

**UNITIL ENERGY SYSTEMS, INC.**  
**2021 RATE PLAN OUTLINE**

1.0 PURPOSE AND EFFECTIVE DATE

1.1 Purpose

The purpose of the 2021 Rate Plan is to establish a procedure that allows Unitil Energy Systems, Inc. (“Unitil Energy” or the “Company”), subject to the jurisdiction of the New Hampshire Public Utilities Commission (the “Commission”), to obtain recovery of the incremental revenue requirement associated with capital additions and the related expenses, as defined herein. Additionally, the 2021 Rate Plan provides for consumer protections, including a cap for rate increases as well as earnings sharing.

1.2 Effective Date

The rate adjustments associated with each Investment Year beginning on and after January 1, 2021 shall be effective April 1 of the following year with a compliance filing due by the last day of January as outlined below:

<b>Investment Year</b>	<b>Rate Year</b>	<b>Compliance Filing Due</b>
January 1-December 31, 2021	April 1, 2022-March 31, 2023	January 31, 2022 <sup>1</sup>
January 1-December 31, 2022	April 1, 2023-March 31, 2024	January 31, 2023
January 1-December 31, 2023	April 1, 2024-March 31, 2025	January 31, 2024

2.0 ELIGIBLE PLANT ADDITIONS

All utility Non-Growth Plant Additions will be eligible for recovery upon Commission review and approval of the annual compliance filing. The 2021 Rate Plan will recover the revenue requirement associated with the annual Change in Net Plant associated with the Non-Growth Plant Additions as a percent of Total Plant Additions.

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<sup>1</sup> The Company proposes to present Investment Year 2021 during the rate case proceeding for effect with permanent rates on April 1, 2022.

### 3.0 REVENUE REQUIREMENT

An illustrative calculation of the Revenue Requirement is provided in Schedule CGDN-2. Revenue Requirement is the sum of the following for each Investment Year:

- Pre-Tax Rate of Return applied to the annual Change in Net Plant multiplied by a factor calculated annually as Non-Growth Plant Additions divided by Total Plant Additions;
- Depreciation Expense on annual Plant Additions multiplied by a factor calculated annually as Non-Growth Plant Additions divided by Total Plant Additions; and
- Property Taxes on the annual Change in Net Plant multiplied by a factor calculated annually as Non-Growth Plant Additions divided by Total Plant Additions.

### 4.0 VEGETATION MANAGEMENT AND RELIABILITY ENHANCEMENT EXPENSES

In the Company's annual compliance filing, the Company will continue to reconcile actual vegetation management and reliability enhancement O&M expenses with \$6,265,166 of cost recovery included in rates in Docket No. DE 21-030. The reconciliation will take into account the amount of recovery included in rates in Docket No. 16-384 for the period of January 1, 2021 through May 31, 2021 and the amount of recovery included in rates in Docket No. DE 21-030 for the period of June 1, 2021 and forward. Any over- or under-collection shall be reflected in the Company's External Delivery Charge mechanism. With approval of the Commission, the Company may credit unspent amounts to future vegetation management program O&M expenditures.

### 5.0 CUSTOMER PROTECTIONS

#### 5.1 Rate Cap

Changes to distribution rates as calculated by the 2021 Rate Plan in any Rate Year are limited to a rate cap of 2.5% of the Company's prior year total electric operating revenue, with revenue for externally supplied customers being adjusted by imputing the Company's default service charges for that period. Any part of the Revenue Requirement that is above the cap will be deferred at the Company's cost of capital established in Docket No. DE 21-030.

#### 5.2 Earnings Sharing

Earnings sharing will be triggered if return on equity as submitted in its annual PUC 308.11 F-1

filing exceeds 11%. If return on equity exceeds 11%, then excess earnings will be shared equally between the distribution ratepayers and the Company.

### 5.3 Stay Out Provision

Except as specifically provided for under the 2021 Rate Plan, the Company may not petition the Commission for distribution base rate adjustments through the end of calendar year 2024. However, if the Company's return on equity is below 7% as submitted in the Company's annual PUC 308.11 F-1 filing, then the Company may petition the Commission for a distribution base rate adjustment before 2024.

### 5.4 Exogenous Events

During the term of this 2021 Rate Plan, the Company will be allowed to adjust distribution rates upward or downward resulting from a singular (not collective) exogenous event, as defined herein. For any of the events defined as a State Initiated Cost Change, Federally Initiated Cost Change, Regulatory Cost Reassignment, or Externally Imposed Accounting Rule Change, during the term of this Plan, the Company will be allowed to adjust distribution rates upward or downward (to the extent that the revenue impact of such event is not otherwise captured through another rate mechanism that has been approved by the Commission) if the total distribution revenue impact (positive or negative) of such event exceeds \$200,000.

## 6.0 RATE DESIGN

For the rate adjustments in section 3.0 above, the revenue requirement increase shall be applied proportionally to all customer classes based on distribution revenue, using current distribution rates and test year billing determinants established in Docket No. DE 21-030. The increase shall be collected through customer, demand or energy charges as applicable for all rate classes, except for outdoor lighting, where the increase shall be applied on an equal percentage basis to all luminaire charges.

For earnings sharing and exogenous events in section 5.0 above, rate adjustments shall also be applied proportionally to all customer classes based on distribution revenue, using current distribution rates and test year billing determinants established in Docket No. DE 21-030. The charge or credit shall be made through demand or energy usage charges, as applicable, for all rate classes, except for outdoor lighting, where the amount shall be applied on an equal percentage basis to all luminaire charges. There will be no change in the customer charge.

## 7.0 DEFINITIONS

- 1) Accumulated Depreciation is the cumulative net credit balance arising from the provision for Depreciation Expense.
- 2) Change in Net Plant is the change in Ending Net Utility Plant from one Investment Year to the next which accounts for Plant Additions as well as Accumulated Depreciation.
- 3) Depreciation Expense is established at 3.36% and is based on the average depreciation rate provided in Docket No. DE 21-030.
- 4) Ending Net Utility Plant is the “per books” utility Plant Additions for plant in service after Accumulated Depreciation is deducted.
- 5) Externally Imposed Accounting Rule Change shall be deemed to have occurred if the Financial Accounting Standards Board or the Securities and Exchange Commission adopts a rule that requires utilities to use a new accounting rule that is not being utilized by the Company as of January 1, 2022.
- 6) Federally Initiated Cost Change shall mean any externally imposed changes in the federal tax rates, laws, regulations, or precedents governing income, revenue, or sales taxes or any changes in federally imposed fees, which impose new obligations, duties or undertakings, or remove existing obligations, duties or undertakings, and which individually decrease or increase the Company’s distribution costs, revenue, or revenue requirement.
- 7) Investment Year is the annual period beginning January 1 and ending December 31 of each calendar year 2021 through 2023 for which capital investments are made by the Company and placed in service.
- 8) Plant Additions are the capitalized costs of plant placed in service as recorded on the Company’s books during the Investment Year. In Investment Year 2021, \$577,144 of additions related to the new Exeter Distribution Operating Center is excluded as it is embedded in base rates via Docket No. DE 21-030.
- 9) Pre-Tax Rate of Return is 9.84% which is established based on the cost of capital and a tax gross up on common stock equity per Docket No. DE 21-030.
- 10) Property Taxes are established at a rate of 2.74%, representing the average system property taxes paid as a percent of net plant in the test year for Docket No. DE 21-030. This percentage will be updated annually to reflect the most recent property tax costs.
- 11) Rate Year is the annual period April 1 through March 31, following the Investment Year.
- 12) State Initiated Cost Change shall mean any externally imposed changes in state or local law or regulatory mandates or changes in other precedents governing income, revenue, sales, franchise, or property or any new or amended regional, state or locally imposed fees (but excluding the effects of routine annual changes in municipal, county and state property tax

rates and revaluations), which impose new obligations, duties or undertakings, or remove existing obligations, duties or undertakings, and which individually decrease or increase the Company's distribution costs, revenue, or revenue requirement.

- 13) Regulatory Cost Reassignment shall mean the reassignment of costs and/or revenues now included in the generation, transmission, or distribution functions to or away from the distribution function by the Commission, FERC, NEPOOL, the ISO or any other official agency having authority over such matters.

UNITIL ENERGY SYSTEMS, INC.  
ILLUSTRATIVE REVENUE REQUIREMENT  
2021 RATE PLAN

LINE NO.	RATE EFFECTIVE DATE	DESCRIPTION	4/1/2022	4/1/2023	4/1/2024
			STEP ADJ #1 INVESTMENT YEAR 2021	STEP ADJ #2 INVESTMENT YEAR 2022	STEP ADJ #3 INVESTMENT YEAR 2023
1		Beginning Utility Plant <sup>(1)</sup>	\$ 407,914,123	\$ 439,000,400	\$ 476,526,965
2		Plant Additions <sup>(2)</sup>	31,086,277	37,526,565	36,977,986
3		Ending Utility Plant	439,000,400	476,526,965	513,504,951
4		Beginning Accumulated Depreciation <sup>(3)</sup>	(138,059,087)	(151,381,091)	(165,855,790)
5		Depreciation Expense	(13,322,003)	(14,474,699)	(15,726,376)
6		Ending Accumulated Depreciation	(151,381,091)	(165,855,790)	(181,582,166)
7		Ending Net Utility Plant	287,619,309	310,671,175	331,922,785
8		Change in Net Plant	17,764,273	23,051,866	21,251,610
9		Non-Growth % Change in Net Plant <sup>(4)</sup>	84%	86%	83%
10		Non-Growth Change in Net Plant	14,918,356	19,841,526	17,702,557
11		Pre-Tax Rate of Return	9.84%	9.84%	9.84%
12		Return and Taxes	1,468,315	1,952,871	1,742,346
13		Depreciation Expense on Non-Growth Plant Additions at 3.36%	877,165	1,085,293	1,034,967
14		Property Taxes on Non-Growth Change in Net Plant at 2.74%	408,763	543,658	485,050
15		Revenue Requirement Increase	\$ 2,754,244	\$ 3,581,822	\$ 3,262,364
16		<u>Rate Cap Limit:</u>			
17		Total Electric Operating Revenue (2020 per books) <sup>(5)</sup>	187,658,364		
18		Percent Limit	2.50%		
19		Maximum Annual Revenue Requirement Increase	4,691,459		

Notes:

- (1) Beginning utility plant corresponds to RevReq-4, Column 7, Line 1
- (2) Forecasted plant additions less forecasted 2021 Exeter building additions. See Page 2 Line 3
- (3) Beginning accumulated depreciation corresponds to RevReq-4, Column 7, Line 2
- (4) Refer to Exhibit KES-2
- (5) Revenue for externally supplied customers is adjusted by imputing the Company's basic service charges

UNITIL ENERGY SYSTEMS, INC.  
FORECASTED PLANT ADDITIONS AND DEPRECIATION  
FOR THE YEAR ENDED DECEMBER 31, 20XX

LINE NO.	(1) DESCRIPTION	(2)	(3)	(4)
		2021	2022	2023
1	Projected Capital Expenditures	31,586,277	37,526,565	36,977,986
2	Less: Exeter Building Close Out Work <sup>(1)</sup>	500,000	-	-
3	Net Capital Expenditures	31,086,277	37,526,565	36,977,986
4	Annual Depreciation	3.36%		
5	2020 Depreciation <sup>(2)</sup>	12,799,754	12,799,754	12,799,754
6	2021 Plant Additions	522,249	1,044,499	1,044,499
7	2022 Plant Additions		630,446	1,260,893
8	2023 Plant Additions			621,230
9	Total	13,322,003	14,474,699	15,726,376

**Notes:**

(1) Company revenue requirement includes pro forma rate base adjustment for Exeter DOC additions. See Schedule RevReq-4-4

(2) Refer to Schedule RevReq-3-16 P2, Col 9, Line 47

UNITIL ENERGY SYSTEMS, INC.  
PRE-TAX RATE OF RETURN  
5 QUARTER AVERAGE ENDED DECEMBER 31, 2020 PRO FORMA

LINE NO.	(1) Description	(2) Amount	(3) Proforma Adjustment	(4) Proformed Amount	(5) Weight	(6) Cost of Capital	(7) Weighted Cost of Capital	(8) Tax Factor	(9) Pre-Tax Cost
1	Common Stock Equity	\$ 101,242,877	\$ -	\$ 101,242,877	52.91%	10.00%	5.29%	1.3714	7.26%
2	Preferred Stock Equity	188,700	-	188,700	0.10%	6.00%	0.01%		0.01%
3	Long Term Debt	93,400,000	(3,500,000)	89,900,000	46.99%	5.49%	2.58%		2.58%
4	Short Term Debt	-	-	-	0.00%	1.68%	0.00%		0.00%
5	Total	<u>\$ 194,831,577</u>	<u>\$ (3,500,000)</u>	<u>\$ 191,331,577</u>	<u>100.00%</u>		<u>7.88%</u>		<u>9.84%</u>



UNITIL ENERGY SYSTEMS, INC.  
COMPUTATION OF REVENUE REQUIREMENT FOR TEMPORARY RATES  
12 MONTHS ENDED DECEMBER 31, 2020

LINE NO.	(1) DESCRIPTION	(2) REFERENCE	(3) AMOUNT
1	Rate Base	2020 Test Year-End Rate Base	\$ 223,474,292
2	Rate of Return	Schedule CG-DN-3, Page 2 of 4	7.61%
3	Income Required	Line 1 * Line 2	17,006,394
4	Adjusted Net Operating Income <sup>(2)</sup>	Schedule CG-DN-3, Page 3 of 4	12,767,903
5	Deficiency	Line 3 - Line 4	4,238,491
6	Income Tax Effect	Line 7 - Line 5	1,574,270
7	Revenue Deficiency for Temporary Rates	1.3714 (Schedule RevReq 1-1) * Line 5	\$ 5,812,761

UNITIL ENERGY SYSTEMS, INC.  
WEIGHTED AVERAGE COST OF CAPITAL  
5 QUARTER AVERAGE ENDED DECEMBER 31, 2020 PRO FORMA ROE SET AT CURRENTLY AUTHORIZED

LINE NO.	(1) DESCRIPTION	(2) AMOUNT	(3) PROFORMA ADJUSTMENT	(4) PROFORMED AMOUNT	(5) WEIGHT	(6) COST OF CAPITAL	(7) WEIGHTED COST OF CAPITAL	(8) REFERENCE
1	Common Stock Equity	\$ 101,242,877	\$ -	\$ 101,242,877	52.91%	9.50%	5.03%	Amount Currently Authorized
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	Total	<u>\$ 194,831,577</u>	<u>\$ (3,500,000)</u>	<u>\$ 191,331,577</u>	<u>100.00%</u>		<u>7.61%</u>	

UNITIL ENERGY SYSTEMS, INC.  
PROPOSED TEMPORARY RATE  
INTEREST SYNCHRONIZATION

LINE NO.	DESCRIPTION	AMOUNT
1	Per Books Operating Income <sup>(1)</sup>	\$ 11,613,315
2	Adjustment for Lost Base Revenue <sup>(2)</sup>	1,076,981
3	Adjusted Operating Income	<u>\$ 12,690,296</u>
4	<u>Interest Synchronization</u>	
5	Rate Base	\$ 223,474,292
6	x Weighted Cost of Debt	2.58%
7	Interest Expense for Ratemaking	<u>\$ 5,764,650</u>
8	Less: 2020 Book Interest Expense (FERC 427-432) <sup>(3)</sup>	<u>5,478,066</u>
9	Increase / (Decrease) in Interest Expense	\$ 286,584
10	Tax-Effect (27.08% * Int. Sync)	(77,607)
11	Adjusted Net Operating Income	<u><u>\$ 12,767,903</u></u>

Notes:

(1) See Schedule RevReq-2 P1, column 4, line 21

(2) Per Docket No. DE 20-092 Exhibit Unitil Attachment L2, Page 1 (Bates Page 953),  
Line 3 + Line 7 + Line 11 + Line 14

(3) Excludes interest on customer deposits

**UNITIL ENERGY SYSTEMS, INC.  
PROPOSED TEMPORARY RATE  
EFFECTIVE JUNE 1, 2021**

<b>DESCRIPTION</b>	<b>AMOUNT</b>
Temporary Rate Increase	\$ 5,812,761
Test Year kWh Sales	1,160,418,601
Temporary Rate \$/kWh	\$ 0.00501
\$ Impact on a 600 kWh residential bill	\$ 3.01