

UNITIL ENERGY SYSTEMS, INC.

EXTERNAL DELIVERY CHARGE:
TRANSMISSION
NON-TRANSMISSION

LEAD/LAG STUDY

2023

Unitil Energy Systems, Inc.
EDC - Transmission & Non-Transmission
Revenue Lag Summary
Based on 2023 Data

Line No.	Description	Electric Number of Days Delay
1	Revenue Lag:	
2	Receipt of Electric Service to Meter Reading	15.21 days
3	Meter Reading to Recording of Accounts Receivable	1.04 days
4	Billing to Collection	36.51 days
5	Collection to Receipt of Available Funds	<u>1.63 days</u>
6	Subtotal Revenue Lag Days	<u>54.39 days</u>

Unitil Energy Systems, Inc.
Receipt of Electric Service to Meter Reading
Average Days Delay

January 1, 2023 to December 31, 2023 - Number of Days

December

January	31
February	28
March	31
April	30
May	31
June	30
July	31
August	31
September	30
October	31
November	30
December	31

1 28 Day Month	1*28	28
4 30 Day Months	4*30	120
7 31 Day Months	7*31	<u>217</u>
	Total	<u><u>365</u></u> days

$$365 \text{ Days} / 12 \text{ Months} / 2 = \underline{\underline{15.21}} \text{ days}$$

Unitil Energy Systems, Inc
Meter Reading to Recording of
Accounts Receivable

January 1, 2023 to December 31, 2023

Month	Average Days
January 2023	1.02
February 2023	1.08
March 2023	1.03
April 2023	1.00
May 2023	1.01
June 2023	1.01
July 2023	1.01
August 2023	1.24
September 2023	1.01
October 2023	1.01
November 2023	1.04
December 2023	1.01
Average	1.04

Unitil Energy Systems, Inc.
Meter Reading to Recording of
Accounts Receivable
Monthly Detail

January 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Weighted Days Lag
1	76,447	99.27%	1	0.99
2	205	0.27%	2	0.01
3	200	0.26%	3	0.01
4	60	0.08%	4	0.00
5	33	0.04%	5	0.00
6	35	0.05%	6	0.00
7	11	0.01%	7	0.00
8-14	14	0.02%	11	0.00
Over 14	1	0.00%	14	0.00
Total	77,006	100.00%		1.02

February 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Weighted Days Lag
1	71,708	93.04%	1	0.93
2	5,153	6.69%	2	0.13
3	107	0.14%	3	0.00
4	69	0.09%	4	0.00
5	12	0.02%	5	0.00
6	5	0.01%	6	0.00
7	5	0.01%	7	0.00
8 to 14	12	0.02%	11	0.00
Over 14	-	0.00%	14	-
Total	77,071	100.00%		1.08

March 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	76,717	99.34%	1	0.99
2	117	0.15%	2	0.00
3	97	0.13%	3	0.00
4	70	0.09%	4	0.00
5	15	0.02%	5	0.00
6	40	0.05%	6	0.00
7	57	0.07%	7	0.01
8 to 14	116	0.15%	11	0.02
Over 14	1	0.00%	14	0.00
Total	77,230	100.00%		1.03

April 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	76,698	99.68%	1	1.00
2	190	0.25%	2	0.00
3	31	0.04%	3	0.00
4	14	0.02%	4	0.00
5	1	0.00%	5	0.00
6	3	0.00%	6	0.00
7	2	0.00%	7	0.00
8 to 14	1	0.00%	11	0.00
Over 14	1	0.00%	14	0.00
Total	76,941	100.00%		1.00

May 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	76,533	99.57%	1	1.00
2	200	0.26%	2	0.01
3	72	0.09%	3	0.00
4	18	0.02%	4	0.00
5	16	0.02%	5	0.00
6	5	0.01%	6	0.00
7	2	0.00%	7	0.00
8 to 14	15	0.02%	11	0.00
Over 14	1	0.00%	14	0.00
Total	76,862	100.00%		1.01

June 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	76,483	99.59%	1	1.00
2	235	0.31%	2	0.01
3	55	0.07%	3	0.00
4	5	0.01%	4	0.00
5	1	0.00%	5	0.00
6	8	0.01%	6	0.00
7	-	0.00%	7	-
8 to 14	11	0.01%	11	0.00
Over 14	2	0.00%	14	0.00
Total	76,800	100.00%		1.01

Unitil Energy Systems, Inc.
Meter Reading to Recording of
Accounts Receivable
Monthly Detail

July 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	76,567	99.50%	1	1.00
2	278	0.36%	2	0.01
3	69	0.09%	3	0.00
4	23	0.03%	4	0.00
5	3	0.00%	5	0.00
6	4	0.01%	6	0.00
7	3	0.00%	7	0.00
8 to 14	2	0.00%	11	0.00
Over 14	-	0.00%	14	-
Total	76,949	100.00%		1.01

August 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	60,901	79.16%	1	0.79
2	13,521	17.57%	2	0.35
3	2,457	3.19%	3	0.10
4	31	0.04%	4	0.00
5	7	0.01%	5	0.00
6	4	0.01%	6	0.00
7	4	0.01%	7	0.00
8 to 14	9	0.01%	11	0.00
Over 14	-	0.00%	14	-
Total	76,934	100.00%		1.24

September 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	76,596	99.45%	1	0.99
2	218	0.28%	2	0.01
3	64	0.08%	3	0.00
4	70	0.09%	4	0.00
5	38	0.05%	5	0.00
6	8	0.01%	6	0.00
7	5	0.01%	7	0.00
8 to 14	22	0.03%	11	0.00
Over 14	-	0.00%	14	-
Total	77,021	100.00%		1.01

October 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	76,686	99.38%	1	0.99
2	296	0.38%	2	0.01
3	125	0.16%	3	0.00
4	20	0.03%	4	0.00
5	13	0.02%	5	0.00
6	1	0.00%	6	0.00
7	6	0.01%	7	0.00
8 to 14	15	0.02%	11	0.00
Over 14	1	0.00%	14	0.00
Total	77,163	100.00%		1.01

November 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	74,724	97.00%	1	0.97
2	2,030	2.64%	2	0.05
3	86	0.11%	3	0.00
4	53	0.07%	4	0.00
5	51	0.07%	5	0.00
6	36	0.05%	6	0.00
7	8	0.01%	7	0.00
8 to 14	45	0.06%	11	0.01
Over 14	-	0.00%	14	-
Total	77,033	100.00%		1.04

December 2023

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	76,660	99.33%	1	0.99
2	254	0.33%	2	0.01
3	123	0.16%	3	0.00
4	90	0	4	0.00
5	4	0.01%	5	0.00
6	12	0.02%	6	0.00
7	7	0.01%	7	0.00
8 to 14	25	0.03%	11	0.00
Over 14	1	0.00%	14	0.00
Total	77,176	100.00%		1.01

Unitil Energy Systems, Inc. Number Of Days Lag In Billing To Collection Twelve Months Average - January 1 to December 31, 2023 Monthly Summary Electric				
Month	Days in Month	Electric Sales Revenues	Daily Average (1) / Days))	Accounts Receivable Electric Sales
		(1)	(2)	(3)
2023				
January	31	27,000,616	870,988	27,931,131
February	28	25,974,653	927,666	30,387,007
March	31	24,221,996	781,355	29,228,576
April	30	20,839,358	694,645	27,253,364
May	31	20,104,736	648,540	25,521,104
June	30	20,332,430	677,748	24,571,923
July	31	26,760,789	863,251	30,905,414
August	31	24,658,968	795,451	29,071,416
September	30	20,656,333	688,544	26,111,214
October	31	17,769,291	573,203	21,921,360
Novemeber	30	17,270,486	575,683	21,492,982
December	31	19,007,789	613,154	23,580,324
Total		264,597,445	8,710,228	317,975,815
Average		22,049,787	725,852	26,497,985
Payment Lag Days ((3) / (2))				36.51

Unitil Energy Systems, Inc.
Collection to Receipt of Available Funds

Revenue Classification by Bank

Revenue is deposited into the remittance account on the day that the revenue is recorded as received.
The following day, the bank statement reflects the prior day's bank availability of funds.

Total Lag Days from Receipt of Funds to Notification of Availability of Funds 1.00 day

Availability of Funds as reported on succeeding business day.

Source: Report on Previous Day Data, Citizens Bank

	Percent of Funds				Weighted Lag Days		
	Available Same Day 0 Days Lag	1 Day Float 1 Day Lag	2-Day Float 2 Days Lag	Total	1 Day	2 Days	Total
2023							
January	40%	57%	4%	100%	0.57	0.08	0.64
February	43%	53%	4%	100%	0.53	0.08	0.61
March	41%	53%	5%	100%	0.53	0.11	0.64
April	44%	52%	4%	100%	0.52	0.07	0.60
May	39%	55%	6%	100%	0.55	0.13	0.68
June	43%	52%	5%	100%	0.52	0.09	0.61
July	41%	54%	5%	100%	0.54	0.10	0.64
August	44%	49%	7%	100%	0.49	0.14	0.63
September	46%	49%	5%	100%	0.49	0.09	0.58
October	39%	56%	5%	100%	0.56	0.11	0.67
November	40%	53%	6%	100%	0.53	0.06	0.60
December	42%	53%	6%	100%	0.53	0.11	0.64

Average Weighted Lag Days for Availability of Funds 0.63 days

Summary

Total Lag Days from Receipt of Funds to Notification of Availability of Funds	1.00 day
Average Weighted Lag Days for Availability of Funds	0.63 days
Total Lag Days from Collection to Availability of Funds:	1.63 days

Uniti Energy Systems, Inc.
 Remittance Accounts

January, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	77,786	403,819	11,992	
4	96,881	321,864	11,230	
5	493,113	351,792	29,936	
6	3,596	315,349	36,620	
9	325,419	616,752	48,475	
10	771,055	353,106	31,373	
11	239,440	246,141	20,421	
12	4,502	252,042	6,752	
13	12,194	417,276	10,140	
17	49,154	577,209	10,226	
18	1,281,422	131,152	7,188	
19	86,516	379,406	14,442	
20	9,554	200,454	14,492	
23	44,912	442,045	30,870	
24	683,622	72,612	16,303	
25	1,640	165,712	10,910	
26	81,134	110,908	8,936	
27	21,048	177,211	33,786	
30	25,046	610,343	48,453	
31	7,238	231,843	40,428	
	4,457,633	6,376,626	438,523	11,272,781
% of Available Funds	43%	57%	4%	100%
Float Days	0	1	2	
Weighted Float Days	-	0.67	0.08	0.85

February, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	29,588	271,670	22,747	
2	43,717	326,058	13,267	
3	45,651	256,764	14,839	
6	462,348	837,863	45,451	
7	1,148,236	464,355	15,979	
8	403,879	770,381	20,357	
9	24,735	272,630	18,874	
10	24,649	666,870	14,667	
13	438,516	690,629	35,518	
14	1,237,063	241,630	17,778	
15	696,215	189,705	14,910	
16	22,834	192,428	6,583	
17	58,454	458,386	2,828	
21	58,296	495,142	171,241	
22	1,022,148	183,284	12,211	
23	29,004	331,546	13,946	
24	5,387	116,620	13,597	
27	257,413	247,880	51,423	
28	(36,304)	369,039	41,026	
	6,888,068	7,295,456	548,293	13,726,797
% of Available Funds	43%	53%	4%	100%
Float Days	0	1	2	
Weighted Float Days	-	0.53	0.08	0.61

March, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	33,136	318,218	76,717	
2	(32,320)	252,048	18,866	
3	34,173	234,694	31,129	
6	73,124	174,138	22,600	
7	745,091	229,368	215,888	
8	244,216	607,109	72,267	
9	24,068	696,636	29,143	
10	17,602	303,105	17,673	
13	371,484	662,482	34,554	
14	1,133,623	756,527	65,159	
15	264,073	363,428	20,329	
16	52,062	126,054	8,156	
17	44,003	294,610	3,024	
20	92,498	410,753	6,027	
21	1,834,824	38,924	10,013	
22	345,437	373,758	25,075	
23	(7,330)	200,035	6,830	
24	18,161	124,657	4,364	
27	470,016	358,763	26,106	
28	419,670	97,793	41,661	
29	33,485	517,456	30,667	
30	1,843	230,655	17,134	
31	16,788	254,586	7,499	
	6,234,893	6,015,167	607,134	12,857,194
% of Available Funds	41%	53%	5%	100%
Float Days	0	1	2	
Weighted Float Days	-	0.53	0.11	0.64

April, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
3	76,050	415,639	39,371	
4	5,913	188,865	41,435	
5	40,365	352,786	20,978	
6	351,135	413,082	43,990	
7	(2,443)	107,072	45,624	
10	363,072	627,063	23,942	
11	1,038,437	364,539	19,675	
12	378,146	497,465	15,261	
13	14,623	335,652	23,567	
14	64,754	235,477	5,919	
17	437,779	378,865	8,839	
18	19,406	366,647	39,096	
19	1,758,191	559,010	44,901	
20	(19,530)	236,890	16,612	
21	5,511	320,611	3,426	
24	281,932	324,991	7,380	
25	896,766	210,618	19,447	
26	234,189	254,529	22,674	
27	22,398	185,792	25,371	
28	(19,746)	332,611	6,368	
	5,948,728	7,024,014	690,719	13,473,461
% of Available Funds	44%	52%	4%	100%
Float Days	0	1	2	
Weighted Float Days	-	0.52	0.07	0.60

May, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	65,888	409,233	15,738	
2	74,828	281,651	19,800	
3	39,205	439,024	13,455	
4	43,275	384,789	60,923	
5	65,686	409,233	15,738	
6	354,737	695,833	26,425	
9	985,758	135,065	11,317	
10	266,059	432,089	104,975	
11	(19,269)	340,571	57,095	
12	(30,452)	330,251	5,790	
15	320,165	575,536	80,053	
16	945,211	449,862	117,654	
17	320,304	366,897	10,975	
18	12,886	120,554	8,498	
19	7,898	61,181	2,458	
22	508,806	408,560	7,190	
23	778,728	79,886	16,131	
24	162,415	144,053	170,930	
25	(142,915)	322,179	16,883	
26	(5,480)	53,577	1,452	
30	261,767	418,618	35,836	
31	(1,290)	213,746	34,373	
	5,013,456	7,074,098	831,689	12,919,245
% of Available Funds	39%	55%	6%	100%
Float Days	0	1	2	
Weighted Float Days	-	0.55	0.10	0.65

June, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	113,310	261,606	69,666	
2	(5,398)	255,945	25,594	
5	50,953	339,746	27,653	
6	565,776	187,544	15,260	
7	384,873	235,034	22,317	
8	24,766	453,135	44,960	
9	56,838	268,138	55,396	
12	395,396	476,369	38,077	
13	919,528	514,856	20,554	
14	211,351	516,679	22,367	
15	(2,353)	319,977	20,909	
16	(8,426)	420,859	5,961	
20	506,686	412,253	8,059	
21	1,345,009	374,795	2,991	
22	11,232	409,720	15,662	
23	5,197	102,529	11,486	
26	35,018	228,862	13,876	
27	144,623	284,125	37,749	
28	(9,333)	251,080	68,375	
29	17,074	183,741	6,595	
30	25,418	194,576	39,166	
	5,298,125	6,389,628	567,535	12,245,688
% of Available Funds	43%	52%	5%	100%
Float Days	0	1	2	
Weighted Float Days	-	0.52	0.09	0.61

Unitil Energy Systems, Inc.
 Remittance Accounts

July, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
3	84,568	473,804	31,304	
6	26,118	82,723	13,051	
7	463,642	332,503	44,611	
7	62,957	174,387	38,855	
10	389,950	891,772	46,627	
11	886,487	412,643	16,762	
12	405,762	188,031	33,556	
13	(2,169)	209,295	15,546	
14	24,842	302,728	89,911	
17	(13,410)	846,522	26,201	
18	1,123,399	54,038	16,083	
19	492,732	376,172	22,129	
20	(4,988)	526,171	5,440	
21	13,862	101,804	23,801	
24	244,883	372,800	135,209	
25	683,079	484,641	20,552	
26	188,471	221,313	26,652	
27	2,031	222,487	12,462	
28	9,440	92,812	3,919	
31	70,958	400,483	13,191	
Total	6,104,637	6,642,859	659,690	12,377,186
% of Available Funds	41%	54%	5%	100%
Float Days	0	1	2	
Weighted Float Days	0	0.64	0.10	0.64

August, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	134,700	238,233	31,339	
2	(19,953)	387,615	73,101	
3	(27,036)	290,424	70,756	
4	52,653	186,417	9,595	
7	76,021	333,385	20,051	
8	1,213,492	151,103	19,387	
9	626,331	553,400	142,132	
10	(94,172)	424,464	34,572	
11	(13,446)	836,978	48,833	
14	361,844	551,821	48,388	
16	1,216,664	432,803	16,344	
16	877,257	461,169	11,487	
17	34,443	390,362	68,835	
18	(69,813)	111,638	68,175	
21	474,278	421,631	13,304	
22	1,203,118	188,520	24,464	
23	387,482	168,466	22,956	
24	(3,301)	192,720	15,516	
25	16,089	162,202	137,982	
26	155,913	505,681	54,038	
29	231,750	216,775	53,047	
30	88,317	229,484	13,759	
31	11,436	185,158	63,968	
Total	6,739,666	7,496,146	1,064,594	15,299,736
% of Available Funds	44%	49%	7%	100%
Float Days	0	1	2	
Weighted Float Days	0	0.49	0.14	0.63

September, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	2,376	416,778	23,786	
5	64,392	412,489	44,624	
6	104,356	446,815	64,756	
7	655,214	294,863	66,261	
8	(10,508)	330,934	18,008	
11	696,766	457,654	18,964	
12	1,265,568	327,363	15,664	
13	471,458	620,465	21,398	
14	8,025	420,590	13,941	
15	22,596	212,882	5,445	
16	288,500	324,720	11,486	
17	1,714,337	335,187	175,044	
18	77,054	336,419	20,779	
21	(3,063)	187,287	8,205	
22	26,786	218,668	3,602	
25	996,847	530,011	24,703	
26	47,488	183,935	28,181	
27	1,729	250,382	13,589	
28	12,051	159,603	10,345	
29	18,984	132,145	48,166	
Total	6,421,849	6,792,680	659,907	13,854,836
% of Available Funds	46%	49%	5%	100%
Float Days	0	1	2	
Weighted Float Days	0	0.49	0.09	0.58

October, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
2	44,005	332,465	28,372	
3	59,439	654,100	38,812	
4	18,995	240,430	85,064	
5	288,711	697,293	40,739	
6	(6,149)	611,214	25,724	
10	86,263	554,177	27,422	
11	1,248,330	500,771	40,266	
12	37,230	146,542	41,839	
13	40,035	376,841	37,949	
16	340,157	201,606	7,568	
17	1,162,433	611,908	155,638	
18	294,489	686,751	10,898	
19	32,845	267,788	24,973	
20	(10,870)	97,251	18,036	
23	227,429	447,787	6,471	
24	720,383	66,970	5,819	
25	179,488	134,694	7,793	
26	13,862	82,672	7,791	
27	7,339	205,969	27,888	
30	47,809	272,860	35,902	
31	112,827	167,366	26,981	
Total	4,965,140	7,136,445	684,576	12,786,161
% of Available Funds	39%	56%	5%	100%
Float Days	0	1	2	
Weighted Float Days	0	0.58	0.11	0.67

November, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	117,437	239,266	173,715	
2	(144,738)	399,821	46,417	
3	(24,559)	156,856	16,061	
6	79,733	603,508	16,130	
7	778,135	193,294	42,389	
8	261,812	281,892	38,821	
9	(162,719)	542,232	12,241	
10	97,894	407,625	9,356	
13	46,706	432,625	32,239	
14	1,077,338	386,522	80,125	
15	294,040	331,363	17,157	
16	(3,680)	186,427	5,173	
17	8,154	224,893	2,780	
20	432,721	186,553	4,999	
21	758,182	98,681	6,446	
22	323,786	276,481	88,325	
24	(69,333)	284,087	5,381	
27	43,114	103,768	15,660	
28	338,887	135,125	9,789	
29	64,236	203,644	5,115	
30	30,230	214,567	89,175	
Total	4,489,980	5,937,161	696,421	11,122,562
% of Available Funds	40%	53%	6%	100%
Float Days	0	1	2	
Weighted Float Days	0	0.53	0.16	0.66

December, 2023	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	(52,693)	151,122	20,229	
4	86,491	386,786	16,579	
5	(7,428)	87,893	193,658	
6	486,895	397,805	174,453	
7	(28,108)	179,716	30,485	
8	1,734	634,130	24,564	
11	351,598	634,130	12,966	
12	795,337	269,369	8,142	
13	239,945	232,368	8,250	
14	27,866	421,578	26,871	
15	(9,810)	316,198	14,124	
18	351,530	273,965	32,684	
19	835,651	394,345	12,958	
20	12,673	164,142	1,943	
21	12,919	152,584	20,005	
22	757	202,926	11,399	
26	225,451	309,814	6,996	
27	1,045,330	241,628	30,424	
28	(4,083)	205,361	13,828	
29	15,100	140,480	17,544	
Total	4,381,827	5,539,438	579,094	10,500,159
% of Available Funds	42%	53%	6%	100%
Float Days	0	1	2	
Weighted Float Days	0	0.53	0.11	0.64

Unitil Energy Systems, Inc.
Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023
Summary of Transmission

Line No	<u>Supplier</u>	<u>Transmission Expense</u>	<u>(Lead) Lag Days</u>	<u>Weighted Dollar Days</u>
1				
2				
3	Eversource	\$ 2,804,184	47.78	\$ 133,994,137
4	Eversource_2	3,792,351	70.80	268,490,574
5	Independent System Operator	27,473,296	57.53	1,580,479,995
6	Independent System Operator _2	446,394	57.50	25,667,021
7	Independent System Operator _3	8,898	59.20	526,803
8	Independent System Operator _4	72,538	57.64	4,181,174
9	Utility Services, Inc.	4,225	21.92	92,625
10	Total	<u>\$34,601,886</u>	<u>58.19</u>	<u>\$2,013,432,330</u>
11				
12				
13				
14				
15		<u>Revenue (Lead) Lag Days</u>	<u>Expense (Lead) / Lag Days</u>	<u>Net (Lead) Lag Days</u>
16		54.39	58.19	(3.80)
17				
18				
19				
20				

Unitil Energy Systems, Inc.
Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Eversource

#10-29-13-32-565-00-01

Line No	Month	Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 226,838	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	1/27/23 12:00 AM	41.50	\$ 9,413,797	WIRE
3	March-23	226,838	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/15/23 12:00 AM	57.50	13,043,213	WIRE
4	April-23	230,970	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/7/23 12:00 AM	51.00	11,779,465	WIRE
5	May-23	226,838	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/2/23 12:00 AM	46.50	10,547,990	WIRE
6	June-23	226,838	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/2/23 12:00 AM	47.00	10,661,409	WIRE
7	June-23	226,838	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	6/23/23 12:00 AM	37.50	8,506,443	WIRE
8	July-23	237,049	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	7/26/23 12:00 AM	40.00	9,481,975	WIRE
9	September-23	280,060	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/6/23 12:00 AM	51.50	14,423,072	WIRE
10	October-23	231,860	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/18/23 12:00 AM	62.50	14,491,258	WIRE
11	November-23	286,935	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/1/23 12:00 AM	46.00	13,199,010	WIRE
12	December-23	202,263	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/4/23 12:00 AM	48.50	9,809,760	WIRE
13	December-23	200,855	11/1/23 12:00 AM	12/1/23 12:00 AM	30	11/16/23 12:00 AM	12/29/23 12:00 AM	43.00	8,636,744	WIRE
14										
15		<u>\$ 2,804,184</u>			<u>365</u>			47.78	<u>\$ 133,994,137</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Eversource (Northeast Utilities)
#10-29-13-32-565-00-00

Line No	Month	Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	February-23	\$ 283,437	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	2/6/23 12:00 AM	82.00	\$ 23,241,834	WIRE
3	March-23	302,212	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	3/3/23 12:00 AM	76.50	23,119,218	WIRE
4	April-23	296,336	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	4/4/23 12:00 AM	77.50	22,966,035	WIRE
5	April-23	346,038	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/21/23 12:00 AM	65.00	22,492,493	WIRE
6	May-23	270,359	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/26/23 12:00 AM	70.50	19,060,281	WIRE
7	June-23	241,856	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/23/23 12:00 AM	68.00	16,446,223	WIRE
8	July-23	286,637	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	7/27/23 12:00 AM	71.50	20,494,535	WIRE
9	August-23	293,147	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/23/23 12:00 AM	68.00	19,933,965	WIRE
10	September-23	426,692	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/22/23 12:00 AM	67.50	28,801,710	WIRE
11	October-23	350,225	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/25/23 12:00 AM	69.50	24,340,624	WIRE
12	November-23	409,403	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/22/23 12:00 AM	67.00	27,429,986	WIRE
13	December-23	286,010	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/26/23 12:00 AM	70.50	20,163,671	WIRE
14										
15		<u>\$ 3,792,351</u>			<u>365</u>			70.80	<u>\$ 268,490,574</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Independent System Operator (ISO)
#10-29-13-32-565-01-00

Line No	Month	Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 2,145,895	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	1/17/23 12:00 AM	62.00	\$ 133,045,476	WIRE
3	February-23	2,271,578	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	2/13/23 12:00 AM	58.50	132,887,333	WIRE
4	March-23	2,133,364	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/13/23 12:00 AM	55.50	118,401,713	WIRE
5	April-23	2,483,527	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/10/23 12:00 AM	54.00	134,110,468	WIRE
6	May-23	1,942,686	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/15/23 12:00 AM	59.50	115,589,824	WIRE
7	June-23	1,746,808	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/12/23 12:00 AM	57.00	99,568,044	WIRE
8	July-23	2,071,103	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	7/10/23 12:00 AM	54.50	112,875,125	WIRE
9	August-23	2,110,978	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/14/23 12:00 AM	59.00	124,547,677	WIRE
10	September-23	3,057,437	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/11/23 12:00 AM	56.50	172,745,218	WIRE
11	October-23	2,515,539	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/16/23 12:00 AM	60.50	152,190,126	WIRE
12	November-23	2,932,367	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/13/23 12:00 AM	58.00	170,077,266	WIRE
13	December-23	2,062,013	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/11/23 12:00 AM	55.50	114,441,724	WIRE
14										
15		<u>\$ 27,473,296</u>			<u>365</u>			57.53	<u>\$ 1,580,479,995</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Independent System Operator (ISO)
#10-29-13-32-561-04-00

Line No	Month	Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 32,326	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	1/17/23 12:00 AM	62.00	\$ 2,004,189	WIRE
3	February-23	34,553	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	2/13/23 12:00 AM	58.50	2,021,330	WIRE
4	March-23	34,627	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/13/23 12:00 AM	55.50	1,921,821	WIRE
5	April-23	40,896	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/10/23 12:00 AM	54.00	2,208,393	WIRE
6	May-23	31,691	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/15/23 12:00 AM	59.50	1,885,610	WIRE
7	June-23	28,290	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/12/23 12:00 AM	57.00	1,612,553	WIRE
8	July-23	33,738	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	7/10/23 12:00 AM	54.50	1,838,695	WIRE
9	August-23	34,886	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/14/23 12:00 AM	59.00	2,058,250	WIRE
10	September-23	50,544	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/11/23 12:00 AM	56.50	2,855,713	WIRE
11	October-23	41,812	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/16/23 12:00 AM	60.50	2,529,641	WIRE
12	November-23	49,015	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/13/23 12:00 AM	58.00	2,842,842	WIRE
13	December-23	34,018	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/11/23 12:00 AM	55.50	1,887,986	WIRE
14										
15		<u>\$ 446,394</u>			<u>365</u>			57.50	<u>\$ 25,667,021</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Independent System Operator (ISO)
#10-29-13-32-561-08-00

Line No	Month	Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 232	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	1/17/23 12:00 AM	62.00	\$ 14,392	WIRE
3	February-23	1	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	2/13/23 12:00 AM	58.50	31	WIRE
4	March-23	1	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/13/23 12:00 AM	55.50	31	WIRE
5	April-23	1	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/10/23 12:00 AM	54.00	44	WIRE
6	May-23	1	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/15/23 12:00 AM	59.50	41	WIRE
7	June-23	1	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/12/23 12:00 AM	57.00	32	WIRE
8	July-23	1	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	7/10/23 12:00 AM	54.50	31	WIRE
9	August-23	1	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/14/23 12:00 AM	59.00	41	WIRE
10	September-23	1	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/11/23 12:00 AM	56.50	32	WIRE
11	October-23	4,895	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/16/23 12:00 AM	60.50	296,126	WIRE
12	November-23	2,784	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/13/23 12:00 AM	58.00	161,464	WIRE
13	December-23	983	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/11/23 12:00 AM	55.50	54,538	WIRE
14										
15		<u>\$ 8,898</u>			<u>365</u>			59.20	<u>\$ 526,803</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Independent System Operator (ISO)
#10-29-13-32-575-07-00

Line No	Month	Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 4,748	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	1/17/23 12:00 AM	62.00	\$ 294,377	WIRE
3	February-23	5,497	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	2/13/23 12:00 AM	58.50	321,597	WIRE
4	March-23	5,844	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/13/23 12:00 AM	55.50	324,326	WIRE
5	April-23	5,206	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/10/23 12:00 AM	54.00	281,141	WIRE
6	May-23	6,321	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/15/23 12:00 AM	59.50	376,091	WIRE
7	June-23	6,279	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/12/23 12:00 AM	57.00	357,883	WIRE
8	July-23	5,155	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	7/10/23 12:00 AM	54.50	280,969	WIRE
9	August-23	4,991	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/14/23 12:00 AM	59.00	294,466	WIRE
10	September-23	6,484	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/11/23 12:00 AM	56.50	366,321	WIRE
11	October-23	8,827	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/16/23 12:00 AM	60.50	534,043	WIRE
12	November-23	7,255	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/13/23 12:00 AM	58.00	420,771	WIRE
13	December-23	5,931	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/11/23 12:00 AM	55.50	329,190	WIRE
14										
15		<u>\$ 72,538</u>			<u>365</u>			57.64	<u>\$ 4,181,174</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Utility Services Inc.
#10-29-12-32-561-05-00

Line No	Month	Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	March-23	\$ 325	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	3/9/23 12:00 AM	82.50	\$ 26,813	CHECK
3	March-23	325	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/9/23 12:00 AM	51.50	16,738	CHECK
4	March-23	325	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	3/9/23 12:00 AM	22.00	7,150	CHECK
5	March-23	325	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	4/6/23 12:00 AM	20.50	6,663	CHECK
6	May-23	325	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	5/10/23 12:00 AM	24.00	7,800	CHECK
7	May-23	325	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	6/1/23 12:00 AM	15.50	5,038	CHECK
8	June-23	325	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	6/29/23 12:00 AM	13.00	4,225	CHECK
9	July-23	325	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	8/3/23 12:00 AM	17.50	5,688	CHECK
10	August-23	325	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	8/24/23 12:00 AM	7.50	2,438	CHECK
11	September-23	325	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	9/21/23 12:00 AM	5.00	1,625	CHECK
12	October-23	325	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	10/26/23 12:00 AM	9.50	3,088	CHECK
13	November-23	325	11/1/23 12:00 AM	12/1/23 12:00 AM	30	11/16/23 12:00 AM	11/21/23 12:00 AM	5.00	1,625	CHECK
14	December-23	325	12/1/23 12:00 AM	1/1/24 12:00 AM	31	12/16/23 12:00 PM	12/28/23 12:00 AM	11.50	3,738	CHECK
15										
16		\$ 4,225						21.92	\$ 92,625	
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023
Summary of Non-Transmission

Line No	Supplier	Non-Transmission Expense	(Lead) Lag Days	Weighted Dollar Days
1				
2				
3	Independent System Operator	\$ (20)	56.59	\$ (1,141)
4	Independent System Operator _2	607	57.19	34,741
5	Independent System Operator _3	9,282	2.50	23,205
6	Independent System Operator _4	(86,102)	59.52	(5,124,486)
7	Independent System Operator _5	(117,100)	56.92	(6,665,593)
8	Energy Services Group LLC	177,829	41.08	7,305,516
9	CGI Technologies and Solutions, Inc.	173,288	44.35	7,684,689
10	Connecticut Municipal Electric	15,000	(8.71)	(130,625)
11	North American Energy	2,000	(248.00)	(496,000)
12	Patnaude	529	112.50	59,484
13	Department of Energy	6,840	82.15	561,932
14	Total	<u>\$ 182,154</u>	<u>17.85</u>	<u>\$ 3,251,724</u>
15				
16				
17				
18				
19		<u>Revenue (Lead) Lag</u> <u>Days</u>	<u>Expense (Lead) /</u> <u>Lag Days</u>	<u>Net (Lead) Lag Days</u>
20		54.39	17.85	36.54

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Independent System Operator (ISO)
#10-29-13-32-555-88-00

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ (2)	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	1/17/23 12:00 AM	62.00	\$ (127)	WIRE
3	February-23	0	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	2/13/23 12:00 AM	58.50	15	WIRE
4	March-23	(0)	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/13/23 12:00 AM	55.50	(1)	WIRE
5	April-23	(5)	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/10/23 12:00 AM	54.00	(294)	WIRE
6	May-23	(8)	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/15/23 12:00 AM	59.50	(449)	WIRE
7	June-23	(0)	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/12/23 12:00 AM	57.00	(22)	WIRE
8	July-23	(6)	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	7/10/23 12:00 AM	54.50	(304)	WIRE
9	August-23	0	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/14/23 12:00 AM	59.00	4	WIRE
10	September-23	(1)	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/11/23 12:00 AM	56.50	(84)	WIRE
11	October-23	2	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/16/23 12:00 AM	60.50	106	WIRE
12	November-23	(0)	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/13/23 12:00 AM	58.00	(1)	WIRE
13	December-23	0	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/11/23 12:00 AM	55.50	16	WIRE
14										
15		\$ (20)			365			56.59	\$ (1,141)	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Independent System Operator (ISO)
#10-29-13-32-555-89-00

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 10	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	1/17/23 12:00 AM	62.00	\$ 632	WIRE
3	February-23	7	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	2/13/23 12:00 AM	58.50	393	WIRE
4	March-23	15	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/13/23 12:00 AM	55.50	845	WIRE
5	April-23	56	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/10/23 12:00 AM	54.00	3,043	WIRE
6	May-23	65	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/15/23 12:00 AM	59.50	3,862	WIRE
7	June-23	16	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/12/23 12:00 AM	57.00	928	WIRE
8	July-23	78	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	7/10/23 12:00 AM	54.50	4,244	WIRE
9	August-23	22	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/14/23 12:00 AM	59.00	1,270	WIRE
10	September-23	36	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/11/23 12:00 AM	56.50	2,022	WIRE
11	October-23	28	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/16/23 12:00 AM	60.50	1,687	WIRE
12	November-23	228	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/13/23 12:00 AM	58.00	13,196	WIRE
13	December-23	47	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/11/23 12:00 AM	55.50	2,618	WIRE
14										
15		<u>\$ 607</u>			<u>365</u>			57.19	<u>\$ 34,741</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Independent System Operator (ISO)

#10-29-01-32-928-01-01

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ -			-			-	\$ -	
3	February-23	-			-			-	-	
4	March-23	-			-			-	-	
5	April-23	-			-			-	-	
6	May-23	-			-			-	-	
7	June-23	-			-			-	-	
8	July-23	9,282	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	7/19/23 12:00 AM	2.50	23,205	WIRE
9	August-23	-			-			-	-	
10	September-23	-			-			-	-	
11	October-23	-			-			-	-	
12	November-23	-			-			-	-	
13	December-23	-			-			-	-	
14										
15		<u>\$ 9,282</u>						2.50	<u>\$ 23,205</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Independent System Operator (ISO)
#10-29-01-32-555-01-10

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ (49,521)	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	1/17/23 12:00 AM	62.00	\$ (3,070,326)	WIRE
3	February-23	(12,009)	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	2/13/23 12:00 AM	58.50	(702,514)	WIRE
4	March-23	(16,522)	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/13/23 12:00 AM	55.50	(916,965)	WIRE
5	April-23	(8,050)	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/10/23 12:00 AM	54.00	(434,682)	WIRE
6	May-23	-	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/15/23 12:00 AM	59.50	-	WIRE
7	June-23	-	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/12/23 12:00 AM	57.00	-	WIRE
8	July-23	-	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	7/10/23 12:00 AM	54.50	-	WIRE
9	August-23	-	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/14/23 12:00 AM	59.00	-	WIRE
10	September-23	-	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/11/23 12:00 AM	56.50	-	WIRE
11	October-23	-	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/16/23 12:00 AM	60.50	-	WIRE
12	November-23	-	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/13/23 12:00 AM	58.00	-	WIRE
13	December-23	-	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/11/23 12:00 AM	55.50	-	WIRE
14										
15		<u>\$ (86,102)</u>			<u>365</u>			59.52	<u>\$ (5,124,486)</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Independent System Operator (ISO)

#10-29-13-32-555-01-00

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ -	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	1/17/23 12:00 AM	62.00	\$ -	WIRE
3	February-23	-	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	2/13/23 12:00 AM	58.50	-	WIRE
4	March-23	-	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/13/23 12:00 AM	55.50	-	WIRE
5	April-23	-	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/10/23 12:00 AM	54.00	-	WIRE
6	May-23	(13,556)	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/15/23 12:00 AM	59.50	(806,567)	WIRE
7	June-23	(3,259)	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/12/23 12:00 AM	57.00	(185,780)	WIRE
8	July-23	(40,274)	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	7/10/23 12:00 AM	54.50	(2,194,938)	WIRE
9	August-23	(18,094)	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/14/23 12:00 AM	59.00	(1,067,540)	WIRE
10	September-23	(13,254)	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	9/11/23 12:00 AM	56.50	(748,868)	WIRE
11	October-23	(11,480)	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/16/23 12:00 AM	60.50	(694,567)	WIRE
12	November-23	(5,496)	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/13/23 12:00 AM	58.00	(318,746)	WIRE
13	December-23	(11,686)	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/11/23 12:00 AM	55.50	(648,587)	WIRE
14										
15		<u>\$ (117,100)</u>			<u>365</u>			56.92	<u>\$ (6,665,593)</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Energy Services Group LLC
#10-29-13-32-923-12-00

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 11,969	11/1/22 12:00 AM	12/1/22 12:00 AM	30	11/16/22 12:00 AM	1/4/23 12:00 AM	49.00	\$ 586,482	ACH
3	January-23	11,969	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	1/23/23 12:00 AM	37.50	448,838	ACH
4	February-23	11,969	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	2/22/23 12:00 AM	36.50	436,869	ACH
5	March-23	1,020	2/28/23 12:00 AM	3/1/23 12:00 AM	1	2/28/23 12:00 PM	3/15/23 12:00 AM	14.50	14,790	ACH
6	April-23	12,078	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/3/23 12:00 AM	47.00	567,674	ACH
7	April-23	12,187	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	4/24/23 12:00 AM	38.50	469,211	ACH
8	May-23	12,296	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	5/24/23 12:00 AM	38.00	467,265	ACH
9	June-23	12,406	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	6/26/23 12:00 AM	40.50	502,426	ACH
10	June-23	1,020	6/15/23 12:00 AM	6/16/23 12:00 AM	1	6/15/23 12:00 PM	6/26/23 12:00 AM	10.50	10,710	ACH
11	July-23	12,406	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	7/26/23 12:00 AM	40.00	496,223	ACH
12	August-23	12,406	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	8/30/23 12:00 AM	44.50	552,048	ACH
13	October-23	1,020	9/20/23 12:00 AM	9/21/23 12:00 AM	1	9/20/23 12:00 PM	10/2/23 12:00 AM	11.50	11,730	ACH
14	October-23	12,406	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/2/23 12:00 AM	46.50	576,859	ACH
15	October-23	1,020	10/13/23 12:00 AM	10/14/23 12:00 AM	1	10/13/23 12:00 PM	10/23/23 12:00 AM	9.50	9,690	ACH
16	October-23	12,406	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	10/25/23 12:00 AM	39.00	483,818	ACH
17	November-23	1,020	10/23/23 12:00 AM	10/24/23 12:00 AM	1	10/23/23 12:00 PM	11/1/23 12:00 AM	8.50	8,670	ACH
18	December-23	12,624	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	12/4/23 12:00 AM	48.50	612,257	ACH
19	December-23	25,609	11/1/23 12:00 AM	12/1/23 12:00 AM	30	11/16/23 12:00 AM	12/27/23 12:00 AM	41.00	1,049,956	ACH
20										
21		\$ 177,829						41.08	\$ 7,305,516	
22										
23										
24										
25										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: CGI Technologies and Solutions, Inc.
#10-29-13-32-923-12-00

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 15,468	12/1/22 12:00 AM	1/1/23 12:00 AM	31	12/16/22 12:00 PM	1/27/23 12:00 AM	41.50	\$ 641,936	ACH
3	March-23	15,484	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	3/6/23 12:00 AM	48.50	750,966	ACH
4	April-23	15,491	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	4/3/23 12:00 AM	47.00	728,077	ACH
5	May-23	15,496	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	5/1/23 12:00 AM	45.50	705,084	ACH
6	May-23	15,983	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	5/24/23 12:00 AM	38.00	607,361	ACH
7	June-23	15,988	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	6/26/23 12:00 AM	40.50	647,518	ACH
8	August-23	15,996	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	8/2/23 12:00 AM	47.00	751,794	ACH
9	August-23	16,005	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	8/30/23 12:00 AM	44.50	712,223	ACH
10	October-23	15,781	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	10/4/23 12:00 AM	48.50	765,391	ACH
11	November-23	15,788	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	11/1/23 12:00 AM	46.00	726,262	ACH
12	December-23	15,807	11/1/23 12:00 AM	12/1/23 12:00 AM	30	11/16/23 12:00 AM	12/27/23 12:00 AM	41.00	648,079	ACH
13										
14		<u>\$ 173,288</u>						44.35	<u>\$ 7,684,689</u>	
15										
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: CT Municipal Electric
#10-29-13-32-556-00-00

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 1,250	1/1/23 12:00 AM	2/1/23 12:00 AM	31	1/16/23 12:00 PM	1/27/23 12:00 AM	10.50	\$ 13,125	ACH
3	February-23	1,250	2/1/23 12:00 AM	3/1/23 12:00 AM	28	2/15/23 12:00 AM	2/8/23 12:00 AM	(7.00)	(8,750)	ACH
4	March-23	1,250	3/1/23 12:00 AM	4/1/23 12:00 AM	31	3/16/23 12:00 PM	3/8/23 12:00 AM	(8.50)	(10,625)	ACH
5	April-23	1,250	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	4/5/23 12:00 AM	(11.00)	(13,750)	ACH
6	May-23	1,250	5/1/23 12:00 AM	6/1/23 12:00 AM	31	5/16/23 12:00 PM	5/3/23 12:00 AM	(13.50)	(16,875)	ACH
7	June-23	1,250	6/1/23 12:00 AM	7/1/23 12:00 AM	30	6/16/23 12:00 AM	6/5/23 12:00 AM	(11.00)	(13,750)	ACH
8	July-23	1,250	7/1/23 12:00 AM	8/1/23 12:00 AM	31	7/16/23 12:00 PM	7/5/23 12:00 AM	(11.50)	(14,375)	ACH
9	August-23	1,250	8/1/23 12:00 AM	9/1/23 12:00 AM	31	8/16/23 12:00 PM	8/2/23 12:00 AM	(14.50)	(18,125)	ACH
10	September-23	1,250	9/1/23 12:00 AM	10/1/23 12:00 AM	30	9/16/23 12:00 AM	9/6/23 12:00 AM	(10.00)	(12,500)	ACH
11	October-23	1,250	10/1/23 12:00 AM	11/1/23 12:00 AM	31	10/16/23 12:00 PM	10/11/23 12:00 AM	(5.50)	(6,875)	ACH
12	November-23	1,250	11/1/23 12:00 AM	12/1/23 12:00 AM	30	11/16/23 12:00 AM	11/6/23 12:00 AM	(10.00)	(12,500)	ACH
13	December-23	1,250	12/1/23 12:00 AM	1/1/24 12:00 AM	31	12/16/23 12:00 PM	12/4/23 12:00 AM	(12.50)	(15,625)	ACH
14										
15		<u>\$ 15,000</u>			<u>365</u>			(8.71)	<u>\$ (130,625)</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: North American Energy
#10-29-01-32-928-03-00

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ 2,000	4/1/23 12:00 AM	4/1/24 12:00 AM	366	10/1/23 12:00 AM	1/26/23 12:00 AM	(248.00)	\$ (496,000)	CHECK
3	February-23	-			-			-	-	
4	March-23	-			-			-	-	
5	April-23	-			-			-	-	
6	May-23	-			-			-	-	
7	June-23	-			-			-	-	
8	July-23	-			-			-	-	
9	August-23	-			-			-	-	
10	September-23	-			-			-	-	
11	October-23	-			-			-	-	
12	November-23	-			-			-	-	
13	December-23	-			-			-	-	
14										
15		<u>\$ 2,000</u>			<u>366</u>			(248.00)	<u>\$ (496,000)</u>	

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Patnaude

#10-29-01-32-928-03-00

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	January-23	\$ -			-			-	\$ -	
3	February-23	-			-			-	-	
4	March-23	-			-			-	-	
5	April-23	-			-			-	-	
6	May-23	-			-			-	-	
7	June-23	-			-			-	-	
8	July-23	-			-			-	-	
9	August-23	-			-			-	-	
10	September-23	-			-			-	-	
11	October-23	529	6/13/23 12:00 AM	6/14/23 12:00 AM	1	6/13/23 12:00 PM	10/4/23 12:00 AM	112.50	59,484	ACH
12	November-23	-			-			-	-	
13	December-23	-			-			-	-	
14										
15		<u>\$ 529</u>						112.50	<u>\$ 59,484</u>	
16										
17										
18										
19										
20										

Unitil Energy Systems, Inc.
Non-Transmission - Calculation of (Lead) Lag
12 Months Ended December 31, 2023

Supplier: Department of Energy
#10-29-13-32-923-11-00

Line No	Month	Non-Transmission Expense	Service From	Service To	Total Days	Mid-Point Calculation Date	Payment Date	(Lead) Lag Days	Weighted Dollar Days	Payment Type
1										
2	May-23	\$ 2,058	2/1/23 12:00 AM	4/1/23 12:00 AM	59	3/2/23 12:00 PM	5/18/23 12:00 AM	76.50	\$ 157,459	CHECK
3	June-23	2,143	4/1/23 12:00 AM	5/1/23 12:00 AM	30	4/16/23 12:00 AM	6/1/23 12:00 AM	46.00	98,565	CHECK
4	August-23	781	4/1/23 12:00 AM	6/1/23 12:00 AM	61	5/1/23 12:00 PM	8/24/23 12:00 AM	114.50	89,429	CHECK
5	October-23	1,858	6/1/23 12:00 AM	8/1/23 12:00 AM	61	7/1/23 12:00 PM	10/26/23 12:00 AM	116.50	216,479	CHECK
6										
7		<u>\$ 6,840</u>						82.15	<u>\$ 561,932</u>	
8										
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