



ATTORNEYS & COUNSELORS AT LAW EST. 1884

One Tampa City Center, Suite 2000
201 N. Franklin Street
P.O. Box 1531 (33601)
Tampa, FL 33602
813.273.4200 Fax: 813.273.4396

WWW.MFMLEGAL.COM
EMAIL: INFO@MFMLEGAL.COM

625 Court Street, Suite 200
P.O. Box 1669 (33757)
Clearwater, FL 33756
727.441.8966 Fax: 727.442.8470

December 15, 2016

VIA E-PORTAL FILING

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Docket No. 160159-GU – Petition for approval of 2016 depreciation study by Peoples Gas System

Dear Ms. Stauffer:

Attached for electronic filing in the above docket on behalf of Peoples Gas System, please find the following revised pages to Peoples' 2016 Depreciation Study:

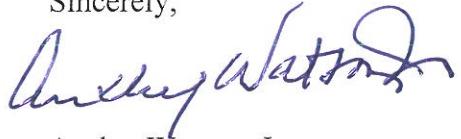
Bates Stamped Pages 2-4
Bates Stamped Page 5
Bates Stamped Pages 10-15
Bates Stamped Pages 16-17
Bates Stamped Pages 107-117
Bates Stamped Page 117A
*Bates Stamped Pages 164-171
*Bates Stamped Pages 285-295
*Bates Stamped Page 295A
*Bates Stamped Pages 325-332

The attached pages marked with an asterisk above supersede and replace the correspondingly numbered pages included in Peoples' initial filing in this docket (Document No. 04070-16). The attached pages not marked with an asterisk above supersede and replace the correspondingly numbered pages included in the revised pages filed in this docket on October 25, 2016 (*i.e.*, in Document No. 08471-16).

Ms. Carlotta S. Stauffer
December 15, 2016
Page 2

We appreciate your usual assistance, and hope you have a Merry Christmas and a Happy New Year.

Sincerely,



Ansley Watson, Jr.

AWjr/a
Attachment

cc: Parties of Record
 Ms. Kandi M. Floyd

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016**

PGS CHANGE IN DEPRECIATION

The proposed changes in depreciation rates and recovery schedules indicate the following functional changes in annual depreciation (in dollars):

Distribution	(\$16,135,439)
Transportation Equipment	\$ 37,549
General Plant	<u>(\$ 16,475)</u>
Total Change	(\$16,114,365)

The following narratives and schedules summarize the changes in depreciation rate components, annual depreciation expense, and the adequacy of the reserve for each depreciable category of plant based on the Peoples Gas System, the industry's expectations and recent experience. The study is organized into functional groups. Distribution, Transportation Equipment and General Plant are organized by plant account or sub-account. The proposed depreciation rates are at the account or sub-account level for all functions.

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016

PEOPLES GAS SYSTEM

There are four proposed changes since the last Peoples Gas System depreciation filing. The changes are related to average service lives and net salvage. The Mains - Other Than Plastic account indicates an increase in the average service life from 40 years to 55 years and a reduction of negative net salvage from (60) to (40). This is attributed to the impact of the Cast Iron and Base Steel replacement program. The Mains - Plastic account indicates an increase in the average service life from 40 years to 45 years. The Service Lines – Other Than Plastic account indicates an increase in the average service life from 32 years to 45 years. The Service Lines –Plastic account indicates an increase in the average service life from 32 years to 40 years.

In the 2011 study, reserve surpluses and deficiencies were addressed by resetting the accounts to the theoretical reserve calculation. This was done to synchronize each account with the whole life to stabilize rate fluctuations. The 2011 study yielded a total company reserve deficiency of (\$16,713,508). This reserve deficiency was allocated between the mains and service lines accounts. The 2016 preliminary review yielded a total company reserve surplus of \$807,117 before changes in rate parameters. The company is proposing in this filing reserve transfers to again synchronize each account to its theoretical reserve calculation. The 2016 study now indicates a total company reserve surplus of \$148,552,301. This is the result of the rate parameter changes made to Accounts 37600 Mains - Other Than Plastic, 37602 Mains – Plastic, 38000 Service Lines – Other Than Plastic, and 38002 Service Lines – Plastic. The company proposes that the reserve surplus be allocated across these four accounts:

37600 Mains - Other Than Plastic	\$ 50,118,249
37602 Mains - Plastic	\$ 46,330,701
38000 Service Lines - Other Than Plastic	\$ 10,609,584
38002 Service Lines - Plastic	<u>\$ 41,493,768</u>
Total Reserve Surplus	<u>\$148,552,301</u>

The 2016 preliminary review, before rate parameter changes to Accounts 37600 Mains - Other Than Plastic, 37602 Mains – Plastic, 38000 Service Lines – Other Than Plastic, and 38002 Service Lines – Plastic, yielded a total company depreciation expense reduction of (\$1,836,442) primarily driven by the reduction of the 2011 depreciation expense increases designed to eliminate reserve deficiencies. With the rate parameter changes, the 2016 depreciation study yields a total company reduction in depreciation expense of (\$16,114,365).

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016**

DISTRIBUTION PLANT:

Account 37402 - Land Rights

There have been no changes that will impact this account. No change in depreciation rate is being requested.

Account 37500 - Structures & Improvements

There have been no changes that will impact this account. No change in depreciation rate is being requested.

Account 37600 - Mains, Other than Plastic

There are some major changes that will impact this account. The theoretical reserve deficiency of (\$7,085,793) in the 2011 study is now indicating a theoretical reserve surplus of \$50,118,249 in the 2016 study. This is the result of the following rate parameter changes: the previously approved average service life was 40 years and the proposed average service life is 55 years; the previously approved net salvage factor was negative (60) and the proposed net salvage factor is negative (40). In addition, there was a change from the R3 curve to an R2 curve as a result of extending the average service life. The changes are attributed to the impact of the Cast Iron and Base Steel replacement program. The previously approved depreciation rate was 4.2% and the proposed depreciation rate is 2.2%. As a result, the annual change in depreciation expense is a reduction of (\$7,706,343).

Account 37602 - Mains, Plastic

There are some major changes that will impact this account. The theoretical reserve deficiency of (\$3,916,387) in the 2011 study is now a surplus of \$46,330,701 in the 2016 study. This is the result of the following rate parameter changes: the previously approved average service life was 40 years and the proposed average service life is 45 years. The previously approved depreciation rate was 3.1% and the proposed depreciation rate is 2.4%. As a result, the annual change in the depreciation expense is a reduction of (\$2,809,170).

Account 37800 - Measuring & Regulating Station Equipment General

There have been no major changes that will impact this account. The previously approved depreciation rate was 3.4% and the proposed depreciation rate is 3.3%. As a result, the annual change in depreciation expense is a reduction of (\$12,925).

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: DECEMBER 15, 2016**

Account 37900 - Measuring & Regulating Station Equipment City Gate

There have been no major changes that will impact this account. The previously approved depreciation rate was 3.4% and the proposed depreciation rate is 3.3%. As a result, the annual change in depreciation expense is a reduction of (\$34,586).

Account 38000 - Service Lines, Other than Plastic

There are some major changes that will impact this account. The theoretical reserve deficiency of (\$1,798,884) in the 2011 study is now a surplus \$10,609,584 in this 2016 study. This is the result of the following rate parameter changes: the previously approved average service life was 32 years and the proposed average service life is 45 years. In addition, there was a change from the R3 curve to an R0.5 curve as a result of extending the average service life. The previously approved depreciation rate was 6.6% and the proposed depreciation rate is 3.7%. As a result, the annual change in depreciation expense is a reduction of (\$1,344,914).

Account 38002 - Service Lines Plastic

There are some major changes that will impact this account. The theoretical reserve deficiency of (\$3,912,444) in the 2011 study is now a surplus \$41,493,768 in this 2016 study. This is the result of the following rate parameter changes: the previously approved average service life was 32 years and the proposed average service life is 40 years. The previously approved depreciation rate was 5.0% and the proposed depreciation rate is 3.3%. As a result, the annual change in depreciation expense is a reduction of (\$4,207,586).

Account 38100 - Meters

There have been no changes that will impact this account. No change in depreciation rate is being requested.

Account 38200 - Meter Installations

There have been no changes that will impact this account. No change in depreciation rate is being requested.

Account 38300 - Regulators

There have been no changes that will impact this account. No change in depreciation rate is being requested.

PEOPLES GAS SYSTEM
2016 Depreciation Rate Review
Comparison of Rates and Components

Account Number	Account Title	Current Rates - Effective 2011 - 2015						Company Proposed - Effective 1/1/2016												
		Curve Type	Average Service Life	Average Remaining Life	Future Net Salvage	Reserve Ratio 2011	Depreciation Rate	Whole Life			Remaining Life									
			(yrs)	(yrs)	(%)	(%)	(%)	Curve Type	Average Service Life	Net Salvage	Whole Life Rate	Average Age	Average Remaining Life	Future Net Salvage	Reserve Ratio 2015	Depreciation Rate	Round Depreciation Rate			
Distribution Plant																				
37402	Land Rights	Confirm	SQ	75	59.0	0	21.96	1.3	Dep Val	75	0	1.3	Dep Val	59.3	59.0	0	20.90	1.3	1.3	
37500	Structures & Improvements	Confirm	R3	40	27.0	0	32.90	2.5	Dep Val	40	0	2.5	Dep Val	24.2	24.0	0	39.58	2.5	2.5	
37600	Mains Steel	Confirm	R3	40	25.0	(60)	56.05	4.2	Dep Val	55	(40)	2.5	Dep Val	16.8	41.2	41.0	(40)	48.16	2.2	2.2
37602	Mains Plastic	Confirm	R3	40	30.0	(25)	31.40	3.1	Dep Val	45	(25)	2.8	Dep Val	12.1	33.8	34.0	(25)	42.75	2.4	2.4
37800	Meas & Reg Station Eqp Gen	R1	31	25.0	(5)	20.74	3.4	Dep Val	31	(5)	3.4	Dep Val	9.4	24.7	25.0	(5)	21.46	3.4	3.3	
37900	Meas & Reg Station Eqp City	R1	31	25.0	(5)	20.28	3.4	Dep Val	31	(5)	3.4	Dep Val	8.1	25.5	26.0	(5)	18.70	3.4	3.3	
38000	Services Steel	Confirm	R3	32	13.6	(100)	110.83	6.6	Dep Val	45	(100)	4.4	Dep Val	24.0	31.1	31.0	(100)	84.71	3.7	3.7
38002	Services Plastic	Confirm	R3	32	21.0	(55)	49.92	5.0	Dep Val	40	(55)	3.9	Dep Val	12.7	28.3	28.0	(55)	62.07	3.3	3.3
38100	Meters	Confirm	L1	16	11.1	5	29.16	5.9	Dep Val	16	5	5.9	Dep Val	8.5	10.8	10.8	5	31.17	5.9	5.9
38200	Meter Installations	Confirm	R4	27	16.5	(20)	46.54	4.5	Dep Val	27	(20)	4.4	Dep Val	13.3	15.3	15.3	(20)	51.87	4.5	4.5
38300	House Regulators	Confirm	R2	28	17.1	0	38.98	3.6	Dep Val	28	0	3.6	Dep Val	14.9	16.6	16.6	0	40.54	3.6	3.6
38400	House Regulator Installs	Confirm	R4	27	16.6	(20)	46.03	4.5	Dep Val	27	(20)	4.4	Dep Val	12.5	15.7	15.7	(20)	50.32	4.4	4.4
38500	Meas & Reg Station Eqp Ind	Confirm	R4	32	15.7	0	50.91	3.1	Dep Val	32	0	3.1	Dep Val	20.6	12.9	12.9	0	59.64	3.1	3.1
38600	Other Property Cust Premise	Confirm	R1	15	15.0	0	0.00	6.7	Dep Val	15	0	6.7	Dep Val	0.0	15.0	15.0	0	0.00	6.7	6.7
38700	Other Equipment	Confirm	S2	16	9.9	0	38.01	6.3	Dep Val	16	0	6.3	Dep Val	6.8	10.2	10.2	0	36.21	6.3	6.3

PEOPLES GAS SYSTEM
2016 Depreciation Rate Review
Comparison of Rates and Components

Account Number	Account Title	Current Rates - Effective 2011 - 2015						Company Proposed - Effective 1/1/2016										
		Curve Type	Average Service Life	Average Remaining Life	Future Net Salvage	Reserve Ratio 2011	Depreciation Rate	Whole Life			Remaining Life							Round Depreciation Rate
			(yrs)	(yrs)	(%)	(%)	(%)	Curve Type	Average Service Life	Future Net Salvage	Whole Life Rate	Average Age	Remaining Life	Average Life	Future Net Salvage	Reserve Ratio 2015	Depreciation Rate (%)	Round Depreciation Rate (%)
Transportation Equipment																		
39201	Vehicles up to 1/2 Tons	S1	8	4.8	10	36.36	11.2	S1	8	10	11.3	4.9	4.5	4.5	10	38.92	11.4	11.4
39202	Vehicles from 1/2 - 1 Tons	S1	7	3.3	10	48.06	12.7	S1	7	10	12.9	5.4	3.3	3.3	10	47.17	13.0	13.0
39204	Trailers & Other	S3	20	7.1	20	51.49	4.0	S3	20	20	4.0	5.4	15.5	15.5	20	18.09	4.0	4.0
39205	Vehicles over 1 Ton	S4	12	4.7	10	55.12	7.4	S4	12	10	7.5	5.8	7.0	7.0	10	37.17	7.5	7.5
General Plant																		
30100	Organization Costs	Not Depreciable				0.0	Not Depreciable			0.0	Not Depreciable							0.0 0.0
30200	Franchise & Consents	25 year Amortizable				4.0	SQ	25	0	4.0	0.0	25.0	25.0	0	0.00	4.0	4.0	
30300	Misc Intangible Plant	25 year Amortizable				4.0	SQ	25	0	4.0	20.5	4.5	4.5	0	81.93	4.0	4.0	
30301	Custom Intangible Plant	15 year Amortizable				6.7	SQ	15	0	6.7	5.2	9.9	9.9	0	33.98	6.7	6.7	
39000	Structures & Improvements	R3	40	36.0	0	10.61	2.5	R3	40	0	2.5	5.7	34.4	34.0	0	13.90	2.5	2.5
39100	Office Furniture	R1	15	12.4	0	17.43	6.7	SQ	15	0	6.7	9.2	5.8	5.8	0	61.01	6.7	6.7
39101	Computer Equipment	S2	8	3.1	0	61.18	12.5	SQ	8	0	12.5	6.6	1.8	1.8	0	77.82	12.3	12.3
39102	Office Equipment	R1	15	7.8	0	47.70	6.7	SQ	15	0	6.7	6.8	8.5	8.5	0	43.42	6.7	6.7
39300	Stores Equipment	S4	25	2.5	0	89.97	4.0	S4	25	0	4.0	3.5	21.5	22.0	0	14.03	4.0	3.9
39400	Tools, Shop & Garage Equip	S1	15	7.8	0	48.19	6.6	SQ	15	0	6.7	4.0	11.1	11.1	0	25.83	6.7	6.7
39401	CNC Station Equipment	New Rate Requested				0.0	20			0	5.0	0.0	20.0	20.0	0	0.00	5.0	5.0
39500	Laboratory Equipment	S1	20	8.3	0	58.54	5.0	SQ	20	0	5.0	0.0	20.0	20.0	0	0.00	5.0	5.0
39600	Power Operated Equipment	S4	15	5.8	5	57.96	6.4	S4	15	5	6.3	8.9	8.0	8.0	5	44.63	6.3	6.3
39700	Communication Equipment	S3	12	5.0	0	58.06	8.4	SQ	12	0	8.3	7.8	4.6	4.6	0	62.08	8.2	8.2
39800	Miscellaneous Equipment	R2	17	7.1	0	58.19	5.9	SQ	17	0	5.9	15.0	3.8	3.8	0	77.38	6.0	6.0

11

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY**

FILED: JUNE 28, 2016

REVISED: OCTOBER 14, 2016

2ND REVISED: OCTOBER 25, 2016

3RD REVISED: DECEMBER 15, 2016

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY**

FILED: JUNE 28, 2016

REVISED: OCTOBER 14, 2016

2ND REVISED: OCTOBER 25, 2016

3RD REVISED: DECEMBER 15, 2016

**PEOPLES GAS SYSTEM
2016 Depreciation Rate Review
Change in Annual Accruals**

Account Number	Account Title	Current Rates - Effective 2011 - 2015				Company Proposed - Effective 1/1/2016					
		Total Plant Cost 12/31/2015	Post Transfer Accumulated Reserve 12/31/2015	Depre- ciation Rate	Depre- ciation Expense	Whole Life			Remaining Life		
		(\$)	(\$)	(%)	(\$)	Depre- ciation Rate (%)	Depre- ciation Expense (\$)	Change in Depreciation Expense (\$)	Depre- ciation Rate (%)	Depre- ciation Expense (\$)	Change in Depreciation Expense (\$)
Distribution Plant											
37402	Land Rights	2,836,412	592,695	1.3	36,873	1.3	36,873	-	1.3	36,873	-
37500	Structures & Improvements	19,415,983	7,684,556	2.5	485,400	2.5	485,400	-	2.5	485,400	-
37600	Mains Steel	385,317,174	185,571,117	4.2	16,183,321	2.5	9,632,929	(6,550,392)	2.2	8,476,978	(7,706,343)
37602	Mains Plastic	401,310,012	171,546,122	3.1	12,440,610	2.8	11,236,680	(1,203,930)	2.4	9,631,440	(2,809,170)
37800	Meas & Reg Station Eqp Gen	12,924,984	2,773,069	3.4	439,449	3.4	439,449	-	3.3	426,524	(12,925)
37900	Meas & Reg Station Eqp City	34,586,108	6,466,837	3.4	1,175,928	3.4	1,175,928	-	3.3	1,141,342	(34,586)
38000	Services Steel	46,376,347	39,283,507	6.6	3,060,839	4.4	2,040,559	(1,020,280)	3.7	1,715,925	(1,344,914)
38002	Services Plastic	247,505,036	153,636,596	5.0	12,375,252	3.9	9,652,696	(2,722,556)	3.3	8,167,666	(4,207,586)
38100	Meters	63,032,755	19,646,963	5.9	3,718,933	5.9	3,718,933	-	5.9	3,718,933	-
38200	Meter Installations	49,175,177	25,507,475	4.5	2,212,883	4.4	2,163,708	(49,175)	4.5	2,212,883	-
38300	House Regulators	14,633,325	5,932,047	3.6	526,800	3.6	526,800	-	3.6	526,800	-
38400	House Regulator Installs	19,915,060	10,020,798	4.5	896,178	4.4	876,263	(19,915)	4.4	876,263	(19,915)
38500	Meas & Reg Station Eqp Ind	9,089,094	5,420,679	3.1	281,762	3.1	281,762	-	3.1	281,762	-
38600	Other Property Cust Premise	-	-	6.7	-	6.7	-	-	6.7	-	-
38700	Other Equipment	5,889,159	2,132,612	6.3	371,017	6.3	371,017	-	6.3	371,017	-
Total Distribution Plant		1,312,006,627	636,215,072	4.1	54,205,245	3.2	42,638,997	(11,566,248)	2.9	38,069,806	(16,135,439)

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY

FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016

PEOPLES GAS SYSTEM
2016 Depreciation Rate Review
Change in Annual Accruals

Account Number	Account Title	Current Rates - Effective 2011 - 2015				Company Proposed - Effective 1/1/2016					
		Total Plant Cost 12/31/2015	Post Transfer Accumulated Reserve 12/31/2015	Depre- ciation Rate (%)	Depre- ciation Expense (\$)	Whole Life			Remaining Life		
						Depre- ciation Rate (%)	Depre- ciation Expense (\$)	Change in Depreciation Expense (\$)	Depre- ciation Rate (%)	Depre- ciation Expense (\$)	Change in Depreciation Expense (\$)
Transportation Equipment											
39201	Vehicles up to 1/2 Tons	8,035,686	3,127,353	11.2	899,997	11.3	908,033	8,036	11.4	916,068	16,071
39202	Vehicles from 1/2 - 1 Tons	6,569,197	3,098,777	12.7	834,288	12.9	847,426	13,138	13.0	853,996	19,708
39204	Trailers & Other	1,153,494	208,703	4.0	46,140	4.0	46,140	-	4.0	46,140	-
39205	Vehicles over 1 Ton	1,769,839	657,801	7.4	130,968	7.5	132,738	1,770	7.5	132,738	1,770
General Plant											
30100	Organization Costs	12,620	-	0.0	-	0.0	-	-	0.0	-	-
30200	Franchise & Consents	-	-	4.0	-	4.0	-	-	4.0	-	-
30300	Misc Intangible Plant	815,325	668,002	4.0	32,613	4.0	32,613	-	4.0	32,613	-
30301	Custom Intangible Plant	25,717,580	8,738,083	6.7	1,723,078	6.7	1,723,078	-	6.7	1,723,078	-
39000	Structures & Improvements	149,951	20,841	2.5	3,749	2.5	3,749	-	2.5	3,749	-
39100	Office Furniture	1,470,244	896,947	6.7	98,506	6.7	98,506	-	6.7	98,506	-
39101	Computer Equipment	5,293,685	4,119,598	12.5	661,711	12.5	661,711	-	12.3	651,123	(10,588)
39102	Office Equipment	922,076	400,399	6.7	61,779	6.7	61,779	-	6.7	61,779	-
39300	Stores Equipment	1,283	180	4.0	51	4.0	51	-	3.9	50	(1)
39400	Tools, Shop & Garage Equip	6,105,880	1,577,372	6.6	402,988	6.7	409,094	6,106	6.7	409,094	6,106
39401	CNG Station Equipment	-	-	0.0	-	5.0	-	-	5.0	-	-
39500	Laboratory Equipment	-	-	5.0	-	5.0	-	-	5.0	-	-
39600	Power Operated Equipment	2,775,668	1,238,693	6.4	177,643	6.3	174,867	(2,776)	6.3	174,867	(2,776)
39700	Communication Equipment	4,841,709	3,005,855	8.4	406,704	8.3	401,862	(4,842)	8.2	397,020	(9,684)
39800	Miscellaneous Equipment	468,234	362,299	5.9	27,626	5.9	27,626	-	6.0	28,094	468
Total General Plant		66,102,470	28,120,903	8.3	5,507,841	8.4	5,529,273	21,432	8.4	5,528,915	21,074
Total Distribution & General Plant		1,378,109,097	664,335,975	4.3	59,713,086	3.5	48,168,270	(11,544,816)	3.2	43,598,721	(16,114,365)

PEOPLES GAS SYSTEM
2016 Depreciation Rate Review
Comparison of Reserve - Actual vs Theoretical

Account Number	Account Title	Total Plant Cost	Post Transfer		Theoretical Reserve Amount	Theoretical Reserve Ratio	Actual Minus Theoretical	Actual over Theoretical	
		12/31/2015	Accumulated Reserve 12/31/2015	Ratio (%)	(\\$)	(\\$)	(\\$)	(%)	
<u>Distribution Plant</u>									
ASR									
37402	Land Rights	2,836,412	592,695	20.90	592,695	20.90	-	100	
37500	Structures & Improvements	19,415,983	7,684,556	39.58	7,684,556	39.58	-	100	
37600	Mains Steel	385,317,174	185,571,117	48.16	135,452,868	35.15	50,118,249	137	
37602	Mains Plastic	401,310,012	171,546,122	42.75	125,215,421	31.20	46,330,701	137	
37800	Meas & Reg Station Eqp Gen	12,924,984	2,773,069	21.46	2,773,069	21.46	-	100	
37900	Meas & Reg Station Eqp City	34,586,108	6,466,837	18.70	6,466,837	18.70	-	100	
38000	Services Steel	46,376,347	39,283,507	84.71	28,673,923	61.83	10,609,584	137	
38002	Services Plastic	247,505,036	153,636,596	62.07	112,142,828	45.31	41,493,768	137	
38100	Meters	63,032,755	19,646,963	31.17	19,646,963	31.17	-	100	
38200	Meter Installations	49,175,177	25,507,475	51.87	25,507,475	51.87	-	100	
38300	House Regulators	14,633,325	5,932,047	40.54	5,932,047	40.54	-	100	
38400	House Regulator Installs	19,915,060	10,020,798	50.32	10,020,798	50.32	-	100	
38500	Meas & Reg Station Eqp Ind	9,089,094	5,420,679	59.64	5,420,679	59.64	-	100	
38600	Other Property Cust Premise	-	-	0.00	0.00	-	0	0	
38700	Other Equipment	5,889,159	2,132,612	36.21	2,132,612	36.21	-	100	
Total Distribution Plant		1,312,006,627	636,215,072	48.49	487,662,771	37.17	148,552,301	130	

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY**

FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016

**PEOPLES GAS SYSTEM
2016 Depreciation Rate Review
Comparison of Reserve - Actual vs Theoretical**

Account Number	Account Title	Total Plant Cost	Post Transfer		Theoretical Reserve Amount	Theoretical Reserve Ratio	Actual Minus Theoretical	Actual over Theoretical (%)
		12/31/2015	Accumulated Reserve	12/31/2015				
<u>Transportation Equipment</u>								
39201	Vehicles up to 1/2 Tons	8,035,686	3,127,353	38.92	3,127,353	38.92	-	100
39202	Vehicles from 1/2 - 1 Tons	6,569,197	3,098,777	47.17	3,098,777	47.17	-	100
39204	Trailers & Other	1,153,494	208,703	18.09	208,703	18.09	-	100
39205	Vehicles over 1 Ton	1,769,839	657,801	37.17	657,801	37.17	-	100
<u>General Plant</u>								
30100	Organization Costs	12,620	-	0.00	-	0.00	-	0
30200	Franchise & Consents	-	-	0.00	-	0.00	-	0
30300	Misc Intangible Plant	815,325	668,002	81.93	668,002	81.93	-	100
30301	Custom Intangible Plant	25,717,580	8,738,083	33.98	8,738,083	33.98	-	100
39000	Structures & Improvements	149,951	20,841	13.90	20,841	13.90	-	100
39100	Office Furniture	1,470,244	896,947	61.01	896,947	61.01	-	100
39101	Computer Equipment	5,293,685	4,119,598	77.82	4,119,598	77.82	-	100
39102	Office Equipment	922,076	400,399	43.42	400,399	43.42	-	100
39300	Stores Equipment	1,283	180	14.03	180	14.03	-	100
39400	Tools, Shop & Garage Equip	6,105,880	1,577,372	25.83	1,577,372	25.83	-	100
39401	CNC Station Equipment	-	-	0.00	-	0.00	-	0
39500	Laboratory Equipment	-	-	0.00	-	0.00	-	0
39600	Power Operated Equipment	2,775,668	1,238,693	44.63	1,238,693	44.63	-	100
39700	Communication Equipment	4,841,709	3,005,855	62.08	3,005,855	62.08	-	100
39800	Miscellaneous Equipment	468,234	362,299	77.38	362,299	77.38	-	100
Total General Plant		66,102,470	28,120,903	42.54	28,120,903	42.54	-	100
Total Distribution & General Plant		1,378,109,097	664,335,975	48.21	515,783,674	37.43	148,552,301	129

PEOPLES GAS SYSTEM
2016 Depreciation Rate Review
Summary of Reserve Transfers

Account Number	Account Title	Before Reserve Transfers 12/31/2015	Proposed Reserve Transfers	After Reserve Transfers 12/31/2015
		(\$)	(\$)	(\$)
Distribution Plant				
37402	Land Rights	654,666	(61,971)	592,695
37500	Structures & Improvements	7,928,741	(244,185)	7,684,556
37600	Mains Steel	218,020,297	(32,449,180)	185,571,117
37602	Mains Plastic	137,184,318	34,361,804	171,546,122
37800	Meas & Reg Station Eqp Gen	3,080,334	(307,265)	2,773,069
37900	Meas & Reg Station Eqp City	7,637,719	(1,170,882)	6,466,837
38000	Services Steel	51,484,453	(12,200,946)	39,283,507
38002	Services Plastic	134,479,130	19,157,466	153,636,596
38100	Meters	21,875,201	(2,228,238)	19,646,963
38200	Meter Installations	25,829,866	(322,391)	25,507,475
38300	House Regulators	6,517,882	(585,835)	5,932,047
38400	House Regulator Installs	9,903,729	117,069	10,020,798
38500	Meas & Reg Station Eqp Ind	5,427,013	(6,334)	5,420,679
38600	Other Property Cust Premise	-	-	-
38700	Other Equipment	2,188,642	(56,030)	2,132,612
Total Distribution Plant		632,211,992	4,003,081	636,215,072

PEOPLES GAS SYSTEM
2016 Depreciation Rate Review
Summary of Reserve Transfers

Account Number	Account Title	Before Reserve Transfers 12/31/2015	Proposed Reserve Transfers	After Reserve Transfers 12/31/2015
		(\$)	(\$)	(\$)
<u>Transportation Equipment</u>				
39201	Vehicles up to 1/2 Tons	3,196,303	(68,950)	3,127,353
39202	Vehicles from 1/2 - 1 Tons	3,899,377	(800,600)	3,098,777
39204	Trailers & Other	211,220	(2,517)	208,703
39205	Vehicles over 1 Ton	669,848	(12,047)	657,801
<u>General Plant</u>				
30100	Organization Costs	3,116	(3,116)	-
30200	Franchise & Consents	0	(0)	-
30300	Misc Intangible Plant	757,491	(89,489)	668,002
30301	Custom Intangible Plant	12,337,858	(3,599,775)	8,738,083
39000	Structures & Improvements	21,023	(182)	20,841
39100	Office Furniture	682,484	214,463	896,947
39101	Computer Equipment	4,204,474	(84,876)	4,119,598
39102	Office Equipment	289,367	111,032	400,399
39300	Stores Equipment	(4,568)	4,748	180
39400	Tools, Shop & Garage Equip	1,175,475	401,897	1,577,372
39401	CNC Station Equipment	-	-	-
39500	Laboratory Equipment	(14,417)	14,417	-
39600	Power Operated Equipment	1,310,249	(71,556)	1,238,693
39700	Communication Equipment	3,064,545	(58,690)	3,005,855
39800	Miscellaneous Equipment	320,139	42,160	362,299
<hr/>				
Total General Plant		32,123,984	(4,003,081)	28,120,903
<hr/>				
Total Distribution & General Plant		664,335,975	0	664,335,975
<hr/>				

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37600. Mains Steel

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 55.0 YRS CURVE: IOWA R2 O.C. SALVAGE %: -40.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
2015	0.50	6668021.	0.008230	54881.	6613140.
2014	1.50	17346600.	0.024638	427383.	16919217.
2013	2.50	36459850.	0.040956	1493248.	34966602.
2012	3.50	15207289.	0.057190	869698.	14337591.
2011	4.50	13122313.	0.073343	962426.	12159887.
2010	5.50	28496989.	0.089405	2547771.	25949218.
2009	6.50	25385637.	0.105364	2674723.	22710914.
2008	7.50	5150015.	0.121233	624349.	4525666.
2007	8.50	3643115.	0.137006	499129.	3143986.
2006	9.50	6066988.	0.152679	926301.	5140687.
2005	10.50	3620456.	0.168254	609157.	3011299.
2004	11.50	3649801.	0.183728	670571.	2979230.
2003	12.50	6722219.	0.199090	1338325.	5383894.
2002	13.50	7496866.	0.214347	1606933.	5889933.
2001	14.50	18296363.	0.229494	4198898.	14097465.
2000	15.50	17330203.	0.244531	4237764.	13092439.
1999	16.50	29122741.	0.259455	7556029.	21566712.
1998	17.50	13076391.	0.274263	3586370.	9490021.
1997	18.50	5370323.	0.288945	1551727.	3818596.
1996	19.50	3546532.	0.303516	1076428.	2470104.
1995	20.50	7480831.	0.317964	2378639.	5102192.
1994	21.50	3535358.	0.332286	1174749.	2360609.
1993	22.50	4159082.	0.346480	1441039.	2718043.
1992	23.50	3295834.	0.360540	1188280.	2107554.
1991	24.50	13981345.	0.374478	5235707.	8745638.
1990	25.50	3746580.	0.388275	1454702.	2291878.
1989	26.50	3376494.	0.401945	1357166.	2019328.
1988	27.50	5573469.	0.415478	2315654.	3257815.
1987	28.50	3262606.	0.428860	1399202.	1863404.
1986	29.50	8079785.	0.442096	3572043.	4507742.
1985	30.50	2269624.	0.455194	1033120.	1236504.
1984	31.50	3018347.	0.468143	1413019.	1605328.
1983	32.50	2633048.	0.480944	1266350.	1366698.
1982	33.50	2471746.	0.493586	1220020.	1251726.
1981	34.50	4304203.	0.506073	2178239.	2125964.
1980	35.50	2643173.	0.518398	1370216.	1272957.
1979	36.50	3298881.	0.530567	1750277.	1548604.
1978	37.50	3279738.	0.542569	1779483.	1500255.
1977	38.50	1588096.	0.554409	880454.	707642.
1976	39.50	1811773.	0.566068	1025587.	786186.
1975	40.50	2438703.	0.577557	1408491.	1030212.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016**

REVISED: OCTOBER 14, 2016

2ND REVISED: OCTOBER 25, 2016

3RD REVISED: DECEMBER 15, 2016

DEPRECIATION/VALUATION SYSTEM

PGS - 2016 CASE

ACCOUNT NO. 37600. Mains Steel

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 55.0 YRS CURVE: IOWA R2 O.C. SALVAGE %: -40.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
1974	41.50	3304470.	0.588872	1945909.	1358561.
1973	42.50	3011007.	0.600010	1806634.	1204373.
1972	43.50	1962441.	0.610971	1198994.	763447.
1971	44.50	1912444.	0.621747	1189056.	723388.
1970	45.50	1689746.	0.632332	1068481.	621265.
1969	46.50	1719894.	0.642729	1105426.	614468.
1968	47.50	3557823.	0.652941	2323047.	1234776.
1967	48.50	1729454.	0.662962	1146562.	582892.
1966	49.50	897930.	0.672793	604121.	293809.
1965	50.50	1088172.	0.682416	742586.	345586.
1964	51.50	1020173.	0.691851	705808.	314365.
1963	52.50	770057.	0.701087	539877.	230180.
1962	53.50	648565.	0.710132	460567.	187998.
1961	54.50	641400.	0.718976	461151.	180249.
1960	55.50	2604002.	0.727621	1894728.	709274.
1959	56.50	2247318.	0.736068	1654179.	593139.
1958	57.50	1705593.	0.744321	1269510.	436083.
1957	58.50	348676.	0.752383	262338.	86338.
1956	59.50	256224.	0.760250	194794.	61430.
1955	60.50	106394.	0.767929	81703.	24691.
1954	61.50	138688.	0.775421	107542.	31146.
1953	62.50	152429.	0.782725	119310.	33119.
1952	63.50	124438.	0.789856	98288.	26150.
1951	64.50	90969.	0.796812	72485.	18484.
1950	65.50	83542.	0.803594	67134.	16408.
1949	66.50	22840.	0.810217	18505.	4335.
1948	67.50	88952.	0.816689	72646.	16306.
1947	68.50	270273.	0.823013	222438.	47835.
1946	69.50	152131.	0.829196	126146.	25985.
1945	70.50	23802.	0.835240	19880.	3922.
1944	71.50	9533.	0.841162	8019.	1514.
1943	72.50	32977.	0.846992	27931.	5046.
1942	73.50	50709.	0.852715	43240.	7469.
1941	74.50	77140.	0.858345	66213.	10927.
1940	75.50	197268.	0.863899	170420.	26848.
1939	76.50	29338.	0.869376	25506.	3832.
1938	77.50	22029.	0.874798	19271.	2758.
1937	78.50	59149.	0.880197	52063.	7086.
1936	79.50	35747.	0.885555	31656.	4091.
1935	80.50	1109.	0.890878	988.	121.
1934	81.50	156144.	0.896179	139933.	16211.

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37600. Mains Steel

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 55.0 YRS CURVE: IOWA R2 O.C. SALVAGE %: -40.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
1933	82.50	831.	0.901438	749.	82.
1932	83.50	1272.	0.906744	1153.	119.
1931	84.50	2753.	0.912035	2511.	242.
1930	85.50	8685.	0.917309	7967.	718.
1929	86.50	4399.	0.922565	4058.	341.
1928	87.50	8405.	0.927787	7798.	607.
1927	88.50	99780.	0.933002	93095.	6685.
1926	89.50	117700.	0.938230	110430.	7270.
1925	90.50	4931.	0.943425	4652.	279.
SUBTOTAL :			0.251097	96752049.	288565125.
NET SALVAGE: -40.0%				38700819.	-38700819.
TOTAL :		385317174.	0.351536	135452868.	249864306.

WEIGHTED AGE: 16.8 YEARS
REMAINING LIFE: 41.2 YEARS

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY**

FILED: JUNE 28, 2016

REVISED: OCTOBER 14, 2016

2ND REVISED: OCTOBER 25, 2016

3RD REVISED: DECEMBER 15, 2016

DEPRECIATION/VALUATION SYSTEM

PGS - 2016 CASE

ACCOUNT NO. 37600. Mains Steel

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 55.0 YRS CURVE: IOWA R2 O.C. SALVAGE %: -40.

I YEAR	II INTERVAL	III ORIGINAL COST 12/31/15	IV ANNUAL DEPRECIATION RATE	V ORIGINAL COST ANNUAL DEPRECIATION
2015	0.50 - 1.50	6668021.	0.018182	121237.
2014	1.50 - 2.50	17346600.	0.018182	315393.
2013	2.50 - 3.50	36459850.	0.018182	662908.
2012	3.50 - 4.50	15207289.	0.018182	276497.
2011	4.50 - 5.50	13122313.	0.018182	238588.
2010	5.50 - 6.50	28496989.	0.018182	518128.
2009	6.50 - 7.50	25385637.	0.018182	461558.
2008	7.50 - 8.50	5150015.	0.018182	93637.
2007	8.50 - 9.50	3643115.	0.018182	66239.
2006	9.50 - 10.50	6066988.	0.018182	110309.
2005	10.50 - 11.50	3620456.	0.018182	65827.
2004	11.50 - 12.50	3649801.	0.018182	66360.
2003	12.50 - 13.50	6722219.	0.018182	122222.
2002	13.50 - 14.50	7496866.	0.018182	136307.
2001	14.50 - 15.50	18296363.	0.018182	332662.
2000	15.50 - 16.50	17330203.	0.018182	315095.
1999	16.50 - 17.50	29122741.	0.018182	529505.
1998	17.50 - 18.50	13076391.	0.018182	237753.
1997	18.50 - 19.50	5370323.	0.018182	97642.
1996	19.50 - 20.50	3546532.	0.018182	64483.
1995	20.50 - 21.50	7480831.	0.018182	136015.
1994	21.50 - 22.50	3535358.	0.018182	64279.
1993	22.50 - 23.50	4159082.	0.018182	75620.
1992	23.50 - 24.50	3295834.	0.018182	59924.
1991	24.50 - 25.50	13981345.	0.018182	254207.
1990	25.50 - 26.50	3746580.	0.018182	68120.
1989	26.50 - 27.50	3376494.	0.018182	61391.
1988	27.50 - 28.50	5573469.	0.018182	101336.
1987	28.50 - 29.50	3262606.	0.018182	59320.
1986	29.50 - 30.50	8079785.	0.018182	146905.
1985	30.50 - 31.50	2269624.	0.018182	41266.
1984	31.50 - 32.50	3018347.	0.018182	54879.
1983	32.50 - 33.50	2633048.	0.018182	47874.
1982	33.50 - 34.50	2471746.	0.018182	44941.
1981	34.50 - 35.50	4304203.	0.018182	78258.
1980	35.50 - 36.50	2643173.	0.018182	48058.
1979	36.50 - 37.50	3298881.	0.018182	59980.
1978	37.50 - 38.50	3279738.	0.018182	59632.
1977	38.50 - 39.50	1588096.	0.018182	28875.
1976	39.50 - 40.50	1811773.	0.018182	32941.
1975	40.50 - 41.50	2438703.	0.018182	44340.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY**

FILED: JUNE 28, 2016

REVISED: OCTOBER 14, 2016

2ND REVISED: OCTOBER 25, 2016

3RD REVISED: DECEMBER 15, 2016

DEPRECIATION/VALUATION SYSTEM

PGS - 2016 CASE

ACCOUNT NO. 37600. Mains Steel

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 55.0 YRS CURVE: IOWA R2 O.C. SALVAGE %: -40.

I YEAR	II INTERVAL	III ORIGINAL COST 12/31/15	IV ANNUAL DEPRECIATION RATE	V ORIGINAL COST ANNUAL DEPRECIATION
1974	41.50 - 42.50	3304470.	0.018182	60081.
1973	42.50 - 43.50	3011007.	0.018182	54746.
1972	43.50 - 44.50	1962441.	0.018182	35681.
1971	44.50 - 45.50	1912444.	0.018182	34772.
1970	45.50 - 46.50	1689746.	0.018182	30723.
1969	46.50 - 47.50	1719894.	0.018182	31271.
1968	47.50 - 48.50	3557823.	0.018182	64688.
1967	48.50 - 49.50	1729454.	0.018182	31445.
1966	49.50 - 50.50	897930.	0.018182	16326.
1965	50.50 - 51.50	1088172.	0.018182	19785.
1964	51.50 - 52.50	1020173.	0.018182	18549.
1963	52.50 - 53.50	770057.	0.018182	14001.
1962	53.50 - 54.50	648565.	0.018182	11792.
1961	54.50 - 55.50	641400.	0.018182	11662.
1960	55.50 - 56.50	2604002.	0.018182	47346.
1959	56.50 - 57.50	2247318.	0.018182	40860.
1958	57.50 - 58.50	1705593.	0.018182	31011.
1957	58.50 - 59.50	348676.	0.018182	6340.
1956	59.50 - 60.50	256224.	0.018182	4659.
1955	60.50 - 61.50	106394.	0.018182	1934.
1954	61.50 - 62.50	138688.	0.018182	2522.
1953	62.50 - 63.50	152429.	0.018182	2771.
1952	63.50 - 64.50	124438.	0.018182	2263.
1951	64.50 - 65.50	90969.	0.018182	1654.
1950	65.50 - 66.50	83542.	0.018182	1519.
1949	66.50 - 67.50	22840.	0.018182	415.
1948	67.50 - 68.50	88952.	0.018182	1617.
1947	68.50 - 69.50	270273.	0.018182	4914.
1946	69.50 - 70.50	152131.	0.018182	2766.
1945	70.50 - 71.50	23802.	0.018182	433.
1944	71.50 - 72.50	9533.	0.018182	173.
1943	72.50 - 73.50	32977.	0.018182	600.
1942	73.50 - 74.50	50709.	0.018182	922.
1941	74.50 - 75.50	77140.	0.018182	1403.
1940	75.50 - 76.50	197268.	0.018182	3587.
1939	76.50 - 77.50	29338.	0.018182	533.
1938	77.50 - 78.50	22029.	0.018182	401.
1937	78.50 - 79.50	59149.	0.018182	1075.
1936	79.50 - 80.50	35747.	0.018182	650.
1935	80.50 - 81.50	1109.	0.018182	20.
1934	81.50 - 82.50	156144.	0.018182	2839.

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37600. Mains Steel

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 55.0 YRS CURVE: IOWA R2 O.C. SALVAGE %: -40.

YEAR	AGE INTERVAL	ORIGINAL COST 12/31/15	ANNUAL DEPRECIATION RATE	V	
				ORIGINAL COST	ANNUAL DEPRECIATION
1933	82.50 - 83.50	831.	0.018182	15.	
1932	83.50 - 84.50	1272.	0.018182	23.	
1931	84.50 - 85.50	2753.	0.018182	50.	
1930	85.50 - 86.50	8685.	0.018182	158.	
1929	86.50 - 87.50	4399.	0.018182	80.	
1928	87.50 - 88.50	8405.	0.018182	153.	
1927	88.50 - 89.50	99780.	0.018182	1814.	
1926	89.50 - 90.50	117700.	0.018182	2140.	
1925	90.50 - 91.50	4931.	0.018182	90.	
SUBTOTAL :		385317174.	0.018182	7005779.	
NET SALVAGE: -40.0 %				2802312.	
TOTAL :		385317174.	0.025455	9808090.	

MONTHLY RATE: 0.002121

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37600. Mains Steel

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 55.0 YRS CURVE: IOWA

R2

YEAR INSTALLED	AGE AT 12/31/15	ORIGINAL COST	AVERAGE REMAINING LIFE	WEIGHTED DOLLAR YEARS	
				V	
2015	0.50	6668021.	54.5	363722070.	
2014	1.50	17346600.	53.6	930555312.	
2013	2.50	36459850.	52.7	1923159810.	
2012	3.50	15207289.	51.9	788566128.	
2011	4.50	13122313.	51.0	668792614.	
2010	5.50	28496989.	50.1	1427204541.	
2009	6.50	25385637.	49.2	1249098098.	
2008	7.50	5150015.	48.3	248911191.	
2007	8.50	3643115.	47.5	172918959.	
2006	9.50	6066988.	46.6	282737298.	
2005	10.50	3620456.	45.7	165621146.	
2004	11.50	3649801.	44.9	163857365.	
2003	12.50	6722219.	44.0	296113637.	
2002	13.50	7496866.	43.2	323945734.	
2001	14.50	18296363.	42.4	775359253.	
2000	15.50	17330203.	41.6	720082903.	
1999	16.50	29122741.	40.7	1186167095.	
1998	17.50	13076391.	39.9	521950232.	
1997	18.50	5370323.	39.1	210022404.	
1996	19.50	3546532.	38.3	135855466.	
1995	20.50	7480831.	37.5	280620100.	
1994	21.50	3535358.	36.7	129833279.	
1993	22.50	4159082.	35.9	149492103.	
1992	23.50	3295834.	35.2	115915250.	
1991	24.50	13981345.	34.4	481009265.	
1990	25.50	3746580.	33.6	126053049.	
1989	26.50	3376494.	32.9	111062838.	
1988	27.50	5573469.	32.1	179179496.	
1987	28.50	3262606.	31.4	102487051.	
1986	29.50	8079785.	30.7	247925372.	
1985	30.50	2269624.	30.0	68007598.	
1984	31.50	3018347.	29.3	88292896.	
1983	32.50	2633048.	28.5	75168280.	
1982	33.50	2471746.	27.9	68844831.	
1981	34.50	4304203.	27.2	116927816.	
1980	35.50	2643173.	26.5	70012537.	
1979	36.50	3298881.	25.8	85173068.	
1978	37.50	3279738.	25.2	82513881.	
1977	38.50	1588096.	24.5	38920240.	
1976	39.50	1811773.	23.9	43240135.	
1975	40.50	2438703.	23.2	56661560.	

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016**

**REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016**

DEPRECIATION/VALUATION SYSTEM

3RD REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

ACCOUNT NO. 37600. Mains Steel

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 55.0 YRS CURVE: IOWA R2

I YEAR INSTALLED	II AGE AT 12/31/15	III ORIGINAL COST	IV AVERAGE REMAINING LIFE	V WEIGHTED DOLLAR YEARS
1974	41.50	3304470.	22.6	74720753.
1973	42.50	3011007.	22.0	66240378.
1972	43.50	1962441.	21.4	41989491.
1971	44.50	1912444.	20.8	39786283.
1970	45.50	1689746.	20.2	34169543.
1969	46.50	1719894.	19.6	33795680.
1968	47.50	3557823.	19.1	67912577.
1967	48.50	1729454.	18.5	32059016.
1966	49.50	897930.	18.0	16159488.
1965	50.50	1088172.	17.5	19007190.
1964	51.50	1020173.	16.9	17290070.
1963	52.50	770057.	16.4	12659889.
1962	53.50	648565.	15.9	10339893.
1961	54.50	641400.	15.5	9913662.
1960	55.50	2604002.	15.0	39010019.
1959	56.50	2247318.	14.5	32622572.
1958	57.50	1705593.	14.1	23984551.
1957	58.50	348676.	13.6	4748585.
1956	59.50	256224.	13.2	3378634.
1955	60.50	106394.	12.8	1358001.
1954	61.50	138688.	12.4	1713050.
1953	62.50	152429.	12.0	1821540.
1952	63.50	124438.	11.6	1438245.
1951	64.50	90969.	11.2	1016609.
1950	65.50	83542.	10.8	902446.
1949	66.50	22840.	10.4	238405.
1948	67.50	88952.	10.1	896822.
1947	68.50	270273.	9.7	2630911.
1946	69.50	152131.	9.4	1429150.
1945	70.50	23802.	9.1	215689.
1944	71.50	9533.	8.7	83281.
1943	72.50	32977.	8.4	277515.
1942	73.50	50709.	8.1	410776.
1941	74.50	77140.	7.8	600997.
1940	75.50	197268.	7.5	1476658.
1939	76.50	29338.	7.2	210773.
1938	77.50	22029.	6.9	151693.
1937	78.50	59149.	6.6	389742.
1936	79.50	35747.	6.3	225007.
1935	80.50	1109.	6.0	6656.
1934	81.50	156144.	5.7	891606.

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37600. Mains Steel

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 55.0 YRS CURVE: IOWA R2

YEAR INSTALLED	AGE AT 12/31/15	ORIGINAL COST	AVERAGE REMAINING LIFE	WEIGHTED DOLLAR YEARS	
1933	82.50	831.	5.4	4505.	
1932	83.50	1272.	5.1	6524.	
1931	84.50	2753.	4.8	13319.	
1930	85.50	8685.	4.5	39499.	
1929	86.50	4399.	4.3	18735.	
1928	87.50	8405.	4.0	33382.	
1927	88.50	99780.	3.7	367680.	
1926	89.50	117700.	3.4	399868.	
1925	90.50	4931.	3.1	15343.	
TOTAL:		385317174.	41.2	15871054602.	

PEOPLES GAS SYSTEM**2016 DEPRECIATION STUDY****FILED: JUNE 28, 2016****REVISED: OCTOBER 14, 2016****2ND REVISED: OCTOBER 25, 2016****3RD REVISED: DECEMBER 15, 2016**

DEPRECIATION/VALUATION SYSTEM

PGS - 2016 CASE

ACCOUNT NO. 37600. Mains Steel

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 55.0 YEARS CURVE: IOWA R2

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	V AVERAGE SURVIVING	VI ACCURAL RATE ON SURVIVORS	VII ANNUAL ACCRAULS	VIII DEPREC. RESERVE	IX DEPREC. RESERVE
0.00	0.0	100.00000					0.00000	
0.50	0.0091	99.91364	0.08636	49.97841	0.018182	0.90870	0.82234	0.008230
1.50	0.0273	99.73355	0.18009	99.82359	0.018182	1.81498	2.45722	0.024638
2.50	0.0455	99.54155	0.19200	99.63755	0.018182	1.81159	4.07682	0.040956
3.50	0.0636	99.33782	0.20373	99.43968	0.018182	1.80800	5.68109	0.057190
4.50	0.0818	99.12246	0.21536	99.23014	0.018182	1.80419	7.26991	0.073343
5.50	0.1000	98.89400	0.22846	99.00823	0.018182	1.80015	8.84161	0.089405
6.50	0.1182	98.65073	0.24327	98.77236	0.018182	1.79586	10.39420	0.105364
7.50	0.1364	98.39373	0.25700	98.52223	0.018182	1.79132	11.92852	0.121233
8.50	0.1545	98.12200	0.27173	98.25786	0.018182	1.78651	13.44330	0.137006
9.50	0.1727	97.83454	0.28746	97.97827	0.018182	1.78143	14.93727	0.152679
10.50	0.1909	97.53127	0.30327	97.68291	0.018182	1.77606	16.41006	0.168254
11.50	0.2091	97.21127	0.32000	97.37127	0.018182	1.77039	17.86044	0.183728
12.50	0.2273	96.87282	0.33846	97.04204	0.018182	1.76440	19.28639	0.199090
13.50	0.2455	96.51637	0.35645	96.69459	0.018182	1.75809	20.68803	0.214347
14.50	0.2636	96.14055	0.37582	96.32846	0.018182	1.75143	22.06364	0.229494
15.50	0.2818	95.74509	0.39546	95.94282	0.018182	1.74442	23.41260	0.244531
16.50	0.3000	95.32900	0.41609	95.53704	0.018182	1.73704	24.73355	0.259455
17.50	0.3182	94.89136	0.43764	95.11018	0.018182	1.72928	26.02519	0.274263
18.50	0.3364	94.43018	0.46118	94.66077	0.018182	1.72111	27.28512	0.288945
19.50	0.3545	93.94691	0.48327	94.18854	0.018182	1.71252	28.51437	0.303516
20.50	0.3727	93.43945	0.50745	93.69318	0.018182	1.70352	29.71043	0.317964
21.50	0.3909	92.90646	0.53300	93.17295	0.018182	1.69406	30.87149	0.332286
22.50	0.4091	92.34736	0.55909	92.62691	0.018182	1.68413	31.99652	0.346480
23.50	0.4273	91.76046	0.58691	92.05391	0.018182	1.67371	33.08333	0.360540
24.50	0.4455	91.14682	0.61364	91.45364	0.018182	1.66280	34.13248	0.374478
25.50	0.4636	90.50300	0.64382	90.82491	0.018182	1.65136	35.14003	0.388275
26.50	0.4818	89.83054	0.67246	90.16677	0.018182	1.63940	36.10697	0.401945
27.50	0.5000	89.12700	0.70355	89.47877	0.018182	1.62689	37.03032	0.415478
28.50	0.5182	88.38973	0.73727	88.75836	0.018182	1.61379	37.90684	0.428860
29.50	0.5364	87.61873	0.77100	88.00423	0.018182	1.60008	38.73592	0.442096
30.50	0.5545	86.81454	0.80418	87.21664	0.018182	1.58576	39.51749	0.455194
31.50	0.5727	85.97473	0.83982	86.39464	0.018182	1.57081	40.24849	0.468143
32.50	0.5909	85.09882	0.87591	85.53677	0.018182	1.55522	40.92780	0.480944
33.50	0.6091	84.18427	0.91455	84.64155	0.018182	1.53894	41.55219	0.493586
34.50	0.6273	83.23109	0.95318	83.70768	0.018182	1.52196	42.12097	0.506073
35.50	0.6455	82.23773	0.99336	82.73441	0.018182	1.50426	42.63187	0.518398
36.50	0.6636	81.20436	1.03337	81.72105	0.018182	1.48584	43.08435	0.530567
37.50	0.6818	80.12864	1.07573	80.66650	0.018182	1.46667	43.47529	0.542569
38.50	0.7000	79.01100	1.11764	79.56982	0.018182	1.44673	43.80438	0.554409

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY**

FILED: JUNE 28, 2016

REVISED: OCTOBER 14, 2016

2ND REVISED: OCTOBER 25, 2016

3RD REVISED: DECEMBER 15, 2016

DEPRECIATION/VALUATION SYSTEM

PGS - 2016 CASE

ACCOUNT NO. 37600. Mains Steel

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 55.0 YEARS CURVE: IOWA R2

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	V AVERAGE SURVIVING	VI ACCURAL RATE ON SURVIVORS	VII ANNUAL ACCRUALS	VIII DEPREC. RESERVE BALANCE	IX DEPREC. RESERVE RATIO
39.50	0.7182	77.84782	1.16318	78.42941	0.018182	1.42599	44.06719	0.566068
40.50	0.7364	76.64045	1.20736	77.24414	0.018182	1.40444	44.26426	0.577557
41.50	0.7545	75.38791	1.25254	76.01418	0.018182	1.38208	44.39380	0.588872
42.50	0.7727	74.08991	1.29800	74.73891	0.018182	1.35889	44.45469	0.600010
43.50	0.7909	72.74609	1.34382	73.41800	0.018182	1.33488	44.44575	0.610971
44.50	0.8091	71.35518	1.39091	72.05064	0.018182	1.31001	44.36485	0.621747
45.50	0.8273	69.91646	1.43872	70.63582	0.018182	1.28429	44.21041	0.632332
46.50	0.8455	68.43082	1.48563	69.17364	0.018182	1.25770	43.98248	0.642729
47.50	0.8636	66.89937	1.53146	67.66509	0.018182	1.23028	43.68131	0.652941
48.50	0.8818	65.32209	1.57728	66.11073	0.018182	1.20202	43.30604	0.662962
49.50	0.9000	63.70000	1.62209	64.51105	0.018182	1.17293	42.85689	0.672793
50.50	0.9182	62.03118	1.66882	62.86559	0.018182	1.14301	42.33108	0.682416
51.50	0.9364	60.32082	1.71036	61.17600	0.018182	1.11229	41.73301	0.691851
52.50	0.9545	58.56882	1.75200	59.44482	0.018182	1.08082	41.06183	0.701087
53.50	0.9727	56.77882	1.79000	57.67382	0.018182	1.04862	40.32045	0.710132
54.50	0.9909	54.95136	1.82746	55.86509	0.018182	1.01573	39.50872	0.718976
55.50	1.0091	53.08954	1.86182	54.02045	0.018182	0.98219	38.62909	0.727621
56.50	1.0273	51.19654	1.89300	52.14304	0.018182	0.94806	37.68415	0.736068
57.50	1.0455	49.27673	1.91982	50.23664	0.018182	0.91339	36.67773	0.744321
58.50	1.0636	47.33409	1.94264	48.30541	0.018182	0.87828	35.61337	0.752383
59.50	1.0818	45.37191	1.96218	46.35300	0.018182	0.84278	34.49398	0.760250
60.50	1.1000	43.39600	1.97591	44.38396	0.018182	0.80698	33.32505	0.767929
61.50	1.1182	41.41073	1.98528	42.40336	0.018182	0.77097	32.11074	0.775421
62.50	1.1364	39.42082	1.98991	40.41577	0.018182	0.73483	30.85567	0.782725
63.50	1.1545	37.43364	1.98718	38.42723	0.018182	0.69868	29.56717	0.789856
64.50	1.1727	35.45409	1.97954	36.44386	0.018182	0.66262	28.25024	0.796812
65.50	1.1909	33.48736	1.96673	34.47073	0.018182	0.62674	26.91025	0.803594
66.50	1.2091	31.54100	1.94636	32.51418	0.018182	0.59117	25.55506	0.810217
67.50	1.2273	29.62136	1.91964	30.58118	0.018182	0.55602	24.19144	0.816689
68.50	1.2455	27.73373	1.88763	28.67754	0.018182	0.52141	22.82522	0.823013
69.50	1.2636	25.88391	1.84982	26.80882	0.018182	0.48743	21.46283	0.829196
70.50	1.2818	24.07673	1.80718	24.98032	0.018182	0.45419	20.10984	0.835240
71.50	1.3000	22.31900	1.75773	23.19786	0.018182	0.42178	18.77389	0.841162
72.50	1.3182	20.61837	1.70064	21.46868	0.018182	0.39034	17.46360	0.846992
73.50	1.3364	18.97564	1.64273	19.79700	0.018182	0.35995	16.18081	0.852715
74.50	1.3545	17.39564	1.58000	18.18564	0.018182	0.33065	14.93146	0.858345
75.50	1.3727	15.88264	1.51300	16.63914	0.018182	0.30253	13.72099	0.863899
76.50	1.3909	14.43836	1.44427	15.16050	0.018182	0.27565	12.55236	0.869376
77.50	1.4091	13.06654	1.37182	13.75245	0.018182	0.25005	11.43059	0.874798
78.50	1.4273	11.77064	1.29591	12.41859	0.018182	0.22579	10.36048	0.880197

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: OCTOBER 14, 2016
2ND REVISED: OCTOBER 25, 2016
3RD REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37600. Mains Steel

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 55.0 YEARS CURVE: IOWA R2

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	V AVERAGE SURVIVING	VI ACCURAL RATE ON SURVIVORS	VII ANNUAL ACCRUALS	VIII DEPREC. RESERVE BALANCE	IX DEPREC. RESERVE RATIO
79.50	1.4455	10.54882	1.22182	11.15973	0.018182	0.20290	9.34156	0.885555
80.50	1.4636	9.40127	1.14754	9.97505	0.018182	0.18136	8.37538	0.890878
81.50	1.4818	8.32882	1.07246	8.86505	0.018182	0.16118	7.46411	0.896179
82.50	1.5000	7.32900	0.99982	7.82891	0.018182	0.14234	6.60664	0.901438
83.50	1.5182	6.40700	0.92200	6.86800	0.018182	0.12487	5.80951	0.906744
84.50	1.5364	5.55600	0.85100	5.98150	0.018182	0.10875	5.06726	0.912035
85.50	1.5545	4.77464	0.78136	5.16532	0.018182	0.09392	4.37982	0.917309
86.50	1.5727	4.06136	0.71327	4.41800	0.018182	0.08033	3.74687	0.922565
87.50	1.5909	3.41400	0.64736	3.73768	0.018182	0.06796	3.16746	0.927787
88.50	1.6091	2.83218	0.58182	3.12309	0.018182	0.05678	2.64243	0.933002
89.50	1.6273	2.31445	0.51773	2.57332	0.018182	0.04679	2.17149	0.938230
90.50	1.6455	1.85673	0.45773	2.08559	0.018182	0.03792	1.75168	0.943425
91.50	1.6636	1.45691	0.39982	1.65682	0.018182	0.03012	1.38199	0.948576
92.50	1.6818	1.11327	0.34364	1.28509	0.018182	0.02337	1.06172	0.953691
93.50	1.7000	0.82200	0.29127	0.96764	0.018182	0.01759	0.78804	0.958685
94.50	1.7182	0.58518	0.23682	0.70359	0.018182	0.01279	0.56401	0.963826
95.50	1.7364	0.39518	0.19000	0.49018	0.018182	0.00891	0.38293	0.968986
96.50	1.7545	0.24909	0.14609	0.32214	0.018182	0.00586	0.24269	0.974310
97.50	1.7727	0.14245	0.10664	0.19577	0.018182	0.00356	0.13961	0.980066
98.50	1.7909	0.07055	0.07191	0.10650	0.018182	0.00194	0.06964	0.987195
99.50	1.8091	0.02782	0.04273	0.04918	0.018182	0.00089	0.02781	0.999673
100.50	1.8273	0.00718	0.02064	0.01750	0.018182	0.00032	0.00749	1.000000
101.50	1.8455	0.00100	0.00618	0.00409	0.018182	0.00007	0.00138	1.000000
102.50	1.8636	0.00000	0.00100	0.00050	0.018182	0.00001	0.00000	1.000000

5499.99054 100.00000

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37602. Mains Plastic

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R3 O.C. SALVAGE %: -25.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
2015	0.50	25640754.	0.010943	280590.	25360164.
2014	1.50	28855720.	0.032770	945591.	27910129.
2013	2.50	27871938.	0.054538	1520072.	26351866.
2012	3.50	16930733.	0.076227	1290571.	15640162.
2011	4.50	25248563.	0.097843	2470394.	22778169.
2010	5.50	27390977.	0.119353	3269199.	24121778.
2009	6.50	19928908.	0.140769	2805378.	17123530.
2008	7.50	8165651.	0.162074	1323437.	6842214.
2007	8.50	6862957.	0.183258	1257690.	5605267.
2006	9.50	5669277.	0.204315	1158320.	4510957.
2005	10.50	6440231.	0.225232	1450548.	4989683.
2004	11.50	8244020.	0.246000	2028028.	6215992.
2003	12.50	8971167.	0.266607	2391772.	6579395.
2002	13.50	12041815.	0.287057	3456685.	8585130.
2001	14.50	21237993.	0.307316	6526766.	14711227.
2000	15.50	28074107.	0.327394	9191283.	18882824.
1999	16.50	19797981.	0.347273	6875296.	12922685.
1998	17.50	15156092.	0.366961	5561697.	9594395.
1997	18.50	8088130.	0.386431	3125502.	4962628.
1996	19.50	5370352.	0.405676	2178624.	3191728.
1995	20.50	7546959.	0.424705	3205231.	4341728.
1994	21.50	6579712.	0.443504	2918129.	3661583.
1993	22.50	6325122.	0.462067	2922632.	3402490.
1992	23.50	3360929.	0.480376	1614510.	1746419.
1991	24.50	3552030.	0.498440	1770474.	1781556.
1990	25.50	7639381.	0.516252	3943847.	3695534.
1989	26.50	4592235.	0.533806	2451364.	2140871.
1988	27.50	5304290.	0.551088	2923132.	2381158.
1987	28.50	4407346.	0.568089	2503766.	1903580.
1986	29.50	5654900.	0.584809	3307034.	2347866.
1985	30.50	3525038.	0.601233	2119370.	1405668.
1984	31.50	3248481.	0.617365	2005498.	1242983.
1983	32.50	2357898.	0.633159	1492924.	864974.
1982	33.50	1796840.	0.648630	1165484.	631356.
1981	34.50	1349069.	0.663759	895457.	453612.
1980	35.50	1193974.	0.678538	810157.	383817.
1979	36.50	2093588.	0.692932	1450714.	642874.
1978	37.50	1208336.	0.706931	854211.	354125.
1977	38.50	786868.	0.720532	566963.	219905.
1976	39.50	358042.	0.733712	262700.	95342.
1975	40.50	688591.	0.746467	514011.	174580.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37602. Mains Plastic

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R3 O.C. SALVAGE %: -25.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
1974	41.50	675804.	0.758754	512769.	163035.
1973	42.50	235567.	0.770587	181525.	54042.
1972	43.50	241408.	0.781960	188771.	52637.
1971	44.50	180397.	0.792869	143031.	37366.
1970	45.50	175640.	0.803299	141091.	34549.
1969	46.50	120809.	0.813255	98249.	22560.
1968	47.50	108182.	0.822750	89007.	19175.
1967	48.50	7043.	0.831794	5858.	1185.
1966	49.50	2395.	0.840393	2013.	382.
1965	50.50	966.	0.848572	820.	146.
1964	51.50	0.	0.856353	0.	0.
1963	52.50	4806.	0.863759	4151.	655.
SUBTOTAL :			0.249613	100172337.	301137675.
NET SALVAGE: -25.0%				25043084.	-25043084.
TOTAL :		401310012.	0.312017	125215421.	276094591.

WEIGHTED AGE: 12.1 YEARS
REMAINING LIFE: 33.8 YEARS

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37602. Mains Plastic

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R3 O.C. SALVAGE %: -25.

YEAR	AGE INTERVAL	ORIGINAL COST 12/31/15	ANNUAL DEPRECIATION RATE	V	
				ORIGINAL COST	ANNUAL DEPRECIATION
2015	0.50 - 1.50	25640754.	0.022222	569795.	
2014	1.50 - 2.50	28855720.	0.022222	641238.	
2013	2.50 - 3.50	27871938.	0.022222	619376.	
2012	3.50 - 4.50	16930733.	0.022222	376239.	
2011	4.50 - 5.50	25248563.	0.022222	561079.	
2010	5.50 - 6.50	27390977.	0.022222	608688.	
2009	6.50 - 7.50	19928908.	0.022222	442865.	
2008	7.50 - 8.50	8165651.	0.022222	181459.	
2007	8.50 - 9.50	6862957.	0.022222	152510.	
2006	9.50 - 10.50	5669277.	0.022222	125984.	
2005	10.50 - 11.50	6440231.	0.022222	143116.	
2004	11.50 - 12.50	8244020.	0.022222	183200.	
2003	12.50 - 13.50	8971167.	0.022222	199359.	
2002	13.50 - 14.50	12041815.	0.022222	267596.	
2001	14.50 - 15.50	21237993.	0.022222	471955.	
2000	15.50 - 16.50	28074107.	0.022222	623869.	
1999	16.50 - 17.50	19797981.	0.022222	439955.	
1998	17.50 - 18.50	15156092.	0.022222	336802.	
1997	18.50 - 19.50	8088130.	0.022222	179736.	
1996	19.50 - 20.50	5370352.	0.022222	119341.	
1995	20.50 - 21.50	7546959.	0.022222	167710.	
1994	21.50 - 22.50	6579712.	0.022222	146216.	
1993	22.50 - 23.50	6325122.	0.022222	140558.	
1992	23.50 - 24.50	3360929.	0.022222	74687.	
1991	24.50 - 25.50	3552030.	0.022222	78934.	
1990	25.50 - 26.50	7639381.	0.022222	169764.	
1989	26.50 - 27.50	4592235.	0.022222	102050.	
1988	27.50 - 28.50	5304290.	0.022222	117873.	
1987	28.50 - 29.50	4407346.	0.022222	97941.	
1986	29.50 - 30.50	5654900.	0.022222	125664.	
1985	30.50 - 31.50	3525038.	0.022222	78334.	
1984	31.50 - 32.50	3248481.	0.022222	72188.	
1983	32.50 - 33.50	2357898.	0.022222	52398.	
1982	33.50 - 34.50	1796840.	0.022222	39930.	
1981	34.50 - 35.50	1349069.	0.022222	29979.	
1980	35.50 - 36.50	1193974.	0.022222	26533.	
1979	36.50 - 37.50	2093588.	0.022222	46524.	
1978	37.50 - 38.50	1208336.	0.022222	26852.	
1977	38.50 - 39.50	786868.	0.022222	17486.	
1976	39.50 - 40.50	358042.	0.022222	7956.	
1975	40.50 - 41.50	688591.	0.022222	15302.	

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37602. Mains Plastic

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R3 O.C. SALVAGE %: -25.

I YEAR	II AGE INTERVAL	III ORIGINAL COST 12/31/15	IV ANNUAL DEPRECIATION RATE	V ORIGINAL COST ANNUAL DEPRECIATION
1974	41.50 - 42.50	675804.	0.022222	15018.
1973	42.50 - 43.50	235567.	0.022222	5235.
1972	43.50 - 44.50	241408.	0.022222	5365.
1971	44.50 - 45.50	180397.	0.022222	4009.
1970	45.50 - 46.50	175640.	0.022222	3903.
1969	46.50 - 47.50	120809.	0.022222	2685.
1968	47.50 - 48.50	108182.	0.022222	2404.
1967	48.50 - 49.50	7043.	0.022222	157.
1966	49.50 - 50.50	2395.	0.022222	53.
1965	50.50 - 51.50	966.	0.022222	21.
1964	51.50 - 52.50	0.	0.022222	0.
1963	52.50 - 53.50	4806.	0.022222	107.
SUBTOTAL :		401310012.	0.022222	8918001. 2229500.
NET SALVAGE: -25.0 %				
TOTAL :		401310012.	0.027778	11147502.

MONTHLY RATE: 0.002315

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37602. Mains Plastic

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 45.0 YRS CURVE: IOWA R3

I YEAR INSTALLED	II AGE AT 12/31/15	III ORIGINAL COST	IV AVERAGE REMAINING LIFE	V WEIGHTED DOLLAR YEARS
2015	0.50	25640754.	44.5	1141207253.
2014	1.50	28855720.	43.5	1255955642.
2013	2.50	27871938.	42.5	1185833814.
2012	3.50	16930733.	41.6	703807220.
2011	4.50	25248563.	40.6	1025017452.
2010	5.50	27390977.	39.6	1085479874.
2009	6.50	19928908.	38.7	770558747.
2008	7.50	8165651.	37.7	307899575.
2007	8.50	6862957.	36.8	252237000.
2006	9.50	5669277.	35.8	202993057.
2005	10.50	6440231.	34.9	224535688.
2004	11.50	8244020.	33.9	279719582.
2003	12.50	8971167.	33.0	296072742.
2002	13.50	12041815.	32.1	386330815.
2001	14.50	21237993.	31.2	662005121.
2000	15.50	28074107.	30.3	849726973.
1999	16.50	19797981.	29.4	581520738.
1998	17.50	15156092.	28.5	431747698.
1997	18.50	8088130.	27.6	223318222.
1996	19.50	5370352.	26.7	143627743.
1995	20.50	7546959.	25.9	195377729.
1994	21.50	6579712.	25.0	164771194.
1993	22.50	6325122.	24.2	153112016.
1992	23.50	3360929.	23.4	78588842.
1991	24.50	3552030.	22.6	80169996.
1990	25.50	7639381.	21.8	166298997.
1989	26.50	4592235.	21.0	96339202.
1988	27.50	5304290.	20.2	107152080.
1987	28.50	4407346.	19.4	85661092.
1986	29.50	5654900.	18.7	105653975.
1985	30.50	3525038.	17.9	63255066.
1984	31.50	3248481.	17.2	55934247.
1983	32.50	2357898.	16.5	38923806.
1982	33.50	1796840.	15.8	28411036.
1981	34.50	1349069.	15.1	20412530.
1980	35.50	1193974.	14.5	17271751.
1979	36.50	2093588.	13.8	28929331.
1978	37.50	1208336.	13.2	15935643.
1977	38.50	786868.	12.6	9895706.
1976	39.50	358042.	12.0	4290405.
1975	40.50	688591.	11.4	7856109.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37602. Mains Plastic

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 45.0 YRS CURVE: IOWA R3

I YEAR INSTALLED	II AGE AT 12/31/15	III ORIGINAL COST	IV AVERAGE REMAINING LIFE	V WEIGHTED DOLLAR YEARS
1974	41.50	675804.	10.9	7336560.
1973	42.50	235567.	10.3	2431900.
1972	43.50	241408.	9.8	2368651.
1971	44.50	180397.	9.3	1681461.
1970	45.50	175640.	8.9	1554686.
1969	46.50	120809.	8.4	1015221.
1968	47.50	108182.	8.0	862886.
1967	48.50	7043.	7.6	53310.
1966	49.50	2395.	7.2	17202.
1965	50.50	966.	6.8	6583.
1964	51.50	0.	6.5	0.
1963	52.50	4806.	6.1	29465.
TOTAL:		401310012.	33.8	13551193635.

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37602. Mains Plastic

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 45.0 YEARS CURVE: IOWA

R3

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	V AVERAGE PERCENT SURVIVING	VI ACCURAL RATE ON SURVIVORS	VII ANNUAL ACCRAULS	VIII DEPREC. RESERVE BALANCE	IX DEPREC. RESERVE RATIO
0.00	0.0	100.00000					0.00000	
0.50	0.0111	99.98311	0.01689	49.99578	0.022222	1.11102	1.09413	0.010943
1.50	0.0333	99.94267	0.04044	99.96289	0.022222	2.22140	3.27508	0.032770
2.50	0.0556	99.89522	0.04745	99.91894	0.022222	2.22042	5.44806	0.054538
3.50	0.0778	99.83822	0.05700	99.86672	0.022222	2.21926	7.61032	0.076227
4.50	0.1000	99.77200	0.06622	99.80511	0.022222	2.21789	9.76199	0.097843
5.50	0.1222	99.69233	0.07967	99.73217	0.022222	2.21627	11.89859	0.119353
6.50	0.1444	99.60000	0.09233	99.64617	0.022222	2.21436	14.02062	0.140769
7.50	0.1667	99.49234	0.10767	99.54617	0.022222	2.21214	16.12509	0.162074
8.50	0.1889	99.36756	0.12478	99.42995	0.022222	2.20955	18.20987	0.183258
9.50	0.2111	99.22411	0.14345	99.29583	0.022222	2.20657	20.27300	0.204315
10.50	0.2333	99.05933	0.16478	99.14172	0.022222	2.20315	22.31137	0.225232
11.50	0.2556	98.87100	0.18833	98.96517	0.022222	2.19923	24.32226	0.246000
12.50	0.2778	98.65644	0.21456	98.76372	0.022222	2.19475	26.30245	0.266607
13.50	0.3000	98.41500	0.24144	98.53572	0.022222	2.18968	28.25069	0.287057
14.50	0.3222	98.14044	0.27455	98.27772	0.022222	2.18395	30.16009	0.307316
15.50	0.3444	97.83267	0.30778	97.98656	0.022222	2.17748	32.02979	0.327394
16.50	0.3667	97.48733	0.34533	97.66000	0.022222	2.17022	33.85468	0.347273
17.50	0.3889	97.10389	0.38345	97.29561	0.022222	2.16212	35.63336	0.366961
18.50	0.4111	96.67600	0.42789	96.88994	0.022222	2.15311	37.35858	0.386431
19.50	0.4333	96.20066	0.47533	96.43833	0.022222	2.14307	39.02632	0.405676
20.50	0.4556	95.67678	0.52389	95.93872	0.022222	2.13197	40.63441	0.424705
21.50	0.4778	95.09978	0.57700	95.38828	0.022222	2.11974	42.17714	0.443504
22.50	0.5000	94.46600	0.63378	94.78289	0.022222	2.10629	43.64965	0.462067
23.50	0.5222	93.76945	0.69656	94.11772	0.022222	2.09151	45.04460	0.480376
24.50	0.5444	93.00889	0.76056	93.38917	0.022222	2.07532	46.35936	0.498440
25.50	0.5667	92.18000	0.82889	92.59444	0.022222	2.05765	47.58813	0.516252
26.50	0.5889	91.27845	0.90155	91.72922	0.022222	2.03843	48.72500	0.533806
27.50	0.6111	90.29822	0.98022	90.78833	0.022222	2.01752	49.76230	0.551088
28.50	0.6333	89.23400	1.06422	89.76611	0.022222	1.99480	50.69288	0.568089
29.50	0.6556	88.08211	1.15189	88.65806	0.022222	1.97018	51.51117	0.584809
30.50	0.6778	86.83622	1.24589	87.45917	0.022222	1.94354	52.20881	0.601233
31.50	0.7000	85.49300	1.34322	86.16461	0.022222	1.91477	52.78036	0.617365
32.50	0.7222	84.03900	1.45400	84.76600	0.022222	1.88369	53.21005	0.633159
33.50	0.7444	82.47367	1.56533	83.25633	0.022222	1.85014	53.49486	0.648630
34.50	0.7667	80.78967	1.68400	81.63167	0.022222	1.81404	53.62490	0.663759
35.50	0.7889	78.98156	1.80811	79.88561	0.022222	1.77524	53.59202	0.678538
36.50	0.8111	77.03822	1.94334	78.00989	0.022222	1.73355	53.38224	0.692932
37.50	0.8333	74.95567	2.08255	75.99694	0.022222	1.68882	52.98851	0.706931
38.50	0.8556	72.73167	2.22400	73.84367	0.022222	1.64097	52.40548	0.720532

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 37602. Mains Plastic

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 45.0 YEARS CURVE: IOWA

R3

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	V AVERAGE SURVIVING	VI ACCRUAL RATE ON SURVIVORS	VII ANNUAL ACCRAULS	VIII DEPREC. RESERVE BALANCE	IX DEPREC. RESERVE RATIO
39.50	0.8778	70.36089	2.37078	71.54628	0.022222	1.58992	51.62462	0.733712
40.50	0.9000	67.84400	2.51689	69.10244	0.022222	1.53561	50.64334	0.746467
41.50	0.9222	65.17300	2.67100	66.50850	0.022222	1.47797	49.45031	0.758754
42.50	0.9444	62.35767	2.81533	63.76533	0.022222	1.41701	48.05198	0.770587
43.50	0.9667	59.40533	2.95233	60.88150	0.022222	1.35292	46.45257	0.781960
44.50	0.9889	56.32600	3.07933	57.86567	0.022222	1.28590	44.65914	0.792869
45.50	1.0111	53.12978	3.19622	54.72789	0.022222	1.21618	42.67909	0.803299
46.50	1.0333	49.83600	3.29378	51.48289	0.022222	1.14406	40.52938	0.813255
47.50	1.0556	46.46867	3.36733	48.15233	0.022222	1.07005	38.23210	0.822750
48.50	1.0778	43.05367	3.41500	44.76117	0.022222	0.99469	35.81179	0.831794
49.50	1.1000	39.61800	3.43567	41.33583	0.022222	0.91857	33.29470	0.840393
50.50	1.1222	36.19500	3.42300	37.90650	0.022222	0.84237	30.71406	0.848572
51.50	1.1444	32.81756	3.37744	34.50628	0.022222	0.76681	28.10343	0.856353
52.50	1.1667	29.51767	3.29989	31.16761	0.022222	0.69261	25.49615	0.863759
53.50	1.1889	26.32645	3.19122	27.92206	0.022222	0.62049	22.92542	0.870813
54.50	1.2111	23.27600	3.05045	24.80122	0.022222	0.55114	20.42611	0.877561
55.50	1.2333	20.39433	2.88167	21.83516	0.022222	0.48523	18.02967	0.884053
56.50	1.2556	17.69944	2.69489	19.04689	0.022222	0.42326	15.75805	0.890313
57.50	1.2778	15.20533	2.49411	16.45239	0.022222	0.36561	13.62955	0.896366
58.50	1.3000	12.92400	2.28134	14.06467	0.022222	0.31255	11.66076	0.902256
59.50	1.3222	10.86878	2.05522	11.89639	0.022222	0.26436	9.86990	0.908097
60.50	1.3444	9.02967	1.83911	9.94922	0.022222	0.22109	8.25189	0.913864
61.50	1.3667	7.40100	1.62867	8.21533	0.022222	0.18256	6.80578	0.919576
62.50	1.3889	5.97400	1.42700	6.68750	0.022222	0.14861	5.52739	0.925241
63.50	1.4111	4.74156	1.23244	5.35778	0.022222	0.11906	4.41401	0.930920
64.50	1.4333	3.69067	1.05089	4.21611	0.022222	0.09369	3.45681	0.936636
65.50	1.4556	2.80367	0.88700	3.24717	0.022222	0.07216	2.64197	0.942327
66.50	1.4778	2.06722	0.73644	2.43544	0.022222	0.05412	1.95965	0.947962
67.50	1.5000	1.46800	0.59922	1.76761	0.022222	0.03928	1.39971	0.953478
68.50	1.5222	0.99822	0.46978	1.23311	0.022222	0.02740	0.95733	0.959036
69.50	1.5444	0.63967	0.35856	0.81894	0.022222	0.01820	0.61697	0.964524
70.50	1.5667	0.37833	0.26133	0.50900	0.022222	0.01131	0.36695	0.969917
71.50	1.5889	0.19967	0.17867	0.28900	0.022222	0.00642	0.19471	0.975162
72.50	1.6111	0.08933	0.11033	0.14450	0.022222	0.00321	0.08759	0.980431
73.50	1.6333	0.03133	0.05800	0.06033	0.022222	0.00134	0.03093	0.986998
74.50	1.6556	0.00667	0.02467	0.01900	0.022222	0.00042	0.00668	1.000000
75.50	1.6778	0.00022	0.00644	0.00344	0.022222	0.00008	0.00031	1.000000
76.50	1.7000	0.00000	0.00022	0.00011	0.022222	0.00000	0.00000	1.000000

4499.99942 100.00000

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R0.5 O.C. SALVAGE %: -100.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
2015	0.50	1835027.	0.006903	12668.	1822359.
2014	1.50	1827839.	0.020674	37790.	1790049.
2013	2.50	1912733.	0.034407	65812.	1846921.
2012	3.50	1424624.	0.048099	68522.	1356102.
2011	4.50	886896.	0.061749	54764.	832132.
2010	5.50	873694.	0.075355	65837.	807857.
2009	6.50	886167.	0.088916	78795.	807372.
2008	7.50	1102243.	0.102447	112921.	989322.
2007	8.50	1143027.	0.115930	132511.	1010516.
2006	9.50	758079.	0.129385	98084.	659995.
2005	10.50	718683.	0.142802	102629.	616054.
2004	11.50	637008.	0.156179	99487.	537521.
2003	12.50	749780.	0.169534	127113.	622667.
2002	13.50	1249064.	0.182850	228391.	1020673.
2001	14.50	43906.	0.196139	8612.	35294.
2000	15.50	2171338.	0.209399	454676.	1716662.
1999	16.50	1159308.	0.222616	258080.	901228.
1998	17.50	1189989.	0.235800	280600.	909389.
1997	18.50	944258.	0.248952	235075.	709183.
1996	19.50	567791.	0.262043	148786.	419005.
1995	20.50	609954.	0.275090	167792.	442162.
1994	21.50	1014635.	0.288085	292301.	722334.
1993	22.50	900246.	0.301028	271000.	629246.
1992	23.50	1011356.	0.313896	317461.	693895.
1991	24.50	1193339.	0.326695	389857.	803482.
1990	25.50	871591.	0.339426	295841.	575750.
1989	26.50	798480.	0.352083	281131.	517349.
1988	27.50	728662.	0.364648	265705.	462957.
1987	28.50	595906.	0.377136	224737.	371169.
1986	29.50	523737.	0.389530	204011.	319726.
1985	30.50	700927.	0.401831	281654.	419273.
1984	31.50	477432.	0.414042	197677.	279755.
1983	32.50	436663.	0.426139	186079.	250584.
1982	33.50	490428.	0.438144	214878.	275550.
1981	34.50	577225.	0.450042	259776.	317449.
1980	35.50	263184.	0.461832	121547.	141637.
1979	36.50	665804.	0.473509	315264.	350540.
1978	37.50	754629.	0.485080	366056.	388573.
1977	38.50	390124.	0.496537	193711.	196413.
1976	39.50	457004.	0.507883	232105.	224899.
1975	40.50	698301.	0.519115	362499.	335802.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R0.5 O.C. SALVAGE %: -100.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
1974	41.50	1053798.	0.530230	558755.	495043.
1973	42.50	1167628.	0.541223	631947.	535681.
1972	43.50	782863.	0.552114	432230.	350633.
1971	44.50	634490.	0.562888	357147.	277343.
1970	45.50	367521.	0.573538	210787.	156734.
1969	46.50	497241.	0.584085	290431.	206810.
1968	47.50	512899.	0.594519	304928.	207971.
1967	48.50	732640.	0.604839	443129.	289511.
1966	49.50	656912.	0.615055	404037.	252875.
1965	50.50	282663.	0.625157	176709.	105954.
1964	51.50	269512.	0.635157	171182.	98330.
1963	52.50	207915.	0.645050	134116.	73799.
1962	53.50	199333.	0.654851	130533.	68800.
1961	54.50	187652.	0.664545	124703.	62949.
1960	55.50	436511.	0.674152	294275.	142236.
1959	56.50	1097639.	0.683660	750411.	347228.
1958	57.50	221419.	0.693089	153463.	67956.
1957	58.50	103802.	0.702431	72914.	30888.
1956	59.50	88966.	0.711687	63316.	25650.
1955	60.50	56327.	0.720878	40605.	15722.
1954	61.50	32530.	0.729991	23747.	8783.
1953	62.50	43899.	0.739042	32443.	11456.
1952	63.50	36369.	0.748039	27205.	9164.
1951	64.50	57368.	0.756983	43427.	13941.
1950	65.50	15444.	0.765880	11828.	3616.
1949	66.50	19819.	0.774738	15355.	4464.
1948	67.50	73188.	0.783568	57348.	15840.
1947	68.50	24000.	0.792375	19017.	4983.
1946	69.50	18032.	0.801178	14447.	3585.
1945	70.50	1458.	0.809980	1181.	277.
1944	71.50	8254.	0.818784	6758.	1496.
1943	72.50	28010.	0.827617	23182.	4828.
1942	73.50	8297.	0.836494	6940.	1357.
1941	74.50	7960.	0.845419	6730.	1230.
1940	75.50	81.	0.854401	69.	12.
1939	76.50	2089.	0.863470	1804.	285.
1938	77.50	38310.	0.872655	33431.	4879.
1937	78.50	5689.	0.881953	5017.	672.
1936	79.50	6522.	0.891392	5814.	708.
1935	80.50	0.	0.900981	0.	0.
1934	81.50	3787.	0.910739	3449.	338.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R0.5 O.C. SALVAGE %: -100.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
1933	82.50	4486.	0.920705	4130.	356.
1932	83.50	1479.	0.930855	1377.	102.
1931	84.50	38742.	0.941197	36464.	2278.
1930	85.50	72850.	0.951663	69329.	3521.
1929	86.50	0.	0.962292	0.	0.
1928	87.50	270.	0.973115	263.	7.
1927	88.50	12760.	0.984273	12559.	201.
1926	89.50	15842.	0.997013	15795.	47.
SUBTOTAL :			0.309144	14336961.	32039386.
NET SALVAGE: -100.0%				14336961.	-14336961.
TOTAL :		46376347.	0.618288	28673923.	17702424.

WEIGHTED AGE: 24.0 YEARS
REMAINING LIFE: 31.1 YEARS

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R0.5 O.C. SALVAGE %: -100.

I YEAR	II AGE INTERVAL	III ORIGINAL COST 12/31/15	IV ANNUAL DEPRECIATION RATE	V ORIGINAL COST ANNUAL DEPRECIATION
2015	0.50 - 1.50	1835027.	0.022222	40778.
2014	1.50 - 2.50	1827839.	0.022222	40618.
2013	2.50 - 3.50	1912733.	0.022222	42505.
2012	3.50 - 4.50	1424624.	0.022222	31658.
2011	4.50 - 5.50	886896.	0.022222	19709.
2010	5.50 - 6.50	873694.	0.022222	19415.
2009	6.50 - 7.50	886167.	0.022222	19692.
2008	7.50 - 8.50	1102243.	0.022222	24494.
2007	8.50 - 9.50	1143027.	0.022222	25400.
2006	9.50 - 10.50	758079.	0.022222	16846.
2005	10.50 - 11.50	718683.	0.022222	15971.
2004	11.50 - 12.50	637008.	0.022222	14156.
2003	12.50 - 13.50	749780.	0.022222	16662.
2002	13.50 - 14.50	1249064.	0.022222	27757.
2001	14.50 - 15.50	43906.	0.022222	976.
2000	15.50 - 16.50	2171338.	0.022222	48252.
1999	16.50 - 17.50	1159308.	0.022222	25762.
1998	17.50 - 18.50	1189989.	0.022222	26444.
1997	18.50 - 19.50	944258.	0.022222	20983.
1996	19.50 - 20.50	567791.	0.022222	12618.
1995	20.50 - 21.50	609954.	0.022222	13554.
1994	21.50 - 22.50	1014635.	0.022222	22547.
1993	22.50 - 23.50	900246.	0.022222	20005.
1992	23.50 - 24.50	1011356.	0.022222	22474.
1991	24.50 - 25.50	1193339.	0.022222	26518.
1990	25.50 - 26.50	871591.	0.022222	19369.
1989	26.50 - 27.50	798480.	0.022222	17744.
1988	27.50 - 28.50	728662.	0.022222	16192.
1987	28.50 - 29.50	595906.	0.022222	13242.
1986	29.50 - 30.50	523737.	0.022222	11639.
1985	30.50 - 31.50	700927.	0.022222	15576.
1984	31.50 - 32.50	477432.	0.022222	10610.
1983	32.50 - 33.50	436663.	0.022222	9704.
1982	33.50 - 34.50	490428.	0.022222	10898.
1981	34.50 - 35.50	577225.	0.022222	12827.
1980	35.50 - 36.50	263184.	0.022222	5848.
1979	36.50 - 37.50	665804.	0.022222	14796.
1978	37.50 - 38.50	754629.	0.022222	16769.
1977	38.50 - 39.50	390124.	0.022222	8669.
1976	39.50 - 40.50	457004.	0.022222	10156.
1975	40.50 - 41.50	698301.	0.022222	15518.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R0.5 O.C. SALVAGE %: -100.

YEAR	I INTERVAL	II AGE	III ORIGINAL COST 12/31/15	IV ANNUAL DEPRECIATION RATE	V ORIGINAL COST ANNUAL DEPRECIATION

1974	41.50 - 42.50		1053798.	0.022222	23418.
1973	42.50 - 43.50		1167628.	0.022222	25947.
1972	43.50 - 44.50		782863.	0.022222	17397.
1971	44.50 - 45.50		634490.	0.022222	14100.
1970	45.50 - 46.50		367521.	0.022222	8167.
1969	46.50 - 47.50		497241.	0.022222	11050.
1968	47.50 - 48.50		512899.	0.022222	11398.
1967	48.50 - 49.50		732640.	0.022222	16281.
1966	49.50 - 50.50		656912.	0.022222	14598.
1965	50.50 - 51.50		282663.	0.022222	6281.
1964	51.50 - 52.50		269512.	0.022222	5989.
1963	52.50 - 53.50		207915.	0.022222	4620.
1962	53.50 - 54.50		199333.	0.022222	4430.
1961	54.50 - 55.50		187652.	0.022222	4170.
1960	55.50 - 56.50		436511.	0.022222	9700.
1959	56.50 - 57.50		1097639.	0.022222	24392.
1958	57.50 - 58.50		221419.	0.022222	4920.
1957	58.50 - 59.50		103802.	0.022222	2307.
1956	59.50 - 60.50		88966.	0.022222	1977.
1955	60.50 - 61.50		56327.	0.022222	1252.
1954	61.50 - 62.50		32530.	0.022222	723.
1953	62.50 - 63.50		43899.	0.022222	976.
1952	63.50 - 64.50		36369.	0.022222	808.
1951	64.50 - 65.50		57368.	0.022222	1275.
1950	65.50 - 66.50		15444.	0.022222	343.
1949	66.50 - 67.50		19819.	0.022222	440.
1948	67.50 - 68.50		73188.	0.022222	1626.
1947	68.50 - 69.50		24000.	0.022222	533.
1946	69.50 - 70.50		18032.	0.022222	401.
1945	70.50 - 71.50		1458.	0.022222	32.
1944	71.50 - 72.50		8254.	0.022222	183.
1943	72.50 - 73.50		28010.	0.022222	622.
1942	73.50 - 74.50		8297.	0.022222	184.
1941	74.50 - 75.50		7960.	0.022222	177.
1940	75.50 - 76.50		81.	0.022222	2.
1939	76.50 - 77.50		2089.	0.022222	46.
1938	77.50 - 78.50		38310.	0.022222	851.
1937	78.50 - 79.50		5689.	0.022222	126.
1936	79.50 - 80.50		6522.	0.022222	145.
1935	80.50 - 81.50		0.	0.022222	0.
1934	81.50 - 82.50		3787.	0.022222	84.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 45.0 YRS CURVE: IOWA R0.5 O.C. SALVAGE %: -100.

I YEAR	II INTERVAL AGE	III ORIGINAL COST 12/31/15	IV ANNUAL DEPRECIATION RATE	V ORIGINAL COST ANNUAL DEPRECIATION
1933	82.50 - 83.50	4486.	0.022222	100.
1932	83.50 - 84.50	1479.	0.022222	33.
1931	84.50 - 85.50	38742.	0.022222	861.
1930	85.50 - 86.50	72850.	0.022222	1619.
1929	86.50 - 87.50	0.	0.022222	0.
1928	87.50 - 88.50	270.	0.022222	6.
1927	88.50 - 89.50	12760.	0.022222	284.
1926	89.50 - 90.50	15842.	0.022222	352.
SUBTOTAL :		46376347.	0.022222	1030580.
NET SALVAGE: -100.0 %				1030580.
TOTAL :		46376347.	0.044444	2061159.

MONTHLY RATE: 0.003704

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 45.0 YRS CURVE: IOWA R0.5

I YEAR INSTALLED	II AGE AT 12/31/15	III ORIGINAL COST	IV AVERAGE REMAINING LIFE	V WEIGHTED DOLLAR YEARS
2015	0.50	1835027.	44.7	82006630.
2014	1.50	1827839.	44.1	80552685.
2013	2.50	1912733.	43.5	83111909.
2012	3.50	1424624.	42.8	61024922.
2011	4.50	886896.	42.2	37446132.
2010	5.50	873694.	41.6	36353782.
2009	6.50	886167.	41.0	36331970.
2008	7.50	1102243.	40.4	44519734.
2007	8.50	1143027.	39.8	45473468.
2006	9.50	758079.	39.2	29699952.
2005	10.50	718683.	38.6	27722578.
2004	11.50	637008.	38.0	24188576.
2003	12.50	749780.	37.4	28020161.
2002	13.50	1249064.	36.8	45930541.
2001	14.50	43906.	36.2	1588254.
2000	15.50	2171338.	35.6	77250222.
1999	16.50	1159308.	35.0	40555490.
1998	17.50	1189989.	34.4	40922754.
1997	18.50	944258.	33.8	31913436.
1996	19.50	567791.	33.2	18855345.
1995	20.50	609954.	32.6	19897389.
1994	21.50	1014635.	32.0	32505207.
1993	22.50	900246.	31.5	28316255.
1992	23.50	1011356.	30.9	31225466.
1991	24.50	1193339.	30.3	36156883.
1990	25.50	871591.	29.7	25908907.
1989	26.50	798480.	29.2	23280822.
1988	27.50	728662.	28.6	20833163.
1987	28.50	595906.	28.0	16702681.
1986	29.50	523737.	27.5	14387746.
1985	30.50	700927.	26.9	18867376.
1984	31.50	477432.	26.4	12589057.
1983	32.50	436663.	25.8	11276348.
1982	33.50	490428.	25.3	12399814.
1981	34.50	577225.	24.7	14285302.
1980	35.50	263184.	24.2	6373708.
1979	36.50	665804.	23.7	15774385.
1978	37.50	754629.	23.2	17485902.
1977	38.50	390124.	22.7	8838635.
1976	39.50	457004.	22.1	10120523.
1975	40.50	698301.	21.6	15111191.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 45.0 YRS CURVE: IOWA R0.5

I YEAR INSTALLED	II AGE AT 12/31/15	III ORIGINAL COST	IV AVERAGE REMAINING LIFE	V WEIGHTED DOLLAR YEARS
1974	41.50	1053798.	21.1	22277051.
1973	42.50	1167628.	20.6	24105774.
1972	43.50	782863.	20.2	15778592.
1971	44.50	634490.	19.7	12480529.
1970	45.50	367521.	19.2	7053051.
1969	46.50	497241.	18.7	9306504.
1968	47.50	512899.	18.2	9358747.
1967	48.50	732640.	17.8	13028056.
1966	49.50	656912.	17.3	11379447.
1965	50.50	282663.	16.9	4767972.
1964	51.50	269512.	16.4	4424861.
1963	52.50	207915.	16.0	3320991.
1962	53.50	199333.	15.5	3095999.
1961	54.50	187652.	15.1	2832708.
1960	55.50	436511.	14.7	6400667.
1959	56.50	1097639.	14.2	15625330.
1958	57.50	221419.	13.8	3058038.
1957	58.50	103802.	13.4	1389980.
1956	59.50	88966.	13.0	1154258.
1955	60.50	56327.	12.6	707499.
1954	61.50	32530.	12.2	395254.
1953	62.50	43899.	11.7	515513.
1952	63.50	36369.	11.3	412363.
1951	64.50	57368.	10.9	627367.
1950	65.50	15444.	10.5	162710.
1949	66.50	19819.	10.1	200902.
1948	67.50	73188.	9.7	712815.
1947	68.50	24000.	9.3	224236.
1946	69.50	18032.	8.9	161333.
1945	70.50	1458.	8.6	12467.
1944	71.50	8254.	8.2	67309.
1943	72.50	28010.	7.8	217281.
1942	73.50	8297.	7.4	61048.
1941	74.50	7960.	7.0	55371.
1940	75.50	81.	6.6	531.
1939	76.50	2089.	6.1	12835.
1938	77.50	38310.	5.7	219537.
1937	78.50	5689.	5.3	30221.
1936	79.50	6522.	4.9	31875.
1935	80.50	0.	4.5	0.
1934	81.50	3787.	4.0	15211.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 45.0 YRS CURVE: IOWA R0.5

I YEAR INSTALLED	II AGE AT 12/31/15	III ORIGINAL COST	IV AVERAGE REMAINING LIFE	V WEIGHTED DOLLAR YEARS
1933	82.50	4486.	3.6	16007.
1932	83.50	1479.	3.1	4602.
1931	84.50	38742.	2.6	102517.
1930	85.50	72850.	2.2	158462.
1929	86.50	0.	1.7	0.
1928	87.50	270.	1.2	327.
1927	88.50	12760.	0.7	9030.
1926	89.50	15842.	0.1	2129.
TOTAL:		46376347.	31.1	1441780609.

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 45.0 YEARS CURVE: IOWA R0.5

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	AVERAGE	VI ACCURAL	VII ANNUAL SURVIVORS	VIII DEPREC. RESERVE BALANCE	IX DEPREC. RESERVE RATIO
				PERCENT SURVIVING	RATE ON SURVIVORS			
0.00	0.0	100.00000					0.00000	
0.50	0.0111	99.57866	0.42134	49.89467	0.022222	1.10876	0.68743	0.006903
1.50	0.0333	98.72900	0.84967	99.15383	0.022222	2.20341	2.04117	0.020674
2.50	0.0556	97.87089	0.85811	98.29994	0.022222	2.18443	3.36749	0.034407
3.50	0.0778	97.00389	0.86700	97.43739	0.022222	2.16526	4.66575	0.048099
4.50	0.1000	96.12800	0.87589	96.56594	0.022222	2.14590	5.93576	0.061749
5.50	0.1222	95.24289	0.88511	95.68544	0.022222	2.12633	7.17698	0.075355
6.50	0.1444	94.34845	0.89445	94.79567	0.022222	2.10656	8.38910	0.088916
7.50	0.1667	93.44600	0.90245	93.89722	0.022222	2.08659	9.57324	0.102447
8.50	0.1889	92.53378	0.91222	92.98989	0.022222	2.06643	10.72745	0.115930
9.50	0.2111	91.61367	0.92011	92.07372	0.022222	2.04607	11.85341	0.129385
10.50	0.2333	90.68466	0.92900	91.14916	0.022222	2.02553	12.94993	0.142802
11.50	0.2556	89.74645	0.93822	90.21555	0.022222	2.00478	14.01649	0.156179
12.50	0.2778	88.80089	0.94556	89.27367	0.022222	1.98385	15.05478	0.169534
13.50	0.3000	87.84600	0.95489	88.32344	0.022222	1.96273	16.06263	0.182850
14.50	0.3222	86.88311	0.96289	87.36455	0.022222	1.94142	17.04116	0.196139
15.50	0.3444	85.91189	0.97122	86.39750	0.022222	1.91993	17.98987	0.209399
16.50	0.3667	84.93067	0.98122	85.42128	0.022222	1.89824	18.90689	0.222616
17.50	0.3889	83.94066	0.99000	84.43567	0.022222	1.87634	19.79323	0.235800
18.50	0.4111	82.94167	0.99900	83.44117	0.022222	1.85424	20.64847	0.248952
19.50	0.4333	81.93067	1.01100	82.43617	0.022222	1.83190	21.46937	0.262043
20.50	0.4556	80.90933	1.02133	81.42000	0.022222	1.80932	22.25736	0.275090
21.50	0.4778	79.87678	1.03255	80.39306	0.022222	1.78650	23.01131	0.288085
22.50	0.5000	78.83300	1.04378	79.35489	0.022222	1.76343	23.73096	0.301028
23.50	0.5222	77.77533	1.05767	78.30417	0.022222	1.74008	24.41338	0.313896
24.50	0.5444	76.70445	1.07089	77.23989	0.022222	1.71643	25.05892	0.326695
25.50	0.5667	75.62067	1.08378	76.16256	0.022222	1.69249	25.66763	0.339426
26.50	0.5889	74.52311	1.09756	75.07189	0.022222	1.66825	26.23833	0.352083
27.50	0.6111	73.40989	1.11322	73.96650	0.022222	1.64369	26.76880	0.364648
28.50	0.6333	72.28267	1.12723	72.84628	0.022222	1.61880	27.26038	0.377136
29.50	0.6556	71.13978	1.14289	71.71122	0.022222	1.59357	27.71106	0.389530
30.50	0.6778	69.98145	1.15833	70.56061	0.022222	1.56800	28.12073	0.401831
31.50	0.7000	68.80800	1.17344	69.39472	0.022222	1.54210	28.48939	0.414042
32.50	0.7222	67.61700	1.19100	68.21250	0.022222	1.51582	28.81421	0.426139
33.50	0.7444	66.41133	1.20567	67.01417	0.022222	1.48920	29.09774	0.438144
34.50	0.7667	65.18933	1.22200	65.80033	0.022222	1.46222	29.33796	0.450042
35.50	0.7889	63.95122	1.23811	64.57028	0.022222	1.43489	29.53474	0.461832
36.50	0.8111	62.69678	1.25445	63.32400	0.022222	1.40719	29.68748	0.473509
37.50	0.8333	61.42733	1.26944	62.06206	0.022222	1.37915	29.79719	0.485080
38.50	0.8556	60.14222	1.28511	60.78478	0.022222	1.35077	29.86284	0.496537

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 45.0 YEARS CURVE: IOWA R0.5

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	V AVERAGE SURVIVING	VI ACCUAL RATE ON SURVIVORS	VII ANNUAL ACCRUALS	VIII DEPREC. RESERVE BALANCE	IX DEPREC. RESERVE RATIO
39.50	0.8778	58.84244	1.29978	59.49233	0.022222	1.32204	29.88511	0.507883
40.50	0.9000	57.52800	1.31444	58.18522	0.022222	1.29300	29.86366	0.519115
41.50	0.9222	56.19922	1.32878	56.86361	0.022222	1.26363	29.79851	0.530230
42.50	0.9444	54.85622	1.34300	55.52772	0.022222	1.23394	29.68945	0.541223
43.50	0.9667	53.50200	1.35422	54.17911	0.022222	1.20397	29.53921	0.552114
44.50	0.9889	52.13544	1.36656	52.81872	0.022222	1.17374	29.34639	0.562888
45.50	1.0111	50.75678	1.37867	51.44611	0.022222	1.14324	29.11097	0.573538
46.50	1.0333	49.36900	1.38778	50.06289	0.022222	1.11250	28.83569	0.584085
47.50	1.0556	47.97200	1.39700	48.67050	0.022222	1.08156	28.52025	0.594519
48.50	1.0778	46.56667	1.40533	47.26933	0.022222	1.05042	28.16534	0.604839
49.50	1.1000	45.15500	1.41166	45.86083	0.022222	1.01912	27.77280	0.615055
50.50	1.1222	43.73700	1.41800	44.44600	0.022222	0.98768	27.34248	0.625157
51.50	1.1444	42.31511	1.42189	43.02606	0.022222	0.95613	26.87672	0.635157
52.50	1.1667	40.89000	1.42511	41.60255	0.022222	0.92450	26.37610	0.645050
53.50	1.1889	39.46433	1.42566	40.17717	0.022222	0.89282	25.84326	0.654851
54.50	1.2111	38.03778	1.42656	38.75106	0.022222	0.86113	25.27783	0.664545
55.50	1.2333	36.61367	1.42411	37.32572	0.022222	0.82946	24.68318	0.674152
56.50	1.2556	35.19200	1.42166	35.90283	0.022222	0.79784	24.05935	0.683660
57.50	1.2778	33.77634	1.41567	34.48417	0.022222	0.76631	23.40999	0.693089
58.50	1.3000	32.36700	1.40933	33.07167	0.022222	0.73492	22.73558	0.702431
59.50	1.3222	30.96544	1.40156	31.66622	0.022222	0.70369	22.03771	0.711687
60.50	1.3444	29.57511	1.39033	30.27028	0.022222	0.67267	21.32005	0.720878
61.50	1.3667	28.19600	1.37911	28.88556	0.022222	0.64190	20.58284	0.729991
62.50	1.3889	26.83100	1.36500	27.51350	0.022222	0.61141	19.82924	0.739042
63.50	1.4111	25.48211	1.34889	26.15655	0.022222	0.58125	19.06161	0.748039
64.50	1.4333	24.15067	1.33145	24.81639	0.022222	0.55147	18.28164	0.756983
65.50	1.4556	22.83844	1.31222	23.49455	0.022222	0.52210	17.49151	0.765880
66.50	1.4778	21.54722	1.29122	22.19283	0.022222	0.49317	16.69346	0.774738
67.50	1.5000	20.27900	1.26822	20.91311	0.022222	0.46473	15.88997	0.783568
68.50	1.5222	19.03533	1.24367	19.65717	0.022222	0.43682	15.08313	0.792375
69.50	1.5444	17.81855	1.21678	18.42694	0.022222	0.40949	14.27584	0.801178
70.50	1.5667	16.62967	1.18889	17.22411	0.022222	0.38276	13.46970	0.809980
71.50	1.5889	15.46945	1.16022	16.04956	0.022222	0.35665	12.66614	0.818784
72.50	1.6111	14.34067	1.12878	14.90506	0.022222	0.33122	11.86858	0.827617
73.50	1.6333	13.24467	1.09600	13.79267	0.022222	0.30650	11.07908	0.836494
74.50	1.6556	12.18178	1.06289	12.71322	0.022222	0.28251	10.29871	0.845419
75.50	1.6778	11.15255	1.02922	11.66717	0.022222	0.25927	9.52875	0.854401
76.50	1.7000	10.15900	0.99356	10.65578	0.022222	0.23679	8.77199	0.863470
77.50	1.7222	9.20244	0.95655	9.68072	0.022222	0.21513	8.03056	0.872655
78.50	1.7444	8.28156	0.92089	8.74200	0.022222	0.19427	7.30394	0.881953

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38000. Services Steel

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 45.0 YEARS CURVE: IOWA R0.5

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	V AVERAGE PERCENT SURVIVING	VI ACCRUAL RATE ON SURVIVORS	VII ANNUAL ACCRAULS	VIII DEPREC. RESERVE BALANCE	IX DEPREC. RESERVE RATIO
79.50	1.7667	7.39733	0.88422	7.83944	0.022222	0.17421	6.59392	0.891392
80.50	1.7889	6.54878	0.84856	6.97305	0.022222	0.15496	5.90032	0.900981
81.50	1.8111	5.73556	0.81322	6.14217	0.022222	0.13649	5.22360	0.910739
82.50	1.8333	4.95800	0.77756	5.34678	0.022222	0.11882	4.56486	0.920705
83.50	1.8556	4.21222	0.74578	4.58511	0.022222	0.10189	3.92097	0.930855
84.50	1.8778	3.49644	0.71578	3.85433	0.022222	0.08565	3.29084	0.941197
85.50	1.9000	2.80500	0.69144	3.15072	0.022222	0.07002	2.66941	0.951663
86.50	1.9222	2.13889	0.66611	2.47194	0.022222	0.05493	2.05823	0.962292
87.50	1.9444	1.49722	0.64167	1.81806	0.022222	0.04040	1.45697	0.973115
88.50	1.9667	0.88000	0.61722	1.18861	0.022222	0.02641	0.86616	0.984273
89.50	1.9889	0.28811	0.59189	0.58406	0.022222	0.01298	0.28725	0.997013
90.50	2.0111	0.00000	0.28811	0.14406	0.022222	0.00320	0.00000	1.000000

4500.02578 100.00000

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38002. Services Plastic

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 40.0 YRS CURVE: IOWA R3 O.C. SALVAGE %: -55.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
2015	0.50	16104752.	0.012309	198228.	15906524.
2014	1.50	13446333.	0.036860	495629.	12950704.
2013	2.50	13439026.	0.061327	824172.	12614854.
2012	3.50	11292798.	0.085691	967693.	10325105.
2011	4.50	9121970.	0.109954	1002999.	8118971.
2010	5.50	8235452.	0.134089	1104282.	7131170.
2009	6.50	6158919.	0.158090	973662.	5185257.
2008	7.50	7969624.	0.181936	1449960.	6519664.
2007	8.50	9625487.	0.205625	1979236.	7646251.
2006	9.50	10890121.	0.229138	2495342.	8394779.
2005	10.50	10304401.	0.252457	2601421.	7702980.
2004	11.50	10865727.	0.275574	2994313.	7871414.
2003	12.50	10728281.	0.298473	3202103.	7526178.
2002	13.50	9654967.	0.321139	3100586.	6554381.
2001	14.50	2680678.	0.343560	920975.	1759703.
2000	15.50	22632222.	0.365733	8277347.	14354875.
1999	16.50	7571643.	0.387635	2935035.	4636608.
1998	17.50	5876206.	0.409260	2404896.	3471310.
1997	18.50	5935123.	0.430603	2555681.	3379442.
1996	19.50	5079509.	0.451649	2294156.	2785353.
1995	20.50	4759849.	0.472390	2248507.	2511342.
1994	21.50	5076457.	0.492819	2501777.	2574680.
1993	22.50	4958394.	0.512930	2543308.	2415086.
1992	23.50	3701880.	0.532709	1972026.	1729854.
1991	24.50	3771325.	0.552150	2082337.	1688988.
1990	25.50	3929631.	0.571241	2244768.	1684863.
1989	26.50	3027945.	0.589968	1786391.	1241554.
1988	27.50	3321216.	0.608317	2020352.	1300864.
1987	28.50	2713913.	0.626275	1699656.	1014257.
1986	29.50	2545006.	0.643824	1638536.	906470.
1985	30.50	1814183.	0.660941	1199069.	615114.
1984	31.50	1541522.	0.677609	1044549.	496973.
1983	32.50	1481859.	0.693800	1028114.	453745.
1982	33.50	1297346.	0.709500	920466.	376880.
1981	34.50	1142467.	0.724683	827926.	314541.
1980	35.50	849861.	0.739322	628321.	221540.
1979	36.50	803966.	0.753407	605714.	198252.
1978	37.50	508253.	0.766916	389787.	118466.
1977	38.50	280597.	0.779838	218820.	61777.
1976	39.50	232766.	0.792168	184390.	48376.
1975	40.50	268138.	0.803899	215556.	52582.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38002. Services Plastic

DETERMINATION OF ORIGINAL COST VALUES AT 12/31/15

DEPRECIATION: ALG LIFE: 40.0 YRS CURVE: IOWA R3 O.C. SALVAGE %: -55.

I YEAR	II AGE AT 12/31/15	III ORIGINAL COST AT 12/31/15	IV DEPRECIATION RESERVE RATIO	V CALCULATED DEPRECIATION RESERVE	VI ORIGINAL COST LESS CALCULATED DEPRECIATION
1974	41.50	387076.	0.815035	315480.	71596.
1973	42.50	141803.	0.825586	117071.	24732.
1972	43.50	245765.	0.835567	205353.	40412.
1971	44.50	243891.	0.844998	206087.	37804.
1970	45.50	377083.	0.853909	321994.	55089.
1969	46.50	333680.	0.862338	287745.	45935.
1968	47.50	123607.	0.870325	107578.	16029.
1967	48.50	12128.	0.877915	10647.	1481.
1966	49.50	79.	0.885166	70.	9.
1965	50.50	0.	0.892138	0.	0.
1964	51.50	0.	0.898887	0.	0.
1963	52.50	111.	0.905477	101.	10.
SUBTOTAL :			0.292318	72350212.	175154824.
NET SALVAGE:	-55.0%			39792616.	-39792616.
TOTAL :		247505036.	0.453093	112142828.	135362208.

WEIGHTED AGE: 12.7 YEARS
REMAINING LIFE: 28.3 YEARS

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38002. Services Plastic

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 40.0 YRS CURVE: IOWA R3 O.C. SALVAGE %: -55.

YEAR	AGE INTERVAL	ORIGINAL COST 12/31/15	ANNUAL DEPRECIATION RATE	V ORIGINAL COST ANNUAL DEPRECIATION	
				IV	V
2015	0.50 - 1.50	16104752.	0.025000	402619.	
2014	1.50 - 2.50	13446333.	0.025000	336158.	
2013	2.50 - 3.50	13439026.	0.025000	335976.	
2012	3.50 - 4.50	11292798.	0.025000	282320.	
2011	4.50 - 5.50	9121970.	0.025000	228049.	
2010	5.50 - 6.50	8235452.	0.025000	205886.	
2009	6.50 - 7.50	6158919.	0.025000	153973.	
2008	7.50 - 8.50	7969624.	0.025000	199241.	
2007	8.50 - 9.50	9625487.	0.025000	240637.	
2006	9.50 - 10.50	10890121.	0.025000	272253.	
2005	10.50 - 11.50	10304401.	0.025000	257610.	
2004	11.50 - 12.50	10865727.	0.025000	271643.	
2003	12.50 - 13.50	10728281.	0.025000	268207.	
2002	13.50 - 14.50	9654967.	0.025000	241374.	
2001	14.50 - 15.50	2680678.	0.025000	67017.	
2000	15.50 - 16.50	22632222.	0.025000	565806.	
1999	16.50 - 17.50	7571643.	0.025000	189291.	
1998	17.50 - 18.50	5876206.	0.025000	146905.	
1997	18.50 - 19.50	5935123.	0.025000	148378.	
1996	19.50 - 20.50	5079509.	0.025000	126988.	
1995	20.50 - 21.50	4759849.	0.025000	118996.	
1994	21.50 - 22.50	5076457.	0.025000	126911.	
1993	22.50 - 23.50	4958394.	0.025000	123960.	
1992	23.50 - 24.50	3701880.	0.025000	92547.	
1991	24.50 - 25.50	3771325.	0.025000	94283.	
1990	25.50 - 26.50	3929631.	0.025000	98241.	
1989	26.50 - 27.50	3027945.	0.025000	75699.	
1988	27.50 - 28.50	3321216.	0.025000	83030.	
1987	28.50 - 29.50	2713913.	0.025000	67848.	
1986	29.50 - 30.50	2545006.	0.025000	63625.	
1985	30.50 - 31.50	1814183.	0.025000	45355.	
1984	31.50 - 32.50	1541522.	0.025000	38538.	
1983	32.50 - 33.50	1481859.	0.025000	37046.	
1982	33.50 - 34.50	1297346.	0.025000	32434.	
1981	34.50 - 35.50	1142467.	0.025000	28562.	
1980	35.50 - 36.50	849861.	0.025000	21247.	
1979	36.50 - 37.50	803966.	0.025000	20099.	
1978	37.50 - 38.50	508253.	0.025000	12706.	
1977	38.50 - 39.50	280597.	0.025000	7015.	
1976	39.50 - 40.50	232766.	0.025000	5819.	
1975	40.50 - 41.50	268138.	0.025000	6703.	

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38002. Services Plastic

DETERMINATION OF DEPRECIATION RATE FOR 2016 BASED ON PLANT AT 12/31/15

DEPRECIATION: ALG LIFE: 40.0 YRS CURVE: IOWA R3 O.C. SALVAGE %: -55.

I YEAR	II INTERVAL AGE	III ORIGINAL COST 12/31/15	IV ANNUAL DEPRECIATION RATE	V ORIGINAL COST ANNUAL DEPRECIATION
1974	41.50 - 42.50	387076.	0.025000	9677.
1973	42.50 - 43.50	141803.	0.025000	3545.
1972	43.50 - 44.50	245765.	0.025000	6144.
1971	44.50 - 45.50	243891.	0.025000	6097.
1970	45.50 - 46.50	377083.	0.025000	9427.
1969	46.50 - 47.50	333680.	0.025000	8342.
1968	47.50 - 48.50	123607.	0.025000	3090.
1967	48.50 - 49.50	12128.	0.025000	303.
1966	49.50 - 50.50	79.	0.025000	2.
1965	50.50 - 51.50	0.	0.025000	0.
1964	51.50 - 52.50	0.	0.025000	0.
1963	52.50 - 53.50	111.	0.025000	3.
SUBTOTAL :		247505036.	0.025000	6187626.
NET SALVAGE: -55.0 %				3403194.
TOTAL :		247505036.	0.038750	9590820.

MONTHLY RATE: 0.003229

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38002. Services Plastic

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 40.0 YRS CURVE: IOWA R3

I YEAR INSTALLED	II AGE AT 12/31/15	III ORIGINAL COST	IV AVERAGE REMAINING LIFE	V WEIGHTED DOLLAR YEARS
2015	0.50	16104752.	39.5	636260972.
2014	1.50	13446333.	38.5	518028156.
2013	2.50	13439026.	37.5	504594154.
2012	3.50	11292798.	36.6	413004206.
2011	4.50	9121970.	35.6	324758849.
2010	5.50	8235452.	34.6	285246803.
2009	6.50	6158919.	33.7	207410288.
2008	7.50	7969624.	32.7	260786544.
2007	8.50	9625487.	31.8	305850020.
2006	9.50	10890121.	30.8	335791139.
2005	10.50	10304401.	29.9	308119181.
2004	11.50	10865727.	29.0	314856556.
2003	12.50	10728281.	28.1	301047120.
2002	13.50	9654967.	27.2	262175229.
2001	14.50	2680678.	26.3	70388123.
2000	15.50	22632222.	25.4	574195012.
1999	16.50	7571643.	24.5	185464315.
1998	17.50	5876206.	23.6	138852400.
1997	18.50	5935123.	22.8	135177661.
1996	19.50	5079509.	21.9	111414114.
1995	20.50	4759849.	21.1	100453699.
1994	21.50	5076457.	20.3	102987213.
1993	22.50	4958394.	19.5	96603449.
1992	23.50	3701880.	18.7	69194175.
1991	24.50	3771325.	17.9	67559526.
1990	25.50	3929631.	17.2	67394530.
1989	26.50	3027945.	16.4	49662165.
1988	27.50	3321216.	15.7	52034579.
1987	28.50	2713913.	14.9	40570293.
1986	29.50	2545006.	14.2	36258788.
1985	30.50	1814183.	13.6	24604571.
1984	31.50	1541522.	12.9	19878916.
1983	32.50	1481859.	12.2	18149805.
1982	33.50	1297346.	11.6	15075181.
1981	34.50	1142467.	11.0	12581634.
1980	35.50	849861.	10.4	8861600.
1979	36.50	803966.	9.9	7930098.
1978	37.50	508253.	9.3	4738633.
1977	38.50	280597.	8.8	2471072.
1976	39.50	232766.	8.3	1935049.
1975	40.50	268138.	7.8	2103284.

**PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016**

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38002. Services Plastic

DETERMINATION OF AVERAGE REMAINING LIFE AT 12/31/15

LIFE: 40.0 YRS CURVE: IOWA R3

I YEAR INSTALLED	II AGE AT 12/31/15	III ORIGINAL COST	IV AVERAGE REMAINING LIFE	V WEIGHTED DOLLAR YEARS
1974	41.50	387076.	7.4	2863825.
1973	42.50	141803.	7.0	989298.
1972	43.50	245765.	6.6	1616475.
1971	44.50	243891.	6.2	1512148.
1970	45.50	377083.	5.8	2203541.
1969	46.50	333680.	5.5	1837407.
1968	47.50	123607.	5.2	641152.
1967	48.50	12128.	4.9	59226.
1966	49.50	79.	4.6	363.
1965	50.50	0.	4.3	0.
1964	51.50	0.	4.0	0.
1963	52.50	111.	3.8	420.
TOTAL:		247505036.	28.3	7006192957.

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38002. Services Plastic

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 40.0 YEARS CURVE: IOWA

R3

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	V AVERAGE PERCENT SURVIVING	VI ACCRUAL RATE ON SURVIVORS	VII ANNUAL ACCRUALS	VIII DEPREC. RESERVE BALANCE	IX DEPREC. RESERVE RATIO
0.00	0.0	100.00000					0.00000	
0.50	0.0125	99.98075	0.01925	49.99519	0.025000	1.24988	1.23063	0.012309
1.50	0.0375	99.93475	0.04600	99.95775	0.025000	2.49894	3.68357	0.036860
2.50	0.0625	99.87875	0.05600	99.90675	0.025000	2.49767	6.12524	0.061327
3.50	0.0875	99.81025	0.06850	99.84450	0.025000	2.49611	8.55285	0.085691
4.50	0.1125	99.72875	0.08150	99.76950	0.025000	2.49424	10.96559	0.109954
5.50	0.1375	99.63050	0.09825	99.67963	0.025000	2.49199	13.35933	0.134089
6.50	0.1625	99.51400	0.11650	99.57225	0.025000	2.48931	15.73214	0.158090
7.50	0.1875	99.37575	0.13825	99.44488	0.025000	2.48612	18.08001	0.181936
8.50	0.2125	99.21425	0.16150	99.29500	0.025000	2.48238	20.40089	0.205625
9.50	0.2375	99.02600	0.18825	99.12012	0.025000	2.47800	22.69064	0.229138
10.50	0.2625	98.80700	0.21900	98.91650	0.025000	2.47291	24.94455	0.252457
11.50	0.2875	98.55450	0.25250	98.68075	0.025000	2.46702	27.15907	0.275574
12.50	0.3125	98.26450	0.29000	98.40950	0.025000	2.46024	29.32931	0.298473
13.50	0.3375	97.93275	0.33175	98.09862	0.025000	2.45247	31.45002	0.321139
14.50	0.3625	97.55525	0.37750	97.74400	0.025000	2.44360	33.51612	0.343560
15.50	0.3875	97.12875	0.42650	97.34200	0.025000	2.43355	35.52317	0.365733
16.50	0.4125	96.64725	0.48150	96.88800	0.025000	2.42220	37.46387	0.387635
17.50	0.4375	96.10650	0.54075	96.37687	0.025000	2.40942	39.33254	0.409260
18.50	0.4625	95.50250	0.60400	95.80450	0.025000	2.39511	41.12366	0.430603
19.50	0.4875	94.82925	0.67325	95.16587	0.025000	2.37915	42.82955	0.451649
20.50	0.5125	94.08150	0.74775	94.45537	0.025000	2.36138	44.44319	0.472390
21.50	0.5375	93.25400	0.82750	93.66775	0.025000	2.34169	45.95738	0.492819
22.50	0.5625	92.34125	0.91275	92.79763	0.025000	2.31994	47.36457	0.512930
23.50	0.5875	91.33650	1.00475	91.83888	0.025000	2.29597	48.65580	0.532709
24.50	0.6125	90.23350	1.10300	90.78500	0.025000	2.26963	49.82242	0.552150
25.50	0.6375	89.02525	1.20825	89.62938	0.025000	2.24073	50.85490	0.571241
26.50	0.6625	87.70350	1.32175	88.36438	0.025000	2.20911	51.74226	0.589968
27.50	0.6875	86.26025	1.44325	86.98187	0.025000	2.17455	52.47356	0.608317
28.50	0.7125	84.68750	1.57275	85.47387	0.025000	2.13685	53.03766	0.626275
29.50	0.7375	82.97600	1.71150	83.83175	0.025000	2.09579	53.42195	0.643824
30.50	0.7625	81.11550	1.86050	82.04575	0.025000	2.05114	53.61259	0.660941
31.50	0.7875	79.09725	2.01825	80.10637	0.025000	2.00266	53.59700	0.677609
32.50	0.8125	76.91100	2.18625	78.00412	0.025000	1.95010	53.36086	0.693800
33.50	0.8375	74.55025	2.36075	75.73062	0.025000	1.89327	52.89337	0.709500
34.50	0.8625	72.00750	2.54275	73.27887	0.025000	1.83197	52.18259	0.724683
35.50	0.8875	69.27650	2.73100	70.64200	0.025000	1.76605	51.21765	0.739322
36.50	0.9125	66.35800	2.91850	67.81725	0.025000	1.69543	49.99458	0.753407
37.50	0.9375	63.25300	3.10500	64.80550	0.025000	1.62014	48.50971	0.766916
38.50	0.9625	59.96950	3.28350	61.61125	0.025000	1.54028	46.76649	0.779838

PEOPLES GAS SYSTEM
2016 DEPRECIATION STUDY
FILED: JUNE 28, 2016
REVISED: DECEMBER 15, 2016

PGS - 2016 CASE

DEPRECIATION/VALUATION SYSTEM

ACCOUNT NO. 38002. Services Plastic

DEVELOPMENT OF AVERAGE LIFE GROUP ACCRUAL RATES AND RESERVE RATIOS

DEPRECIATION: ALG LIFE: 40.0 YEARS CURVE: IOWA

R3

I AGE	II AGE/LIFE RATIO	III PERCENT SURVIVING	IV RETIREMENT DIFFERENCE	V AVERAGE PERCENT SURVIVING	VI ACCRUAL RATE ON SURVIVORS	VII ANNUAL ACCRAULS	VIII DEPREC. RESERVE BALANCE	IX DEPREC. RESERVE RATIO
39.50	0.9875	56.52100	3.44850	58.24525	0.025000	1.45613	44.77413	0.792168
40.50	1.0125	52.92575	3.59525	54.72337	0.025000	1.36808	42.54696	0.803899
41.50	1.0375	49.20975	3.71600	51.06775	0.025000	1.27669	40.10766	0.815035
42.50	1.0625	45.40575	3.80400	47.30775	0.025000	1.18269	37.48635	0.825586
43.50	1.0875	41.55150	3.85425	43.47862	0.025000	1.08697	34.71906	0.835567
44.50	1.1125	37.68925	3.86225	39.62037	0.025000	0.99051	31.84732	0.844998
45.50	1.1375	33.86575	3.82350	35.77750	0.025000	0.89444	28.91826	0.853909
46.50	1.1625	30.12850	3.73725	31.99713	0.025000	0.79993	25.98094	0.862338
47.50	1.1875	26.52325	3.60525	28.32588	0.025000	0.70815	23.08384	0.870325
48.50	1.2125	23.09225	3.43100	24.80775	0.025000	0.62019	20.27303	0.877915
49.50	1.2375	19.87350	3.21875	21.48287	0.025000	0.53707	17.59135	0.885166
50.50	1.2625	16.89675	2.97675	18.38512	0.025000	0.45963	15.07423	0.892138
51.50	1.2875	14.18250	2.71425	15.53963	0.025000	0.38849	12.74847	0.898887
52.50	1.3125	11.74275	2.43975	12.96263	0.025000	0.32407	10.63279	0.905477
53.50	1.3375	9.58025	2.16250	10.66150	0.025000	0.26654	8.73682	0.911962
54.50	1.3625	7.68975	1.89050	8.63500	0.025000	0.21587	7.06220	0.918391
55.50	1.3875	6.05900	1.63075	6.87437	0.025000	0.17186	5.60331	0.924791
56.50	1.4125	4.67225	1.38675	5.36563	0.025000	0.13414	4.35070	0.931178
57.50	1.4375	3.51150	1.16075	4.09188	0.025000	0.10230	3.29225	0.937561
58.50	1.4625	2.55725	0.95425	3.03437	0.025000	0.07586	2.41385	0.943926
59.50	1.4875	1.78975	0.76750	2.17350	0.025000	0.05434	1.70069	0.950240
60.50	1.5125	1.19025	0.59950	1.49000	0.025000	0.03725	1.13844	0.956473
61.50	1.5375	0.74050	0.44975	0.96538	0.025000	0.02413	0.71283	0.962629
62.50	1.5625	0.42000	0.32050	0.58025	0.025000	0.01451	0.40683	0.968650
63.50	1.5875	0.20925	0.21075	0.31463	0.025000	0.00787	0.20395	0.974664
64.50	1.6125	0.08475	0.12450	0.14700	0.025000	0.00368	0.08312	0.980808
65.50	1.6375	0.02425	0.06050	0.05450	0.025000	0.00136	0.02399	0.989111
66.50	1.6625	0.00325	0.02100	0.01375	0.025000	0.00034	0.00333	1.000000
67.50	1.6875	0.00000	0.00325	0.00162	0.025000	0.00004	0.00000	1.000000

3999.99999 100.00000