

Unitil Energy Systems, Inc.  
 Calculation of Domestic Class Default Service Power Supply Charge

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	<u>Dec-22</u> <u>Estimated</u>	<u>Jan-23</u> <u>Estimated</u>	<u>Feb-23</u> <u>Estimated</u>	<u>Mar-23</u> <u>Estimated</u>	<u>Apr-23</u> <u>Estimated</u>	<u>May-23</u> <u>Estimated</u>	<u>Total</u>
<b><u>Residential Class</u></b>							
1 Reconciliation (1)	(\$60,492)	(\$67,539)	(\$66,540)	(\$59,696)	(\$57,182)	(\$50,310)	(\$361,758)
2 Total Costs (Page 2)	<u>\$10,910,347</u>	<u>\$14,139,779</u>	<u>\$13,021,092</u>	<u>\$6,723,642</u>	<u>\$3,436,201</u>	<u>\$2,434,018</u>	<u>\$50,665,079</u>
3 Reconciliation plus Total Costs (L.1 + L.2)	\$10,849,855	\$14,072,239	\$12,954,552	\$6,663,947	\$3,379,019	\$2,383,708	\$50,303,320
4 Residential Class kWh DS Sales	<u>37,277,881</u>	<u>41,620,634</u>	<u>41,005,021</u>	<u>36,787,059</u>	<u>35,237,812</u>	<u>31,003,182</u>	<u>222,931,589</u>
5 Total Retail Rate - Residential Variable Power Supply Charge (L.3/L.4)	\$0.29105	\$0.33811	\$0.31593	\$0.18115	\$0.09589	\$0.07689	
6 Total Retail Rate - Residential Fixed Power Supply Charge (L.3/L.4)							\$0.22564

(1) As filed in DE 22-017 (March 25, 2022). Power Supply Charge balance as of February 28, 2022, as adjusted, allocated between rate periods (June-November 2022 and December 2022-May 2023) and rate classes (Residential and G2/OL), and then to each month, December 2022 through May 2023, on equal per kWh basis.

Rate period: June-November 2022  
 Rate period: December 2022-May 2023  
 Total

Reconciliation  
per period  
 (\$528,681)  
(\$527,203)  
 (\$1,055,884)

Residential class  
 G2 and OL class  
 Total

Reconciliation  
by class  
 68.62% (\$361,758)  
 31.38% (\$165,444)  
 (\$527,203)

Unitil Energy Systems, Inc.  
 Itemized Costs for Non-G1 Class Default Service Charge and Amounts Allocated to Residential Class

<i>Calculation of Working Capital Supplier Charges and GIS Support Payments</i>														
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
Non-G1 Class (Residential) 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)		Total Remaining Costs for NonG1 Class (sum col. c + g + h + i + j + k + l)
Dec-22	\$10,856,529			\$669,866	4.75%	\$31,819	\$42,300	\$3,007	\$0	\$0	\$762	\$10,856,529		\$78,431
Jan-23	\$14,079,479			\$868,718	4.75%	\$41,264	\$42,300	\$3,007	\$0	\$0	\$762	\$14,079,479		\$87,877
Feb-23	\$12,963,037			\$799,835	4.75%	\$37,992	\$42,300	\$3,007	\$0	\$0	\$762	\$12,963,037		\$84,605
Mar-23	\$6,678,227			\$412,071	4.75%	\$19,573	\$42,300	\$3,007	\$0	\$0	\$762	\$6,678,227		\$66,186
Apr-23	\$3,397,383			\$209,647	4.75%	\$9,958	\$42,300	\$3,007	\$0	\$0	\$762	\$3,397,383		\$56,571
May-23	<u>\$2,397,212</u>			<u>\$147,938</u>	4.75%	<u>\$7,027</u>	<u>\$42,300</u>	<u>\$3,007</u>	<u>\$0</u>	<u>\$0</u>	<u>\$762</u>	<u>\$2,397,212</u>		<u>\$53,640</u>
Total	\$50,371,866		\$3,261			\$147,634	\$253,800	\$18,042	\$0	\$0	\$4,572	\$50,371,866		\$427,309

**Total Costs Allocated to the Residential Class**

Non-G1 Class (Residential) DS Supplier Charges (col. a) (i)	Allocation of Remaining Costs (col. o) to Residential Class (3) (ii)	Total Non-G1 Class (Residential) Power Supply Charges (iii) = (i) + (ii)	Residential Class Allocation	
Dec-22	\$10,856,529	\$53,818	\$10,910,347	68.6%
Jan-23	\$14,079,479	\$60,300	\$14,139,779	68.6%
Feb-23	\$12,963,037	\$58,054	\$13,021,092	68.6%
Mar-23	\$6,678,227	\$45,416	\$6,723,642	68.6%
Apr-23	\$3,397,383	\$38,818	\$3,436,201	68.6%
May-23	<u>\$2,397,212</u>	<u>\$36,807</u>	<u>\$2,434,018</u>	68.6%
Total	\$50,371,866	\$293,213	\$50,665,079	

(1) Estimates based on monthly average wholesale rate times estimated monthly purchases.

(2) Number of days lag equals 22.52. Calculated using revenue lag of 58.28 days less cost lead of 35.76 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 22-017 filed March, 25, 2022.

(3) Remaining Costs allocated between the Residential Class and the G2 and Outdoor Lighting Classes.

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

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	<u>Dec-22</u> <u>Estimated</u>	<u>Jan-23</u> <u>Estimated</u>	<u>Feb-23</u> <u>Estimated</u>	<u>Mar-23</u> <u>Estimated</u>	<u>Apr-23</u> <u>Estimated</u>	<u>May-23</u> <u>Estimated</u>	<u>Total</u>
1 Reconciliation (1)	(\$116,156)	(\$129,687)	(\$127,769)	(\$114,626)	(\$109,799)	(\$96,604)	(\$694,642)
2 Total Costs (Page 2)	<u>\$284,948</u>	<u>\$330,665</u>	<u>\$325,774</u>	<u>\$292,264</u>	<u>\$279,955</u>	<u>\$246,312</u>	<u>\$1,759,920</u>
3 Reconciliation plus Total Costs (L.1 + L.2)	\$168,793	\$200,978	\$198,005	\$177,638	\$170,157	\$149,708	\$1,065,278
4 Residential Class kWh DS Sales	<u>37,277,881</u>	<u>41,620,634</u>	<u>41,005,021</u>	<u>36,787,059</u>	<u>35,237,812</u>	<u>31,003,182</u>	<u>222,931,589</u>
5 Total Retail Rate - Residential Variable RPS Charge (L.3/L.4)	\$0.00453	\$0.00483	\$0.00483	\$0.00483	\$0.00483	\$0.00483	
6 Total Retail Rate - Residential Fixed RPS Charge (L.3/L. 4)							\$0.00478

(1) As filed in DE 22-017 (March 25, 2022). Renewable Portfolio Standard Charge balance as of February 28, 2022, as adjusted, allocated between rate periods (June-November 2022 and December 2022-May 2023) and then to each month on equal per kWh basis.

Reconciliation amount for June-November 2022	(\$1,015,164)
Reconciliation amount for December 2022-May 2023	<u>(\$1,012,325)</u>
Total	(\$2,027,489)

	<u>% by class</u>	Reconciliation <u>by class</u>
Residential class	68.62%	(\$694,642)
G2 and OL class	31.38%	<u>(\$317,683)</u>
Total		(\$1,012,325)

Unitil Energy Systems, Inc.  
 Itemized Costs for Domestic Class Default Service Renewable Portfolio Standard Charge

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	(a) Renewable Energy Credits- Domesitic Class	<i>Calculation of Working Capital</i>			(e) Supply Related Working Capital (c * d)	(f) Total Costs (sum a + e)
		(b) Number of Days of Lag / 365 (1)	(c) Working Capital Requirement (a*b)	(d) Prime Rate		
Dec-22	\$294,533	(68.51%)	(\$201,775)	4.75%	(\$9,584)	\$284,948
Jan-23	\$341,787	(68.51%)	(\$234,148)	4.75%	(\$11,122)	\$330,665
Feb-23	\$336,732	(68.51%)	(\$230,684)	4.75%	(\$10,958)	\$325,774
Mar-23	\$302,094	(68.51%)	(\$206,955)	4.75%	(\$9,830)	\$292,264
Apr-23	\$289,372	(68.51%)	(\$198,240)	4.75%	(\$9,416)	\$279,955
May-23	<u>\$254,597</u>	(68.51%)	(\$174,417)	4.75%	<u>(\$8,285)</u>	<u>\$246,312</u>
Total	\$1,819,115				(\$59,195)	\$1,759,920

(1) Number of days lag equals (250.05). Calculated using revenue lag of 58.28 days less cost lead of 308.33 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 22-017 filed March 25, 2022.

Unitil Energy Systems, Inc.  
 Calculation of Domestic Class Default Service Power Supply Charge

	<u>Dec-22 Estimated</u>	<u>Jan-23 Estimated</u>	<u>Feb-23 Estimated</u>	<u>Mar-23 Estimated</u>	<u>Apr-23 Estimated</u>	<u>May-23 Estimated</u>	<u>Jun-23 Estimated</u>	<u>Jul-23 Estimated</u>	<u>Total</u>
<b>Residential Class</b>									
1 Reconciliation (1)	(\$45,745)	(\$51,074)	(\$50,318)	(\$45,142)	(\$43,241)	(\$38,045)	(\$38,364)	(\$49,830)	(\$361,758)
2 Total Costs (Page 2)	<u>\$10,910,347</u>	<u>\$14,139,779</u>	<u>\$13,021,092</u>	<u>\$6,723,642</u>	<u>\$3,436,201</u>	<u>\$2,434,018</u>	<u>\$2,155,996</u>	<u>\$3,153,336</u>	\$55,974,410
3 Reconciliation plus Total Costs (L.1 + L.2)	\$10,864,602	\$14,088,705	\$12,970,774	\$6,678,500	\$3,392,960	\$2,395,973	\$2,117,632	\$3,103,506	\$55,612,651
4 Residential Class kWh DS Sales	<u>37,277,881</u>	<u>41,620,634</u>	<u>41,005,021</u>	<u>36,787,059</u>	<u>35,237,812</u>	<u>31,003,182</u>	<u>31,263,286</u>	<u>40,606,847</u>	<u>294,801,722</u>
5 Total Retail Rate - Residential Variable Power Supply Charge (L.3/L.4)	\$0.29145	\$0.33850	\$0.31632	\$0.18154	\$0.09629	\$0.07728	\$0.06774	\$0.07643	
6 Total Retail Rate - Residential Fixed Power Supply Charge (L.3/L.4)									\$0.18864

(1) As filed in DE 22-017 (March 25, 2022). Power Supply Charge balance as of February 28, 2022, as adjusted, allocated between rate periods (June-November 2022 and December 2022-May 2023) and rate classes (Residential and G2/OL), and then to each month, December 2022 through May 2023, on equal per kWh basis.

Rate period: June-November 2022	Reconciliation <u>per period</u>
Rate period: December 2022-May 2023	(\$528,681)
Total	(\$527,203)
	Reconciliation
Residential class	<u>by class</u>
G2 and OL class	68.62%
Total	(\$361,758)
	<u>by class</u>
	31.38%
	(\$165,444)
	(\$527,203)

Unitil Energy Systems, Inc.  
 Itemized Costs for Non-G1 Class Default Service Charge and Amounts Allocated to Residential Class

<i>Calculation of Working Capital Supplier Charges and GIS Support Payments</i>														
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
Non-G1 Class (Residential) 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)		Total Remaining Costs for NonG1 Class (sum col. c + g + h + i + j + k + l)
Dec-22	\$10,856,529	\$544	6.17%	\$669,866	4.75%	\$31,819	\$42,300	\$3,007	\$0	\$0	\$762	\$10,856,529		\$78,431
Jan-23	\$14,079,479	\$544	6.17%	\$868,718	4.75%	\$41,264	\$42,300	\$3,007	\$0	\$0	\$762	\$14,079,479		\$87,877
Feb-23	\$12,963,037	\$544	6.17%	\$799,835	4.75%	\$37,992	\$42,300	\$3,007	\$0	\$0	\$762	\$12,963,037		\$84,605
Mar-23	\$6,678,227	\$544	6.17%	\$412,071	4.75%	\$19,573	\$42,300	\$3,007	\$0	\$0	\$762	\$6,678,227		\$66,186
Apr-23	\$3,397,383	\$544	6.17%	\$209,647	4.75%	\$9,958	\$42,300	\$3,007	\$0	\$0	\$762	\$3,397,383		\$56,571
May-23	\$2,397,212	\$544	6.17%	\$147,938	4.75%	\$7,027	\$42,300	\$3,007	\$0	\$0	\$762	\$2,397,212		\$53,640
Jun-23	\$2,119,747	\$544	6.17%	\$130,819	4.75%	\$6,214	\$42,300	\$3,007	\$0	\$0	\$762	\$2,119,747		\$52,826
Jul-23	<u>\$3,115,085</u>	<u>\$544</u>	6.17%	\$192,230	4.75%	<u>\$9,131</u>	<u>\$42,300</u>	<u>\$3,007</u>	<u>\$0</u>	<u>\$0</u>	<u>\$762</u>	<u>\$3,115,085</u>		<u>\$55,743</u>
Total	\$55,606,698	\$4,348				\$162,978	\$338,400	\$24,057	\$0	\$0	\$6,095	\$55,606,698		\$535,879

**Total Costs Allocated to the Residential Class**

	Non-G1 Class (Residential) DS Supplier Charges (col. a) (i)	Allocation of Remaining Costs (col. o) to Residential Class (3) (ii)	Total Non-G1 Class (Residential) Power Supply Charges (iii) = (i) + (ii)	Residential Class Allocation
Dec-22	\$10,856,529	\$53,818	\$10,910,347	68.6%
Jan-23	\$14,079,479	\$60,300	\$14,139,779	68.6%
Feb-23	\$12,963,037	\$58,054	\$13,021,092	68.6%
Mar-23	\$6,678,227	\$45,416	\$6,723,642	68.6%
Apr-23	\$3,397,383	\$38,818	\$3,436,201	68.6%
May-23	\$2,397,212	\$36,807	\$2,434,018	68.6%
Jun-23	\$2,119,747	\$36,249	\$2,155,996	68.6%
Jul-23	<u>\$3,115,085</u>	<u>\$38,250</u>	<u>\$3,153,336</u>	68.6%
Total	\$55,606,698	\$367,712	\$55,974,410	

(1) Estimates based on monthly average wholesale rate times estimated monthly purchases.

(2) Number of days lag equals 22.52. Calculated using revenue lag of 58.28 days less cost lead of 35.76 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 22-017 filed March, 25, 2022.

(3) Remaining Costs allocated between the Residential Class and the G2 and Outdoor Lighting Classes.

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

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	<u>Dec-22</u> <u>Estimated</u>	<u>Jan-23</u> <u>Estimated</u>	<u>Feb-23</u> <u>Estimated</u>	<u>Mar-23</u> <u>Estimated</u>	<u>Apr-23</u> <u>Estimated</u>	<u>May-23</u> <u>Estimated</u>	<u>Jun-23</u> <u>Estimated</u>	<u>Jul-23</u> <u>Estimated</u>	<u>Total</u>
1 Reconciliation (1)	(\$87,838)	(\$98,071)	(\$96,620)	(\$86,681)	(\$83,031)	(\$73,053)	(\$73,666)	(\$95,682)	(\$694,642)
2 Total Costs (Page 2)	<u>\$284,948</u>	<u>\$330,665</u>	<u>\$325,774</u>	<u>\$292,264</u>	<u>\$279,955</u>	<u>\$246,312</u>	<u>\$248,379</u>	<u>\$322,611</u>	<u>\$2,330,910</u>
3 Reconciliation plus Total Costs (L.1 + L.2)	\$197,110	\$232,595	\$229,154	\$205,582	\$196,925	\$173,260	\$174,713	\$226,929	\$1,636,268
4 Residential Class kWh DS Sales	<u>37,277,881</u>	<u>41,620,634</u>	<u>41,005,021</u>	<u>36,787,059</u>	<u>35,237,812</u>	<u>31,003,182</u>	<u>31,263,286</u>	<u>40,606,847</u>	<u>294,801,722</u>
5 Total Retail Rate - Residential Variable RPS Charge (L.3/L.4)	\$0.00529	\$0.00559	\$0.00559	\$0.00559	\$0.00559	\$0.00559	\$0.00559	\$0.00559	
6 Total Retail Rate - Residential Fixed RPS Charge (L.3/L. 4)									\$0.00555

(1) As filed in DE 22-017 (March 25, 2022). Renewable Portfolio Standard Charge balance as of February 28, 2022, as adjusted, allocated between rate periods (June-November 2022 and December 2022-May 2023) and then to each month on equal per kWh basis.

Reconciliation amount for June-November 2022	(\$1,015,164)
Reconciliation amount for December 2022-May 2023	<u>(\$1,012,325)</u>
Total	<u>(\$2,027,489)</u>

	<u>% by class</u>	Reconciliation <u>by class</u>
Residential class	68.62%	(\$694,642)
G2 and OL class	31.38%	<u>(\$317,683)</u>
Total		<u>(\$1,012,325)</u>

Unitil Energy Systems, Inc.  
 Itemized Costs for Domestic Class Default Service Renewable Portfolio Standard Charge

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	(a) Renewable Energy Credits- Domestic Class	<i>Calculation of Working Capital</i>				(f) Total Costs (sum a + e)
		(b) Number of Days of Lag / 365 (1)	(c) Working Capital Requirement (a*b)	(d) Prime Rate	(e) Supply Related Working Capital (c * d)	
Dec-22	\$294,533	(68.51%)	(\$201,775)	4.75%	(\$9,584)	\$284,948
Jan-23	\$341,787	(68.51%)	(\$234,148)	4.75%	(\$11,122)	\$330,665
Feb-23	\$336,732	(68.51%)	(\$230,684)	4.75%	(\$10,958)	\$325,774
Mar-23	\$302,094	(68.51%)	(\$206,955)	4.75%	(\$9,830)	\$292,264
Apr-23	\$289,372	(68.51%)	(\$198,240)	4.75%	(\$9,416)	\$279,955
May-23	\$254,597	(68.51%)	(\$174,417)	4.75%	(\$8,285)	\$246,312
Jun-23	\$256,733	(68.51%)	(\$175,880)	4.75%	(\$8,354)	\$248,379
Jul-23	<u>\$333,462</u>	(68.51%)	(\$228,444)	4.75%	<u>(\$10,851)</u>	<u>\$322,611</u>
Total	\$2,409,311				(\$78,401)	\$2,330,910

(1) Number of days lag equals (250.05). Calculated using revenue lag of 58.28 days less cost lead of 308.33 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 22-017 filed March 25, 2022.



**Unitil Energy Systems, Inc.**  
**Illustrative 6-Month and 8-Month Residential Class Default Service Charge**

<b>6-Month Default Service Calculation - December 2022-May 2023</b>			
Power Supply Costs incl. prior period reconciliation	\$50,303,320		
Residential Class kWh Default Service Sales	<u>222,931,589</u>		
Residential Fixed Power Supply Charge (\$/kWh)	\$0.22564		
Renewable Portfolio Standard Costs incl. prior period reconciliation	\$1,065,278		
Residential Class kWh Default Service Sales	<u>222,931,589</u>		
Residential Fixed Renewable Portfolio Standard Charge (\$/kWh)	\$0.00478		
<b>Total Residential Default Service Charge (\$/kWh)</b>	<b>\$0.23042</b>		
			<b>\$/kWh</b>
650 kWh Residential Bill Under Current Rates	\$133.92	Current Default Service Charge =	\$0.10117
650 kWh Residential Bill Using 6-Mo. Default Service Charge	<u>\$217.93</u>	Est. 6-Mo. Default Service Charge =	<u>\$0.23042</u>
Increase/(Decrease)	\$84.01	Increase/(Decrease) =	\$0.12925
	63%		
			<b>\$/kWh</b>
650 kWh Residential Bill Under Winter 21-22 Default Service Rates*	\$182.02	Winter 21-22 Default Service Charge =	\$0.17518
650 kWh Residential Bill Using 6-Mo. Default Service Charge	<u>\$217.93</u>	Est. 6-Mo. Default Service Charge =	<u>\$0.23042</u>
Increase/(Decrease)	\$35.91	Increase/(Decrease) =	\$0.05524
	20%		

<b>8-Month Default Service Calculation - December 2022-July 2023</b>			
Power Supply Costs incl. prior period reconciliation	\$55,612,651		
Residential Class kWh Default Service Sales	<u>294,801,722</u>		
Residential Fixed Power Supply Charge (\$/kWh)	\$0.18864		
Renewable Portfolio Standard Costs incl. prior period reconciliation	\$1,636,268		
Residential Class kWh Default Service Sales	<u>294,801,722</u>	Est. 6-Mo. Default Service Charge =	\$0.23042
Residential Fixed Renewable Portfolio Standard Charge (\$/kWh)	\$0.00555	Est. 8-Mo. Default Service Charge =	<u>\$0.19419</u>
		Difference	\$0.03623
<b>Total Residential Default Service Charge (\$/kWh)</b>	<b>\$0.19419</b>		<b>16%</b>
			<b>\$/kWh</b>
650 kWh Residential Bill Under Current Rates	\$133.92	Current Default Service Charge =	\$0.10117
650 kWh Residential Bill Using 8-Mo. Default Service Charge	<u>\$194.38</u>	Est. 8-Mo. Default Service Charge =	<u>\$0.19419</u>
Increase/(Decrease)	\$60.46	Increase/(Decrease) =	\$0.09302
	45%		
			<b>\$/kWh</b>
650 kWh Residential Bill Under Winter 21-22 Default Service Rates*	\$182.02	Winter 21-22 Default Service Charge =	\$0.17518
650 kWh Residential Bill Using 8-Mo. Default Service Charge	<u>\$194.38</u>	Est. 8-Mo. Default Service Charge =	<u>\$0.19419</u>
Increase/(Decrease)	\$12.36	Increase/(Decrease) =	\$0.01901
	7%		

\* Calculated using current delivery rates (as of July 26, 2022), and winter 21-22 Default Service Charge.