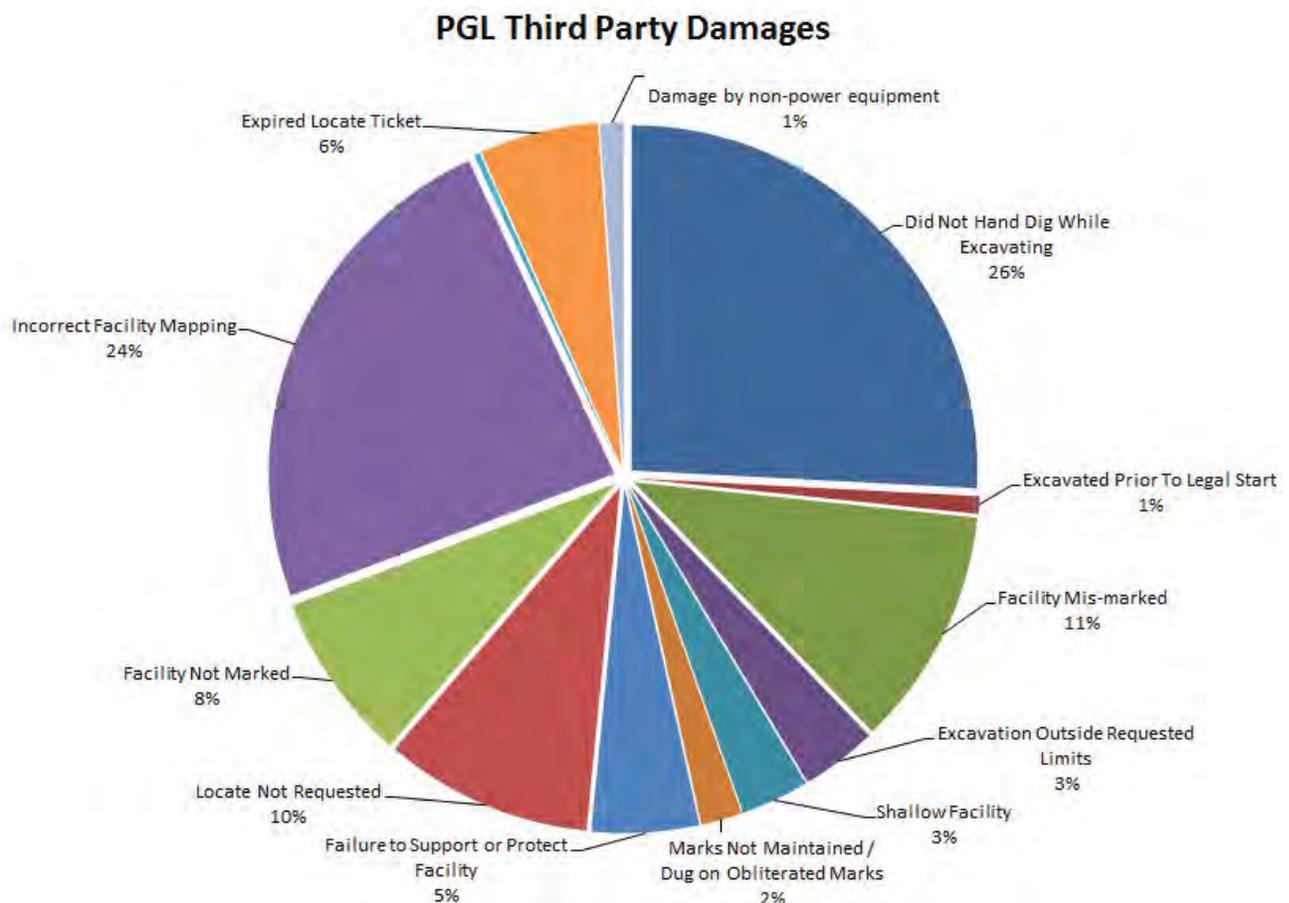
Year	Total Damages	Total Locates	Hit/1000
2006	1044	69885	14.9
2007	1027	92459	11.1
2008	953	92765	10.3
2009	724	93046	7.8
2010	735	91201	8.1
2011	913	115626	7.9
2012	1156	161666	7.2
2013	1042	169355	6.2
2014	1099	176226	6.2

Comparing contractor damage among different utilities (e.g., Figure C.9 of the Report) may be misleading. For example, no standard guidelines exist to track third party damage, so utilities may track and report the information differently. Utilities operate in different geographic territories, are subject to different legal obligations and different

enforcement agencies are responsible for damages. For example, in Illinois, neither the ICC nor the City of Chicago was the responsible enforcement agency under the Illinois Underground Utility Facilities Damage Prevention Act – although a recent amendment to the law authorized the City to regulate underground utility facilities damage prevention. A better comparison would be to track a utility’s performance based on its own historical data to see if an improvement to its gas system safety is being achieved.

Peoples Gas follows best practices as outlined by the Common Ground Alliance (CGA). As part of the comprehensive damage prevention program, Peoples Gas tracks metrics and performs analysis to identify risks to its gas system. Based on the analysis, Peoples Gas implements changes to its damage prevention program. Peoples Gas also tracks excavators who cause the highest damages to the gas system and monitors their construction activities. Peoples Gas’ System Integrity Group meets on a regular basis with the “highest hitter” and provides additional locating and monitoring of their construction sites. The damage prevention team also provides free damage prevention training to these contractors and city agencies. Peoples Gas is actively involved with the Greater Chicago Damage Prevention Council (GCDPC) collaborating with excavators, engineering firms, locators and utilities towards preventing damages. Peoples Gas also collaborates with the Underground Contractors Association (UCA), attending its meetings and discussion panels.

The chart below shows the breakdown of the root causes from the 2014 annual report filed with the ICC.



The following solutions have been implemented to deal with the deficiencies:

- **Incorrect Facility Mapping** – Use of Marker Ball technology along with tracer wire to enhance better locating capability of buried gas facilities. Increased emphasis on making sure incorrect records are corrected.
- **Not Marked or Mis-Marked Locates** – As shown in the table above, there has been a significant increase in locates due to infrastructure improvements in Chicago. Peoples Gas added a second locating company in 2014 to manage the increase in workload. Peoples Gas mandated that the locating companies provide no less than 48 hours' notice prior to the due dates of any issues with difficult or critical locates.
- **Audits** - In addition to tracking second and third party contractors, Peoples Gas also tracks performance of its locators by performing audits. Any deficiencies identified with the locator's performance could result in corrective measures ranging from additional training up to discharge.

Below are some of qualitative efforts that have been made by Peoples Gas' System Integrity Group.

Preventative Measures - Staffing

- Increased departmental staffing and training.
 - Removed Corrosion Control from System Integrity Group, allowing more managerial focus on Damage Prevention
 - Added an additional engineer and supervisor to Damage Prevention Team.
 - Damage Prevention staff required to attend week-long locating training at Staking University.
- Outsourced all locate work to contracted vendor, freeing up Company staff to enforce safe digging practices during ongoing excavations (Excavator Audits and Watch and Protect Program).
- Conduct monthly meetings with third-party excavators with the highest amount of damages to Company facilities.
- Provide excavators with complete departmental contact information.

Preventative Measures - Training

- Offer free Damage Prevention training to all excavators.
- Conduct training and coaching for Company crews that have damaged the facilities of others.

- Organize training for City Department of Water Management at Jardine Water Plant.
- Partner with Greater Chicago Damage Prevention Council to bring greater awareness to damages to Company facilities.
- Provide training for Company contractors.
- Joined Common Ground Alliance and plan to increase participation by attending spring conference.
- Trained over 400 Company crews on sweeping before excavating.

Preventative Measures – On Site Audits

- Conduct on-site audits of contractors, resulting in immediate coaching, in case of offenses.
- Promptly respond to excavators calls regarding unmarked and mis-marked facilities.
- Notify DIGGER, the City of Chicago’s one-call agency, of one-call violations and deliberate damage by excavators.
- Work with high-volume excavators to provide better locating support for ongoing projects, in hopes of curtailing damages.

Preventative Measures - Communications

- Distribute Damage Prevention material, via mass email, to Chicagoland area excavators.
- Mail billing insert to Company customers, informing them about safe excavation practices.
- Participate in public awareness events (Chicago Garden Show, Lakeview Arts Festival, etc.).

Owner:

Director, Gas Operations & Maintenance

Liberty Recommendation C.3:

Peoples Gas should undertake measures to verify the operability of external service shutoff valves.

Accept/Reject: Peoples Gas rejects this recommendation.

Status: Implemented an Alternative.

Response to Recommendation C.3:

Peoples Gas determined that its ongoing operations, processes and procedures result in the company examining and verifying the operability of excess shutoff valves at a rate significantly greater than that recommended by Liberty. Liberty recommends randomly surveying 1,000 service valves. From January 2011 through August 2015, Peoples Gas has used external service shutoff valves to shutoff service to isolate gas from 135,505 buildings (approximately 30,000 annually). This amount of annual building shutoffs and high success percentage exceeds the recommended program requirements. Consequently, Peoples Gas has determined that instituting an additional program for verifying the locatibility and functionality of external service shut off valves would not produce tangible benefits beyond those benefits from the current programs that address locatibility and functionality of external service shutoff valves.

Outside building shutoff orders follow an automated escalation system to ensure the properly trained and equipped crews are sent to complete shutoffs. The logic of the automated process is illustrated in the process flow chart.¹ Understanding this process is critical to understanding the order completion statistics. Building shutoff orders will automatically proceed to different “off methods” (described in Table 1 below) based on the system logic shown in the flow chart.

Table 1 – Peoples Gas Shutoff “Off Methods”

Gas Off Method	Description
A	Physical Cut
B	Turn Off at B-box/Riser
C, F, G	Inside - Off at Meter
D	Outside - Off at Meter
E	Box Maintenance

There are numerous reasons why b-box and riser shutoffs may be unsuccessful (“why-not” in Peoples Gas terminology). Many of these reasons do not mean they are not

¹ Please refer to C.3 Attachment 1 in Appendix

locatable or serviceable. For example, orders can be unsuccessful due to a car parked on the service box, a locked gate blocking access, or an unsafe condition in the yard such as a loose dog. Most building shutoff orders are not emergencies and no immediate action will be necessary on that day. Instead, the order will be reinitiated and follow the system logic to be assigned to another crew at a future date. It is important to consider this process when interpreting the following statistics on Peoples Gas building shutoffs. The majority of “physical cut” shutoffs will be visited multiple times because they originate as an off method “B” but as they are unsuccessful will proceed into a “physical cut” (off method “A”). Table 2 below shows a breakdown of the building gas shutoffs over the period January 2011 through August 7, 2015.

Table 2 – Peoples Gas - Building Shutoffs from January 1, 2011 to August 7, 2015

Number of visits	Shutoff Method			Grand Total
	Locked at B-box	Locked at Riser	Physical Cuts	
1	85.9%	91.8%	39.8%	87.7%
2	8.9%	5.4%	19.7%	7.7%
3	2.4%	1.4%	15.7%	2.1%
4+	2.8%	1.5%	24.8%	2.5%
Grand Total	80,778	53,089	1,638	135,505
% of Overall Shutoffs	59.6%	39.2%	1.2%	100.0%

Table 2 illustrates a high success rate of 97% of b-box and 98.6% for riser shutoffs in the first three visits. As explained earlier, some first visits are unsuccessful despite locating a serviceable valve due to other circumstances. Additionally, only 1.2% of building shutoffs require physical cutoffs. This data shows that locating and the function of service shutoff valves is not a significant issue.

In an emergency where a service valve cannot be located, there are alternative methods of isolating gas service from a building. One method is to dig up the service line and physically cut the service pipe. Another method is to isolate gas to the service pipe by shutting gas main valves. These gas main valves are inspected annually without interrupting service to customers.

Peoples Gas disagrees with Liberty’s conclusion that the lack of its proposed safety program for assessing operability does not conform to good utility practice. Peoples Gas has consulted five other major natural gas LDCs across the country, and none are aware of any structured programs to randomly locate and operate service valves. Additionally, the American Gas Association does not recommend this type of program



as a best practice. Peoples Gas does not believe any federal or state laws require such a program.

In conclusion, Peoples Gas has determined that Liberty's recommendation of this program is already accomplished through standard operations.

Owner:

Director, Gas Operations & Maintenance

Liberty Recommendation C.4:

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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation C.4:

Peoples Gas agrees with and has implemented this recommendation but notes that the examination is part of its overall capital improvements planning and how it addresses the results of the proposed examination may be through a Neighborhood project or a System Improvement project. As described below, Peoples Gas' planning and shut-down processes take into account isolated low pressure areas and single-contingency outage risks.

Peoples Gas considers many aspects of safety and reliability as part of identifying capital system improvement projects. This includes analyzing regions of low pressure that may be encountered during field pressure surveys performed during the winter months, or from field conditions that are experienced during normal operations.

An evaluation of the distribution system using network modeling software, SynerGEE, is performed to identify isolated low pressure areas during the pre/post as-built phase. Designs are then developed and incorporated to be part of a Neighborhood project or a stand-alone System Improvement project.

System Improvement projects focus on solving more immediate or short term operating issues such as low pressure areas that require a pressure boost, preferentially through a system replacement upgrade to medium pressure when feasible. The Neighborhood approach allows the company to focus capital dollars on replacement of cast and ductile iron pipe and low pressure areas in alignment with the overall infrastructure replacement plan. Through the Neighborhood approach, the highest risk segments of the system are ranked and addressed by priority, therefore reducing risk of future leaks.

During the design planning phase of a neighborhood replacement project, engineers perform feasibility and project phasing SynerGEE studies as an evaluation for managing outage risk. The studies are performed using a Design Day of -20 degrees plus a stress factor to account for a worst case scenario. The purpose of the feasibility and phasing studies is to establish the criteria where the system can be upgraded while maintaining uninterrupted service to customers. This includes influencing factors such as temperature constraints, supply fault and pipe sizing analysis, and identifying critical main gas feeds required to maintain the supply during the installation process.

As part of the construction phase of a project additional SynerGEE studies may be performed to account for the current status of the gas system. This along with the development of shut-down procedures, coordinated with multiple departments, reduces the risk of low pressure and single-contingency outages.



The benefit of continuing the above stated practices, in alignment with this recommendation, is the mitigation of the risk of an outage associated with low pressures or a single-contingency.

Owner:
Director, Gas Engineering

Liberty Recommendation C.5:

Peoples Gas should test both services and mains to 100 psig.

Accept/Reject: Peoples Gas rejects this recommendation.

Status: Implemented an alternative.

Response to Recommendation C.5:

The maximum allowable operating pressure (“MAOP”) for Peoples Gas’ distribution gas mains and services are:

- Low pressure = 14 inches water column
- Medium pressure = 25 psig

AMRP will replace all of the low pressure mains and services and the medium pressure ductile and cast iron mains and their associated services. It will not replace medium pressure plastic or steel mains already in place.

The approximate number of services off of medium pressure mains that will not be part of future AMRP projects is:

- Corrosion Protected Steel Main = 43,446 Services
- Black Plastic Main = 60,164 Services
- Yellow Plastic Main = 101,964 Services
- Total = 205,574 Services

Prior to the Liberty audit, Peoples Gas tested medium and low pressure services to a minimum of 50 psig.

In January 2015 Peoples Gas implemented a new pressure testing procedure, TEG 1030. TEG 1030 states:

TEG 1030.5.1_1: Before put into operation, each new segment of pipeline and segments of pipeline that have been relocated or replaced must be:

A. Pressure tested to substantiate the MAOP (also referred to as a strength test)

TEG 1030.5.1_2A: Test pressures to substantiate MAOP for common distribution pipelines are listed in Tables 1030.4 and 1030.5

Table 1030.4 – Test Pressure Required to Substantiate MAOP for Services

Pipe Material	Operating Pressure	Design MAOP	Test Pressure Band		Maximum Allowable Pressure Drop (not including temperature effect)	
			Minimum	Maximum	Test Duration 1 hour or less	Test Duration longer than 1 hour
Steel or Copper	Less than 1 psig	1 psig	50	60	1 psi	1 psi
Steel	1 – 99 psig	99 psig	90	105		1 psi
	100 – 150 psig	150 psig	225	275		2.5 psi
	151 – 250 psig	250 psig	375	425		10 psi
	251 – 420 psig	420 psig	630	680		10 psi
Plastic	Less than 1 psig	33 psig	50	60		1 psi
	1 – 60 psig	60 psig	90	105		1 psi
	61 – 100 psig	100 psig	150	165		1 psi

Table 1030.5 – Test Pressure Required to Substantiate MAOP for Mains¹

Pipe Material	Operating Pressure	Design MAOP	Test Pressure Band		Maximum Allowable Pressure Drop (not including temperature effect)	
			Minimum	Maximum	Test Duration 1 hour or less	Test Duration longer than 1 hour
Steel or plastic	Less than 1 psig	1 psig	50	60	1 psi	1 psi
	1 – 60 psig	60 psig	90	105		1 psi
Plastic	61 – 100 psig	100 psig	150	165		1 psi
Steel	61 – 150 psig	150 psig	225	275		2.5 psi
	151 – 250 psig	250 psig	375	425		10 psi
	251 – 420 psig	420 psig	630	680		10 psi

This procedure addresses the bulk of the objectives for this recommendation since it assures all new medium pressure services are tested to a minimum of 90 psig, which would allow an MAOP 60 psig if desired. The same test pressure will also be used for the repair of any existing medium pressure service and would allow for upgrading if desired.

As the low pressure system is converted to medium pressure, it will be tested to 90 psig, allowing for an upgrade to 60 psig.

¹ Test pressures in this table are derived from the United States Department of Transportation’s rules codified at 49 CFR 192 Subpart J using the conservative assumption that steel pipelines are designed to operate at 30% SMYS (specified minimum yield strength) or greater and are located in Class 3 or 4 locations. For pipelines designed to operate at less than 30% SMYS or in Class 1 or 2 locations, Peoples Gas’ Engineering may choose to test at a lower pressure as specified in the appropriate Subpart J sections that apply to the specific project variables.

Although the current procedure would allow uprating mains and services sometime in the future, the cost associated with developing and implementing a plan to uprate approximately 205,574 services is high. It is reasonable to delay these costs to when and if Peoples Gas decides to uprate the entire system to an MAOP of 60 psig.

At this time Peoples Gas does not anticipate the need to uprate the system to an MAOP of 60 psig since:

- The current design is sized adequately for a 25 psig system; and
- There is no anticipated significant load growth that would require uprating.

If a need does develop, a comprehensive program to retest existing service could be developed and the cost of the project could be assessed against other alternatives.

As can be seen by reading the applicable codes, the current and past test procedures comply with all regulatory requirements:

192.509 Test requirements for pipelines to operate below 100 psig:

Except for service lines and plastic pipelines, each segment of a pipeline that is to be operated below 100 psig must be leak tested in accordance with the following:*

(b) Each main that is to be operated at less than 1 psig must be tested to at least 10 psig and each main to be operated at or above 1 psig must be tested to at least 90 psig.

192.511 Test requirements for service lines*

(b) Each segment of a service line (other than plastic) intended to be operated at a pressure of at least 1 psig but not more than 40 psig must be given a leak test at a pressure of not less than 50 psig

(c) Each segment of a service line (other than plastic) intended to be operated at pressures of more than 40 psig must be tested to at least 90 psig, except that each segment of a steel service line stressed to 20 percent or more of SMYS must be tested in accordance with § 192.507 of this subpart.

192.513 Test requirements for plastic pipelines*

(c) The test pressure must be at least 150 percent of the maximum operating pressure or 50 psig, whichever is greater. However, the maximum test pressure may not be more than three times the pressure determined under §192.121, at a temperature not less than the pipe temperature during the test.

* Unrelated code subsections left out

Owner:
Manager, Compliance

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation C.6:

Based on PHMSA¹ guideline F7100.1-1 (Rev. 1/11), Peoples Gas defines the cause code of a leak due to corrosion as a leak resulting from a hole in the pipe or other component that was caused by galvanic, bacterial, chemical, stray current, or other corrosive action.

Some examples of corrosion leaks are:

- Holes rusted through a bare steel service.
- Pin holes through a cast iron main.
- Holes rusted through the barrel of a dresser coupling.
- Bolts on a mechanical fitting that have rusted through causing the seal to leak

Additionally, graphitization of cast and ductile iron is reported with a cause code of corrosion based on the criteria noted above. While the Liberty report stated this to be an unusual practice for gas distribution companies, it is one that best fits this category more than any other utilized since it is associated with the degradation of metal and is considered a form of corrosion.

Based on leak data assembled from 2013 to the current date, there have been 533 leaks cleared with corrosion as the cause code. Of these leaks, 101 were on cathodically protected steel mains and services. After checking all of these records, Peoples Gas found that 47 leaks were attributed to leaks on underground protected pipe. Of these 47 records, corrosion pitting was only noted on 15 records. The other 32 did not note any active corrosion being the cause of the leak. Of the 15 records indicating corrosion pitting, 7 were due to age, 3 were in areas with known stray current interference, 2 were due to improper insulation, 1 was improperly classified as a fitting failure, 1 was on an a service with active corrective action work pending, and 1 was due to an improper anode installation.

As a result of this analysis, Peoples Gas concludes that cathodically protected services and mains only account for approximately 2.5% of the total leaks classified with a corrosion cause code and are not a widespread issue. Additionally the percentage compared to our total leak count would be significantly less.

Lastly, since January of 2014 the corrosion control group has implemented a preventive maintenance program specifically designed to address borderline reads obtained on cathodically protected mains and services with a 10 year inspection frequency. This

¹ The United States Department of Transportation's Pipeline and Hazardous Materials Safety Administration.



practice has helped identify and correct deficient cathodic protection levels prior to them producing leaks.

Owner:

Director, Gas Operations & Maintenance

Liberty Recommendation 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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation D.1:

As part of the development of the new cost model as defined in the response to Recommendation D.6, Peoples Gas will provide a clear description of the AMRP program including all critical quantities.

The project will then be able to report clearly against the completion of these quantities. The reporting will be able to trend the progress against these quantities on a program to date, year to date, and monthly progress.

Additionally, please refer to AMRP's Integrated Project Controls management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation D.6 in particular is addressed under "Scope".

Owner:

Project Director

Liberty Recommendation D.3:

Peoples Gas should provide a realistic schedule assessment based on an effective program plan

Accept/Reject: Peoples Gas accepts this recommendation

Status: Implementation In Progress

Response to Recommendation D.3:

Refer to AMRP's Integrated Project Controls (IPC) management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation D.3 is in particular, addressed under the "Report" phase of the IPC.

There are several factors that affect "on target" project completion. It is important to differentiate between those that affect Construction Start and those that affect In-Progress Performance:

- Construction Start factors –
 - Design issues or revisions that may delay project award
 - Late City of Chicago Office of Underground Coordination ("OUC") approval of Construction Work Packages that delay issuance of a notice to proceed (NTP) to contractor
 - Delays in Chicago Department of Transportation ("CDOT") permit releases
- In-Progress Performance factors –
 - Changes in CDOT requirements while projects are in construction
 - Peoples Gas resource limitations in completing meter installations and retirements
 - "Straggler" services that must be skipped and returned to at a later date due to unresponsive customers
 - Contractor performance – crew allocations and production.

The following have been implemented to better monitor project performance:

- Program Plan – A high level 5-year program plan has been developed in Primavera P6 and NetPoint for projecting neighborhood project planning and budgeting using production rates and cost loading.
- Integrated Project Schedule – An integrated schedule containing Engineering, Procurement, Permitting, Construction, and Closeout components is being implemented in the second half of 2015 for 2015 Design / 2016 Construction Year projects. This will provide a "cradle to grave" project status for 2016 construction projects.

- Contractor Performance Metrics (Construction) – The 2015 Schedule Basis, a component of the Contract General Specifications, requires the contractor to utilize performance metrics for the Contractor Monthly Status Meeting, wherein all projects in progress are evaluated. These metrics include comparison of current production rates to planned rates, Schedule Performance Index (SPI), and Recovery Plan metrics. The project management office (“PMO”) utilizes performance metrics in evaluating production performance for Main and Services installation quantities on a weekly basis and is reported in the Peoples Gas Monthly Report.
- Construction Finish Variance – All construction schedules track against a target baseline schedule and have done so since the AMRP program began in 2011. Finish variance is measured weekly and reported in the Peoples Gas Monthly Report.
- Construction Recovery Plan – The 2015 Schedule Basis, a component of the Contract General Specifications, requires a Recovery Plan if a Phase Completion Date reaches or exceeds 5 work days of negative variance. The plan is outlined and tracked in the weekly schedule update narrative and is primarily based on expanded work hours (with CDOT permit approval), additional crews, or additional concurrent blocks as means of regaining lost time.

Peoples Gas Shop Resources – PMO schedulers are at the Peoples Gas District Shops and have developed resource loading and leveling in NetPoint. Peoples Gas has had internal resource challenges for Meter Sets and Retirements and this has created schedule issues to achieve timely completion of a project. This can impact the contractor’s ability to finish Final Restoration within the planned timeframe of the project. By planning ahead with NetPoint, the Shop can see where the critical resource points can be expected and provide guidance for resource leveling options to prepare for those instances

Owner:
Director, Gas Operations Planning

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation D.4:

Peoples Gas agrees with Liberty's recommendation. A detailed resource plan will allow Peoples Gas to align resource needs to workload and budget allocation, as articulated in the recommendation. Currently, due to the ongoing organizational transition following Wisconsin Energy Corporation's acquisition of Integrys, analyses and studies are underway to map out the future of Peoples Gas operating and staffing models.

Peoples Gas has completed several resource analyses of the areas of work force constraints. The first was an overall work and productivity analysis. The second was a workload analysis of the field workforce requirements of the AMRP for 2015 and 2016. Both of these work force models allow Peoples Gas to model various options to solve for the short term, staffing needs for the field resources as well as provide the data input for an integrated resource planning model.

Below is a discussion of the current state of activities for the AMRP transition plan. As WEC Energy Group, Inc. ("WEC") continues to gain greater insight into the existing Peoples Gas organization and external factors, Peoples Gas expects that there will be periodic adjustments to the plan and organizational design. Peoples Gas is developing a workforce planning department as part of the organizational design. A complete and detailed resource plan will be available by June 30, 2016.

Current steps underway as part of the analyses and studies are:

Elements

- I. Assessing current internal and third party AMRP resources
- II. Defining organizational structure and filling key positions
- III. Transition from Jacobs Engineering to internal and alternative third party resources
- IV. Evaluation of the long term staffing needs of the program.
- V. Development of a Resource Plan and model.

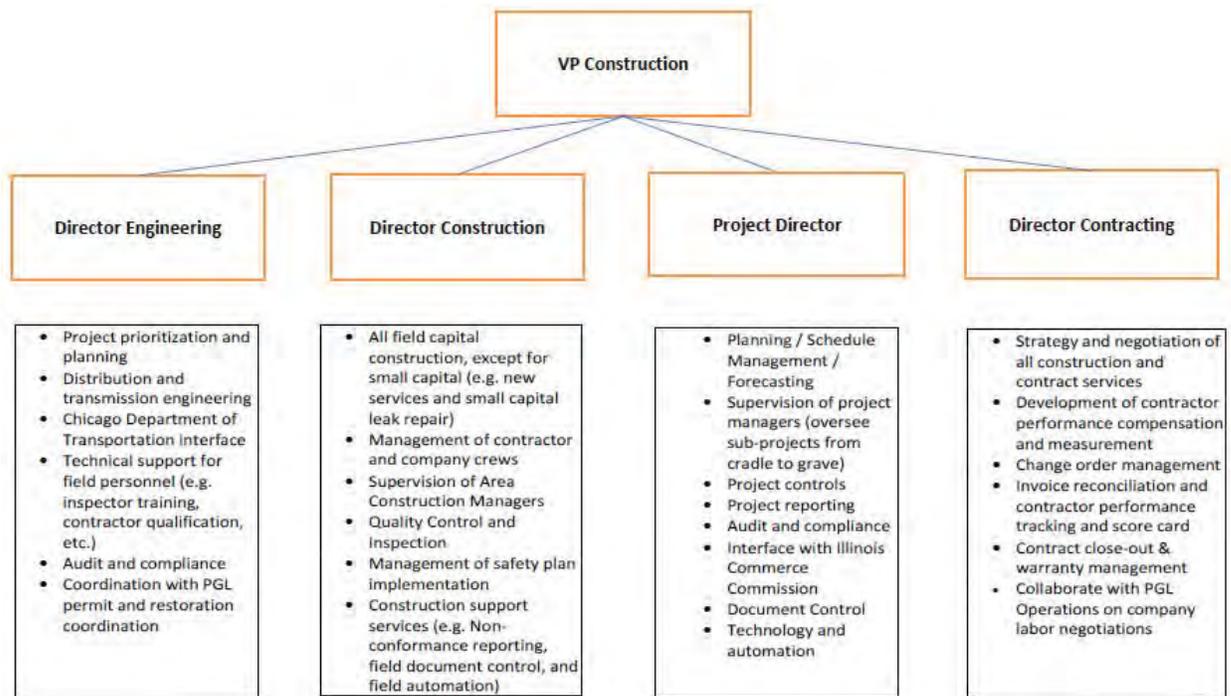
I. Assessing Current Internal and Third Party AMRP Resources

Prior to the acquisition, Peoples Gas had been in the process of hiring a Workforce Planning Manager to help perform the analysis and strategy for the staffing of the project and Peoples Gas. Beginning the closing day of the acquisition transaction, the new Peoples Gas leadership conducted sessions with all employees to introduce the team, review the corporate culture and the overarching goals of the organization, and interact with employees at the main office and shop locations.

Subsequently, the Vice President of Construction began a process of participating in weekly construction meetings, reviewing organizational structure and job responsibilities of internal and external resources, reviewing construction reports, and evaluating alternatives and opportunities for improvement. Consistent with Liberty recommendations and WEC’s historical practice of in-house management of capital projects, Peoples Gas determined that it should end the services arrangement with Jacobs Engineering (“Jacobs”) and move management of the project in-house.

II. Defining Organizational Structure and Filling Key Positions

Below is a sample of the proposed organization structure under the new Construction organization of which AMRP will be a part going forward. Also see Chapter B of this response.



III. Transition from Jacobs’ Project Management

- Peoples Gas management has sought and received input on individual Jacobs’ team member performances and has prioritized their value to the project
- Peoples Gas is in the process of making direct offers of employment to select high value Jacobs’ employees
- Certain Jacobs’ team members are best suited for long-term employment through an engineering / contracting firm (e.g., inspectors)
- Peoples Gas will post remaining positions to which internal and external candidates can apply

IV. Evaluation of a long term staffing needs of the program

- Peoples Gas management will evaluate the current state of resources post-transition and model the long term (3-5 year) needs of the program.
- Model the current workforce with retirement impacts and retention rates.
- Create an appropriate staffing plan based on these evaluations.

V. Development of a Resource Plan and model

- Develop a resource planning model that takes into consideration all labor for the program.
- Provide strategic direction and recommendations based upon the results of the model.
- Perform risk analysis of the variations of changes in the mix of labor and potential resource needs.

Below are the milestones and projected completion dates for both the consultant and Peoples Gas management:

Action Item	Forecasted Completion Date
Define organizational structure and fill key positions	Completed
Transition from Jacobs Engineering to internal and alternative third party resources	Fall 2015
Assess current internal and third party AMRP resources	12/31/15
Evaluate long term staffing needs of the program.	03/31/16
Develop a Resource Plan and model.	06/30/16

Owner:

Director, Gas Operations Planning

Liberty Recommendation D.5:

In light of apparent decreases in productivity, Peoples Gas should promptly complete an analysis of productivity associated with the installation of meters.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation D.5:

Peoples Gas has been tracking productivity of meter installations / meter moves at the shop level since January of 2015. The data shows day to day productivity, in meters/day, for each of the Peoples Gas shops, which is combined into a total monthly average. It also includes a cumulative average based upon a per day meter move count. Available resource levels at the shops vary. Vacations, training, qualifications, and urgent compliance issues are some of the main reasons why the resource level shifts throughout the year. In general, the shops average between 15-35 resources which focus on meter installations. The productivity averages have been helpful in the process of determining resource levels and beginning to forecast an approximate number of meters that can be moved within a year.

It should be noted that this tracking mechanism has not yet been finalized and is still being adjusted to meet the needs of management. Peoples Gas is currently examining potential construction process changes that could have a significant impact on meter installation productivity. In light of this evaluation, Peoples Gas will revisit the productivity analysis after the process study is complete. However, the continual tracking of meter productivity on both a weekly and monthly basis will be on-going.

Action Item	Forecasted Completion Date
Evaluate potential construction process changes	12/31/15
Comprehensive productivity analysis complete	04/01/16

Owner:

Director, Construction

Liberty Recommendation D.6:

Peoples Gas should promptly complete a new program cost estimate consistent with good estimating practices.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation D.6:

Please see Peoples Gas' response to Recommendation G.1, which addresses the development of a new AMRP Cost Plan Model.

Peoples Gas has selected a consulting firm to create a new cost and schedule model for the AMRP work. Below are the milestones and projected completion dates for both the cost model consultant and Peoples Gas management:

Action Items	Forecasted Completion Date
RFP sent to prospective consulting firms	Completed
Responses due back to Peoples Gas	Completed
Selection and contracting with consulting firm	Completed
Consulting firm due diligence of Peoples Gas records, research of program requirements, and development of cost and schedule model	09/30/15
Draft deliverables due back to Peoples Gas	10/09/15
Peoples Gas review of draft results and critique sent back to consultant	10/23/15
Final deliverables due back to Peoples Gas	11/06/15
Full results ready for submission by Peoples Gas to ICC	11/16/15
ICC report submission deadline	11/30/15

Also refer to AMRP's Integrated Project Controls management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation D.6 in particular is addressed under "Scope".

Owner:

Director, Gas Operations Planning

Liberty Recommendation 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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation E.1:

Peoples Gas' most recent update of the AMRP Project Execution Plan ("PEP"), now referred to as Capital Construction Program Project Execution Plan, was completed in April 2015 ("2015 PEP").

Peoples Gas will replace the 2015 PEP and will initiate the process to review and modify the content to incorporate summary-level discussion and description of processes in areas such as those highlighted below:

- Cost Estimating
- Program/Project Schedule
- Resource Planning
- Work Management
- Cost Management
- Cost Reporting
- Scope Control & Management
- Procurement & Sourcing
- Contract Management

The list below summarizes the latest status of the component plans in the 2015 PEP. The component plans were finalized on the revision date and approved by management with the approval of the 2015 PEP:

Plan	Revision Date	Status
Project Execution Plan	4/22/15	Issued Following Management Approval
Long Term Planning and Forecasting	3/24/15	Issued for Execution; management approval with PEP
Engineering & Design	3/30/15	Issued for Execution
Construction Planning	3/30/15	Issued for Execution
Construction Management	3/24/15	Issued for Execution

Construction Contract Close Out	3/30/15	Issued for Execution
Corporate Governance	3/2/15	Issued for Review (Pending)
Safety	3/30/15	Issued for Review & Approval (Pending)
Quality	3/30/15	Issued for Review
Cost Management	3/24/15	Issued for Execution
Schedule Management	3/30/15	Issued for Execution
Document Management	3/24/15	Issued for Execution
Risk Management	2/27/15	Issued for Execution
Contract Management	3/24/15	Issued for Execution
Communications Management	3/24/15	Issued for Execution

Peoples Gas recognizes that incorporating more summary-level process information can provide a more streamlined and structured guidance document for effective control of project information, process, cost, time, and scope elements in the project environment.

The implementation plan for replacing the 2015 PEP will coincide with the existing process of updating the document annually. The table below summarizes the replacement implementation plan:

Action Item	Forecasted Completion Date
Subject Matter/Component Plan Review of 2015 PEP	12/31/15
Revisions complete and re-issue	04/01/16

The PEP is a key component of Peoples Gas' adoption of an Integrated Project Controls management approach. Please refer to AMRP's Integrated Project Controls management approach detailed in Peoples Gas' response to Recommendation L.1.

Owner:

Vice President, Construction

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation E.2:

Peoples Gas agrees with the recommendation that the development of a replacement AMRP Project Execution Plan (“PEP”), now referred to as the Capital Construction Program PEP, should incorporate lessons learned from the previous AMRP management experience with adoption and operationalization of the PEP for project execution.

Peoples Gas is transitioning to an Integrated Project Controls (“IPC”) management approach that is intended to provide the Capital Construction Program with clearer process and implementation guidance, and responsibilities and interconnection or integration of administrative and management procedures. The PEP is a key element in the IPC and, thus, transition to IPC drives and sustains the operationalization of the PEP. Furthermore, the transition to WEC Energy Group, Inc.’s (“WEC”) historical in-house management of capital programs further provides an environment that standardizes and operationalizes policies and procedures across the entire capital construction program. WEC’s new project delivery organizational structure and the adoption of an IPC management approach will facilitate clearer accountabilities and responsibilities of project and program performance.

Replacement of the former AMRP PEP will address the legacy operational and governance issues that presented a challenge to operationalization of the PEP. Please refer to AMRP’s Integrated Project Controls management approach detailed in Peoples Gas’ response to Recommendation L.1.

Owner:

Project Director

Liberty Recommendation F.1:

Peoples Gas should develop, staff, and implement a data quality control program.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation F.1:

Peoples Gas concurs with Liberty that there are opportunities to improve data management, but there is no indication to date that the in-place tools and processes have compromised proper prioritization of at-risk infrastructure. This is further assured due to the inherent conservatism built into the Main Ranking Index.

Peoples Gas' new management places a high value on the consistency and accessibility of data and repeatability of data extracts from its source. For example, Liberty referenced an inability to reconcile leak data. Upon additional investigation by Peoples Gas, the root cause was inconsistent data queries from the company's single master source of raw data. In this case, the remedy is based in training and protocols regarding data extraction. A different remedy would have needed to be pursued if the root cause analysis found multiple disparate data bases housing inconsistent data and/or there were gaps in the raw data, which was not the case.

Appropriate operational data management is another facet of project controls and ownership of maintaining the quality of various pieces of data, whether related to construction execution, safety, quality, or financial, cuts across many project team members. As such, in the coming months, the project team will prioritize the highest value data elements and assess their quality, consistency, and accessibility. Based on the assessment, the team will determine whether attention to raw data, storage, access, data systems and management, and/or staff training are warranted. Efforts in this regard are a component of the project controls work discussed in Peoples Gas' response to recommendation L.1. It is not yet evident if dedicated resources are warranted.

Action Item	Forecasted Completion Date
Identify 4 high value data elements for analysis	09/30/15
Initial findings on the state of the 4 elements and opportunities / recommendations for improvement.	11/30/15
Implementation of recommendations complete, subject to systems or software upgrades may span multiple years.	03/31/16

Owner:

Project Director

Liberty Recommendation F.2:

Peoples Gas should develop a database of soils data already collected, and populate it further with soils data taken at new excavations.

Accept/Reject: Peoples Gas accepts this recommendation

Status: Implementation In Progress

Response to Recommendation F.2:

Based upon the clarification from Liberty, Peoples Gas will implement the recommendation in the following manner.

Peoples Gas will take soil samples associated with repairs being made for leaks caused by corrosion of the pipe. The soil analysis will include soil resistivity and pH.

Peoples Gas will collect the soil analysis data and annually do a geographic analysis of the all soil readings compared to leaks caused by corrosion. The company will look for geographic trends in the data to assist, if possible, in the prediction of future risks associated with corrosion and prioritization of future replacements.

Peoples Gas will research other urban gas utilities with similar systems to see if there are any other models that have been developed in regards to soil analysis and corrosion studies which can be leveraged.

Action Item	Forecasted Completion Date
Update Associated Company Procedures	10/31/15
Research other Utilities	10/31/15
Communicate/Train on Changes to Procedures	12/31/15
Perform GIS Analysis of prior Soil Data	12/31/15

Owner:

Director, Gas Operations Planning

Liberty Recommendation F.3:

Peoples Gas should conduct a structured study of alternative criteria and weightings for the Main Ranking Index and for the neighborhood approach.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation F.3:

In 2011, Peoples Gas established a neighborhood approach for the main replacement program. The neighborhoods were analyzed and prioritized through the use of a set of criteria and weightings. Below is the set of criteria and weightings that were used.

2011 Prioritization Model

Attribute	Weighting
MP ¹ Ductile Iron Main	25%
8-Inch or Smaller CI ² Main	25%
CI Main Older than 1920	15%
Unrepaired Leaks	20%
Inside Meter	15%

In early 2015 Peoples Gas reviewed the performance of the replacement program (the normalized leak count) and reviewed the criteria and weightings. The goal was to see if changes could be made to the ranking model to improve the efficiency of replacement. While the company did see a reduction in the overall normalized leak rate, the company wanted to see if changes could be made to improve that rate reduction.

After a thorough review of the prioritization model, a number of changes were implemented in 2015 along with a new prioritization model³. Below is a table showing the new model.

2015 Prioritization Model

Attribute	Weighting
MP Cast Iron & Ductile Iron Main	30%
8-Inch or Smaller CI Main	15%
Mean UMRI ⁴	30%
Unrepaired Leaks	10%
Vulnerable Services	15%

¹ Medium pressure

² Cast iron

³ See F.3 Attachments 1 Model Neighborhood Input and F.3 Attachment 2 Model Neighborhood Ranking

⁴ Uniform Main Rank Index

The first change was to take advantage of the UMRI which has already been shown to be an effective tool at prioritization of at-risk pipe. The next change was to drive the focus on medium pressure replacement of ductile iron pipe to include cast iron. With the elevated pressures on these two materials there is greater risk in the failure of the material. The focus on the smaller diameter cast iron pipe was retained. The criterion for unrepaired leaks adds value to the model, not only from reduction of current non-hazardous leaks, but in being a leading indicator of potential problems. The UMRI brings past performance of the pipe into the equation, and the pending leaks criterion brings current performance. Finally, a criterion for vulnerable services was added. The criteria were also compared to the company's Distribution Integrity Management Program ("DIMP") to ensure that the top risks identified through that program were being covered. All of the top ten risks that could be addressed through the replacement program were covered by the criteria above.

One other major change to the model was in switching from total units being evaluated to normalized values. This change makes a dramatic shift in focus from the largest neighborhoods due to the overall amount of pipe to replace to those neighborhoods that have the highest percentage of at-risk pipe. This will allow Peoples Gas to more effectively focus capital towards replacement of the most at-risk pipe.

The models were re-run in 2015 after these changes were made. The changes in the rankings have been incorporated into the scheduled replacement for 2016 going forward. As part of the process changes, the model will be re-run each year. Reevaluation of the criteria and weightings will be done every two years.

The company expects to see improvements to performance of the gas system as these projects identified through the new ranking model are completed. The performance will be monitored through the leak rate trend based upon the weather normalized annual leak rate. Additional metrics on the performance of the system can be seen through analysis on the average emergency time to make safe (time from arrival time to gas secured). Through the upgrade of the system, for both mains and services, it will become easier to perform emergency shutoffs in the event of fire, accident or other incidents where it is important to be able to stop the flow of gas quickly. Another key metric would be the reduction in third party damages. As the system is upgraded with plastic and steel, the company will be reducing the number of street crossings of pipe and will have an infrastructure in place that will allow for the pipe to be located more effectively.

Owner:
Director, Gas Operations Planning

Liberty Recommendation F.4:

Should Peoples Gas not change the current criteria and weightings, then the utility should develop additional measures to reduce leak rates further.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation F.4:

Peoples Gas has made changes to the current criteria and weights as identified in Peoples Gas' response to Recommendation F.3.

Owner:

Director, Gas Operations Planning

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation F.5:

Peoples Gas agrees with the recommendation and has implemented changes to the neighborhood prioritization model. In 2011, Peoples Gas established a neighborhood prioritization approach for the Accelerated Main Replacement Program (“AMRP”). The neighborhoods were analyzed and prioritized through the use of a set of criteria and weightings. In early 2015 Peoples Gas reviewed the performance of the AMRP, using the normalized leak count data to analyze the ranking model’s criteria and weightings. The goal was to see if changes could be made to the model to improve the efficiency of replacement.

The table below includes the set of criteria and weightings for the 2013 model and the changes for the 2015 improvements:

2011 Prioritization Model		2015 Prioritization Model	
Attribute	Weighting	Attribute	Weighting
MP ¹ Ductile Iron Main	25%	MP Cast Iron & Ductile Iron Main	30%
8-Inch or Smaller CI ² Main	25%	8-Inch or Smaller CI Main	15%
CI Main Older than 1920	15%	Mean UMRI ³	30%
Unrepaired Leaks	20%	Unrepaired Leaks	10%
Inside Meter	15%	Vulnerable Services	15%

Please refer to Peoples Gas’ response to Recommendation F.3, for details on Peoples Gas’ improvements to the prioritization model. Peoples Gas has improved the criteria used to monitor risks through the use of the Uniform Main Rank Index (“UMRI”) and the incorporation of vulnerable services into the replacement criteria.

¹ Medium pressure

² Cast iron

³ Uniform Main Rank Index



Peoples Gas will also use the following metrics to monitor performance of the system going forward.

- Normalized Hazardous Leak Rate (Normalized for weather, incorporating all class two leaks except third party damage)
- Average Time to Make Safe – (Time from arrival time to gas secured)
- Third Party Damage Rate – (Third party hits/1,000 locate tickets)

These metrics will help provide guidance to the overall performance of the system and the replacement program. Peoples Gas will continue to look for other meaningful metrics, through an iterative process of data review and analysis, which would help to provide insight into the performance of the main replacement program.

Owner:

Director, Gas Operations Planning



Liberty Recommendation F.6:

Peoples Gas should develop a cost model that addresses O&M costs associated with AMRP and related work

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation F.6:

Please refer to Peoples Gas' response to recommendation G.1.

Owner:

Director, Gas Operations Planning



Liberty Recommendation 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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation G.1:

Peoples Gas has engaged a nationally-recognized engineering firm to help create a new cost plan and schedule. The selected firm will create new models that will not only take into account AMRP progress to-date, remaining AMRP scope, observed productivity, known cost/schedule drivers (Chicago agency regulations, moratorium restrictions, permitting process, etc.), but also utilize industry best practices and identify the largest drivers and risks affecting each model. Once a final cost and schedule model has been developed, in line with other Liberty audit recommendation action plans, a number of other activities will follow to ensure that the models are used and updated. These activities include: providing sufficient resources to execute the plan, identify management employees to monitor and report on the progress of the plan, review and update the entire plan as needed, and ensure project controls are appropriate and able to effect change when needed.

Below are the milestones and projected completion dates for both the consultant and Peoples Gas management:

Action Item	Forecasted Completion Date
RFP sent to prospective consulting firms	Completed
Responses due back to Peoples Gas	Completed
Selection and contracting with consulting firm	Completed
Consulting firm due diligence of Peoples Gas records, research of program requirements, and development of cost and schedule model	09/30/15
Draft deliverables due to Peoples Gas	10/09/15
Peoples Gas review of draft results and critique sent back to consultant	10/23/15
Final deliverables due to Peoples Gas	11/06/15
Full results ready for submission by Peoples Gas to ICC	11/16/15
ICC report submission deadline	11/30/15



Please also refer to AMRP's Integrated Project Controls management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation G.1 is, in particular, addressed under "Scope".

Owner:

Director, Gas Operations Planning

**Liberty Recommendation G.2:**

Peoples Gas should establish a Cost Trend Program to monitor potential, major cost-affecting items.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation G.2:

The internal trend program for adjustments to management reserve will be established via the Integrated Project Controls (“IPC”) management approach. The internal trend program will establish the means by which the management reserve will be allocated within the AMRP program. Refer to AMRP’s Integrated Project Controls (“IPC”) management approach detailed in Peoples Gas’ response to Recommendation L.1. Recommendation G.2 is, in particular, addressed under the “Action” and “Report” phases of the IPC.

In addition, please refer to Recommendation G.1, which addresses the development of the new cost model for AMRP.

Owner:

Director, Gas Operations Planning

Liberty Recommendation H.1:

Peoples Gas should develop a Scheduling Master Plan.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation H.1:

Refer to AMRP's Integrated Project Controls management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation H.1, in particular, is addressed under "Scope".

Owner:

Director, Gas Operations Planning

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation H.2:

Peoples Gas agrees with this recommendation and implemented an integrated schedule containing engineering, procurement, permitting, construction, and closeout components beginning in the second half of 2015.

During the 2012 and 2013 construction years, the Program had in place two levels of schedule detail.

The first level was an “integrated” schedule which was project-based and included components at the phase level for Engineering, Permitting and Construction, as well as a project level Closeout component. This schedule was intended as a monthly management reporting tool.

The second level of detail was for project “construction”, and incorporated the contractor’s street level construction schedules along with shop provided information for Peoples Gas work activities, and start milestones for permit release to a range of blocks along a specific street. This schedule was intended to be a weekly reporting tool to be used by the shops, and as the source of data for the first level monthly schedule.

Owing to a lack of input data, the engineering process, permitting process and closeout process components were removed from the “integrated” schedule for the 2014 construction year. Without these components, the 2014 “integrated” schedule was limited to summary activities, at the phase level, for construction.

In 2014, the shop level “construction” schedule moved the start milestones that represent the initial release of permits from the street level to the individual block, and required the contractor’s construction details be provided at the individual block. In addition, project management office (PMO) shop schedulers were assigned to North and South shops. This has resulted in determining Peoples Gas crew sizes and functions, daily production rates for meter installations and retirements, and served as input to the contractor for activity durations at the time of schedule baseline preparation, and helped to provide progress updates weekly for Peoples Gas work activities. The 2014 model was the basis of the schedules in use by the Program at the time of Liberty’s Audit.

Since the audit, both the “integrated” and “construction” level schedules have been combined into a single project schedule (2015 logic model), containing engineering, procurement, permitting, construction, and closeout components. This revised logic model was issued to the contractors for use on all projects initiated after July 1, 2015.

This new schedule template will provide project status visibility across the lifecycle of these projects.

Implementation of the 2015 logic model will benefit AMRP by providing timely and actionable information for planning and tracking throughout the life of a project, and for AMRP as a whole.

Owner:

Director, Gas Operations Planning

Liberty Recommendation H.3:

Peoples Gas should resource-load schedules to address all physical work resources (including internal workforce and contractors) and construction inspectors.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Action Pending Further Review/Study

Response to Recommendation H.3:

Peoples Gas agrees with Liberty's recommendation. The following discussion details what has been implemented thus far and challenges Peoples Gas continues to work through in other areas.

The current construction schedules are resource-loaded, not with man-hours, but in terms of crew production rates for both contractor activities and Peoples Gas internal workforce activities. These production rates applied against total activity quantity are the basis for calculating activity durations in baselines and progress update schedules. All three Peoples Gas district shops (North, Central, and South) provide shop specific production rates during baseline development. These rates are monitored during construction with the use of resource leveling of meter installations and retirements to better manage spikes for shop crew resources, which are routinely impacted by emergency maintenance demand, gas service turn-ons for winter season, and other top priority functions.

The Peoples Gas design and engineering schedule, which includes schedules from outsourced engineering companies, is not currently based on resource-loaded values or rates. Durations are therefore derived from historical design experience based on the length of total main piping in the design. A plan to study the feasibility of incorporating resource-loaded values and rates to build the design and engineering portion of the schedule will be developed by the end of 2015.

Activities by other support groups in the Peoples Gas internal workforce, e.g., permitting, are planned for development in the master schedule. The permit process has been defined at various times, but due to changing Chicago Department of Transportation ("CDOT") limitations requiring permits to be acquired for each city block of work (limited to 8 blocks maximum at a time), it has been cumbersome to implement a strategic logic model for the process that could be set to a historical rate of performance. Resource-loading of this process and similar processes to generate reliable durations continue to be a challenge and are part of the feasibility study.

Action Item	Forecasted Completion Date
Develop plan to study the feasibility of incorporating resource-loaded values and rates to build the design and engineering portion of the schedule	12/31/15
Develop plan to include activities by other support groups in the Peoples Gas internal workforce, e.g., permitting, in the master schedule	12/31/15
Evaluate resource-loaded scheduling capabilities, as various PMO roles transition to in-house resources	12/31/15

Owner:
Director, Gas Operations Planning

Liberty Recommendation H.4:

Peoples Gas should regularly perform schedule variance analyses to identify recurring or systemic issues, and plan corrective actions.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation H.4:

Peoples Gas agrees to implement this Recommendation. It has identified recurring issues that cause delays, both pre-construction and while work is in progress. Peoples Gas is taking steps to address delays attributable to both Peoples Gas' and contractors' actions as discussed below. Factors outside Peoples Gas' and its contractors' control, however, are also a source of some recurring issues.

During the 2012 and 2013 construction years, the Program had in place an "integrated" schedule which was project based and included components at the phase level for Engineering, Permitting and Construction, as well as a project level Closeout component. This schedule was intended as a monthly management reporting tool.

In 2014 the "integrated" schedule was limited to summary activities, at the phase level, for construction.

The 2014 "construction only" model was the basis of the schedules in use by the Program at the time of the Liberty's Audit.

Further, at the time of the Liberty audit, the project management office ("PMO") Scheduling had in place the tools necessary to measure and track construction schedules against target baseline schedules on a weekly basis, and report this information in the Peoples Gas Monthly Report.

In conjunction with tracking and reporting variances, the following issues had been identified:

- Design Schedules – Although a phase level engineering schedule template had been developed and implemented in 2012, it was removed from the "integrated" schedule for the 2014 construction year.
- Schedule Enforcement – The PMO had and still has provisions for tracking Construction Finish Variance and instructions for implementation of a construction recovery plan.
- Recurring or Systemic Issues – Several factors that affect "on target" project completion were identified. Many of those factors are beyond the contractor's control and some are beyond Peoples Gas' control. External factors such as difficult to reach customers, coordination with external agencies, and third party

utilities influence schedule performance. Peoples Gas continues to work with all parties involved to achieve better schedule performance.

Since the Liberty audit, the following steps have been taken to address identified problems and better monitor project performance.

- Program Plan – A high level 5-year program plan has been developed in Primavera P6 and NetPoint for projecting neighborhood project planning and budgeting using production rates and cost loading.
- Integrated Project Schedule – A revised logic model was developed and issued to the contractors for use on all 2015 projects initiated after July 1, 2015. This integrated schedule containing Engineering, Procurement, Permitting, Construction, and Closeout components is being implemented in the second half of 2015 for 2015 Design / 2016 Construction Year projects. This will provide a “cradle to grave” project status for 2016 construction projects.
- Restoration Management - Contractors have taken steps to improve the restoration management process with less reliance on subcontractors that require large areas of available work. Peoples Gas has likewise organized a restoration management team specifically focused on restoration punchlists and completion oversight.
- Contractor Performance Metrics (Construction) – The 2015 Schedule Basis, a component of the Contract General Specifications, requires the contractor to utilize performance metrics for the Contractor Monthly Status Meeting, wherein all projects in progress are evaluated. These metrics include comparison of current production rates to planned rates, schedule performance index (“SPI”), and recovery plan metrics. The PMO utilizes performance metrics in evaluating production performance for mains and services installation quantities on a weekly basis and it is reported in the Peoples Gas Monthly Report.
- Identifying Problematic Trends – The PGL Capital Construction – Monthly Schedule Update Report has been revised to summarize and include key issues, which widely impact the schedules of projects within the Program. This listing is intended to provide management with actionable items that can benefit overall schedule performance.
- Construction Recovery Plan – The 2015 Schedule Basis, a component of the Contract General Specifications, requires a Recovery Plan if a Phase Completion Date reaches or exceeds 5 work days of negative variance. The plan is outlined and tracked in the weekly schedule update narrative and is primarily based on expanded work hours (with Chicago Department of Transportation (“CDOT”) permit approval), additional crews, or additional concurrent blocks as means of

regaining lost time. Peoples Gas is in the process of developing the project management structure that these recovery plans will be delivered to.

Furthermore, please refer to AMRP's Integrated Project Controls (IPC) management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation H.4 is, in particular, addressed under the "Report" phase of the IPC.

Owner:
Director, Gas Operations Planning

Liberty Recommendation H.5:

Peoples Gas should complete promptly its efforts to ensure that construction schedules become quantity-based for the internal workforce and for contractors.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation H.5:

Peoples Gas agrees with the recommendation that the construction schedules should be quantity loaded for all resources that have an impact on the schedule. Prior to the audit, not all the contractors had added quantities to their schedules. In some cases quantity reporting was being performed in a separate MS Excel database.

The contractor schedules continue to be quantity driven in terms of applied crew production rates for both contractor work activities and Peoples Gas internal workforce activities. However, since the audit, these production rates are applied against total activity quantity and are the basis for calculating activity durations in baselines and progress update schedules. All three Peoples Gas district shops (North, Central, South) provide shop specific production rates during baseline development. These rates are monitored during construction with the use of resource leveling of meter installations to better manage spikes for shop crew resources, which are routinely impacted by emergency maintenance demand, gas service turn-ons for winter season, and other top priority functions.

Implementation of this recommendation will provide the ability to report directly in terms of the AMRP performance metrics – quantity of pipe, services, meters, and blocks of restoration completed.

Owner:

Director, Gas Operations Planning

Liberty Recommendation I.1:

Peoples Gas should develop a long-term resource staffing plan that reflects the numbers, skills, and experience needs of all key positions.

Accept/Reject: Peoples Gas accepts this recommendation

Status: Implementation In Progress

Response to Recommendation I.1:

Please refer to Peoples Gas' response to Recommendation D.4.

Owner:

Director, Gas Operations Planning

Liberty Recommendation I.4:

Peoples Gas should bring enhanced productivity measurement and management to resource planning

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation I.4:

Please refer to AMRP's Integrated Project Controls (IPC) management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation I.4 is, in particular, addressed under the "Report" phase of the IPC.

Owner:

Project Director

Liberty Recommendation I.5:

Peoples Gas should more closely monitor contractor resources and production.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation I.5:

Please refer to AMRP's Integrated Project Controls (IPC) management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation I.5 is, in particular, addressed under the "Report" phase of the IPC.

Owner:

Director, Gas Operations Planning

Liberty Recommendation I.7:

Peoples Gas should evaluate regularly the performance (e.g., wage rates, quality, productivity, expertise, safety, dependability) between the internal and external workforce.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation I.7:

Please refer to Peoples Gas' response to Recommendation D.4.

Owner:

Director, Gas Operations Planning

Liberty Recommendation 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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation J.1:

Please refer to AMRP's Integrated Project Controls (IPC) management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation J.1 is, in particular, addressed under the "Action" phase of the IPC.

Owner:

Project Director

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation K.1:

Peoples Gas agrees with and is implementing this recommendation. Prior to 2015, Peoples Gas used its work management information system (“WMIS”) and several off-system tools in attempt to improve the accuracy of the WMIS cost estimates.

At the start of 2015, Peoples Gas implemented updates to the cost estimating process used by Gas Engineering. A team consisting of representatives from Accounting, Gas Engineering, Business Support, the project management office (“PMO”), Project Services, and Team Impact worked together to come up the key components for estimating and how best to use existing software to produce better estimates. It was determined that the existing WMIS system could be modified to meet these needs. The team agreed that the main estimating components for both mains and services would be: contractor labor, company labor, materials, restoration, and overhead.

Peoples Gas has developed training materials and a procedure to communicate cost estimating expectations to engineers. The training presentation was developed to introduce the changes made to WMIS in 2015. The procedure gives engineers an overview of project cost estimating from the start of a project to final estimating after the project is OUC (the City’s Office of Underground Coordination) approved.

Rates and assumptions will be updated on a yearly basis using current and/or actual pricing and production data. Peoples Gas concluded that final cost estimation on an individual project basis should be done after OUC approval is received. At this point in the project, it is assumed that there will be no significant changes to the design and would most accurately reflect the work that will be done.

An internal team is currently evaluating the existing cost estimating philosophy stated above, along with formalizing and documenting the process. The goal of this effort is to determine when an initial estimate can be determined, what should be included in the initial estimate, at what point in the project a final estimate can be created, and how bid amounts are incorporated into the final estimate. A formal process flow will be created to document the steps involved in cost estimating.

Action Item	Forecasted Completion Date
Cost Estimating Philosophy Review (Estimating Process & Project Approval Update)	12/31/15

Owner:
Director, Gas Engineering

Liberty Recommendation K.2:

Peoples Gas should maintain and keep updated a set of historical databases that address cost estimating variables.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation K.2:

Peoples Gas agrees with and has implemented this recommendation.

Prior to 2015, Gas Engineering used its work management information system (“WMIS”) and several off-system tools in attempt to improve the accuracy of the WMIS cost estimates.

Beginning in January 2015, Peoples Gas implemented a process flow to update compatible units on a yearly basis. Representatives from Gas Operations, Business Support, Gas Engineering, Project Services, and WAM (work asset management) System Support will be involved in supplying information for the updates. Compatible units in WMIS have been updated or created to address the major components of cost estimating for mains and services: contractor labor, company labor, materials, restoration, and overhead.

Rates and assumptions will be updated on a yearly basis using current and/or actual pricing and production data. Peoples Gas concluded that final cost estimation on an individual project basis should be done after OUC (the City’s Office of Underground Coordination) approval is received. At this point in the project, it is assumed that there will be no significant changes to the design and would most accurately reflect the work that will be done.

Implementation of this recommendation will ensure that the correct levels of approvals are obtained as well as improve the accuracy of Peoples Gas capital budgets and forecasts.

Owner:

Director, Gas Engineering

Liberty Recommendation K.3:

Peoples Gas should perform project cost estimate reconciliations to understand major cost deviations, analyze performance and document lessons learned

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation K.3:

Please refer to AMRP's Integrated Project Controls (IPC) management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation K.3 is, in particular, addressed under the "Plan" phase of the IPC.

Also please refer to Peoples Gas' response to Recommendation G.1, which addresses the development of a new AMRP Cost Plan Model.

Owner:

Project Director

Liberty Recommendation K.4:

Peoples Gas should expand the development of cost estimates at the individual project level and at the program level

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation K.4:

Please refer to AMRP's Integrated Project Controls (IPC) management approach detailed in Peoples Gas' response to Recommendation L.1. Recommendation K.4 is, in particular, addressed under the "Plan" phase of the IPC.

Also please refer to the response to Recommendation G.1, which addresses the development of a new AMRP Cost Plan Model.

Owner:

Project Director

Liberty Recommendation K.5:

Peoples Gas should establish a centralized cost estimating organization to maintain and sharpen the cost estimating skills.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Action Pending Further Review/Study

Response to Recommendation K.5:

Peoples Gas agrees and will begin implementing this recommendation once organizational changes are completed. Please refer to Peoples Gas' Chapter B response and response to Recommendation L.1.

Owner:

Director, Gas Operations Planning

Liberty Recommendation L.1:

Peoples Gas should implement a holistic cost management program.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Liberty Recommendation L.1:

Peoples Gas' response to Recommendation L.1 outlines the Integrated Project Controls management approach. The following Recommendations are addressed, in whole or in part, through this response to Recommendation L.1:

- IPC Approach – **L.2**
- Scope – **D.1, D.6, G.1, G.2, H.1, P.1**
- Plan – **K.1, K.3, K.4**
- Report – **D.3, H.4, I.4, I.5**
- Action – **G.2, J.1**

This response should be read in concert with the responses to those and other Liberty recommendations.

Integrated Project Controls (“IPC”) Management

A broader view of project controls is required to manage a program of the magnitude of the Accelerated Main Replacement Program (“AMRP”). Over the last several months, Peoples Gas has worked to build the foundation of an IPC process. The principal objectives are to:

- Identify the normal duties and responsibilities of a Project Controls Group (covered in different Liberty responses).
- Provide a standard methodology of controls for consistent measurement.
- Ensure the project team and Peoples Gas management is informed of program/project status on a timely basis.

The two primary functions of the IPC are to:

- Provide the Project / Program 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.

The basic elements of the IPC include:

- The overall scope including schedule and cost budgets
- A monitoring system which measures performance against plan and budget
- A reporting system which identifies deviations from the plan and budget
- Corrective action to alleviate these deviations.

The various processes within the IPC process are broken into the following five main areas (phases):

- Scope
- Plan
- Report
- Action
- Results

This methodology will be applied at both the program and project level and will support efforts associated with developing and managing the annual plan.

Implementation of this formal structure will provide a guiding philosophy towards not only cost management, but program and project controls in general and provide a foundation for the critical analysis required for a capital program of this magnitude. The core tools of sound project controls management are currently being built upon this foundation and outlined throughout this response.

This process is flexible enough to allow for both a top down (program) and bottom up (project) process to manage progress, cost and schedule. The integration of cost and schedule will support efforts to develop and monitor the annual budget process. When implemented, the IPC process will provide a robust and comprehensive level of control for all capital projects executed by Peoples Gas.

Scope

A clear and unambiguous program definition is required to monitor and control the program, and this definition needs to be supported with a comprehensive cost and schedule model. While a legacy program cost estimate and schedule as well as a supporting cost model currently exist, Peoples Gas will be providing a new independent estimate, schedule and cost model for the program.

Until the new model is developed, the program will continue to utilize the legacy program cost and schedule information to support program decisions.

Peoples Gas provided the breakdown of the project structure into the various neighborhoods that make up the overall program scope. Further, these individual projects were augmented with specific inclusions, exclusions and assumptions to define the overall parameters of a program. For purposes of the AMRP, the scope of the

overall program will be defined under the new cost and schedule models. The specific design and contractual documents define the scope of the individual projects. These documents, as well as other technical documents during the execution of the Project, provide the project team with sufficient definition to provide for the preparation of estimates, schedules, cost management and scope control.

The legacy Peoples Gas cost model includes the following elements, by neighborhood and high pressure projects:

- Retire mile quantities
- Install mile quantities, by pipe size
- Meter install quantities, by inside location (basement, other), outside location and size
- Service quantities
- New vaults
- Retired vaults
- Impacted intersections
- Impacted rail crossings
- Permits
- Outside Engineering costs

The quantities were extracted from Peoples Gas' system of record and costs were based on program-to-date unit rates. These rates were based on units of installation including:

- Cost / feet pipe by size - installation methodology- installation location
- Cost /service
- Cost / meter
- Cost / mile designed
- Cost / intersection
- Quantity of permits / block

Items include:

- Peoples Gas costs
- Project Management Organization ("PMO") costs
- Escalation
- Management Reserve

The legacy schedule is resource loaded for select items and resources including:

- Miles retire (quantity)
- Miles install (quantity and cost)
- Services (quantity and cost)
- Meters (quantity and cost)
- Local Union 18007 resources (crews)
- Local Union 597 resources (crews)

The legacy schedule also establishes baseline productivity factors for monitoring the program.

Further, the legacy program cost and schedule includes the following:

- Assumptions, inclusions and exclusions
- Program influences
- Program constraints and modifiers
- Escalation
- Deterministic cost and schedule (unlimited and constrained resources)
- Resource curves
- Spend Plan
- Probabilistic cost and schedule (unlimited and constrained resources)
- Cost and schedule
- Resource curves
- Program cost and schedule drivers (disproportionate risks)
- Opportunities for cost and schedule improvement.

The baseline assumptions for cost, productivity and management reserve establish the parameters for progress measurement at the program and project level. Further, those assumptions establish the basis for the trend program supporting management reserve and drawdown as well as input for real time forecasting of program cost and schedule.

Plan

A sound estimating process is critical to controlling the overall program cost and is the foundation of a robust trend program. Over the last several months, Peoples Gas has worked to enhance the estimating capabilities within the program, recognizing that the compatible unit estimate needs to be augmented with a bottom up estimate to validate contractor pricing. Currently, several core processes are in place to support this broader strategy of closer alignment of the three neighborhood cost estimates currently a part of the program. These three estimates are:

- Master program estimate
- Engineering (compatible units) estimate
- Contractor bids

The AMRP PMO program currently employs an estimator on staff to perform independent material take-offs at the project level as part of the bid process. This allows for the reconciliation of contractor estimates during the bid tabulation process, identifies anomalies in the quantities / pricing, and subsequently provides the basis for contractor negotiations to reconcile differences. This reconciliation process then becomes a key input into the AMRP trend program to adjust management reserve based actual pricing.

Efforts so far include documenting a reconciliation process for the program estimate and engineering estimate to establish an agreed upon project cost (neighborhood, high pressure segment, etc..) as the basis for comparison of contractor estimates.

Additionally, shifting to a comprehensive cost estimating is a key step in the ongoing evolution of the program.

As the overall estimating process becomes more established, the annual reconciliation of compatible unit estimates to actual installation will become more efficient and effective.

Report

Continuous monitoring and reporting as well as insightful and candid analysis are critical for management and executive reporting. The basis for this vital information is embedded throughout the various activities and performance metrics housed within the IPC process.

Schedule performance of active projects is assessed on a weekly and monthly basis, including a detailed variance report against current schedule. The following have been implemented or are in process to better monitor current project performance and develop broad program recovery plans:

- Program Plan – A high level 5-year program plan has been developed in Primavera P6 and NetPoint for projecting neighborhood project planning and budgeting using production rates and cost loading.
- Integrated Project Schedule – An integrated schedule containing Engineering, Procurement, Permitting, Construction, and Closeout components is being implemented in the second half of 2015 for 2015 Design / 2016 Construction Year projects. This will provide a “cradle to grave” project status for 2016 construction projects.
- Contractor Performance Metrics (Construction) – The 2015 Schedule Basis, a component of the Contract General Specifications, requires the contractor to utilize performance metrics for the Contractor Monthly Status Meeting, wherein all projects in progress are evaluated. These metrics include comparison of current production rates to planned rates, Schedule Performance Index (“SPI”), and Recovery Plan metrics. The PMO utilizes performance metrics in evaluating production performance for Main and Services installation quantities on a weekly basis and is reported in the Peoples Gas Monthly Report.
- Construction Finish Variance – All construction schedules track against a target baseline schedule and have done so since the AMRP program began in 2011. Finish variance is measured weekly and reported in the Peoples Gas Monthly Report.
- Construction Recovery Plan – The 2015 Schedule Basis, a component of the Contract General Specifications, requires a Recovery Plan if a Phase Completion Date reaches or exceeds 5 work days of negative variance. The plan is outlined and tracked in the weekly schedule update narrative and is primarily based on expanded work hours (with Chicago Department of Transportation (“CDOT”) permit approval), additional crews, or additional concurrent blocks as a means of regaining lost time.

- Peoples Gas Shop Resources – PMO schedulers have developed resource loading and leveling in NetPoint. Peoples Gas Shops have limited manpower resources for Meter Sets and Retirements and this creates schedule issues when the Shop cannot perform at the capacity needed to achieve timely completion of a project. This can impact the contractor's ability to finish Final Restoration within the planned timeframe of the project. By planning ahead with NetPoint, the Shop can see where the critical resource points can be expected and provide guidance for resource leveling options to prepare for those instances. Another complication that cannot be controlled in the schedule is that Peoples Gas Shop resources must remain responsive to live gas maintenance issues across their entire customer base when leaks or other issues arise. This function takes priority for public safety reasons and temporarily decreases the available Peoples Gas manpower for the AMRP program when these events occur.

These activities are incorporated into the legacy program schedule through the carry-over work analysis to identify overall impact on the program. Peoples Gas will continue to utilize the legacy program schedule until the revised estimate and schedule are complete.

The legacy program cost and schedule facilitated implementation of a number of key performance indicators as metrics in 2015. Resource curves outlining productivity requirements are available to assess peak loading and better balance work activities against resources.

Action

Implementing a program of this magnitude is a dynamic process that grows out of the assumptions and criteria established in the master estimate and schedule at the time they were developed. Changes are an unavoidable part of executing this program. A robust trend process is core to the successful management of the AMRP program, providing real time, before the fact warning and control of positive and negative events, and is a key component of the IPC process.

While individual project baseline cost and to a certain extent, schedule, have been in place since program inception, completion of the legacy program cost and schedule supported the establishment of a program baseline for the short term, until the new estimate and schedule are complete.

The current contractual change management process is in-place with a robust business process for the timely identification, assessment and disposition of a change on the project. Assessment includes impact on overall project cost and schedule. The disposition process includes a gated process for review and approval depending on change value.

The internal trend program for adjustments to management reserve has not been established. The process establishes the means by which the management reserve will



be allocated within the program. The key performance indicators and performance metrics are critical inputs to the overall process. Once the internal trend program is implemented, the existing project change process within the Unifier software can be easily adapted to support the trend process and will be evaluated once the current software enhancements are complete. Peoples Gas will provide an update of the trend program development process by November 30, 2015

Peoples Gas has retained a third party expert to perform a two phase analysis (“Project Controls Audit”) of project controls and cost control management. At the conclusion of the Project Controls Audit, Peoples Gas will be able to identify the main project control gaps that the organization faces and deploy corrective actions to address these issues. The analysis will also help identify gaps in data collection, transmittal, and processing to ensure that going forward there is a consistent and standard process for tracking all AMRP project management functional elements, specifically, costs. The Project Controls Audit will help inform the completeness, appropriateness, and implementation of L.1. Please refer to Peoples Gas’ Chapter B Executive Response – Project Management and Controls.

Owner:
Program Director

Liberty Recommendation 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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation L.2:

Refer to AMRP's Integrated Project Controls management approach detailed in Peoples Gas' response to Recommendation L.1.

Owner:

Project Director



Liberty Recommendation L.5:

Peoples Gas should provide training for managers, supervisors and cost support personnel in cost management techniques consistent with the holistic approach.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Action Pending Further Study or Review

Response to Recommendation L.5:

Peoples Gas agrees with Liberty's recommendation. The recommended training programs can enable staff to proactively track, report, and manage against program costs.

Once the reorganization efforts related to Wisconsin Energy Corporation's acquisition of Integrys Energy Group, Inc. are complete, Peoples Gas will assess the training needs at the various levels for staff with cost management responsibilities. From that analysis, specific training programs will be developed and provided on cost management processes, techniques, and leading practices.

The analysis of the training needs will be completed by the end of 2015, with implementation in 2016 or on an on-going basis as employees are on-boarded.

Action Item	Forecasted Completion Date
Analyze training needs	12/31/15

Owner:

Director, Gas Operations Planning

Liberty Recommendation M.1:

Peoples 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.

Accept/Reject: Peoples Gas accepts this recommendation

Status: Implementation In Progress

Response to Recommendation M.1:

Peoples Gas agrees that it is appropriate to investigate the potential opportunity to improve contract terms and pricing through long-term contracts and alliance arrangements. Peoples Gas questions whether it or any company can regularly achieve above average contract terms and below average pricing in a competitive market. Peoples Gas believes that its current supply chain process obtains fair market value for AMRP purchased goods and services.

Peoples Gas understands the important role that sound procurement strategies and techniques play in securing advantageous pricing and terms. It is for this very reason that Peoples Gas has recruited a very experienced director of contracts who has years of experience in implementing procurement strategies on very large capital projects. Sound strategies not only bring about attractive pricing, but terms and conditions that align business interests with the project owner, and the commercially efficient mitigation of risks. A key role of the new director, who arrived August 31, 2015, is to develop the procurement strategy that adds to the sound procurement strategies that Peoples Gas is already implementing. Below is a schedule laying out the general steps that will be taken to assess current commercial agreements, the goals of the organization, and methods to improve terms and minimize project costs.

Action Item	Forecasted Completion Date
Assess current agreements and their alignment with business goals	10/15/15
Identify potential opportunities with key vendors and develop modified agreements and strategies for 2016 business	11/30/15
Meet with Engineering Design, Paving and Restoration contractors to discuss alliance opportunities and benefits	12/31/15
Expand the current multi-year arrangements and alliance arrangements as appropriate	02/28/16

Owner:

Director, Contracting

Liberty Recommendation M.2:

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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation M.2:

Peoples Gas agrees with Liberty's recommendations and provides details below as to how this recommendation is being implemented.

Currently, the Materials Management organization tracks two measures specific to all inventory materials ordered through the warehouse.

The Monthly Back-Order Report is a measure of inventory availability of those items expected to be stocked 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 impact project construction. Over the last three calendar years, the fulfillment rate has been in excess of 96%.

A second measure which is available through the Materials Management organization is the Peoples Gas and North Shore Gas Past Due Distribution Work Management System (DWMS) orders. This measure accurately details 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.

Both of the above reports are immediately available for distribution and the below action items will ensure that they are distributed to the appropriate stakeholders with insightful and actionable data for management.



Peoples Gas is in the process of firming up a business strategy going forward that will help identify key leaders that will be accountable for AMRP materials and contract administration. Once the new organization is in place, supply chain will meet to determine routing of monthly reports and metrics.

Action Item	Forecasted Completion Date
Identify the Owner, frequency of reports, and the required distribution list	09/30/15
Meet with Peoples Gas leadership to identify key personnel accountable for day to day project management	10/31/15
Start routing the report(s)	12/31/15

Owner:

Director, Strategic Sourcing

Liberty Recommendation M.3:

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

Accept/Reject: Peoples Gas accepts this Recommendation.

Status: Implementation In Progress

Response to Recommendation M.3:

Peoples Gas will seek opportunities to bring additional benefits in both commercial terms and pricing to agreements while balancing the strategies with meeting its supplier diversity obligations under Sections 5-111(b)(10) and 5-117 of the Public Utilities Act (220 ILCS 5/5-111(b)(10), 5-117). Please see Peoples Gas' response to Recommendation M.1. Peoples Gas believes that its current supply chain process obtains fair market value for AMRP contracting.

Currently, Supply Chain uses a bid-by-project and award approach to manage the flow through of projects from engineering design to paving and restoration. To meet the supplier diversity requirements under Sections 5-111(b)(10) and 5-117 of the Public Utilities Act, Peoples Gas has moved towards unbundling large projects in order to provide opportunities to and develop smaller and diverse suppliers. Peoples Gas is therefore working to balance unbundling large projects with achieving efficiency and cost effectiveness in contracting to inform its present and future contracting strategy.

Peoples Gas is in the process of firming up a business strategy going forward that will help determine if there are additional opportunities for efficiencies associated with AMRP contracting needs, especially with the long term nature of the program. Peoples Gas will enter into discussion with suppliers to see if long term alliance partnership opportunities exist while still preserving the supplier diversity value. Please see the response to Recommendation M.1 for the Action Items which are inclusive of this recommendation.

Owner:

Director, Contracting

Liberty Recommendation M.4:

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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation M.4:

Peoples Gas' current contracts include prudent and reasonable terms and conditions, but it is reasonable to review the standard terms and conditions periodically. Peoples Gas will review all contract requirements to determine if changes are appropriate. In conjunction with the implementation of other Liberty Recommendations, contract language will be revised as appropriate for the implemented changes.

Management will:

1. Review all current contract documents and create a list of all requirements outlined in each of these documents.
2. Make recommendations on which provisions to keep, revise or eliminate and the implications of revising or eliminating existing language.
3. Consider changes resulting from other recommendations that will be implemented.
4. Negotiate and revise contract language with the contractors to reflect the final agreed upon changes.
5. Issue contract amendments to existing contracts or new contracts, as appropriate.

Proposed Schedule for Implementation:

Action Item	Forecasted Completion Date
Compile a single list of all contract requirements	10/15/15
Make recommendations on which provisions to keep, revise or eliminate	11/30/15
Develop revised contract documents based on these and other recommendations	12/31/15
Full implementation	2016 construction season

Owner:
Director, Contracting

Liberty Recommendation M.5:

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

Accept/Reject: Peoples Gas accepts this recommendation

Status: Implementation In Progress

Response to Recommendation M.5:

Peoples Gas' current contract management policies and procedures are prudent and reasonable, but it is appropriate to review and enhance those policies and procedures. Peoples Gas will review current policies and procedures which pertain to the management of contract changes and will develop a formal process to audit both contractor and company compliance.

A review of all policies and procedures pertaining to contract changes will be made to:

1. Determine any contract changes that will result from the implementation of other Liberty Recommendations
2. Develop an audit plan
3. Implement the audit plan
4. Develop metrics based on the results of future audits
5. Develop and implement a process improvement plan based on the results of future audits

Proposed Schedule for Implementation:

Action Item	Forecasted Completion Date
Determine contract changes resulting from implementation of other Liberty Recommendations	11/30/15
Develop an audit plan	01/01/16
Implement the audit plan	01/01/16
Develop metrics based on audits	03/01/16
Develop and implement a process improvement plan	07/01/16

Owner:

Director, Contracting

Liberty Recommendation M.6:

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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation M.6:

Peoples Gas' current contract management processes are prudent and reasonable, but it is reasonable to review those processes and implement enhanced management oversight of changes, as appropriate. To that effect, Peoples Gas has already implemented several initiatives to begin this enhanced oversight:

1. The implementation of Unifier, which will house all change management information, define and standardize the review, justification, and approval processes for all changes, allow for enhanced reporting (upon further development) of changes and total expected costs, and can be further developed to support and define future enhancements
2. Program roles are being redefined to clarify approval processes and create a central management structure for oversight of program construction activities, including costs

Peoples Gas will review and develop further enhancements to the management oversight of contract changes by:

1. Enhancing the reporting structure that will categorize changes into root causes to allow for review and determination of major cost factors for the program.
2. Enhancing the process for approval of changes that encompasses a policy for program-wide changes versus single-project changes.
3. Classifying root causes for changes into those that can be affected by, and those that are outside the control of, Peoples Gas or the contractor.
4. Enhancing the process for reducing or eliminating changes caused by classifications of root causes that can be reduced or eliminated.
5. Enhancing the monitoring / tracking policy to measure and report on improvements made.

Proposed Schedule for Implementation:

Action Items	Forecasted Completion Date
Initial analysis of change orders	09/30/15
Implement any needed reporting structure changes for regular analysis of change orders	11/30/15
Implement any needed change order review procedures	11/30/15
Implement any needed strategy to review root causes of changes and begin improvements	11/30/15
Implement any needed tracking and trending policy for root cause improvements	12/31/15

Owner:

Director, Contracting

Liberty Recommendation M.7:

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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation M.7:

Peoples Gas currently has prudent practices in effect, but it is reasonable to review those practices as part of its overall response to the Chapter M Recommendations. Peoples Gas currently receives information from contractors regarding their approach to the project, proposed staffing and anticipated production levels at the time of bid. The contractors include bid-level schedules, which shows anticipated durations for the various portions of the work, and a much more detailed baseline schedule is agreed upon prior to the start of construction. This baseline is the basis for validating /challenging all change requests.

All bidders are selected from a prequalified group of contractors, and only contractors that are performing in a satisfactory manner, have appropriate available resources, and are capable of performing any particular project or projects are invited to bid. This process reduces risk that the contractors for any given project will perform at less than optimal levels.

As the use of the schedule for the program matures, additional information will be required from contractors at the time of bid and during the establishment of the baseline schedules. The nature of this information would be determined from the Schedule Basis as it exists at the time of the decision to obtain this additional information.

Peoples Gas proposes that the implementation of this Recommendation be delayed for the short term, with reviews of the viability of implementing the Recommendation in stages, as the implementation of other Recommendations of this chapter progresses.

Proposed Schedule for Implementation:

Action Item	Forecasted Completion Date
Proposed first review of viability	6/30/16

Owner:

Director, Contracting

Liberty Recommendation M.8:

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

Accept/Reject: Peoples Gas accepts this Recommendation

Status: Implementation In Progress

Response to Recommendation M.8:

Peoples Gas' current practices related to contractor evaluations are prudent and reasonable. Contractor performance evaluations are central to the selection and management of contractors. Peoples Gas currently has an existing contractor performance evaluation process that is used to influence the selection of contractors for invitations to bid and/or awards. With the implementation of this Recommendation, Peoples Gas' current process will be enhanced to monitor contractor performance throughout the year, and the metrics developed will provide objective evidence to be used in the selection of contractors for bidding and execution of work.

A structured contractor evaluation process was executed at the beginning of the program, wherein the major contractors were rated on their ability to adequately execute the program work. At the end of the first construction season, the evaluations were again performed to judge the degree of success of each of the active contractors. The results of these evaluations, and the ongoing work with each contractor, noting non-conformance, safety incidents, etc. were used in deciding which contractors to invite to bid on additional work.

The contractor evaluation process was renewed in 2014, which revamped the activities that contractors were reviewed on and the method of collecting the survey data. The results of these evaluations were reviewed with each contractor, and have again been used in the selection of whom to invite to bid on various projects for all subsequent bid lettings.

Peoples Gas' proposal is to develop the review and monitoring process of contractor performance using Service Level Agreement provisions contained in the current contracts. These contract provisions provide for the establishment of metrics for various aspects of the contractor's work, the joint creation of the acceptable levels of performance, the development of regular tracking and reporting on these metrics by the contractors as well as verification by Peoples Gas.

The implementation of this proposal must be performed in conjunction with many other Recommendations, and the metrics defined must meet the objectives of the overall program goals. Therefore, the proposed schedule cannot accurately be determined at this time. Peoples Gas proposes to review the implementation of this Recommendation at regular intervals in conjunction with the implementation of other Recommendations



and establish an overall implementation date of the beginning of the 2017 construction season.

Owner:

Director, Contracting

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation P.1:

Peoples Gas agrees with this recommendation and is currently implementing it. Please refer to Peoples Gas' response to Recommendation L.1 for details on Peoples Gas' vision of AMRP's integrated project controls ("IPC") framework going forward.

Once in place, the IPC will facilitate a comprehensive assessment of AMRP risks associated with potential mismatches between work performed and work charged, and will include means for annual testing designed to mitigate the risks identified.

In addition to the IPC, an annual internal audit, as required by Rider QIP and other related ICC rules, will be used as a secondary means to validate the performance of the IPC to the extent it falls within the scope of that audit.

Owner:

Director, Gas Operations Planning

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation P.2:

Peoples Gas has addressed and continues on-going efforts to fulfill this recommendation. Executive level sponsorship for Peoples Gas' mitigation efforts was provided at the corporate senior leadership level. In addition, communication regarding these efforts was provided to the Illinois Commerce Commission. At this time, most of the mitigation efforts are complete, but Peoples Gas is undergoing a second review and will provide updates to the Illinois Commerce Commission as deemed necessary.

Owner:

Director, Gas Operations and Maintenance

Liberty Recommendation P.3:

Peoples Gas should promptly: (a) correct the potential 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 any 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 exists with respect to AMRP costs subject to rate recovery.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation P.3:

Peoples Gas agrees with and has implemented this recommendation through the annual audit required under Rider QIP and the related ICC rules. The Company's Internal Audit area has completed the audit for 2014 and submitted it to the ICC Staff in July 2015. The audit scope addressed items (a) through (c) noted in this Recommendation, and Peoples Gas is implementing action plans from that audit that address materials.

Please refer to Peoples Gas' response to Recommendation L.1 for details on Peoples Gas' vision of AMRP's integrated project controls ("IPC") framework going forward.

Further to item (a), the standard construction contract General Specifications includes a "Materials Reconciliation" under General Specifications Section 322 Materials Furnished by Company, sub-section V Materials Reconciliation:

"The Contractor shall maintain records of all materials delivered to the Contractor by the Company before and during the course of each Project. In addition, the Contractor shall maintain records of all materials the Contractor returned to the Company at the conclusion of each Project. Materials may not be used on different Phases of the same Project or on another Project unless the appropriate transfer documents have been completed and submitted to the Company's warehouse. All submittals of documents to the Company's warehouse for transfers or returns shall be copied to the PMO.

At the conclusion of the Project and as part of the Project Closeout process, the Contractor shall submit a complete set of all delivery, transfer and returned materials documents along with a summary reconciliation of all materials installed versus those received. Differences of more than ten percent (10%) for each size and type of material must be explained.

When the Contractor desires to close out a Phase of a Project, the Contractor shall obtain the signature of the Company Warehouse Manager for the reconciliation of materials for that Phase. Should the Contractor transfer material between Phases of a Project, the Contractor shall obtain the signature of the



Company Warehouse Manager on the reconciliation of material for the entire Project prior to submittal for final payment.”

Owner:

Director, Construction

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation Q.1:Procedures

With respect to procedures, Liberty stated that Peoples Gas' procedures were generally appropriate but that additional procedures were needed for jeeping, steel strap installation on end caps, and bracing and blocking. Since the audit completion, Peoples Gas issued a new procedure on bracing and blocking, Work Practice "WP-2019 Thrust Blocks and Bracing," on July 31, 2015. Procedures on Jeeping and Steel Straps will be issued on or before the second quarter release of procedures in 2016.

Contractor Training:

With respect to Contractor Training, beginning in November 2014, Peoples Gas implemented an annual quality review and audit process for contractor operator qualification ("OQ") programs. Peoples Gas will fully incorporate this process into a documented quality assurance program for contractor OQ programs by March 2017.

Inspector Training/CMG Training:

With regards to Inspector Training, Peoples Gas is reviewing the training material and program provided to construction inspectors. A revised training program will be rolled out prior to March 31, 2017. This program will address the issues identified by Liberty.

As necessary, revisions to construction inspection training that are transferable to the Compliance Monitoring Group ("CMG") will be incorporated into CMG Training

Inspection Documentation/Construction Verification Audits:

With regards to Inspection Documentation, as described in response to Recommendation Q.2, Peoples Gas is reviewing various software packages to assure that field activities audited by the construction inspectors are driven by detailed checklists and documented in a system that can be queried.

With respect to construction verification audits, the CMG currently audits every contractor at least once a quarter. This audit typically entails a sample of every construction activity. Furthermore, the Construction inspectors continuously audit contractor performance.

To address Liberty’s concerns about documentation, as described previously, Peoples Gas will develop and will implement a quality assurance program for construction activities by March 2017 that will include trending and tracking of contractor performance in order to modify performance as necessary. Below is a schedule for activity.

Action Item	Forecasted Completion Date
Determine which program to use (Unifier, eTq, Skyline) for field inspections	01/18/16
Provide all inspectors with written authorization to stop work	03/31/16
Review and Revise Inspector and CMG Training	03/31/17
Trend and analyze inspection data	03/31/17
Develop and implement a quality assurance program for construction activities	03/31/17

Owner:
Manager, Compliance

Liberty Recommendation 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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation Q.2:

Prior to Liberty’s Audit, Peoples Gas implemented an inspection checklist to improve the consistency of inspection. Furthermore, inspectors had, on a number of occasions, been informed of their authority and obligation to stop unsafe and non-compliant activities.

Since Liberty’s Audit, Peoples Gas has taken several measures to implement a more structured training program conducted by the Technical Training Department. In addition, the use of a daily checklist was implemented across all districts. The checklists are saved along with other project documents. However, analyzing the data from a paper checklist proved time consuming and impractical due to the nature of the free-form fields with the checklist. To address this issue and to provide additional guidance to inspectors, Peoples Gas has started a pilot program using a mobile, computer-based (tablet) program for the field recording of construction data. This allows the checklist to better match standards and procedures. It will also make field data readily available for analysis.

Finally, all inspectors, including Compliance Monitoring Group (“CMG”) staff, have been reminded that they can halt unsafe work at any time without management approval. In fact, this is an expectation of the position. Additionally Peoples Gas will:

Action Item	Forecasted Completion Date
Determine which program to use (Unifier, eTq, Skyline) for field inspections	01/18/16
Provide all inspectors with written authorization to stop work	03/31/16
Trend and analyze inspection data	03/31/17

Systemic evaluation of inspection data will not be able to occur until a fully functional electronic system with a query-enabled database is developed and deployed in the field. In the interim, a quality meeting, typically held weekly, will review quality and compliance issues reported from the Field Inspectors, CMG auditors, and other sources



such as any Commission inspections. The result of this meeting will be communicated to inspectors and Peoples Gas supervision.

Owner:

Director, Construction

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status of Implementation: Implementation in Progress

Response to Recommendation Q.3:

Please refer to Peoples Gas' response to Recommendation D.4.

Owner:

Director, Gas Operations Planning

Liberty Recommendation Q.4:

Identify and pursue means to increase the stability in and the numbers of field supervision and inspection personnel.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation Q.4:

Peoples Gas agrees with Liberty's recommendation.

Peoples Gas concluded that, in order to keep up with the need for additional field supervisors, the company had to look externally. Therefore, Peoples Gas' supervisor staffing and recruitment has recently been drawing resources from non-traditional sources and not just from union employees. The additional supervisors are sourced from various industries and utilities and come with leadership experience as part of their skill sets. While these new supervisors have deep supervisory and leadership experience, they do not necessarily have deep gas pipeline technical experience. In order to address this gap, Peoples Gas has looked at new methods to bolster technical experience. One such recently created initiative is the "Grab a Wrench" program. This program has new supervisors shadowing field employees to perform the field work alongside them. This helps augment the traditional training and operator qualification programs and provides a more real world appreciation of the work while fostering team work.

The company has also been looking at other options by which to leverage the experience of its union work force through non-traditional programs.

Through these changes, as well as the ongoing Peoples Gas reorganization and the development of a dedicated resource planning team at Peoples Gas, the company is confident in its ability to ensure the right level of oversight for its operational and construction activities.

For additional details regarding the *Resource Plan*, please refer to Peoples Gas' response to Recommendation D.4.

Owner:

Director, Gas Operations Planning

Liberty Recommendation Q.5:

Clarify responsibilities for key field roles and institute training programs to support them more fully.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation Q.5:

Peoples Gas agrees with the recommendation and the below discussion addresses what has been done, and what additional studies or analyses Peoples Gas intends to undertake, to address the remaining items.

Meter Markers: As of February 16, 2015, the Peoples Gas Technical Training and Quality Assurance department is responsible for training all meter markers. This change from the shop locations to a centralized location will help ensure consistent training on compliance with safety and company procedures and standards among all meter markers. The AMRP project management office (“PMO”) created a guide and assisted with the development of the training presentation and knowledge assessment that is now part of this training. All meter markers completed this new training course as of March 2, 2015. An annual refresher during the first quarter will also be part of the ongoing training. This recommendation has been addressed.

Technical Training and Compliance Monitoring: The current role of the Technical Training and Quality Assurance department is to provide guidance and interpretation of procedures and work practices. In the event of non-compliance, additional guidance comes from the Standards Group to ensure compliance and consistency with code requirements. To address the knowledge and experience levels of instructors and auditors, they are cross trained and regularly attend continuing education sessions to bridge their specific knowledge and experience gap. This recommendation has been addressed.

Operator Qualification (OQ): Peoples Gas will study means to provide contractors with an OQ covered task listing (contract) for the work that they are performing. This recommendation is in transition due to recent organizational changes. Construction inspectors need to ensure that contractor personnel performing the work have the required OQ qualifications to perform the work. Technical Training started conducting onsite OQ audits of contractor programs (i.e., training, testing, performance, etc.) in November of 2014. These OQ audits will be conducted annually. Also, the Compliance Monitoring Group (“CMG”) has audit question sets related to OQ qualifications and this is part of every audit for company and contractor personnel. This recommendation has been addressed. Implementation of all elements for this recommendation will help ensure contractors are in compliance with OQ regulations by having the necessary qualifications to perform covered task work.

Quality Control: Peoples Gas will study means to merge the CMG deficiency audit reports and inspector non-compliance reports into one reporting system for improved quality tracking. Additionally, Peoples Gas will study means to establish accountability measures for contractor and company personnel when repeat deficiencies are identified. Implementation of this recommendation will allow the company to better identify deficiency trends among the contractor workforce and will also improve the data used to address accountability with contractors.

In order to address the lack of gas industry experience of new construction inspectors, Peoples Gas will study the feasibility of increasing the duration of training programs for construction inspectors to a minimum of five weeks. The five weeks would be divided into two weeks of classroom and 3 weeks of on-the-job training (“OJT”). Week 1: Field Training, Week 2: Classroom, Week 3: Field Training, Week 4: Classroom, Week 5: Field Training. Implementation of this recommendation will increase the engagement of new construction inspectors and the trainers (OJT and Classroom) during the training program. Lastly, by allowing inspectors to apply newly learned information on the job, knowledge retention will increase.

Below is a list of action items with forecasted completion dates:

Action Item	Forecasted Completion Date
Study means to provide contractors with an OQ covered task listing (contract) for the work that they are performing	12/31/15
Study means to merge the CMG deficiency audit reports and inspector non-compliance reports into one reporting system for improved quality tracking	12/31/15
Study means to establish accountability measures for contractor and company personnel when repeat deficiencies are identified	12/31/15

Owner:
Director, Construction

Liberty Recommendation Q.6:

Peoples Gas should examine the benefits of equipping technicians with sub-meter accurate GPS devices in areas that have line of sight to satellites.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation Q.6:

Peoples Gas agrees with Liberty's recommendation and now requires GPS data collection for all AMRP and Public Improvement projects. This requirement was applied to the 2015 AMRP and Public Improvement projects. The 2015 construction contracts require contractors to supply the equipment and resources to collect, process, and deliver sub-decimeter accurate locations for all new installed facilities. In areas with poor satellite coverage, contractors are required to acquire facility locations via surveying equipment and a licensed professional surveyor. After data collection, the contractor submits the GPS data to Peoples Gas in a standardized electronic format that allows the company's mapping technicians to import the data into its geographic information system (GIS). The lot line-derived location measurements and other information written on paper as-builts are used to supplement and verify the consistency and completeness of the GPS data.

To enable processing of GPS data, Peoples Gas developed a data standard for all contractors to follow and detailed the data standard and data collection requirements in the 2015 General Construction Specification (Section 318). The GPS requirements were shared with prospective contractors during the 2015 bid process and after contracts were awarded, the company provided training for field technicians on the GPS requirements in the Specification. Peoples Gas also responded to questions and concerns about the data collection process and continues to work with contractors to ensure they understand and are able meet GPS data requirements.

Peoples Gas anticipates that the GPS data will help streamline and expedite the process of updating the company's mapping and property records. Peoples Gas also expects the GPS data to improve the quality and accuracy of the company's mapping records and to reduce the number of mapping errors that stem from incorrect or missing information in the paper as-built records.

Please see Q.6 Attachment 1 in the Appendix for an excerpt of Section 318 of the 2015 General Construction Specifications for more information regarding the GPS requirements.

Owner:

Director, Gas Engineering

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation S.1:

Peoples Gas agrees with this recommendation. The steps outlined in the recommendation will ensure that Peoples Gas approaches every facet of safety and safety management from top to bottom.

Peoples Gas safety is championed at the executive level by the President of Peoples Gas. The President sets the direction for the utility on all matters concerning safety. He recently developed and communicated his top initiatives and improvement opportunities¹. Safety was the first item on the list with his vision for safety: Target Zero with every employee focused and committed to working safely². The goal is zero harm and zero injuries every day. The President also recently developed a video message for all Peoples Gas employees explaining this vision and actionable steps that support the Target Zero philosophy.

Two other Peoples Gas executives, the Vice President, Operations and Maintenance, and the Vice President, Construction serve as key safety sponsors under the President’s leadership and drive the Target Zero philosophy through the organization.

Peoples Gas has a comprehensive communications program in place that includes: An executive dashboard that shows leading and lagging safety indicator data, regular updates related to safety goals, plans, and initiatives in a variety of leader and management meetings, weekly safety meetings at field locations for field employees, regular tailgate meetings for field employees, Safety Committee which includes management and union representation, weekly injury review calls to discuss recent injuries, close calls and significant updates, and monitors at each shop location which display safety information for viewing by field employees and management.

Peoples Gas has established aggressive performance targets that require improvement year over year and target top quartile performance within five years. The specific measure currently targeted and built into management incentive plans is the Days Away, Restrictions, or Transfer measure, commonly referred to as the DART rate. This rate includes injury cases involving days away from work, restrictions from conducting regular responsibilities, or transfers to another area.

¹ Please refer to S.1 Attachment 1 in the Appendix.

² Please refer to S.1 Attachment 1 in the Appendix.

Peoples Gas regularly measures its safety performance. Weekly, monthly, and quarterly updates are prepared and communicated to various audiences through a variety of forums, such as Field Managers, front-line supervisors, and field employees. The monthly executive dashboard and quarterly scorecard include both leading and lagging indicator data. The Peoples Gas Safety Committee and Peer Observation Team work to address trends as do Peoples Gas Managers for their respective locations.

In the first quarter of 2015, a root cause workshop was delivered to a number of Peoples Gas leaders. It was presented to refresh management on root cause concepts and human performance techniques. Human performance is a discipline geared toward preventing human error which can lead to incidents (i.e., preventing error due to potential human distraction). A training plan has been established to train a core group of individuals in Compliance, Corporate Safety, and Operations trained in root cause analysis techniques. This training plan is underway and some of these individuals have already received training.

Currently, all injuries receive investigation and an apparent cause evaluation is completed. Incidents that rate high on a formal severity scale receive more in-depth root cause analysis.

In order to improve safety performance, Peoples Gas has a multi-year corporate strategy that includes quality management, supervisor development, human performance, and balanced scorecards which include both leading and lagging indicator data. For 2015, Peoples Gas has developed a safety business plan³ which connects to the multiyear strategy. It includes specific actions for supervisor development; follow up on important outcomes and recommendations stemming from a safety perception survey/focus groups conducted in 2014, implementation of a culture improvement effort called Target Zero, along with an effort to improve effectiveness of hazard recognition practices and skills of employees.

There are many other specific program elements that are either in place or identified as improvement areas that are expected to help improve results. Two of these include leader observation and peer observation processes. The teams leading these processes regularly review injury data as well as leading data trends identified during observations. These teams work with management to develop initiatives and are areas of focus in Peoples Gas' continual improvement process.

Owner:

Director, Operations and Maintenance

³ Please refer to S.1 Attachment 2 in the Appendix.

Liberty Recommendation S.2:

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

Accept/Reject: Peoples Gas accepts this recommendation

Status: Implementation In Progress

Response to Recommendation S.2:

Peoples Gas agrees with Liberty's recommendation to improve its performance on injury prevention and examination of root causes as well as to develop a responsive action plan to improve employee accident rates. This requires a comprehensive injury prevention approach that encompasses culture, leader and employee accountability, and better execution of certain safety program elements. Peoples Gas' approach, which is a responsive action plan, is referenced in this document as the safety business plan¹. Additionally, please see the response to Recommendation S.1 regarding root cause analysis.

In order to improve safety performance, Peoples Gas has a multi-year strategy which includes quality management supervisor development, human performance, which is a discipline focused on helping people prevent errors, and balanced scorecards which include both leading and lagging indicator data.

For 2015, Peoples Gas developed a responsive action plan/safety business plan which connects to the multiyear strategy. It includes specific actions to promote supervisor development, follow up on important outcomes and recommendations stemming from a safety perception survey/focus groups conducted in 2014, implementation of a culture improvement effort called Target Zero², along with an effort to improve effectiveness of hazard recognition practices and skills of employees.

Please see the response to Recommendation S.1 for other programs and initiatives underway.

Owner:

Director, Operations and Maintenance

¹ Please refer to Peoples Gas' response to Recommendation S.1 Attachment 2.

² Please refer to Peoples Gas' response to Recommendation S.1 Attachment 1.

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation

Status: Implementation In Progress

Response to Recommendation T.1:

Peoples Gas understands the importance of prioritizing the relationship with the City of Chicago, and has made changes in the last year and a half to improve the relationship. As such, action on the recommendation is in progress and will require a long term commitment of resources to develop a better relationship with The Office of the Mayor; as well as the principal agencies with jurisdiction over the AMRP: the Chicago Department of Transportation (“CDOT”) and the Department of Water Management (“DWM”). These agencies have direct contacts for major issues, such as restoration or pipeline safety.

The Government & Community Relations Team created an outreach plan to introduce the new leadership and schedule regular meetings with key stakeholders: CDOT, DWM, local elected officials in leadership positions and those impacted directly by AMRP construction. Building trusting relationships, especially those with administration officials, is the key to sustaining the improvements observed over the past year.

Going forward all efforts to establish and build upon communications and coordination with the City of Chicago will be managed through the Construction organization at Peoples Gas.

Owner:

Vice President, Construction

Liberty Recommendation T.2:

Peoples Gas should expand the scope of AMRP project schedules to incorporate permitting requirements.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation T.2:

Peoples Gas agrees with and has implemented this recommendation.

During the 2012 and 2013 construction years, the Program had in place two levels of schedule detail.

The first level was an “integrated” schedule which was project based and included components at the phase level for Engineering, Permitting and Construction, as well as a project level Closeout component. This schedule was intended as a monthly management reporting tool.

The second level of detail was for project “construction”, and incorporated the contractor’s street level construction schedules along with start milestones for permit release to a range of blocks along a specific street. This schedule was intended to be a weekly reporting tool to be used by the shops, and as the source of data for the first level monthly schedule.

Owing to a lack of input data, the engineering process, permitting process and closeout process components were removed from the “integrated” schedule for the 2014 construction year. Without these components, the 2014 “integrated” schedule was limited to summary activities, at the phase level, for construction.

For 2014, the shop level “construction” schedule moved the start milestones that represent the initial release of permits from the street level to the individual block, and required the contractor’s construction details be provided at the individual block.

The 2014 model was the basis of the schedules in use by the Program at the time of Liberty’s Audit.

Since the audit, both the “integrated” and “construction” level schedules have been combined into a single project schedule (2015 logic model). This model containing engineering, procurement, permitting, construction, and closeout components has been developed and is being implemented in the second half of 2015 for the 2015 and 2016 design-construction year projects. This will provide a project status across the entire lifecycle for 2016 construction projects.

Implementation of the 2015 logic model will benefit the Program by providing timely and actionable information for planning and tracking throughout the entire life of a project, and for the Program as a whole.

The permitting process, at present, is identified in the engineering (front end) portion of this integrated project schedule. However, permits are requested and issued at the block level for construction; therefore, permit acquisitions run through the life of the construction schedule in block groups of eight (at a maximum) for each contractor, as set by the Chicago Department of Transportation (“CDOT”).

A “Permit Release to Contractor” milestone has been in the construction schedules at the Street level of detail since 2012, and was moved to the Block Level in the 2014 Model. This milestone serves two purposes, both of which benefit the program by facilitating scheduling and timely permit acquisition:

1. Provides a forecast plan of anticipated permit necessity for each block in a phase. The contractor provides a rolling three-week look-ahead schedule that can be used for permit planning by the Peoples Gas Shop (North, Central or South) to ensure that permits are requested and released to the contractor to meet the work plan. Additionally, the permit release dates needed by the contractor throughout the project can be reviewed by CDOT to help in determining future contractor work locations and planned timeframe.
2. Records in the schedule by actualized date when the contractor received the block permit from Peoples Gas which, along with material delivery, allows the contractor to begin construction in that block.

Owner:

Director, Gas Operations Planning

Liberty Recommendation T.3:

Peoples Gas should develop a database of permit applications to include all permit applications to the Chicago Department of Transportation.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation T.3:

Peoples Gas agrees with and is implementing the recommendation that a database or similar tracking system is appropriate for permits. Peoples Gas has a database that includes permits for which electronic processes are in place with the City of Chicago. For other permits, Peoples Gas is using or will enhance the existing database to track these permits and has created or will create tracking mechanisms. These reports will assist with the management and communication of permit status internally and externally with the Chicago Department of Transportation (“CDOT”) permitting staff.

Peoples Gas’ ARM (asset and resource management) Web Portal (“AWP”) application is a database system that is capable of communicating with CDOT’s permitting system. Through this capability, Peoples Gas electronically submits construction permit requests by batch on a daily basis to CDOT. Once the permit application is processed by CDOT, the permit platform will update the following fields for the permits in the AWP system: Received Date, Expiration Date, Agency No (the agency number), and Agency Control ID (Dig Number). All permits and their status are directly linked to Peoples Gas’ Work Asset Management (WAM) and the associated work request (WR) #, in order to track the permits for pending and completed jobs. The permit database auto-populates the permit form template, creates a PDF, and saves the files as an attachment to the permit request in AWP. Please note that these electronic submittals only apply to the original permit application and do not apply to amendments, extension, or restoration permits, which are discussed below.

As the AWP system is a Peoples Gas database, permit reports can be generated using the data in the AWP system and therefore the development of a new database of permit applications is not necessary. Below are some of the key functionalities and process flows that define the AWP interface.

Construction Permits

Peoples Gas currently creates three permitting reports using the AWP system:

1. Permits Received - Daily
2. Permits Held – Weekly
3. Permits Expiring - Weekly

In addition to these three current reports, Peoples Gas will create a monthly report extracted from the AWP system to track permits requested and not received from CDOT and the monthly average approval time to receive a permit.

Peoples Gas is also proposing two software enhancements to the AWP system to track the following:

1. Add an attribute to the AWP system to designate permits as AMRP.
2. Add additional date fields to the AWP system to track “Permit Held” response durations from CDOT agencies to clear a permit hold as designated by CDOT, and to track the duration for permit release once all required documentation has been submitted.

Restoration Permits

Currently, the City does not have a system to allow Peoples Gas to apply electronically for restoration permits, and the City manually creates restoration permits. The City has told Peoples Gas that the restoration permits will be included in the electronic system in the future, potentially by the fourth quarter of 2015. As a result, Peoples Gas will implement the following to manage permits required to perform restoration only:

1. Create an excel spreadsheet of all active and expired restoration permits for each year, date requested and date received, permit cost, and permits requested but not received.
2. Modify the AWP system to track restoration permits following the same reporting and processes for all other permits, once a final determination is made for the City of Chicago’s implementation of the restoration functionality.

Permit Extensions

The CDOT database does not have the capability for Peoples Gas to send permit extensions electronically through the AWP application system. The current process is for Peoples Gas to generate a weekly AWP database report identifying construction permits set to expire within 7 days. This listing is sent to the Shop Construction Managers to determine extension requirements. Any permit identified as requiring an extension is then sent to CDOT electronically and in turn the extended permits are received from CDOT via email or hand delivery to Peoples Gas’ Construction Planning Group (CPG). Peoples Gas will update the AWP database with the permit extension received date and expiration date within 48 hours to ensure the AWP database stays up to date with all active permits.

Below are all the action items and forecasted completion dates for recommendation T.3:

Action Item	Forecasted Completion Date
Create a monthly report extracted from the AWP system to track permits requested and not received from CDOT and the monthly average approval time to receive a permit.	12/31/15
Make software enhancements to AWP system.	12/31/15
Create an excel spreadsheet of all active and expired restoration permits for each year, date requested and date received, permit cost, and permits requested but not received.	12/31/15

Owner:

Director, Gas Operations Planning

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation T.4:

Peoples Gas agrees with and is implementing the recommendation to work with the Chicago Department of Transportation ("CDOT") to identify shared reporting platforms. In 2014 and 2015, Peoples Gas worked with the City of Chicago on its new project reporting system, CDOT DOTMaps. CDOT DOTMaps is now available and being used by Peoples Gas. CDOT DOTMaps is a Google based mapping system platform in which third party project information can be viewed including street moratoriums, active permit information, utility construction drawings, and overlapping projects. CDOT provided training to Peoples Gas in the second quarter of 2015 and select departments in Peoples Gas have access to the system.

Additionally, CDOT supplies the following items to Peoples Gas:

1. Weekly Project Coordination Office (PCO) CDOT Conflict Listing – Project listing supplied on a weekly basis to Office of Underground Coordination (OUC) utility members showing overlapping utility projects which are discussed at CDOT's office on a weekly basis. The intent of the listing and the weekly meetings is to coordinate construction and restoration schedules and identify shared restoration opportunities.
2. GIS Shape file of moratorium streets – File supplied to the Gas Engineering group which is uploaded into the GIS system. This layer is used as a tool during the design process to identify streets which have been resurfaced and placed on a moratorium.

As of August 14, 2015, Peoples Gas and CDOT have not yet scheduled a meeting to discuss sharing other CDOT reports. Peoples Gas plans to meet with CDOT in the fourth quarter of 2015 to talk about other data or reports that may be available. Please see sample agenda plan below for items topics:

Meeting Agenda:

1. CDOT and Peoples Gas Reporting Overview
2. CDOT and Peoples Gas Identification of Shared Platform Reporting
3. Hansen System Overview
4. Round Table/Open Topics

Below is the action item and forecasted completion dates for recommendation T.4:

Action Item	Forecasted Completion Date
Meeting with CDOT to discuss shared platform reporting	12/31/15

Owner:

Director, Gas Operations Planning

Liberty Recommendation T.5:

Peoples Gas should improve the database of rail crossing permits.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation T.5:

Peoples Gas agrees with and is implementing this recommendation.

In 2014 Peoples Gas reviewed and documented the process to obtain rail crossing approvals and permits. The tracking tool was also updated to capture status information.

Per this recommendation, Peoples Gas has updated its railroad tracking tool to include relevant fields and data entry controls as well as making it easier to maintain. In order to monitor that the tool is being populated, a report has been developed to track missing information. To ensure that action or follow up is maintained, a Primavera P6 summary report was developed to provide project statuses and action items that need to be addressed. Peoples Gas also documented the monitoring and reporting frequency of outstanding rail road permits.

The benefit of having implemented this recommendation is improved controls and oversight over the status of railroad crossing permits that have historically caused significant delays to the completion of a project in construction.

Owner:

Director, Gas Engineering

Liberty Recommendation T.6:

Peoples Gas should improve its database of citations.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implemented

Response to Recommendation T.6:

Peoples Gas agrees with this recommendation. A database is a valuable tool to help provide insight to Peoples Gas' management as to how the Company is performing in complying with the Chicago Department of Transportation ("CDOT") rules and regulations.

In the past, Peoples Gas maintained a database that was mostly used to document and track citations. In 2015, Peoples Gas added more fields to the database to help identify root cause of citations being issued. This current and improved database therefore captures the root cause as a field in addition to the Citation #, date citation was issued, address, citation counts, citation reason, CDOT inspector name, type of work performed, work performed by, cost, court date, voucher number, shop and docket#. A copy of the most current database is located on Peoples Gas' shared drive for management and the shops to review.

This citations database provides input into a high level dashboard that is created each month and centered around the total amount spent on citations and the root causes by percentages. This report is shared monthly with the construction management team.

Keeping track of the citations in a database since 2012 and investigating their root causes more recently has helped Peoples Gas identify lagging indicators of opportunities to improve processes. It also has helped Peoples Gas work with contractors to recover the cost of citations paid by Peoples Gas and to remediate the causes of citations that are issued as well as work with the CDOT to better coordinate activities and work on implementation and interpretation of municipal regulations.

Owner:

Director, Gas Operations Planning



Liberty Recommendation U.1:

Peoples Gas should alter the AMRP Communications Plan.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation U.1:

Peoples Gas understands that not having an AMRP Customer Communications Plan that is continually reviewed and updated poses risks to the Company image and customer satisfaction.

Peoples Gas agrees with the recommendation and has updated the communications plan to specifically address Liberty's recommendations regarding the below items [see U.1 Attachment 1 in the appendix for Communications Plan details]:

- Protocols and strategies for dealing with uncooperative customers
- Process to update customer needs and expectations as the project progresses [See U.4 and U.5]
- Process to gather customer feedback and measure customer satisfaction [See U.4 and U.5]

Corporate Communications will communicate the plan to all of those involved in the program by the end of November 2015, and follow up with bi-yearly meetings. At these meetings, feedback from these internal stakeholders will be incorporated into subsequent edits to the plan. In addition, the plan has been modified to reflect current staffing changes as part of the recent acquisition of Integrys Energy Group by Wisconsin Energy Corporation.

Action Item	Forecasted Completion Date
Revise Communication Plan	Complete
Communications Team to communicate the plan to all of those involved in the program, gather input from the past year and incorporate those suggestions into the 2016 plan.	11/30/15
Communications Team to communicate the plan to all of those involved in the program.	03/31/16
Communications Team to communicate the plan to all of those involved in the program, gather input from the past year and incorporate those suggestions into the 2017 plan.	11/30/16

Owner:

Vice President, Customer Service



Liberty Recommendation U.2:

Peoples Gas should standardize the process to set AMRP customer appointments.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation U.2:

Peoples Gas understands that being inconsistent in setting appointments for field visits can lead to customer dissatisfaction. In addition, the lack of flexible hours for customers to call in and make appointments can affect customer service ratings.

Currently, Peoples Gas requests appointments for service markings through a standard letter/appointment process. However, meter move appointments are handled differently at each shop, but the primary method is going door-to-door. Peoples Gas' standard hours do not consistently accommodate after-hours and weekend appointments.

Peoples Gas will review the current customer appointment process for service markings and meter moves as well as the ability to consistently offer options for after-hour and weekend appointments.

Action Item	Forecasted Completion Date
Review the current customer appointment process as well as the ability to offer consistent options for after-hour and weekend appointments.	12/31/15
Develop a new plan to standardize customer appointments across all districts and to offer customers the flexibility to schedule weekend and evening appointments.	03/01/16
Pilot customer appointments for meter moves at one of the shops.	04/01/16
Implement meter move appointments and flexible hours.	05/31/16

Owner:

Director, Construction



Liberty Recommendation U.3:

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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation U.3:

The Improved Customer Experience (ICE) project is a consolidation effort to combine the legacy Integrys Customer Information Systems into one platform. Teams from Peoples Gas Corporate Communications and Gas Operations have been formed to ensure that the current customer communications process is incorporated into the new system.

Peoples Gas understands the importance of ensuring that the new customer information system fully supports the AMRP communications process.

Action Item	Forecasted Completion Date
Deploy AMRP Communications Processes in the Customer Information System	TBD

Owner:

Vice President, Customer Service

Liberty Recommendation 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.

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation U.4:

Peoples Gas established the Construction Complaints Group in 2012 to help coordinate customer construction complaints associated with AMRP work. The goal of the group is to contact customers within 48 working hours to clarify their complaint and provide the field with as much information as possible to aid expedient investigation and resolution.

In line with the Liberty recommendation, Peoples Gas will evaluate the current training and resource needs of this group to ensure customer satisfaction remains a focal point of the program. The company will provide all relevant system tools to aid in the investigation of complaints such as the company's systems of record and the permitting database. Finally, the company continues to expand the We Care program, which is the customer satisfaction effort put in place to follow-up with customers to ensure their appointments or work orders were completed to their satisfaction. As the program expands, AMRP restoration will be a work type included in the proactive phone calls with customers, which is anticipated to identify similar issues to those currently sent to the Complaints Group. In developing this portion of the We Care program, root cause analysis will be performed in order to better understand the results collected and provide the opportunity for resolution of issues before they become a complaint. The complaints received by the Complaints Group will be included in that root cause analysis to provide a complete view of all the complaints received associated with AMRP. With the overlap between these two efforts, the company will leverage efficiencies obtained with one effort and apply it to the other to reduce complaints and resolution time.

Action Items	Forecasted Completion Date
Evaluate the current resources in the Construction Complaints Group and determine a plan to address any gaps	09/30/15
Evaluate options to provide the Construction Complaints Group personnel with additional tools to help with the initial complaint resolution.	09/30/15
Include the complaints that the Construction Complaints Group receives in the development of the We Care root cause analysis.	11/30/15
Assess any overlap between the Construction Complaints Group and AMRP restoration We Care calls.	11/30/15

Owner:

Director, Construction

Liberty Recommendation 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

Accept/Reject: Peoples Gas accepts this recommendation.

Status: Implementation In Progress

Response to Recommendation U.5:

Peoples Gas understands the value of measuring customer satisfaction with AMRP and the effectiveness of its communications and customer service.

In April 2015, Peoples Gas began a small pilot program to implement a program in which employees make calls to customers who have had a field service order¹ completed by the company on the prior day. To date, there are nearly 400 employees making several calls each day to customers. If a customer is dissatisfied with the transaction with the company, a referral is created and a supervisor in that department will contact the customer within 24 hours to resolve the customer’s issue. Peoples Gas is tracking these dissatisfied customers and developing root cause analysis in order to correct any system or process that is causing complaints. Reports are generated daily for senior management from all areas of Peoples Gas operations to review.

In addition, see Peoples Gas’ response to Recommendation U.4 for the customer complaint process improvements that are being implemented.

Action Item	Forecasted Completion Date
Begin making calls to customers who have had an AMRP Service Marking Appointment	09/30/15
Begin making calls to customers who have had an AMRP Meter Move Appointment	12/31/15
Begin analysis to track trends, investigate them and put process improvements in place.	03/31/16
Begin making calls to customers who have had their property restored as part of AMRP.	06/30/16

Owner:

Vice President, Customer Service

¹ Field Service Orders include Emergency Inside Leak, No Gas, Turn Ons, Meter Changes, and Inside Safety Inspections.

Appendix

- I. Glossary
- II. Attachments to Responses

ABBREVIATIONS, ACRONYMS, TERMS

AMRP: Accelerated Main Replacement Program

APS: Advanced Planning System

CDOT: Chicago Department of Transportation

CI: cast iron

CI/DI: cast iron / ductile iron

City: City of Chicago

CMG: Compliance Monitoring Group

Commission: Illinois Commerce Commission

DI: ductile iron

DIMP: Distribution Integrity Management Program

DWMS: Distribution Work Management System

District Shop: refers to Peoples Gas' North, Central and South shops

eTq: Quality Management application

GCDPC: Greater Chicago Damage Prevention Council

GIS: Geographic Information Systems

ICC: Illinois Commerce Commission

IPC: Integrated Project Controls

Jacobs: Jacobs Engineering

LDC: local distribution company

Liberty: The Liberty Consulting Group

LP: low pressure

MAOP: maximum allowable operating pressure

MP: medium pressure

MRI: Main Rank Index

NetPoint: Scheduling Application

NTP: Notice to Proceed

OUC: City of Chicago's Office of Underground Coordination

Peoples Gas: The Peoples Gas Light and Coke Company

PEP: Project Execution Plan

PGL: The Peoples Gas Light and Coke Company

PHMSA: United States Department of Transportation's Pipeline and Hazardous Materials Safety Administration

PMO: Project Management Office

Primavera P6: a project management system, developed by Oracle, that Peoples Gas uses

Primavera Unifier: a project management system, developed by Oracle, that Peoples Gas is implementing to replace Primavera P6

psi: pounds per square inch

psig: pounds per square inch gauge

Rider QIP: Rider Qualifying Infrastructure Plant

shop: refers to Peoples Gas' North, Central and South shops

Skyline: Quality Assurance/Quality Control (QA/QC) tracking database used by the CMG at Peoples Gas

SPI: Schedule Performance Index

SMYS: specified minimum yield strength

SynerGEE: Natural Gas network modeling software

UCA: Underground Contractors Association

UMRI: Uniform Main Rank Index

Unifier: a system Peoples Gas is implementing

WAM: Work and Asset Management system

WEC: WEC Energy Group, Inc., formerly known as Wisconsin Energy Corporation

WMIS: Work Management Information System



F.3 Attachment 1

Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP	Mains, miles	AMRP	Services	CIDI MP, miles	CI Main <= 8', miles	Total Pending Leaks	% CIDI MP	% CI Main <= 8'	Mean MRI	Vulnerable Services	Leakable Services	% Vulnerable Services	Leakable/Miles of Main	CI DI MP Ranking	CI Main <= 8' Ranking	Mean MRI Ranking	Services Ranking	Leakable/Miles of Main Ranking
Albany Park	30602	4252	216	0	19210	0.206	61	7.06%	62.77%	0.000	1198	0	0.00%	1.933	82	160	181	206	172
Alteid Gardens	0.000	47	0	0	0.000	0.009	0	0.00%	0.00%	0.009	0	0	0.00%	0.000	0	0	0	0	0
Andersonville	6.251	765	0.36	128	4.553	0.165	8	5.76%	72.84%	0.165	128	128	16.73%	1.280	65	195	160	161	136
Archadia Terrace	5.612	955	0	138	4.095	0.258	12	0.00%	72.96%	0.258	138	138	14.45%	2.138	0	197	204	136	179
Archer Heights	15.552	2068	1.74	104	7.432	0.140	12	11.19%	47.79%	0.140	104	104	5.03%	2.138	142	98	137	43	78
Ashburn	7.611	3908	2.06	250	14.519	0.175	4	8.40%	59.23%	0.175	250	250	6.40%	0.163	110	144	164	61	4
Avalon Park	24.513	7613	10.02	164	4.292	0.258	3	9.33%	56.38%	0.258	164	164	16.37%	0.394	123	130	205	158	17
Avoidale	10.402	1006	0.14	152	2.704	0.057	15	1.35%	26.00%	0.057	152	152	15.11%	1.442	14	54	68	145	146
Back of the Yards	10.948	1509	1.13	358	3.305	0.060	12	10.32%	30.19%	0.060	358	358	23.72%	1.096	127	63	71	192	111
Belmont Central	28.378	5076	1.18	576	14.653	0.144	19	4.16%	51.64%	0.144	576	576	11.35%	0.670	36	117	139	113	65
Belmont Gardens	3.204	428	0	122	1.151	0.057	12	0.00%	0.00%	0.057	122	122	28.50%	1.873	0	75	67	209	166
Belmont Heights	21.150	4029	1.1	477	14.475	0.370	12	5.20%	68.44%	0.370	477	477	11.84%	0.567	49	182	223	118	41
Belmont Terrace	5.219	801	0.26	71	3.661	0.237	7	4.98%	70.15%	0.237	71	71	8.86%	0.575	47	191	197	95	43
Beverly	32.151	3707	1.06	392	22.793	0.218	26	3.30%	70.89%	0.218	392	392	10.57%	0.809	30	193	189	109	86
Beverly View	1.811	240	0	4	0.482	0.131	0	0.00%	26.62%	0.131	4	4	1.67%	0.000	0	56	131	6	0
Beverly Woods	0.483	100	0.48	35	0.483	0.300	2	9.38%	100.00%	0.300	35	35	35.00%	4.141	212	228	216	131	6
Big Oaks	10.740	1779	0.11	151	5.270	0.216	3	0.93%	49.07%	0.216	151	151	8.49%	0.279	11	104	187	86	6
Bowmanville	4.098	464	0.62	120	2.019	0.210	11	15.13%	49.26%	0.210	120	120	25.86%	2.684	203	107	163	203	197
Brainerd	19.013	2591	2.02	171	9.823	0.180	8	10.62%	51.66%	0.180	171	171	6.60%	0.421	134	118	167	63	23
Bridgeport	12.812	953	5.25	154	2.934	0.099	26	40.98%	22.90%	0.099	154	154	16.16%	2.029	192	48	108	155	176
Brighton Park	23.295	3006	2.13	560	7.440	0.109	17	9.14%	31.94%	0.109	560	560	18.63%	0.730	120	67	111	171	70
Bronzeville	15.370	578	5.77	29	3.001	0.076	11	37.54%	19.53%	0.076	29	29	5.02%	0.716	187	39	89	41	69
Brynford Park	0.000	0	0	0	0.000	0.009	0	0.00%	0.00%	0.009	0	0	0.00%	0.000	0	0	14	0	0
Bucktown	20.421	3229	1.48	177	10.663	0.061	15	7.25%	5.21%	0.061	177	177	5.48%	0.000	0	18	73	49	71
Budlong Woods	9.007	1127	0.47	167	6.907	0.232	8	5.22%	76.69%	0.232	167	167	14.82%	0.888	50	212	196	143	95
Buena Park	5.258	374	0.01	9	1.444	0.122	7	0.19%	22.23%	0.122	9	9	2.41%	1.331	5	46	124	12	139
Burnside	10.802	1230	0.87	91	2.444	0.088	6	8.05%	22.63%	0.088	91	91	7.40%	0.555	102	47	95	78	40
Cabrin Green	0.054	2	0	1	0.002	0.054	1	0.00%	0.32%	0.054	1	1	0.00%	3.609	0	7	64	0	210
Calumet Heights	25.081	3738	2.24	166	13.093	0.271	16	8.93%	52.20%	0.271	166	166	4.44%	0.638	116	121	209	32	60
Canaryville	0.000	0	0	0	0.000	0.034	0	0.00%	0.00%	0.034	0	0	0.00%	0.000	0	0	45	0	0
Chatham	26.278	3797	1.52	336	16.328	0.210	33	5.69%	61.09%	0.210	336	336	8.85%	1.235	61	153	182	92	131
Chicago Lawn	6.347	937	0.46	211	3.027	0.110	5	7.29%	47.69%	0.110	211	211	22.52%	0.788	88	97	113	188	80
Chinatown	1.671	300	0.32	12	0.240	0.126	1	19.15%	14.36%	0.126	12	12	4.00%	0.598	170	30	15	25	52
Chrysler Village	0.000	1	0	1	0.000	0.009	0	0.00%	0.00%	0.009	1	1	100.00%	0.000	0	0	0	224	0
Clearing (E)	0.000	0	0	0	0.000	0.005	0	0.00%	0.00%	0.005	0	0	0.00%	0.000	0	0	4	0	0
Clearing (W)	0.405	5	0.3	4	0.000	0.007	4	7.40%	0.00%	0.007	4	4	80.00%	2.469	204	208	9	220	192
Coatage Grove Heights	5.008	833	0.17	58	3.824	0.223	2	3.39%	76.36%	0.223	58	58	6.96%	0.399	31	208	191	71	18
Cragin	35.655	5579	3.88	1118	18.015	0.197	49	10.88%	50.53%	0.197	1118	1118	20.04%	1.374	173	113	181	141	141
Dearborn Homes	0.410	0	0.41	0	0.000	0.126	0	99.88%	0.00%	0.126	0	0	0.00%	0.000	215	0	127	0	0
Dearborn Park	1.083	120	0	34	0.000	0.020	4	0.00%	0.00%	0.020	34	34	28.33%	3.695	0	0	27	207	211
Douglas Park	4.010	236	0	0	0.705	0.139	0	0.00%	17.60%	0.139	0	0	0.00%	0.000	0	31	136	0	0
Dunning	6.500	1317	0.56	65	0.737	0.066	5	8.62%	11.34%	0.066	65	65	4.94%	0.769	113	28	76	39	75
East Beverly	7.620	637	1.5	95	3.731	0.068	4	19.68%	48.96%	0.068	95	95	14.91%	0.525	171	102	80	144	144
East Chatham	7.831	773	0.43	37	4.578	0.170	12	5.49%	58.46%	0.170	37	37	4.79%	1.532	57	136	162	35	150
East Garfield Park	22.330	1777	0.18	87	5.318	0.089	10	0.81%	23.82%	0.089	87	87	4.90%	0.448	8	50	97	38	27
East Hyde Park	0.015	2	0.02	0	0.000	0.024	0	130.16%	0.00%	0.024	0	0	0.00%	0.000	225	0	34	0	0
East Pilsen	1.616	105	0.62	172	0.315	0.091	4	38.37%	19.49%	0.091	172	172	7.93%	2.476	190	38	100	193	193
East Side	0.335	16	0	3	0.000	0.023	4	0.00%	0.00%	0.023	3	3	18.75%	11.926	0	0	30	174	225
East Ukrainian Village	7.351	1149	0.36	69	0.735	0.117	8	4.90%	10.00%	0.117	69	69	6.01%	1.088	46	24	121	58	110
Eden Green	0.000	2	0	0	0.000	0.009	0	0.00%	0.00%	0.009	0	0	0.00%	0.000	0	0	10	0	0
Edgebrook	5.180	536	1.18	56	3.301	0.085	3	22.78%	63.73%	0.085	56	56	10.45%	0.579	176	162	94	106	47
Edgewater	11.527	1103	0.92	139	6.272	0.194	14	7.98%	54.41%	0.194	139	139	12.60%	1.215	101	123	171	127	124
Edgewater Beach	6.581	471	0.16	19	1.201	0.093	6	2.43%	18.25%	0.093	19	19	4.03%	0.912	22	34	104	27	100
Edgewater Glen	1.329	161	0	25	0.557	0.160	7	0.00%	41.95%	0.160	25	25	15.53%	5.269	0	86	155	149	220
Edison Park	2.064	174	1.18	80	4.044	0.041	6	62.02%	19.59%	0.041	80	80	4.58%	2.907	201	51	201	219	201
Englewood	46.892	4155	1.23	422	17.516	0.104	27	2.41%	37.35%	0.104	422	422	10.16%	0.576	20	77	109	105	44
Fermwood	15.459	2170	0.31	172	9.257	0.202	22	2.01%	59.88%	0.202	172	172	7.93%	1.423	19	147	177	80	145
Fifth City	2.963	168	0	6	0.637	0.061	1	0.00%	21.49%	0.061	6	6	3.57%	0.337	0	43	72	22	10
Ford City	0.014	0	0.02	0	0.000	0.002	0	0.00%	0.00%	0.002	0	0	0.00%	0.000	226	0	2	0	0
Forest Glen	2.990	446	0	57	2.418	0.254	3	0.00%	80.86%	0.254	57	57	12.78%	1.003	0	218	203	128	105
Fuller Park	0.000	1	0	1	0.000	0.029	1	0.00%	0.00%	0.029	1	1	100.00%	0.000	0	0	42	225	0
Fulton River District	0.000	0	0	0	0.000	0.026	0	0.00%	0.00%	0.026	0	0	0.00%	0.000	0	0	38	0	0
Gage Park	19.585	3125	1.39	370	12.353	0.164	17	7.10%	63.07%	0.164	370	370	11.84%	0.868	83	161	157	119	91
Galewood	18.867	2861	1.04	458	8.313	0.168	19	5.51%	44.06%	0.168	458	458	16.01%	1.007	58	89	161	154	106
Garfield Ridge	43.172	7703	3.09	103	27.742	0.244	11	7.16%	64.26%	0.244	103	103	6.00%	1.909	87	165	198	57	5
Gladstone Park	3.667	538	0	163	1.863	0.469	7	0.00%	50.80%	0.469	163	163	19.14%	1.909	0	114	164	175	168
Gold Coast	7.515	627	0	18	2.176	0.082	15	0.00%	28.95%	0.082	18	18	2.87%	1.996	0	59	92	17	174
Golden Gate	0.000	9	0	0	0.000	0.011	0	0.00%	0.00%	0.011	0	0	0.00%	0.000	0	0	17	0	0

F.3 Attachment 1

Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP Mains, miles	AMRP Services	CIDI MP, miles	CI Main <= 8', miles	Vulnerable Services	Total Pending Leaks	% CIDI MP	% CI Main <= 8'	Mean MRI	% Vulnerable Services	Leaks/Miles of Main	CI DI MP Ranking	CI Main <= 8' Ranking	Mean MRI Ranking	Services Ranking	Leaks/ Miles of Main Ranking
Neighborhood																
Goose Island	2.559	26	1.09	0.052	0	1	42.59%	10.19%	0.052	0.00%	0.391	193	25	61	0	16
Graceland West	1.885	230	0	1.248	15	3	0.00%	66.23%	0.147	6.52%	1.591	0	177	144	62	153
Grand Crossing	2.1897	1870	0.71	12.881	186	15	3.24%	58.83%	0.197	9.95%	0.885	28	140	172	102	66
Greektown	0.524	24	0	0.004	0	1	0.00%	0.82%	0.018	0.00%	1.908	0	9	24	0	167
Gresham	44.139	5572	2.31	21.673	406	20	5.23%	49.10%	0.122	7.29%	0.453	54	106	123	75	30
Groveland Park	0.000	0	0	0.000	0	0	0.00%	0.00%	0.006	0.00%	0.000	0	0	6	0	0
Hanson Park	1.543	273	0	0.879	51	5	0.00%	56.99%	0.290	18.68%	3.241	0	131	214	172	206
Harbour Point Estates	0.000	0	0	0.000	0	0	0.00%	0.00%	0.024	0.00%	0.000	0	0	35	0	0
Heart of Chicago	11.989	2151	1.58	2.130	283	29	13.18%	17.77%	0.134	13.16%	2.419	149	33	134	132	188
Heart of Italy	0.590	2	0.47	0.000	0	2	79.64%	0.00%	0.155	0.00%	3.389	206	0	151	0	207
Hegewisch	3.001	1	0	0.000	0	1	0.00%	0.00%	0.020	0.00%	9.36755	0	0	26	0	227
Hermosa	0.704	482	0.39	1.933	215	9	10.53%	52.18%	0.074	44.61%	2.430	129	119	86	218	189
Hollywood Park	3.111	538	0	2.314	46	11	0.00%	74.38%	0.127	8.55%	3.536	0	202	130	88	209
Homan Square	0.219	3	0	0.000	0	1	0.00%	0.00%	0.023	0.00%	4.562	0	0	31	212	218
Honner Park	0.005	6	0	0.000	1	0	0.00%	0.00%	0.056	16.67%	0.000	0	0	66	159	0
Humboldt Park	32.044	4419	0.22	10.323	463	39	9.83%	32.21%	0.149	10.48%	1.217	6	68	146	108	200
Hyde Park	0.732	18	0.72	0.000	2	2	98.33%	0.00%	0.037	11.11%	2.731	211	0	49	111	226
Idles Prairie Homes	0.553	2	0.14	0.001	0	0	25.34%	0.19%	0.024	0.00%	0.000	181	5	33	0	97
Ida B. Wells / Darrow Homes	0.535	0	0.54	0.000	0	2	100.92%	0.00%	0.024	0.00%	3.738	222	0	32	0	212
Illinois Medical District	0.362	8	0.17	0.000	0	0	46.92%	0.00%	0.029	0.00%	0.000	195	0	41	0	0
Irving Park	12.203	1767	0.87	8.422	436	36	7.13%	69.02%	0.293	24.67%	2.950	85	187	215	197	202
Irving Woods	8.515	1420	1.29	6.413	163	4	15.15%	75.32%	0.369	11.48%	0.470	159	204	222	114	32
Jackson Park	1.109	73	0	0.829	0.066	4	0.00%	74.79%	0.066	5.48%	0.917	167	145	148	177	157
Jefferson Park	60.821	9574	3.6	36.968	1500	40	5.92%	60.78%	0.212	15.67%	0.658	66	152	185	152	62
Jeffery Manor	10.106	1607	0.01	8.702	238	6	0.10%	86.10%	0.227	14.81%	0.594	3	221	194	141	51
Kevin Park	2.804	332	0.16	1.135	100	1	5.71%	40.49%	0.113	30.12%	1.070	63	84	116	211	109
Kennedy Park	0.000	1	0	0.000	1	1	0.00%	0.00%	0.017	100.00%	0.000	0	0	22	0	0
Kenwood	5.454	424	1.02	3.242	131	4	18.70%	54.44%	0.151	5.42%	1.617	167	145	148	45	102
Kilbourn Park	4.713	448	0	2.513	23	4	0.00%	53.32%	0.137	29.24%	0.849	0	122	135	210	88
Lake Meadows	0.507	1	0.51	0.000	0.059	0	100.57%	0.00%	0.059	0.00%	0.000	217	0	70	0	0
Lake View	39.411	5277	2.11	21.745	716	86	5.35%	55.17%	0.143	13.57%	2.182	55	127	138	133	185
Lake View East	8.913	673	0.11	2.908	0.091	38	1.29%	34.16%	0.091	1.997	1.997	13	72	102	53	175
Lakewood - Balmoral	1.855	241	0	1.016	0.069	47	0.00%	54.79%	0.069	19.50%	1.543	197	124	81	161	157
Lathrop Homes	1.296	115	0.73	0.312	0.041	23	56.33%	24.08%	0.041	20.00%	1.543	197	51	51	180	152
Lawndale	19.873	1709	4.84	4.339	0.070	28	24.36%	21.83%	0.070	15.62%	1.409	178	45	82	150	144
LeClaire Courts	1.886	307	0	1.459	0.052	2	0.00%	77.40%	0.052	0.00%	0.000	0	215	62	3	0
Lincoln Park	13.670	1570	0	4.418	0.204	145	0.00%	92.47%	0.204	9.24%	0.878	0	69	178	100	93
Lincoln Square	3.724	168	0.32	2.852	107	8	8.59%	76.58%	0.153	21.93%	2.148	112	210	149	187	180
Lithuanian Plaza	0.886	465	0	0.452	0.177	30	0.00%	51.08%	0.177	18.18%	1.129	0	115	166	167	113
Little Village	12.484	573	1.79	1.597	0.072	87	57.60%	12.79%	0.072	15.18%	1.202	198	29	84	107	184
Logan Square	41.532	5897	2.47	15.985	0.098	1095	5.95%	38.49%	0.098	18.57%	1.324	68	81	107	170	137
London Town	2.499	453	0.12	0.000	0.032	0	4.80%	0.00%	0.032	0.00%	0.800	44	0	44	0	82
Longwood Manor	9.005	1571	0.41	5.905	0.158	55	4.27%	61.48%	0.158	3.50%	0.416	39	159	154	21	21
Magnificent Mile	0.266	2	0	0.001	0.046	0	0.00%	0.19%	0.046	0.00%	0.000	0	4	56	0	0
Magnolia Glen	1.377	106	0.28	0.921	0.111	9	20.34%	66.89%	0.111	8.49%	2.179	173	181	114	87	184
Margate Park	2.249	171	0	0.845	0.092	4	0.00%	37.58%	0.092	2.34%	0.445	0	79	103	10	26
Marquette Park	25.601	4084	1.53	14.787	0.212	381	5.98%	57.76%	0.212	9.33%	0.703	69	134	184	101	67
Marycrest	0.000	0	0	0.000	0.071	0	0.00%	0.00%	0.071	0.00%	0.000	0	0	83	0	0
Marynook	5.207	875	0	3.409	0.379	129	7.00%	65.47%	0.379	14.74%	1.344	0	173	224	139	140
Mayfair	6.094	956	0.5	4.929	0.285	268	8.20%	80.88%	0.285	28.03%	2.954	107	219	205	205	203
McKinley Park	8.111	1337	0.15	2.334	0.113	262	6.16%	28.78%	0.113	19.60%	0.740	74	58	115	179	74
Montclare	21.715	3269	1.72	4.345	0.131	193	7.92%	20.01%	0.131	5.90%	0.599	98	42	132	54	53
Morgan Park	27.510	3575	10.38	16.518	0.182	428	37.73%	60.04%	0.182	11.97%	0.872	189	148	168	122	92
Mount Greenwood	0.000	21	0	0.000	0.023	21	0.00%	0.00%	0.023	100.00%	9485.633	0	0	29	227	228
Mount Greenwood Heights	0.000	1	0	0.000	0.007	1	0.00%	0.00%	0.007	100.00%	0.000	0	0	7	0	0
Near East Side	0.000	0	0	0.000	0.019	0	0.00%	0.00%	0.019	0.00%	0.000	0	0	25	0	0
Near North	7.286	266	0.77	2.116	0.115	6	10.57%	29.04%	0.115	2.26%	3.020	132	60	119	9	205
Near West Side	6.482	404	1.18	2.189	0.068	6	18.20%	33.77%	0.068	1.49%	0.617	165	71	79	5	57
Noble Square	6.277	937	0.93	0.638	0.095	30	13.82%	9.49%	0.095	0.00%	0.297	153	22	105	18	8
North Austin	14.213	1713	1.65	3.727	0.080	250	11.61%	26.22%	0.080	14.59%	1.407	143	55	91	137	143
North Center	5.969	748	0	3.624	0.075	137	0.00%	60.71%	0.075	18.32%	2.178	0	151	88	168	183
North Kenwood	0.145	4	0	0.000	0.025	1	0.00%	0.00%	0.025	25.00%	0.000	0	0	0	198	0
North Mayfair	7.926	1372	0.11	6.106	0.277	338	1.39%	77.03%	0.277	21.46%	1.262	16	214	211	194	133
North Park	5.343	844	0	3.534	0.185	202	0.00%	66.13%	0.185	23.93%	0.374	0	176	169	193	14
Northwood Park East	17.856	2182	1.62	10.806	0.221	380	9.07%	60.51%	0.221	17.42%	0.461	118	149	190	166	29
Nonwood Park West	15.173	2036	0.92	10.543	0.275	284	6.06%	69.49%	0.275	12.97%	0.446	71	189	210	130	31
Oakland	0.000	0	0	0.000	0.031	0	0.00%	0.00%	0.031	0.00%	0.000	0	0	43	0	0
O'Hare	2.072	120	1.84	0.001	0.079	8	88.80%	0.04%	0.079	66.7%	1.930	208	1	90	66	171

F.3 Attachment 1

Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP Mains, miles	AMRP Services	CIDI MP, miles	CI Main <= 8', miles	Vulnerable Services	Total Pending Leaks	% CIDI MP	% CI Main <= 8'	Mean MRI	% Vulnerable Services	Leak/Miles of Main	CI DI MP Ranking	CI Main <= 8' Ranking	Mean MRI Ranking	Services Ranking	Leaks/ Miles of Main Ranking	
Old Edgebrook	0.000	0	0	0.000	0	0	0.00%	0.00%	0.000	0.00%	0.000	0	0	1	0	0	
Old Irving Park	12.319	1297	1.37	7.144	220	15	11.12%	57.99%	0.132	0.132	16.96%	1218	140	135	162	127	
Old Norwood Park	9.668	827	1.41	6.652	187	5	14.58%	68.80%	0.200	0.200	22.61%	0.517	156	186	174	190	
Old Town	5.473	547	0.87	0.588	11	5	15.90%	10.37%	0.095	0.095	2.01%	0.914	160	62	106	8	
Old Town Triangle	5.409	715	0	1.628	189	8	0.00%	30.10%	0.148	0.148	9.09%	1.479	0	26	149	101	
Orion Park	11.747	1518	0.92	7.972	0	6	7.83%	66.33%	0.456	0.456	12.45%	0.511	96	62	106	97	
Palmer Square	6.028	813	0	2.626	120	10	0.00%	43.56%	0.253	0.253	14.76%	0.259	0	88	202	140	
Palmer Square Park Manor	23.728	2679	1.01	13.142	230	19	4.26%	55.39%	0.146	0.146	8.59%	0.801	38	128	143	89	
Park West	5.679	694	0.45	2.005	19	7	7.92%	35.30%	0.248	0.248	2.74%	1.233	99	73	200	16	
Parkview	2.741	431	0	2.196	75	1	0.00%	80.09%	0.145	0.145	17.40%	0.365	0	216	165	13	
Parkway Gardens	0.376	5	0	0.000	2	0	0.00%	0.00%	0.012	0.012	0.00%	0.000	0	0	18	0	
Peterson Park	2.613	410	0	1.941	70	3	0.00%	74.26%	0.316	0.316	17.07%	11.48	0	200	218	115	
Pill Hill	3.999	555	0	2.122	23	3	0.00%	58.96%	0.338	0.338	4.14%	0.834	0	142	220	52	
Pilsen	11.311	1267	0.85	0.843	70	13	7.51%	7.46%	0.108	0.108	5.52%	0.108	94	20	110	117	
Portage Park	37.933	6204	4.05	24.770	1208	44	10.68%	65.30%	0.116	0.116	19.47%	1.160	137	172	120	176	
Prairie District	0.589	10	0	0.000	0	1	0.00%	0.00%	0.036	0.036	0.00%	1.698	0	0	60	163	
Prairie Shores	0.268	1	0.27	0.000	0	0	100.85%	0.00%	0.051	0.051	0.00%	0.000	219	0	0	0	
Princeton Park	5.010	567	0.44	3.510	28	3	8.78%	70.06%	0.331	0.331	4.94%	0.599	115	190	219	40	
Printers Row	0.869	29	0	0.027	0	10	0.00%	3.09%	0.085	0.085	0.00%	11.509	0	16	93	0	
Pulaski Park	6.844	1079	0	5.224	166	10	0.00%	76.33%	0.289	0.289	15.38%	1.461	0	207	213	148	
Pullman	0.000	0	0	0.000	0	0	0.00%	0.00%	0.010	0.010	0.00%	0.000	0	0	16	0	
Ranch Triangle	0.408	5	0.37	0.000	0	1	90.71%	0.00%	0.036	0.036	0.00%	2.452	209	0	47	0	
Ravenswood	23.817	2635	2.14	11.683	280	43	9.23%	50.39%	0.163	0.163	10.63%	1.855	121	111	156	165	
Ravenswood Gardens	0.742	121	0.02	0.568	8	2	2.70%	76.59%	0.202	0.202	6.61%	2.696	24	211	176	65	
Ravenswood Manor	2.441	413	0.15	2.231	86	10	6.15%	91.41%	0.534	0.534	20.82%	4.097	72	223	227	214	
River North	2.617	122	0.17	0.019	1	5	6.50%	4.54%	0.054	0.054	0.00%	1.910	77	17	63	4	
River West	0.000	0	0	0.000	0	0	0.00%	0.00%	0.029	0.029	0.00%	0.000	0	0	40	0	
Rivdale	0.000	0	0	0.000	0	0	0.00%	0.00%	0.017	0.017	0.00%	0.000	0	0	23	0	
River's Edge	0.000	0	0	0.000	0	0	0.00%	0.00%	0.007	0.007	0.00%	0.000	0	0	8	0	
Rogers Park	16.606	431	0.62	8.330	17	8	3.73%	50.16%	0.009	0.009	3.94%	0.482	33	110	133	23	
Roscoe Village	8.669	1513	0.25	5.786	373	14	2.88%	66.74%	0.205	0.205	24.65%	1.615	27	180	180	155	
Roseland	30.157	3296	2.02	13.468	291	27	6.70%	44.66%	0.175	0.175	8.83%	0.895	79	92	165	96	
Rosemoor	10.994	1865	1.16	7.082	75	11	10.55%	64.41%	0.158	0.158	16.42%	1.531	131	166	153	104	
Sauganash	16.535	2093	0.01	10.125	330	0	0.06%	61.24%	0.172	0.172	15.77%	0.605	2	156	163	56	
Sauganash Woods	0.000	0	0	0.000	0	0	0.00%	0.00%	0.003	0.003	0.00%	0.000	0	0	3	0	
Schaerch Forest View	0.559	2	0.57	0.001	0	0	102.03%	0.15%	0.061	0.061	0.00%	0.000	223	3	74	0	
Schaerch Village	10.111	1725	0.95	6.515	226	6	9.40%	64.44%	0.217	0.217	13.10%	0.953	124	168	188	131	
Scottsdale	26.122	4066	0.46	10.197	172	1	1.76%	39.03%	0.230	0.230	4.23%	0.038	17	83	195	30	
Sheffield Neighbors	0.674	28	0.25	0.256	7	4	37.10%	38.02%	0.045	0.045	25.00%	1.86	186	80	55	200	
Sheridan Park	3.243	310	0	1.432	17	4	0.00%	44.16%	0.114	0.114	5.48%	1.233	0	90	118	51	
Sleepy Hollow	0.009	0	0	0.009	0	0	0.00%	100.00%	0.006	0.006	0.00%	0.000	0	227	5	0	
South Austin	57.158	6118	1.63	27.787	425	38	2.85%	48.61%	0.123	0.123	6.95%	0.665	25	101	125	70	
South Chicago	34.530	4170	2.87	18.926	499	40	8.31%	54.81%	0.164	0.164	11.97%	1.158	109	126	158	118	
South Commons	0.877	78	0	0.000	7	1	0.00%	0.00%	0.015	0.015	8.97%	0.000	0	20	96	114	
South Deering	16.866	2094	1.38	7.928	211	13	8.18%	47.01%	0.090	0.090	5.25%	0.771	105	94	99	44	
South East Ravenswood	2.390	237	0.62	0.723	21	4	25.95%	30.26%	0.050	0.050	8.86%	1.674	182	64	58	93	
South Edgebrook	2.135	177	0.27	1.810	12	0	12.65%	84.76%	0.250	0.250	6.78%	0.000	148	220	201	67	
South Loop	6.600	135	1.41	0.075	0	17	21.36%	1.14%	0.051	0.051	0.00%	2.576	175	10	59	0	
South Old Irving Park	1.234	131	0	0.848	54	2	0.00%	68.69%	0.204	0.204	41.22%	1.621	0	185	179	216	
South Shore	41.321	3862	1.83	26.793	211	52	4.43%	64.84%	0.073	0.073	5.46%	1.258	41	170	85	47	
Stateway Gardens	0.006	0	0.01	0.000	0	0	171.24%	0.00%	0.015	0.015	0.00%	0.000	228	0	19	0	
Stony Island Park	9.171	1105	1.25	5.414	134	4	13.63%	59.03%	0.223	0.223	12.13%	0.436	151	143	192	123	
Streetsville	0.000	0	0	0.000	0	0	0.00%	0.00%	0.025	0.025	0.00%	0.000	0	0	37	0	
Tally's Corner	0.000	0	0	0.000	0	0	0.00%	0.00%	0.023	0.023	0.00%	0.000	0	0	28	0	
The Bush	4.435	416	0	4.123	94	4	0.00%	92.98%	0.311	0.311	22.60%	0.902	0	224	217	189	
The Gap	0.643	0	0.64	0.000	0	0	99.49%	0.00%	0.062	0.062	0.00%	0.000	214	0	75	0	
The Island	0.000	0	0	0.000	0	0	0.00%	0.00%	0.067	0.067	0.00%	0.000	0	0	78	0	
The Loop	9.480	230	0	0.180	1	41	0.00%	1.89%	0.041	0.041	0.43%	4.325	0	13	53	1	
The Robert Taylor Homes	0.000	0	0	0.000	0	1	0.00%	0.00%	0.016	0.016	0.00%	0.000	0	0	21	0	
The Villa	0.393	0	0	0.011	0	1	0.00%	2.76%	0.028	0.028	0.00%	2.547	0	14	39	0	
Tri-Taylor	0.000	0	0	0.000	0	1	0.00%	0.00%	0.059	0.059	0.00%	0.000	0	0	69	0	
Trumbull Park	0.206	9	0	0.202	0	7	0.00%	0.786	0.076	0.076	0.00%	4.859	0	225	228	0	
Trumbull Park	5.925	740	0.48	1.088	120	1	8.10%	18.37%	0.126	0.126	16.22%	1.181	104	35	129	157	
Ukrainian Village	9.510	1525	1.36	6.776	119	4	14.30%	71.25%	0.193	0.193	7.80%	0.421	154	194	170	79	
Union Ridge	3.948	218	1.29	0.373	16	5	32.68%	9.44%	0.044	0.044	7.34%	1.267	184	21	54	76	
University Village / Little Italy	9.978	835	0.41	4.898	22	16	4.11%	49.09%	0.155	0.155	2.63%	1.603	35	105	150	135	
Uptown	4.950	891	0	3.396	29	2	0.00%	68.60%	0.213	0.213	3.25%	0.404	0	183	186	19	
Vittum Park	8.508	1044	0.99	4.998	83	0	11.64%	58.75%	0.110	0.110	7.95%	0.000	145	138	112	82	
Washington Heights																	

F.3 Attachment 1

Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP Mains, miles	AMRP Services	CIDI MP, miles	CI Main <= 8", miles	Mean MRI	Vulnerable Services	Total Pending Leaks	% CI DI MP	% CI Main <= 8"	Mean MRI	% Vulnerable Services	Leak/Miles of Main	CI DI MP Ranking	CI Main <= 8" Ranking	Mean MRI Ranking	Services Ranking	Leak/Miles of Main Ranking	
Washington Park	9.021	379	1.55	3.763	0.145	17	7	17.18%	41.72%	0.145	0.145	4.49%	0.776	164	85	142	34	79
Wentworth Gardens	0.000	0	0	0.000	0.039	0	0	0.00%	0.00%	0.039	0.039	0.00%	0.000	0	0	50	0	0
West Beverly	3.884	596	2.86	2.926	0.265	130	8	73.63%	75.33%	0.265	0.265	21.81%	2.060	203	206	206	185	177
West Chatham	3.018	462	0	1.452	0.089	46	0	0.00%	48.13%	0.089	0.089	9.96%	0.000	0	100	98	104	0
West Chesterfield	5.686	881	0.05	2.806	0.121	22	2	0.88%	49.35%	0.121	0.121	2.50%	0.352	9	109	122	13	12
West De Paul	1.066	98	0.26	0.006	0.035	7	0	24.39%	0.56%	0.035	0.035	71.4%	0.000	179	8	46	74	0
West Elston	23.712	3794	2.52	14.489	0.270	239	8	10.63%	61.10%	0.270	0.270	6.30%	0.337	135	155	208	60	9
West Englewood	31.164	3314	1.41	19.131	0.246	386	18	4.52%	61.39%	0.246	0.246	11.65%	0.578	43	157	199	117	45
West Garfield Park	8.121	417	1.37	2.028	0.055	106	6	16.87%	24.97%	0.055	0.055	25.42%	0.739	162	52	65	202	73
West Humboldt Park	7.715	997	0.56	5.657	0.144	210	18	7.26%	73.32%	0.144	0.144	21.06%	2.333	91	199	140	184	187
West Law	33.276	6088	1.74	21.908	0.201	562	18	5.23%	65.84%	0.201	0.201	9.23%	0.541	52	174	175	98	39
West Loop Gate	0.504	7	0.3	0.000	0.075	0	4	59.56%	0.00%	0.075	0.075	0.00%	7.941	200	0	87	0	223
West Morgan Park	3.252	537	3.28	2.089	0.266	136	7	100.85%	64.25%	0.266	0.266	25.33%	2.152	220	164	207	201	181
West Pullman	34.940	3990	4.09	12.758	0.114	236	28	11.71%	36.51%	0.114	0.114	5.91%	0.801	146	76	117	56	84
West Rogers Park	44.610	5410	3.12	25.449	0.150	735	38	6.99%	57.05%	0.150	0.150	13.59%	0.852	80	132	147	135	89
West Town	25.775	2674	4.84	4.981	0.091	185	15	18.78%	19.32%	0.091	0.091	6.92%	0.582	168	37	101	69	48
West Woodlawn	10.963	949	0.82	5.182	0.164	80	7	7.48%	47.27%	0.164	0.164	8.43%	0.639	93	96	159	84	61
Wicker Park	11.949	1472	0.67	0.169	0.046	64	14	5.61%	1.41%	0.046	0.046	4.35%	1.172	60	12	57	31	120
Wilgewood	0.000	6	0	0.000	0.009	6	0	0.00%	0.00%	0.009	0.009	100.00%	0.000	0	0	12	223	0
Winnetona Parkway	0.940	52	0	0.607	0.126	6	0	0.00%	64.59%	0.126	0.126	11.54%	0.000	0	169	128	115	0
Woodlawn	11.434	891	0	3.469	0.088	63	12	0.00%	30.34%	0.088	0.088	7.07%	1.049	0	66	96	73	108
Wrightwood	19.942	3051	1.23	11.723	0.227	248	2	6.17%	58.78%	0.227	0.227	8.13%	0.100	76	139	193	83	3
Wrightwood Neighbors	8.676	1113	0.9	3.968	0.156	54	15	10.14%	44.70%	0.156	0.156	4.85%	1.690	126	93	152	36	162
Wrigleyville	3.158	434	0	2.310	0.339	54	2	0.00%	73.14%	0.339	0.339	12.44%	0.633	0	198	221	124	58

F.3 Attachment 2
 Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP Mains, miles	AMRP Services	CI DI	MP Ranking	CI Main	8* Ranking	Mean	MRI Ranking	Vulnerable Services Ranking	Leak/Miles of Main Ranking	Score
Beverly Woods	0.483	100	212	228	216	214	215	216	214	215	216
West Morgan Park	3.252	537	220	164	207	201	181	207	201	181	201
West Beverly	3.884	596	203	206	206	185	177	206	185	177	199
Mayfair	6.094	956	107	219	212	205	203	212	205	203	180
Ravenswood Manor	2.441	413	72	223	227	183	214	227	183	214	172
Bowmanville	4.098	464	157	107	183	203	197	183	203	197	168
Irving Park	12.203	1767	85	187	215	197	202	215	197	202	168
Irving Woods	8.515	1420	159	204	222	114	32	222	114	32	165
Old Norwood Park	9.668	827	156	186	174	190	36	174	190	36	159
Morgan Park	27.510	3575	189	148	168	122	92	168	122	92	157
Lincoln Square	3.724	488	112	210	149	187	180	149	187	180	156
Cragin	35.655	5579	138	113	173	181	141	173	181	141	152
Albany Park	30.602	4252	82	160	181	206	172	181	206	172	151
South Edgebrook	2.135	177	148	220	201	67	0	201	67	0	148
West Humboldt Park	7.715	997	91	199	140	184	187	140	184	187	145
Oriole Park	11.747	1518	96	178	225	126	35	225	126	35	145
Stony Island Park	9.171	1105	151	143	192	123	25	192	123	25	145
Magnolia Glen	1.377	106	173	181	114	87	184	114	87	184	145
Schorsch Village	10.111	1725	124	168	188	131	49	188	131	49	143
Avalon Park	7.613	1002	123	130	205	158	17	205	158	17	143
North Mayfair	7.926	1372	16	214	211	194	133	211	194	133	143
Norwood Park East	17.856	2182	118	149	190	166	29	190	166	29	143
Portage Park	37.933	6204	137	172	120	176	119	120	176	119	141
Union Ridge	9.510	1525	154	194	170	79	22	170	79	22	140
Princeton Park	5.010	567	115	190	219	40	54	219	40	54	140
Old Irving Park	12.319	1297	140	135	133	162	127	133	162	127	139
Bridgeport	12.812	953	192	48	108	155	176	108	155	176	138
The Bush	4.435	416	0	224	217	189	98	217	189	98	137
Budlong Woods	9.007	1127	50	212	196	143	95	196	143	95	137
Sheffield Neighbors	0.674	28	186	80	55	200	222	55	200	222	136
West Elsdon	23.712	3794	135	155	208	60	9	208	60	9	136
Norwood Park West	15.173	2036	71	189	210	130	31	210	130	31	135
Edison Park	2.064	174	201	41	51	219	201	51	219	201	135
Andersonville	6.251	765	65	195	160	161	136	160	161	136	134
Hermosa	3.704	482	129	119	86	218	189	86	218	189	134
Roscoe Village	8.669	1513	27	180	180	196	155	180	196	155	134
Kenwood	5.454	424	167	145	148	45	102	148	45	102	133
Ravenswood	23.187	2635	121	111	156	110	165	156	110	165	133
Pulaski Park	6.844	1079	0	207	213	148	148	213	148	148	132
Peterson Park	2.613	410	0	200	218	163	115	218	163	115	131

F.3 Attachment 2
 Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP Mains, miles	AMRP Services	CI DI	MP Ranking	CI Main	8 ⁺ Ranking	Mean MRI	Vulnerable Services Ranking	Leak/Miles of Main Ranking	Score
Edgewater	11.527	1103	101	123	171	127	124	131		
Belmont Heights	21.150	4029	49	182	223	118	41	131		
Hanson Park	1.543	273	0	131	214	172	206	130		
South Old Irving Park	1.234	131	0	185	179	216	158	130		
Arcadia Terrace	5.612	955	0	197	204	136	179	129		
South Chicago	34.530	4170	109	126	158	120	118	129		
Heart of Chicago	11.989	2151	149	33	134	132	188	129		
Gladstone Park	3.667	538	0	114	226	175	168	128		
Marynook	5.207	875	0	173	224	139	140	128		
Heart of Italy	0.590	2	206	0	151	0	207	128		
Jefferson Park	60.821	9574	66	152	185	152	62	127		
Calumet Heights	25.081	3738	116	121	209	32	60	127		
Edgebrook	5.180	536	176	162	94	106	47	126		
Lathrop Homes	1.296	115	197	51	52	180	152	124		
Rosemoor	10.994	1865	131	166	153	26	104	124		
Trumbull Park	0.206	9	0	225	228	0	219	124		
Forest Glen	2.990	446	0	218	203	128	105	123		
Gage Park	19.585	3125	83	161	157	119	91	123		
Little Village	12.484	573	198	29	84	146	123	123		
Chatham	26.728	3797	61	153	182	92	131	123		
Lawndale	19.873	1709	178	45	82	150	144	122		
Ravenswood Gardens	0.742	121	24	211	176	65	198	121		
Wrigleyville	3.158	434	0	198	221	124	58	120		
Belmont Terrace	5.219	801	47	191	197	95	43	120		
Brainerd	19.013	2591	134	118	167	63	23	120		
Beverly	32.151	3707	30	193	189	109	86	119		
Garfield Ridge	43.172	7703	87	165	198	57	5	119		
Wrightwood Neighbors	8.876	1113	126	93	152	36	162	119		
Jeffery Manor	10.106	1607	3	221	194	141	51	119		
West Englewood	31.164	3314	43	157	199	117	45	118		
Marquette Park	25.601	4084	69	134	184	101	67	118		
Washington Park	9.021	379	164	85	142	34	79	117		
West Rogers Park	44.610	5410	80	132	147	135	89	117		
O'Hare	2.072	120	208	1	90	66	171	116		
Clearing (W)	0.405	5	204	0	9	220	192	116		
East Beverly	7.620	637	171	102	80	144	38	116		
Park West	5.679	694	99	73	200	16	128	116		
Lake View	39.411	5277	55	127	138	133	185	116		
Hyde Park	0.732	18	211	0	49	111	200	115		
Wrightwood	19.942	3051	76	139	193	83	3	114		

F.3 Attachment 2
Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP Mains, miles	AMRP Services	CI DI MP Ranking	CI Main <= 8" Ranking	Mean MRI Ranking	Vulnerable Services Ranking	Leaks/Miles of Main Ranking	Score
West Garfield Park	8.121	417	162	52	65	202	73	114
Ashburn	24.511	3908	110	144	164	61	4	113
North Austin	14.213	1713	143	55	91	137	143	113
Galewood	18.867	2861	58	89	161	154	106	113
West Lawn	33.276	6088	52	174	175	98	39	113
Archer Heights	15.552	2068	142	98	137	43	78	112
East Pilsen	1.616	105	190	38	100	0	193	112
Brighton Park	23.295	3006	120	67	111	171	70	112
South East Ravenswood	2.390	237	182	64	58	93	161	112
Chicago Lawn	6.347	937	88	97	113	188	80	111
Ukrainian Village	5.925	740	104	35	129	157	122	111
Palmer Square	6.028	813	0	88	202	140	159	111
Cottage Grove Heights	5.008	833	31	208	191	71	18	111
Roseland	30.157	3296	79	92	165	91	96	110
Washington Heights	8.508	1044	145	138	112	82	0	110
Back of the Yards	10.948	1509	127	63	71	192	111	109
Kelvin Park	2.804	332	63	84	116	211	109	109
West Woodlawn	10.963	949	93	96	159	84	61	109
West Loop Gate	0.504	7	200	0	87	0	223	108
North Park	5.343	844	0	176	169	193	14	107
Fernwood	15.459	2170	19	147	177	80	145	107
West Pullman	34.940	3990	146	76	117	56	84	107
East Chatham	7.831	773	57	136	162	35	150	106
Near North	7.286	266	132	60	119	9	205	106
Edgewater Glen	1.329	161	0	86	155	149	220	104
Logan Square	41.532	5897	68	81	107	170	137	104
Lithuanian Plaza	0.886	165	0	115	166	167	113	103
Hollywood Park	3.111	538	0	202	130	88	209	103
Grand Crossing	21.897	1870	28	140	172	102	66	103
Dearborn Homes	0.410	0	215	0	127	0	0	103
Chinatown	1.671	300	170	30	126	25	52	102
Bronzeville	15.370	578	187	39	89	41	69	102
West Town	25.775	2674	168	37	101	69	48	101
Sauganash	16.535	2093	2	156	163	153	56	101
Parkview	2.741	431	0	216	141	165	13	101
Pill Hill	3.599	555	0	142	220	29	87	100
McKinley Park	8.111	1337	74	58	115	179	74	100
University Village / Little Italy	3.948	218	184	21	54	76	135	99
Kilbourn Park	4.713	448	0	122	135	210	88	99
Ida B. Wells / Darrow Homes	0.535	0	222	0	32	0	212	97

F.3 Attachment 2
 Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP Mains, miles	AMRP Services	CI DI	MP Ranking	CI Main	8 ⁺ Ranking	Mean MRI Ranking	Vulnerable Services Ranking	Leaks/Miles of Main Ranking	Score
Ranch Triangle	0.408	5	209	0	47	0	47	0	190	96
Park Manor	23.728	2679	38	128	143	89	143	89	83	95
Old Town	5.473	547	160	26	106	8	106	8	101	95
Graceland West	1.885	230	0	177	144	62	144	62	153	94
Belmont Central	28.378	5076	36	117	139	113	139	113	65	93
North Center	5.969	748	0	151	88	168	88	168	183	93
South Loop	6.600	135	175	10	59	0	59	0	196	91
Near West Side	6.482	404	165	71	79	5	79	5	57	90
South Deering	16.866	2094	105	94	99	44	99	44	76	90
Schorsch Forest View	0.559	2	223	3	74	0	74	0	0	90
Uptown	9.978	835	35	105	150	14	150	14	154	89
Montclare	21.715	3269	98	42	132	54	132	54	53	89
Big Oaks	10.740	1779	11	104	187	86	187	86	6	88
Vittum Park	4.950	891	0	183	186	19	186	19	19	88
Lincoln Park	13.670	1570	0	69	178	100	178	100	93	88
Longwood Manor	9.605	1571	39	159	154	21	154	21	21	87
The Gap	0.643	0	214	0	75	0	75	0	0	87
Lake Meadows	0.507	1	217	0	70	0	70	0	0	86
Lakewood - Balmoral	1.855	241	0	124	81	177	81	177	157	85
Humboldt Park	32.044	4419	6	68	146	108	146	108	126	85
Noble Square	6.727	937	153	22	105	18	105	18	8	84
Pilsen	11.311	1267	94	20	110	52	110	52	117	84
Prairie Shores	0.268	1	219	0	60	0	60	0	0	84
South Shore	41.321	3862	41	170	85	47	85	47	132	84
Gresham	44.139	5572	54	106	123	75	123	75	30	83
Old Town Triangle	5.409	715	0	62	145	97	145	97	149	82
Burnside	10.802	1230	102	47	95	78	95	78	40	82
Goose Island	2.559	26	193	25	61	0	61	0	16	82
Winneconna Parkway	0.940	52	0	169	128	115	128	115	0	81
Scottsdale	26.122	4066	17	83	195	30	195	30	1	81
West De Paul	1.066	98	179	8	46	74	46	74	0	80
Belmont Gardens	3.204	428	0	75	67	209	67	209	166	79
East Hyde Park	0.015	2	225	0	34	0	34	0	0	78
South Austin	57.158	6118	25	101	125	70	125	70	63	77
Dunning	6.500	1317	113	28	76	39	76	39	75	74
Stately Gardens	0.006	0	228	0	19	0	19	0	0	74
East Ukrainian Village	7.351	1149	46	24	121	58	121	58	110	73
Illinois Medical District	0.362	8	195	0	41	0	41	0	0	71
Lake View East	8.513	673	13	72	102	53	102	53	175	71
Englewood	46.892	4155	20	77	109	105	109	105	44	71

F.3 Attachment 2
 Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP Mains, miles	AMRP Services	CI DI	MP Ranking	CI Main	8 ⁺ Ranking	Mean MRI	Vulnerable Services Ranking	Leak/Miles of Main Ranking	Score
Jackson Park Highlands	1.109	73	0	0	203	77	48	97	70	
Sheridan Park	3.243	310	0	0	90	118	51	130	69	
Avondale	10.402	1006	14	226	54	68	145	146	69	
Ford City	0.014	0	90	18	0	2	0	0	69	
Bucktown	20.421	3229	0	0	0	73	49	71	66	
Mount Greenwood	0.000	0	181	5	0	29	227	228	66	
Ickes Praire Homes	0.553	2	0	0	5	33	0	0	65	
Homan Square	0.219	3	77	17	0	31	212	218	63	
River North	2.617	122	5	46	124	63	4	170	62	
Buena Park	5.258	374	0	0	27	12	12	139	61	
Dearborn Park	1.083	120	0	0	0	207	73	211	60	
Woodlawn	11.434	891	0	66	96	98	104	108	60	
West Chatham	3.018	462	0	100	109	122	13	0	60	
West Chesterfield	5.686	881	9	0	30	30	174	225	58	
East Side	0.335	16	22	34	104	104	27	100	57	
Edgewater Beach	6.581	471	0	59	92	92	17	174	56	
Gold Coast	7.515	627	60	12	57	57	31	120	54	
Wicker Park	11.949	1472	0	16	93	93	0	224	53	
Printers Row	0.869	29	0	215	62	62	3	0	51	
LeClaire Courts	1.886	307	0	56	131	131	6	0	49	
Beverly View	1.811	240	8	50	97	97	38	27	47	
East Garfield Park	22.330	1777	0	79	103	103	10	26	47	
Margate Park	2.249	171	0	0	42	42	225	0	46	
Fuller Park	0.000	0	0	31	136	136	0	0	46	
Douglas Park	4.010	236	0	0	66	66	159	0	44	
Hornor Park	0.005	6	0	7	64	64	0	210	41	
Cabrini Green	0.554	2	0	0	22	22	228	0	41	
Kennedy Park	0.000	1	0	0	36	36	198	0	41	
North Kenwood	0.145	4	0	0	53	53	1	216	40	
The Loop	9.480	230	0	0	15	15	224	0	38	
Chrysler Village	0.000	0	0	0	18	18	215	0	38	
Parkway Gardens	0.376	5	33	110	13	13	23	34	37	
Rogers Park	16.606	431	0	0	12	12	223	0	37	
Wildwood	0.000	0	0	227	5	5	0	0	36	
Sleepy Hollow	0.009	0	0	0	7	7	222	0	35	
Mount Greenwood Heights	0.000	0	44	0	44	44	0	82	35	
London Town	2.499	453	0	14	39	39	0	194	33	
The Villa	0.393	0	0	43	72	72	22	10	32	
Fifth City	2.963	168	0	0	20	20	96	114	32	
South Commons	0.877	78	0	0	0	0	0	0	32	

F.3 Attachment 2
 Neighborhood Ranking Model - Feb 2015

Neighborhood	AMRP Mains, miles	AMRP Services	CI DI	MP Ranking	CI Main	8* Ranking	Mean MRI Ranking	Vulnerable Services Ranking	Leak/Miles of Main Ranking	Score
Prairie District	0.589	10	0	0	0	0	48	0	163	31
Hegewisch	0.001	1	0	0	0	0	26	0	227	30
Greektown	0.524	24	0	0	9	0	24	0	167	25
Marycrest	0.000	0	0	0	0	0	83	0	0	25
The Island	0.000	0	0	0	0	0	78	0	0	23
Tri-Taylor	0.000	0	0	0	0	0	69	0	0	21
Magnificent Mile	0.266	2	0	0	4	0	56	0	0	17
Wentworth Gardens	0.000	0	0	0	0	0	50	0	0	15
Canaryville	0.000	0	0	0	0	0	45	0	0	14
Oakland	0.000	0	0	0	0	0	43	0	0	13
River West	0.000	0	0	0	0	0	40	0	0	12
Fulton River District	0.000	0	0	0	0	0	38	0	0	11
Streeterville	0.000	0	0	0	0	0	37	0	0	11
Harbour Point Estates	0.000	0	0	0	0	0	35	0	0	11
Tally's Corner	0.000	0	0	0	0	0	28	0	0	8
Near East Side	0.000	0	0	0	0	0	25	0	0	8
Riverdale	0.000	0	0	0	0	0	23	0	0	7
The Robert Taylor Homes	0.000	0	0	0	0	0	21	0	0	6
Golden Gate	0.000	9	0	0	0	0	17	0	0	5
Pullman	0.000	0	0	0	0	0	16	0	0	5
Brynford Park	0.000	0	0	0	0	0	14	0	0	4
Altgeld Gardens	0.000	47	0	0	0	0	11	0	0	3
Eden Green	0.000	2	0	0	0	0	10	0	0	3
River's Edge	0.000	0	0	0	0	0	8	0	0	2
Groveland Park	0.000	0	0	0	0	0	6	0	0	2
Clearing (E)	0.000	0	0	0	0	0	4	0	0	1
Sauganash Woods	0.000	0	0	0	0	0	3	0	0	1
Old Edgebrook	0.000	0	0	0	0	0	1	0	0	0

318. GENERAL SURVEY COORDINATES

The Contractor shall be responsible for providing Global Positioning System (GPS) coordinates of all of the hard improvements performed, in addition to providing the As-built Drawings outlined in Section 301 AS-BUILT DRAWING REQUIREMENTS.

I. Geographic Coordinate System

- A. NAD_1983_StatePlane_Illinois_East_FIPS_1201_Feet
- B. Projection: Transverse Mercator
- C. False Easting: 984250.000000
- D. False Northing: 0.000000
- E. Central Meridian: -88.333333
- F. Scale Factor: 0.999975
- G. Latitude of Origin: 36.666667
- H. Linear Unit: Foot US (0.304801)
- I. Geographic Coordinate System: GCS_North_American_1983
 - 1. Angular Unit: Degree (0.017453292519943295)
 - 2. Prime Meridian: Greenwich (0.000000000000000000)
 - 3. Datum: D_North_American_1983
 - a. Spheroid: GRS_1980
 - 1) Semimajor Axis: 6378137.000000000000000000
 - 2) Semiminor Axis: 6356752.314140356100000000
 - 3) Inverse Flattening: 298.257222101000020000

II. Equipment and Data Capture

- A. Equipment is to be provided by the Contractor and have sub centimeter accuracy.
- B. The Contractor shall provide the make and model of the hardware that will be used to satisfy the requirements specified in this Section 318.
- C. Data is to be captured with a 3D satellite lock. If conditions are not providing 3D satellite lock and sub centimeter accuracy, then the Contractor shall provide data collection with a Total Station by a professional surveyor (PLS) licensed in the state of Illinois.

- D. All data shall be tied back to IL State Plane benchmark control points.
- E. When collecting data with a GPS unit, Z coordinate is elevation, not the depth of cover needed by Company. Depth (distance from top of fitting to top of pavement/cover) shall be collected manually.
- F. The Contractor and/or surveyor is responsible for any post processing, quality assurance, and correction of the GPS data needed to achieve sub centimeter accuracy and conform to the data standard detailed in Subpart IV, below.
- G. At the time of each partial and final as-built submittal, the GPS data pertaining to that submittal shall be delivered to the Company via SharePoint. E-mail will not be possible due to security restrictions.

III. Scope of GPS Data Collection

The improvements that shall be registered shall include but not be limited to the following facilities and shall conform to the standard detailed in Section 318, IV.

A. Main Installation

1. Fitting(s) or connection type(s) used to tie new main in to existing supply header or supply main installed in previous Phase.
2. Horizontal Offset points to include:
 - a. Point of divergence from original line-of-lay as called for on the plans
 - b. Point of resumption of alignment parallel to original line-of-lay
 - c. Point of divergence toward original line-of-lay.
 - d. Point of resumption of original line-of-lay
 - e. Note: Should the offset be compound (containing multiple angular fittings) the location of each angle point shall be noted.
3. Vertical and Horizontal Depth Adjustments
 - a. Point and depth of cover of divergence from original depth of line-of-lay
 - b. Point and depth of cover of resumption of horizontal alignment to the original line-of-lay

- c. Point and depth of cover of divergence back to original depth of line-of-lay
 - d. Point and depth of cover of resumption of original depth of line-of-lay
 - e. Note: Should the offset be compound (containing many angular fittings) each angle point shall be noted as to its location and depth of cover.
4. Vertical or horizontal swings in pipe location without bend fittings.
 5. Valves.
 6. All other fittings installed.
 7. Benchmarks, lot corners, control points and other reference points used for GPS data collection.
 8. Where no services have been installed along the main for a distance greater than 100 feet, the horizontal coordinates of the main shall be taken at 100 foot intervals.
 9. Size, facility type, and data collection date must be recorded for all fittings in the format specified in Subpart IV.B. and Subpart IV.C. The manufacturer name must be provided for all plastic fittings including transition fittings as specified in Subpart IV.D. For service taps, risers, and service bend fittings only, the house address and house unit (if applicable) served must be recorded.
 10. The locations of butt fusions where a change in plastic pipe manufacturer information (manufacturer name, date of manufacture, or lot number) occurs between connected pipe segments shall be captured. For pipe installed via insertion or directional bore methods, the final location of the butt fusion shall be captured by noting the pipe length inserted or drilled from each opening, then using a measuring wheel to reach and capture the final location of the butt fusion(s). For changes in pipe manufacture that occur at any other fitting, note "MFR Change" in the COMMENTS field of the fitting where the change occurs.

B. Services

1. Location, depth of cover, service address, and unit (if applicable) of all service taps on supply main
2. Location, depth of cover, service address, and unit (if applicable) of all risers for connection to future meters

3. Location, service address, and unit (if applicable) of all bend fittings installed on service pipes.

C. Restoration

1. Temporary
 - a. Limit(s) of concreted trench(es)
 - b. Location(s) and limit(s) of temporary sidewalk(s)
2. Permanent
 - a. Corner points/limit(s) of new asphaltic surface(s)
 - 1). quarter point, half point and full width by block, address range and square footage
 - 2). Long Side Services
 - 3). Intersections
 - 4). Driveways and alley aprons
 - b. New sidewalks and/or partial sections
 - 1) Address range
 - 2) Square footage
 - c. New ADA ramps
 - 1) Intersection
 - 2) Quadrant
 - 3) Quantity

IV. GPS Data Standard

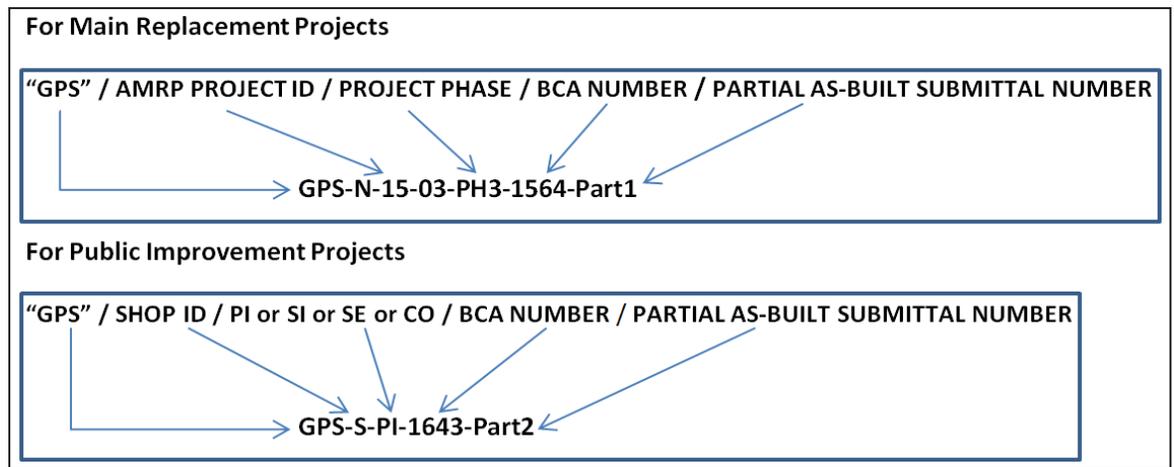
Each GPS data submittal shall conform to the following data standard. A template of the file geodatabase deliverable that conforms to the schema, spatial projection, and naming conventions listed in this Section is available in the bid package.

A. Deliverable Data Format and Naming Convention

All point features shall be stored in a single feature class named "Gas Facilities" within an ESRI file geodatabase (10.0 or higher).



The geodatabase deliverable shall be named according to the following pattern.



For the final data submittal, use the next partial as-built submittal number available. For example, if the final data submittal is the first GPS data set to be submitted, use “Part1” in the geodatabase name. If the final data submittal is the 3rd data set to be submitted, use “Part3” in the geodatabase name.

At the time of each partial and final data submittal, the GPS data/geodatabase pertaining to that submittal shall be enclosed in a .zip file named using the same convention as the enclosed geodatabase and delivered to the Company via SharePoint. E-mail will not be possible due to security restrictions.

B. Data Schema

The “Gas Facilities” feature class shall be structured and fields populated during data collection as indicated in the following table. The instructions for populating each field are described below the table. The TYPE and MFR fields in the GasFacilities feature class shall be linked to domains or drop-down lists containing the names indicated in the TYPE Field and MFR Field lists below to ensure data integrity during GPS data collection.

FIELD NAME	DATA TYPE	FIELD LENGTH	FIELD DESCRIPTION
OBJECTID ¹	Object ID	-	System Generated Field

SHAPE ²	Geometry	-	System Generated Field
SIZE ³	Text	10	Fitting diameter.
TYPE ⁴	Text	50	Fitting type.
MFR ⁵	Text	50	Fitting manufacturer for plastic fittings only.
COMMENTS ⁶	Text	255	Notes of explanation.
DATE ⁷	Date	-	Date of data collection.
HOUSENUM ⁸	Long Integer	-	For service taps, risers, and service bend fittings only, the house address served.
HOUSEUNIT ⁹	Text	10	For service taps, risers, and service bend fittings only, the house unit served.

1. **OBJECTID** – This field is automatically generated upon creation of the “Gas Facilities” feature class and populated by the system upon creation of each point feature. No data entry is required in this field.
2. **SHAPE** – This field is automatically generated upon creation of the “Gas Facilities” feature class and populated by the system upon creation of each point feature. No data entry is required in this field.
3. **SIZE** – List the fitting size in this field. For fittings that connect pipe segments with differing diameters, list the larger diameter, then the letter "x", then the smaller diameter (i.e., 8x6). For tees connecting pipe segments of the same diameter, list the common diameter, then the letter "x", then list the diameter again (i.e., 4x4). For all other fittings, list only the size of the fitting (i.e., 6).



4. **TYPE** – Choose one of the facility names shown in the Facility Types list (Section 318, IV, C.). The facility name is case-sensitive and must be identical to the name in the list.
5. **MFR** – *For plastic facilities only (including transition fittings)*, choose one of the manufacturer names shown in the list (Subpart IV.D). The manufacturer name is case-sensitive and must be identical to the name in the list.
6. **COMMENTS** – Write any notes of explanation as necessary for any non-standard fitting and/or manufacturer types. If recording the location of pre-existing gas facilities, write “EXISTING” in the COMMENTS field.
7. **DATE** – Record the date of data collection.
8. **HOUSENUM** – *For service tap, service bend fitting, and riser facilities only.* Record the numeric value of the house address served. For example, for **200** E Randolph St., Unit # 8000B, record **200** in the HOUSENUM field for all applicable service tap, service bend fitting, and riser points taken. For service facilities that feed multiple addresses, list the lowest address value served.
9. **HOUSEUNIT** - *For service tap, service bend fitting, and riser facilities only.* If applicable, record the unit of the house address served. For example, for 200 E Randolph St., Unit #**8000B**, record **8000B** in the HOUSEUNIT field for all service tap, service bend fitting, and riser points taken. For service facilities that serve multiple units, leave this field blank.

Values in the TYPE field shall be entered as indicated in the NAME column of the following tables. If the facility installed or benchmark used is not represented in the lists below, choose “Other” from the appropriate facility list (i.e., “Bend Other”, “Valve Other”, etc.), then record the actual facility type in the COMMENTS field.

HORIZONTAL/VERTICAL OFFSETS	
NAME	DESCRIPTION
Bend 90	90 degree bend fitting.
Bend 45	45 degree bend fitting.
Swing	Vertical or horizontal swing in the pipe without the use of fittings.
Bend Other	Bend fitting with an angle other than 45 or 90

	degrees. List the angle in the COMMENTS field.
--	--

VALVES	
NAME	DESCRIPTION
Valve	Valve installed on distribution main.
Service Valve	If a service valve is proposed on the construction drawing, record the location of the service valve and assign this type to the point.
Valve Other	Other valve type. List the valve type in the COMMENTS field.

FITTINGS	
NAME	DESCRIPTION
Electrofusion Coupling	Coupling used to fuse plastic pipe segments together.
End Cap	Cap installed at the end of a main. If temporary, record "Temp" in the COMMENTS field.
Purge End Cap	A purge cap installed at the end of a main.
Flange Anchor	Flange anchor.
Reducer	Connects pipe segments of differing diameters.
Transition	Transition between plastic and steel pipe segments.

Tee	Tee.
HVTT	High volume tapping tee.
No Blo Tee	No Blo tee.
No Blo Trans Tee	No Blo tee connecting steel and plastic main.
Flange Tee	Flange tee.
M-Stop	M-Stop.
Brass Tee	Brass tee.
Lateral Tee	Lateral tee.
Saddle Tee	Saddle tee.
50A Hot Tap Tee	50A Hot Tap tee. Use for slit sleeve with flange tee.
ST/ST NON-INS CPLG	Non-insulated connection between two steel pipe segments. Commonly a Dresser Coupling.
ST/ST INS CPLG	Insulated connection between two steel pipe segments.
CI/PL Coupling	Connection between cast iron and plastic pipe segments.
CI/ST INS CPLG	Insulated connection between cast iron and steel pipe.
Insulated Reducer Coupling	Insulated coupling used to connect pipe segments of differing diameters.
Universal Coupling	Universal coupling.
Plug	Plug.
LineStopper	Linestopper. Also use for pressuretrols.
Sav A Valve	Sav-a-Valve.

Threadolet	Threadolet.
Fitting Other	Unlisted fitting type. Record the fitting name in the COMMENTS field.

CORROSION, LOCATE, AND OTHER FACILITIES	
NAME	DESCRIPTION
CP Test Station	A box containing test leads used to take corrosion readings on steel main.
CP Rectifier	A rectifier used to protect a steel pipe segment from corrosion.
Locate Station BBox	A bbox through which locate wires are drawn up.
Regulator	Low to medium pressure regulator station.
Top of Pipe	Where no services have been installed along the main for a distance greater than 100 feet, take points along the main at 100 foot intervals and assign this value to each point.
Butt Fusion MFR Change	The locations of butt fusions where a change in plastic pipe manufacturer information (manufacturer, date of manufacture, or lot number) occurs between connected pipe segments.

Facility Other	Any other gas facility. Provide a description in the COMMENTS field.
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TIE-INS WITHOUT FITTINGS	
NAME	DESCRIPTION
Butt Fusion Tie-In	Tie-in to existing plastic with a butt fusion.
Weld Connection Tie-In	Tie-in to existing steel with a weld connection.
Tie-In Other	Record the connection method in the COMMENTS field.

BENCHMARKS	
NAME	DESCRIPTION
Benchmark	Provide description of benchmark in COMMENTS field.
Control Point	Provide description of control point in COMMENTS field.
Lot Corner	Lot corner
Reference Other	Record the reference type in the COMMENTS field.

SERVICES	
NAME	DESCRIPTION
Service Tap	The location of a service tap on supply main. Record the house

	address in the HOUSENUM field, the unit (if applicable) in the HOUSEUNIT field and the depth of cover in the COMMENTS field.
Service Bend	The location of a bend fitting installed on a service pipe. Record the house address in the HOUSENUM field, the unit (if applicable) in the HOUSEUNIT field and the depth of cover in the COMMENTS field.
Riser	The location of the riser for connection to future meters. Record the house address in the HOUSENUM field, the unit (if applicable) in the HOUSEUNIT field and the depth of cover in the COMMENTS field.

C. Plastic Manufacturer/Brand Names

Values in the MFR field shall be entered as indicated in the following table for all plastic fittings, including transition fittings. If the manufacturer or brand is not shown in the list below, choose "Manufacturer Other" and record the manufacturer or brand in the COMMENTS field.

MANUFACTURER/BRAND NAMES
Central Plastics
Continental Industries



Driscoplex
Elster Perfection
Extron
Friatec
Handley Industries, Inc.
Innogaz
Kerotest
NORMAC
Performance Pipe
Plexco
Polyvalve
R.W. Lyall and Company, Inc.
Rockwell
Upsco Incorporated
US Poly
Manufacturer Other

D. Example GPS Attributes

Below is a table that shows sample GPS attributes that conform to this GPS data standard.

OBJEC TID	SHAP E	SI ZE	TYPE	MFR	COMME NTS	DATE	HOUSE NUM	HOUSE UNIT
2	Point	4x 2	Tee	Perform ance Pipe	LOOKIN G DOWN	8/18/20 14		
3	Point	4	Electrof usion Couplin g	Innogaz		8/18/20 14		



4	Point	4	Bend 90	Perform ance Pipe		8/18/20 14		
5	Point	4	End Cap	Perform ance Pipe		8/18/20 14		
6	Point	4	Service Tap			8/18/20 14	200	8000B

Measurements shall be taken during construction and prior to the facilities being backfilled or otherwise made inaccessible. In addition, all fitting measurements from lot lines shall be documented on the As-built Drawings.



Charles Matthews
President
Peoples Gas and North Shore Gas

Top 10+ 2015

PEOPLES GAS®
NATURAL GAS DELIVERY

NORTH SHORE GAS®
NATURAL GAS DELIVERY

165 YEARS
1850-2015

115 YEARS
1900-2015

1. Target ZERO...with every employee focused and committed to working safely. Our goal is zero harm and zero injuries every day.

- Increase personal engagement by implementing weekly safety conference calls for key field leaders
- Require greater commitment by supervisors
- Administer existing safety business plans and improve year-to-date performance
- Work with Corporate Safety to develop 2016 safety business plans

2. Complete a thorough review of the management of the AMRP program and initiate a plan for both immediate and long-term improvements, which includes:

- No later than Sept. 4, develop an AMRP transition plan and incorporate the Liberty audit recommendations to address the following categories:
 - Program oversight and controls
 - Cost/Schedule/Resources
 - Relationships
 - Field operations
 - Safety
- Within the first 45 days, develop an effective plan to:
 - Complete the PGL construction management team
 - Recover from the lag in meter changes



3. Achieve a measurable reduction in leak rates during the second half of 2015. Set an aggressive goal for improvement in 2016.

- Reduce leaks due to excavations
- Improve repair rate for category 2 leaks

4. Complete design and implementation of the organization structure and reporting relationships for key positions.

- Define team member roles and responsibilities
- Align goals for employees and contractors

5. Be relentless in improving customer satisfaction.

- Establish a culture of outstanding customer service through improved customer communication and employee/contractor training and coaching
- Implement We Care across all transactions with effective, same-day follow-up for all dissatisfied customers
- By Oct. 1, implement transaction survey and measurement methodology consistent with corporate reporting
- Align contractor agreements with PGL's customer satisfaction goals
- Establish root cause and support structure to drive out dissatisfied customer issues
- Reduce project restoration time

6. Improve revenue enhancement initiative with responsibility and targets assigned to a senior officer.

- Analyze and create a plan for disconnect for non-payment (DNP), theft, gas pressure issues and estimated accounts
- Review gas special contracts for appropriate rates

7. Within the first 30 days, audit all major contracts and provide specific observations and recommendations to the management team.

- Map contracts to contract owners, identify all auditable components, and audit oversight activities and processes to manage and monitor them

8. Provide all Peoples Gas and North Shore Gas employees with WEC Energy Group training on ethics and compliance standards.

- Set leadership expectations and establish a sense of urgency and accountability

9. Develop financial and operating plans focused on earning the allowed rate of return in 2016.

- Review and prioritize all non-AMRP capital spending for 2016
- Manage O&M expenses, including permit fees, paving costs and non-budgeted regulatory expenses

10. Maintain historic levels of community involvement.

- Strategic board involvement
- Develop a strategic plan to leverage community efforts into an overall PR plan
- Fulfill the Share the Warmth commitment



11. Continue to improve the effectiveness of the supplier diversity initiative.

- Integrate Peoples Gas & North Shore Gas Supplier Diversity initiative into WEC Energy Group's written Corporate Supplier Diversity Policy Statement
- Achieve 2015 target
- Establish 2016 target

12. Move forward with design and construction of a state-of-the-art training/safety center for gas distribution workers.

13. Hold each other accountable for making Peoples Gas and North Shore Gas the best places to work in our industry.

- Safety
- Integrity
- Diversity
- Inclusion
- Customer focus
- Sense of urgency
- Financial discipline
- Personal responsibility for results

Key Initiatives	Description	Assumptions or Actions	Metrics
Supervisor Development	Supervisor development continues to be an area of strategic opportunity and focus for PGL. Accordingly, PGL Operations is developing plans in 2015 for the continued development of Supervisors.	Supervisor Development will focus in three key areas: <ul style="list-style-type: none"> Operator Qualification Leader Hands-On/Practical Training Program Gas Operations Orientation Training Program 	<ul style="list-style-type: none"> Implementation plans developed. Change management plan developed. Change management plan communicated to all PGL Leadership.
		LAT Team will define Leader Hands-On / Practical Training Program as well as coordinate Operator Qualification and efforts. LAT will receive direction and guidance from a selected Manager of Field Operations	<ul style="list-style-type: none"> 80% or more of Supervisors will have received training and qualification for at least 1 OQ task. At least 10% of Supervisors will have received qualification for all Operator Qualification tasks appropriate for their area of responsibility (i.e. Service, Dist.)
		Includes: <ul style="list-style-type: none"> Defining framework, ground rules Logistics Change management Communications Development of expectations 	<ul style="list-style-type: none"> Each Supervisor will work as a “crew member for a day” at least one, full-day time per month beginning in June, 2015 and must complete at least 6 days by year-end. (Exceptions for those on extended excused absences or extenuating circumstances.)
			<ul style="list-style-type: none"> 80% of Supervisors will have attended leadership orientation training (excluding Supervisors that attended in prior years).
LivingZero – Implement the Living Zero concepts at PGL	<ul style="list-style-type: none"> Develop and finalize implementation plan and timeframe 	PGL Living Zero Team formed to develop a change management plan and communicate. Leaders and Union reps to team up to deliver the training.	<ul style="list-style-type: none"> Change management plan developed Communicated to all PGL Leadership
	Deliver Living Zero message to PGL Leadership Team <ul style="list-style-type: none"> Deliver to Directors Deliver to Managers 	Union buy-in and participation. Living Zero Team is in place.	<ul style="list-style-type: none"> Present message / training to PGL Directors Present message/training to PGL O&M leads, Construction and O&M Managers
	Deliver Living Zero message to PGL Supervisors/Front Line Leaders and Employees <ul style="list-style-type: none"> Develop detailed plan and schedule for leaders and employees Begin training formal leaders first 	PGL Team formed. Track departments/sites that have received the Living Zero message which include members from: <ul style="list-style-type: none"> Leaders and union employees from PGL HR Safety HR Labor 	<ul style="list-style-type: none"> PGL Executive Team approves plan. Change management plan communicated to employees that have been identified to attend training. Meetings with HR Professional trainers. Training is completed for front line Supervisors and employees
BST 2014 Survey - Results and Recommendations <ul style="list-style-type: none"> Plan Execution 	A BST Perception Survey was completed in 2014. This goal centers around the need to complete recommendations and associated action items as well as take general action to improve weaknesses and support existing strengths moving forward.		Initial communication is sent to all PGL employees informing them, where appropriate, of high level plans.
			Communication of progress with leadership is prepared
			Actions taken in accordance with the BST Perception Survey Action Plan. Substantial progress/completion of all action items identified.
Training (Leaders and Employees)	<ul style="list-style-type: none"> Provide additional education and development for various PGL leadership, as applicable on Human Performance concepts, BST workshop or other safety-related workshop. Provide employees with hands- 		<ul style="list-style-type: none"> Provide HP Education and training on HP concepts or other safety-related workshop to 80% or more of PGL leaders.

	<p>on training in at least one of the following: body mechanics, trenching and excavations, work traffic control methods, Smith System or Human Performance Tools.</p>		<ul style="list-style-type: none"> • Provide at least one `referenced training to 80% or more of applicable employees (i.e. Trenching & Excavating and Work Traffic Control applies to Distribution employees only)
<p>Tailboard Program Improvement</p>	<p>There is a need and opportunity to improve the quality of tailboards. Consideration will be given to a move toward documented tailboards.</p>	<ul style="list-style-type: none"> • Evaluate options, including approaches used at other companies • Determine which work groups will be included • Determine rollout plan • Develop a change management plan. 	<ul style="list-style-type: none"> • Team is formed • Research other companies • Identify the selected future path process/form/training/coaching, etc. <hr/> <ul style="list-style-type: none"> • Develop change management plan. • Implement change management plan through leadership at the O&M level and above. <hr/> <ul style="list-style-type: none"> • Implement the new process/deliver training as identified in the tailboard improvement plan.



Capital Construction Program Communications Plan

September 1, 2015

Table of Contents

1. EXECUTIVE SUMMARY 4

 1.1 Background: 4

 1.2 Communication Objectives: 4

2. PROGRAM HISTORY 4

3. COMMUNICATION PLAN OVERVIEW 6

4. COMMUNICATION PLAN OBJECTIVE 7

5. STRATEGIES 7

6. CHALLENGES 8

7. KEY MESSAGES 9

8. COMMUNICATION MATERIALS USED 10

9. MEASUREMENT OF THE INFRASTRUCTURE UPGRADE PROGRAM EXPERIENCE 12

10. COMMUNICATION MATERIALS REVIEW PROTOCOLS 12

11. STAKEHOLDERS 13

 11.1 Affected Residential Customers 13

 Objective: 13

 Strategy: 13

 Stakeholder Concerns Noted to Date: 13

 Relevant Messages: 13

 Tactics: 13

 11.2 Affected Commercial Customers 17

 Objective 17

 Strategy 17

 Stakeholder Concerns Noted to Date: 17

 Relevant Messages: 17

 Tactics: 18

 11.3 Affected Large Customers – Major Accounts 20

 11.4 Government Officials – City of Chicago 21

 Objective: 21

 Strategy: 21

 Tactics: 22

 11.5 Government Officials – Cook County 26

 Objective: 26

 Strategy: 26

 Stakeholder Concerns: 27

 Relevant Messages: 27

 Tactics: 27

11.6. Government Officials – State of Illinois 28
 Objective: 28
 Strategy: 28
 Stakeholder Concerns: 28
 Relevant Messages: 28
 Tactics: 29

11.7. Government Officials – Federal 30

11.8. Media 30
 Objective: 30
 Strategy: 30
 Tactics: 30

11.9. Shop Employees – Union and Non-Union 32
 Objective: 32
 Strategy: 32
 Relevant Messages: 32
 Tactics: 32

11.10. Contractor Employees 33
 Objective: 33
 Strategy: 33
 Stakeholder Concerns Noted to Date: 33
 Relevant Messages: 33
 Tactics: 33

11.11. Peoples Gas Employees 34
 Objective: 34
 Strategy: 34
 Stakeholder Concerns Noted to Date: 34
 Relevant Messages: 34
 Tactics: 34

12. VERSION AND UPDATE INFORMATION 35

1. EXECUTIVE SUMMARY

1.1 Background:

The Peoples Gas Infrastructure Upgrade Program represents a significant commitment to our customers by meeting the natural gas delivery needs of Chicago. The most significant element of the program is upgrading nearly half of the underground natural gas pipeline system by 2030.

The Peoples Gas Infrastructure Upgrade Program will touch almost every member of the Chicago community either directly or indirectly, through construction activity at their homes and businesses, possible neighborhood impacts, or the cost of the program as noted on their Peoples Gas bill. The Chicago community will also experience the benefits – increased safety and reliability, reduced carbon emissions, ability to use energy-efficient appliances, and the creation of new jobs and economic development.

1.2 Communication Objectives:

Peoples Gas will support the safe completion of The Peoples Gas Infrastructure Upgrade Program by providing timely information to affected residential and commercial customers as well as major account clients through letters, brochures, neighborhood signs, out-going and incoming telephone calls, leave-behinds, and the website. Peoples Gas will convey its messages regarding neighborhood impacts and system-wide benefits and issues through active media engagement.

Communications with Peoples Gas and contractor employees through meetings, refresher training, and the company website will help focus them on safe and accurate work and the importance of serving our customers.

Peoples Gas will provide information regarding the program to elected officials and the staffs of municipal, state, and federal government agencies. Critically, the members of the program team will engage with their City of Chicago counterparts through a “single point of contact” system, so that the mayor’s office, the aldermen, and the staffs of the 13 City of Chicago departments that work on the project know how information should flow between the City of Chicago and the program team.

This Communications Plan is a high-level program plan and will be updated at least annually. More detailed project plans are developed for the various individual projects throughout the year. Please contact The Senior Customer Communications Specialist with any questions or suggestions.

2. PROGRAM HISTORY

Peoples Gas is a regulated natural gas utility serving approximately 831,000 residential and business customers in Chicago. Peoples Gas has served Chicago for 165 years and has played a key role in the development of the Chicagoland area. Peoples Gas is currently upgrading its natural gas delivery system to ensure its long-term safety and reliability.

Prior to 2011, Peoples Gas annually replaced about 45 miles of cast iron and ductile iron main with modern polyethylene pipes. In 2011, there were approximately 1,900 miles of cast/ductile iron main remaining in the Peoples Gas distribution system, much of this pipe was installed

more than a century ago. Peoples Gas set the goal of replacing and retiring all cast iron, ductile iron, and low-pressure pipe in the system by 2030.

To accomplish this goal, an accelerated replacement approach – the Accelerated Main Replacement Program (AMRP) and a cost recovery mechanism (Rider ICR, Infrastructure Cost Recovery) – was proposed to and approved by the Illinois Commerce Commission. Peoples Gas began replacing cast/ductile iron mains under this rider; however, the Rider ICR was overturned (on appeal brought by the Attorney General) by the Illinois Appellate Court in September 2012. In July 2013, the Illinois General Assembly passed the Natural Gas Consumer, Safety and Reliability Act, to provide funding for Illinois gas infrastructure upgrades through an adjustment on customer bills. The Rider Qualifying Infrastructure Plant (QIP), which took effect in 2014, allowed by this act, covers both main replacement and other qualifying capital infrastructure work that places new natural gas assets into service.

Accelerated main replacement will provide numerous benefits not only to customers of Peoples Gas but to Chicago, emergency response personnel, and gas workers. Benefits include:

- Increased reliability of the system.
- Enhanced safety for customers, gas workers and emergency response personnel.
- Reduced congestion of utilities in the streets where possible.
- Increased ability to use energy efficient appliances, which reduce costs and greenhouse gas emissions.
- Creation and maintenance of around 1,000 highly-skilled, well-paying, long-term union jobs, along with many indirect jobs. The program employs over 2,000 workers at peak construction times.

In addition to accelerated main replacement, the QIP enables Peoples Gas to perform other capital work, including:

- Calumet CAL High Pressure Transmission: Increases reliability of natural gas delivery to the south side of the Peoples Gas service area.
- High Pressure Northwest Interconnect: Increases reliability of natural gas delivery to the north side of the Peoples Gas service area.
- Public Improvement Projects: Construction projects to provide gas delivery to new developments or replace main in areas where other agencies are already performing construction work.
- Loop Project: Coordination of Peoples Gas capital work, including main replacement, with other construction taking place in the busy and highly-developed downtown area.

Accelerated main replacement makes up more than 80% of the QIP, and will be the focus of most of the communications activities described in this plan.

3. COMMUNICATION PLAN OVERVIEW

The Peoples Gas Infrastructure Upgrade Program, which includes the accelerated main replacement work and all other capital construction, will touch almost every member of the Chicago community either directly or indirectly. The impacts include:

1. Construction activity at homes or businesses. These include installation of mains; installation of service lines; and access to homes or business to mark lines, move meters, and relight pilot lights of appliances.
2. Possible service interruptions.
3. Cost of the QIP, noted on Peoples Gas bills.
4. Traffic disruptions and street congestion due to construction.
5. Restoration of property.
6. Visual and physical impacts to neighborhoods due to construction.
7. Other neighborhood disruptions due to construction, such as impacts to parks, bicycle and pedestrian facilities, interference with parade or festival schedules, etc.

Peoples Gas recognizes the importance of effectively communicating the impacts and benefits to stakeholders across its service area. **The credibility of the program and the reputation of the company relies in large part on the consistency and accuracy of information that flows from all members of the project team, including employees, vendors, consultants, and contractors.**

We recognize that the program will evolve and because of this, the communication plan needs to evolve as well. This plan is a fluid document and will be reviewed regularly and updated to include all the revisions as the program progresses each year.

This Communication Plan serves as a foundation to guide all aspects of communications on the program. The team responsible for developing and implementing this plan includes a representative cross-section of the Peoples Gas staff, including:

- Vice President, Customer Service
- Vice President, Construction
- Assistant to the President
- Director, Corporate Communications
- Special Projects Coordinator, Corporate Communications
- Senior Customer Communications Specialist, Corporate Communications
- Director, Media Relations, Corporate Communications
- Senior Director, State Government and Community Affairs, Govt. Relations
- Manager, Local Government and Community Affairs, Govt. Relations
- Director, Gas Regulatory Policy
- Director, Construction

4. COMMUNICATION PLAN OBJECTIVE

Support The Peoples Gas Infrastructure Upgrade Program in fulfilling Peoples Gas' mission of providing customers with safe, reliable energy at a reasonable cost. This means supporting the safe completion of infrastructure upgrade projects by providing timely and accurate information to impacted stakeholders, including customers, city and elected officials and others. The messages and communications tools for The Peoples Gas Infrastructure Upgrade Program are developed and updated in coordination with all corporate communications for Peoples Gas.

5. STRATEGIES

The Peoples Gas Infrastructure Upgrade Program communications team will meet the following objectives:

- Engage government and community leaders early in the process to identify issues and concerns.
- Communicate the benefits of The Peoples Gas Infrastructure Upgrade Program to customers, who will be funding the improvements, as well as elected officials, consumer advocates, and regulators.
- Accurately communicate to stakeholders, including customers, residents, business owners, and elected officials, the processes by which Peoples Gas will be making infrastructure upgrades in their community.
- Set appropriate expectation regarding the construction with stakeholders and customers.
- Clearly communicate to customers the steps they will need to take as participants in the program and manage their expectations.
- If multiple steps are involved, communicate with the customer along the way to resolve the situation and manage their expectation.
- Gather, manage, and address stakeholder complaints/questions/concerns and resolve in a timely manner in order to prevent escalation to contacts both inside and outside of Peoples Gas. Use this information to continually improve communications processes with customers in order to improve customer compliance and satisfaction.
- Acknowledge to customers that we are accountable if our customer service fails to meet expectations. Apologize when necessary. We understand that we aren't perfect and there may be reasons where Peoples Gas needs to apologize for our actions. Develop the proper communication to fit the situation if they arise.
- Support PHMSA objectives for pipeline safety. Take the opportunity to remind customers of the importance of the natural gas delivery system and related safety practices, such as calling DIGGER before excavation or calling the 24-Hour Natural Gas Emergency line at 866-556-6002 if they smell natural gas or suspect a leak.
- Enhance and continually improve internal communications within The Peoples Gas Infrastructure Upgrade Program.

- Enhance and continually improve communications between The Peoples Gas Infrastructure Upgrade Program; City of Chicago agencies such as the Departments of Water, Transportation, and Streets and Sanitation; the Chicago Transit Agency; and colleague companies, such as ComEd, telephone companies, and cable companies by setting up regular meetings and increasing program communications.
- Convey to staff and contractors, who will be working in Peoples Gas' communities that they are to serve as positive ambassadors for Peoples Gas.
- Develop and prepare key messages and other materials for senior management and local affairs representatives of Peoples Gas to support the communications effort and ensure consistency.
- Collaborate with operations to identify opportunities to improve the construction process and customer satisfaction.
- Provide Peoples Gas employees with information about The Peoples Gas Infrastructure Upgrade Program to increase understanding of project progress and ensure consistency of message.
- Empower employees to serve as positive community ambassadors for the company.
- Create transparency about the program in order to meet the expectations of regulators, elected officials, and the community that information will be made available before, during, and after the program.
- Continuously explore effective communication channels by evaluating the effectiveness of communication pieces and adjusting as necessary.

6. CHALLENGES

The communications team has identified challenges to successful implementation of the communication strategy. Understanding these obstacles will enable the team to develop strategies to overcome them. Current challenges to The Peoples Gas Infrastructure Upgrade Program include:

- Messaging – The Peoples Gas Infrastructure Upgrade Program is complex, and it is difficult to craft one concise and effective message that captures the complexity of the program and its issues to numerous impacted stakeholders.
- Name of Program – The program has grown and evolved, and it has been referred to as AMRP, Rider QIP, capital construction projects, and Natural Gas Infrastructure Modernization Program. People and documents still use all of these names. The Peoples Gas Infrastructure Upgrade Program accurately reflects the current scope of the program, which encompasses all capital construction projects. Peoples Gas may want to consider a brand name for the program.
- Internal communication protocols – Internal communication strategies and protocols are being developed and documented. However, some existing communication methods

between stakeholders across various Peoples Gas departments/divisions still lack formalized structure and protocols.

- Perception of regulators – While relationships with regulators are improving, some input indicates that not all in the regulatory community have favorable perceptions toward Peoples Gas.
- Perception of elected officials and consumer advocacy groups – As with regulators, some input indicates that not all in these groups have favorable perceptions toward Peoples Gas.
- Project differentiation –The need to differentiate ourselves from the Department of Water and the Sewer Department construction activity, both of which are replacing their aging infrastructure.
- Conveying benefits – Some customers and stakeholders may feel the system is already providing adequate service, and may not think the value of improvements justifies the construction disruptions or cost.
- Prudence of expenditures – Some stakeholders may feel that The Peoples Gas Infrastructure Upgrade Program’s expenditures are too high.
- Confusion between programs – Stakeholders do not always distinguish between activities of different Peoples Gas programs, such as regular operations and maintenance activities vs. The Peoples Gas Infrastructure Upgrade Program.
- Existing customer attitudes – Although the results appear to be negative, there is an inconclusive understanding of existing sentiments about Peoples Gas among customers; the J.D. Power and Associates survey is only one metric as well as the company’s own Customer Experience Measurements (CEM) surveys.
- Diversity of workers – Some stakeholders may feel that the workforce does not reflect the diversity of the neighborhoods in which they are working or the city of Chicago.
- Relocation of meters – Some customers are reluctant to move meters outside of their building.
- Unreliable construction schedules for both construction and restoration significantly increase customer questions and complaints. The lack of information and accuracy also erodes the company’s goodwill in the community.

7. KEY MESSAGES

It is important that the messages of The Peoples Gas Infrastructure Upgrade Program be in alignment with the overarching key messages of the company. They are:

Key Message 1: The safety of the natural gas system, our customers and employees is our highest priority.

Key Message 2: We aim to deliver prompt and courteous service with a key focus on customer satisfaction.

Key Message 3: Peoples Gas is steadfast in its commitment to delivering safe and reliable natural gas service to its customers. We are proud of our 165-year legacy.

Key Message 4: Peoples Gas is prudently investing approximately \$250 million a year in modernizing Chicago's natural gas infrastructure. We are dedicated to upgrading the system to ensure its continued safety and reliability.

Key Message 5: Peoples Gas is proud to be an active member of the community. We are committed to building ever-stronger relationships with our community partners.

Specific messages regarding The Peoples Gas Infrastructure Upgrade Program are:

- Since the 1980s, Peoples Gas has been steadily upgrading the natural gas infrastructure in Chicago, replacing older materials prone to leaking with new polyethylene pipes.
- In 2011, Peoples Gas accelerated the replacement of the remaining 1,900 miles of cast and ductile iron pipe.
- The Peoples Gas Infrastructure Upgrade Program is designed to:
 - Increase the reliability of the system
 - Enhance safety for customers, gas workers and emergency response personnel
 - Reduce congestion of utilities in the streets where possible
 - Allow people to use new energy-efficient appliances, which reduce costs and greenhouse gas emissions
- Peoples Gas will:
 - Replace all cast iron and ductile iron main pipes in Chicago with modern polyethylene pipes
 - Move meters to the outside of buildings to allow for immediate emergency access to meters/shut-off valves
 - Improve high-pressure transmission lines on the North and South Sides
 - Work with Water, CDOT, and others to replace main in areas where they are already working
- The Peoples Gas Infrastructure Upgrade Program has created more than 1,000 highly-skilled, well-paying, longer-term union jobs – over 2,000 jobs during summer peaks. It also creates many indirect jobs. The program is supported by the city of Chicago and Local Union 18007.
- Peoples Gas developed a project labor agreement (PLA) which has strengthened our relationship with several trades, including Pipefitters, Operators, Teamsters, and Laborers.
- Peoples Gas developed the Gas Sector Utility Workers Training Program for military veterans in collaboration with the Utility Workers of America (UWUA) – Local 18007, the UWUA Power for America Training Trust Fund and City Colleges of Chicago. Apprentices have graduated and been hired by Peoples Gas.
- The Peoples Gas Infrastructure Upgrade Program is focused on increasing the spend with supplier diverse (MBE/WBE/SME/VBE) vendors.

8. COMMUNICATION MATERIALS USED

Peoples Gas has developed materials to meet the goals and communicate the messages of the program to various stakeholders. Copies of these materials are included in the appendix to this Communications Plan.

- Messages (Reviewed and updated at least quarterly)
- Talking points for internal staff and project team (Reviewed and updated at least quarterly)
- Website (Reviewed and updated at least quarterly)
- E-newsletter with project updates sent quarterly to elected officials and stakeholders
- Briefing packages for elected officials and community leadership (generally contain sample letters to customers, FAQ brochure, map of affected area, and contact information for the project). These are created annually and customized by geographic area.
- Letters to residential and business customers
 1. Introductory letter asking customer to make meter marking appointment (sent with 6-step brochure)
 2. Announcement that construction is about to begin, and asking customer to make meter marking appointment if they have not done so (sent with FAQ brochure)
 3. Two notices of disconnection
 4. Letters to customers living near construction but not directly affected
- Emails to major accounts
Template prepared by major account representatives and individualized for each account.
- Leave-behinds (Shops order as needed)
 - “Sorry we missed you” – Appointment needed
 - Information card – Wallet-sized contact card
 - Care of restoration
- What’s Next? – Final Restoration
- Call center scripts
 - To set appointments for marking and meter moving
 - To take complaints
 - To give basic program information
 - To disconnect
- Press releases
- Standard presentation for community meetings, etc. [any edits for specific audiences to be approved by Corporate Communications]
- FAQ Brochure for customers
- Step-by-Step brochure for customers
- Maps of projects by ward or neighborhood (made by Engineering)
- Signs for job sites
- Stories for community newsletters and websites (as needed)

The communications team will evaluate the materials and communication methods throughout the year and add materials and/or make changes as needed.

9. MEASUREMENT OF THE INFRASTRUCTURE UPGRADE PROGRAM EXPERIENCE

To better understand and gauge the customer experience with Peoples Gas, the company has implemented the We Care program. Employees who are closely aligned with the construction program will make outbound calls to customers who have just had a transaction with the company in the field. Dissatisfied customers will have their complaints escalated to a supervisor who will contact them within 24 hours and work to remedy the situation. A team will monitor these dissatisfied calls to identify trends and look to correct root causes. We will prepare our first report on trends in the first quarter of 2016.

The following is the schedule for The Peoples Gas Infrastructure Upgrade Program service calls:

- September 30 – Service Marking Appointments
- Fourth Quarter – Meter Moves
- Second Quarter 2016 – Final Restoration Calls

10. COMMUNICATION MATERIALS REVIEW PROTOCOLS

To provide clear guidance on the content of all communication materials developed for the program, the following protocol will be followed.

1. All communication material will be developed by members of the Communications Team and reviewed by the Communications Team as a whole. The Senior Customer Communications Specialist will coordinate the appropriate approvals. Communication Team members include:
 - Senior Customer Communications Specialist, Corporate Communications
 - Director, Media Relations, Corporate Communications
 - Manager, Local Government and Community Affairs
 - Special Projects Coordinator, Corporate Communications
2. Once approved by the Communications Team, the draft will be sent to selected members of the Project Leadership Team for review and approval. The Senior Customer Communications Specialist will coordinate the appropriate approvals. The Project Leadership Team members are:
 - Senior Director, State Government and Community Affairs, Government and Community Relations
 - Vice President, Customer Service
 - Vice President, Construction
 - Assistant to the President
 - Director, Construction
 - Director, Corporate Communications
3. Twice a year, the communications team will present the process and tools used for notifying our customers about the program to Peoples Gas Operations, project managers and construction contractors. Feedback from these meetings and suggestions throughout the year will be incorporated into the process and the plan.

11. STAKEHOLDERS

11.1. Affected Residential Customers

Objective:

Communicate clearly with customers in order to expedite the safe completion of infrastructure upgrade projects, manage customer expectations and provide an excellent customer experience. Educate customers about the reasons for and benefits of the work affecting them. Clearly explain their required cooperation. Note their site-specific concerns, and address them when possible.

Strategy:

Communicate often with these customers before, during and after the construction. Provide customers with information needed to understand the importance of the work to them and to the city, along with a list of expectations of what's to come prior to, during and post-construction. Provide them with the information they need to schedule service markings, meter relocation, relighting of pilot lights, and any other work that requires their presence. Provide them with company contacts for the construction period. Meet with elected officials and other leaders to determine specific communications methods that can be useful and to identify unique issues in each area.

Stakeholder Concerns Noted to Date:

- Disruptions related to construction
- Moving of meters
- Restoration of area after construction
- Access to property during construction
- Service disruptions (gas shut-off)
- Inconvenience – parking, traffic, sidewalks
- Length of time project disruptions persist
- Unprofessional behavior or conduct of contractors or Peoples Gas crews on-site

Relevant Messages:

- Increase the reliability of the system
- Enhance safety for customers, gas workers and emergency response personnel
- Reduce congestion of utilities in the streets where possible
- Allow people to use new energy-efficient appliances, which reduce costs and greenhouse gas emissions
- Create and maintain around 1,000 highly-skilled, well-paying, longer-term union jobs, along with many indirect jobs. The program employs over 2,000 workers at peak construction times.

Tactics:

Use notifying letters, phone calls, and home visits to announce upcoming construction and its benefits and explain cooperation required (noted below). Use neighborhood newspapers or websites to explain upcoming construction, impacts, and benefits (see media relations section). Use protocols to schedule appointments. Meet with community groups (elected officials can help identify appropriate groups). Use the We Care Program to survey customers after the work

is performed or completed. Implement changes based on suggestions and feedback. Surveying our customers and implementing changes based on feedback is an area being developed in 2015 for 2016.

Uncooperative customers:

Peoples Gas will send a series of four letters, a week apart, requesting an appointment with the customer. If, after the fourth letter, the customer fails to make an appointment with the company, once the new main is installed Peoples Gas will not transfer the service to the new main, leaving the customer without gas service. Company crews will attempt to schedule appointments with the customers while on site, if our communication outreach by mail fails. They will also attempt calling the customer and leaving messages. Ultimately, if customers don't provide access to our equipment, they will be without service once the old main is retired.

The following tools and schedules listed on pages 14-35, are legacy Peoples Gas processes. As part of the recent acquisition of Integrys Energy Group —the holding company for Peoples Gas — by Wisconsin Energy Corporation (WEC), organizational changes and transitions are underway at the corporate, utility, and project management levels. Organizational design and structure are currently being reviewed to ensure that the most effective operating model is used to deliver projects at the corporate and utility levels. Liberty's conclusion and associated recommendation will serve as guidelines in this process and any future organizational design will seek to address these concerns on an immediate as well as longer-term basis.

Affected Residential Customers – Tactics, Tools, and Channels			
Communication Tool	Timing	Responsible	Notes & links
Letters			
<ul style="list-style-type: none"> Introductory letter asking customer to make meter marking appointment (sent with 6-step brochure) 	<ul style="list-style-type: none"> 1 week before meter marking begins 	<ul style="list-style-type: none"> Construction Manager/Construction Planning 	LSO200
<ul style="list-style-type: none"> Announcement that construction is about to begin, and asking customer to make meter marking appointment if they have not done so (sent with FAQ brochure) 	<ul style="list-style-type: none"> Two weeks before construction work begins 	<ul style="list-style-type: none"> Construction Manager/Construction Planning 	LSO205

Affected Residential Customers – Tactics, Tools, and Channels			
Communication Tool	Timing	Responsible	Notes & links
<ul style="list-style-type: none"> • First Notice of Disconnection 	<ul style="list-style-type: none"> • The week construction begins 	<ul style="list-style-type: none"> • Construction Manager/Construction Planning 	LSO215
<ul style="list-style-type: none"> • Final Notice of Disconnection 	<ul style="list-style-type: none"> • The week after the first notice 	<ul style="list-style-type: none"> • Construction Manager/Construction Planning 	LSO216
<ul style="list-style-type: none"> • Letters to customers near construction not directly affected 	<ul style="list-style-type: none"> • Two to four weeks prior to construction 	<ul style="list-style-type: none"> • Shops/Construction Planning 	LSO210
<ul style="list-style-type: none"> • Meter move appointment letter (sent twice) 	<ul style="list-style-type: none"> • Sent after attempts to reach customer in person to make appointment have failed 	<ul style="list-style-type: none"> • Shops/Construction Planning 	LSO230 LSO 231 LSO232 LSO233
<ul style="list-style-type: none"> • First Notice of Disconnection (meter move) 	<ul style="list-style-type: none"> • The week after second meter move appointment letter 	<ul style="list-style-type: none"> • Construction Manager/Construction Planning 	LSO235
<ul style="list-style-type: none"> • Final Notice of Disconnection (meter move) 	<ul style="list-style-type: none"> • The week after the first notice 	<ul style="list-style-type: none"> • Construction Manager/Construction Planning 	LSO236
In-coming calls			
<ul style="list-style-type: none"> • Calls to make appointments for service marking 	<ul style="list-style-type: none"> • When received 	<ul style="list-style-type: none"> • Call center 	
<ul style="list-style-type: none"> • Calls to ask questions regarding work 	<ul style="list-style-type: none"> • When received 	<ul style="list-style-type: none"> • Call center 	
<ul style="list-style-type: none"> • Complaint calls 	<ul style="list-style-type: none"> • When received 	<ul style="list-style-type: none"> • Call center 	See protocols
Out-going calls			
<ul style="list-style-type: none"> • Disconnection calls – Attempting to gain access to our equipment, either to mark the service or move the meter 	<ul style="list-style-type: none"> • At conclusion of letter/notification process 	<ul style="list-style-type: none"> • Call center/Construction Planning 	

Affected Residential Customers – Tactics, Tools, and Channels			
Communication Tool	Timing	Responsible	Notes & links
Leave-behinds, inserts, and handouts			
<ul style="list-style-type: none"> “Sorry we missed you” – appointment needed 	<ul style="list-style-type: none"> When needed 	<ul style="list-style-type: none"> Shops 	Warehouse ID 159-0229
<ul style="list-style-type: none"> Wallet-sized contact card 	<ul style="list-style-type: none"> Handed out by Peoples Gas crews and contractors when asked question by media or public 	<ul style="list-style-type: none"> Shops to order and provide to employees and contractors. Supervisors make sure workers have them on site. 	Warehouse ID 159-4904
<ul style="list-style-type: none"> Care of Restoration 	<ul style="list-style-type: none"> Left at properties as restoration is completed 	<ul style="list-style-type: none"> Shops to order and provide to contractors. Contractors make sure workers have them on site. 	Warehouse ID 159-0281
<ul style="list-style-type: none"> What’s Next? – Final Restoration 	<ul style="list-style-type: none"> Left at properties after services/ meters are installed 	<ul style="list-style-type: none"> Shops to order and provide to contractors. Contractors make sure workers have them on site. 	Warehouse ID 159-0321
<ul style="list-style-type: none"> Six-Step-Brochure 	<ul style="list-style-type: none"> To be included in first service marking letter, also available from contractors and crews. 	<ul style="list-style-type: none"> Communications team to write, design, and update. Shops to order and include in letters. 	Warehouse ID 159-0326
<ul style="list-style-type: none"> FAQ Brochure 	<ul style="list-style-type: none"> To be included in second letter, also available from contractors, and crews. 	<ul style="list-style-type: none"> Communications team to write, design, and update. Shops to order and include in letters. 	Warehouse ID 157-2591
Others			
<ul style="list-style-type: none"> Job site signs 	<ul style="list-style-type: none"> While construction is on-going 	<ul style="list-style-type: none"> Communications team to design, shops to order and place. 	
<ul style="list-style-type: none"> Website 	<ul style="list-style-type: none"> Construction map is updated every two weeks 	<ul style="list-style-type: none"> Customer communications, IT, mapping and scheduling team 	

11.2. Affected Commercial Customers

Objective

Communicate clearly with customers in order to expedite the safe completion of infrastructure upgrade projects and manage customer expectations while providing an excellent customer experience. Educate customers about the reasons for and benefits of the work affecting them (usually accelerated main replacement). Clearly explain their required cooperation. Note their site-specific concerns, and address them when possible.

Strategy

Communicate often with these customers before, during and after the construction, so that the customer can adequately manage their business operations with minimal disruptions. Provide them with the information they need to schedule service markings, meter relocation, relighting of pilot lights, and any other work that requires their presence. Provide them with company contacts for the construction period. Meet with elected officials and other leaders to determine specific communications methods that can be useful and to identify unique issues in each area.

Stakeholder Concerns Noted to Date:

- Disruptions related to construction
- Moving of meters
- Restoration of area after construction
- Access to property during construction
- Customer access during construction
- Delivery and employee access during construction
- Parking
- Impacts to revenue
- Service disruptions (gas shut-off)
- Inconvenience – parking, traffic, sidewalks
- Length of time project disruptions persist
- Unprofessional behavior or conduct of contractors or Peoples Gas crews on-site

Relevant Messages:

- Increase the reliability of the system for their business
- Enhance safety for customers, gas workers and emergency response personnel
- Reduce congestion of utilities in the streets where possible
- Allow people to use new energy-efficient appliances, which reduce costs and greenhouse gas emissions
- Create and maintain around 1,000 highly-skilled, well-paying, longer-term union jobs, along with many indirect jobs. The program employs over 2,000 workers at peak construction times.

Tactics:

In general, methods of outreach to commercial customers are the same as those used for residential customers. Need to be mindful that disruptions to business may affect the customer's revenue and ability to operate. For Major Account customers, see the next section. Use protocols of notifying letters, phone calls, and site visits to announce upcoming construction and its benefits and explain cooperation required (noted below). Use neighborhood newspapers or websites to explain upcoming construction, impacts, and benefits (see media relations section). Use protocols to schedule appointments. Meet with community groups (elected officials can help identify appropriate groups). Use the We Care Program to survey customers after the work is performed or completed. Implement changes based on suggestions and feedback. Surveying our customers and implementing changes based on feedback is an area being developed in 2015 for 2016.

Uncooperative customers:

Peoples Gas will send a series of four letters, a week apart, requesting an appointment with the customer. If, after the fourth letter, the customer fails to make an appointment with the company, once the new main is installed Peoples Gas will not transfer the service to the new main, leaving the customer without gas service. Company crews will attempt to schedule appointments with the customers while on site, if our communication outreach by mail fails. They will also attempt calling the customer and leaving messages. Ultimately, if customers don't provide access to our equipment, they will be without service once the old main is retired.

Affected Commercial Customers – Tactics, Tools, and Channels			
Communication Tool	Timing	Responsible	Notes & links
Letters			
<ul style="list-style-type: none"> Introductory letter asking customer to make meter marking appointment (sent with 6-step brochure) 	<ul style="list-style-type: none"> 1 week before meter marking begins 	<ul style="list-style-type: none"> Construction Manager/ Construction Planning 	LSO200
<ul style="list-style-type: none"> Announcement that construction is about to begin, and asking customer to make meter marking appointment if they have not done so (sent with FAQ brochure) 	<ul style="list-style-type: none"> Two weeks before construction work begins 	<ul style="list-style-type: none"> Construction Manager/ Construction Planning 	LSO205
<ul style="list-style-type: none"> First Notice of Disconnection 	<ul style="list-style-type: none"> The week construction begins 	<ul style="list-style-type: none"> Construction Manager/ Construction Planning 	LSO215
<ul style="list-style-type: none"> Final Notice of Disconnection 	<ul style="list-style-type: none"> The week after the first notice 	<ul style="list-style-type: none"> Construction Manager/ Construction Planning 	LSO216

Affected Commercial Customers – Tactics, Tools, and Channels			
Communication Tool	Timing	Responsible	Notes & links
<ul style="list-style-type: none"> Letters to customers near construction not directly affected 	<ul style="list-style-type: none"> Two to four weeks prior to construction 	<ul style="list-style-type: none"> Shops/Construction Planning 	LSO210
<ul style="list-style-type: none"> Meter move appointment letter (sent twice) 	<ul style="list-style-type: none"> Sent after attempts to reach customer in person to make appointment have failed 	<ul style="list-style-type: none"> Shops/Construction Planning 	LSO230 LSO 231 LSO232 LSO233
<ul style="list-style-type: none"> First Notice of Disconnection (meter move) 	<ul style="list-style-type: none"> The week after second meter move appointment letter 	<ul style="list-style-type: none"> Construction Manager/ Construction Planning 	LSO235
<ul style="list-style-type: none"> Final Notice of Disconnection (meter move) 	<ul style="list-style-type: none"> The week after the first notice 	<ul style="list-style-type: none"> Construction Manager/ Construction Planning 	LSO236
In-coming calls			
<ul style="list-style-type: none"> Calls to make appointments for service marking 	<ul style="list-style-type: none"> When received 	<ul style="list-style-type: none"> Call center 	
<ul style="list-style-type: none"> Calls to ask questions regarding work 	<ul style="list-style-type: none"> When received 	<ul style="list-style-type: none"> Call center 	
<ul style="list-style-type: none"> Complaint calls 	<ul style="list-style-type: none"> When received 	<ul style="list-style-type: none"> Call center 	See protocols
Out-going calls			
<ul style="list-style-type: none"> Disconnection calls – Attempting to gain access to our equipment, either to mark the service or move the meter 	<ul style="list-style-type: none"> At conclusion of letter/notification process 	<ul style="list-style-type: none"> Call center/Construction Planning 	
Leave-behinds, inserts, and handouts			
<ul style="list-style-type: none"> “Sorry we missed you” – appointment needed 	<ul style="list-style-type: none"> When needed 	<ul style="list-style-type: none"> Shops 	Warehouse ID 159-0229
<ul style="list-style-type: none"> Wallet-sized contact card 	<ul style="list-style-type: none"> Handed out by Peoples Gas crews and contractors when asked question by media or public 	<ul style="list-style-type: none"> Shops to order and provide to employees and contractors. Supervisors make sure workers have them on site. 	Warehouse ID 159-4904

Affected Commercial Customers – Tactics, Tools, and Channels			
Communication Tool	Timing	Responsible	Notes & links
<ul style="list-style-type: none"> Care of Restoration 	<ul style="list-style-type: none"> Left at properties as restoration is completed 	<ul style="list-style-type: none"> Shops to order and provide to contractors. Contractors make sure workers have them on site. 	Warehouse ID 159-0281
<ul style="list-style-type: none"> What's Next? – Final Restoration 	<ul style="list-style-type: none"> Left at properties after services/meters are installed 	<ul style="list-style-type: none"> Shops to order and provide to contractors. Contractors make sure workers have them on site. 	Warehouse ID 159-0321
<ul style="list-style-type: none"> Six-Step-Brochure 	<ul style="list-style-type: none"> To be included in first service marking letter, also available from contractors and crews. 	<ul style="list-style-type: none"> Communications team to write, design, and update. Shops to order and include in letters. 	Warehouse ID 159-0326
<ul style="list-style-type: none"> FAQ Brochure 	<ul style="list-style-type: none"> To be included in second letter, also available from contractors, and crews. 	<ul style="list-style-type: none"> Communications team to write, design, and update. Shops to order and include in letters. 	Warehouse ID 157-2591
Others			
<ul style="list-style-type: none"> Job site signs 	<ul style="list-style-type: none"> While construction is on-going 	<ul style="list-style-type: none"> Communications team to design, shops to order and place. 	
<ul style="list-style-type: none"> Website 	<ul style="list-style-type: none"> Construction map is updated every two weeks 	<ul style="list-style-type: none"> Customer communications, IT, mapping and scheduling team 	

11.3. Affected Large Customers – Major Accounts

Major Account customers include both major facilities that use a large volume of natural gas, as well as organizations with many sites, such as the Chicago Public Schools and the Archdiocese of Chicago. Affected Major Account customers are guided through the process by the Major Accounts group, and communications processes are individualized for each account.

Major Account customers are notified by their account reps that they have a location(s) in an area planned for construction. The account representative sends their contact a list of properties and the Peoples Gas Operations contact they will need to work with during construction. The representative asks their client for a list of contacts at the properties and sends the list to the proper shop contact.

11.4. Government Officials – City of Chicago

Objective:

Communicate accurately and clearly with elected officials and City of Chicago staff in order to expedite the safe completion of infrastructure upgrade projects.

Strategy:

By replacing almost half of the natural gas mains in Chicago, The Peoples Gas Infrastructure Upgrade Program will work in most neighborhoods and wards in the city. Since we will be in most of the wards and affect most citizens and city services, we must maintain constant communication with departments within the City of Chicago.

The key relationships include:

- City of Chicago Mayor: The chief executive of the City of Chicago
- City of Chicago Aldermen: The 50 members of Chicago City Council are also responsible for the day-to-day administration of their wards.
- Chicago Department of Transportation (CDOT): Responsible for issuing all permits for work in the public way. Their Office of Underground Coordination (OUC) works with the permit office to monitor and coordinate construction projects by public utilities to minimize disruption and maximize benefits to Chicago.
- Department of Streets and Sanitation: Responsible for street operations and sanitation and waste reduction, including garbage, street sweeping and vehicle removal and towing.
- Department of Water Management: Responsible for delivering water and removing waste water and storm runoff.
- Department of Emergency Management and Communications, Chicago Fire Department, and Chicago Police Department: Responsible for safeguarding the city and responding to emergencies.

The Program sometimes coordinates with other departments, including:

- Department of Environment
- DIGGER
- 311 City Services
- Department of Planning
- Economic Development Commission
- Department of Law
- Department of Buildings

Other local government agencies:

- Chicago Park District
- Chicago Transit Authority (CTA)
- Metropolitan Water Reclamation District
- Chicago Public Schools

The Manager of Local Government and Community Affairs is accountable for all communication with the City of Chicago.

Tactics:

Because The Peoples Gas Infrastructure Upgrade Program needs to interact with so many areas of city government at so many levels, there is a risk that important information may not be communicated. The opposite is also true – the same topics may be discussed by multiple people at different levels in both organizations. In either case, the result can be confusion.

In an ideal world, or a smaller project, a single point of contact between the city and Peoples Gas could provide the clarity of communication that would solve this problem. Because of the size of this project, each staff member or function will have a single point of contact with the other organization.

Assigned staff (see chart) at Peoples Gas will communicate directly with their assigned counterpart at the City of Chicago. Their counterpart will work on the same issues and at the same level of responsibility. If an issue that two people are working on needs to be elevated, the Peoples Gas staff member will notify their superior, who will contact their counterpart at the city. The organizational charts of both organization should “zip up”, with communications smoothly happening at each level.

Each Peoples Gas staff member will inform the Manager of Local Government and Community Affairs about communications with City of Chicago officials and employees.

In October of each year, the communications and government relations team will meet to review the work planned for the upcoming construction season and determine the elected officials whose constituents will be affected. The team will determine likely issues to be raised, and draft a timeline of activities for that year.

A meeting to discuss activities with the city of Chicago will be held every two weeks.

City of Chicago Staff or Function	PGL Staff or Function	Topics and Issues	Communication Methods and Timing
Elected Officials			
<ul style="list-style-type: none"> City of Chicago Mayor Rahm Emanuel and/or his staff 	<ul style="list-style-type: none"> Peoples Gas Executives, coordinated by Manager of Local Government and Community Affairs 	<ul style="list-style-type: none"> The Peoples Gas Infrastructure Upgrade Program mission, goals, and impacts to the city of Chicago. 	<ul style="list-style-type: none"> Peoples Gas will work with the mayor’s office to determine best schedule for communication. Peoples Gas may request annual meeting in January to review progress and discuss plan for next construction season. Peoples Gas may join in other utilities’ meetings with the mayor’s office or may prepare a monthly report.

City of Chicago Staff or Function	PGL Staff or Function	Topics and Issues	Communication Methods and Timing
			<ul style="list-style-type: none"> Peoples Gas will meet with the mayor and/or his representatives at any time at their request.
<p><i>City of Chicago Aldermen</i></p> <ul style="list-style-type: none"> North Wards: 1, 2, 32, 33, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50 Central Wards: 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 35, 36, 37 South Wards: 3, 4, 5, 6, 7, 8, 9, 10, 16, 17, 18, 19, 20, 21, 34 	<ul style="list-style-type: none"> Government and Community Relations Representatives: <ul style="list-style-type: none"> North Central South At some times, Peoples Gas field personnel may discuss issues with aldermen or their staff when community representatives are not present. Field personnel will immediately email or call community representative with summary of conversation. AT NO TIME WILL A CONTRACTOR MEET WITH ALDERMEN OR THEIR STAFF WITHOUT A PEOPLES GAS EMPLOYEE PRESENT. 	<ul style="list-style-type: none"> The Peoples Gas Infrastructure Upgrade Program mission, goals, and impacts to the ward. Schedule of work. Day-to-day progress. Residents' complaints and issues. 	<ul style="list-style-type: none"> Each winter, community representatives will brief the aldermen of the wards where infrastructure upgrade work will be performed in the upcoming construction season. During construction season, community representatives will communicate regularly (usually weekly) with affected aldermen to report on progress and find out about any constituent complaints or issues. The 50 Chicago aldermen have different communications needs. Peoples Gas community representatives will maintain a spreadsheet listing their preferences for communication frequency, methods, etc. The community representatives will record interactions with aldermen to make sure solutions and concessions are consistent across wards.

City of Chicago Staff or Function	PGL Staff or Function	Topics and Issues	Communication Methods and Timing
Chicago Department of Transportation			
<ul style="list-style-type: none"> Commissioner Rebekah Scheinfeld 	<ul style="list-style-type: none"> Manager of Local Government and Community Affairs 	<ul style="list-style-type: none"> The Peoples Gas Infrastructure Upgrade Program mission, goals, and impacts to the city of Chicago. Program plans. Program accomplishments. Resolve larger issues. 	<ul style="list-style-type: none"> Peoples Gas will work with the commissioner to determine best schedule for communication. Peoples Gas may request periodic meetings to address significant items. Meetings may include the mayor's office or other utilities. Peoples Gas will meet with the commissioner and/or her representatives at any time at their request.
<ul style="list-style-type: none"> Randy Conner, First Deputy Commissioner 	<ul style="list-style-type: none"> Manager of Local Government and Community Affairs 	<ul style="list-style-type: none"> Planning and forecasting work 	<ul style="list-style-type: none"> Periodic phone calls and emails.
<ul style="list-style-type: none"> William Cheaks, Deputy Commissioner, Infrastructure Management 	<ul style="list-style-type: none"> Director of Construction Director of Operations and Maintenance Director of Restoration Manager of Local Government and Community Affairs 	<ul style="list-style-type: none"> Mr. Cheaks receives calls/complaints from aldermen regarding Peoples Gas work Planning and forecasting work 	<ul style="list-style-type: none"> Mr. Cheaks has asked not to receive calls from multiple Peoples Gas employees. Peoples Gas will ask him to forward concerns from aldermen and his own questions to the appropriate director. The directors cc Manager of Local Government and Community Affairs on all communications with Mr. Cheaks. Weekly call or meeting Phone calls or emails Reports
<ul style="list-style-type: none"> Mike Simon 	<ul style="list-style-type: none"> Gas Operations Planning Manager Associate Engineer Gas Operations Planning Manager 	<ul style="list-style-type: none"> All permits 	<ul style="list-style-type: none"> Phone calls and emails

City of Chicago Staff or Function	PGL Staff or Function	Topics and Issues	Communication Methods and Timing
<ul style="list-style-type: none"> Carolina Matthews 	<ul style="list-style-type: none"> Associate Engineer 	<ul style="list-style-type: none"> Permit issuing 	<ul style="list-style-type: none"> City process for requesting permits – electronic Follow-up phone calls
<ul style="list-style-type: none"> George Keck, CDOT PMO 	<ul style="list-style-type: none"> Gas Operations Planning Manager 	<ul style="list-style-type: none"> Restoration and other issues 	<ul style="list-style-type: none"> Phone calls
<ul style="list-style-type: none"> CDOT's Office of Underground Coordination (OUC) 	<ul style="list-style-type: none"> Gas Operations Planning Manager 	<ul style="list-style-type: none"> CDOT and other utility work 	<ul style="list-style-type: none"> Weekly conflict meeting
<ul style="list-style-type: none"> Central Business District (CBD) communications team HBK is the PMO and clearing house for all CBD communications 	<ul style="list-style-type: none"> Director of Construction Manager of Field Operations Senior Customer Communications Specialist Community Representative 	<ul style="list-style-type: none"> Planning and forecasting of CBD work and communication with affected customers 	<ul style="list-style-type: none"> Regular meetings Phone calls or emails Reports Weekly meeting
<ul style="list-style-type: none"> Donna Larcher, Community Services Representative, CDOT 	<ul style="list-style-type: none"> Supervisory Operations Specialist 	<ul style="list-style-type: none"> Coordinate procedures for directing 311 issues to Peoples Gas and communicating results. 	<ul style="list-style-type: none"> Current procedure is to collect 311 complaints bi-weekly. Soon Peoples Gas will be able to access the 311 database for relevant complaints. Regular calls to update on elevated complaints.
<ul style="list-style-type: none"> Cindy Williams, Quality Assurance Manager 	<ul style="list-style-type: none"> Gas Operations Planning Manager 	<ul style="list-style-type: none"> Quality 	<ul style="list-style-type: none"> Periodic meetings on quality methods and protocols
Chicago Department of Water Management			
<ul style="list-style-type: none"> Thomas H Powers, PE, Commissioner 	<ul style="list-style-type: none"> Director of Construction Manager of Local Government and Community Affairs Manager, Gas Distribution Design 	<ul style="list-style-type: none"> Coordination of construction and joint work. Pipeline safety. 	

City of Chicago Staff or Function	PGL Staff or Function	Topics and Issues	Communication Methods and Timing
<ul style="list-style-type: none"> Barrett Murphy, First Deputy Commissioner 	<ul style="list-style-type: none"> Director of Construction Manager of System Integrity 	<ul style="list-style-type: none"> Pipeline safety. Coordination of construction. 	
Office of Emergency Communications			
<ul style="list-style-type: none"> Richard Guidice, Managing Director of Operations 	<ul style="list-style-type: none"> Media Relations, Corporate Communications 	<ul style="list-style-type: none"> Coordinate emergency coordination procedures 	<ul style="list-style-type: none"> Phone calls Planning meetings
Other City of Chicago Departments			
<p>The Manager of Local Government and Community Affairs will be responsible for communication with other city departments at the commissioner level. If more interaction is needed, she will assign personnel to a communications role.</p>			
Other Local Government Entities			
CTA <ul style="list-style-type: none"> Gerald Nichols, Government and Community Relations 	<ul style="list-style-type: none"> Manager of Local Government and Community Affairs 	<ul style="list-style-type: none"> Coordination regarding construction at or near CTA facilities 	<ul style="list-style-type: none"> Through CDOT and OUC
<ul style="list-style-type: none"> Leaders of: Chicago Public Schools Chicago Park District City Colleges of Chicago 	<ul style="list-style-type: none"> Account Management Senior Leader 	<ul style="list-style-type: none"> Coordination regarding construction at or near facilities. 	<ul style="list-style-type: none"> Account Management Senior Leader and the major accounts team will handle communication with these large customers. He or she will elevate issues to Manager of Local Government and Community Affairs if necessary.

11.5. Government Officials – Cook County

Objective:

Working within the framework of Peoples Gas' government relations goals, communicate clearly with elected officials and Cook County staff in order to expedite the safe completion of infrastructure upgrade projects.

Strategy:

The Peoples Gas Infrastructure Upgrade Program work is entirely within Cook County. While most interaction with local government will take place on the municipal level with the City of

Chicago, it is important to keep Cook County officials updated about the progress of the program and its benefits.

Stakeholder Concerns:

- Disruptions related to construction
- Moving of meters
- Restoration of area after construction
- Service disruptions (gas shut-off)
- Inconvenience – parking, traffic, sidewalks
- Length of time project disruptions persist
- Unprofessional behavior or conduct of contractors or Peoples Gas crews on-site
- Access to Forest Preserve of Cook County lands and preservation of the environment

Relevant Messages:

- Increase the reliability of the system
- Enhance safety for customers, gas workers and emergency response personnel
- Reduce congestion of utilities in the streets where possible
- Increase the ability to meet the growing needs of the community
- Allow people to use new energy-efficient appliances, which reduce costs and greenhouse gas emissions
- Create and maintain around 1,000 highly-skilled, well-paying, longer-term union jobs, along with many indirect jobs. The program employs over 2,000 workers at peak construction times.

Tactics:

The communications team will add Cook County Commissioners and the President of the Cook County Board to the distribution list of the elected official and stakeholder newsletter to keep them informed of project progress. Information requests from Cook County will be forwarded to DeShana Forney, Senior Director, State Government and Community Affairs. In the event that access to Cook County land (including Forest Preserve lands) is required, the communications team will develop a communications plan for that effort.

Cook County Staff or Function	Peoples Gas Staff or Function	Topics and Issues	Communication Methods and Timing
Elected Officials			
<ul style="list-style-type: none"> • County Board President and Commissioners (they also serve as Board of Commissioners for Forest Preserve District of Cook County) 	<ul style="list-style-type: none"> • Senior Director, State Govt. & Community Affairs • Manager of Local Govt. & Community Affairs 	<ul style="list-style-type: none"> • The Peoples Gas Infrastructure Upgrade Program mission, goals, and progress 	<ul style="list-style-type: none"> • Include officials on distribution of newsletter for elected officials and stakeholders. • Answer requests for information.

11.6. Government Officials – State of Illinois

Objective:

Working within the framework of Peoples Gas’ government relations goals, communicate clearly with State of Illinois elected officials and agency staff in order to expedite the safe completion of infrastructure upgrade projects.

Strategy:

Most governmental interaction for The Peoples Gas Infrastructure Upgrade Program happens on the local level. However, it is important to keep state legislators and the governor’s office updated on the progress of the program. The Peoples Gas Infrastructure Upgrade Program will work with Senior Director, State Government and Community Affairs, to provide useful updates to legislators and the governor’s office. Senate Bill 2266, which provides funding for program infrastructure upgrades through an adjustment on customer bills, was passed in 2013, and a bill to replace it will be needed after 10 years in order to continue the program. The communications team will update this communications plan to increase the frequency of communication when work on the bill replacing Senate Bill 2266 begins.

The Peoples Gas Infrastructure Upgrade Program will provide information to DeShana Forney and the State Government and Community Affairs on their request to support their department’s communications objectives.

Stakeholder Concerns:

- Employment opportunities for constituents
- Economic development
- Progress of the program
- Disruptions related to construction
- Length of time project disruptions persist

Relevant Messages:

- Increase the reliability of the system
- Enhance safety for customers, gas workers and emergency response personnel
- Reduce congestion of utilities in the streets where possible
- Increase the ability to meet the growing needs of the community
- Allow people to use new energy-efficient appliances, which reduce costs and greenhouse gas emissions
- Create and maintain around 1,000 highly-skilled, well-paying, longer-term union jobs, along with many indirect jobs. The program employs over 2,000 workers at peak construction times.

Tactics:

State of Illinois Staff or Function	Peoples Gas Staff or Function	Topics and Issues	Communication Methods and Timing
Elected Officials			
<ul style="list-style-type: none"> Newly-elected Chicago-area state legislators and state-wide office holders 	<ul style="list-style-type: none"> Senior Director, State Govt. and Community Affairs, & Communications Team 	<ul style="list-style-type: none"> The Peoples Gas Infrastructure Upgrade Program mission, goals, and progress 	<ul style="list-style-type: none"> At beginning of each legislative session, the Communications Team will send a briefing packet to each new Chicago-area state legislator and state-wide elected official to introduce them to the program.
<ul style="list-style-type: none"> State legislators and state-wide office holders 	<ul style="list-style-type: none"> Senior Director, State Govt. and Community Affairs 	<ul style="list-style-type: none"> The Peoples Gas Infrastructure Upgrade Program mission, goals, and progress 	<ul style="list-style-type: none"> Include officials on distribution of newsletter for elected officials and stakeholders. Answer requests for information. Include messages regarding The Peoples Gas Infrastructure Upgrade Program in Peoples Gas talking points at legislative events, etc.
<ul style="list-style-type: none"> ICC Staff and Commissioners 	<ul style="list-style-type: none"> Director of Gas Regulatory Policy 	<ul style="list-style-type: none"> The Peoples Gas Infrastructure Upgrade Program mission, goals, and progress 	<ul style="list-style-type: none"> Include officials on distribution of newsletter for elected officials and stakeholders. Answer requests for information. Determine if regular meeting with ICC Commissioners are needed and offer to host site visits.

11.7. Government Officials – Federal

Most communication with federal regulators takes place through State of Illinois officials from the Illinois Commerce Commission. All other communication with Federal elected officials or regulators will be managed by the Director of Federal Government Relations, WEC Energy Group.

11.8. Media

Objective:

Through the media, convey messages and information that support The Peoples Gas Infrastructure Upgrade Program and its safe completion of infrastructure upgrade projects by providing timely and accurate information to impacted customers and the public. Maintain and enhance Peoples Gas’ image within the community by providing excellent customer service and managing customer expectations. These efforts will be coordinated with Peoples Gas’ media strategies.

Strategy:

Convey proactively and clearly via the media the need and benefits of The Peoples Gas Infrastructure Upgrade Program. Explain the general and local impacts of the construction process and duration. Respond accurately to requests for information about the program and local impacts.

Tactics:

In October of each year, the communications team will meet to review the work planned for the next year’s construction season. The team will review the affected areas and likely issues to be raised. The team will then draft a timeline of activities for the year, including unique local issues and the local print and online media that will be involved.

The following chart lists media relations activities.

Media Relations			
Communication Tool	Timing	Responsible	Notes & links
<ul style="list-style-type: none"> Annual Media Plan 	<ul style="list-style-type: none"> October- Nov. of each year 	<ul style="list-style-type: none"> Director, Media Relations, Corporate Communications 	<ul style="list-style-type: none"> The Annual Media Plan will note the areas where work will be performed, issues anticipated, and local or hyperlocal news outlets in those areas. Information gathered from elected officials in winter briefings will be included. The plan will include a matrix of media activities for the upcoming construction season.
<ul style="list-style-type: none"> City-Wide Stories 	<ul style="list-style-type: none"> According to Annual Media Plan 	<ul style="list-style-type: none"> Director, Media Relations, Corporate Communications 	<ul style="list-style-type: none"> Pitch stories to Chicago-area publications and broadcast outlets regarding the benefits of The Peoples Gas Infrastructure Upgrade Program.

Media Relations			
Communication Tool	Timing	Responsible	Notes & links
<ul style="list-style-type: none"> Neighborhood and Project-Specific Stories 	<ul style="list-style-type: none"> Two weeks before beginning of construction & throughout construction process 	<ul style="list-style-type: none"> Director, Media Relations, Corporate Communications 	<ul style="list-style-type: none"> Distribute a press release to targeted community papers and websites in the project areas two weeks prior to beginning of construction. Follow up to secure placement. Alert community papers and websites to project milestones. Distribute a press release at conclusion of construction. Place a thank you ad in local publications at conclusion of construction.
<ul style="list-style-type: none"> Industry Publications 	<ul style="list-style-type: none"> According to Annual Media Plan and objectives 	<ul style="list-style-type: none"> Director, Media Relations, Corporate Communications 	<ul style="list-style-type: none"> Pitch stories about the successes of The Peoples Gas Infrastructure Upgrade Program to industry publications.
<ul style="list-style-type: none"> Responses to Media Inquiries 	<ul style="list-style-type: none"> Immediately upon request 	<ul style="list-style-type: none"> Director, Media Relations, Corporate Communications 	<ul style="list-style-type: none"> All contact with the media regarding The Peoples Gas Infrastructure Upgrade Program must be in harmony with the overall Peoples Gas media strategy. For this reason, all media inquiries will be directed to Director, Media Relations, Corporate Communications, for proper response. Field Operations will be provided with media calling cards to provide to media that might be asking questions on job sites.

11.9. Shop Employees – Union and Non-Union

Objective:

Garner employee support for the goals of the infrastructure upgrade projects. Encourage employees to communicate with the customer, perform work with the customer in mind and manage customer expectations throughout the process.

Strategy:

Work with Local 18007 and directly with shop employees to emphasize the importance of The Peoples Gas Infrastructure Upgrade Program to the future of the company, our customers and the entire community.

Stakeholder Concerns Noted to Date:

- Productivity requirements
- Resources to perform the work
- Job Security
- Opportunities for career advancement and growth
- Training
- Growth of contractor work force

Relevant Messages:

- Work safely - Target zero accidents
- Additional jobs will be added for this project.
- Peoples Gas will make sure crews have the proper equipment.
- New worker classification has been created with advancement built in.
- Keep the customer in mind. Communicate if additional follow through is needed by the company.
- All workers on The Peoples Gas Infrastructure Upgrade Project represent both themselves and Peoples Gas. Workers will conduct themselves professionally. Workers will follow rules regarding smoking, littering, site maintenance, and courtesy to the public.

Tactics:

Communications with Shop Employees			
Communication Tool	Timing	Responsible	Notes & links
• Tailgates	• Daily	• Foremen	<ul style="list-style-type: none"> • Safety Topics • Importance of program • Cleanliness and courtesy to customers and public
• Bulletin Boards	• Weekly		
• Training	• Annually, and as needed	• Training Coordinator	

11.10. Contractor Employees

Objective:

Garner contractor employee support for and execution of the safe completion of infrastructure upgrade projects. Ask contractor employees to share our focus on customer satisfaction and safety.

Strategy:

Work with contractor management and directly with contractor employees to emphasize the importance of The Peoples Gas Infrastructure Upgrade Program to the future of their business relationship with Peoples, their employers and to their career

Stakeholder Concerns Noted to Date:

- Productivity requirements
- Resources to perform the work
- Job Security
- Opportunities for career advancement and growth
- Training

Relevant Messages:

- Work safely –Target zero accidents
- Additional jobs will be added for this project.
- Peoples Gas will make sure crews have the proper equipment.
- Contractors will be expected to meet productivity goals.
- Keep the customer in mind. Communicate if additional follow through is needed by the company.
- All workers on The Peoples Gas Infrastructure Upgrade Project represent both themselves and Peoples Gas. Workers will conduct themselves professionally. Workers will follow rules regarding smoking, littering, site maintenance, and courtesy to the public.

Tactics:

Communications with Contractor Employees			
Communication Tool	Timing	Responsible	Notes & links
• Tailgates	• Daily	• Foremen	<ul style="list-style-type: none"> • Safety Topics • Importance of program • Cleanliness and courtesy to customers and public
• Bulletin Boards	• Weekly		
• Training	• Annually, and as needed	• Training Coordinator	

11.11. Peoples Gas Employees

Objective:

Garner employee support for and execution of the safe completion of infrastructure upgrade projects while managing customers' expectation of the work we need to perform. Inform employees who are not directly involved about the importance of the program and its successes. Enable employees to help maintain and advance Peoples Gas' image within the community.

Strategy:

Use Peoples Gas' internal communications protocols to keep employees informed about the program.

Stakeholder Concerns Noted to Date:

- Relationship of The Peoples Gas Infrastructure Upgrade Program to fiscal health and future of the utility.
- Job security

Relevant Messages:

- The Peoples Gas Infrastructure Upgrade Program is part of Peoples Gas' commitment to continuing our history of delivering safe and reliable natural gas for our customers.
- The program is critical to the future success of the company and the region.
- The program has created many well-paying jobs, including about 1,000 highly-skilled, long-term union jobs.
- The program is among the largest natural gas pipe replacement projects in the nation.

Tactics:

Communications with Contractor Employees			
Communication Tool	Timing	Responsible	Notes & links
• Intranet	• Timing of updates		• Intranet system accessible by all Peoples Gas employees. Field crews have access through kiosks at each shop; information is not available on usage.
• Bulletin boards			• Posters and other information is posted on bulletin boards located at each Peoples Gas facility
• Tailgates			• Sessions held as needed with field crews prior to their leaving the work site for the morning; shop manager is notified to set these sessions up; shop managers are provided talking points and materials to distribute as needed to support the information being provided; tailgates are typically conducted by the shop manager
• Issues and Impacts			• Electronic information pushed out to subscribers; developed on an as-needed basis or when issues arise; typically covers topics such as company position on legislation or other issues

Communications with Contractor Employees			
Communication Tool	Timing	Responsible	Notes & links
<ul style="list-style-type: none"> • Mass email 			<ul style="list-style-type: none"> • Can be used to provide information to all employees
<ul style="list-style-type: none"> • Reference Center 			<ul style="list-style-type: none"> • Electronic bulletin board for Call Centers; notices are posted by Customer Relations of road closings, work in progress, etc.

12. VERSION AND UPDATE INFORMATION

This Communications Plan for the Capital Construction Program (Version 2.0) replaces the draft Communications Plan for the Accelerated Main Replacement Program dated May 16, 2011. This plan describes current communications activities. The Peoples Gas communications team will update this plan every year to incorporate lessons learned from the previous year and any changes required by the work planned for the upcoming construction seasons. Other updates will be made as needed. Please contact the Senior Communications Specialist, Corporate Communications, with changes or updates.