EXHIBIT
#19
DG 17-070

Northern Utilities, Inc.
Docket No. DG 17-070
PUC Staff Information Data Request Set 1

Received: April 12, 2019 Date of Response: April 17, 2019
Request No. Staff 5-3 Witness: Cindy Carroll and Christopher LeBlanc

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Request:

Concerning any line extension project subject to the step increase where the actual costs were 30 percent or more above the original budgeted costs:

a) Please provide an updated CIAC calculation using actual costs and provide the amount of CIAC actually paid by the customer(s).

If the full amount of the updated CIAC was not paid by the customer(s) please explain why not.

Response:

201 Atlantic Ave North Hampton NH – This project is to serve the North Hampton Elementary School. The original CIAC was approved through a warrant article vote with the town. Additional costs were associated with ledge removal and additional cut backs and paving required by the NHDOT. Ledge removal and the close proximity of the installed main to the edge of pavement caused the pavement to become undermined and the NHDOT requirements were to cut trench back 1 foot and repave. This required more ledge removal than originally estimated. The original CIAC assumed that the Company would connect nine residential customers within 5 years. The Company has connected 15 residential customers in the first year. The CIAC also assumed eight C&I customers within 4 years and the Company has not yet connected any C&I customers. The Company provided a revised CIAC calculation in response to Staff 1-4 Attachment 2. The revised CIAC calculation results in a higher CIAC than the CIAC collected from this customer.

10 Hampshire Rd, Salem NH – Revision 1 was to cover the costs associated with unanticipated ledge in areas and additional police detail needed for ledge removal. A revised estimate was provided and a new IRR was modeled. There was no CIAC required as a result of Revision 1. Revision 2 is for the costs associate with additional ledge incurred at the street crossing which made hole hogging the street not a viable option. The street needed an open cut removal of ledge and a pave and cutback of trench. This added additional traffic detail costs as well. See Staff 5-3 Attachment 1 for a revised CIAC calculation. The revised CIAC calculation results in a higher CIAC than the first revision.

121 Corporate Drive, Portsmouth NH – The original project included 4" HDPE main as required to serve the customer load. Revision 1 was developed because Engineering recommended the installation of 8" main in order to serve additional future load in the

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area. The additional cost for the 8" main was not included in the IRR calculation as it was a system improvement for future load in the area.

101 International Drive, Portsmouth NH – The revision was for the costs associated with the installation of 1350' of 8" HDPE gas main. It was originally estimated to be installed off pavement, but due to unknown underground facilities on both sides of the roadway, the main had to be installed entirely in pavement. The project was not run through the IRR because this improvement was recommended by engineering for future load considerations. However, the additional gas load added at this customer's facility would return an IRR of 33% over the 10 year term.

DR 17-070

NU Response to Staff DR 5-3, Attachment 1

Unitil - NuNH Gas

Customer Project Evaluation & Determination of Non-Refundable Customer Contribution

Relative Year ==>			-	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Absolute Year==>			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital Expenditures																			
Customer Contribution (Non Refundable)			45,950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Project			79,452	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Capital Expenditure			33,502	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cumulative Capital/Plant			33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502
Rate Base																			
Book Depreciation																			
S/L Depreciation Rates		33	0.01515	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303
S/L (Book) Depr	2017	33,502	508	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015
	2018	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2019	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2020	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2021	-					-	-	-	-	-	-	-	-	-	-	-	-	-
	2022	-						-	-	-	-	-	-	-	-	-	-	-	-
	2023	-							-	-	-	-	-	-	-	-	-	-	-
	2024	-								-	-	-	-	-	-	-	-	-	-
	2025	-									-	-	-	-	-	-	-	-	-
	2026	-										-	-	-	-	-	-	-	-
Total Book Depreciation		33,502	508	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015
Tax Depreciation																			
Tax Depreciation (MACRS) Rates - 20 year			0.0375	0.0722	0.0668	0.0618	0.0571	0.0529	0.0489	0.0452	0.0446	0.0446	0.0446	0.0446	0.0446	0.0446	0.0446	0.0446	0.0446
Tax Depr (MACRS)	2017	33,502	1,256	2,419	2,237	2,069	1,914	1,771	1,638	1,515	1,495	1,495	1,495	1,495	1,495	1,495	1,495	1,495	1,495
	2018	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2019	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2020	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2021	-					-	-	-	-	-	-	-	-	-	-	-	-	-
	2022	-						-	-	-	-	-	-	-	-	-	-	-	-
	2023	-							-	-	-	-	-	-	-	-	-	-	-
	2024	-								-	-	-	-	-	-	-	-	-	-
	2025	-									-	-	-	-	-	-	-	-	-
	2026	-										-	-	-	-	-	-	-	-
Total Tax Depreciation		33,502	1,256	2,419	2,237	2,069	1,914	1,771	1,638	1,515	1,495	1,495	1,495	1,495	1,495	1,495	1,495	1,495	1,495
Tax - Deferred (Fed+ST)		39.41%	(295)	(553)	(482)	(415)	(354)	(298)	(245)	(197)	(189)	(189)	(189)	(189)	(189)	(189)	(189)	(189)	(189)
Rate Base																			
Plant			33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502
Less: Accum (Book) Depr			508	1,523	2,538	3,553	4,569	5,584	6,599	7,614	8,629	9,645	10,660	11,675	12,690	13,706	14,721	15,736	16,751
Net Book Value			32,995	31,980	30,964	29,949	28,934	27,919	26,904	25,888	24,873	23,858	22,843	21,827	20,812	19,797	18,782	17,766	16,751
Less: Def Tax Bal			295	848	1,330	1,745	2,099	2,397	2,642	2,839	3,028	3,217	3,406	3,595	3,784	3,973	4,162	4,351	4,540
Rate Base			32,700	31,131	29,635	28,204	26,835	25,522	24,261	23,049	21,845	20,641	19,436	18,232	17,028	15,824	14,619	13,415	12,211
Revenue Build																			
Primary Class (1)																			
Class	06 G41																		
Customer Charge (per month)		$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73
Consumption Charge (per Therm)		$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144
Number of Units/Meters			1	-	-	-	-	-	-	-	-								
Cumulative			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Annual Consumption per Meter			20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209
Consumption Charge			20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209
Customer Charge			2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361
Consumtion Charge			4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071
Base Revenue - Primary Class (1)			$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432
Additional Class (2)																			
Class	02 R5																		
Customer Charge (per month)		$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36
Consumption Charge (per Therm)		$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115
Number of Units/Meters			-	-	-	-	-	-	-	-	-	-							
Cumulative			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual Consumption per Meter			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Consumption			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charge			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consumption Charge			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Base Revenue - Additional Class (2)			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Additional Class (3)																			
Class	03 R11																		
Customer Charge (per month)		$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52
Consumption Charge (per Therm)		$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960
Number of Units/Meters			-	-	-	-	-	-	-	-	-	-							
Cumulative			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual Consumption per Meter			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consumption Charge			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charge			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consumtion Charge			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Base Revenue - Additional Class (3)			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Income Statement																			
Base Revenue			$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432
Depreciation (book)			508	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015
Property Tax & Insur			904	876	848	821	793	765	737	709	681	654	626	598	570	542	515	487	459
O&M Incentive Costs			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Op Ex excl Inc Tax			1,412	1,891	1,864	1,836	1,808	1,780	1,752	1,725	1,697	1,669	1,641	1,613	1,585	1,558	1,530	1,502	1,474
Inc Tax			1,595	1,424	1,453	1,480	1,507	1,534	1,560	1,585	1,610	1,635	1,660	1,685	1,710	1,735	1,760	1,785	1,811
Tot Op Ex			3,007	3,316	3,316	3,316	3,315	3,314	3,312	3,309	3,307	3,304	3,301	3,298	3,296	3,293	3,290	3,287	3,285
Op Inc			3,425	3,116	3,115	3,115	3,116	3,118	3,120	3,122	3,125	3,128	3,130	3,133	3,136	3,139	3,141	3,144	3,147

Relative Year ==>		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Absolute Year==>		2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Capital Expenditures																			
Customer Contribution (Non Refundable)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Project		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Capital Expenditure		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cumulative Capital/Plant		33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502
Rate Base																			
Book Depreciation																			
S/L Depreciation Rates		0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.030303	0.015152	-
S/L (Book) Depr	2017	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	508	-
	2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Book Depreciation		1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	508	-
Tax Depreciation																			
Tax Depreciation (MACRS) Rates - 20 year		0.0446	0.0446	0.0446	0.0223														
Tax Depr (MACRS)	2017	1,495	1,495	1,495	747														
	2018	-	-	-	-	-													
	2019	-	-	-	-	-	-												
	2020	-	-	-	-	-	-	-											
	2021	-	-	-	-	-	-	-	-										
	2022	-	-	-	-	-	-	-	-	-									
	2023	-	-	-	-	-	-	-	-	-	-								
	2024	-	-	-	-	-	-	-	-	-	-	-							
	2025	-	-	-	-	-	-	-	-	-	-	-	-						
	2026	-	-	-	-	-	-	-	-	-	-	-	-	-					
Total Tax Depreciation		1,495	1,495	1,495	747	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax - Deferred (Fed+ST)		(189)	(189)	(189)	106	400	400	400	400	400	400	400	400	400	400	400	400	200	-
Rate Base																			
Plant		33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502	33,502
Less: Accum (Book) Depr		17,766	18,782	19,797	20,812	21,827	22,843	23,858	24,873	25,888	26,904	27,919	28,934	29,949	30,964	31,980	32,995	33,502	33,502
Net Book Value		15,736	14,721	13,706	12,690	11,675	10,660	9,645	8,629	7,614	6,599	5,584	4,569	3,553	2,538	1,523	508	-	-
Less: Def Tax Bal		4,729	4,918	5,107	5,002	4,601	4,201	3,801	3,401	3,001	2,601	2,201	1,801	1,400	1,000	600	200	0	0
Rate Base		11,007	9,803	8,599	7,689	7,074	6,459	5,844	5,228	4,613	3,998	3,383	2,768	2,153	1,538	923	308	(0)	(0)
Revenue Build																			
Primary Class (1)																			
Class	06 G41																		
Customer Charge (per month)		$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73	$ 196.73
Consumption Charge (per Therm)		$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144	$ 0.20144
Number of Units/Meters																			
Cumulative		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Annual Consumption per Meter		20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209
Consumption Charge		20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209	20,209
Customer Charge		2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361	2,361
Consumtion Charge		4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071
Base Revenue - Primary Class (1)		$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432
Additional Class (2)																			
Class	02 R5																		
Customer Charge (per month)		$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36	$ 21.36
Consumption Charge (per Therm)		$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115	$ 0.56115
Number of Units/Meters																			
Cumulative		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual Consumption per Meter		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Consumption		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charge		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consumption Charge		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Base Revenue - Additional Class (2)		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Additional Class (3)																			
Class	03 R11																		
Customer Charge (per month)		$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52	$ 15.52
Consumption Charge (per Therm)		$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960	$ 0.31960
Number of Units/Meters																			
Cumulative		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual Consumption per Meter		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consumption Charge		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charge		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consumtion Charge		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Base Revenue - Additional Class (3)		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Income Statement																			
Base Revenue		$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432
Depreciation (book)		1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	1,015	508	-
Property Tax & Insur		431	403	376	348	320	292	264	236	209	181	153	125	97	70	42	14	-	-
O&M Incentive Costs		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Op Ex excl Inc Tax		1,446	1,419	1,391	1,363	1,335	1,307	1,279	1,252	1,224	1,196	1,168	1,140	1,113	1,085	1,057	1,029	508	-
Inc Tax		1,836	1,861	1,886	1,907	1,926	1,944	1,962	1,980	1,998	2,017	2,035	2,053	2,071	2,089	2,107	2,126	2,335	2,535
Tot Op Ex		3,282	3,279	3,277	3,270	3,261	3,251	3,241	3,232	3,222	3,213	3,203	3,193	3,184	3,174	3,164	3,155	2,842	2,535
Op Inc		3,150	3,152	3,155	3,161	3,171	3,180	3,190	3,200	3,209	3,219	3,229	3,238	3,248	3,258	3,267	3,277	3,589	3,897

Interest Expense		973	927	882	839	799	760	722	686	650	614	578	543
Net Income		$ 2,452	$ 2,189	$ 2,233	$ 2,276	$ 2,317	$ 2,358	$ 2,398	$ 2,436	$ 2,475	$ 2,513	$ 2,552	$ 2,591
Cash Flows													
Revenue - Base		$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432
Prop Tax & Insur		(904)	(876)	(848)	(821)	(793)	(765)	(737)	(709)	(681)	(654)	(626)	(598)
O&M Incentive Costs		-	-	-	-	-	-	-	-	-	-	-	-
Inc Tax (Incl Tax Synch Impact on Interest)		(1,595)	(1,424)	(1,453)	(1,480)	(1,507)	(1,534)	(1,560)	(1,585)	(1,610)	(1,635)	(1,660)	(1,685)
Deferred Tax (from tax vs book depr)		295	553	482	415	354	298	245	197	189	189	189	189
Interest On RateBase		(973)	(927)	(882)	(839)	(799)	(760)	(722)	(686)	(650)	(614)	(578)	(543)
Expense Components		(3,177)	(2,674)	(2,702)	(2,725)	(2,745)	(2,761)	(2,773)	(2,783)	(2,752)	(2,714)	(2,675)	(2,637)
Oper & Financing Cash Flow (Incl Interest Related)		3,255	3,758	3,730	3,707	3,687	3,671	3,658	3,648	3,679	3,718	3,756	3,795
PreTax Interest (Cash Out) on RateBase		(973)	(927)	(882)	(839)	(799)	(760)	(722)	(686)	(650)	(614)	(578)	(543)
Interest-Driven Income Tax [Cash In/(Out)]		384	365	348	331	315	299	285	270	256	242	228	214
Net CashFlow from Financing		(590)	(561)	(534)	(509)	(484)	(460)	(437)	(416)	(394)	(372)	(350)	(329)
CashFlow from Operations Only		3,844	4,319	4,264	4,215	4,171	4,131	4,096	4,064	4,073	4,090	4,107	4,123
Investment Cash Flow In/(Out) (From Above)		(33,502)	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow (Excl Financing)		(29,658)	4,319	4,264	4,215	4,171	4,131	4,096	4,064	4,073	4,090	4,107	4,123
Cumulative Net Cash Flow (Excl Financing)		(29,658)	(25,339)	(21,075)	(16,860)	(12,689)	(8,558)	(4,462)	(398)	3,675	7,765	11,872	15,995
Simple Payback			-	-	-	-	-	-	-	8	-	-	-
IRR on Net Cash Flow (Excl Financing)			-35.44%	-54.11%	-32.70%	-19.21%	-10.44%	-4.51%	-0.34%	2.70%	4.98%	6.71%	8.06%
Net Present Value - at AftTax WACC	6.71%	(27,792)	(24,000)	(20,491)	(17,240)	(14,226)	(11,429)	(8,831)	(6,414)	(4,145)	(2,009)	0	1,891
Net Cash Flows (Excl Financing) over Dynamic 10-year period													
Incremental Cap Ex		79.452	-	-	-	-	-	-	-	-	-	-	-
RelativeYear of Cap Ex	-	-	-	-	-	-	-	-	-	-	-	-	-
Last Relative year of Analysis	10	10	10	10	10	10	10	10	10	10	10	10	10
IRR	6.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.71%	0.00%
NPV	0	-	-	-	-	-	-	-	-	-	-	0	-
Net Cash Flows (Excl Financing) over Dynamic 20-year period													
Incremental Cap Ex		79.452	-	-	-	-	-	-	-	-	-	-	-
RelativeYear of Cap Ex	-	-	-	-	-	-	-	-	-	-	-	-	-
Last Relative year of Analysis	20	20	20	20	20	20	20	20	20	20	20	20	20
IRR	12.82%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NPV	14,517	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flows (Excl Financing) for Dual Fuel Customer													
Number of Contract Years	-	-	-	-	-	-	-	-	-	-	-	-	-
IRR	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NPV	(27,792)	(27,792)	-	-	-	-	-	-	-	-	-	-	-

Interest Expense	507	471	435	399	363	328	292	256	229	211	192	174
Net Income	$ 2,629	$ 2,668	$ 2,706	$ 2,745	$ 2,783	$ 2,822	$ 2,861	$ 2,899	$ 2,932	$ 2,960	$ 2,988	$ 3,016
Cash Flows												
Revenue - Base	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432
Prop Tax & Insur	(570)	(542)	(515)	(487)	(459)	(431)	(403)	(376)	(348)	(320)	(292)	(264)
O&M Incentive Costs	-	-	-	-	-	-	-	-	-	-	-	-
Inc Tax (Incl Tax Synch Impact on Interest)	(1,710)	(1,735)	(1,760)	(1,785)	(1,811)	(1,836)	(1,861)	(1,886)	(1,907)	(1,926)	(1,944)	(1,962)
Deferred Tax (from tax vs book depr)	189	189	189	189	189	189	189	189	(106)	(400)	(400)	(400)
Interest On RateBase	(507)	(471)	(435)	(399)	(363)	(328)	(292)	(256)	(229)	(211)	(192)	(174)
Expense Components	(2,598)	(2,560)	(2,521)	(2,483)	(2,444)	(2,405)	(2,367)	(2,328)	(2,590)	(2,856)	(2,828)	(2,800)
Oper & Financing Cash Flow (Incl Interest Related)	3,833	3,872	3,911	3,949	3,988	4,026	4,065	4,103	3,842	3,575	3,603	3,631
PreTax Interest (Cash Out) on RateBase	(507)	(471)	(435)	(399)	(363)	(328)	(292)	(256)	(229)	(211)	(192)	(174)
Interest-Driven Income Tax [Cash In/(Out)]	200	186	171	157	143	129	115	101	90	83	76	69
Net CashFlow from Financing	(307)	(285)	(264)	(242)	(220)	(198)	(177)	(155)	(139)	(128)	(116)	(105)
CashFlow from Operations Only	4,140	4,157	4,174	4,191	4,208	4,225	4,242	4,258	3,981	3,703	3,720	3,737
Investment Cash Flow In/(Out) (From Above)	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow (Excl Financing)	4,140	4,157	4,174	4,191	4,208	4,225	4,242	4,258	3,981	3,703	3,720	3,737
Cumulative Net Cash Flow (Excl Financing)	20,135	24,293	28,467	32,658	36,865	41,090	45,332	49,590	53,570	57,273	60,993	64,730
Simple Payback	-	-	-	-	-	-	-	-	-	-	-	-
IRR on Net Cash Flow (Excl Financing)	9.13%	9.97%	10.65%	11.21%	11.67%	12.04%	12.35%	12.62%	12.82%	12.98%	13.12%	13.24%
Net Present Value - at AftTax WACC	3,669	5,343	6,918	8,400	9,794	11,105	12,339	13,500	14,517	15,403	16,238	17,023
Net Cash Flows (Excl Financing) over Dynamic 10-year period												
Incremental Cap Ex	-	-	-	-	-	-	-	-	-	-	-	-
RelativeYear of Cap Ex	-	-	-	-	-	-	-	-	-	-	-	-
Last Relative year of Analysis	10	10	10	10	10	10	10	10	10	10	10	10
IRR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NPV	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flows (Excl Financing) over Dynamic 20-year period												
Incremental Cap Ex	-	-	-	-	-	-	-	-	-	-	-	-
RelativeYear of Cap Ex	-	-	-	-	-	-	-	-	-	-	-	-
Last Relative year of Analysis	20	20	20	20	20	20	20	20	20	20	20	20
IRR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.82%	0.00%	0.00%	0.00%
NPV	-	-	-	-	-	-	-	-	14,517	-	-	-
Net Cash Flows (Excl Financing) for Dual Fuel Customer												
Number of Contract Years	-	-	-	-	-	-	-	-	-	-	-	-
IRR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NPV	-	-	-	-	-	-	-	-	-	-	-	-

Interest Expense	156	137	119	101	82	64	46	27	9	(0)	(0)
Net Income	$ 3,044	$ 3,072	$ 3,100	$ 3,128	$ 3,156	$ 3,184	$ 3,212	$ 3,240	$ 3,268	$ 3,589	$ 3,897
Cash Flows											
Revenue - Base	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432	$ 6,432
Prop Tax & Insur	(236)	(209)	(181)	(153)	(125)	(97)	(70)	(42)	(14)	-	-
O&M Incentive Costs	-	-	-	-	-	-	-	-	-	-	-
Inc Tax (Incl Tax Synch Impact on Interest)	(1,980)	(1,998)	(2,017)	(2,035)	(2,053)	(2,071)	(2,089)	(2,107)	(2,126)	(2,335)	(2,535)
Deferred Tax (from tax vs book depr)	(400)	(400)	(400)	(400)	(400)	(400)	(400)	(400)	(400)	(200)	-
Interest On RateBase	(156)	(137)	(119)	(101)	(82)	(64)	(46)	(27)	(9)	0	0
Expense Components	(2,772)	(2,744)	(2,716)	(2,689)	(2,661)	(2,633)	(2,605)	(2,577)	(2,549)	(2,535)	(2,535)
Oper & Financing Cash Flow (Incl Interest Related)	3,659	3,687	3,715	3,743	3,771	3,799	3,827	3,855	3,883	3,897	3,897
PreTax Interest (Cash Out) on RateBase	(156)	(137)	(119)	(101)	(82)	(64)	(46)	(27)	(9)	0	0
Interest-Driven Income Tax [Cash In/(Out)]	61	54	47	40	32	25	18	11	4	(0)	(0)
Net CashFlow from Financing	(94)	(83)	(72)	(61)	(50)	(39)	(28)	(17)	(6)	0	0
CashFlow from Operations Only	3,754	3,770	3,787	3,804	3,821	3,838	3,855	3,871	3,888	3,897	3,897
Investment Cash Flow In/(Out) (From Above)	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow (Excl Financing)	3,754	3,770	3,787	3,804	3,821	3,838	3,855	3,871	3,888	3,897	3,897
Cumulative Net Cash Flow (Excl Financing)	68,483	72,254	76,041	79,845	83,666	87,504	91,358	95,230	99,118	103,015	106,912
Simple Payback	-	-	-	-	-	-	-	-	-	-	-
IRR on Net Cash Flow (Excl Financing)	13.34%	13.43%	13.50%	13.57%	13.62%	13.67%	13.71%	13.75%	13.76%	13.81%	13.83%
Net Present Value - at AftTax WACC	17,762	18,458	19,113	19,730	20,310	20,857	21,371	21,855	22,310	22,738	23,139
Net Cash Flows (Excl Financing) over Dynamic 10-year period											
Incremental Cap Ex	-	-	-	-	-	-	-	-	-	-	-
RelativeYear of Cap Ex	-	-	-	-	-	-	-	-	-	-	-
Last Relative year of Analysis	10	10	10	10	10	10	10	10	10	10	10
IRR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NPV	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flows (Excl Financing) over Dynamic 20-year period											
Incremental Cap Ex	-	-	-	-	-	-	-	-	-	-	-
RelativeYear of Cap Ex	-	-	-	-	-	-	-	-	-	-	-
Last Relative year of Analysis	20	20	20	20	20	20	20	20	20	20	20
IRR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NPV	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flows (Excl Financing) for Dual Fuel Customer											
Number of Contract Years	-	-	-	-	-	-	-	-	-	-	-
IRR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NPV	-	-	-	-	-	-	-	-	-	-	-