



Delta Natural Gas Company, Inc.

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APR 08 2016

PUBLIC SERVICE
COMMISSION

April 8, 2016

Mr. James W. Gardner
Acting Executive Director
Kentucky Public Service Commission
P O Box 615
Frankfort, KY 40602

**RE: AN ADJUSTMENT OF THE PIPE REPLACEMENT PROGRAM RIDER
OF DELTA NATURAL GAS COMPANY, INC.
Case No. 2016-00110**

Dear Mr. Gardner,

Enclosed are the original and ten (10) copies of the responses to the Commission Staff's First Information Request dated March 31, 2016 in the above-styled case.

Please indicate receipt of this filing by date stamping the enclosed duplicate of this letter.

Sincerely,

Jenny Lowery Croft
Manager -Employee & Regulatory Services

Delta Natural Gas Company, Inc.
CASE NO. 2016-00110

FIRST PSC DATA REQUEST
DATED MARCH 31, 2016

1. Identify the general locations of the major main replacements that occurred in 2015, and describe how those specific projects were selected and prioritized.

Response:

See the attached Exhibit I for general locations of replacements that occurred in 2015. As in prior years, with an emphasis on public safety, our distribution personnel consider leak history, and the age and type of pipe in selecting and prioritizing each replacement.

Sponsoring Witness:

Matthew D. Wesolosky

Delta Natural Gas
Case No. 2016-00110
Main Replacement Projects over 1,000 FT
ITEM 1

Exhibit I

<u>System</u>	<u>Footage Installed</u>		<u>Cost</u>
Berea	1,670	\$	357
London	1,782	\$	33,834
Barbourville	2,750	\$	66,776
Pineville	908	\$	88,172
Canada Mountain	0 {1}	\$	2,144
Middlesboro	4,674	\$	157,663
Corbin	9,436	\$	450,631
Manchester	0 {2}	\$	2,866
Manchester	0 {3}	\$	1,958
	21,220	\$	804,401
Replacements less than 1,000 feet		\$	484,990
Total per PRP Filing		\$	1,289,391

{1} Represents cost incurred in the current year on a project to relocate 8" steel main in Bell County. The project is in progress and the feet of pipe replaced are not reported from the field until the project has been completed.

{2} Represents additional cost incurred on a work order completed and reported in the prior year.

{3} Represents cost incurred in the current year on a project to relocate 4" plastic main in Manchester. The project is in progress and the feet of pipe replaced are not reported from the field until the project has been completed.

Delta Natural Gas Company, Inc.
CASE NO. 2016-00110

FIRST PSC DATA REQUEST
DATED MARCH 31, 2016

2. Provide a list of the remaining items to be replaced and an estimate of the associated costs eligible to be recovered through the Pipe Replacement Program (PRP) as originally enumerated by Delta in Case No. 2010-00116. The information should include:
 - a. The amount of pipe remaining to be replaced through the PRP. Pipe should be categorized by material (i.e. bare steel, coated steel, etc.); age; size; and location.
 - b. The number of services remaining to be replaced through the PRP.
 - c. The number of years Delta expects to use the PRP mechanism to recover the cost of bare and coated steel pipes along with associated services.
 - d. The estimated remaining cost per year of the PRP, broken down by pipe, services, and any other eligible PRP activities.

Response:

- a. The attached Exhibit II lists the steel pipe per Delta's mapping records to be replaced through the PRP mechanism and includes bare steel and coated steel pipe which is not cathodically protected. Delta's engineering records do not differentiate between the two types of pipe as both types are subject to the risk of corrosion. Experience under the PRP has shown the quantities retired to be greater than the quantities originally cataloged in Delta's mapping records primarily when we retire pipe from older systems acquired by Delta and therefore not originally mapped by Delta personnel.

Delta is evaluating the Pipeline and Hazardous Materials Safety Administration ("PHMSA") advisory bulletins concerning the susceptibility of older plastic pipe to premature cracking. To the extent Delta identifies older pipe materials included in the PHMSA bulletins, replacement of such materials would be included in future PRP filings.

- b. Service line replacements result from main replacements, mandatory relocation projects or leaks. While replacing a main, if a service line is found to be steel or older vintage plastic, the service line is replaced. Delta has approximately 1,200 bare steel service lines to be replaced. Mandatory relocations of services and replacements due to leaks occur as required.

The cost of removal related to inactive service lines is also recovered through the PRP. Delta currently has approximately 2,800 services which are inactive. Once these

services remain inactive for five years, Delta schedules removal of the service line from the premise.

- c. Excluding mandatory relocations, Delta has replaced an average of 43,000 feet per year of unprotected main. Assuming the remaining unprotected mains are replaced at a similar rate, based on current mapping records, it will take approximately 5 years to complete the replacements. The quantity of bare steel main Delta is able to replace in a given year largely depends on resource requirements. In addition to replacing bare steel pipe, the PRP includes main replacements resulting from periodic leak surveys, replacements dictated by outside agencies and the termination of inactive service lines. As in recent years, priorities at the time of work will continue to influence the pace and scope of replacement activities. Additionally, as Delta evaluates the impact of the PHMSA advisory bulletins, the pace of replacements could change. Although efforts to replace bare steel pipe will take a minimum of 5 years to replace, Delta's PRP is a continuing program to improve public safety and reliability of service for our customers as the PRP promotes the replacement of facilities other than bare steel that do not meet current material and construction standards or pose other operational issues.

- d. See attached Exhibit III.

Sponsoring Witness:

Matthew D. Wesolosky

Feet of Main by Pipe Size

Feet of Pipe	0.75	1	1.25	2	2.5	3	4	6	8	Grand Total
BARBOURVILLE										
UNKNOWN	25	1,341	184	5,764		790	3,961			12,065
BARBOURVILLE Total	25	1,341	184	5,764		790	3,961			12,065
BEREA										
1956		163		382						545
1957		63								63
UNKNOWN		76		126						202
BEREA Total		302		508						810
CORBIN										
1982		84								84
2014		30								30
UNKNOWN	730	3,607	1,972	15,002		4,188	7,676	14,164	6,474	53,813
CORBIN Total	730	3,721	1,972	15,002		4,188	7,676	14,164	6,474	53,927
LONDON										
1988		189								189
1989							674			674
UNKNOWN				26						26
LONDON Total		189		26			674			889
MANCHESTER										
1983		52								52
2005			71							71
UNKNOWN		1,113	562	747		4,642				7,064
MANCHESTER Total		1,165	633	747		4,642				7,187
MIDDLESBORO										
1980				84						84
1981				35						35
1983				206						206
1984				602						602
1997		45								45
UNKNOWN	78	1,315		19,847	445	906	18,243	4,489		45,323
MIDDLESBORO Total	78	1,360		20,774	445	906	18,243	4,489		46,295
NICHOLASVILLE										
1957		1,239		1,379						2,618
1958		1,462		2,161						3,623
1959		318		296						614
1960		72		1,114						1,186

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Feet of Pipe	Feet of Main by Pipe Size									Grand Total
	0.75	1	1.25	2	2.5	3	4	6	8	
1961		221		1,695						1,916
1962		523		1,331						1,854
1963		418		2,001						2,419
1964		578		1,334						1,912
1965		44		3,261						3,305
1966				1,351						1,351
1968		105						345	2	452
1969		34								34
1973									1,255	1,255
1975				59						59
1978				459						459
1980				32						32
1981		30								30
1983				72						72
1985		45								45
1986			210	68						278
1988								12		12
1990				320						320
UNKNOWN		1,576		13,273		26	5,513			20,388
NICHOLASVILLE Total		6,665	210	30,206		26	5,513	357	1,257	44,234
OWINGSVILLE										
1961				117						117
1965		157		73						230
1968				152						152
1983							210			210
UNKNOWN		2,119		2,071	2,091					6,281
OWINGSVILLE Total		2,276		2,413	2,091		210			6,990
STANTON										
1962		218								218
1975				49						49
1983		42								42
1984				38						38
1985						1,117				1,117
UNKNOWN		109		109						218
STANTON Total		369		196		1,117				1,682
WILLIAMSBURG										
1980		25		21						46
1982		42								42
UNKNOWN		3,829		11,697		4,268	3,737	10,390		33,921

Feet of Pipe	Feet of Main by Pipe Size								Grand Total	
	0.75	1	1.25	2	2.5	3	4	6		8
WILLIAMSBURG Total		3,896		11,718		4,268	3,737	10,390		34,009
(blank)										
TRANSMISSION										
1966				101						101
1971						457				457
1972								1,131		1,131
1973						1,191				1,191
1975								912		912
1984		7								7
1986				40						40
1987		72								72
1988		273								273
1989				150						150
1990		339								339
1991		194								194
1992		26								26
1993		106								106
1995		195								195
1997						214				214
UNKNOWN		973		4,699				2,685		8,357
TRANSMISSION Total		2,185		4,990		214	1,648	3,597	1,131	13,765
Grand Total	833	23,469	2,999	92,344	2,536	16,151	41,662	32,997	8,862	221,853

Unknown vintages result from gas systems acquired by Delta which did not have adequate records to determine the vintage of pipe.

Main replacements (unprotected)	\$ 2,200,000	{1}
Main replacements (leak survey)		{2}
Main replacements (old vintage plastic)		{3}
Main relocations		{2}
Main retirements		{2}
Service line removals	184,000	{4}
Service line replacements	203,000	{5}
Service line relocations		{2}

{1} Since inception, the average cost of mains replaced through the PRP, excluding mandatory relocations, is \$50.19 per foot. Based on replacing an average of 43,000 feet of main per year, Delta expects to spend approximately \$2.2 million per year to replace the unprotected mains.

{2} Performed as needed.

{3} Delta is currently evaluating the impact of the PHMSA advisory bulletins to determine the scope of replacements required.

{4} Delta has 2,800 inactive services which could be removed within the next five years. Under the PRP, the average cost to remove a service is \$328, resulting in an average cost of \$184,000 per year for five years.

{5} Delta has approximately 1,200 bare steel services which could be removed within the next five years. Under the PRP, the average cost to replace a service is \$847, resulting in an average cost of \$203,000 per year for five years.