

## **Columbia Gas of Pennsylvania, Inc.**

### **2014/2015 Winter Reliability Overview**

#### **Winter Readiness**

##### Frost Patrols

Leak surveys based on frost potential will continue on our remaining and declining population of cast iron pipe until this pipe is entirely replaced. Once frost has penetrated the ground in Columbia's service territory, Columbia will conduct weekly surveys of our cast iron systems until the frost has receded.

##### Winter Operations Preparedness

Columbia's 2014- 2015 Winter Operations Plan includes an assessment of all distribution facilities to ensure that adequate capacity and pressures are available to serve projected peak day demand. Considered in the assessment are facility performance under last year's peak demand, system improvements, upgrades, and reconfigurations over the past year along with changes in customer demand. This assessment determines the appropriate monitoring activities to be performed throughout the winter season.

##### Winter Operations Monitoring

Winter Operations Monitoring involves the recording of distribution system pressures at particular intervals of winter ambient temperatures. Collecting and compiling winter operations information enables Technical Operations and M&R personnel to proactively address operational issues and provides a platform for system planning and modeling.

##### Emergency Dispatch

Columbia operates a fully-automated call-out process for emergency response with Service personnel on an Emergency Response Rotation. This means that the Columbia emergency response personnel are available on rotation 24 hours a day, 7 days a week, 365 days a year to respond to emergencies on its distribution system.

#### **Employee Safety/Readiness**

##### Employee Safety

Columbia is committed to maintaining a strong culture of safety for employees, customers and the communities we work in. Messages on maintaining safe work habits are shared on a weekly basis with focus on hazards experienced during winter operations. Work site safety audits are conducted on a regular basis and will continue during the heating season. During the 2013-2014 winter operations period Columbia experienced zero reportable OSHA injuries.

### Staffing

Columbia's Operations Planning team, in conjunction with local operating center leadership, evaluate projected workloads by activity and develop an annual staffing plan to ensure preparedness. These plans are used to coordinate the hiring and training of new employees throughout the year. The plans also identifies shift placement to best match workload demands and enhance response to emergency situations.

### Personnel Preparedness

In addition to ongoing training and qualification programs, the development of the Winter Operations Plan provides an opportunity for Field Operations personnel to better understand how their systems operate. This process includes a review of system performance during the previous year's heating season, changes made to the system and key monitoring points. Collecting and compiling winter operations information enables Technical Operations and M&R personnel to proactively address operational issues and provides a platform for system planning and modeling.

### **Communications Outreach**

Columbia's Call Center will always have up-to-date information to respond to customer inquiries in the event of any emergency or outage. As service interruptions can vary in nature and range, and therefore require different levels of customer outreach, Columbia will take the following additional steps to communicate to impacted customers as appropriate:

- a. Web Page Customer Alert – "Customer Alert" posted on Columbia's web site. This includes both a "what's new" box on the home page and an "outage/incident center" page.
  - o Post regular updates on Columbia's web site.
  - o Push major update information out to news media.
  - o Provide updates to assignment desks or assigned reporters directly.
  - o Be aware of news cycle times in order to prepare updated information.
  
- b. Local Public Official Notification – Notify appropriate local public officials (i.e. Legislators, town managers, public/safety works directors, emergency response officials, etc.) as well as the PUC to ensure all critical external stakeholders are identified and response is coordinated.

- c. News Release – Issue a targeted news release with incident details. For example, an outage release would include the location of outage, number of customers impacted, estimated date and time for service restoration, and the location of potential warming centers.
- d. Social Media – Post time sensitive outage/emergency updates on Columbia’s Twitter and Facebook page to promote the location of the warming center(s).
- e. Customer Emails – When appropriate, send targeted (by zip code) emails to customers with outage/emergency information including the location of the warming center(s).
- f. Warming Center Coordination – If needed, partner with local VFD, Emergency Management and Red Cross organizations to establish a warming center for impacted customers while their service is interrupted. If shelters are open, utilize news media, CPA web site, social media and the customer email system to disseminate information (location, hours and resources available).

### **Gas Supply and Planning**

To ensure that it can meet its firm service obligations, Columbia has longstanding daily and winter season “Design Criteria” which serve as the basis for the design and management of its supply/capacity portfolio. Columbia’s Design Day Temperature has a 6.67% probability of occurrence and Columbia’s Design Winter Season is based on colder temperatures having a 10% probability. More specifically, there is a 1 in 15 chance that actual temperatures could exceed Columbia’s Design Day Temperature of -5 degrees, and a 1 in 10 chance that the weather could exceed Columbia’s Design Winter Season criteria. These criteria serve as the basis for the design of Columbia’s supply & capacity portfolio and Columbia’s management of its assets to ensure its ability to reliably fulfill its firm service obligations.

Columbia is well positioned to meet its firm service obligations for the 2014-15 Winter Season. Columbia secures its winter supplies primarily in two ways. First, Columbia contracts for firm supplies equal to its expected purchase needs for the three coldest months of December thru February, prior to the start of the winter season. Secondly, Columbia fills its firm pipeline storage services to a level of approximately 98 percent by November 1st. Further, Columbia manages its assets daily in a manner that ensures reliable service in the short term through the use of a 5-day weather forecast from a commercial weather service. In the longer term Columbia protects its firm seasonal service obligations based on managing its assets to meet the “Design Criteria” throughout the winter period. For the 2014-15 Winter Season, assuming normal weather, Columbia expects to serve Firm Sales Markets with approximately a 50/50

split between Firm Purchases and Storage Withdrawals. On a Design Day, at an average daily temperature of -5 degrees, Storage Withdrawals will make up an even greater portion of Columbia's service to Firm Sales Markets, approaching 75%. Columbia would not expect curtailment of any firm requirements.

### **Natural Gas Demand from Electric Generators**

In recognition of the planning criteria and processes described in response to Request No. 4 (Gas Supply and Planning), Columbia is confident about the adequacy of supply and the availability of firm transportation service to meet its firm service obligations for the forthcoming winter. As has been noted, Columbia's supply/capacity portfolio, and associated management throughout the winter season are predicated on the occurrence of extreme cold daily and seasonal temperatures having rather limited probabilities of occurrence with the foremost objective being the maintenance of safe, reliable service. For these reasons, the prospect of increased demand for natural gas or increased use of firm transportation service for the purpose of electric generation present Columbia with no undue cause for concern. In fact, Columbia fully supports the concept of firm transportation service capacity being used for such purpose. Because of Columbia's longstanding policies and practices regarding supply and capacity, along with their actual management, no new plans or protocols are in need of being developed or instituted as a result of the prospective increased use of natural gas for electric generation.

### **Polar Vortex Analysis**

The reliability of Columbia's distribution system has been significantly enhanced as a result of its ongoing accelerated infrastructure replacement program. Through the period of extreme cold during January 2014, Columbia experienced no large scale customer outages. Columbia did identify a number of areas in its distribution system that experienced low pressures during extended periods of extreme cold, with some isolated customer outages.

### **Summary of Outages or Pressure Issues**

The Southern York system (Shrewsbury and New Freedom) experienced low pressure during the extreme cold temperatures. Columbia worked with its large customers in the Hanover area, asking them to voluntarily reduce their usage in order to shed load in the Shrewsbury and New Freedom areas. This action was taken to ensure uninterrupted service to the balance of Columbia's customers. As part of the company's efforts to address this issue, Columbia installed approximately 700 feet of 6-inch medium density plastic pipe along Wilson Avenue in Hanover.

This project connects the two systems together and will increase capacity of the systems. The work was completed October 30, 2014. In addition, Columbia is working with the local interstate transmission pipeline to increase physical pipeline capacity in the Hanover operating area.

The subdivision of Myoma Woods, in Columbia's PA Central operations, experienced low pressure problems during extreme cold temperatures, resulting in customer outages. Columbia installed a temporary feed from Peoples Gas as a short term solution. Columbia then installed 4,560 feet of 6-inch plastic main along Plains Church Road to tie the ends of the system together. This work was completed on September 29, 2014.

Chippewa Intermediate pressure system experienced low pressure problems and limited customer outages during the extreme cold temperatures. Regulators were changed in order to increase capacity in the system. This work was completed on September 25, 2014.

Sutersville experienced low pressure and limited customer outages during extreme cold temperatures. A project to replace main along 2nd Avenue is planned to be completed by the end of October, 2014 to improve system performance.

Rimersburg experienced low pressures at extreme cold temperatures. Regulators were changed in 2014 to address this issue.

East Berlin system in Adams County experienced low pressure problems during extreme cold temperatures. Changes at regulator station have been made in 2014 to address this issue.

A subdivision on Battleridge Road in Washington County experienced low pressures during extreme cold temperatures. A project to replace regulator station is planned to be completed by the end of November, 2014.

Seven Fields in Butler County experienced low pressure along Wilshire Circle during extreme cold temperatures. A project is planned to install approximately 2,340 feet of 6-inch plastic main along Mt. Pleasant Road as long term solution. This project is scheduled to begin in the first quarter of 2015. In the interim, Columbia's Engineering and M&R group will closely monitor this system.

The Cherrington subdivision in Moon Township experienced low pressures. Work is in progress to change regulators and is expected to be completed by October 31, 2014.



The Monastery on Portersville Road in Lawrence County experienced low pressures and outages during the extreme cold weather. A project is in progress to replace pipeline along Wurtemberg Road to serve the Monastery from a medium pressure system. This project started on September 22, 2014 and is expected to be completed by the end of November 2014.