Schedule LSM-1

CALCULATION OF THE DEFAULT SERVICE CHARGE

Non-G1 Class Default Service:

		<u>Dec-21</u>	<u>Jan-22</u>	<u>Feb-22</u>	<u>Mar-22</u>	<u>Apr-22</u>	<u>May-22</u>	<u>Total</u>
	Power Supply Charge							
	Residential Class							
1	Reconciliation	(\$76,446)	(\$80,659)	(\$76,084)	(\$67,445)	(\$62,717)	(\$55,091)	(\$418,442)
2	Total Costs	\$8,189,313	\$10,275,095	\$9,351,868	\$5,351,503	\$2,401,366	\$2,399,124	\$37,968,269
3	Reconciliation plus Total Costs (L.1 + L.2)	\$8,112,867	\$10,194,436	\$9,275,784	\$5,284,058	\$2,338,649	\$2,344,033	\$37,549,827
4	kWh Purchases	43,598,144	46,001,076	43,391,627	38,464,718	35,768,076	31,419,414	238,643,055
5	Total, Before Losses (L.3 / L.4)	\$0.18608	\$0.22161	\$0.21377	\$0.13737	\$0.06538	\$0.07460	\$0.15735
6	Losses	6.40%	<u>6.40%</u>	6.40%	6.40%	6.40%	<u>6.40%</u>	6.40%
	Total Retail Rate - Residential Variable Power Supply Charge (L.5 * $(1+L.6)$) Total Retail Rate - Residential Fixed Power Supply Charge (L.5 * $(1+L.6)$)	\$0.19799	\$0.23580	\$0.22745	\$0.14617	\$0.06957	\$0.07938	\$0.16742
9	G2 and OL Class Reconciliation	(\$27,851)	(\$27,877)	(\$27,891)	(\$27,733)	(\$26,938)	(\$25,326)	(\$163,617)
10	Total Costs	\$2,788,700	\$3,282,062	\$3,200,722	\$1,947,474	\$891,553	\$862,634	\$12,973,145
11	Reconciliation plus Total Costs (L.9 + L.10)	\$2,760,849	\$3,254,184	\$3,172,831	\$1,919,740	\$864,615	\$837,308	\$12,809,528
12	kWh Purchases	15,884,934	15,900,198	15,907,972	15,818,000	15,364,419	14,445,122	93,320,647
13	Total, Before Losses (L.11 / L.12)	\$0.17380	\$0.20466	\$0.19945	\$0.12136	\$0.05627	\$0.05796	\$0.13726
14	Losses	6.40%	6.40%	6.40%	6.40%	6.40%	6.40%	6.40%
	Total Retail Rate - G2 and OL Variable Power Supply Charge (L.13 * (1+L.14)) Total Retail Rate - G2 and OL Fixed Power Supply Charge (L.13 * (1+L.14))	\$0.18493	\$0.21776	\$0.21221	\$0.12913	\$0.05988	\$0.06167	\$0.14605

Renewable Portfolio Standard (RPS) Charge							
17 Reconciliation	(\$18,574)	(\$19,329)	(\$18,517)	(\$16,950)	(\$15,967)	(\$14,322)	(\$103,660)
18 Total Costs	<u>\$436,498</u>	\$474,349	<u>\$454,416</u>	\$415,978	\$391,840	<u>\$351,474</u>	\$2,524,554
19 Reconciliation plus Total Costs (L.17 + L.18)	\$417,923	\$455,020	\$435,899	\$399,028	\$375,873	\$337,152	\$2,420,895
20 kWh Purchases	59,483,078	61,901,274	59,299,599	54,282,719	51,132,495	45,864,536	331,963,702
21 Total, Before Losses (L.19 / L.20)	\$0.00703	\$0.00735	\$0.00735	\$0.00735	\$0.00735	\$0.00735	\$0.00729
22 Losses	6.40%	6.40%	6.40%	6.40%	6.40%	6.40%	6.40%
23 Total Retail Rate - Variable RPS Charge (L.21 * (1+L.22)) 24 Total Retail Rate - Fixed RPS Charge (L.21 * (1+L.22))	\$0.00748	\$0.00782	\$0.00782	\$0.00782	\$0.00782	\$0.00782	\$0.00776

TOTAL DEFAULT SERVICE CHARGE							
Total Retail Rate - Residential Variable Default Service 25 Charge (L.7 + L.23) Total Retail Rate - Residential Fixed Default Service 26 Charge (L.8+L.24)	\$0.20547	\$0.24362	\$0.23527	\$0.15399	\$0.07739	\$0.08720	\$0.17518
Total Retail Rate - G2 and OL Variable Default Service 27 Charge (L.15 + L.23) Total Retail Rate - G2 and OL Fixed Default Service 28 Charge (L.16+L.24)	\$0.19241	\$0.22558	\$0.22003	\$0.13695	\$0.06770	\$0.06949	\$0.15381

Authorized by NHPUC Order No. 26,470 in Case No. DE 21-041, dated April 13, 2021

Issued: October 1, 2021 April 2, 2021 Effective: December 1, 2021 June 1, 2021

CALCULATION OF THE DEFAULT SERVICE CHARGE

Non-G1 Class Default Service:

	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	<u>Total</u>
Power Supply Charge							
Residential Class							
1 Reconciliation	(\$61,983)	(\$70,489)	(\$85,309)	(\$74,990)	(\$54,561)	(\$58,500)	(\$405,832)
2 Total Costs	\$2,121,275	\$3,144,895	\$2,577,883	\$1,591,244	\$2,090,157	\$2,702,014	\$14,227,468
3 Reconciliation plus Total Costs (L.1 + L.2)	\$2,059,293	\$3,074,406	\$2,492,574	\$1,516,254	\$2,035,596	\$2,643,514	\$13,821,636
4 kWh Purchases	<u>35,472,149</u>	40,340,064	48,821,671	42,916,322	<u>31,224,716</u>	33,479,006	232,253,928
5 Total, Before Losses (L.3 / L.4)	\$0.05805	\$0.07621	\$0.05105	\$0.03533	\$0.06519	\$0.07896	\$0.05951
6 Losses	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>
Total Retail Rate - Residential Variable Power Supply Charg (1+L.6)) Total Retail Rate - Residential Fixed Power Supply Charge (1 8 (1+L.6))	\$0.06177	\$0.08109	\$0.05432	\$0.03759	\$0.06936	\$0.08401-	\$0.06332
G2 and OL Class Reconciliation	(\$26,817)	(\$28,220)	(\$31,884)	(\$30,081)	(\$24,393)	(\$24,446)	(\$165,843)
10 Total Costs	\$723,474	\$988,640	\$895,023	\$614,918	\$693,911	\$916,263	\$4,832,229
11 Reconciliation plus Total Costs (L.9 + L.10)	\$ 696,656	\$960,420	\$863,139	\$584,837	\$669,518	\$891,816	\$4,666,386
12 kWh Purchases	15,343,711	16,146,441	18,242,695	<u>17,211,180</u>	13,956,596	<u>13,987,101</u>	94,887,723
13 Total, Before Losses (L.11 / L.12)	\$0.04540	\$0.05948	\$0.04731	\$0.03398	\$0.04797	\$0.06376	\$0.04918
14 Losses	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>
Total Retail Rate - G2 and OL Variable Power Supply Charg 15 (1+L.14)) Total Retail Rate - G2 and OL Fixed Power Supply Charge (\$0.04831	\$0.06329	\$0.05034	\$0.03615	\$0.05104	\$0.06784	
16 (1+L.14))							\$0.05233

Renewable Portfolio Standard (RPS) Charge							
17 Reconciliation	(\$15,814)	(\$17,579)	(\$20,871)	(\$18,712)	(\$14,061)	(\$14,772)	(\$101,810)
18 Total Costs	\$378,309	\$420,521	\$499,264	\$447,627	<u>\$336,363</u>	<u>\$353,369</u>	<u>\$2,435,452</u>
19 Reconciliation plus Total Costs (L.17 + L.18)	\$362,494	\$402,941	\$478,393	\$428,914	\$322,302	\$338,597	\$2,333,642
20 kWh Purchases	<u>50,815,860</u>	<u>56,486,505</u>	67,064,366	60,127,502	45,181,311	47,466,107	327,141,651
21 Total, Before Losses (L.19 / L.20)	\$0.00713	\$0.00713	\$0.00713	\$0.00713	\$0.00713	\$0.00713	\$0.00713
22 Losses	6.40%	6.40%	6.40%	6.40%	<u>6.40%</u>	6.40%	<u>6.40%</u>
23 Total Retail Rate - Variable RPS Charge (L.21 * (1+L.22)) 24 Total Retail Rate - Fixed RPS Charge (L.21 * (1+L.22))	\$0.00759	\$0.00759	\$0.00759	\$0.00759	\$0.00759	\$0.00759	\$0.00759

TOTAL DEFAULT SERVICE CHARGE							
Total Retail Rate - Residential Variable Defa 25 Charge (L.7 + L.23) Total Retail Rate - Residential Fixed Default 26 Charge (L.8+L.24)	\$0.06936	\$0.08868	\$0.06191	\$0.04518	\$0.07695	\$0.09160	\$0.07091
Total Retail Rate - G2 and OL Variable Defa Charge (L.15 + L.23) Total Retail Rate - G2 and OL Fixed Default Charge (L.16+L.24)	\$0.05590	\$0.07088	\$0.05793	\$0.04374	\$0.05863	\$0.07543	\$0.05992

Schedule LSM-1

CALCULATION OF THE DEFAULT SERVICE CHARGE

	G1 Class Default Service:	<u>Dec-21</u>	<u>Jan-22</u>	<u>Feb-22</u>	<u>Mar-22</u>	<u>Apr-22</u>	<u>May-22</u>	<u>Total</u>
	Power Supply Charge							
1	Reconciliation							\$47,765
2	Total Costs excl. wholesale supplier charge							<u>\$28,846</u>
3	Reconciliation plus Total Costs excl. wholesale supplier charge $(L.1 + L.2)$							\$76,611
4	kWh Purchases							25,275,697
5	Total, Before Losses (L.3 / L.4)							\$0.00303
6	Losses							<u>4.591%</u>
7	Power Supply Charge excl. wholesale supplier charge (L.5 * (1+L.6))	\$0.00317	\$0.00317	\$0.00317	\$0.00317	\$0.00317	\$0.00317	\$0.00317
	Wholesale Supplier Charge Losses	MARKET <u>4.591%</u>	MARKET 4.591%	MARKET <u>4.591%</u>	MARKET <u>4.591%</u>	MARKET 4.591%	MARKET 4.591%	
8	Retail Rate - Wholesale Supplier Charge (L.8a * (1+L.8b))	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
9	Total Retail Rate - Power Supply Charge (L.7 + L. 8)	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
	Renewable Portfolio Standard (RPS) Charge							
10	Reconciliation	(\$2,296)	(\$2,172)	(\$2,190)	(\$2,202)	(\$2,223)	(\$2,147)	(\$13,231)
11	Total Costs	<u>\$32,756</u>	<u>\$32,355</u>	<u>\$32,616</u>	<u>\$32,795</u>	<u>\$33,117</u>	<u>\$31,986</u>	<u>\$195,625</u>
12	Reconciliation plus Total Costs (L.10+ L.11)	\$30,460	\$30,183	\$30,426	\$30,593	\$30,894	\$29,839	\$182,394
13	kWh Purchases	4,387,100	4,149,721	4,183,084	4,206,047	<u>4,247,401</u>	4,102,344	25,275,697
14	Total, Before Losses (L.12 / L.13)	\$0.00694	\$0.00727	\$0.00727	\$0.00727	\$0.00727	\$0.00727	
15	Losses	4.591%	4.591%	4.591%	<u>4.591%</u>	4.591%	4.591%	
16	Total Retail Rate - RPS Charge (L.14 * (1+L.15))	\$0.00726	\$0.00761	\$0.00761	\$0.00761	\$0.00761	\$0.00761	

TOTAL DEFAULT SERVICE CHARGE

Total Retail Rate - Default Service Charge (L.9 + L.16) MARKET MARKET MARKET MARKET MARKET MARKET

Authorized by NHPUC Order No. 26,470 in Case No. DE 21-041, dated April 13, 2021

Issued: October 1, 2021April 2, 2021 Effective: December 1, 2021June 1, 2021

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Issued By: Robert B. Hevert 001.62ce President

CALCULATION OF THE DEFAULT SERVICE CHARGE

	G1 Class Default Service:	Jun 21	Jul 21	<u>Aug 21</u>	<u>Sep-21</u>	<u>Oct 21</u>	<u>Nov 21</u>	<u>Total</u>
	Power Supply Charge							
1	Reconciliation							\$50,380
2	Total Costs excl. wholesale supplier charge							<u>\$30,135</u>
3	Reconciliation plus Total Costs excl. wholesale supplier charge $(L.1+L.2)$							\$ 80,516
4	kWh Purchases							<u>25,037,023</u>
5	Total, Before Losses (L.3 / L.4)							\$0.00322
6	Losses							4.591%
7	Power Supply Charge excl. wholesale supplier charge (L.5 * $(1+L.6)$)	\$0.00336	\$0.00336	\$0.00336	\$0.00336	\$0.00336	\$0.00336	\$ 0.00336
8b	Wholesale Supplier Charge Losses	MARKET 4.591%	MARKET 4.591%	MARKET 4.591%	MARKET 4.591%	MARKET 4.591%	MARKET 4.591%	
8	Retail Rate - Wholesale Supplier Charge (L.8a * (1+L.8b))	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
9	Total Retail Rate - Power Supply Charge (L.7 + L. 8)	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
	Renewable Portfolio Standard (RPS) Charge							
10	Reconciliation	(\$2,228)	(\$2,480)	(\$2,576)	(\$2,395)	(\$2,149)	(\$2,126)	(\$13,954)
11	Total Costs	<u>\$30,279</u>	<u>\$33,702</u>	<u>\$35,008</u>	<u>\$32,552</u>	<u>\$29,208</u>	<u>\$28,898</u>	<u>\$189,647</u>
12	Reconciliation plus Total Costs (L.10+ L.11)	\$28,051	\$31,222	\$32,432	\$30,157	\$27,059	\$26,772	\$ 175,693
13	kWh Purchases	3,997,435	<u>4,449,271</u>	<u>4,621,728</u>	<u>4,297,467</u>	3,856,019	3,815,103	25,037,023
14	Total, Before Losses (L.12 / L.13)	\$0.00702	\$0.00702	\$0.00702	\$0.00702	\$0.00702	\$0.00702	
15	Losses	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	
16	Total Retail Rate - RPS Charge (L.14 * (1+L.15))	\$0.00734	\$0.00734	\$0.00734	\$0.00734	\$0.00734	\$0.00734	
	TOTAL DEFAULT SERVICE CHARGE							
17	Total Retail Rate - Default Service Charge (L.9 + L.16)	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	

SUMMARY OF LOW-INCOME ELECTRIC ASSISTANCE PROGRAM DISCOUNTS

Low-Income Electric Assistance Program (LI-EAP) Discounts for Eligible Customers

	Percentage of NH State Median Income &			LI-EAP discount Delivery Only *; Excludes Supply	LI-EAP discount Fixed Default Service ** Supply Only			LI-EAP Variable Defa Suppl			
Tier	Federal Poverty <u>Guidelines</u>	Discount (5)	Blocks	Dec 2021-Jun 2022 (1) Aug 2021-Nov 2021 (1)	Dec 2021-Jun 2022 (2) Jun 2021-Nov 2021 (2)	Dec-21 (3) Jun-21 (3)	Jan-22 (3) Jul-21 (3)	Feb-22 (3) Aug-21 (3)	Mar-22 (3) Sep-21 (3)	Apr-22 (3) Oct-21 (3)	May-22 (3) Nov-21 (3)
1 (4)	N/A	N/A									
2	151 (FPG) - 60 (SMI)	8%	Customer Charge	(\$1.30)	(\$0.01401) \$0.00000	(\$0.01644) \$0.00000	(\$0.01949) \$0.00000	(\$0.01882) \$0.00000	(\$0.01232) \$0.00000	(\$0.00619) \$0.00000	(\$0.00698) \$0.00000
			First 750 kWh Excess 750 kWh	(\$0.00617) \$0.00000	(\$0.00567) \$0.00000	(\$0.00555) \$0.00000	(\$0.00709) \$0.00000	(\$0.00495) \$0.00000	(\$0.00361) \$0.00000	(\$0.00616) \$0.00000	(\$0.00733) \$0.00000
3	126 (FPG) - 150 (FPG)	22%	Customer Charge	(\$3.57)	(\$0.03854) \$0.00000	(\$0.04520) \$0.00000	(\$0.05360) \$0.00000	(\$0.05176) \$0.00000	(\$0.03388) \$0.00000	(\$0.01703) \$0.00000	(\$0.01918) \$0.00000
			First 750 kWh Excess 750 kWh	(\$0.01698) \$0.00000	(\$0.01560) \$0.00000	(\$0.01526) \$0.00000	(\$0.01951) \$0.00000	(\$0.01362) \$0.00000	(\$0.00994) \$0.00000	(\$0.01693) \$0.00000	(\$0.02015) \$0.00000
4	101 (FPG) - 125 (FPG)	36%	Customer Charge	(\$5.84)	(\$0.06306) \$0.00000	(\$0.07397) \$0.00000	(\$0.08770) \$0.00000	(\$0.08470) \$0.00000	(\$0.05544) \$0.00000	(\$0.02786) \$0.00000	(\$0.03139) \$0.00000
			First 750 kWh Excess 750 kWh	(\$0.02778) \$0.00000	(\$0.02553) \$0.00000	(\$0.02497) \$0.00000	(\$0.03192) \$0.00000	(\$0.02229) \$0.00000	(\$0.01626) \$0.00000	(\$0.02770) \$0.00000	(\$0.03298) \$0.00000
5	76 (FPG) - 100 (FPG)	52%	Customer Charge	(\$8.43)	(\$0.09109) \$0.00000	(\$0.10684) \$0.00000	(\$0.12668) \$0.00000	(\$0.12234) \$0.00000	(\$0.08007) \$0.00000	(\$0.04024) \$0.00000	(\$0.04534) \$0.00000
			First 750 kWh Excess 750 kWh	(\$0.04013) \$0.00000	(\$0.03687) \$0.00000	(\$0.03607) \$0.00000	(\$0.04611) \$0.00000	(\$0.03219) \$0.00000	(\$0.02349) \$0.00000	(\$0.04001) \$0.00000	(\$0.04763) \$0.00000
6	0 - 75 (FPG)	76%	Customer Charge	(\$12.33)	(\$0.13314) \$0.00000	(\$0.15616) \$0.00000	(\$0.18515) \$0.00000	(\$0.17881) \$0.00000	(\$0.11703) \$0.00000	(\$0.05882) \$0.00000	(\$0.06627) \$0.00000
			First 750 kWh Excess 750 kWh	(\$0.05865) \$0.00000	(\$0.05389) \$0.00000	(\$0.05271) \$0.00000	(\$0.06740) \$0.00000	(\$0.04705) \$0.00000	(\$0.03434) \$0.00000	(\$0.05848) \$0.00000	(\$0.06962) \$0.00000

⁽¹⁾ Discount calculated using total utility charges from Page 4 multiplied by the appropriate discount. These figures exclude default service and are applicable to customers choosing a Competitive Supplier or self-supply. Customers taking default service from the Company would receive these discounts plus the appropriate discount applicable to default service supply. Competitively supplied customers billed on a consolidated basis would receive these discounts plus the appropriate fixed default service supply discount.

Issued: August 9, 2021October 1, 2021

Effective: August 1, 2021December 1, 2021

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⁽²⁾ Discount calculated using Non-G1 class (Residential) Fixed Default Service Rate multiplied by the appropriate discount. These figures exclude delivery.

⁽³⁾ Discount calculated using Non-G1 class (Residential) Variable Default Service Rate, for the applicable month, multiplied by the appropriate discount. These figures exclude delivery.

⁽⁴⁾ Tier 1 was eliminated by Order No. 25,200 in DE 10-192 dated March 4, 2011.

⁽⁵⁾ Discounts effective July 1, 2016 in accordance with Order No. 25-901 in DE 14-078.

^{*} Authorized by NHPUC Order No. 26,500 in Case No. DE 21-121, dated July 29, 2021

^{**} Authorized by NHPUC Order No. 26,470 in Case No. DE 21-041, dated-April 13, 2021

		Dec-21 Estimated	Jan-22 Estimated	Feb-22 Estimated	Mar-22 Estimated	Apr-22 Estimated	May-22 Estimated	<u>Total</u>
1	Residential Class Reconciliation (1)	(\$76,446)	(\$80,659)	(\$76,084)	(\$67,445)	(\$62,717)	(\$55,091)	(\$418,442)
2	Total Costs (Page 2)	\$8,189,313	<u>\$10,275,095</u>	\$9,351,868	<u>\$5,351,503</u>	<u>\$2,401,366</u>	\$2,399,124	\$37,968,269
3	Reconciliation plus Total Costs (L.1 + L.2)	\$8,112,867	\$10,194,436	\$9,275,784	\$5,284,058	\$2,338,649	\$2,344,033	\$37,549,827
4	kWh Purchases	43,598,144	46,001,076	43,391,627	38,464,718	35,768,076	31,419,414	238,643,055
5	Total, Before Losses (L.3 / L.4)	\$0.18608	\$0.22161	\$0.21377	\$0.13737	\$0.06538	\$0.07460	\$0.15735
6	Losses	6.40%	6.40%	6.40%	6.40%	6.40%	6.40%	6.40%
	Total Retail Rate - Residential Variable Power Supply Charge (L.5 * (1+L.6)) Total Retail Rate - Residential Fixed Power Supply Charge (L.5 * (1+L.6))	\$0.19799	\$0.23580	\$0.22745	\$0.14617	\$0.06957	\$0.07938	\$0.16742
9	G2 and OL Class Reconciliation (1)	(\$27,851)	(\$27,877)	(\$27,891)	(\$27,733)	(\$26,938)	(\$25,326)	(\$163,617)
10	Total Costs (Page 2)	\$2,788,700	\$3,282,062	\$3,200,722	\$1,947,474	<u>\$891,553</u>	\$862,634	\$12,973,145
11	Reconciliation plus Total Costs (L.9 + L.10)	\$2,760,849	\$3,254,184	\$3,172,831	\$1,919,740	\$864,615	\$837,308	\$12,809,528
12	kWh Purchases	15,884,934	15,900,198	15,907,972	15,818,000	15,364,419	14,445,122	93,320,647
13	Total, Before Losses (L.11 / L.12)	\$0.17380	\$0.20466	\$0.19945	\$0.12136	\$0.05627	\$0.05796	\$0.13726
14	Losses	6.40%	<u>6.40%</u>	6.40%	6.40%	6.40%	6.40%	6.40%
	Total Retail Rate - G2 and OL Variable Power Supply Charge (L.13 * (1+L.14)) Total Retail Rate - G2 and OL Fixed Power Supply Charge (L.13 * (1+L.14))	\$0.18493	\$0.21776	\$0.21221	\$0.12913	\$0.05988	\$0.06167	\$0.14605

(1) As filed in DE 21-041 (April 2, 2021). Power Supply Charge balance as of February 28, 2021, as adjusted, allocated between rate periods (June-November 2021 and December 2021-May 2022) and rate classes (Residential and G2/OL), and then to each month, December 2021 through May 2022, on equal per kWh basis.

Rate period: June-November 2021 Rate period: December 2021-May 2022

Total

Reconciliation

<u>per period</u>
(\$571,675)
(\$582,059)
(\$1,153,734)

December 2021-May 2022 Reconciliation

<u>kWh purchases</u> <u>% by class</u>

238,643,055 71.89% (\$418,442)

<u>93,320,647</u> 28.11% (\$163,617)

331,963,702 (\$582,059)

Residential class G2 and OL class Total Redacted Schedule LSM-2 Page 2 of 2

Unitil Energy Systems, Inc. Itemized Costs for Non-G1 Class Default Service Charge

	(a)	(b)	(c)		ation of Working ges and GIS Sup (e)		(g)	(h)	(i)	(j)	(k)	(1)	(m)	(n)	(0)	(p)
	Non-G1 Class (Residential) DS Supplier Charges (1)	Non-G1 Class (G2 and OL) DS Supplier Charges (1)	GIS Support Payments	Number of Days of Lag / 365 (2)	Working Capital Requirement ((a+b+c)*d)	Prime Rate	Supply Related Working Capital (e * f)	Provision for Uncollected Accounts	Internal Company Administrative Costs	Legal Charges	Consulting Outside Service Charges	Default Service Portion of the annual PUC Assessment	Non-G1 Class (Residential) DS Supplier Charges (col. a)	- /	Costs (sum col. c	
Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Total			\$479 \$575 \$597 \$584 \$535 <u>\$521</u> \$3,291	6.25% 6.25% 6.25% 6.25% 6.25% 6.25%		3.25% 3.25% 3.25% 3.25% 3.25% 3.25%			\$3,007 \$3,007 \$3,007 \$3,007 \$3,007 \$18,042	\$0 \$0 \$0 \$0 \$0 <u>\$0</u> \$0	\$0 \$0 \$0 \$0 \$0 <u>\$0</u>	\$773 \$773 \$773 \$773 \$773 <u>\$773</u> \$4,641				\$10,978,012 \$13,557,157 \$12,552,590 \$7,298,977 \$3,292,919 \$3,261,759 \$50,941,414

Total Costs Allocated to the Residential Class and the G2/OL Class

	Non-G1 Class (Residential) DS Supplier Charges (col. a)	Allocation of Remaining Costs (col. o) to Residential Class (3)	Total Non-G1 Class (Residential) Power Supply Charges (iii) = (i) + (ii)	Non-G1 Class (G2 and OL) DS Supplier Charges (col. b) (iv)	Allocation of Remaining Costs (col. o) to G2 and OL Class (3) (v)	Total Non-G1 Class (G2 and OL) Power Supply Charges (vi) = (iv) + (v)
Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Total			\$8,189,313 \$10,275,095 \$9,351,868 \$5,351,503 \$2,401,366 \$2,399,124 \$37,968,269			\$2,788,700 \$3,282,062 \$3,200,722 \$1,947,474 \$891,553 <u>\$862,634</u> \$12,973,145

- (1) Estimates based on monthly average wholesale rate times estimated monthly purchases.
 (2) Number of days lag equals 22.80. Calculated using revenue lag of 59.97 days less cost lead of 37.17 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 21-041 filed April 2, 2021.
 (3) Remaining Costs (column o) allocated between the Residential Class and the G2 and Outdoor Lighting Class based on estimated monthly kWh purchases, as shown below:

				Residential	G2 and OL
				Class kWh	Class kWh
	Estimated kWh	1		Purchases /	Purchases /
	Purchases -	Estimated kWh	Total Non-G1	Total Non-G1	Total Non-G1
	Residential	Purchases - G2	Class kWh	Class kWh	Class kWh
	Class	and OL Class	Purchases	Purchases	Purchases
			<u> </u>		
Dec-21	43,598,144	15,884,934	59,483,078	73.3%	26.7%
Jan-22	46,001,076	15,900,198	61,901,274	74.3%	25.7%
Feb-22	43,391,627	15,907,972	59,299,599	73.2%	26.8%
Mar-22	38,464,718	15,818,000	54,282,719	70.9%	29.1%
Apr-22	35,768,076	15,364,419	51,132,495	70.0%	30.0%
May-22	31,419,414	14,445,122	45,864,536	68.5%	31.5%
Total	238,643,055	93,320,647	331,963,702		

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Unitil Energy Systems, Inc.
Calculation of Non-G1 Class Default Service Renewable Portfolio Standard (RPS) Charge

		Dec-21 Estimated	Jan-22 <u>Estimated</u>	Feb-22 <u>Estimated</u>	Mar-22 <u>Estimated</u>	Apr-22 Estimated	May-22 <u>Estimated</u>	<u>Total</u>
1	Reconciliation (1)	(\$18,574)	(\$19,329)	(\$18,517)	(\$16,950)	(\$15,967)	(\$14,322)	(\$103,660)
2	Total Costs (Page 2)	<u>\$436,498</u>	<u>\$474,349</u>	<u>\$454,416</u>	<u>\$415,978</u>	\$391,840	\$351,474	<u>\$2,524,554</u>
3	Reconciliation plus Total Costs (L.1 + L.2)	\$417,923	\$455,020	\$435,899	\$399,028	\$375,873	\$337,152	\$2,420,895
4	kWh Purchases	<u>59,483,078</u>	61,901,274	<u>59,299,599</u>	<u>54,282,719</u>	<u>51,132,495</u>	<u>45,864,536</u>	331,963,702
5	Total, Before Losses (L.3 / L.4)	\$0.00703	\$0.00735	\$0.00735	\$0.00735	\$0.00735	\$0.00735	\$0.00729
6	Losses	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>
7 8	Total Retail Rate - Variable RPS Charge (L.5 * (1+L.6)) Total Retail Rate - Fixed RPS Charge (L.5 * (1+L.6))	\$0.00748	\$0.00782	\$0.00782	\$0.00782	\$0.00782	\$0.00782	\$0.00776

⁽¹⁾ As filed in DE 21-041 (April 2, 2021). Renewable Portfolio Standard Charge balance as of February 28, 2021, as adjusted, allocated between rate periods (June-November 2021 and December 2021-May 2022) and then to each month on equal per kWh basis.

Reconciliation amount for June-November 2021	(\$101,810)
Reconciliation amount for December 2021-May 2022	<u>(\$103,660)</u>
Total	(\$205,470)

	(a)	(b)	(c)	(d)	(e)	(f)
			Working			
		Number of	Capital			
	Renewable Energy Credits	Days of Lag /	Requirement		Supply Related Working	
_	(1)	365 (2)	(a*b)	Prime Rate	Capital (c * d)	Total Costs (sum a + e)
Dec-21	\$445,569	(62.64%)	(\$279,122)	3.25%	(\$9,071)	\$436,498
Jan-22	\$484,207	(62.64%)	(\$303,326)	3.25%	(\$9,858)	\$474,349
Feb-22	\$463,860	(62.64%)	(\$290,580)	3.25%	(\$9,444)	\$454,416
Mar-22	\$424,623	(62.64%)	(\$266,000)	3.25%	(\$8,645)	\$415,978
Apr-22	\$399,983	(62.64%)	(\$250,565)	3.25%	(\$8,143)	\$391,840
May-22	<u>\$358,778</u>	(62.64%)	(\$224,752)	3.25%	(\$7,304)	<u>\$351,474</u>
Total	\$2,577,021	•	(\$1,614,345)		(\$52,466)	\$2,524,554

⁽¹⁾ Schedule JMP-4.

⁽²⁾ Number of days lag equals (228.65). Calculated using revenue lag of 59.97 days less cost lead of 288.62 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 21-041 filed April 2, 2021.

Unitil Energy Systems, Inc.
Calculation of G1 Large General Service Class Default Service Power Supply Charge

		Total December 2021-May 2022
1	Reconciliation (1)	\$47,765
2	Total Costs excl. wholesale supplier charge (Page 2)	<u>\$28,846</u>
3	Reconciliation plus Total Costs excl. wholesale supplier charge (L.1 + L.2)	\$76,611
4	kWh Purchases	25,275,697
5	Total, Before Losses (L.3 / L.4)	\$0.00303
6	Losses	<u>4.591%</u>
7	Power Supply Charge excl. wholesale supplier charge (L.5 * (1+L.6)) (2)	\$0.00317

(1) As filed in DE 21-041 (April 2, 2021). Power Supply Charge balance as of February 28, 2021, as adjusted, allocated between rate periods (June-November 2021 and December 2021-May 2022) on equal per kWh basis.

Reconciliation amount for June-November 2021	\$50,380
Reconciliation amount for December 2021-May 2022	<u>\$47,765</u>
Total	\$98,145

(2) The total G1 Power Supply Charge will equal the sum of Line 7 plus a wholesale supplier charge which shall be determined at the end of each month. The wholesale supply charges will be determined as the sum of the average ISO-New England real time hourly locational marginal prices for the New Hampshire load zone, weighted by the wholesale hourly kWh volumes of the Company's G1 Default Service customers, and charges for capacity, ancillary services, and other supplier costs established through a competitive bidding process.

				Calculation of	Working Cap	ital						
			Suppl	ier Charges and	d GIS Support	Payments						
	(a)	(b)	(c)	(d) Working	(e)	(f)	(g)	(h) Internal	(i)	(j)	(k) Default Service	(I)
	Total G1 Class	GIS	Number of	Capital		Supply Related	Provision for	Company		Consulting	Portion of the	Total Costs
	DS Supplier	Support	Days of Lag	Requirement		Working Capital	Uncollected	Administrative	Legal	Outside Service	annual PUC	(sum a + b + f +
	Charges (1)	Payments	/ 365 (2)	(3)	Prime Rate	(d * e)	Accounts	Costs	Charges	Charges	Assessment	g + h + i + j + k)
Dec-21		\$43	0.24%	\$1,452	3.25%	\$47	\$0	\$4,668	\$0	\$0	\$60	\$4,818
Jan-22		\$47	0.24%	\$1,620	3.25%	\$53	\$0	\$4,668	\$0	\$0	\$60	\$4,827
Feb-22		\$45	0.24%	\$1,583	3.25%	\$51	\$0	\$4,668	\$0	\$0	\$60	\$4,824
Mar-22		\$42	0.24%	\$999	3.25%	\$32	\$0	\$4,668	\$0	\$0	\$60	\$4,802
Apr-22		\$43	0.24%	\$479	3.25%	\$16	\$0	\$4,668	\$0	\$0	\$60	\$4,786
May-22		<u>\$45</u>	0.24%	\$504	3.25%	<u>\$16</u>	<u>\$0</u>	<u>\$4,668</u>	<u>\$0</u>	<u>\$0</u>	<u>\$60</u>	\$4,789
Total		\$264				\$216	\$0	\$28,006	\$0	\$0	\$360	\$28,846

⁽¹⁾ DS Supplier Charges to be determined at the end of each month.

⁽²⁾ Number of days lag equals 0.89. Calculated using revenue lag of 41.89 days less cost lead of 41.00 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 20 of 23, DE 21-041 filed April 2, 2021.

⁽³⁾ The working capital requirement equals the supplier charge plus GIS Support payment times the number of days lag divided by 365. As the G1 class supplier charge is not determined using a contract price, estimates of the G1 class power supply costs were calculated based on the forecasted G1 class kWh purchases and an estimated price per kWh. The estimated price per kWh was determined by comparing a historical relationship between G1 and Non-G1 class supplier pricing and then applying that relationship to the current average Non-G1 supplier price per kWh. Actual working capital will be determined using the actual supplier charges in each month.

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Unitil Energy Systems, Inc. Calculation of G1 Class Default Service Renewable Portfolio Standard (RPS) Charge

1	Pagengiliation (1)	Dec-21 Estimated	Jan-22 Estimated	Feb-22 Estimated	Mar-22 Estimated	Apr-22 Estimated	May-22 Estimated	<u>Total</u>
ı	Reconciliation (1)	(\$2,296)	(\$2,172)	(\$2,190)	(\$2,202)	(\$2,223)	(\$2,147)	(\$13,231)
2	Total Costs (Page 2)	<u>\$32,756</u>	<u>\$32,355</u>	<u>\$32,616</u>	<u>\$32,795</u>	<u>\$33,117</u>	<u>\$31,986</u>	<u>\$195,625</u>
3	Reconciliation plus Total Costs (L.1 + L.2)	\$30,460	\$30,183	\$30,426	\$30,593	\$30,894	\$29,839	\$182,394
4	kWh Purchases	4,387,100	4,149,721	4,183,084	4,206,047	4,247,401	4,102,344	25,275,697
5	Total, Before Losses (L.3 / L.4)	\$0.00694	\$0.00727	\$0.00727	\$0.00727	\$0.00727	\$0.00727	
6	Losses	4.591%	<u>4.591%</u>	4.591%	<u>4.591%</u>	4.591%	4.591%	
7	Total Retail Rate - Variable RPS Charge (L.5 * (1+L.6))	\$0.00726	\$0.00761	\$0.00761	\$0.00761	\$0.00761	\$0.00761	

(1) As filed in DE 21-041 (April 2, 2021). Renewable Portfolio Standard Charge balance as of February 28, 2021, as adjusted, allocated between rate periods (June-November 2021 and December 2021-May 2022) and then to each month on equal per kWh basis.

Reconciliation amount for June-November 2021	(\$13,954)
Reconciliation amount for December 2021-May 2022	<u>(\$13,231)</u>
Total	(\$27,185)

Schedule LSM-5 Page 2 of 2

			Calculation of Working Capital								
	(a)	(b)	(c)	(d)	(e)	(f)					
		Number of	Working								
	Renewable Energy Credits	Days of Lag /	Capital Requirement		Supply Related Working	Total Costs (sum					
	(1)	365 (2)	(a*b)	Prime Rate	Capital (c * d)	a + e)					
Dec-21	\$33,446	(63.45%)	(\$21,223)	3.25%	(\$690)	\$32,756					
Jan-22	\$33,037	(63.45%)	(\$20,963)	3.25%	(\$681)	\$32,355					
Feb-22	\$33,302	(63.45%)	(\$21,132)	3.25%	(\$687)	\$32,616					
Mar-22	\$33,485	(63.45%)	(\$21,248)	3.25%	(\$691)	\$32,795					
Apr-22	\$33,814	(63.45%)	(\$21,457)	3.25%	(\$697)	\$33,117					
May-22	<u>\$32,660</u>	(63.45%)	(\$20,724)	3.25%	(\$674)	<u>\$31,986</u>					
Total	\$199,744	,	,		(\$4,119)	\$195,625					

⁽¹⁾ Schedule JMP-4.

⁽²⁾ Number of days lag equals (231.61). Calculated using revenue lag of 41.89 days less cost lead of 273.50 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 20 of 23, DE 21-041 filed April 2, 2021.

Unitil Energy Systems, Inc. Internal Administrative Costs associated with Default Service

Energy Contract 1 2		G1 Class	Non-G1 Class	Total	Notes:
1	s Department:		5. 5.465	1000	
2	Average Cost of Labor per Hour	\$57.54	\$57.54	\$57.54	1
	Estimated Annual Hours Required to Accomplish Tasks	249.4	<u>150.6</u>	400.0	
3	Cost of Labor	\$14,350	\$8,666	\$23,016	
4	Overhead (Line 3 * Overhead rate)	\$14,924	\$9,012	\$23,937	2
5	Total Labor and Overhead Cost	\$29,275	<u>\$17,678</u>	\$46,953	
Regulatory Serv	rices Department:				
1	Average Cost of Labor per Hour	\$66.89	\$66.89	\$66.89	1
2	Estimated Annual Hours Required to Accomplish Tasks	88.0	35.0	123.0	
3	Cost of Labor	\$5,886	\$2,341	\$8,227	
4	Overhead (Line 3 * Overhead rate)	\$6,122	\$2,435	\$8,557	2
5	Total Labor and Overhead Cost	<u>\$12,008</u>	<u>\$4,776</u>	<u>\$16,784</u>	
Accounts Payab	ele Department:				
1	Average Cost of Labor per Hour	\$30.91	\$30.91	\$30.91	1
2	Estimated Annual Hours Required to Accomplish Tasks	6.0	6.0	12.0	
3	Cost of Labor	\$185	\$185	\$371	
4	Overhead (Line 3 * Overhead rate)	<u>\$193</u>	<u>\$193</u>	<u>\$386</u>	2
5	Total Labor and Overhead Cost	<u>\$378</u>	<u>\$378</u>	<u>\$757</u>	
General Accoun	ting Department:				
1	Average Cost of Labor per Hour	\$49.77	\$49.77	\$49.77	1
2	Estimated Annual Hours Required to Accomplish Tasks	6.0	6.0	12.0	
3	Cost of Labor	\$299	\$299	\$597	
4	Overhead (Line 3 * Overhead rate)	<u>\$311</u>	<u>\$311</u>	\$621	2
5	Total Labor and Overhead Cost	<u>\$609</u>	<u>\$609</u>	<u>\$1,218</u>	
Finance Departn	ment:				
1 '	Average Cost of Labor per Hour	\$50.36	\$50.36	\$50.36	1
2	Estimated Annual Hours Required to Accomplish Tasks	26.0	<u>26.0</u>	52.0	
3	Cost of Labor	\$1,309	\$1,309	\$2,619	
4	Overhead (Line 3 * Overhead rate)	<u>\$1,362</u>	<u>\$1,362</u>	\$2,723	2
5	Total Labor and Overhead Cost	<u>\$2,671</u>	<u>\$2,671</u>	<u>\$5,342</u>	
Communications	s Department:				
1	Average Cost of Labor per Hour	\$56.23	\$56.23	\$56.23	1
2	Estimated Annual Hours Required to Accomplish Tasks	60.0	60.0	120.0	
3	Cost of Labor	\$3,374	\$3,374	\$6,748	
4	Overhead (Line 3 * Overhead rate)	<u>\$3,509</u>	<u>\$3,509</u>	\$7,018	2
5	Total Labor and Overhead Cost	<u>\$6,883</u>	<u>\$6,883</u>	<u>\$13,765</u>	
Customer Enerc	y Solutions (formerly Business Development) Department:				
1	Average Cost of Labor per Hour	\$53.36	\$53.36	\$53.36	1
2	Estimated Annual Hours Required to Accomplish Tasks	8.0	0.0	8.0	
3	Cost of Labor	\$427	\$0	\$427	
4	Overhead (Line 3 * Overhead rate)	<u>\$444</u>	<u>\$0</u>	<u>\$444</u>	2
5	Total Labor and Overhead Cost	<u>\$871</u>	<u>\$0</u>	<u>\$871</u>	
Information Svst	tems Department:				
1	Average Cost of Labor per Hour	\$50.64	\$50.64	\$50.64	1
2	Estimated Annual Hours Required to Accomplish Tasks	3.6	<u>1.4</u>	<u>5.0</u>	
3	Cost of Labor	\$182	\$71	\$253	
4	Overhead (Line 3 * Overhead rate)	<u>\$190</u>	<u>\$74</u>	<u>\$263</u>	2
5	Total Labor and Overhead Cost	<u>\$372</u>	<u>\$145</u>	<u>\$517</u>	
Customer Service	ce Department:				
- 40.011101 OOI VIL	Average Cost of Labor per Hour	\$30.08	\$30.08	\$30.08	1
1	Estimated Annual Hours Required to Accomplish Tasks	48.0	48.0	96.0	
	, , , , , , , , , , , , , , , , , , , ,		\$1,444	\$2,888	
1	Cost of Labor	\$1,444	Ψ1, ΤΤΤ	Ψ=,000	
1 2	Cost of Labor Overhead (Line 3 * Overhead rate)	\$1,444 \$1,502		\$3,003	2
1 2 3			\$1,502 \$2,945		2
1 2 3 4	Overhead (Line 3 * Overhead rate)	<u>\$1,502</u>	<u>\$1,502</u>	\$3,003	2

See Schedule LSM-6, Page 2 of 2.
 Based on Unitil Service Corp. overhead rate of 104% (2020 average rate).

Unitil Service Corp. Average Cost of Labor per Hour by Department

<u>Department</u> (a)	Full Time <u>Equivalent</u> (b)	Annualized Base Labor (1) (c)	Open Positions (d)	Open Positions (2) (e)	Total $\frac{Positions}{(b) + (d) = (f)}$	Total <u>Salaries</u> (c) + (e) = (g)	Avg Hrly Labor Cost (3) (g) \div (f) \div 2080 = (h)
Energy Contracts	8.0	\$957,540			8.00	\$957,540	\$57.54
Regulatory / Legal	12.0	\$1,669,515			12.00	\$1,669,515	\$66.89
Accounts Payable	5.0	\$321,463			5.00	\$321,463	\$30.91
General Accounting	18.0	\$1,863,335			18.00	\$1,863,335	\$49.77
Finance	6.8 (4)	\$712,300			6.80	\$712,300	\$50.36
Communications	9.0	\$1,052,665			9.00	\$1,052,665	\$56.23
Customer Energy Solutions (formerly Business Services)	26.0	\$2,885,951			26.00	\$2,885,951	\$53.36
Information Technology	29.0	\$3,052,914	1.0	\$107,211	30.00	\$3,160,125	\$50.64
Customer Service	71.0	\$4,465,561	1.0	\$39,840	72.00	\$4,505,401	\$30.08

- (1) Annualized salaries of active employees as of September 1, 2021
- (2) Salary range 90% of midpoint of open positions as of September 1, 2021 $\,$
- (3) Total Salaries + Total Positions + (40 hours/wk * 52 weeks/yr)
- (4) Includes one part-time employee.

Unitil Energy Systems, Inc. Typical Bill Impacts by Rate Component

Residential Rate D 650 kWh Bill

	9/1/2021	12/1/2021					%
							Difference
Rate Components	Current Rate	As Revised	<u>Difference</u>	Current Bill	As Revised Bill	<u>Difference</u>	to Total Bill
Customer Charge	\$16.22	\$16.22	\$0.00	\$16.22	\$16.22	\$0.00	0.0%
	<u>\$/kWh</u>	<u>\$/kWh</u>					
Distribution Charge	\$0.03942	\$0.03942	\$0.00000	\$25.62	\$25.62	\$0.00	0.0%
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000	\$19.36	\$19.36	\$0.00	0.0%
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000	(\$0.01)	(\$0.01)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00047	\$0.00047	\$0.00000	\$0.31	\$0.31	\$0.00	0.0%
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$4.89	\$4.89	\$0.00	0.0%
Default Service Charge	\$0.07091	\$0.17518	\$0.10427	\$46.09	<u>\$113.87</u>	\$67.78	60.3%
Total kWh Charges	\$0.14808	\$0.25235	\$0.10427				
Total Bill				\$112.47	\$180.25	\$67.78	60.3%

	Regular Genera	al G2 Demand,	11 kW, 2,800 k	Wh Typical Bill	<u> </u>		
	9/1/2021	12/1/2021					%
							Difference
Rate Components	Current Rate	As Revised	<u>Difference</u>	Current Bill	As Revised Bill	<u>Difference</u>	to Total Bill
Customer Charge	\$29.19	\$29.19	\$0.00	\$29.19	\$29.19	\$0.00	0.0%
	All kW	All kW					
Distribution Charge	\$10.51	\$10.51	\$0.00	\$115.61	\$115.61	\$0.00	0.0%
Stranded Cost Charge	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%
Total kW Charges	\$10.51	\$10.51	\$0.00	\$115.61	\$ 115.6 1	\$0.00	0.0%
	<u>\$/kWh</u>	<u>\$/kWh</u>					
Distribution Charge	\$0.00384	\$0.00384	\$0.00000	\$10.75	\$10.75	\$0.00	0.0%
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000	\$83.38	\$83.38	\$0.00	0.0%
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000	(\$0.06)	(\$0.06)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00047	\$0.00047	\$0.00000	\$1.32	\$1.32	\$0.00	0.0%
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$21.06	\$21.06	\$0.00	0.0%
Default Service Charge	\$0.05992	\$0.15381	\$0.09389	\$167.78	\$430.67	\$262.89	<u>61.3%</u>
Total kWh Charges	\$0.10151	\$0.19540	\$0.09389	\$284.23	\$547.12	\$262.89	61.3%
Total Bi	ll			\$429.03	\$691.92	\$262.89	61.3%

Unitil Energy Systems, Inc. Typical Bill Impacts by Rate Component

Regular Genera	I G2 Quick Reco	very Water Hea	ating and Spac	ce Heating 1,66	0 kWh Typical Bill	_	
	9/1/2021	12/1/2021					%
Rate Components	Current Rate	As Revised	Difference	Current Bill	As Revised Bill	<u>Difference</u>	Difference to Total Bill
Customer Charge	\$9.73	\$9.73	\$0.00	\$9.73	\$9.73	\$0.00	0.0%
	\$/kWh	<u>\$/kWh</u>					
Distribution Charge	\$0.03588	\$0.03588	\$0.00000	\$59.56	\$59.56	\$0.00	0.0%
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000	\$49.43	\$49.43	\$0.00	0.0%
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000	(\$0.03)	(\$0.03)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00047	\$0.00047	\$0.00000	\$0.78	\$0.78	\$0.00	0.0%
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$12.48	\$12.48	\$0.00	0.0%
Default Service Charge	\$0.05992	\$0.15381	\$0.09389	\$99.47	\$255.32	\$155.86	67.3%
Total kWh Charges	\$0.13355	\$0.22744	\$0.09389	\$221.69	\$377.55	\$155.86	67.3%
Total Bill				\$231.42	\$387.28	\$155.86	67.3%

	Regular General G2 kWh Meter 115 kWh Typical Bill								
	9/1/2021	12/1/2021					% Difference to		
Rate Components	Current Rate	As Revised	Difference	Current Bill	As Revised Bill	<u>Difference</u>	Total Bill		
Customer Charge	\$18.38	\$18.38	\$0.00	\$18.38	\$18.38	\$0.00	0.0%		
	<u>\$/kWh</u>	<u>\$/kWh</u>							
Distribution Charge	\$0.01267	\$0.01267	\$0.00000	\$1.46	\$1.46	\$0.00	0.0%		
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000	\$3.42	\$3.42	\$0.00	0.0%		
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000	(\$0.00)	(\$0.00)	\$0.00	0.0%		
Storm Recovery Adj.	\$0.00047	\$0.00047	\$0.00000	\$0.05	\$0.05	\$0.00	0.0%		
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$0.86	\$0.86	\$0.00	0.0%		
Default Service Charge	\$0.05992	\$0.15381	\$0.09389	<u>\$6.89</u>	<u>\$17.69</u>	\$10.80	34.8%		
Total kWh Charges	\$0.11034	\$0.20423	\$0.09389	\$12.69	\$23.49	\$10.80	34.8%		
Total Bil	I			\$31.07	\$41.87	\$10.80	34.8%		

Unitil Energy Systems, Inc. Typical Bill Impacts for Residential Rate Class based on Mean and Median Usage

Residential Rate D 650 kWh Bill - Mean Use*

	9/1/2021	12/1/2021					%
Rate Components	Current Rate	As Revised	Difference	Current Bill	As Revised Bill	Difference	<u>Difference</u> to Total Bill
Customer Charge	\$16.22	\$16.22	\$0.00	\$16.22	\$16.22	\$0.00	0.0%
	<u>\$/kWh</u>	<u>\$/kWh</u>					
Distribution Charge	\$0.03942	\$0.03942	\$0.00000	\$25.62	\$25.62	\$0.00	0.0%
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000	\$19.36	\$19.36	\$0.00	0.0%
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000	(\$0.01)	(\$0.01)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00047	\$0.00047	\$0.00000	\$0.31	\$0.31	\$0.00	0.0%
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$4.89	\$4.89	\$0.00	0.0%
Default Service Charge	<u>\$0.07091</u>	<u>\$0.17518</u>	\$0.10427	<u>\$46.09</u>	<u>\$113.87</u>	<u>\$67.78</u>	60.3%
Total kWh Charges	\$0.14808	\$0.25235	\$0.10427				
Total B	ill			\$112.47	\$180.25	\$67.78	60.3%

Residential Rate D 526 kWh Bill - Median Use*

	9/1/2021	12/1/2021					%
Rate Components	Current Rate	As Revised	<u>Difference</u>	Current Bill	As Revised Bill	Difference	<u>Difference</u> to Total Bill
Customer Charge	\$16.22	\$16.22	\$0.00	\$16.22	\$16.22	\$0.00	0.0%
	<u>\$/kWh</u>	<u>\$/kWh</u>					
Distribution Charge	\$0.03942	\$0.03942	\$0.00000	\$20.73	\$20.73	\$0.00	0.0%
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000	\$15.66	\$15.66	\$0.00	0.0%
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000	(\$0.01)	(\$0.01)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00047	\$0.00047	\$0.00000	\$0.25	\$0.25	\$0.00	0.0%
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$3.96	\$3.96	\$0.00	0.0%
Default Service Charge	\$0.07091	\$0.17518	\$0.10427	\$37.30	<u>\$92.14</u>	<u>\$54.85</u>	<u>58.3%</u>
Total kWh Charges	\$0.14808	\$0.25235	\$0.10427				
Total Bill				\$94.11	\$148.96	\$54.85	58.3%

^{*} Based on billing period January through December 2020.

Unitil Energy Systems, Inc. Average Class Impacts Due to Proposed Default Service Rate Changes Effective December 1, 2021

(A) <u>Class of Service</u>	(B) Annual Number of Customers (luminaires <u>for Outdoor Lighting)</u>	(C) Annual kWh <u>Sales</u>	(D) Annual kW / kVA <u>Sales</u>	(E) Proposed DSC <u>Change \$</u>	(F) Estimated Annual Revenue \$ Under Present Rates	(G) Estimated Annual Revenue \$ Under <u>Proposed Rates</u>	(H) Proposed Net Change <u>Revenue \$</u>	(I) % Change DSC <u>Revenue</u>
Residential	815,280	515,968,592	n/a	\$53,800,045	\$89,628,463	\$143,428,508	\$53,800,045	60.0%
General Service	134,344	317,056,821	1,234,532	\$29,768,465	\$49,100,758	\$78,869,223	\$29,768,465	60.6%
Outdoor Lighting	97,930	7,625,729	n/a	\$715,980	\$2,448,568	\$3,164,547	\$715,980	29.2%
Total	1,047,553	840,651,142		\$84,284,490	\$141,177,788	\$225,462,278	\$84,284,490	59.7%

⁽B), (C), (D) Test year billing determinants in DE 21-030.

⁽E) Difference in proposed rate and current rate, times the billing determinants shown in Column (C).

⁽F) Based on current rates times billing determinants shown in Columns (B), (C) and (D).

⁽G) Sum of Columns (E) and (F)

⁽H) Column (G) minus Column (F)

⁽I) Column (H) divided by Column (F)

Unitil Energy Systems, Inc. Typical Bill Impacts - September 1, 2021 vs. December 1, 2021 Due to Changes in the Default Service Charge Impact on D Rate Customers

Average <u>kWh</u>	Total Bill Using Rates <u>9/1/2021</u>	Total Bill Using Rates <u>12/1/2021</u>	Total <u>Difference</u>	% Total <u>Difference</u>
405	404.70	447.70	# 40.00	07.50/
125	\$34.73	\$47.76	\$13.03	37.5%
150	\$38.43	\$54.07	\$15.64	40.7%
200	\$45.84	\$66.69	\$20.85	45.5%
250	\$53.24	\$79.31	\$26.07	49.0%
300	\$60.64	\$91.93	\$31.28	51.6%
350	\$68.05	\$104.54	\$36.49	53.6%
400	\$75.45	\$117.16	\$41.71	55.3%
450	\$82.86	\$129.78	\$46.92	56.6%
500	\$90.26	\$142.40	\$52.14	57.8%
525	\$93.96	\$148.70	\$54.74	58.3%
550	\$97.66	\$155.01	\$57.35	58.7%
575	\$101.37	\$161.32	\$59.96	59.1%
600	\$105.07	\$167.63	\$62.56	59.5%
625	\$108.77	\$173.94	\$65.17	59.9%
650	\$112.47	\$180.25	\$67.78	60.3%
675	\$116.17	\$186.56	\$70.38	60.6%
700	\$119.88	\$192.87	\$72.99	60.9%
725	\$123.58	\$199.17	\$75.60	61.2%
750	\$127.28	\$205.48	\$78.20	61.4%
775	\$130.98	\$211.79	\$80.81	61.7%
825	\$138.39	\$224.41	\$86.02	62.2%
925	\$153.19	\$249.64	\$96.45	63.0%
1,000	\$164.30	\$268.57	\$104.27	63.5%
1,250	\$201.32	\$331.66	\$130.34	64.7%
1,500	\$238.34	\$394.75	\$156.41	65.6%
2,000	\$312.38	\$520.92	\$208.54	66.8%
3,500	\$534.50	\$899.45	\$364.95	68.3%
5,000	\$756.62	\$1,277.97	\$521.35	68.9%

	Rates - Effective September 1, 2021	Rates - Proposed December 1, 2021	Difference
Customer Charge	\$16.22	\$16.22	\$0.00
	kWh_	<u>kWh</u>	<u>kWh</u>
Distribution Charge:	\$0.03942	\$0.03942	\$0.00000
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00047	\$0.00047	\$0.00000
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000
Default Service Charge	<u>\$0.07091</u>	<u>\$0.17518</u>	\$0.10427
TOTAL	\$0.14808	\$0.25235	\$0.10427

Unitil Energy Systems, Inc. Typical Bill Impacts - September 1, 2021 vs. December 1, 2021 Due to Changes in the Default Service Charge Impact on G2 Rate Customers

Load Factor	Average Monthly <u>kW</u>	Average Monthly <u>kWh</u>	Total Bill Using Rates <u>9/1/2021</u>	Total Bill Using Rates <u>12/1/2021</u>	Total <u>Difference</u>	% Total <u>Difference</u>
20%	5	730	\$155.84	\$224.38	\$68.54	44.0%
20%	10	1,460	\$282.49	\$419.57	\$137.08	48.5%
20%	15	2,190	\$409.15	\$614.77	\$205.62	50.3%
20%	25	3,650	\$662.45	\$1,005.15	\$342.70	51.7%
20%	50	7,300	\$1,295.71	\$1,981.11	\$685.40	52.9%
20%	75	10,950	\$1,928.97	\$2,957.07	\$1,028.10	53.3%
20%	100	14,600	\$2,562.24	\$3,933.03	\$1,370.79	53.5%
20%	150	21,900	\$3,828.76	\$5,884.95	\$2,056.19	53.7%
36%	5	1,314	\$215.12	\$338.50	\$123.37	57.3%
36%	10	2,628	\$401.06	\$647.80	\$246.74	61.5%
36%	15	3,942	\$586.99	\$957.11	\$370.11	63.1%
36%	25	6,570	\$958.86	\$1,575.72	\$616.86	64.3%
36%	50	13,140	\$1,888.53	\$3,122.25	\$1,233.71	65.3%
36%	75	19,710	\$2,818.20	\$4,668.77	\$1,850.57	65.7%
36%	100	26,280	\$3,747.87	\$6,215.30	\$2,467.43	65.8%
36%	150	39,420	\$5,607.21	\$9,308.36	\$3,701.14	66.0%
50%	5	1,825	\$267.00	\$438.35	\$171.35	64.2%
50%	10	3,650	\$504.80	\$847.50	\$342.70	67.9%
50%	15	5,475	\$742.61	\$1,256.66	\$514.05	69.2%
50%	25	9,125	\$1,218.22	\$2,074.97	\$856.75	70.3%
50%	50	18,250	\$2,407.25	\$4,120.74	\$1,713.49	71.2%
50%	75	27,375	\$3,596.28	\$6,166.52	\$2,570.24	71.5%
50%	100	36,500	\$4,785.31	\$8,212.29	\$3,426.99	71.6%
50%	150	54,750	\$7,163.36	\$12,303.84	\$5,140.48	71.8%

	Rates - Effective September 1, 2021	Rates - Proposed December 1, 2021	Difference
Customer Charge	\$29.19	\$29.19	\$0.00
	All kW	<u>All kW</u>	All kW
Distribution Charge	\$10.51	\$10.51	\$0.00
Stranded Cost Charge	<u>\$0.00</u>	<u>\$0.00</u>	\$0.00
TOTAL	\$10.51	\$10.51	\$0.00
	<u>kWh</u>	<u>kWh</u>	<u>kWh</u>
Distribution Charge	\$0.00384	\$0.00384	\$0.00000
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000
Storm Recovery Adj. Factor	\$0.00047	\$0.00047	\$0.00000
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000
Default Service Charge	\$0.05992	<u>\$0.15381</u>	\$0.09389
TOTAL	\$0.10151	\$0.19540	\$0.09389

Unitil Energy Systems, Inc. Typical Bill Impacts - September 1, 2021 vs. December 1, 2021 Due to Changes in the Default Service Charge Impact on G2 kWh Meter Rate Customers

Average Monthly <u>kWh</u>	Total Bill Using Rates <u>9/1/2021</u>	Total Bill Using Rates <u>12/1/2021</u>	Total <u>Difference</u>	% Total <u>Difference</u>
15	\$20.04	\$21.44	\$1.41	7.0%
75	\$26.66	\$33.70	\$7.04	26.4%
150	\$34.93	\$49.01	\$14.08	40.3%
250	\$45.97	\$69.44	\$23.47	51.1%
350	\$57.00	\$89.86	\$32.86	57.7%
450	\$68.03	\$110.28	\$42.25	62.1%
550	\$79.07	\$130.71	\$51.64	65.3%
650	\$90.10	\$151.13	\$61.03	67.7%
750	\$101.14	\$171.55	\$70.42	69.6%
900	\$117.69	\$202.19	\$84.50	71.8%

	Rates - Effective September 1, 2021	Rates - Proposed December 1, 2021	Difference
kWh Meter Customer Charge	\$18.38	\$18.38	\$0.00
	All kWh	All kWh	All kWh
Distribution Charge	\$0.01267	\$0.01267	\$0.00000
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00047	\$0.00047	\$0.00000
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000
Default Service Charge	\$0.05992	<u>\$0.15381</u>	\$0.09389
TOTAL	\$0.11034	\$0.20423	\$0.09389

Unitil Energy Systems, Inc. Typical Bill Impacts - September 1, 2021 vs. December 1, 2021 Due to Changes in the Default Service Charge Impact on G2 QRWH and SH Rate Customers

Average <u>kWh</u>	Total Bill Using Rates <u>9/1/2021</u>	Total Bill Using Rates <u>12/1/2021</u>	Total <u>Difference</u>	% Total <u>Difference</u>
100	\$23.09	\$32.47	\$9.39	40.7%
200	\$36.44	\$55.22	\$18.78	51.5%
300	\$49.80	\$77.96	\$28.17	56.6%
400	\$63.15	\$100.71	\$37.56	59.5%
500	\$76.51	\$123.45	\$46.95	61.4%
750	\$109.89	\$180.31	\$70.42	64.1%
1,000	\$143.28	\$237.17	\$93.89	65.5%
1,500	\$210.06	\$350.89	\$140.84	67.0%
2,000	\$276.83	\$464.61	\$187.78	67.8%
2,500	\$343.61	\$578.33	\$234.73	68.3%

	Rates - Effective September 1, 2021	Rates - Proposed December 1, 2021	Difference	
Customer Charge	\$9.73	\$9.73	\$0.00	
	All kWh	<u>All kWh</u>	All kWh	
Distribution Charge	\$0.03588	\$0.03588	\$0.00000	
External Delivery Charge	\$0.02978	\$0.02978	\$0.00000	
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000	
Storm Recovery Adjustment Factor	\$0.00047	\$0.00047	\$0.00000	
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	
Default Service Charge	<u>\$0.05992</u>	<u>\$0.15381</u>	\$0.09389	
TOTAL	\$0.13355	\$0.22744	\$0.09389	

Unitil Energy Systems, Inc.
Typical Bill Impacts - September 1, 2021 vs. December 1, 2021
Due to Changes in the Default Service Charge
Impact on OL Rate Customers*

1 2 3 4 4 5 5 6 6 7 8 8 9 10	100 175 250 400 1,000 100 175 50 100 175 50 100 175 50 100 175 50 100 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 177 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,75 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 1	3,500 7,000 11,000 20,000 60,000 11,000 20,000 60,000 3,500 7,000 60,000 30,000 140,000 140,000 140,000 140,000 140,000 140,000 140,000 150,000 140,000 13,500 23,500 8,800 13,500 23,500 8,800 13,500 23,500 8,800 13,500 23,500	ST ST ST ST ST ST ST ST ST FL FL PB ST ST ST FL FL FL FL FL FL FL FL FL FL FL FL FL	43 71 100 157 372 100 157 380 48 71 23 48 65 102 161 380 65 102 161 380 23 48 74 102 158 74	\$17.64 \$22.96 \$28.00 \$37.19 \$79.95 \$29.17 \$38.69 \$76.27 \$18.28 \$22.08 \$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91	\$21.68 \$29.62 \$37.39 \$51.93 \$114.88 \$38.56 \$53.43 \$111.95 \$22.79 \$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.47	\$4.04 \$6.67 \$9.39 \$14.74 \$34.93 \$9.39 \$14.74 \$35.68 \$4.51 \$6.67 \$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$9.58 \$14.51 \$9.58 \$14.51 \$9.58 \$14.51	22.9% 29.0% 33.5% 39.6% 43.7% 32.2% 38.1% 46.8% 24.7% 30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.5% 22.8% 22.8% 22.8% 27.2%	
2 3 4 5 6 7 8 9 10 His 11 11 12 13 14 15 16 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 Lig 33 34 34 345 36 37 38	175 250 400 1,000 250 400 1,000 175 100 175 100 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 50 100 175 250 400 1,000 175 250 400 1,75 250	7,000 11,000 20,000 60,000 11,000 20,000 60,000 3,500 7,000 60,000 3,500 16,000 30,000 50,000 140,000 4,000 95,000 140,000 4,000 95,000 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800	ST ST ST FL FL PB ST ST ST FL FL PB PB ST ST FL FL FL FL FL FL FL FL FL FL FL FL FL	71 100 157 372 100 157 380 48 71 23 48 65 102 161 380 65 102 161 380 65 74 102 158 74	\$22.96 \$28.00 \$37.19 \$79.95 \$29.17 \$38.69 \$76.27 \$18.28 \$22.08 \$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91	\$29.62 \$37.39 \$51.93 \$114.88 \$38.56 \$53.43 \$111.95 \$22.79 \$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.46	\$6.67 \$9.39 \$14.74 \$34.93 \$9.39 \$14.74 \$35.68 \$4.51 \$6.67 \$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$4.51 \$6.95 \$9.58 \$14.83	29.0% 33.5% 39.6% 43.7% 32.2% 38.1% 46.8% 24.7% 30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 25.3% 29.9% 38.5% 22.8%	
3 4 5 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 24 33 34 35 36 37 38	250 400 1,000 250 400 1,000 100 175 50 100 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 175 250 400 1,000 175 250 400 175 250 400 1,75 250 400 1,00	11,000 20,000 60,000 11,000 20,000 60,000 3,500 7,000 9,500 16,000 30,000 140,000 4,000 95,000 140,000 4,000 95,000 140,000 95,000 140,000 95,000 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500	ST ST FL FL PB ST ST ST FL FL FB PB ST ST FL FL FL FL FL FL FL FL FL FL FL FL FL	100 157 372 100 157 380 48 71 23 48 65 102 161 380 65 102 161 380 65 102 161 380 48	\$28.00 \$37.19 \$79.95 \$29.17 \$38.69 \$76.27 \$18.28 \$22.08 \$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91	\$37, 39 \$51,93 \$114.88 \$38.56 \$53.43 \$111.95 \$22.79 \$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.21	\$9.39 \$14.74 \$34.93 \$9.39 \$14.74 \$35.68 \$4.51 \$6.67 \$2.16 \$4.51 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$4.51 \$4.51 \$9.58 \$15.12 \$35.68 \$4.51 \$9.58 \$15.42 \$35.68 \$15.42 \$35.68 \$4.51	33.5% 39.6% 43.7% 32.2% 38.1% 46.8% 24.7% 30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.5% 25.2% 30.8% 37.9% 44.5% 25.2% 30.8% 37.9% 44.5% 25.2% 30.8% 37.9% 44.5% 25.2% 30.8% 37.9% 44.5% 25.2% 30.8% 37.9% 44.5% 25.2% 30.8% 37.9% 44.5% 25.2% 30.8% 37.9% 44.5% 25.8%	
4 5 6 7 8 9 10	400 1,000 250 400 1,000 175 igh Pressure Sc 50 100 150 250 400 1,000 150 250 400 1,000 50 100 ietal Halide: 175 250 400 1,000 1,000	20,000 60,000 11,000 20,000 60,000 3,500 7,000 60,000 10,0	ST STLFLFB BB ST ST ST FLFLFB BB ST ST FLFLFF FB FB	157 372 100 157 380 48 71 23 48 65 102 161 380 65 102 161 380 23 48	\$37.19 \$79.95 \$29.17 \$38.69 \$76.27 \$18.28 \$22.08 \$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91	\$51.93 \$114.88 \$38.56 \$53.43 \$111.95 \$22.79 \$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.46	\$14.74 \$34.93 \$9.39 \$14.74 \$35.68 \$4.51 \$6.67 \$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$4.51 \$6.95 \$4.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.42 \$1.51 \$1.5	39.6% 43.7% 32.2% 38.1% 46.8% 24.7% 30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8%	
5 6 7 8 9 110 His 11 12 13 14 15 16 16 17 18 19 20 21 22 24 25 26 27 28 29 30 31 32 24 25 26 27 28 29 30 31 32 24 25 36 37 38	1,000 250 400 1,000 1,000 175 igh Pressure Sc 50 100 150 250 400 1,000 150 250 400 1,000 50 100 ietal Halide: 175 250 400 1,75 250 400 1,75 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 1,75 250 400 1,000 1,75 250 400 1,000 1,75 250 400 1,000 1,75 250 400 1,000 1,75 250 400 1,000 1,75 250 400 1,000 1,75 250 400 1,000 1	60,000 11,000 20,000 60,000 3,500 7,000 ddium: 4,000 9,500 16,000 30,000 50,000 140,000 95,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800	ST FL FL PB ST ST ST FL FL PB PB ST ST FL FL FL FL FL FL FL FL FL FL FL FL FL	372 100 157 380 48 71 23 48 65 102 161 380 65 102 161 380 65 74 102 158 74	\$79.95 \$29.17 \$38.69 \$76.27 \$18.28 \$22.08 \$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91	\$114.88 \$38.56 \$53.43 \$111.95 \$22.79 \$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.46	\$34.93 \$9.39 \$14.74 \$35.68 \$4.51 \$6.67 \$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$4.51 \$6.95 \$14.83	43.7% 32.2% 38.1% 46.8% 24.7% 30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.5% 25.2% 23.8%	
6 7 8 9 10	250 400 1,000 100 175 50 100 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 100 letal Halide: 175 250 400 1,75 250 400 1,75 250 400 1,75 250 400 1,00	11,000 20,000 60,000 3,500 7,000 ddium: 4,000 9,500 16,000 30,000 50,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500	FL FL PB PB ST ST ST ST FL FL FL PB PB ST ST FL FL FL FL FL FL FL FL FL FL FL FL FL	100 157 380 48 71 23 48 65 102 161 380 65 102 161 380 23 48	\$29.17 \$38.69 \$76.27 \$18.28 \$22.08 \$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91	\$38.56 \$53.43 \$111.95 \$22.79 \$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.32 \$33.32 \$33.46	\$9.39 \$14.74 \$35.68 \$4.51 \$6.67 \$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$4.51 \$4.51 \$4.51	32.2% 38.1% 46.8% 24.7% 30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8%	
7 8 9 10 His 9 10 His 11 12 13 13 14 15 16 17 18 19 20 21 22 22 22 Me 23 24 25 26 26 27 28 29 30 31 32 Lie 33 34 34 35 36 37 38	400 1,000 1,000 175 100 175 100 175 100 100 150 250 400 1,000 150 250 400 1,000 100 100 175 250 400 1,75 250	20,000 60,000 3,500 7,000 0dium: 4,000 9,500 16,000 30,000 50,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800	FL FL PB ST ST ST ST FL FL PB PB ST ST FL FL FL FL FL FL FL FL FL FL FL FL FL	157 380 48 71 23 48 65 102 161 380 65 102 161 380 23 48 74 102 158 74	\$38.69 \$76.27 \$18.28 \$22.08 \$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$53.43 \$111.95 \$22.79 \$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.46	\$14.74 \$35.68 \$4.51 \$6.67 \$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$4.51 \$4.51	38.1% 46.8% 24.7% 30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8%	
8 9 10 His 11 11 12 13 13 14 15 16 16 17 18 19 20 21 22 24 25 26 27 28 29 30 31 32 24 25 33 34 35 36 37 38	1,000 100 100 175 igh Pressure Sc 50 100 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 ght Emitting Dic	60,000 3,500 7,000 sdium: 4,000 9,500 16,000 30,000 140,000 10,000 140,000 4,000 95,000 140,000 23,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500	FL PB ST ST ST ST FL FL PB PB ST ST FL FL FL FL FL FL FL FL FL FL FL FL FL	380 48 71 23 48 65 102 161 380 65 102 161 380 23 48 74 102 158 74 102	\$76.27 \$18.28 \$22.08 \$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$111.95 \$22.79 \$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.46	\$35.68 \$4.51 \$6.67 \$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$4.51 \$4.51 \$4.51	46.8% 24.7% 30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.55% 22.8%	
9 10 His 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 24 33 34 35 36 37 38	100 175 175 186 1775 180 180 180 180 180 180 180 180 180 180	3,500 7,000 ddium: 4,000 9,500 16,000 30,000 50,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500	PB PB ST ST ST ST ST ST FL FL PB PB ST ST FL	48 71 23 48 65 102 161 380 65 102 161 380 23 48 74 102 158 74 102	\$18.28 \$22.08 \$15.85 \$20.09 \$21.88 \$22.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$22.79 \$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$4.51 \$6.67 \$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$1.12 \$35.68 \$2.16 \$4.51 \$9.58 \$14.83	24.7% 30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8%	
10 His 11 11 12 13 14 15 16 16 17 18 19 20 21 22 22 Me 23 24 25 26 27 28 29 30 31 32 Lig 33 34 35 36 37 38	175 igh Pressure Sc 50 100 150 250 400 1,000 150 250 400 1,000 50 100 letal Halide: 175 250 400 175 250 400 175 250 400 1,000 175 250 400 1,000 1,75 250 400 1,000 1,75 250 400 1,0	7,000 bdium: 4,000 9,500 16,000 30,000 50,000 140,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500 8,800 13,500	PB ST ST ST ST ST FL FL PB PB ST ST FL	71 23 48 65 102 161 380 65 102 161 380 23 48 74 102 158 74 102	\$22.08 \$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$28.74 \$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.46	\$6.67 \$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$6.95 \$9.58 \$14.83	30.2% 13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.5% 22.8%	
His	igh Pressure Sc 50 100 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 150 250 400 1,000 175 250 400 1,75 250 400 1,75 250 400 1,000 175 250 1,000 1,0	### 4,000 9,500 16,000 30,000 50,000 140,000 140,000 4,000 95,000 #################################	ST ST ST ST ST FL FL FB PB ST ST FL FL FL FL FL	23 48 65 102 161 380 65 102 161 380 23 48 74 102 158 74 102	\$15.85 \$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$18.01 \$24.60 \$27.98 \$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$33.46	\$2.16 \$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51	13.6% 22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.55% 22.8%	
11 12 13 14 15 16 17 18 19 20 21 22 Me 23 24 25 26 27 28 29 30 31 32 24 35 36 37 38	50 100 150 150 250 400 1,000 150 250 400 1,000 50 100 letal Halide: 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 ght Emitting Dic	4,000 9,500 16,000 30,000 140,000 140,000 50,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 8,800 8,800 8,800 8,800 8,800	ST ST ST ST FL FL PB PB ST ST FL FL FL FL	48 65 102 161 380 65 102 161 380 23 48 74 102 158 74 102	\$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$24,60 \$27,98 \$39,07 \$55,59 \$115,91 \$30,31 \$40,69 \$55,04 \$116,28 \$17,00 \$23,42 \$34,37 \$41,58 \$53,32 \$37,46	\$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$9.58 \$14.83	22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8%	
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 24 35 36 37 38	50 100 150 150 250 400 1,000 150 250 400 1,000 50 100 letal Halide: 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 ght Emitting Dic	4,000 9,500 16,000 30,000 140,000 140,000 50,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 8,800 8,800 8,800 8,800 8,800	ST ST ST ST FL FL PB PB ST ST FL FL FL FL	48 65 102 161 380 65 102 161 380 23 48 74 102 158 74 102	\$20.09 \$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$24,60 \$27,98 \$39,07 \$55,59 \$115,91 \$30,31 \$40,69 \$55,04 \$116,28 \$17,00 \$23,42 \$34,37 \$41,58 \$53,32 \$37,46	\$4.51 \$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$9.58 \$14.83	22.4% 27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8%	
13 14 15 16 16 17 18 19 20 21 22 Me 23 24 25 26 27 28 29 30 31 31 32 Lic 33 34 35 36 37 38	150 250 400 1,000 150 250 400 1,000 50 100 letal Halide: 175 250 400 1,000 175 250 400 1,000 ght Emitting Dic	16,000 30,000 50,000 140,000 16,000 30,000 50,000 4,000 95,000 8,800 13,500 8,800 13,500 86,000 8,800 13,500 8,800	ST ST ST FL FL PB PB ST ST FL FL FL FL	65 102 161 380 65 102 161 380 23 48 74 102 158 74 102	\$21.88 \$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$27,98 \$39,07 \$55,59 \$115,91 \$30,31 \$40,69 \$55,04 \$116,28 \$17,00 \$23,42 \$34,37 \$41,58 \$53,32 \$33,46	\$6.10 \$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$6.95 \$9.58 \$14.83	27.9% 32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.55% 22.8%	
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 Lie 33 34 35 36 37 38	250 400 1,000 150 250 400 1,000 50 100 letal Halide: 175 250 400 1,75 250 400 1,000 175 250 400 175 250 400 175 250 400 175 250 400 175 250 400 400 175 250 400 400 400 400 400 400 400 400 401	30,000 50,000 140,000 16,000 30,000 50,000 140,000 95,000 8,800 13,500 23,500 86,000 8,800 13,500 8,800 13,500	ST ST FL FL PB PB ST ST FL FL FL	102 161 380 65 102 161 380 23 48 74 102 158 74 102	\$29.49 \$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$39.07 \$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$9.58 \$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$6.95 \$9.58 \$14.83	32.5% 37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8% 29.9% 38.5% 22.8%	
15 16 17 18 19 20 21 22 Me 23 24 25 26 27 28 29 30 31 32 24 35 36 37 38	400 1,000 1,000 150 250 400 1,000 50 100 letal Halide: 175 250 400 1,75 400 1,000 1,75 250 400 1,000 1	50,000 140,000 16,000 30,000 50,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 86,000 8,800 13,500 8,800 13,500	ST ST FL FL PB PB ST ST ST FL FL FL	161 380 65 102 161 380 23 48 74 102 158 74	\$40.47 \$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$55.59 \$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$15.12 \$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$6.95 \$9.58 \$14.83	37.3% 44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.5% 22.8%	
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 Lie 33 34 35 36 37 38	1,000 150 400 1,000 50 100 letal Halide: 175 250 400 175 250 400 1,000 175 250 400 1,000 ght Emitting Die 42	140,000 16,000 30,000 50,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 86,000 8,800 13,500 8,800	ST FL FL PB PB ST ST FL FL FL	380 65 102 161 380 23 48 74 102 158 74	\$80.23 \$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$115.91 \$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$35.68 \$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$6.95 \$9.58 \$14.83	44.5% 25.2% 30.8% 37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.5% 22.8%	
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 Lig 33 34 35 36 37 38	150 250 400 1,000 50 100 letal Halide: 175 250 400 175 250 400 1,000 175 250 400 1,000 175 250 400 1,0	16,000 30,000 50,000 140,000 95,000 8,800 13,500 8,800 13,500 86,000 8,800 13,500	FL FL FL PB ST ST FL FL FL	65 102 161 380 23 48 74 102 158 74 102	\$24.21 \$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$30.31 \$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$6.10 \$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$6.95 \$9.58 \$14.83	25.2% 30.8% 37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.5% 22.8%	
18 19 20 21 22 23 24 25 26 27 28 29 30 31 31 32 Lig 33 34 35 36 37 38	250 400 1,000 50 100 letal Halide: 175 250 400 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400	30,000 50,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 86,000 8,800 13,500	FL FL PB PB ST ST FL FL FL	102 161 380 23 48 74 102 158 74 102	\$31.11 \$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$40.69 \$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$9.58 \$15.12 \$35.68 \$2.16 \$4.51 \$6.95 \$9.58 \$14.83	30.8% 37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.5% 22.8%	
19 20 21 22 Me 23 24 25 26 27 28 29 30 31 32 29 30 31 32 Lie 33 34 35 36 37	400 1,000 50 100 letal Halide: 175 250 400 175 250 400 1,000 175 250 400 0,000 ght Emitting Dic	50,000 140,000 4,000 95,000 8,800 13,500 8,800 13,500 86,000 8,800 13,500	FL FL PB PB ST ST ST FL FL FL	161 380 23 48 74 102 158 74 102	\$39.92 \$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$55.04 \$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$15.12 \$35.68 \$2.16 \$4.51 \$6.95 \$9.58 \$14.83	37.9% 44.3% 14.5% 23.8% 25.3% 29.9% 38.5% 22.8%	
20 21 22 23 24 25 26 27 28 29 30 31 32 29 30 31 32 Lig 35 36 37	1,000 50 100 letal Halide: 175 250 400 175 250 400 1,000 1,75 250 400 1,000 1000 175 250 400 400 1,000 400 400 400	140,000 4,000 95,000 8,800 13,500 8,800 13,500 23,500 86,000 8,800 13,500	FL PB PB ST ST FL FL FL FL	380 23 48 74 102 158 74 102	\$80.60 \$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$116.28 \$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$35.68 \$2.16 \$4.51 \$6.95 \$9.58 \$14.83	44.3% 14.5% 23.8% 25.3% 29.9% 38.5% 22.8%	
21 22 23 24 25 26 27 28 29 30 31 32 29 30 31 32	50 100 letal Halide: 175 250 400 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400 1,000 175 250 400	4,000 95,000 8,800 13,500 23,500 8,800 13,500 23,500 86,000 8,800 13,500	PB PB ST ST FL FL FL FL	23 48 74 102 158 74 102	\$14.84 \$18.91 \$27.42 \$32.00 \$38.49	\$17.00 \$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$2.16 \$4.51 \$6.95 \$9.58 \$14.83	14.5% 23.8% 25.3% 29.9% 38.5% 22.8%	
22 23 24 25 26 27 28 29 30 31 32 Lie 33 34 35 36 37 38	100 letal Halide: 175 250 400 175 250 400 1,000 1,000 1,000 175 250 400 ght Emitting Dic	95,000 8,800 13,500 23,500 8,800 13,500 23,500 86,000 8,800 13,500	PB ST ST FL FL FL FL	74 102 158 74 102	\$18.91 \$27.42 \$32.00 \$38.49	\$23.42 \$34.37 \$41.58 \$53.32 \$37.46	\$4.51 \$6.95 \$9.58 \$14.83	25.3% 29.9% 38.5% 22.8%	
23 24 25 26 27 28 29 30 31 32 Lig 33 34 35 36 37	letal Halide: 175 250 400 175 250 400 175 250 400 1,000 175 250 400 400 ght Emitting Dic	8,800 13,500 23,500 8,800 13,500 23,500 86,000 8,800 13,500	ST ST ST FL FL FL	74 102 158 74 102	\$27.42 \$32.00 \$38.49	\$34.37 \$41.58 \$53.32 \$37.46	\$6.95 \$9.58 \$14.83	25.3% 29.9% 38.5% 22.8%	
23 24 25 26 27 28 29 30 31 32 <u>Lig</u> 33 34 35 36 37	175 250 400 175 250 400 1,000 175 250 400 ght Emitting Dic	13,500 23,500 8,800 13,500 23,500 86,000 8,800 13,500	ST ST FL FL FL	102 158 74 102	\$32.00 \$38.49	\$41.58 \$53.32 \$37.46	\$9.58 \$14.83	29.9% 38.5% 22.8%	
23 24 25 26 27 28 29 30 31 32 <u>Lig</u> 33 34 35 36 37	175 250 400 175 250 400 1,000 175 250 400 ght Emitting Dic	13,500 23,500 8,800 13,500 23,500 86,000 8,800 13,500	ST ST FL FL FL	102 158 74 102	\$32.00 \$38.49	\$41.58 \$53.32 \$37.46	\$9.58 \$14.83	29.9% 38.5% 22.8%	
24 25 26 27 28 29 30 31 32 <u>Lic</u> 33 34 35 36 37	250 400 175 250 400 1,000 175 250 400 ght Emitting Dio 42	13,500 23,500 8,800 13,500 23,500 86,000 8,800 13,500	ST ST FL FL FL	102 158 74 102	\$32.00 \$38.49	\$41.58 \$53.32 \$37.46	\$9.58 \$14.83	29.9% 38.5% 22.8%	
25 26 27 28 29 30 31 32 <u>Lie</u> 33 34 35 36 37	400 175 250 400 1,000 175 250 400 ght Emitting Dio	23,500 8,800 13,500 23,500 86,000 8,800 13,500	ST FL FL FL	158 74 102	\$38.49	\$53.32 \$37.46	\$14.83	38.5% 22.8%	
26 27 28 29 30 31 32 33 34 35 36 37	175 250 400 1,000 175 250 400 ght Emitting Dio 42	8,800 13,500 23,500 86,000 8,800 13,500	FL FL FL FL	74 102		\$37.46		22.8%	
27 28 29 30 31 32 <u>Lig</u> 33 34 35 36 37	250 400 1,000 175 250 400 ght Emitting Dio 42	13,500 23,500 86,000 8,800 13,500	FL FL FL	102	+				
28 29 30 31 32 <u>Lig</u> 33 34 35 36 37 38	400 1,000 175 250 400 ght Emitting Dic 42	23,500 86,000 8,800 13,500	FL FL		\$35.18	\$44.76	\$9.58		
29 30 31 32 <u>Lig</u> 33 34 35 36 37 38	1,000 175 250 400 ght Emitting Dic 42	86,000 8,800 13,500	FL		\$40.92	\$55.75	\$14.83	36.3%	
30 31 32 <u>Lig</u> 33 34 35 36 37 38	175 250 400 ght Emitting Dic 42	8,800 13,500		374	\$70.18	\$105.30	\$35.11	50.0%	
31 32 33 34 35 36 37 38	250 400 ght Emitting Dio 42	13,500		74	\$26.14	\$33.09	\$6.95	26.6%	
32 33 34 35 36 37 38	400 ght Emitting Dio 42		PB	102	\$30.16	\$39.74	\$9.58	31.7%	
33 34 35 36 37 38	ght Emitting Dic	,_00	PB	158	\$37.21	\$52.04	\$14.83	39.9%	
33 34 35 36 37 38	42				*****	**	******		
34 35 36 37 38							** **		
35 36 37 38	57	3,600	AL	15	\$14.68	\$16.09	\$1.41	9.6%	
36 37 38		5,200	AL	20	\$15.24	\$17.12	\$1.88	12.3%	
37 38	25	3,000	CH	9	\$14.02	\$14.87	\$0.85	6.0%	
38	88	8,300	CH	30	\$16.35	\$19.16	\$2.82	17.2%	
	108	11,500	CH	37	\$17.12	\$20.59	\$3.47	20.3%	
39	193	21,000	CH	67	\$20.42	\$26.71	\$6.29	30.8%	
	123	12,180	FL	43	\$17.77	\$21.81	\$4.04	22.7%	
40 41	194 297	25,700 38,100	FL FL	67 103	\$20.42 \$24.39	\$26.71 \$34.06	\$6.29 \$9.67	30.8% 39.7%	
••	20.	00,100				*******	*****		
		Lun	minaire Charge	s For Year Rou	nd Service:				
ates - Effective September 1, 2	2021	Mercury Vapo		Sodium Vap		Metal Halid	e Rate/Mo.	LED Rat	e/Mo.
ustomer Charge	\$0.00		1 \$13.28	11	\$13.52	23	\$19.91	33	\$13.1
ustomer Charge	ψ0.00		2 \$15.75	12		24	\$21.65	34	\$13.2
	All MWP								
	All kWh			13		25	\$22.45	35	\$13.1
	\$0.00384		4 \$21.25	14		26	\$23.00	36	\$13.3
xternal Delivery Charge	\$0.02978		5 \$42.19	15	\$24.13	27	\$24.83	37	\$13.3
tranded Cost Charge ((\$0.00002)		6 \$19.02	16	\$41.66	28	\$24.88	38	\$13.6
	\$0.00047		7 \$22.75	17		29	\$32.22	39	\$13.4
• •	\$0.00752		8 \$37.70	18	\$20.76	30	\$18.63	40	\$13.6
	\$0.05992		9 \$13.41	19	\$23.58	31	\$19.81	41	\$13.9
9-			10 \$14.87	20	\$42.03	32	\$21.17	• •	,
OTAL	\$0.10151		ιο φιι.σ.	21	\$12.51	02	Ų2		
	Ç0.10101			22	\$12.51				
ates - Proposed December 1, 2	2021	Mercury Vapo	or Rate/Mo	Sodium Vap		Metal Halid	e Rate/Mo	LED Rat	e/Mo
•		vapo							
ustomer Charge	\$0.00		1 \$13.28	11		23	\$19.91	33	\$13.1
			2 \$15.75	12		24	\$21.65	34	\$13.2
	All kWh		3 \$17.85	13		25	\$22.45	35	\$13.1
	\$0.00384		4 \$21.25	14		26	\$23.00	36	\$13.3
	\$0.02978		5 \$42.19	15		27	\$24.83	37	\$13.3
randed Cost Charge ((\$0.00002)		6 \$19.02	16	\$41.66	28	\$24.88	38	\$13.6
orm Recovery Adj. Factor	\$0.00047		7 \$22.75	17	\$17.61	29	\$32.22	39	\$13.4
	\$0.00752		8 \$37.70	18		30	\$18.63	40	\$13.6
	\$0.15381		9 \$13.41	19		31	\$19.81	41	\$13.9
- 3-			10 \$14.87	20	\$42.03	32	\$21.17		, 2.0
OTAL	\$0.19540			21	\$12.51	Ű.	+=		
- ··· -	-050-10			22	\$14.04				
fference		Morouna Voca-	r Dato/Ma			Motal Hali-	o Dato/Ma	I ED D-4	to/Mc
fference	***	Mercury Vapo		Sodium Vap		Metal Halid		LED Rat	
ustomer Charge	\$0.00		1 \$0.00	11	\$0.00	23	\$0.00	33	\$0.00
			2 \$0.00	12		24	\$0.00	34	\$0.00
	All kWh		3 \$0.00	13		25	\$0.00	35	\$0.00
stribution Charge	\$0.00000		4 \$0.00	14		26	\$0.00	36	\$0.00
ternal Delivery Charge	\$0.00000		5 \$0.00	15	\$0.00	27	\$0.00	37	\$0.00
	\$0.00000		6 \$0.00	16		28	\$0.00	38	\$0.00
	\$0.00000		7 \$0.00	17		29	\$0.00	39	\$0.00
	\$0.00000		8 \$0.00	18		30	\$0.00	40	\$0.00
efault Service Charge	\$0.09389		9 \$0.00	19		31	\$0.00	41	\$0.00
OTAL .	*******		10 \$0.00	20	\$0.00	32	\$0.00		
OTAL	\$0.09389			21 22	\$0.00 \$0.00				

Unitil Energy Systems, Inc. Typical Bill Impacts by Rate Component

Residential Rate D 650 kWh Bill

	12/1/2020	12/1/2021					%
Rate Components	Prior Rate	As Revised	Difference	Current Bill	As Revised Bill	Difference	Difference <u>to</u> Total Bill
Trate Componente	<u>i noi rato</u>	710 11011000	Billororico	<u> </u>	7 to 1 to 1100 d D III	<u>Difference</u>	<u> </u>
Customer Charge	\$16.22	\$16.22	\$0.00	\$16.22	\$16.22	\$0.00	0.0%
	\$/kWh	\$/kWh					
							
Distribution Charge	\$0.03558	\$0.03942	\$0.00384	\$23.13	\$25.62	\$2.50	1.9%
External Delivery Charge	\$0.03613	\$0.02978	(\$0.00635)	\$23.48	\$19.36	(\$4.13)	(3.2%)
Stranded Cost Charge	(\$0.00025)	(\$0.00002)	\$0.00023	(\$0.16)	(\$0.01)	\$0.15	0.1%
Storm Recovery Adj.	\$0.00084	\$0.00047	(\$0.00037)	\$0.55	\$0.31	(\$0.24)	(0.2%)
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$4.89	\$4.89	\$0.00	0.0%
Default Service Charge	\$0.09315	\$0.17518	\$0.08203	\$60.5 <u>5</u>	\$113.87	\$53.32	41.4%
Total kWh Charges	\$0.17297	\$0.25235	\$0.07938				
Total Bill				\$128.65	\$180.25	\$51.60	40.1%

	Regular Gener	al G2 Demand,	11 kW, 2,800 k	Wh Typical Bill	-		
	12/1/2020	12/1/2021					% Difference <u>to</u>
Rate Components	Prior Rate	As Revised	Difference	Current Bill	As Revised Bill	<u>Difference</u>	Total Bill
Customer Charge	\$29.19	\$29.19	\$0.00	\$29.19	\$29.19	\$0.00	0.0%
	All kW	All kW					
Distribution Charge	\$10.51	\$10.51	\$0.00	\$115.61	\$115.61	\$0.00	0.0%
Stranded Cost Charge	<u>(\$0.05)</u>	\$0.00	\$0.0 <u>5</u>	<u>(\$0.55)</u>	\$0.00	\$0.55	0.1%
Total kW Charges	\$10.46	\$10.51	\$0.05	\$115.06	\$115.61	\$0.55	0.1%
	<u>\$/kWh</u>	<u>\$/kWh</u>					
Distribution Charge	\$0.00000	\$0.00384	\$0.00384	\$0.00	\$10.75	\$10.75	2.1%
External Delivery Charge	\$0.03613	\$0.02978	(\$0.00635)	\$101.16	\$83.38	(\$17.78)	(3.5%)
Stranded Cost Charge	(\$0.00005)	(\$0.00002)	\$0.00003	(\$0.14)	(\$0.06)	\$0.08	0.0%
Storm Recovery Adj.	\$0.00084	\$0.00047	(\$0.00037)	\$2.35	\$1.32	(\$1.04)	(0.2%)
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$21.06	\$21.06	\$0.00	0.0%
Default Service Charge	\$0.08702	<u>\$0.15381</u>	\$0.06679	\$243.66	\$430.67	\$187.01	<u>36.5%</u>
Total kWh Charges	\$0.13146	\$0.19540	\$0.06394	\$368.09	\$547.12	\$179.03	34.9%
Total Bil	<u> </u>			\$512.34	\$691.92	\$179.58	35.1%

Unitil Energy Systems, Inc. Typical Bill Impacts by Rate Component

Regular Genera	I G2 Quick Reco	very Water He	ating and Spac	ce Heating 1,66	0 kWh Typical Bill	_	
	12/1/2020	12/1/2021					% Difference to
Rate Components	Prior Rate	As Revised	<u>Difference</u>	Current Bill	As Revised Bill	<u>Difference</u>	Total Bill
Customer Charge	\$9.73	\$9.73	\$0.00	\$9.73	\$9.73	\$0.00	0.0%
	<u>\$/kWh</u>	\$/kWh					
Distribution Charge	\$0.03204	\$0.03588	\$0.00384	\$53.19	\$59.56	\$6.37	2.3%
External Delivery Charge	\$0.03613	\$0.02978	(\$0.00635)	\$59.98	\$49.43	(\$10.54)	(3.8%)
Stranded Cost Charge	(\$0.00025)	(\$0.00002)	\$0.00023	(\$0.42)	(\$0.03)	\$0.38	0.1%
Storm Recovery Adj.	\$0.00084	\$0.00047	(\$0.00037)	\$1.39	\$0.78	(\$0.61)	(0.2%)
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$12.48	\$12.48	\$0.00	0.0%
Default Service Charge	\$0.08702	\$0.15381	\$0.06679	\$144.45	\$255.32	\$110.87	39.5%
Total kWh Charges	\$0.16330	\$0.22744	\$0.06414	\$271.08	\$377.55	\$106.47	37.9%
Total Bill	I			\$280.81	\$387.28	\$106.47	37.9%

Regular General G2 kWh Meter 115 kWh Typical Bill								
	12/1/2020	12/1/2021					% Difference to	
Rate Components	Prior Rate	As Revised	Difference	Current Bill	As Revised Bill	<u>Difference</u>	Total Bill	
Customer Charge	\$18.38	\$18.38	\$0.00	\$18.38	\$18.38	\$0.00	0.0%	
	<u>\$/kWh</u>	<u>\$/kWh</u>						
Distribution Charge	\$0.00883	\$0.01267	\$0.00384	\$1.02	\$1.46	\$0.44	1.3%	
External Delivery Charge	\$0.03613	\$0.02978	(\$0.00635)	\$4.15	\$3.42	(\$0.73)	(2.1%)	
Stranded Cost Charge	(\$0.00025)	(\$0.00002)	\$0.00023	(\$0.03)	(\$0.00)	\$0.03	0.1%	
Storm Recovery Adj.	\$0.00084	\$0.00047	(\$0.00037)	\$0.10	\$0.05	(\$0.04)	(0.1%)	
System Benefits Charge	\$0.00752	\$0.00752	\$0.00000	\$0.86	\$0.86	\$0.00	0.0%	
Default Service Charge	\$0.08702	\$0.15381	\$0.06679	<u>\$10.01</u>	<u>\$17.69</u>	<u>\$7.68</u>	22.3%	
Total kWh Charges	\$0.14009	\$0.20423	\$0.06414	\$16.11	\$23.49	\$7.38	21.4%	
Total Bill				\$34.49	\$41.87	\$7.38	21.4%	