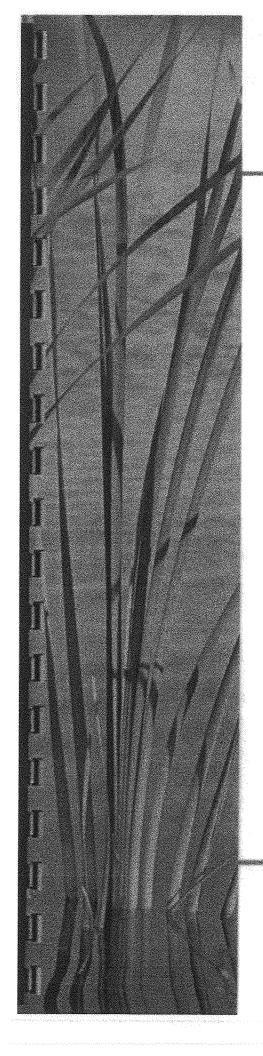
BEFORE THE TENNESSEE REGULATORY AUTHORITY NASHVILLE, TENNESSEE

IN RE:)	
PETITION OF B&W PIPELINE, LLC FOR AN INCREASE IN RATES))))	DOCKET NO. 15-00042

SUPPLEMENTAL RESPONSE TO FIRST REQUEST OF THE CONSUMER ADVOCATE AND PROTECTION DIVISION OF THE ATTORNEY GENERAL'S OFFICE

EXHIBIT 1-2



Gas Pipeline Replacement Cost Evaluation

B & W Pipeline, LLC

Cookeville, Tennessee

November 2013





December 12, 2013

Mr. Rafael E. Ramon de los Rios, Controller ENREMA 728 South Jefferson Avenue, Unit #4 Cookeville, Tennessee 38501

Re: Gas Pipeline Replacement Cost Evaluation B & W Pipeline, LLC Cookeville, Tennessee

Gentlemen:

Find attached two (2) completed reports of the replacement cost analysis for the B & W Pipeline. Your comments concerning the methodology for the use of the percentage of construction cost for "Miscellaneous Construction Items" and for "Project Costs" have been incorporated into the body of the report.

It has been our pleasure to assist you in this endeavor and trust that the completed report is that which will fulfill your expectations. Should you need additional copies of the report or have other questions concerning the report, please do not hesitate to call.

Also, should you have need for engineering services for other projects, please call. We will be happy to assist.

Sincerely,

BELL ENGINEERING

Kelly G. Gillespie, President, Project Manager

Carroll R. Ramey, Associate

GAS PIPELINE REPLACEMENT COST EVALUATION B & W Pipeline, LLC 728 South Jefferson Avenue, Unit #4 Cookeville, Tennessee 38501

On October 30, 2013, Bell Engineering was authorized by B & W Pipeline, LLC, to conduct a study to determine the replacement cost of their gas pipeline known as the B & W Gas Pipeline. The cost evaluation will estimate the cost to replace the entire length of pipeline from the B & W connection to the Spectra Energy transmission main, near Deer Lodge, Tennessee, to the Navitas master meter approximately one mile south of the Kentucky/Tennessee state line. The total length of this pipeline is approximately 48 miles.

It was also requested, as a part of this report, to estimate the "actual cash value" of the pipeline as it currently exists.

The methodology used for the accomplishment of these tasks is as follows:

- Adjusting the cost of individual units of gas pipe from past projects to present day costs
 using the factors presented in the Engineering News Record (ENR) Index. The ENR
 Index is a publication of the construction industry which considers such factors as
 inflation, salary changes and material costs. ENR began publishing the data in this
 index in 1960.
- 2. The "Actual Cash Value" will be calculated using the present day replacement costs depreciated by the "age of the main".
- 3. As sections of the main were constructed in different time frames and of different materials, each section must be evaluated separately.
- 4. As the pipeline components are made up of both steel pipe and polyethylene pipe, and as the construction materials are different, the pipeline age used to estimate the "Actual Cash Value" will be different. For this study it was assumed the useful life of the pipe to be 50 years for steel pipe and 75 years for polyethylene pipe.
- 5. The study will consider the cost to replace the existing main in place. As such, the methodology used will be similar to completion of a preliminary study. In a preliminary study, the approximate length of a pipeline is known, but "miscellaneous construction items" are not known until completion of the final design. In the B & W case, the lengths of the pipeline are known, but the miscellaneous items of construction which would be necessary to replace the main are not known. These items include, but are not limited to, valves, cathodic protection, line markers, pavement replacement and similar items necessary for construction. It has been found historically, that such items can be estimated as a percentage of the main line construction cost. As the B & W pipeline crosses primarily rural areas, this percentage is estimated at 20%. Should the main be located in urban areas, for example, the percentage would be 30% to 35%.

6. Likewise, the percentage used for this report for "Project Development Costs", also 20%, covers such items as engineering fees, legal costs, company costs to administer the construction contracts, state natural gas rate regulatory soft costs, and administration costs associated with the requirements of other regulatory agencies. As the nature of the pipeline is primarily rural in nature, the percentage used would seem appropriate as compared to a location in an urban atmosphere of which the percentage would be approximately 30%.

The following table presents a list of the pipeline materials, their length and the approximate date of their installation:

PIPE	LENGTH	YEAR INSTALLED
6 Inch Medium Density Polyethylene	21,120 Ft.	1982
6 Inch Steel	79,200 Ft.	1981-1982
6 Inch High Density Polyethylene	10,250 Ft.	2013
6 Inch High Density Polyethylene	72,336 Ft.	1988-1989
6 Inch Steel	40,128 Ft.	1988
8 Inch Steel	11,088 Ft.	1986-1987
8 Inch High Density Polyethylene	20,064 Ft.	1986-1987

The individual pipe values, as adjusted to the Engineering News Record Index are as follows:

6 Inch Medium Density Polyethylene	\$26.00 /L.F.
6 Inch High Density Polyethylene	\$28.00 /L.F.
8 Inch High Density Polyethylene	\$32.00 /L.F.
6 Inch Steel	\$42.50/ L.F.
8 Inch Steel	\$54.00 /L.F.

Opinion of probable replacement costs for this system, by section, is shown as follows:

Section 1 – 6 Inch Medium Density Poly. 21, 120 Ft. @ \$26.00/L.F. \$549,120.00 Pressure Regulating Station @ Spectra Connection \$50,000.00

Metering Station @ Spectra Connection Subtotal Miscellaneous Construction Items @ 20% of Subtotal Total Opinion of Construction Cost Miscellaneous Project Development Costs @ 20% Total Opinion of Probable Replacement Costs (Section 1)	\$20,000.00 \$619,120.00 \$123,824.00 \$742,944.00 \$148,589.00 \$891,533.00
Section 2 – 6 Inch Steel 79,200 Ft. @ \$42.50/L.F. In-Line Metering Station Subtotal Miscellaneous Construction Items @ 20% of Subtotal Total Opinion of Probable Construction Cost Miscellaneous Project Development Costs @ 20% Total Opinion of Probable Replacement Costs (Section 2)	\$3,366,000.00 \$ 18,000.00 \$3,384,000.00 \$ 676,800.00 \$4,060,800.00 \$ 812,160.00 \$4,872,960.00
Section 3 – 6 Inch High Density Poly. 10,250 Ft. @ \$28.00/L.F. Miscellaneous Construction Items @ 20% Total Opinion of Probable Construction Cost Miscellaneous Project Development Costs @ 20% Total Opinion of Probable Replacement Costs (Section 3)	\$287,000.00 \$ 57,400.00 \$344,400.00 \$ 68,880.00 \$ 413,280.00
Section 4 – 6 Inch High Density Poly. 72,336 Ft. @\$28.00/L.F. In-Line Metering Station Subtotal Miscellaneous Construction Items @ 20% of Subtotal Total Opinion of Probable Construction Cost Miscellaneous Project Development Costs @ 20% Total Opinion of Probable Replacement Costs (Section 4)	\$2,025,408.00 \$ 18,000.00 \$2,043,408.00 \$ 408,682.00 \$2,452,090.00 \$ 490,418.00 \$2,943,508.00
Section 5 – 6 Inch Steel 40,128 Ft. @ \$42.50/L.F. Miscellaneous Construction Items @ 20% Total Opinion of Probable Construction Cost Miscellaneous Project Development Costs @ 20% Total Opinion of Probable Replacement Costs (Section 5)	\$1,625,184.00 <u>\$ 325,037.00</u> \$1,950,221.00 <u>\$ 390,044.00</u> \$2,340,265.00

Section 6 – 8 Inch Steel	11,088 Ft. @ \$54.00/L.F.	\$598,752.00
Miscellaneous Construction	\$119,750.00	
Total Opinion of Probable C	Construction Cost	\$718,502.00
Miscellaneous Project Deve	lopment Costs @ 20%	\$143,700.00
Total Opinion of Probable R	Replacement Costs (Section 6)	\$862,202.00
Section 7 – 8 Inch High Density Poly.	20,064 Ft. @ \$32.00/L.F.	\$642,048.00
Byrdstown Master Meter		\$ 18,000.00
Albany Master Meter		\$ 18,000.00
Subtotal		\$ 678,048.00
Miscellaneous Construction	\$ 135,610.00	
Total Opinion of Probable C	\$813,658.00	
Miscellaneous Project Deve	lopment Cost @ 20%	<u>\$162,732.00</u>
Total Opinion of Probable R	eplacement Costs (Section 7)	\$ 976,390.00

SUMMARY

TOTAL OPINION OF PROBABLE REPLACEMENT COSTS

Section 1	\$ 891,533.00
Section 2	\$4,872,960.00
Section 3	\$413,280.00
Section 4	\$2,942,508.00
Section 5	\$2,340,265.00
Section 6	\$862,202.00
Section 7	\$976,390.00

TOTAL OPINION OF PROBABLE REPLACEMENT COST

\$13,299,138.00

DEPRECIATED VALUES

The primary difference between replacement cost and actual cash value is the deduction for depreciation. There are likely several methods for calculating the depreciated value of the B & W pipeline. For the purpose of this report, the depreciation will be calculated on the basis of comparing the expected life of the pipeline materials against the amount of time since they were constructed. For this report, the expected life of steel pipe will be 50 years; the expected life of the polyethylene pipe will be 75 years. This comparison is depicted in the following table:

SECTION	PIPE	YEAR INSTALLED	AGE	DEPRECIATION AMOUNT	REPLACEMENT COST	CASH VALUE
- Foods	Poly	1982	31 yrs.	31/75 - 41.3%	\$891,533.00	\$523,033.00
2	Steel	1982	31 yrs.	31/50 - 62.0%	\$4,872,960.00	\$1,851,725.00
3	Poly	2013	0 yrs	0%	\$413,280.00	\$413,280.00
4	Poly	1988	25 yrs	25/75 – 33.3%	\$2,942,508.00	\$1,962,653.00
5	Steel	1988	25 yrs	25/50 – 50.0%	\$2,340,265.00	\$1,170,132.00
6	Steel	1987	26 yrs	26/50 – 52.0%	\$862,202.00	\$413,857.00
7	Poly	1987	26 yrs	26/75 – 34.7%	\$976,390.00	\$637,908.00
TOTAL OPINION OF PROBABLE CASH VALUE						\$6,972,588.00

EXHIBIT 1-18



Operator Fee Calculations - FY 2013 - 2014 (B&W Pipeline, LLC) - Class AB-PI (No well-related/ Non-regulated business Costs)

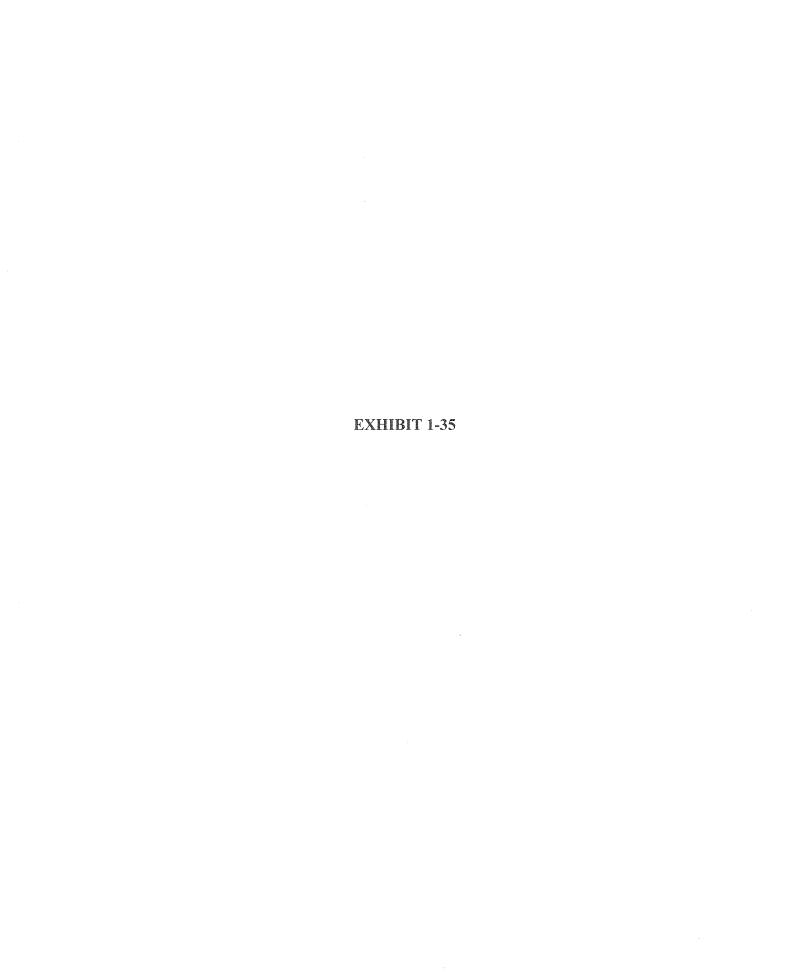
PERSONNEL COST

		Vehicle Insurance	Fuel & Maintenance	Vehicle Wear and Tear (Depreciation)		VEHICLE AND ASSOCIATED COST	Marcelo M. Recchia	Rafael E. Ramon	Frank D. Cash	EMPLOYEE NAME
Li Annual Monthly		\$	\$.	s	PERI		Genera	Con	Pipeline	ī
Vehicle Model: 2012 Ford F-150 Purchase Price: \$ 15,178.3 Life Expectancy: 5Yea Annual Deprediation: \$ 3,235.6 Monthly Contribution: \$ 263.6		148.74	553.17	269.64	PER MONTH		General Manager	Controller	Pipeline Operator	ши
2012 Ford F \$ 16, \$ 3,		50%	50%	50%	DEDICATION		\$ 240,000.00	\$ 96,000.00	\$ 91,560.00	GROSS ANNI SALARY
9F-150 6,178.32 5Years 3,235.66 269.64	۰	❖	÷	\$	ž.		\$ 00.00	\$ 0.00	\$ 0.00	UAL SOC
	485.78	74.37	276.59	134.82	MONTHLY CHARGE		14,880.00 \$	5,952.00 \$	5,676.72 \$	GROSS ANNUAL SOCIAL SECURITY SALARY (6.2%)*
							3,480.00	1,392.00	1,327.62	MEDICARE (1.45%)
							360.00	,	,	ADDITIONAL MEDICARE TAX
							\$ 180.00	\$ 180.00	\$ 180.00	ADDITIONAL PAYROLL MEDICARE TAX PROCESSING FEES
							\$ 5,457.96	\$ 5,273.76	\$ 8,732.76	HEALTH INS. (COMPANY)
							\$ 264,357.96 \$	\$ 108,797.76 \$	\$ 107,477.10 \$	TOTAL ANNUAL COST
							22,029.83	9,066.48	8,956.43	MONTHLY AVERAGE
							5.00%	10%	50%	DEDICATION
						v	\$	⋄	\$	CH
						6,486.35	1,101.49	906.65	4,478.21	MONTHLY CHARGE

INSURANCE AND OTHER ORGANIZATIONAL COST

CONCEPT		PER MONTH	DEDICATION	MONT	MONTHLY CHARGE
Workers Compensation (Frank Cash)	ţ,	241.22	50%	٠٠	120.61
Workers Compensation (Rafael E. Ramon)	45	46.08	10%	❖	4.61
Workers Compensation (Marcelo M. Recchia)	Ş	134.00	5%	s	6.70
General Liability & Umbrella (Pipeline)	ş	7,762.42	55%	<>>	4,269.33
				ţ,	4,401.25
SUMMARY OF CHARGES					
DCDCDMA)CI COC	ES				
PERSONNEL COST	ES .	6,486.35			
VEHICLE AND ASSOCIATED COST	T S	6,486.35 485.78			
VEHICLE AND ASSOCIATED COST INSURANCE AND OTHER ORGANIZATIONAL COST	ES T \$	6,486.35 485.78 4,401.25			

Assumed Operator Fee for the Period S 11,375.00



VERIFICATION

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COUNTY	OF MAMINDAGE	
5 -	Pacan Bruss	

I, RAFACE REWEND, being duly sworn, state that I am the Controller for Enrema, LLC; that I am authorized to make this verification on behalf of B&W Pipeline, LLC; that I have read the foregoing discovery responses and know the content thereof; that the same are true and correct to the best of my knowledge, information and belief.

ANG.

SWORN to and subscribed before me, this 214 day of July, 2015.

Notary Public

My Commission Expires: 5/1/2017

FERDINAND TORO

Notary Public - State of Florida

My Comm. Expires May 1, 2017

Commission # FF 013605