

**UNITIL ENERGY SYSTEMS, INC.  
DOCKET DE 21-030  
REVENUE REQUIREMENT SCHEDULES**

UNITIL ENERGY SYSTEMS, INC.  
REVENUE REQUIREMENT TABLE OF CONTENTS  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-TOC

LINE NO.	(1) DESCRIPTION	(2) REFERENCE
1	Summary of Financial Schedules	
2	Computation Of Revenue Deficiency And Revenue Requirement	<u>Schedule RevReq-1</u>
3	Computation Of Gross-Up Factor For Revenue Requirement	<u>Schedule RevReq-1-1</u>
4	Operating Income Statement	<u>Schedule RevReq-2 P1</u>
5	Pro Forma Distribution Operating Income Statement	<u>Schedule RevReq-2 P2</u>
6	Summary Of Adjustments	<u>Schedule RevReq-3</u>
7	Summary of Revenue Adjustment Schedules	
8	Non-Distribution Bad Debt	<u>Schedule RevReq-3-1</u>
9	Unbilled Revenue	<u>Schedule RevReq-3-1</u>
10	New DOC Rent Revenue	<u>Schedule RevReq-3-1</u>
11	Late Fee Adjustment	<u>Schedule RevReq-3-1</u>
12	O&M Expense Adjustments	
13	Payroll	<u>Schedule RevReq-3-2</u>
14	VMP Expense	<u>Schedule RevReq-3-3</u>
15	Medical & Dental Insurances	<u>Schedule RevReq-3-4</u>
16	Pension	<u>Schedule RevReq-3-5</u>
17	PBOP	<u>Schedule RevReq-3-5</u>
18	SERP	<u>Schedule RevReq-3-5</u>
19	401K	<u>Schedule RevReq-3-5</u>
20	Deferred Comp Expense	<u>Schedule RevReq-3-5</u>
21	Property & Liability Insurances	<u>Schedule RevReq-3-6</u>
22	DOC Expense Adjustment	<u>Schedule RevReq-3-7</u>
23	NHPUC Regulatory Assessment	<u>Schedule RevReq-3-8</u>
24	Dues & Subscriptions	<u>Schedule RevReq-3-9</u>
25	Pandemic Costs	<u>Schedule RevReq-3-10</u>
26	Claims & Litigation Adjustment	<u>Schedule RevReq-3-11</u>
27	Severance Expense	<u>Schedule RevReq-3-12</u>
28	Distribution Bad Debt	<u>Schedule RevReq-3-13</u>
29	Non-Distribution Bad Debt	<u>Schedule RevReq-3-1</u>
30	Arrearage Management Program (AMP) Implementation Cost	<u>Schedule RevReq-3-14</u>
31	Inflation Allowance	<u>Schedule RevReq-3-15</u>
32	D&A Expense Adjustments	
33	Depreciation Annualization	<u>Schedule RevReq-3-16 P1</u>
34	Proposed Depreciation Rate Adjustment	<u>Schedule RevReq-3-16 P2</u>
35	Software Amortization Expense Adjustment	<u>Schedule RevReq-3-17</u>
36	Excess ADIT Flowback	<u>Schedule RevReq-3-18</u>
37	Taxes Other Than Income Adjustments	
38	Property Taxes	<u>Schedule RevReq-3-19</u>
39	Payroll Taxes - Wage Increases	<u>Schedule RevReq-3-20 P1</u>
40	Payroll Taxes - Employee Retention Credit	<u>Schedule RevReq-3-20 P2</u>
41	Income Taxes Adjustments	
42	Computation of Federal and State Income Taxes	<u>Schedule RevReq-3-21 P1</u>
43	Change in Interest Expense Applicable to Income Tax Computation	<u>Schedule RevReq-3-21 P2</u>
44	Computation of Federal and State Income Taxes	<u>Schedule RevReq-3-21 P3</u>
45	Prior Year Income Taxes	<u>Schedule RevReq-3-22 P4</u>
46	Rate Base & Related Adjustments	
47	Rate Base Calculation	<u>Schedule RevReq-4</u>
48	Quarterly Rate Base	<u>Schedule RevReq-4-1</u>
49	Cash Working Capital	<u>Schedule RevReq-4-2</u>
50	Kensington Distribution Operating Center Adjustment	<u>Schedule RevReq-4-3</u>
51	Exeter Distribution Operating Center Adjustment	<u>Schedule RevReq-4-4</u>
52	Excess Accumulated Deferred Income Taxes Adjustment	<u>Schedule RevReq-4-5</u>
53	Cost of Capital Related Schedules	
54	Weighted Average Cost Of Capital	<u>Schedule RevReq-5</u>
55	Capital Structure for Ratemaking Purposes	<u>Schedule RevReq-5-1</u>
56	Historical Capital Structure	<u>Schedule RevReq-5-2</u>
57	Historical Capitalization Ratios	<u>Schedule RevReq-5-3</u>
58	Weighted Average Cost Of Long-Term Debt	<u>Schedule RevReq-5-4</u>
59	Cost of Short-Term Debt	<u>Schedule RevReq-5-5</u>
60	Weighted Average Cost of Preferred Stock	<u>Schedule RevReq-5-6</u>
61	Rate Case Expense Costs	<u>Schedule RevReq-6</u>
62	Workpapers	<u>Workpapers</u>

UNITIL ENERGY SYSTEMS, INC.  
 COMPUTATION OF REVENUE DEFICIENCY AND REVENUE REQUIREMENT  
 12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-1  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) REFERENCE	(3) AMOUNT
1	Rate Base	Schedule RevReq-4	\$ 226,030,082
2	Rate Of Return	Schedule RevReq-5	<u>7.88%</u>
3	Income Required	Line 1 * Line 2	17,811,170
4	Adjusted Net Operating Income	Schedule RevReq-2	<u>9,066,677</u>
5	Deficiency	Line 3 - Line 4	8,744,493
6	Income Tax Effect	Line 7 - Line 5	<u>3,247,900</u>
7	Revenue Deficiency	1.3714 (Schedule RevReq-1-1) * Line 5	<u><u>\$ 11,992,392</u></u>

**UNITIL ENERGY SYSTEMS, INC.**  
**COMPUTATION OF GROSS-UP FACTOR FOR REVENUE REQUIREMENT**  
**12 MONTHS ENDED DECEMBER 31, 2020**

Schedule RevReq-1-1  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) RATE	(3) AMOUNT
1	Federal Income Tax Rate	21.00%	0.2100
2	State Income Tax Rate	7.70%	0.0770
3	Federal Benefit of State Income Tax	-(Line 1 * Line 2)	<u>(0.0162)</u>
4	Effective Tax Rate	(Line 1 + Line 2 + Line 3)	<u>0.2708</u>
5	Gross-Up Factor	(1 / 1 - Line 4)	<u><u>1.3714</u></u>

UNITIL ENERGY SYSTEMS, INC.  
OPERATING INCOME STATEMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-2  
Page 1 of 2  
Table of Contents

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
LINE NO.	TEST YEAR 12 MONTHS ENDED 12/31/2020	TEST YEAR FLOW-THROUGH	TEST YEAR DISTRIBUTION	PROFORMA ADJUSTMENTS	TEST YEAR DISTRIBUTION AS PROFORMED	CALENDAR YEAR 2019 <sup>(1)</sup>	CALENDAR YEAR 2018 <sup>(1)</sup>	
DESCRIPTION								
1	Distribution Revenue	\$ 58,337,364	\$ -	\$ 58,337,364	\$ (280,812)	\$ 58,056,553	\$ 57,749,747	\$ 57,757,766
2	Flow-Through Revenue	98,489,216	98,489,216	-	-	-	101,655,415	97,267,289
3	Electric Service Revenue	156,826,580	98,489,216	58,337,364	(280,812)	58,056,553	159,405,162	155,025,055
4	Other Operating Revenue	2,096,875	1,078,347	1,018,528	493,945	1,512,473	2,426,664	2,623,127
5	Total Operating Revenues	158,923,455	99,567,563	59,355,892	213,133	59,569,025	161,831,826	157,648,182
6	Operating Expenses:							
7	Purchased Power	53,020,521	52,736,269	284,252	-	284,252	65,385,884	61,038,767
8	Transmission	35,468,734	35,400,175	68,559	-	68,559	28,308,204	29,608,490
9	Distribution	9,476,199	-	9,476,199	2,113,975	11,590,175	9,195,883	9,199,438
10	Customer Accounting	4,286,916	321,671	3,965,244	449,940	4,415,184	4,655,167	4,633,933
11	Customer Service	7,326,955	7,298,180	28,775	-	28,775	5,450,371	3,773,461
12	Administrative & General	9,750,830	825,374	8,925,457	1,006,161	9,931,618	10,867,236	10,763,947
13	Depreciation	12,680,791	-	12,680,791	118,963	12,799,754	11,905,213	11,419,121
14	Amortizations	3,262,428	1,059,270	2,203,158	(761,204)	1,441,954	3,378,749	3,484,160
15	Taxes Other Than Income	7,166,678	-	7,166,678	905,507	8,072,185	6,435,130	6,519,710
16	Federal Income Tax	(1,180,388)	-	(1,180,388)	3,523,246	2,342,858	4,672,111	(173,832)
17	State Income Tax	(1,096,468)	-	(1,096,468)	1,264,624	168,156	1,707,349	(927)
18	Deferred Federal & State Income Taxes	5,203,294	-	5,203,294	(5,861,441)	(658,148)	(3,692,668)	3,207,039
19	Interest On Customers Deposits	17,026	-	17,026	-	17,026	31,594	32,204
20	Total Operating Expenses	145,383,515	97,640,939	47,742,577	2,759,771	50,502,348	148,300,222	143,505,511
21	Net Operating Income	\$ 13,539,940	\$ 1,926,625	\$ 11,613,315	\$ (2,546,638)	\$ 9,066,677	\$ 13,531,604	\$ 14,142,671

Notes

(1) Calendar Years 2019 and 2018 Represents Total Company (i.e., Flow-Through and Distribution).

UNITIL ENERGY SYSTEMS, INC.  
PRO FORMA DISTRIBUTION OPERATING INCOME STATEMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-2  
Page 2 of 2  
Table of Contents

LINE NO.	DESCRIPTION	(1)	(2)	(3)	(4)	PROOF	
		TEST YEAR DISTRIBUTION	PROFORMA ADJUSTMENTS	TEST YEAR DISTRIBUTION AS PROFORMED	REVENUE REQUIREMENT	PRO FORMA RATE RELIEF	
1	Distribution Revenue	\$ 58,337,364	\$ (280,812)	\$ 58,056,553	\$ 11,992,392	\$ 70,048,945	
2	Flow-Through Revenue	-	-	-	-	-	
3	Electric Service Revenue	58,337,364	(280,812)	58,056,553	11,992,392	70,048,945	
4	Other Operating Revenue	1,018,528	493,945	1,512,473	-	1,512,473	
5	Total Operating Revenues	59,355,892	213,133	59,569,025	11,992,392	71,561,417	
6	Operating Expenses:						
7	Purchased Power	284,252	-	284,252	-	284,252	
8	Transmission	68,559	-	68,559	-	68,559	
9	Distribution	9,476,199	2,113,975	11,590,175	-	11,590,175	
10	Customer Accounting	3,965,244	449,940	4,415,184	-	4,415,184	
11	Customer Service	28,775	-	28,775	-	28,775	
12	Administrative & General	8,925,457	1,006,161	9,931,618	-	9,931,618	
13	Depreciation	12,680,791	118,963	12,799,754	-	12,799,754	
14	Amortizations	2,203,158	(761,204)	1,441,954	-	1,441,954	
15	Taxes Other Than Income	7,166,678	905,507	8,072,185	-	8,072,185	
16	Federal Income Tax	(1,180,388)	3,523,246	2,342,858	2,324,485	4,667,344	
17	State Income Tax	(1,096,468)	1,264,624	168,156	923,414	1,091,570	
18	Deferred Federal & State Income Taxes	5,203,294	(5,861,441)	(658,148)	-	(658,148)	
19	Interest On Customers Deposits	17,026	-	17,026	-	17,026	
20	Total Operating Expenses	47,742,577	2,759,771	50,502,348	3,247,900	53,750,247	
21	Net Operating Income	\$ 11,613,315	\$ (2,546,638)	\$ 9,066,677	\$ 8,744,493	\$ 17,811,170	

UNITIL ENERGY SYSTEMS, INC.  
SUMMARY OF ADJUSTMENTS  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) CLASSIFICATION	(3) SCHEDULE NO.	(4) AMOUNT
1	Revenue Adjustments			
2	Non-Distribution Bad Debt	Dist Rev	Schedule RevReq-3-1	(143,623)
3	Unbilled Revenue Adjustment	Dist Rev	Schedule RevReq-3-1	(137,189)
4	New DOC Rent Revenue	Oth Rev	Schedule RevReq-3-1	313,007
5	Late Fee Adjustment	Oth Rev	Schedule RevReq-3-1	180,938
6	Total Revenue Adjustments			<u>\$ 213,133</u>
7	Operating & Maintenance Expense Adjustments			
8	Payroll	Dist	Schedule RevReq-3-2	\$ 709,516
9	VMP Expense	Dist	Schedule RevReq-3-3	1,406,427
10	Medical & Dental Insurances	A&G	Schedule RevReq-3-4	483,155
11	Pension	A&G	Schedule RevReq-3-5	62,288
12	PBOP	A&G	Schedule RevReq-3-5	(41,636)
13	SERP	A&G	Schedule RevReq-3-5	85,989
14	401K	A&G	Schedule RevReq-3-5	41,844
15	Deferred Comp Expense	A&G	Schedule RevReq-3-5	64,957
16	Property & Liability Insurances	A&G	Schedule RevReq-3-6	72,468
17	DOC Expense Adjustment	Dist	Schedule RevReq-3-7	(1,968)
18	NHPUC Regulatory Assessment	A&G	Schedule RevReq-3-8	159,383
19	Dues & Subscriptions	A&G	Schedule RevReq-3-9	(14,473)
20	Pandemic Costs	A&G	Schedule RevReq-3-10	(39,857)
21	Claims & Litigation Adjustment	A&G	Schedule RevReq-3-11	44,072
22	Severance Expense	A&G	Schedule RevReq-3-12	(40,395)
23	Distribution Bad Debt	Cust Acct	Schedule RevReq-3-13	134,563
24	Non-Distribution Bad Debt	Cust Acct	Schedule RevReq-3-1	(143,623)
25	Arrearage Management Program (AMP) Implementation Cost	Cust Acct	Schedule RevReq-3-14	459,000
26	Inflation Allowance	A&G	Schedule RevReq-3-15	128,368
27	Total Operating & Maintenance Expense Adjustments			<u>\$ 3,570,077</u>
28	Depreciation & Amortization Expense Adjustments			
29	Depreciation Annualization	Depr	Schedule RevReq-3-16 P1	\$ 908,712
30	Proposed Depreciation Rates	Depr	Schedule RevReq-3-16 P2	(789,749)
31	Software Amortization	Amort	Schedule RevReq-3-17	238,591
32	Excess ADIT Flowback	Amort	Schedule RevReq-3-18	(999,795)
33	Total Depreciation & Amortization Expense Adjustments			<u>\$ (642,241)</u>
34	Taxes Other Than Income Adjustments			
35	Property Taxes	Taxes Other	Schedule RevReq-3-19	\$ 744,985
36	Payroll Taxes - Wage Increases	Taxes Other	Schedule RevReq-3-20 P1	54,278
37	Payroll Taxes - Employee Retention Credit	Taxes Other	Schedule RevReq-3-20 P2	106,244
38	Total Taxes Other Than Income Adjustments			<u>\$ 905,507</u>
39	Income Taxes Adjustments			
40	Federal Income Tax	FIT	Schedule RevReq-3-21 P1	\$ (770,033)
41	State Income Tax	SIT	Schedule RevReq-3-21 P1	(305,900)
42	Prior Year Federal Income Tax	FIT	Schedule RevReq-3-21 P4	4,293,279
43	Prior Year State Income Tax	SIT	Schedule RevReq-3-21 P4	1,570,523
44	Prior Year Deferred Federal Income Tax	DIT	Schedule RevReq-3-21 P4	(4,290,918)
45	Prior Year Deferred State Income Tax	DIT	Schedule RevReq-3-21 P4	(1,570,523)
46	Total Income Taxes Adjustments			<u>\$ (1,073,571)</u>
47	Rate Base Adjustments			
48	Cash Working Capital Adjustment	CWC	Schedule RevReq-4-2	\$ 967,154
49	Kensington Distribution Operating Center Adj. - Net Book Value	Plant	Schedule RevReq-4-3	(988,214)
50	Kensington Distribution Operating Center Adj. - ADIT	RB DIT	Schedule RevReq-4-3	(71,351)
51	Exeter Distribution Operating Center Adj. - Net Book Value	Plant	Schedule RevReq-4-4	577,144
52	Excess Accumulated Income Tax Adj. (Storm)	EDIT	Schedule RevReq-4-5	(2,644,590)
53	Accumulated Deferred Income Tax Adj. (Storm)	EDIT	Schedule RevReq-4-5	716,234
54	Total Rate Base Adjustments			<u>\$ 2,555,790</u>

UNITIL ENERGY SYSTEMS, INC.  
REVENUE ADJUSTMENTS  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-1  
Table of Contents

	(1)		(2)
LINE NO.	DESCRIPTION		AMOUNT
1	<u>Non Distribution Bad Debt Adjustment (Revenue &amp; Expense)</u>		
2	Remove: Accrued Revenue - Non Dist Bad Debt	\$	(143,623)
3	Remove: Provision For Doubtful Accts - Non-Dist	\$	(143,623)
4	<u>Unbilled Revenue Adjustment</u>		
5	Remove Unbilled Revenue	\$	(137,189)
6	<u>Rent Revenue Adjustment</u>		
7	Annual DOC Rental Revenue Received from USC	\$	313,007
8	<u>Late Payment Revenue Adjustment <sup>(1)</sup></u>		
9	Late Payment Revenue Adjustment	\$	180,938

Notes

(1) Refer to Workpaper 1.1



UNITIL ENERGY SYSTEMS, INC.  
PAYROLL ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

LINE NO.	(1) DESCRIPTION	(2)	(3)	(4)	(5)	(6)
		NONUNION	UES UNION	SUBTOTAL	FROM USC	TOTAL
1	Test Year Payroll, Adjusted for Target Incentive Compensation	\$ 1,405,138	\$ 4,793,090	\$ 6,198,228	\$ 8,630,554	\$ 14,828,782
2	2020 Rate Increase, Annualized <sup>(1)</sup>	-	57,518	57,518	-	57,518
3	Payroll Annualized for 2020 Union Wage Increase	1,405,138	4,850,608	6,255,746	8,630,554	14,886,300
4	2021 Salary & Wage Increase <sup>(2)</sup>	51,288	145,518	196,806	379,744	576,550
5	Payroll Proformed for 2020 and 2021 Wage Increases	1,456,426	4,996,126	6,452,552	9,010,298	15,462,850
6	2022 Salary & Wage Increase <sup>(3)</sup>	53,160	149,884	203,043	396,453	599,496
7	Payroll Proformed for 2020, 2021 and 2022 Wage Increases	1,509,585	5,146,010	6,655,595	9,406,751	16,062,346
8	Less Amounts Chargeable to Capital <sup>(4)</sup>	969,908	3,306,311	4,276,219	2,676,221	6,952,440
9	O&M Payroll Proformed	539,677	1,839,699	2,379,376	6,730,530	9,109,907
10	Less: Test Year O&M Payroll <sup>(5)</sup>			2,225,229	6,175,162	8,400,391
11	Increase in O&M Payroll due to Annual Salary and Wage Increases			154,147	555,368	709,516
12	Incentive Compensation Target Adjustment <sup>(6)</sup>			\$ -	-	-
13	Net Adjustment to O&M Payroll / Compensation			154,147	555,368	709,516

**Notes**

(1) UES Union increase of 3.0% effective June 1, 2020

(2) UES Non-union increase of 3.65% effective January 1, 2021, Union increase of 3.0% effective June 1, 2021 and USC increase of 4.40% effective January 1, 2021

(3) UES Non-union increase of 3.65% effective January 1, 2022, Union increase of 3.0% effective June 1, 2022 and USC increase of 4.40% effective January 1, 2022

(4) Test Year Payroll Capitalization Rates:

UES	64.25%
USC	28.45%

(5) Refer to Workpaper 2.2 and Schedule RevReq-3-2, page 2.

(6) Refer to Workpaper 2.4

**UNITIL ENERGY SYSTEMS, INC.  
UNITIL SERVICE CORP PAYROLL ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

Schedule RevReq-3-2  
Page 2 of 2  
Table of Contents

<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) TOTAL</b>
1	Test Year USC Labor Charges to Unitil Energy <sup>(1)</sup>	\$ 8,630,554
2	2021 Salary & Wage Increase % <sup>(2)</sup>	<u>4.40%</u>
3	Payroll Increase	379,744
4	Proforma Payroll for 2019 Increase	<u>9,010,298</u>
5	2022 Salary & Wage Increase % <sup>(2)</sup>	<u>4.40%</u>
6	Payroll Increase	396,453
7	Proforma Payroll for 2019 and 2020 Increase	<u>9,406,751</u>
8	Payroll Capitalization Ratio for 2021 and 2022 Increase	<u>28.45%</u>
9	Proforma Payroll Capitalization	2,676,221
10	Proforma Amount to O&M Expense	6,730,530
11	Test Year O&M Payroll Amount of USC Charge	<u>6,175,162</u>
12	O&M Payroll Increase	<u><u>\$ 555,368</u></u>

**Notes**

(1) Includes Incentive Compensation at Target of \$938,339

(2) Average Increase of 4.40% Effective January 1, 2021 and Average Increase of 4.40% Effective January 1, 2022

UNITIL ENERGY SYSTEMS, INC.  
 RELIABILITY ENHANCEMENT AND VEGETATION MANAGEMENT PROGRAM ADJUSTMENT  
 12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-3  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) 2020 <sup>(1)</sup>	(3) 2021 <sup>(1)</sup>
1	Cycle Prune	\$ 1,487,245	\$ 1,746,507
2	Hazard Tree Mitigation	934,544	840,000
3	Forestry Reliability Work	18,168	115,360
4	Mid-Cycle Review	31,791	25,603
5	Police / Flagger	676,997	619,515
6	Core Work	176,579	154,500
7	VM Planning	-	-
8	Distribution Total	3,325,322	3,501,485
9	Sub-T	363,327	620,069
10	Substation Spraying	10,798	13,431
11	VM Staff	376,758	364,491
12	Program Total	4,076,205	4,499,476
13	Storm Resiliency Program	1,439,617	1,465,690
14	Reliability Enhancement Program	152,803	300,000
15	Deferral as of 12/31/2020	179,614	-
16	Total REP & VMP Expense	\$ 5,848,239	\$ 6,265,166
17	Increase in REP & VMP Expense		\$ 416,927
18	Removal of Test Year Third Party Reimbursement <sup>(2)</sup>		989,500
19	Total Increase in REP & VMP Expense		\$ 1,406,427

**Notes**

(1) Per DE 20-183 filing made on February 17, 2021

(2) To be refunded as part of the Company's External Delivery Charge (EDC)

UNITIL ENERGY SYSTEMS, INC.  
 MEDICAL AND DENTAL INSURANCE ADJUSTMENT  
 12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-4  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) TOTAL	(3) UNITIL ENERGY SYSTEMS, INC. <sup>(1)</sup>	(4) UNITIL SERVICE CORP. <sup>(2)</sup>
1	Proformed Medical and Dental O&M Expense	\$ 995,556	\$ 219,155	\$ 776,401
2	Less: Test Year Medical And Dental Insurance O&M Expense	<u>512,402</u>	<u>95,921</u>	<u>416,480</u>
3	Proformed 2021 And 2022 O&M Increase	<u>\$ 483,155</u>	<u>\$ 123,234</u>	<u>\$ 359,921</u>

**Notes**

(1) See Workpapers W3.1

(2) See Workpapers W3.2

Unitil Energy Systems, Inc.  
PENSION, PBOP, SERP, 401(K) and Deferred Compensation Expense  
12 MONTHS ENDED DECEMBER 21, 2020

Schedule RevReq-3-5  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) TOTAL	(3) UNITIL ENERGY SYSTEMS, INC.	(4) UNITIL SERVICE CORP.
1	Test Year Pension Expense, as Pro-Formed	\$ 1,122,160	\$ 479,438	\$ 642,721
2	Test Year PBOP Expense, as Pro-Formed	849,272	579,088	270,185
3	Test Year SERP Expense, as Pro-Formed	468,678	-	468,678
4	Test Year 401K Expense, as Pro-Formed	534,997	102,860	432,136
5	Test Year Deferred Comp Expense, as Pro-Formed	77,097	-	77,097
6	Total Test Year Retirement Costs as Pro-Formed	<u>3,052,204</u>	<u>1,161,386</u>	<u>1,890,817</u>
7	Test Year Pension Expense	\$ 1,059,872	\$ 456,916	\$ 602,955
8	Test Year PBOP Expense	890,909	590,644	300,265
9	Test Year SERP Expense	382,690	-	382,690
10	Test Year 401K Expense	493,152	96,674	396,479
11	Test Year Deferred Comp Expense	12,140	-	12,140
12	Total Test Year Retirement Costs	<u>2,838,762</u>	<u>1,144,234</u>	<u>1,694,528</u>
13	Test Year Pension Expense, Pro-Forma Adjustment <sup>(1)</sup>	62,288	22,522	39,766
14	Test Year PBOP Expense, Pro-Forma Adjustment <sup>(2)</sup>	(41,636)	(11,556)	(30,080)
15	Test Year SERP Expense, Pro-Forma Adjustment <sup>(3)</sup>	85,989	-	85,989
16	Test Year 401K Expense, Pro-Forma Adjustment <sup>(4)</sup>	41,844	6,187	35,658
17	Test Year Deferred Comp Expense, Pro-Forma Adjustment <sup>(5)</sup>	64,957	-	64,957
18	Total Test Year Pension, PBOP and 401K Expense, Pro-Forma Adjustment	<u>\$ 213,441</u>	<u>\$ 17,152</u>	<u>\$ 196,289</u>

**Notes**

- (1) Refer to Workpaper 4.1
- (2) Refer to Workpaper 4.2
- (3) Refer to Workpaper 4.3
- (4) Refer to Workpaper 4.4
- (5) Refer to Workpaper 4.6

UNITIL ENERGY SYSTEMS, INC.  
PROPERTY & LIABILITY INSURANCE  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-6  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) TOTAL	(3) UES <sup>(1)</sup>	(4) UNITIL SERVICE CORP. <sup>(2)</sup>
1	Proformed Property & Liability Insurances O&M Expense	\$ 369,896	\$ 328,517	\$ 41,379
2	Less: Test Year Property & Liability Insurances O&M Expense	<u>297,428</u>	<u>273,026</u>	<u>24,402</u>
3	Proformed 2021 And 2022 O&M Increase	<u>\$ 72,468</u>	<u>\$ 55,491</u>	<u>\$ 16,977</u>

Notes

(1) See Workpaper W5.1

(2) See Workpaper W5.2

UNITIL ENERGY SYSTEMS, INC.  
DISTRIBUTION OPERATION CENTER EXPENSE ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-7  
Table of Contents

(1)	(2)	
LINE NO.	DESCRIPTION	AMOUNT
1	New Exeter DOC Operating Expense <sup>(1)</sup>	\$ 119,250
2	Test Year DOC Operating Expense	121,218
3	Change in DOC Operating Expense	<u>(1,968)</u>

Notes

(1) Amount reflects 2021 budget and will be updated with 2021 actuals during pendency of case

**UNITIL ENERGY SYSTEMS, INC.  
REGULATORY ASSESSMENT FEE ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-8  
Table of Contents**

	(1)	(2)			
<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>			
1	Regulatory Assessment for Fiscal Year 2021	\$ 801,884			
2	Less: Supplier Portion	10,000			
3	Regulatory Assessment Assigned to Base	791,884			
4	Test Year Regulatory Assessment Assigned to Base	632,501			
5	Regulatory Assessment Fee Adjustment	\$ 159,383			



**UNITIL ENERGY SYSTEMS, INC.  
DUES & SUBSCRIPTION ADJUSTEMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-9  
Table of Contents**

LINE NO.	(1) DESCRIPTION	(2) AMOUNT
1	EEI Membership Dues	
2	Regular Activities of Edison Electric Institute <sup>(1)</sup>	\$ 61,515
3	Industry Issues <sup>(2)</sup>	6,152
4	Restoration, Operations, and Crisis Management Program <sup>(3)</sup>	2,000
5	2021 Contribution to The Edison Foundation, which funds IEI <sup>(4)</sup>	5,000
6	Total	74,667
7	Amount allocated to UES	68%
8	Test Year UES Dues & Subscriptions	50,774
9	Adjustment to remove lobbying portion of Dues & Subscriptions	(14,473)

**Notes**

- (1) The portion of 2021 membership dues relating to influencing legislation, which is not deductible for federal income tax purposes, is estimated to be 13%
- (2) The portion of the 2021 industry issues support relating to influencing legislation is estimated to be 24%
- (3) The Restoration, Operations, and Crisis Management Program is related to improvements to industry-wide responses to major outages (e.g. National Response Event); continuity of industry and business operations; and EEI's all hazards (storms, wildfires, cyber, etc.) support and coordination of the industry during times of crises. No portion of this assessment is allocable to influencing legislation
- (4) The Edison Foundation is an IRC 501(c)(3) educational and charitable organization. Contributions are deductible for federal income tax purposes to the extent provided by law. Please consult your tax advisor with respect to your specific situation

**UNITIL ENERGY SYSTEMS, INC.  
 PANDEMIC COST ADJUSTMENT  
 12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-10  
Table of Contents**

	(1)	(2)	
<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>	
1	Pandemic Cost Adjustment - UES	\$ 30,250	
2	<u>Unitil Service Expense Allocated to UES</u>		
3	Total Unitil Service Pandemic Costs	\$ 49,496	
4	UES Apportionment	27.50%	
5	Expense Apportioned to UES	\$ 13,611	
6	Capitalization Rate	29.42%	
7	UES Capitalization	4,004	
8	UES Net O&M Medical Expense	\$ 9,607	
9	Removal of Total Pandemic Costs from Test Year	\$ (39,857)	

UNITIL ENERGY SYSTEMS, INC.  
CLAIMS & LITIGATION ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-11  
Table of Contents

	(1)		(2)
<u>LINE NO.</u>	<u>DESCRIPTION</u>		<u>AMOUNT</u>
1	Claims & Litigation Adjustment <sup>(1)</sup>	\$	44,072

Notes

(1) Test year reflects a reclass adjustment from UES to Northern Utilities - Maine Division for inadvertent expense booked in calendar year 2019

UNITIL ENERGY SYSTEMS, INC.  
SEVERANCE EXPENSE ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-12  
Table of Contents

	(1)	(2)
<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
1	Removal of test year severance expense	\$ (40,395)

UNITIL ENERGY SYSTEMS, INC.  
DISTRIBUTION BAD DEBT ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-13  
Table of Contents

	(1)	(2)	
LINE NO.	DESCRIPTION	AMOUNT	
1	Calendar Year 2019 Write-Offs as a % of Retail Delivery Billed Revenue <sup>(1)</sup>	0.64%	
2	Per Books Delivery Retail Billed Revenue - Calendar Year 2019 <sup>(1)</sup>	\$ 91,933,881	
3	Revenue Increase from Rate Case	11,992,392	
4	2020 Total Normalized Delivery Retail Billed Revenue	\$ 103,926,273	
5	Uncollectible Delivery Revenue	\$ 660,815	
6	Less: Test Year Bad Debt Expense	\$ 526,252	
7	Increase in Bad Debt Expense	\$ 134,563	

**Notes**

(1) Normalized write offs and per books delivery retail billed revenue by using 2019 calendar year activity

**UNITIL ENERGY SYSTEMS, INC.**  
**ARREARAGE MANGAEMENT PROGRAM (AMP) IMPLEMENTATION ADJUSTMENT**  
**12 MONTHS ENDED DECEMBER 31, 2020**

Schedule RevReq-3-14  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) AMOUNT
1	Required AMP Full Time Employee	\$ 84,000
2	Annual AMP Forgiveness <sup>(1)</sup>	375,000
3	Total AMP Implementation Costs	<u>\$ 459,000</u>

**Notes**

(1) Annual over/under recovery of AMP forgiveness to be reconciled through Company's External Delivery Charge (EDC)

UNITIL ENERGY SYSTEMS, INC.  
INFLATION ALLOWANCE  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-15  
Page 1 of 2  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) TOTAL
1	Test Year Distribution O&M Expenses	\$ 22,748,486
	Less Normalizing Adjustments Items:	
2	Payroll	\$ 8,400,391
3	Medical and Dental Insurance	512,402
4	401K Costs	493,152
5	Property & Liability Insurance	297,428
6	Regulatory Assessment Fees	632,501
7	Total Normalizing Adjustment Items	<u>\$ 10,335,874</u>
	Less Items not Subject to Inflation:	
8	Pension	\$ 1,059,872
9	Postemployment Benefits Other than Pensions	890,909
10	Supplemental Executive Retirement Plan	382,690
11	Deferred Comp Expense	12,140
12	Bad Debts	526,252
13	Vegetation Management Expense	4,858,739
14	Postage	298,842
15	Amortizations - USC Charge	107,733
16	Facility Leases - USC Charge	454,965
17	Total Items not Subject to Inflation	<u>\$ 8,592,140</u>
18	Residual O&M Expenses	\$ 3,820,472
19	Projected Inflation Rate <sup>(1)</sup>	<u>3.36%</u>
20	Increase in Other O&M Expense for Inflation	\$ 128,368

**Notes**

(1) Refer to Schedule RevReq-3-15, Page 2 of 2

**UNITIL ENERGY SYSTEMS, INC.  
INFLATION ALLOWANCE  
12 MONTHS ENDED DECEMBER 31, 2020**

<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) INDEX<sup>(1)</sup></b>
	<b>GDPIPD Index Value at the end of the Test Year:</b>	
1	June 2020 Index-GDP	113.0
2	July 2020 Index-GDP	113.3
3	July 1, 2020 (Midpoint of Test Year) Index	<u>113.2</u>
	<b>GDPIPD Index Value at date of permanent rates :</b>	
4	March 2022 Index-GDP	116.8
5	April 2022 Index-GDP	117.1
6	April 1, 2022 (Date of Permanent Rates) Index	<u>117.0</u>
7	Projected Inflation Rate	<u>3.36%</u>

**Notes**

(1) Refer to Workpaper W6.1 for GDPIPD Indices



UNITIL ENERGY SYSTEMS, INC.  
DEPRECIATION ANNUALIZATION  
12 MONTHS ENDED DECEMBER 31, 2020

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
LINE NO.	DESCRIPTION	PLANT BALANCE 12/31/2020	ADJUSTMENTS	LESS NON DEPRECIABLE	DEPRECIABLE PLANT	LESS ITEMS CHARGED TO CLEARING ACCOUNT	DEPRECIABLE PLANT CHARGED TO DEPRECIATION EXPENSE	CURRENT DEPRECIATION RATES	ANNUAL PROFORMED EXPENSE
1	Intangible Plant								
2	301-Organization	\$ 380	\$ -	\$ 380	\$ -	\$ -	\$ -	N/A	N/A
3	303-Misc Intangible Plant	21,916,840	-	21,916,840	-	-	-	N/A	N/A
4	Total Intangible Plant	21,917,220	-	21,917,220	-	-	-	N/A	N/A
5	Other Production Plant:								
6	343-Movers	56,575	-	-	56,575	-	56,575	6.67%	3,774
7	Total Other Production Plant	56,575	-	-	56,575	-	56,575	6.67%	3,774
8	Distribution Plant								
9	360-Land & Land Rights	2,677,472	-	2,677,472	-	-	-	N/A	N/A
10	361-Structures & Improvements	2,173,616	-	-	2,173,616	-	2,173,616	2.45%	53,254
11	362-Station Equipment	50,412,132	-	-	50,412,132	-	50,412,132	2.60%	1,310,715
12	364-Poles, Towers & Fixtures	75,140,861	-	-	75,140,861	-	75,140,861	3.70%	2,780,212
13	365-Overhead Conductors & Devices	92,313,723	-	-	92,313,723	-	92,313,723	3.64%	3,360,220
14	366-Underground Conduit	2,587,958	-	-	2,587,958	-	2,587,958	2.04%	52,794
15	367-Underground Conductors & Devices	23,862,963	-	-	23,862,963	-	23,862,963	2.55%	608,506
16	368.0-Line Transformers	29,259,308	-	-	29,259,308	-	29,259,308	3.00%	877,779
17	368.1-Line Transformer Installations	25,947,042	-	-	25,947,042	-	25,947,042	2.89%	749,870
18	369-Services	25,642,632	-	-	25,642,632	-	25,642,632	5.67%	1,453,937
19	370.0-Meters	11,764,062	-	-	11,764,062	-	11,764,062	5.00%	588,203
20	370.1-Meter Installations	7,165,765	-	-	7,165,765	-	7,165,765	5.00%	358,288
21	371-Installations On Customer Premises	2,404,367	-	-	2,404,367	-	2,404,367	7.56%	181,770
22	373-Street Lighting & Signal Systems	3,580,954	-	-	3,580,954	-	3,580,954	7.79%	278,956
23	Total Distribution Plant	354,932,857	-	2,677,472	352,255,384	-	352,255,384	3.59%	12,654,504
24	General Plant								
25	389-General & Misc. Structure <sup>(1)</sup>	1,363,295	(9,679)	1,353,616	-	-	-	N/A	N/A
26	390-Structures <sup>(1)</sup>	19,114,262	(482,234)	-	18,632,028	-	18,632,028	2.08%	387,546
27	391.1-Office Furniture & Equipment	1,289,877	76,307	-	1,366,184	-	1,366,184	5.83%	79,649
28	391.3-Computer Equipment	-	-	-	-	-	-	N/A	N/A
29	392-Transportation Equip	1,073,517	-	-	1,073,517	1,073,517	-	N/A	N/A
30	393-Stores Equip	90,657	4,536	-	95,192	-	95,192	3.36%	3,198
31	394-Tools, Shop & Garage Eq	2,429,892	-	-	2,429,892	-	2,429,892	3.64%	88,448
32	395-Laboratory Equipment	948,530	-	-	948,530	-	948,530	3.90%	36,993
33	397-Communication Equip	5,005,568	-	-	5,005,568	-	5,005,568	6.60%	330,367
34	398-Miscellaneous Equip	102,943	-	-	102,943	-	102,943	4.88%	5,024
35	Total General Plant	31,418,541	(411,070)	1,353,616	29,653,855	1,073,517	28,580,338	3.26%	931,225
36	Total Plant in Service	\$ 408,325,192	\$ (411,070)	\$ 25,948,308	\$ 381,965,814	\$ 1,073,517	\$ 380,892,297	3.57%	\$ 13,589,503
37	Test Year Expense								12,680,791
38	Increase In Depreciation Expense								\$ 908,712

**Notes**

(1) Refer to Schedule RevReq-4-3 and Schedule RevReq-4-4

UNITIL ENERGY SYSTEMS, INC.  
DEPRECIATION ANNUALIZATION  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-16  
Page 2 of 2  
[Table of Contents](#)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
LINE NO.	DESCRIPTION	PLANT BALANCE 12/31/2020	ADJUSTMENTS	LESS NON DEPRECIABLE	DEPRECIABLE PLANT	LESS ITEMS CHARGED TO CLEARING ACCOUNT	DEPRECIABLE PLANT CHARGED TO DEPRECIATION EXPENSE	PROPOSED DEPRECIATION RATES	PROPOSED PROFORMED EXPENSE
1	Intangible Plant								
2	301-Organization	\$ 380	\$ -	\$ 380	\$ -	\$ -	\$ -	N/A	N/A
3	303-Misc Intangible Plant	21,916,840	-	21,916,840	-	-	-	N/A	N/A
4	Total Intangible Plant	21,917,220	-	21,917,220	-	-	-	N/A	N/A
5	Other Production Plant:								
6	343-Movers	56,575	-	-	56,575	-	56,575	18.66%	10,557
7	Total Other Production Plant	56,575	-	-	56,575	-	56,575	18.66%	10,557
8	Distribution Plant								
9	360-Land & Land Rights	2,677,472	-	2,677,472	-	-	-	N/A	N/A
10	361-Structures & Improvements	2,173,616	-	-	2,173,616	-	2,173,616	2.40%	52,167
11	362-Station Equipment	50,412,132	-	-	50,412,132	-	50,412,132	2.96%	1,492,199
12	364-Poles, Towers & Fixtures	75,140,861	-	-	75,140,861	-	75,140,861	3.61%	2,712,585
13	365-Overhead Conductors & Devices	92,313,723	-	-	92,313,723	-	92,313,723	3.62%	3,341,757
14	366-Underground Conduit	2,587,958	-	-	2,587,958	-	2,587,958	2.16%	55,900
15	367-Underground Conductors & Devices	23,862,963	-	-	23,862,963	-	23,862,963	2.85%	680,094
16	368.0-Line Transformers	29,259,308	-	-	29,259,308	-	29,259,308	2.46%	719,779
17	368.1-Line Transformer Installations	25,947,042	-	-	25,947,042	-	25,947,042	2.30%	596,782
18	369-Services	25,642,632	-	-	25,642,632	-	25,642,632	2.43%	623,116
19	370.0-Meters	11,764,062	-	-	11,764,062	-	11,764,062	8.76%	1,030,532
20	370.1-Meter Installations	7,165,765	-	-	7,165,765	-	7,165,765	5.51%	394,834
21	371-Installations On Customer Premises	2,404,367	-	-	2,404,367	-	2,404,367	8.03%	193,071
22	373-Street Lighting & Signal Systems	3,580,954	-	-	3,580,954	-	3,580,954	1.49%	53,356
23	Total Distribution Plant	354,932,857	-	2,677,472	352,255,384	-	352,255,384	3.39%	11,946,172
24	General Plant								
25	389-General & Misc. Structure <sup>(1)</sup>	1,363,295	(9,679)	1,353,616	-	-	-	N/A	N/A
26	390-Structures <sup>(1)</sup>	19,114,262	(482,234)	-	18,632,028	-	18,632,028	1.85%	344,693
27	391.1-Office Furniture & Equipment	1,289,877	76,307	-	1,366,184	-	1,366,184	5.95%	81,224
28	391.3-Computer Equipment	-	-	-	-	-	-	N/A	N/A
29	392-Transportation Equip	1,073,517	-	-	1,073,517	1,073,517	-	N/A	N/A
30	393-Stores Equip	90,657	4,536	-	95,192	-	95,192	1.75%	1,670
31	394-Tools, Shop & Garage Eq	2,429,892	-	-	2,429,892	-	2,429,892	3.40%	82,572
32	395-Laboratory Equipment	948,530	-	-	948,530	-	948,530	2.97%	28,137
33	397-Communication Equip	5,005,568	-	-	5,005,568	-	5,005,568	4.34%	217,198
34	398-Miscellaneous Equip	102,943	-	-	102,943	-	102,943	0.93%	962
35	Total General Plant	31,418,541	(411,070)	1,353,616	29,653,855	1,073,517	28,580,338	2.65%	756,456
36	Total Plant in Service	\$ 408,325,192	\$ (411,070)	\$ 25,948,308	\$ 381,965,814	\$ 1,073,517	\$ 380,892,297	3.36%	\$ 12,713,185
37	<u>Reserve Adjustment For Amortization <sup>(2)</sup></u>								
38	390-Structures								(173)
39	391.1-Office Furniture & Equipment								66,592
40	391.3-Computer Equipment								(869)
41	393-Stores Equip								908
42	394-Tools, Shop & Garage Eq								22,424
43	395-Laboratory Equipment								58
44	397-Communication Equip								(1,754)
45	398-Miscellaneous Equip								(617)
46	Total Reserve Adjustment for Amortization								86,569
47	Total Pro Forma Depreciation Expense (Line 36 + Line 46)								12,799,754
48	Annualized Test Year Expense <sup>(3)</sup>								13,589,503
49	Increase In Depreciation Expense								\$ (789,749)

**Notes**

- (1) Refer to Schedule RevReq-4-3 and Schedule RevReq-4-4
- (2) Refer to testimony and schedules of Mr. Allis
- (3) Refer to Schedule RevReq-3-16, Page 1 of 2, Line 34

**UNITIL ENERGY SYSTEMS, INC.  
AMORTIZATION ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-17  
Table of Contents**

<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) TOTAL</b>
1	Unitil Energy Systems Rate Year Software Amortization <sup>(1)</sup>	\$ 1,585,103
2	USC Allocated Rate Year Software Amortization <sup>(2)</sup>	162,109
3	Total Rate Year Software Amortization	<u>1,747,212</u>
4	Unitil Energy Systems Test Year Software Amortization <sup>(3)</sup>	\$ 1,392,138
5	Unitil Energy Systems Test Year Adjustment	11,313
6	USC Allocated Test Year Software Amortization <sup>(4)</sup>	105,171
7	Total 2020 Test Year Software Amortization	<u>1,508,621</u>
8	Test Year Amortization Expense Adjustment (Line 3 - Line 7)	<u><u>\$ 238,591</u></u>

**Notes**

(1) Workpaper W7.2 Line 76

(2) Workpaper W7.4 Line 20

(3) Workpaper W7.1 Line 89

(4) Workpaper W7.3 Line 20

UNITIL ENERGY SYSTEMS, INC.  
EXCESS ACCUMULATED DEFERRED INCOME TAX ("ADIT") FLOW BACK  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-18  
Table of Contents

<u>LINE NO.</u>	(1) <u>DESCRIPTION</u>	(2) <u>TOTAL</u>
1	Annual Amortization Expense Reduction Related to Excess ADIT Flowback <sup>(1)</sup>	\$ (999,795)

Notes

(1) Refer to Exhibit JAG-6

UNITIL ENERGY SYSTEMS, INC.  
PROPERTY TAXES  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-19  
Table of Contents

(1)	(2)	(3)	(4)	(5)	
LINE NO.	MUNICIPALITY & STATE	TAXATION PERIOD	LOCAL TAX RATE	ASSESSED VALUATION	TOTAL TAXES <sup>(1)</sup>
1	Allenstown	4/1 - 3/31	\$ 27.27	\$ 72,800	\$ 1,985
2	Atkinson	1/1 - 12/31	16.24	6,404,700	104,012
3	Boscawen	4/1 - 3/31	24.91	9,837,900	245,062
4	Bow	4/1 - 3/31	23.69	13,389,400	317,195
5	Brentwood	4/1 - 3/31	21.36	189,400	4,046
6	Canterbury	4/1 - 3/31	25.38	3,125,400	79,323
7	Chichester	1/1 - 12/31	21.27	5,774,800	122,830
8	Concord	7/1 - 6/30	24.89	61,631,200	1,534,001
9	Concord	7/1 - 6/30	26.76	83,600	2,237
10	Concord	7/1 - 6/30	28.13	10,358,200	291,376
11	Danville	4/1 - 3/31	24.14	3,885,600	93,798
12	Dunbarton	4/1 - 3/31	20.40	565,000	11,526
13	East Kingston	4/1 - 3/31	20.50	6,782,600	139,043
14	Epsom	4/1 - 3/31	19.92	4,750,000	94,620
15	Exeter	4/1 - 3/31	24.49	613,300	15,020
16	Exeter - Land Only	4/1 - 3/31	22.50	23,387,900	526,228
17	Greenland	4/1 - 3/31	14.58	30,500	445
18	Hampstead	4/1 - 3/31	19.63	464,700	9,122
19	Hampton--Class 4000	4/1 - 3/31	13.93	22,489,300	313,276
20	Hampton--Class 5000	4/1 - 3/31	14.43	11,076,800	159,838
21	Hampton Falls	4/1 - 3/31	19.33	4,260,400	82,354
22	Hopkinton	4/1 - 3/31	27.41	477,700	13,094
23	Kensington	4/1 - 3/31	18.61	10,060,284	187,222
24	Kingston	4/1 - 3/31	18.94	19,784,300	369,094
25	Loudon	4/1 - 3/31	20.73	616,800	12,786
26	Newton	4/1 - 3/31	19.10	6,078,600	116,101
27	North Hampton	4/1 - 3/31	14.80	137,300	2,032
28	Pembroke	4/1 - 3/31	22.77	421,800	9,604
29	Plaistow	4/1 - 3/31	19.60	15,501,960	303,838
30	Salisbury	4/1 - 3/31	22.55	2,689,000	60,637
31	Seabrook	4/1 - 3/31	13.90	19,802,000	275,249
32	South Hampton	4/1 - 3/31	17.14	2,572,400	44,091
33	Stratham	4/1 - 3/31	17.14	9,749,400	167,105
34	Webster	4/1 - 3/31	20.28	2,838,900	57,573
35	State Property Tax <sup>(2)</sup>	4/1 - 3/31			1,644,889
36	Total			\$ 279,903,944	\$ 7,410,651
37	Plus: New Exeter DOC Adjustment <sup>(3)</sup>		\$ 24.49	\$ 15,517,171	\$ 380,016
38	Less: Removal of Old Kensington DOC		\$ 18.61	\$ 1,015,306	\$ 18,895
39	Adjusted Test Year Property Tax Expense				\$ 7,771,772
38	Test Year Property Taxes <sup>(4) (5)</sup>				\$ 7,065,052
39	Less: Test Year Property Tax Abatements <sup>(4)</sup>				38,265
40	Total Test Year Property Tax Expense				\$ 7,026,787
41	Total Property Tax Increase (Line 39 - Line 40)				\$ 744,985

**Notes**

- (1) Based on final 2020 property tax bills. Company will update for final 2021 property tax bills during pendency of case
- (2) Based on current estimated 2021 State Property Tax. Amount will be updated during pendency of case
- (3) Estimated Exeter DOC valuation to be updated with actual town valuation during proceeding
- (4) Test Year Property Taxes (Line 38) adjusted to exclude inadvertent property tax abatement entry of \$4,172.67. This amount was included in the Property Tax Abatements (Line 39) to correct
- (5) Test Year Property Taxes reduced by \$12,230.60 to remove accrual adjustment entry related to 2019

UNITIL ENERGY SYSTEMS, INC.  
 PAYROLL TAX ADJUSTMENT - WAGE INCREASES  
 12 MONTHS ENDED DECEMBER 21, 2020

LINE NO.	(1) DESCRIPTION	(2) Social Security	(3) Medicare	(4) Total
1	Increase in O&M Payroll / Compensation due to Annual Rate Increases <sup>(1)</sup>	\$ 709,516	\$ 709,516	
2	Payroll Tax Rates	<u>6.20%</u>	<u>1.45%</u>	
3	Increase in Payroll Taxes	<u>\$ 43,990</u>	<u>\$ 10,288</u>	<u>\$ 54,278</u>

Notes

(1) See Schedule RevReq 3-2 P1

**UNITIL ENERGY SYSTEMS, INC.**  
**PAYROLL TAX ADJUSTMENT - EMPLOYEE RETENTION CREDIT**  
**EMPLOYEE RETENTION CREDIT ("ERC") & FAMILY FIRST CORONAVIRUS RESPONSE ACT ("FFCRA")**  
**12 MONTHS ENDED DECEMBER 21, 2020**

LINE NO.	(1) DESCRIPTION	(2) TOTAL
1	ERC & FFCRA - UES	\$ (143,511)
2	Capitalization Rate	64.25%
3	Capitalized Amount	<u>(92,206)</u>
4	Net Expense - UES	<u>(51,305)</u>
5	<u>Unitil Service ERC Allocated to UES</u>	
6	Total Unitil Service ERC	\$ (279,213)
7	UES Apportionment	27.50%
8	Expense Apportioned to UES	<u>\$ (76,784)</u>
9	Capitalization Rate	28.45%
10	UES Capitalization	<u>(21,845)</u>
11	UES Net ERC	<u>\$ (54,939)</u>
12	Removal of Total ERC & FFCRA from Test Year	<u><u>\$ 106,244</u></u>

UNITIL ENERGY SYSTEMS, INC.  
 COMPUTATION OF FEDERAL AND STATE INCOME TAXES  
 12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-21  
 Page 1 of 4  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) AMOUNT
1	<u>Increases / (Decreases) To Revenue</u>	
2	Non-Distribution Bad Debt	(143,623)
3	Unbilled Revenue	(137,189)
4	New DOC Rent Revenue	313,007
5	Late Fee Adjustment	180,938
6	Total Revenue Adjustments	<u>\$ 213,133</u>
7	<u>Increases / (Decreases) To Expenses</u>	
8	Payroll	\$ 709,516
9	VMP Expense	1,406,427
10	Medical & Dental Insurances	483,155
11	Pension	62,288
12	PBOP	(41,636)
13	SERP	85,989
14	401K	41,844
15	Deferred Comp Expense	64,957
16	Property & Liability Insurances	72,468
17	DOC Expense Adjustment	(1,968)
18	NHPUC Regulatory Assessment	159,383
19	Dues & Subscriptions	(14,473)
20	Pandemic Costs	(39,857)
21	Claims & Litigation Adjustment	44,072
22	Severance Expense	(40,395)
23	Distribution Bad Debt	134,563
24	Non-Distribution Bad Debt	(143,623)
25	Arrearage Management Program (AMP) Implementation Cost	459,000
26	Inflation Allowance	128,368
27	Depreciation Annualization	908,712
28	Proposed Depreciation Rates	(789,749)
29	Software Amortization	238,591
30	Excess ADIT Flowback	(999,795)
31	Property Taxes	744,985
32	Payroll Taxes - Wage Increases	54,278
33	Payroll Taxes - Employee Retention Credits	106,244
34	Change In Interest Exp (Refer to Schedule RevReq-3-21 Page 2)	352,512
35	Total Expense Adjustments	<u>\$ 4,185,854</u>
36	Increase / (Decrease) In Taxable Income	\$ (3,972,721)
37	Effective Federal Income Tax Rate <sup>(1)</sup>	19.38%
38	NH State Tax Rate <sup>(2)</sup>	7.70%
	<u>Federal Income &amp; NH State Tax</u>	
39	Effective Federal Income Tax	\$ (770,033)
40	NH State Tax	<u>(305,900)</u>
41	Increase (Decrease) In Income Taxes	<u>\$ (1,075,932)</u>
	<u>Notes</u>	
42	Federal Income Tax Rate	21.00%
43	Federal Benefit of State Tax -(Line 43 * Line 46)	-1.62%
44	(1) Effective Federal Income Tax Rate	<u>19.38%</u>
45	(2) State Income Tax Rate	7.70%
46	Unitil Energy Systems Tax Rate (Line 45 + Line 46)	<u>27.08%</u>



UNITIL ENERGY SYSTEMS, INC.  
CHANGE IN INTEREST EXPENSE APPLICABLE TO INCOME TAX COMPUTATION  
12 MONTHS ENDED DECEMBER 31, 2020

LINE NO.	(1) DESCRIPTION	(2) AMOUNT
1	Ratemaking Interest Synchronization:	
2	Rate Base <sup>(1)</sup>	\$ 226,030,082
3	Cost of Debt In Proposed Rate of Return <sup>(2)</sup>	2.58%
4	Interest Expense for Ratemaking	<u>5,830,578</u>
5	Test Year Interest Expense:	
6	Interest Charges (427-432)	<u>\$ 5,478,066</u>
7	Increase / (Decrease) in Interest Expense	<u>\$ 352,512</u>

Notes

- (1) Schedule RevReq-4
- (1) Schedule RevReq-5

UNITIL ENERGY SYSTEMS, INC.  
COMPUTATION OF FEDERAL AND STATE INCOME TAXES  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-21  
Page 3 of 4  
Table of Contents

LINE NO	(1) DESCRIPTION	(2) TEST YEAR ACTUAL	(3) PRO-FORMA ADJUSTMENTS	(4) TEST YEAR UTILITY
1	Net Income	\$ 8,133,382	\$ -	\$ 8,133,382
2	Federal Income Tax-Current	(1,161,380)	-	(1,161,380)
3	NH State Income Tax-Current	(1,088,917)	-	(1,088,917)
4	NH State Business Enterprise Credit Against NH BPT	78,000	-	78,000
5	Deferred Federal Income Tax	3,329,959	-	3,329,959
6	Deferred State Income Tax	1,873,334	-	1,873,334
7	Net Income Before Income Taxes	11,164,379	-	11,164,379
8	<u>Permanent Items</u>			
9	Lobbying	34,375	-	34,375
10	Parking Lot Disallowance	1,368	-	1,368
11	Penalties	-	-	-
12	State Regulatory Asset Amortization	-	-	-
13	Unallowable Meals	107	-	107
14	Total Permanent Items	35,850	-	35,850
15	<u>Temporary Differences</u>			
16	Accrued Revenue	666,606	-	666,606
17	Bad Debt	394,494	-	394,494
18	Bad Debt Reg Asset	(143,623)	-	(143,623)
19	Debt Discount	1,920	-	1,920
20	Deferred Rate Case Costs	(5,850)	-	(5,850)
21	DER Investment Amortization	11,020	-	11,020
22	Indenture Costs	28,704	-	28,704
23	FASB 87-Pensions	(394,249)	-	(394,249)
24	Prepaid Property Taxes	192,963	-	192,963
25	PBOP SFAS 106	757,586	-	757,586
26	Storm Restoration	1,470,280	-	1,470,280
27	Utility Plant Differences	(1,867,587)	-	(1,867,587)
28	Total Temporary Differences	1,112,264	-	1,112,264
29	<u>Federal And State Tax Differences</u>			
30	Tax Depreciation	(5,044,874)	-	(5,044,874)
31	Total Federal And State Tax Differences	(5,044,874)	-	(5,044,874)
32	State Taxable Base Income	7,267,619	-	7,267,619
33	State Business Profits Tax - Current	559,607	-	559,607
34	Less: Business Enterprise Tax	78,000	-	78,000
35	Total State Tax Expense	481,607	-	481,607
36	Federal Taxable Income Base Before Federal And State Tax Differences	6,708,012	-	6,708,012
37	Less: Federal And State Tax Differences	(5,044,874)	-	(5,044,874)
38	Federal Taxable Income Base	11,752,886	-	11,752,886
39	Federal Income Tax-Current	2,468,106	-	2,468,106
40	<u>Summary Of Utility Income Taxes:</u>			
41	Federal Income Tax-Current	2,449,098	-	2,449,098
42	Federal Income Tax-Prior	(4,293,279)	-	(4,293,279)
43	Federal Income Tax-NOL	663,793	-	663,793
44	Federal Amount To Non-Distribution Operations	19,008	(19,008)	-
45	State Business Profits Tax-Current	474,055	-	474,055
46	State Business Profits Tax-Prior	(1,570,523)	-	(1,570,523)
47	State Amount To Non-Distribution Operations	7,551	(7,551)	-
48	Deferred Federal Income Tax	(297,166)	-	(297,166)
49	Deferred Federal Income Tax-Prior	4,290,918	-	4,290,918
50	Deferred Federal Income Tax-NOL	(663,793)	-	(663,793)
51	Deferred State Business Profits Tax	302,811	-	302,811
52	Deferred State Business Profits Tax-Prior	1,570,523	-	1,570,523
53	Total Income Taxes	\$ 2,952,997	\$ (26,560)	\$ 2,926,437

**UNITIL ENERGY SYSTEMS, INC.  
PRIOR YEAR INCOME TAXES  
12 MONTHS ENDED DECEMBER 31, 2020**

<b>LINE NO</b>	<b>(1) DESCRIPTION</b>	<b>(2) ACTUAL</b>
1	Remove Prior Year Federal Income Taxes	\$ 4,293,279
2	Remove Prior Year State Income Taxes	1,570,523
3	Remove Prior Year Deferred Federal Income Taxes	(4,290,918)
4	Remove Prior Year Deferred State Income Taxes	(1,570,523)
5	Total	<u>\$ 2,361</u>

UNITIL ENERGY SYSTEMS, INC.  
RATE BASE  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-4  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) REFERENCE	(3) TEST YEAR AVERAGE <sup>(1)</sup>	(4) 5 QUARTER AVERAGE	(5) RATE BASE AT DECEMBER 31, 2020	(6) PRO FORMA ADJUSTMENTS	(7) PRO FORMA RATE BASE AT DECEMBER 31, 2020
1	Utility Plant In Service	Schedule RevReq-4-1	\$ 385,883,446	\$ 378,293,580	\$ 408,325,193	\$ (411,070)	\$ 407,914,123
2	Less: Reserve for Depreciation	Schedule RevReq-4-1	134,753,201	136,143,968	138,059,087	-	138,059,087
3	Net Utility Plant		251,130,244	242,149,612	270,266,106	(411,070)	269,855,036
4	Add: M&S Inventories	Schedule RevReq-4-1	\$ 2,022,364	\$ 1,998,245	\$ 2,032,252	\$ -	\$ 2,032,252
5	Cash Working Capital <sup>(2)</sup>	Schedule RevReq-4-2	2,383,150	2,383,150	2,383,150	967,154	3,350,304
6	Prepayments	Schedule RevReq-4-1	4,840,442	4,956,633	4,508,744	-	4,508,744
7	Sub-Total		9,245,956	9,338,028	8,924,147	967,154	9,891,301
8	Less: Net Deferred Income Taxes	Schedule RevReq-4-1	\$ 36,365,292	\$ 36,267,391	\$ 38,338,666	\$ (71,351)	\$ 38,267,315
9	Less: Excess Deferred Income Taxes	Schedule RevReq-4-1	16,601,346	16,601,346	16,601,346	(1,928,356)	14,672,991
10	Plus: Deferred Income Taxes Debit	Schedule RevReq-4-1	146,198	134,890	150,098	-	150,098
11	Less: Customers Deposits	Schedule RevReq-4-1	482,702	480,878	371,830	-	371,830
12	Less: Customer Advances	Schedule RevReq-4-1	539,816	498,063	554,217	-	554,217
13	Rate Base		\$ 206,533,242	\$ 197,774,851	\$ 223,474,292	\$ 2,555,790	\$ 226,030,082
14	Net Operating Income Applicable To Rate Base		\$ 11,613,315	\$ 11,613,315	\$ 11,613,315		\$ 9,066,677
15	Rate of Return		5.62%	5.87%	5.20%		4.01%

**Notes**

(1) Two Point Average

(2) Computed Working Capital Based on Test Year O&M Expenses

UNITIL ENERGY SYSTEMS, INC.  
RATE BASE ITEMS  
QUARTERLY BALANCES

Schedule RevReq-4-1  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) DECEMBER 31 2019	(3) MARCH 31 2020	(4) JUNE 30 2020	(5) SEPTEMBER 30 2020	(6) DECEMBER 31 2020	(7) 5 QUARTER AVERAGE
1	Utility Plant in Service						
2	Classified	\$ 350,524,447	\$ 356,913,902	\$ 357,270,455	\$ 361,417,472	\$ 379,030,364	\$ 361,031,328
3	Completed Construction Not Classified	12,917,251	13,216,745	15,748,937	15,133,497	29,294,829	17,262,252
4	Total Utility Plant in Service	<u>363,441,698</u>	<u>370,130,647</u>	<u>373,019,392</u>	<u>376,550,969</u>	<u>408,325,193</u>	<u>378,293,580</u>
5	Depreciation & Amortization Reserves	\$ (131,447,315)	\$ (134,081,053)	\$ (137,117,184)	\$ (140,015,203)	\$ (138,059,087)	\$ (136,143,968)
6	Add:						
7	M&S Inventories						
8	Materials and Supplies	1,174,870	1,262,158	1,389,123	1,192,748	1,206,272	1,245,034
9	Stores	189,428	259,182	177,187	39,287	201,952	173,407
10	Clearing Accounts	648,177	1,405,667	670,379	(449,234)	624,028	579,803
11	Total M&S Inventories	<u>\$ 2,012,476</u>	<u>\$ 2,927,007</u>	<u>\$ 2,236,689</u>	<u>\$ 782,802</u>	<u>\$ 2,032,252</u>	<u>\$ 1,998,245</u>
12	Prepayments	5,172,139	5,243,990	4,888,628	4,969,664	4,508,744	4,956,633
13	Cash Working Capital	2,383,150	2,383,150	2,383,150	2,383,150	2,383,150	2,383,150
14	Less: Rate Base Deferred Taxes						
15	Total Deferred Income Taxes	16,461,001	15,482,438	17,529,426	18,327,330	20,259,723	17,611,984
16	Less: Storm Damage DFIT	1,527,288	1,446,855	1,340,817	1,223,261	1,129,092	1,333,463
17	Less: SFAS 158 DIT	(13,086,349)	(12,969,759)	(13,006,813)	(13,045,482)	(14,498,720)	(13,321,425)
18	Less: SFAS 106 DIT	2	2	2	479,390	0	95,879
19	Less: SFAS 158 DIT	1	1	1	133,801	0	26,761
20	Less: Prepaid Property Taxes	459,538	125,886	374,327	226,716	407,278	318,749
21	Less: (ASC 740) Gross up <sup>(1)</sup>	(6,150,857)	(6,150,857)	(6,150,857)	(6,150,857)	(6,150,857)	(6,150,857)
22	Less: Rate Case Expense	(1)	(1)	(1)	(1)	1,584	316
23	Less: Bad Debt Regulatory Asset	20,080	16,172	15,393	15,393	58,978	25,203
24	Less: Accrued Revenue - Purchased Power	(700,619)	(1,322,203)	(1,914,021)	(1,954,342)	973,702	(983,497)
25	Total Rate Base Deferred Taxes	<u>\$ 34,391,918</u>	<u>\$ 34,336,343</u>	<u>\$ 36,870,579</u>	<u>\$ 37,399,450</u>	<u>\$ 38,338,666</u>	<u>\$ 36,267,391</u>
26	Less: Excess Deferred Income Taxes <sup>(1)</sup>	16,601,346	16,601,346	16,601,346	16,601,346	16,601,346	16,601,346
27	Plus: Deferred Taxes Debit	142,298	120,514	129,066	132,475	150,098	134,890
28	Less: Customer Deposits	593,573	545,176	470,020	423,792	371,830	480,878
29	Less: Customer Advances	525,416	444,982	476,559	489,144	554,217	498,063
30	Rate Base	<u>\$ 189,592,193</u>	<u>\$ 194,796,409</u>	<u>\$ 191,121,237</u>	<u>\$ 189,890,125</u>	<u>\$ 223,474,292</u>	<u>\$ 197,774,851</u>

**Notes:**

(1) ASC 740 Gross up excluded from Total Rate Base Deferred Taxes (Line 11), but included in Excess Deferred Income Tax Line (Line 18)

**UNITIL ENERGY SYSTEMS, INC.**  
**CASH WORKING CAPITAL**  
**12 MONTHS ENDED DECEMBER 31, 2020**

Schedule RevReq-4-2  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) REFERENCE	(3) TEST YEAR ACTUAL	(4) PROFORMA ADJUSTMENTS	(5) TEST YEAR AS PROFORMED
1	O&M Expense	Schedule RevReq-2	22,222,234	2,061,610	24,283,845
2	Tax Expense	Schedule RevReq-2	4,889,822	8,941,277	13,831,098
3	Total		<u>\$ 27,112,056</u>	<u>\$ 11,002,887</u>	<u>\$ 38,114,943</u>
4	Cash Working Capital Requirement:				
5	Other O&M Expense Days Lag <sup>(1)</sup> / 366	32.17 days	<u>8.79%</u>	<u>8.79%</u>	<u>8.79%</u>
6	Total Cash Working Capital	Line 5 X Line 3	<u>\$ 2,383,150</u>	<u>\$ 967,154</u>	<u>\$ 3,350,303</u>

**Notes**

(1) Refer to Lead-Lag Study in Direct Testimony of Daniel Hurstak

UNITIL ENERGY SYSTEMS, INC.  
**KENSINGTON DISTRIBUTION OPERATING CENTER ADJUSTMENT**  
**12 MONTHS ENDED DECEMBER 31, 2020**

Schedule RevReq-4-3  
Table of Contents

(1)	(2)
LINE NO.	AMOUNT
DESCRIPTION	
1	Kensington DOC Value as of 12/31/2020
2	389-General & Misc. Structure
3	390-Structures
4	Total Kensington DOC Value as of 12/31/2020
5	Net Tax Value as of 12/31/2020
6	Change in Accumulated Deferred Taxes <sup>(1)</sup>

**Notes**

(1) (Line 3 + Line 5) x Effective Tax Rate of 27.083%

**UNITIL ENERGY SYSTEMS, INC.  
EXETER DISTRIBUTION OPERATING CENTER ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-4-4  
Table of Contents**

(1)	(2)	
<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>
1	Exeter DOC Additions 1/1/2021-2/28/2021	
2	390-Structures	\$ 496,301
3	391.1-Office Furniture & Equipment	76,307
4	393-Stores Equip	4,536
5	Total Exeter DOC Additions 1/1/2021-2/28/2021	<u>\$ 577,144</u>



**UNITIL ENERGY SYSTEMS, INC.**  
**EXCESS ACCUMULATED DEFERRED INCOME TAXES ADJUSTMENT**  
**12 MONTHS ENDED DECEMBER 31, 2020**

Schedule RevReq-4-5  
Table of Contents

	(1)	(2)			
<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>			
1	Major Storm Cost Reserve Balance as of 12/31/2020	\$ 3,275,423			
2	Excess ADIT flow back for 2018-2020 <sup>(1)</sup>	2,644,590			
3	Adjusted Major Storm Cost Reserve Balance as of 12/31/2020	630,833			
4	Reduction to Excess Deferred Income Tax Liability	(2,644,590)			
5	Increase to Accumulated Deferred Income Taxes <sup>(2)</sup>	716,234			
6	Net Decrease to Excess Deferred Income Tax Liability	(1,928,356)			

**Notes**

(1) Refer to Exhibit JAG-6

(2) - Line 4 x Effective Tax Rate of 27.083%

UNITIL ENERGY SYSTEMS, INC.  
 WEIGHTED AVERAGE COST OF CAPITAL  
 5 QUARTER AVERAGE ENDED DECEMBER 31, 2020 PRO FORMA

Schedule RevReq-5  
Table of Contents

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
LINE NO.	DESCRIPTION	AMOUNT	PROFORMA ADJUSTMENT	PROFORMED AMOUNT	WEIGHT	COST OF CAPITAL	WEIGHTED COST OF CAPITAL	REFERENCE
1	Common Stock Equity	\$ 101,242,877	\$ -	\$ 101,242,877	52.91%	10.00%	5.29%	Schedule RevReq 5-1
2	Preferred Stock Equity	188,700	-	188,700	0.10%	6.00%	0.01%	Schedule RevReq 5-1 and 5-6
3	Long Term Debt	93,400,000	(3,500,000)	89,900,000	46.99%	5.49%	2.58%	Schedule RevReq 5-1 and 5-4
4	Short Term Debt	-	-	-	0.00%	1.68%	0.00%	Schedule RevReq 5-1 and 5-5
5	<b>Total</b>	<u>\$ 194,831,577</u>	<u>\$ (3,500,000)</u>	<u>\$ 191,331,577</u>	<u>100.00%</u>		<u>7.88%</u>	

UNITIL ENERGY SYSTEMS, INC.  
CAPITAL STRUCTURE FOR RATEMAKING PURPOSES  
5-QUARTER AVERAGE ENDED DECEMBER 31, 2020 PRO FORMA

Schedule RevReq-5-1  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) DECEMBER 31 2019	(3) MARCH 31 2020	(4) JUNE 30 2020	(5) SEPTEMBER 30 2020	(6) DECEMBER 31 2020	(7) 5 QUARTER AVERAGE	(8) PROFORMA ADJUSTMENT	(9) PROFORMA AMOUNT
1	Common Stock Equity								
2	Common Stock	\$ 2,442,426	\$ 2,442,426	\$ 2,442,426	\$ 2,442,426	\$ 2,442,426	\$ 2,442,426	\$ -	\$ 2,442,426
3	Premium on Capital Stock	1,005,875	1,005,875	1,005,875	1,005,875	1,005,875	1,005,875	-	1,005,875
4	Misc. Paid In Capital	51,028,170	51,028,170	56,028,170	56,028,170	58,778,170	54,578,170	-	54,578,170
5	Common Stock Expense	(94,845)	(94,845)	(94,845)	(94,845)	(94,845)	(94,845)	-	(94,845)
6	Retained Earnings	42,949,034	42,237,826	42,838,727	44,310,367	44,220,302	43,311,251	-	43,311,251
7	Total Common Stock Equity	97,330,660	96,619,452	102,220,353	103,691,992	106,351,928	101,242,877	-	101,242,877
8	Preferred Stock Equity	188,700	188,700	188,700	188,700	188,700	188,700	-	188,700
9	Long-Term Debt	87,500,000	82,500,000	82,500,000	108,000,000	106,500,000	93,400,000	(3,500,000)	89,900,000
10	Short-Term Debt <sup>(1)</sup>	-	-	-	-	-	-	-	-
11	Total	<u>\$ 185,019,360</u>	<u>\$ 179,308,152</u>	<u>\$ 184,909,053</u>	<u>\$ 211,880,692</u>	<u>\$ 213,040,628</u>	<u>\$ 194,831,577</u>	<u>\$ (3,500,000)</u>	<u>\$ 191,331,577</u>
12	<u>Capital Structure Ratios</u>								
13	Common Stock Equity	52.61%	53.88%	55.28%	48.94%	49.92%	51.96%		52.91%
14	Preferred Stock Equity	0.10%	0.11%	0.10%	0.09%	0.09%	0.10%		0.10%
15	Long-Term Debt	47.29%	46.01%	44.62%	50.97%	49.99%	47.94%		46.99%
16	Short-Term Debt <sup>(1)</sup>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%
17	Total	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>		<u>100.00%</u>

Notes

(1) For ratemaking purposes the Company has imputed zero short-term debt

**UNITIL ENERGY SYSTEMS, INC.  
HISTORICAL CAPITAL STRUCTURE  
DECEMBER 31, 201X**

**Schedule RevReq-5-2  
Table of Contents**

LINE NO.	(1) DESCRIPTION	(2) 2015	(3) 2016	(4) 2017	(5) 2018	(6) 2019
1	Common Stock Equity	\$ 77,284,950	\$ 79,155,139	\$ 80,739,631	\$ 83,926,900	\$ 97,330,660
2	Preferred Stock Equity	189,800	189,300	189,300	189,300	188,700
3	Long-Term Debt	<u>77,000,000</u>	<u>74,000,000</u>	<u>72,500,000</u>	<u>96,000,000</u>	<u>87,500,000</u>
4	Total	<u>\$ 154,474,750</u>	<u>\$ 153,344,439</u>	<u>\$ 153,428,931</u>	<u>\$ 180,116,200</u>	<u>\$ 185,019,360</u>
5	Short-Term Debt (Year-End)	8,774,322	16,772,688	21,386,504	-	13,065,032

**UNITIL ENERGY SYSTEMS, INC.  
HISTORICAL CAPITALIZATION RATIOS  
DECEMBER 31, 201X**

**Schedule RevReq-5-3  
Table of Contents**

<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) 2015</b>	<b>(3) 2016</b>	<b>(4) 2017</b>	<b>(5) 2018</b>	<b>(6) 2019</b>
1	Common Stock Equity	50.03%	51.62%	52.62%	46.60%	52.61%
2	Preferred Stock Equity	0.12%	0.12%	0.12%	0.11%	0.10%
3	Long-Term Debt	49.85%	48.26%	47.25%	53.30%	47.29%
4	Total	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>

UNITIL ENERGY SYSTEMS, INC.  
WEIGHTED AVERAGE COST OF LONG-TERM DEBT  
DECEMBER 31, 2020 PRO FORMA

Schedule RevReq-5-4  
Table of Contents

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
LINE NO.	ISSUE	DATE ISSUED	TERM	FACE VALUE	OUTSTANDING AMOUNT	PROFORMA ADJUSTMENT	PROFORMED OUTSTANDING AMOUNT	ISSUANCE COSTS	NET PROCEEDS RATIO [(5)-(9)/(5)]	UNAMORTIZED ISSUANCE COSTS	NET PROCEEDS OUTSTANDING (8)-(11)	ANNUAL ISSUANCE COST	ANNUAL INTEREST COST Rate * (8)	TOTAL ANNUAL COST (13)+(14)	COST RATE BASED ON NET PROCEEDS (15)/[(8)-(11)]
1	8.49% Series I	10/14/1994	30 Yrs	\$ 6,000,000	\$ 1,200,000	\$ (600,000)	\$ 600,000	\$ 141,750	97.64%	\$ 18,034	\$ 581,966	\$ 4,756	\$ 50,940	\$ 55,696	9.57%
2	6.96% Series J	9/1/1998	30 Yrs	10,000,000	8,000,000	(1,000,000)	7,000,000	343,727	96.56%	88,011	6,911,989	11,479	487,200	498,679	7.21%
3	8.00% Series K	5/1/2001	30 Yrs	7,500,000	7,500,000	-	7,500,000	236,989	96.84%	50,381	7,449,619	4,876	600,000	604,876	8.12%
4	8.49% Series L	10/14/1994	30 Yrs	9,000,000	1,800,000	(900,000)	900,000	193,809	97.85%	24,599	875,401	6,488	76,410	82,898	9.47%
5	6.96% Series M	9/1/1998	30 Yrs	10,000,000	8,000,000	(1,000,000)	7,000,000	230,507	97.69%	59,076	6,940,924	7,706	487,200	494,906	7.13%
6	8.00% Series N	5/1/2001	30 Yrs	7,500,000	7,500,000	-	7,500,000	111,917	98.51%	40,280	7,459,720	3,898	600,000	603,898	8.10%
7	6.32% Series O	9/26/2006	30 Yrs	15,000,000	15,000,000	-	15,000,000	280,242	98.13%	146,737	14,853,263	9,341	948,000	957,341	6.45%
8	4.18% Series Q	11/30/2018	30 Yrs	30,000,000	30,000,000	-	30,000,000	535,964	98.21%	498,784	29,501,216	17,865	1,254,000	1,271,865	4.31%
9	3.58% Series R	9/15/2020	20 Yrs	27,500,000	27,500,000	-	27,500,000	173,526	99.37%	170,634	27,329,366	8,676	984,500	993,176	3.63%
10	12th Supplemental	12/1/2002	24 Yrs					464,633		158,265	(158,265)	21,582		21,582	
11	Total			\$ 122,500,000	\$ 106,500,000	\$ (3,500,000)	\$ 103,000,000	\$ 2,713,064		\$ 1,254,801	\$ 101,745,199			\$ 5,584,917	5.49%

**UNITIL ENERGY SYSTEMS, INC.  
COST OF SHORT-TERM DEBT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-5-5  
Table of Contents**

LINE NO.	(1) MONTH	(2) MONTH-END AMOUNT OUTSTANDING	(3) AVERAGE DAILY BORROWINGS	(4) MONTHLY SHORT-TERM INTEREST	(5) INTEREST RATE <sup>(1)</sup>
1	January 2020	15,981,465	13,423,371	\$ 32,462	2.86%
2	February 2020	18,329,433	15,403,679	34,383	2.82%
3	March 2020	25,006,584	22,479,815	40,533	2.13%
4	April 2020	26,439,328	24,786,356	38,939	1.92%
5	May 2020	26,575,577	25,292,157	29,279	1.37%
6	June 2020	23,423,291	23,096,051	25,174	1.33%
7	July 2020	26,686,489	25,491,071	28,529	1.32%
8	August 2020	29,757,846	29,264,455	32,399	1.31%
9	September 2020	4,767,278	17,205,102	18,331	1.30%
10	October 2020	8,896,119	7,217,071	7,906	1.29%
11	November 2020	6,996,466	6,214,346	6,564	1.29%
12	December 2020	8,176,368	<u>6,924,815</u>	7,590	<u>1.29%</u>
13	Average for the Year		18,066,524		1.68%

**Notes**

(1) The Interest Rate is calculated as follows: [Column (4) / # of days in month \* 366] / Column (3).

UNITIL ENERGY SYSTEMS, INC.  
WEIGHTED AVERAGE COST OF PREFERRED STOCK  
DECEMBER 31, 2020

Schedule RevReq-5-6  
Table of Contents

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE NO.	SERIES	DATE ISSUED	FACE VALUE	ISSUANCE COSTS	NET PROCEEDS RATIO [(3)-(4)/(3)]	OUTSTANDING AMOUNT	UNAMORTIZED ISSUANCE COSTS	NET PROCEEDS OUTSTANDING (6)-(7)	ANNUAL ISSUANCE COST	ANNUAL DIVIDEND EXPENSE Rate * (6)	TOTAL ANNUAL COST (11)+(12)	COST RATE BASED ON NET PROCEEDS (11)/[(6)-(7)]
1	6.00%	1905-1926	\$ 188,700	N/A	100.00%	\$ 188,700	N/A	\$ 188,700	\$ -	\$ 11,322	\$ 11,322	6.00%
2	Total		\$ 188,700	\$ -		\$ 188,700	\$ -	\$ 188,700	\$ -	\$ 11,322	\$ 11,322	6.00%



**UNITIL ENERGY SYSTEMS, INC.  
COST OF COMMON EQUITY CAPITAL  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-5-7  
Table of Contents**

**THE INFORMATION CONCERNING THE COST OF COMMON EQUITY CAPITAL IS PROVIDED  
IN THE TESTIMONY AND EXHIBITS OF MS. JENNIFER NELSON**

UNITIL ENERGY SYSTEMS, INC.  
RATE CASE EXPENSE COSTS  
PROJECTED THROUGH THE COMPLETION OF THE CASE

Schedule RevReq-6  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) AMOUNT
1	Cost Studies and Rate Design	215,000
2	Decoupling	45,000
3	Depreciation Study	80,000
4	Return On Equity	110,000
5	Administration and Miscellaneous Expenses	5,000
6	Commission Costs	300,000
7	Total	<u>755,000</u>