State of Florida

Public Service Commission

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-M-E-M-O-R-A-N-D-U-M-

DATE: August 2, 2012

TO: Office of Commission Clerk (Cole)

FROM: Division of Accounting and Finance (Cicchetti, Mouring, Slemkewicz, Trueblood)
Division of Economics (Draper, Higgins, Kummer, McNulty)
Division of Engineering (Black, Moses)
Office of the General Counsel (Brown)

RE: Docket No. 110320-GU – Petition for approval of Cast Iron/Bare Steel Pipe Replacement Rider (Rider CI/BSR), by Peoples Gas System.

AGENDA: 08/14/12 – Regular Agenda – Tariff Filing – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: 8-Month clock waived by Peoples Gas System to the August 14, 2012, Agenda Conference

SPECIAL INSTRUCTIONS: Place this docket before Docket No. 120036-GU

FILE NAME AND LOCATION: S:\PSC\ECR\WP\110320.RCM.DOC

Case Background

On December 14, 2011, Peoples Gas System (Peoples) filed a petition for approval of a Cast Iron/Bare Steel Pipe Replacement Rider (Rider) to recover through a surcharge on customers' bills the cost of accelerating the replacement of cast iron and bare steel distribution pipes on its system. Gas utilities have been urged by the U.S. Department of Transportation (USDOT) to replace these older facilities as a safety measure. The Commission approved $1 million dollars in rate base for the 2009 projected test year for replacement of these pipes in

Peoples' last rate case.[1] Through the Rider, Peoples seeks approval of an annually adjusted per therm surcharge to capture the cost of replacement of cast iron and bare steel pipes over a 10-year period. This accelerated recovery period would increase Peoples' capital expenditures for replacement of those facilities from $1 million to approximately $8 million annually, with the $7 million of additional revenue requirement to be recovered annually through the Rider. The $1 million currently included in rate base would be excluded from recovery through the Rider.

On March 23, 2012, the Office of Public Counsel (OPC) intervened in this case.[2] On June 26, 2012, Peoples filed a letter agreeing to waive the 8-month clock with the understanding that the Commission will consider this petition at the August 14, 2012, Agenda Conference. In March, June, and July 2012 Peoples provided responses to staff's five sets of data requests, which included certain modifications and revisions to Peoples' petition. Most notably, in response to staff's fourth data request filed on May 25, 2012, Peoples agreed to use the actual overall cost of capital, including the allowed return on equity from Peoples' last rate case, reflected in the most recent December earnings surveillance report. In its petition, Peoples had originally proposed to use the overall cost of capital from the last rate case.

On July 31, 2012, Peoples filed a letter agreeing to implement the Rider and its tariffs on January 1, 2013, instead of July 2012, as requested in the petition. The letter included revised tariffs that contain the following modifications from the tariffs originally filed with the petition: (1) January 1, 2013, effective date; (2) Use of actual overall cost of capital reflected in the most recent December earnings surveillance report; (3) The annual true-up will be based on seven months of actual data and five months of projected date; and (4) certain minor clarifications. These tariff sheets supersede and replace the tariff sheets that accompanied the petition.

Florida Public Utilities Company and Chesapeake Utilities Corporation filed a similar joint petition on February 3, 2012, in Docket No. 120036-GU, which is also scheduled for Commission consideration at the August 14, 2012, Agenda Conference.

The Commission has jurisdiction over this matter pursuant to Sections 366.03, 366.04, 366.05 and 366.06, Florida Statutes (F.S.).

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[1] Order No. PSC-09-0411-FOF-GU, issued June 9, 2009, Docket No. 080318-GU, In re: Petition for a Rate Increase by Peoples Gas System.

[2] OPC's intervention was acknowledged in Order No. PSC-12-0138-PCO-GU.

Discussion of Issues

Issue 1: Should the Commission approve Peoples' proposed Cast Iron/Bare Steel Replacement Rider and associated tariff sheets (Rider)?

Recommendation: Yes, the proposed Rider and associated tariff sheets should be approved as modified by Peoples in its July 31, 2012 letter. Peoples should file its annual surcharge petitions by September 1 of each year, starting in 2013. Peoples should also file quarterly reports on the progress of the replacement program as described in the recommendation. (Draper, Black, Cicchetti, Higgens, McNulty, Moses, Mouring, Troublood)

Staff Analysis:

Overview of the Proposed Rider

Peoples has had a replacement program in place since 2000. From December 2000 to December 2010, Peoples states that it replaced approximately 200 miles of cast iron and bare steel mains. Peoples requested the Rider addressed in this petition to accelerate the replacement program of its cast iron and bare steel pipes. Specifically, Peoples proposed to replace bare steel and cast iron mains, service lines, and regulator stations. In addition, meters will be evaluated on an individual basis whether they will need to be replaced. Cast iron pipes currently comprise approximately one percent, or 156 miles, of Peoples' distribution system. Bare steel pipes comprise approximately four percent, or 411 miles, of Peoples' system, for a total of 567 miles. Peoples' distribution system includes a total of 11,164 miles of pipe. Of the 567 miles of remaining facilities to be replaced, Peoples plans to replace approximately 57 miles, or ten percent, annually over a 10-year period. Peoples explained that it believes that a 10-year time frame is a reasonable projection to complete the replacement program, after consideration of several factors including customer rate impact, and contractor and employee availability and workload.

The Commission approved $1 million dollars in rate base for the 2009 projected test year for replacement of these type of facilities in Peoples' last rate case,[3] allowing Peoples to earn a return on and recover the depreciation and ad valorem expenses associated with the $1 million investment through its base rates. Staff notes that base rates were not increased to recover a return or any related expenses on any capital investments made in 2010 or 2011. Peoples states that with $1 million per year targeted for the replacement of the pipes, it would take over 70 years to replace all of it, and this amount is therefore insufficient to replace all of its targeted pipes in a timely manner. Thus, Peoples seeks approval of an annually adjusted cast iron/bare steel surcharge (surcharge) on customers' bills to capture the cost of replacement of cast iron and bare steel pipes over a 10-year period. This accelerated recovery period would increase Peoples' capital investment for replacement of those facilities from $1 million to approximately $8 million annually, with the $7 million of additional investment to be recovered through the surcharge. Peoples will annually exclude recovery of $1 million before any other capital investments are included for purposes of recovery through the Rider.

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[3] Order No. PSC-09-0411-FOF-GU, issued June 9, 2009, Docket No. 080318-GU, In re: Petition for rate increase by Peoples Gas System.

Peoples proposed to administer the surcharge with the filing of an annual petition for approval of the projected revenue requirement to be recovered during the following calendar year. The revenue requirement would be calculated and trued up each year. Peoples states that the Commission will have the opportunity to thoroughly review and audit Peoples' filings. The revenue requirement will be allocated to the customer classes using the same methodology that was used for the allocation of mains and services in the cost of service study used in Peoples' most recent rate case.

The collection of the surcharge established each year will continue until Peoples files a rate case. Peoples proposes that during a rate case, the replaced infrastructure be rolled into Peoples' overall rate base, and the surcharge will be "reset to zero." The surcharge would terminate when all applicable cast iron and bare steel pipes have been replaced and included in rate base through one or more rate cases.

In addition to meeting safety concerns, Peoples states that a by-product of the proposed Rider will be an economic development boost to the areas where cast iron and bare steel replacements are made through the use of local labor. Peoples will use a combination of internal employees and external contractors to perform the accelerated replacements.

Residential Customer Bill Impact

In its July 31, 2012 letter Peoples filed a revised Exhibit E reflecting the projected impact on a residential customer's bill. The current monthly bill for a residential customer who uses 20 therms is $37.55 (including July 2012 PGA and Gross Receipts Tax). The projected monthly bill impact for a residential customer who uses 20 therms is $0.05 in 2013, and increases to $0.80 in 2022, assuming no rate cases in that time frame. The calculation assumes incremental capital expenditures of $7 million annually. Staff notes that the customer impact increases annually as the return on the unamortized investment increases over time as the investment grows until the investment is embedded in rate base and recovered through base rates.

Background and Safety Concerns

Peoples states that this petition is in response to growing concerns by the Pipeline Hazardous Materials and Safety Administration (PHMSA) of the USDOT regarding the use of cast iron and unprotected bare steel as expressed in Secretary LaHood's letter to each state governor dated March 28, 2011.[4] The PHMSA was created in 2004 and is responsible for pipeline safety nationwide. Secretary LaHood also appeared at the National Association of Regulatory Utility Commissioners in 2011 expressing concerns about the aged infrastructure.

The PHMSA issued advisory bulletins regarding cast iron usage in distribution systems as early as 1991. In the latest advisory bulletin (ADB-2012-05) PHMSA asked the operators and state pipeline safety representatives to consider the following:

[4] A copy of the letter is included in response to staff's second data request No. 4, filed March 12, 2012.

Request, review and monitor operator cast iron replacement plans and programs, actively encourage operators to develop and continually update and follow their plans, and consider establishment of mandated replacement programs.

Establish accelerated leakage survey frequencies or leak testing considering the results from failure investigations and environment risk factors.

Focus pipeline safety efforts on identifying the highest risk pipe.

Use rate adjustments and flexible rate recovery mechanisms to incentivize pipeline rehabilitations, repair and replacement programs.

Strengthen pipeline safety inspections, accident investigations and enforcement actions.

Safety Concerns regarding Cast Iron

Cast iron pipe is subject to "graphitization" or graphitic softening. Cast iron is an alloy made of iron and carbon, the carbon being in the form of graphite. With this composition, when the iron dissolves out due to corrosion, only the graphite is left. This causes the pipe and similar equipment such as fittings to become mechanically unsound. Also, cast iron loses its ductility or ability to bend when the pipe material becomes "graphitized" which leads to cracks. However, after graphitization corrosion occurs, the graphite pipe may last for many years if it is not subjected to any mechanical forces or pressure changes.

The method used to join cast iron pipe segments is a cause for concern in today's environment. Cast iron is joined using joints made by either mechanical couplings, threaded, or by sealing the bell and spigot joints with jute and lead wool. Natural gas used by the industry today in Florida is a much dryer gas than used in the past which greatly increases the potential of leakage due to the drying out of these materials used as a caulking in the bell and spigot joints.

Any movement of the earth caused by excavation, heavy road traffic, or any outside forces can cause a failure. Leakage can gravitate in sewer drains or under pavement or any dense material that will not allow it to vent to the atmosphere. If the gas gravitates and collects in an occupied structure, which has been the case in some accidents in other states, loss of life can occur.

Safety Concerns regarding Unprotected Bare Steel

Unprotected bare steel is subject to corrosion. Corrosion causes pitting in the steel pipeline, which reduces the structural integrity of the pipeline. Corrosion left undetected or uncorrected can lead to structural failure and release of gas. According to Peoples' petition, Peoples installed unprotected bare steel beginning around 1940 and ended in 1970. The age of the unprotected bare steel is now 42 to 72 years.

PHMSA recognized the threat of corrosion on bare unprotected steel pipeline and as a result amended Part 192.455, Code of Federal Regulations (CFR), to prohibit the installation of unprotected bare steel pipeline after July 31, 1971, unless the operator could demonstrate by tests, investigation, or experience in the area using, at a minimum, soil resistivity measurements and tests for corrosion accelerating bacteria, that a corrosive environment does not exist.

Steel pipeline installed after August 1, 1971, uses protective coatings developed to help insulate the pipeline from the corrosive environment. Where there are nicks or "holidays" in the coating, cathodic protection is required under the amended Part 192.455, CFR, to reduce corrosion. Cathodic protection consists of an electric current applied to the pipeline in such a manner as to cause metals to be deposited on the pipeline instead of being eroded from it.

Method of Determining the Order of Pipeline Replacement

PHMSA urged the states in its latest advisory regarding cast iron to consider replacing the highest risk pipes first. Staff believes this same methodology should be carried out throughout the replacement of both cast iron and unprotected bare steel.

Peoples stated that it would prioritize the replacement of cast iron and bare steel using the following factors:

a. The Distribution Integrity Management Program (DIMP)
b. Leak incident rates
c. Pressure under which the pipeline is operating
d. Areas of significant construction (municipal improvement projects, etc.)
e. Age of pipeline

The DIMP program is a comprehensive plan of pipeline risk assessments that staff believes will appropriately provide guidance to Peoples in determining which pipes should be replaced first based on the risk to the residents located near the pipelines. Also, using historical leak incident rates, Peoples can assess which pipes are in need of replacement sooner than other less corroded pipes. Peoples states that polyethylene pipe will be utilized for the replacement pipes; and in some cases, Peoples will use coated steel to maintain system integrity and operational requirements.

Quarterly Reports

Staff recommends that Peoples file quarterly reports with the Commission on the progress of its replacement program. The reports should include information such as location of the replacements, the mileage and type of pipeline replaced, the type of material used, and the date the replacement pipe was put into service. Peoples agreed to file the quarterly reports. Staff notes that this information is necessary for mandated safety reports staff provides to PHMSA.

What Other States Are Doing

Twenty-four states have established programs for the replacement of the unprotected bare steel and cast iron, and several states have pending programs.[5] States have implemented a variety of cost recovery methods for these programs. New Jersey, Kentucky, and Indiana are currently using traditional ratemaking authority to establish infrastructure replacement pipeline programs. Missouri, Kansas, and Nebraska are using specific ratemaking authority using detailed eligibility requirements and cost recovery formulas for replacement surcharges. Ohio provides far more flexibility and discretion. Ohio has an alternative rate plan which requires the company to file an application with the proposed rates, summary of the proposed plan, a comparison of the typical before and after customer bill, and any waiver requests. Texas utilizes an interim rate adjustment method, and Virginia has adopted a separate rider, allowing for the recovery of certain costs associated with eligible infrastructure replacement projects

Determination of Revenue requirement

Peoples projects $8 million in total annual replacement costs, with $7 million, to be recovered through the Rider. The assumptions for the $8 million annual investment is based upon Peoples' linear miles of cast iron and steel pipes to be replaced, multiplied by the projected costs associated with replacing cast iron and bare steel pipe using contractor pricing for Peoples' east and west regions. Peoples' total projected cost to replace all remaining cast iron and bare steel pipes amounts to $72.8 million, however, Peoples included a 10 percent contingency. Peoples states that the complexity of the work in certain urban areas may increase the replacement costs significantly, whereas the costs may be lower in less densely populated areas. Finally, Peoples states that these costs are only estimates, and that actual costs could be more or less than estimated. However, in the annual filings, Peoples will true-up the costs and only request recovery of actual dollars incurred.

Staff notes that Peoples may experience potential cost reductions in future operations and maintenance (O&M) expenses as a result of replacing the cast iron and bare steel pipes. Peoples explained that as the replacements progress, it expects reductions in the expenses associated with unprotected structure leak surveys, electrical surveys, and maintenance repair expenses. While Peoples cannot accurately quantify the expected O&M savings at this point, any reductions will be quantified and reflected in Peoples' next rate case proceeding.

Through the surcharge, Peoples proposes to recover the return on, depreciation expense, and ad valorem tax expense associated with the capital expenditures for replacements in excess of $1 million. Peoples is not proposing to recover any O&M related expenses, which Peoples asserts should be minimal. Each expense component is discussed in more detail below.

Return

In response to staff's fourth data request, Peoples modified its petition and agreed to use the actual overall cost of capital, including the allowed return on equity from Peoples' last rate case, reflected in the most recent December 2011 earnings surveillance report. In its petition, Peoples had originally proposed to use the overall cost of capital from the last rate case. Staff believes that relying on a more current overall cost of capital more accurately aligns current costs

[5] Source: American Gas Association Natural Gas Rate Round-Up, May 2011 and http://opsweb.phmsa.dot.gov/pipelineforum/pipeline-systems/state-pipeline-system/state-replacement-programs/.

with current cost recovery and sends a more precise price signal. For future annual filings Peoples should use the most currently available December earning surveillance report.

In response to staff fourth data request, Peoples provided an updated net operating income multiplier to be applied to the revenue requirement associated with the equity component of the Rider. As discussed above, staff is recommending using the more current capital structure reflected on Peoples' December 2011 Earnings Surveillance Report, which reduces the "Total Equity Cost Rate" used by Peoples from 8.4987 percent to 8.1153 percent. Also, using the more current capital structure, the "Total Debt Cost Rate" used by Peoples would be reduced from 3.2907 percent to 3.1459 percent.

Ad Valorem Taxes

As a result of the increased capital investments associated with Peoples' proposed Rider, Peoples will incur additional ad valorem taxes. In response to staff's first data request, Peoples provided an updated Exhibit C using the current composite millage rates associated with the forty counties that will be impacted by the Rider. Staff has evaluated Peoples' revised calculation of the aggregate millage rate to be used for the Rider and believes it to be accurate and reasonable. As such, staff recommends that the appropriate ad valorem tax rate to be used in this case is 17.88 mills or approximately 1.79 percent. Staff also notes that yearly variations in the millage rates can be addressed during the annual filings.

Depreciation

Peoples proposed to use the applicable depreciation rates from its 2011 study which staff believes is appropriate.[6] Staff notes that the costs of the old cast iron and bare steel pipe being replaced are recovered through the cost of removal component in Peoples' currently approved depreciation rates. Thus, the cost of removal will not be recovered through the Rider. The applicable depreciation rates are presented below.

Account No.	Investment	Remaining Life Depreciation Rate
37600	Mains Steel	4.2%
37602	Mains Plastic	3.1%
38000	Services Steel	6.6%
38002	Services Plastic	5.0%
38300	House Regulator	3.6%

Staff will review Peoples' projection and true-up filings on an annual basis to ensure the appropriate depreciation rates are applied.

[6] Order No. PSC-12-0217-PAA-GU, issued April 24, 2012, in Docket No. 110232-GU, In re: Petition for approval of 2011 Depreciation Study by Peoples Gas System.

Procedure for Setting the Surcharge

As stated in the case background, staff proffered five sets of data requests to Peoples, and therefore a July 2012 implementation date as originally requested by Peoples in its petition was not feasible. Staff believes that for ease of administration and to avoid customer confusion, it will be more efficient to implement the tariffs containing the surcharges effective January 2013. Peoples agreed to this change in its July 31, 2012 letter.

Peoples should file annual petitions to revise the surcharges to be effective the following calendar year by September 1 of each year, starting in 2013, wherein such petitions contain a final true-up, actual-estimated true-up, and projected year revenue requirement. Peoples proposed that the annual filings include the following three components:

1. A final true-up showing the actual replacement costs and actual surcharge revenues for the most recent 12-month historical period from January 1 through December 31 that ends prior to the annual petition filing; including the final over- or under-recovery for the final true-up period;

2. An actual/estimated true-up showing;

3. A projection showing 12 months of projected Rider revenue requirement for the period beginning January 1 following the annual filing.

Staff believes that the actual/estimated true-up should contain seven months of actual and five months of projected costs and revenues to enable Peoples to file its annual petition by September 1 to give staff and any interested parties adequate time to review the filing. Staff believes that the prevailing commercial paper rate of interest should be applied to all over- and under-recoveries. Staff notes that staff and interested parties will have the opportunity to thoroughly review Peoples' replacement expenditures during the annual approval process of the surcharges and request additional information if necessary.

Conclusion

It is staff's opinion that the Commission clearly has authority under the broad ratemaking powers found in Sections 366.04, 366.05, and 366.06, F.S., to establish this type of surcharge to recover a discreet set of costs incurred in response to unusual, urgent circumstances. For example, in Action Group v. Deason, 615 So. 2d 683 (Fla. 1993), the Florida Supreme Court upheld the Commission's approval of a 15-year rate rider charged to customers in a specific service area to retire the existing debt of a bankrupt system that Florida Power Corporation (now Progress Energy Florida) had purchased. The Court stated that the Commission had the authority under Section 366.04(1), F.S., to fix "just, reasonable, and compensatory rates, charges, fares, tolls, or rentals", and the authority under Section 366.05(1), F.S., to prescribe "fair and reasonable rates and charges [and] classifications," which authority, the Court stated, was to be construed liberally. See also Section 366.041(2), F.S., which provides that the "power and authority herein conferred upon the commission shall . . . be construed liberally to further the legislative intent that adequate service be rendered by public utilities." In Docket No. 041291-

EI, In re: Petition for authority to recover prudently incurred storm restoration costs related to 2004 storm season that exceed storm reserve balance, by Florida Power & Light Co.,[7] the Commission approved a surcharge to cover FPL's unanticipated storm restoration costs for a period of three years. Likewise, in Docket No, 041272-EI, In re: Petition for approval of storm cost recovery clause for recovery of extraordinary expenditures related to Hurricanes Charley, Frances, Jeanne, and Ivan, by Progress Energy Florida, Inc.,[8] the Commission approved a two-year surcharge to recover Progress's storm costs.

Staff recommends approval of the proposed Rider and its associated tariff sheets, implemented January 1, 2013. While PHMSA has not yet mandated the replacement of cast iron and unprotected bare steel, Congress has required biennial reports on the replacement. Staff believes the replacement of these types of pipelines is in the public interest to improve the safety of Florida's natural gas infrastructure and reduce the possibility of loss of life and destruction of property should an incident occur. Given the length of time these types of pipelines have been installed and the leak history due to corrosion, staff believes it is appropriate to approve the proposed replacement program. Without the Rider, it is reasonable to expect that Peoples will have to file for more frequent base rate proceedings to recover the expenses of an accelerated replacement program. The annual filings will provide the Commission with the oversight to ensure that projected expenses are trued-up and only actual costs are recovered. The Rider and its associated surcharges will terminate when all replacements have been made and the revenue requirement has been rolled into rate base.

[7] Order No. PSC-05-0937-FOF-EI, issued September 21, 2005.
[8] Order No. PSC-05-0748-FOF-EI, issued July 14, 2005.

Issue 2: Should this docket be closed?

Recommendation: Yes. If Issue 1 is approved, this tariff should become effective on January 1, 2013. If a protest is filed within 21 days of the issuance of the order, this tariff should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order. (Brown)

Staff Analysis: If Issue 1 is approved, this tariff should become effective on January 1, 2013. If a protest is filed within 21 days of the issuance of the order, this tariff should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order.