

UNITIL ENERGY SYSTEMS, INC.

DEFAULT SERVICE AND  
RENEWABLE ENERGY CREDITS

LEAD/LAG STUDY

FOR G1 AND NON-G1 CUSTOMERS

2017

Unitil Energy Systems, Inc.  
Default Service Costs and Renewable Energy Credits Lead / Lag Study  
For the Period January 1, 2017 Through December 31, 2017  
Summary of Results

The results of the Unitil Energy Systems, Inc. Default Service ("DS") and Renewable Energy Credits ("RECs") Lead / Lag Study ("Study") indicate a net lead period for DS and REC costs of 14.62 days for G1 Customers and a net lag period of 7.12 days for Non-G1 Customers. The procedures used to develop the Study are as follows:

**I. Determination of Revenue Lag Period**

The revenue lag period includes four calculations in determining the total lag – receipt of electric service to meter reading, meter reading to recording of accounts receivable, billing to collection, and collection to receipt of available funds.

**A. Receipt of Electric Service to Meter Reading**

There are 365 days in the test year January through December 2017, including one 28 day month, four 30 day months, and seven 31 day months. The weighted average day delay is 15.21 days between the time a customer receives service until the meter is read. See page 5 of this Study.

**B. Meter Reading to Recording of Accounts Receivable**

The average delay time from meter reading to recording of accounts receivable is 1.09 days. See pages 6 - 10 of this Study.

**C. Billing to Collection**

Billing to Collection lag days are determined by dividing accounts receivable sales by daily electric revenues. The daily average revenues are obtained from the monthly electric sales revenues divided by the number of days in the month. This weighted average delay period from Billing to Collection is 28.30 days for G1 customers and 46.09 days for Non-G1 customers. See pages 11 and 12 of this Study.

**D. Collection to Receipt of Available Funds**

On average, 1.72 days are required for checks deposited at the Company's banks to be considered available funds for banking transaction purposes. See pages 13 - 19 of this Study.

The sum of all revenue lag periods is 46.32 days for G1 customers and 64.11 days for Non-G1 customers. See page 4 of this Study.

Unitil Energy Systems, Inc.  
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## II. Determination of the Expense Lead Period

The expense lead period consists of the lead in payment of DS supplier costs and RECs, and is calculated for the G1 and Non-G1 customer classes based upon the following calculations: lead period, average days lead, weighted cost, days lead and weighted days lead.

### A. Lead Period

The lead period is generally based on a monthly cycle and consists of (1) the average days in the period that DS purchases were provided or RECs were required; and (2) the billing period from the end of the period up to and including the payment date. See pages 20 through 23 of the Study.

### B. Average Days Lead

The bills for each G-1 and Non-G-1 DS supplier are analyzed to determine the days lead. The REC days lead are also analyzed. Average days lead is calculated by multiplying the lead period by the weighted percentage of aggregate costs. The weighted days are then totaled to obtain the average days lead period for DS suppliers and for the RECs. See pages 20 and 22 of this Study.

### C. Weighted Cost

The cost of purchasing default service and RECs is divided by the total combined costs to determine a weighted cost. See pages 20 and 22 of this Study.

### D. Weighted Days Lead

The weighted cost is multiplied by the average days lead to calculate the weighted days lead, resulting in 60.94 days for G1 customers and 56.99 days for Non-G1 customers. See pages 20 and 22 of this Study.

## III. Summary

The results of the Study indicate a net Purchased Power lead period of 14.62 days for G1 customers and net lag period of 7.12 days for Non-G1 customers. See page 4 of this Study.

**Unitil Energy Systems, Inc.**  
**Number of Days Delay Between Receipt of Revenue and**  
**Payment of Default Service Costs and Renewable Energy Credits**  
**Based on 2017 Data**

Line No.	Description	G1 Customers		Non-G1 Customers	
		Page Reference	Number of Days Delay	Page Reference	Number of Days Delay
1	Revenue Lag:				
2	Receipt of Electric Service to Meter Reading	5	15.21 days	5	15.21 days
3	Meter Reading to Recording of Accounts Receivable	6 - 10	1.09 days	6 - 10	1.09 days
4	Billing to Collection	11	28.30 days	12	46.09 days
5	Collection to Receipt of Available Funds	13 - 19	<u>1.72 days</u>	13 - 19	<u>1.72 days</u>
6	Subtotal Revenue Lag Days		46.32 days		64.11 days
	Less: Lead in Payment of Default Service Costs and				
7	Renewable Energy Credits	20	<u>60.94 days</u>	22	<u>56.99 days</u>
8	Total Default Service and Renewable Energy Credit Lag (Line 6 Less Line 7)		<u><u>-14.62 days</u></u>		<u><u>7.12 days</u></u>

**Receipt of Electric Service to Meter Reading  
Average Days Delay**

January 1, 2017 to December 31, 2017 Number of Days

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	365 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**

<u>Month</u>	<u>Average Days</u>
January 2017	1.07
February 2017	1.04
March 2017	1.05
April 2017	1.04
May 2017	1.05
June 2017	1.07
July 2017	1.04
August 2017	1.25
September 2017	1.03
October 2017	1.26
November 2017	1.15
December 2017	1.04
Average	<u><u>1.09</u></u>

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

**January 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Weighted Days Lag
1	69,608	93.36%	1	0.93
2	4,711	6.32%	2	0.13
3	186	0.25%	3	0.01
4	14	0.02%	4	0.00
5	9	0.01%	5	0.00
6	5	0.01%	6	0.00
7	6	0.01%	7	0.00
8-14	17	0.02%	11	0.00
Over 14	3	0.00%	14	0.00
<b>Total</b>	<b>74,559</b>	<b>100.00%</b>		<b>1.07</b>

**February 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Weighted Days Lag
1	72,830	97.58%	1	0.98
2	1,472	1.97%	2	0.04
3	184	0.25%	3	0.01
4	88	0.12%	4	0.00
5	12	0.02%	5	0.00
6	6	0.01%	6	0.00
7	9	0.01%	7	0.00
8 to 14	16	0.02%	11	0.00
Over 14	18	0.02%	14	0.00
<b>Total</b>	<b>74,635</b>	<b>100.00%</b>		<b>1.04</b>

**March 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	72,179	96.58%	1	0.97
2	1,689	2.26%	2	0.05
3	666	0.89%	3	0.03
4	112	0.15%	4	0.01
5	34	0.05%	5	0.00
6	25	0.03%	6	0.00
7	5	0.01%	7	0.00
8 to 14	20	0.03%	11	0.00
Over 14	3	0.00%	14	0.00
<b>Total</b>	<b>74,733</b>	<b>100.00%</b>		<b>1.05</b>

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

**April 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	72,649	97.14%	1	0.97
2	1,696	2.27%	2	0.05
3	169	0.23%	3	0.01
4	96	0.13%	4	0.01
5	125	0.17%	5	0.01
6	17	0.02%	6	0.00
7	6	0.01%	7	0.00
8 to 14	10	0.01%	11	0.00
Over 14	17	0.02%	14	0.00
<b>Total</b>	<b>74,785</b>	<b>100.00%</b>		<b>1.04</b>

**May 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	72,723	97.13%	1	0.97
2	1,698	2.27%	2	0.05
3	211	0.28%	3	0.01
4	70	0.09%	4	0.00
5	42	0.06%	5	0.00
6	41	0.05%	6	0.00
7	41	0.05%	7	0.00
8 to 14	28	0.04%	11	0.00
Over 14	19	0.03%	14	0.00
<b>Total</b>	<b>74,873</b>	<b>100.00%</b>		<b>1.05</b>

**June 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	71,749	94.38%	1	0.94
2	3,485	4.58%	2	0.09
3	615	0.81%	3	0.02
4	93	0.12%	4	0.00
5	42	0.06%	5	0.00
6	8	0.01%	6	0.00
7	6	0.01%	7	0.00
8 to 14	11	0.01%	11	0.00
Over 14	12	0.02%	14	0.00
<b>Total</b>	<b>76,021</b>	<b>100.00%</b>		<b>1.07</b>



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

**July 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	84,449	98.23%	1	0.98
2	364	0.42%	2	0.01
3	842	0.98%	3	0.03
4	169	0.20%	4	0.01
5	64	0.07%	5	0.00
6	36	0.04%	6	0.00
7	19	0.02%	7	0.00
8 to 14	26	0.03%	11	0.00
Over 14	2	0.00%	14	0.00
<b>Total</b>	<b>85,971</b>	<b>100.00%</b>		<b>1.04</b>

**August 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	71,785	83.37%	1	0.83
2	8,199	9.52%	2	0.19
3	5,594	6.50%	3	0.19
4	199	0.23%	4	0.01
5	233	0.27%	5	0.01
6	36	0.04%	6	0.00
7	31	0.04%	7	0.00
8 to 14	29	0.03%	11	0.00
Over 14	2	0.00%	14	0.00
<b>Total</b>	<b>86,108</b>	<b>100.00%</b>		<b>1.25</b>

**September 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	84,959	98.73%	1	0.99
2	531	0.62%	2	0.01
3	245	0.28%	3	0.01
4	157	0.18%	4	0.01
5	60	0.07%	5	0.00
6	48	0.06%	6	0.00
7	14	0.02%	7	0.00
8 to 14	40	0.05%	11	0.01
Over 14	-	0.00%	14	-
<b>Total</b>	<b>86,054</b>	<b>100.00%</b>		<b>1.03</b>

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

**October 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	65,127	76.29%	1	0.76
2	18,757	21.97%	2	0.44
3	1,134	1.33%	3	0.04
4	250	0.29%	4	0.01
5	50	0.06%	5	0.00
6	11	0.01%	6	0.00
7	11	0.01%	7	0.00
8 to 14	28	0.03%	11	0.00
Over 14	5	0.01%	14	0.00
<b>Total</b>	<b>85,373</b>	<b>100.00%</b>		<b>1.26</b>

**November 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	68,467	86.60%	1	0.87
2	10,010	12.66%	2	0.25
3	106	0.13%	3	0.00
4	310	0.39%	4	0.02
5	90	0.11%	5	0.01
6	24	0.03%	6	0.00
7	14	0.02%	7	0.00
8 to 14	41	0.05%	11	0.01
Over 14	-	0.00%	14	-
<b>Total</b>	<b>79,062</b>	<b>100.00%</b>		<b>1.15</b>

**December 2017**

Days Lag	Number of Meters	Percent of Meters	Days Lag Multiplier	Wtd Days Lag
1	83,374	97.96%	1	0.98
2	1,167	1.37%	2	0.03
3	290	0.34%	3	0.01
4	172	0.20%	4	0.01
5	24	0.03%	5	0.00
6	6	0.01%	6	0.00
7	13	0.02%	7	0.00
8 to 14	30	0.04%	11	0.00
Over 14	33	0.04%	14	0.01
<b>Total</b>	<b>85,109</b>	<b>100.00%</b>		<b>1.04</b>

Unitil Energy Systems, Inc. Number Of Days Lag In Billing To Collection Twelve Months Average 1/17 - 12/17 G1 Customers				
Month	Days in Month	Electric Sales Revenues	Daily Average (1/Days)	Accounts Receivable Electric Sales
		(1)	(2)	(3)
2017				
January	31	1,542,309	49,752	1,213,682
February	28	1,558,219	55,651	1,131,587
March	31	1,413,094	45,584	989,774
April	30	1,475,948	49,198	962,899
May	31	1,530,869	49,383	973,851
June	30	1,669,183	55,639	1,185,981
July	31	1,139,140	36,746	1,854,223
August	31	1,168,186	37,683	1,779,203
September	30	1,184,881	39,496	1,784,321
October	31	1,985,060	64,034	1,865,847
Novemeber	30	1,741,333	58,044	1,573,993
December	31	2,027,949	65,418	1,850,920
Total		18,436,172	606,629	17,166,279
Average		1,536,348	50,552	1,430,523
Payment Lag Days (3/2)				28.30

Unitil Energy Systems, Inc. Number Of Days Lag In Billing To Collection Twelve Months Average 1/17 - 12/17 Non-G1 Customers				
Month	Days in Month	Electric Sales Revenues	Daily Average (1/Days)	Accounts Receivable Electric Sales
		(1)	(2)	(3)
2017				
January	31	10,463,157	337,521	13,176,773
February	28	9,376,069	334,860	13,018,466
March	31	9,096,251	293,427	11,884,332
April	30	8,685,790	289,526	11,592,325
May	31	7,991,216	257,781	10,453,929
June	30	9,115,056	303,835	12,838,264
July	31	6,981,371	225,206	15,236,110
August	31	6,648,484	214,467	15,150,482
September	30	6,318,941	210,631	14,733,790
October	31	9,767,047	315,066	13,983,360
Novemeber	30	8,848,790	294,960	13,410,947
December	31	13,652,848	440,414	16,647,248
Total		\$ 106,945,021	\$ 3,517,695	\$ 162,126,025
Average		\$ 8,912,085	\$ 293,141	\$ 13,510,502
Payment Lag Days (3/2)				46.09

**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**

2017	Percent of Funds				Weighted Lag Days		
	Available Same Day 0 Days Lag	1 Day Float 1Day Lag	2-Day Float 2 Days Lag	Total	1 Day	2 Days	Total
January	34%	62%	4%	100%	0.62	0.08	0.70
February	40%	56%	4%	100%	0.56	0.07	0.63
March	36%	55%	9%	100%	0.55	0.17	0.72
April	37%	60%	4%	100%	0.60	0.07	0.67
May	40%	55%	5%	100%	0.55	0.10	0.66
June	34%	60%	6%	100%	0.60	0.12	0.72
July	29%	64%	8%	100%	0.64	0.16	0.79
August	27%	66%	7%	100%	0.66	0.14	0.80
September	32%	62%	6%	100%	0.62	0.12	0.74
October	33%	61%	6%	100%	0.61	0.12	0.73
November	32%	62%	6%	100%	0.62	0.12	0.74
December	32%	62%	6%	100%	0.62	0.12	0.74

Average Weighted Lag Days for Availability of Funds 0.72 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	<u>0.72 days</u>
<b>Total Lag Days from Collection to Availability of Funds:</b>	<b><u><u>1.72 days</u></u></b>

Unitil Energy Systems, Inc.  
Remittance Accounts

January, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
3	317,319	448,834	20,525	
4	61,075	89,030	21,884	
5	80,954	214,177	19,484	
6	167,130	443,388	7,760	
9	451,235	807,108	20,271	
10	193,215	250,707	21,725	
11	125,219	193,917	20,638	
12	153,148	186,910	5,911	
13	159,894	118,501	16,207	
17	137,778	388,977	11,952	
18	36,458	135,502	7,290	
19	56,215	201,034	11,146	
20	39,730	104,549	7,734	
23	401,719	412,739	15,650	
24	131,949	78,297	26,860	
25	35,372	260,692	13,859	
26	56,391	138,466	31,971	
27	102,789	150,147	28,844	
30	132,256	575,922	21,049	
	<u>2,839,847</u>	<u>5,198,897</u>	<u>330,760</u>	<u>8,369,504</u>
% of Available Funds	34%	62%	4%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.62</u>	<u>0.08</u>	<u>0.70</u>

February, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	50,180	162,017	14,475	
2	135,540	217,645	10,439	
3	279,880	256,882	19,307	
6	514,800	751,580	47,547	
7	191,291	236,005	27,486	
8	48,696	205,359	10,659	
9	33,946	147,721	20,437	
10	212,302	198,685	21,736	
13	457,125	681,350	13,673	
14	206,368	45,618	6,395	
15	66,155	153,108	3,640	
16	66,879	125,910	11,290	
17	244,574	217,706	24,570	
21	437,973	380,083	20,898	
22	51,441	188,808	8,952	
23	74,475	164,653	11,016	
24	187,828	196,847	12,753	
27	223,567	493,795	13,392	
28	132,668	168,456	25,578	
	<u>3,615,688</u>	<u>4,992,228</u>	<u>324,243</u>	<u>8,932,159</u>
% of Available Funds	40%	56%	4%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.56</u>	<u>0.07</u>	<u>0.63</u>

Unitil Energy Systems, Inc.  
Remittance Accounts

March, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	77,405	254,371	5,775	
2	88,099	196,938	8,543	
3	95,004	270,539	35,756	
6	417,947	663,443	34,520	
7	211,689	192,334	66,879	
8	231	260,016	26,167	
9	24,908	186,130	5,324	
10	174,695	137,763	11,692	
13	513,148	677,199	21,108	
14	153,641	56,884	9,261	
15	68,754	207,505	3,702	
16	2,808	158,802	4,583	
17	307,618	111,175	6,270	
20	435,034	380,186	19,602	
21	148,002	120,594	6,697	
22	55,034	141,077	12,316	
23	55,156	139,411	9,635	
24	109,436	133,103	8,669	
27	353,357	378,340	28,278	
28	70,076	116,922	23,252	
29	49,687	262,142	13,557	
30	53,017	191,060	255,029	
31	170,396	224,372	254,158	
	<u>3,635,143</u>	<u>5,460,306</u>	<u>870,773</u>	<u>9,966,222</u>
% of Available Funds	36%	55%	9%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.55</u>	<u>0.17</u>	<u>0.72</u>

April, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
3	87,050	824,529	31,975	
4	189,629	247,096	28,508	
5	68,302	291,769	17,006	
6	53,491	278,291	14,298	
7	184,881	197,276	16,237	
10	408,781	547,523	24,767	
11	161,361	99,037	15,486	
12	113,022	121,135	23,942	
13	44,565	138,426	3,911	
14	200,227	164,634	2,591	
17	536,248	474,396	10,269	
18	141,919	51,043	10,907	
19	90,727	73,547	4,961	
20	58,703	206,356	3,216	
21	224,348	116,796	8,530	
24	294,349	430,770	17,600	
25	23,716	186,604	10,329	
26	64,213	156,645	12,014	
27	47,038	188,666	29,685	
28	51,572	143,793	13,476	
	<u>3,044,139</u>	<u>4,938,332</u>	<u>299,708</u>	<u>8,282,179</u>
% of Available Funds	37%	60%	4%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.60</u>	<u>0.07</u>	<u>0.67</u>

Unitil Energy Systems, Inc.  
Remittance Accounts

May, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	289,745	520,996	21,939	
2	150,769	161,205	64,314	
3	9,296	171,662	55,564	
4	27,739	311,731	6,877	
5	261,369	278,759	7,537	
8	447,369	447,375	22,737	
9	340,121	396,130	18,280	
10	55,391	192,743	24,599	
11	31,280	92,925	20,756	
12	218,404	164,763	4,289	
15	499,252	287,677	15,183	
16	250,590	122,289	10,011	
17	35,535	150,422	10,753	
18	29,510	116,269	3,996	
19	138,416	99,336	10,213	
22	373,877	315,655	13,491	
23	78,671	136,913	18,173	
24	35,993	182,776	13,460	
25	36,029	137,967	6,179	
26	65,208	240,505	12,170	
30	262,808	432,921	47,912	
31	90,435	224,093	83,990	
	<u>3,727,809</u>	<u>5,185,112</u>	<u>492,423</u>	<u>9,405,344</u>
% of Available Funds	40%	55%	5%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.55</u>	<u>0.10</u>	<u>0.66</u>

June, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	20,988	194,152	79,489	
2	116,603	299,129	16,024	
5	515,092	579,925	83,960	
6	66,667	149,909	84,578	
7	7,276	273,800	21,867	
8	57,172	246,638	22,603	
9	132,083	142,466	8,780	
12	399,412	517,814	17,798	
13	132,225	95,850	13,614	
14	51,568	183,605	2,678	
15	52,337	122,285	4,529	
16	99,071	95,854	3,485	
19	420,987	289,238	19,654	
20	85,562	187,317	8,348	
21	49,015	155,105	3,586	
22	34,467	101,253	5,813	
23	43,165	161,575	5,356	
26	207,677	421,005	28,796	
27	15,999	121,958	23,286	
28	119,501	173,684	11,981	
29	30,029	202,271	9,984	
30	46,633	139,124	10,819	
	<u>2,703,528</u>	<u>4,853,957</u>	<u>487,028</u>	<u>8,044,513</u>
% of Available Funds	34%	60%	6%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.60</u>	<u>0.12</u>	<u>0.72</u>



Unitil Energy Systems, Inc.  
Remittance Accounts

July, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
3	89,255	992,747	77,137	
5	757	231,255	79,166	
6	75,767	227,726	16,405	
7	5,978	241,551	16,946	
10	941,490	642,245	46,677	
11	91,174	188,530	31,272	
12	4,851	206,014	11,679	
13	2,232	98,895	17,377	
14	19,632	149,147	20,991	
17	201,730	224,720	7,296	
18	17,467	98,003	13,464	
19	122,091	232,288	12,997	
20	8,238	97,683	6,896	
21	461,450	86,151	5,628	
24	98,963	249,107	20,533	
25	107,022	108,415	14,150	
26	12,159	280,897	14,864	
27	22,264	174,378	91,319	
28	6,654	225,016	102,322	
31	45,252	427,087	29,862	
Total	2,334,426	5,181,855	636,981	8,153,262
% of Available Funds	29%	64%	8%	100%
Float Days	0	1	2	
Weighted Float Days	-	0.64	0.16	0.79

August, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	177,081	116,451	24,467	
2	120,482	495,093	21,486	
3	165,813	181,384	18,638	
4	105,441	312,281	19,410	
7	83,657	1,070,244	44,524	
8	22,310	240,474	68,624	
9	341,362	360,778	50,408	
10	94,827	242,688	12,917	
11	56,903	285,451	25,949	
14	219,491	405,218	19,887	
15	395,344	153,977	46,816	
16	112,425	217,063	33,536	
17	17,547	164,856	13,221	
18	49,728	65,309	19,979	
21	94,287	289,829	17,786	
22	294,668	50,631	7,939	
23	97,043	185,522	8,723	
24	16,385	149,660	40,778	
25	35,291	329,057	70,486	
28	5,071	548,883	67,337	
29	80,963	167,055	15,069	
30	58,701	263,668	23,578	
31	11,314	208,690	10,232	
Total	2,656,137	6,504,262	681,790	9,842,189
% of Available Funds	27%	66%	7%	100%
Float Days	0	1	2	
Weighted Float Days	-	0.66	0.14	0.80

Unitil Energy Systems, Inc.  
 Remittance Accounts

September, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	76,197	188,523	12,825	
5	92,564	996,212	37,606	
6	68,358	227,817	34,708	
7	555,633	422,684	33,757	
8	50,893	401,269	82,496	
11	134,718	354,954	48,056	
12	538,406	496,787	40,127	
13	141,754	288,576	25,592	
14	163,741	144,736	18,987	
15	75,828	188,296	29,029	
18	200,363	508,900	27,766	
19	260,729	138,357	20,955	
20	127,324	212,890	18,411	
21	11,796	192,508	10,079	
22	62,759	203,254	10,697	
25	138,915	334,771	26,786	
26	266,865	146,691	19,882	
27	16,776	240,028	38,042	
28	78,364	284,645	14,541	
29	85,113	230,441	54,823	
	<u>3,147,096</u>	<u>6,202,339</u>	<u>605,165</u>	<u>9,954,600</u>
% of Available Funds	32%	62%	6%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.62</u>	<u>0.12</u>	<u>0.74</u>

October, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
2	33,305	480,115	65,204	
3	122,974	457,290	54,653	
4	94,466	391,515	60,918	
5	7,509	428,604	28,379	
6	126,154	301,607	37,943	
10	189,557	813,123	47,704	
11	1,073,755	98,463	49,982	
12	4,316	250,485	50,873	
13	34,167	269,119	32,926	
16	267,190	415,797	24,395	
17	10,454	157,924	13,199	
18	521,333	92,429	5,298	
19	8,176	163,832	4,182	
20	112,343	92,415	4,246	
23	213,252	323,768	7,807	
24	280,283	82,381	3,601	
25	32,693	151,869	7,629	
26	18,941	273,472	14,137	
27	50,663	247,088	20,272	
30	43,897	462,456	41,466	
31	171	128,197	15,237	
	<u>3,245,599</u>	<u>6,081,949</u>	<u>590,051</u>	<u>9,917,599</u>
% of Available Funds	33%	61%	6%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.61</u>	<u>0.12</u>	<u>0.73</u>

Unitil Energy Systems, Inc.  
Remittance Accounts

November, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	23,495	263,576	11,877	
2	57,287	267,816	11,103	
3	159,255	298,468	20,470	
6	460,282	791,094	42,439	
7	332,801	153,361	91,385	
8	52,814	300,536	90,462	
9	34,493	301,062	36,436	
10	43,604	334,552	31,075	
13	40,247	689,754	15,763	
14	484,019	130,741	9,915	
15	194,901	118,337	8,310	
16	14,029	112,972	11,676	
17	61,257	130,553	22,837	
20	248,866	309,052	16,688	
21	242,009	79,249	9,190	
22	154,724	208,054	3,919	
24	53,165	230,653	5,507	
27	52,743	353,284	19,418	
28	9,677	101,167	12,003	
29	95,171	126,198	32,807	
30	1,223	248,553	11,317	
	<u>2,816,061</u>	<u>5,549,032</u>	<u>514,597</u>	<u>8,879,690</u>
% of Available Funds	32%	62%	6%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.62</u>	<u>0.12</u>	<u>0.74</u>

December, 2017	Available Balance	1 Day Float	2 Day Float	Total Available + Float
1	77,350	143,729	10,517	
4	145,518	457,328	39,352	
5	278,900	113,369	33,417	
6	6,271	200,439	9,540	
7	16,932	265,077	16,326	
8	61,770	236,188	9,491	
11	188,685	520,407	29,236	
12	295,726	264,150	41,157	
13	100,515	250,033	24,984	
14	13,878	146,058	7,755	
15	139,801	269,807	79,556	
18	118,167	267,209	68,355	
19	217,931	147,589	4,035	
20	25,941	299,105	4,106	
21	9,754	148,234	4,275	
22	75,179	132,643	5,082	
26	346,441	526,702	31,605	
27	69,209	82,395	6,404	
28	275,058	355,716	20,907	
29	98,221	178,977	17,283	
	<u>2,561,246</u>	<u>5,005,155</u>	<u>463,383</u>	<u>8,029,784</u>
% of Available Funds	32%	62%	6%	100%
Float Days	<u>0</u>	<u>1</u>	<u>2</u>	
Weighted Float Days	<u>-</u>	<u>0.62</u>	<u>0.12</u>	<u>0.74</u>

**UNITIL ENERGY SYSTEMS, INC**  
**LEAD IN PAYMENT OF DEFAULT SERVICE COSTS AND RENEWABLE ENERGY CREDITS**

	Reference Page	Cost	% of Total	Average Days Lead	Weighted Days Lead
G1 Default Service Supplier Costs	Schedule DTN-2	\$ 1,740,581	89.41%	33.65 days	30.09 days
G1 Renewable Energy Credits	21	\$ 206,063	10.59%	291.40 days	30.85 days
Total		<u>\$ 1,946,644</u>	100.00%		<u>60.94 days</u>

UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF RENEWABLE ENERGY CREDITS

G1	2017												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>RECs*</b>													
Period Begin	1/1/2017	2/1/2017	3/1/2017	4/1/2017	5/1/2017	6/1/2017	7/1/2017	8/1/2017	9/1/2017	10/1/2017	11/1/2017	12/1/2017	
Period End	1/31/2017	2/28/2017	3/31/2017	4/30/2017	5/31/2017	6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017	12/31/2017	
\$ Amount	\$0	\$0	\$0	\$0	\$11,411	\$17,638	\$17,469	\$18,393	\$18,288	\$15,759	\$15,110	\$15,859	\$129,926
% to Total	0.00%	0.00%	0.00%	0.00%	5.54%	8.56%	8.48%	8.93%	8.87%	7.65%	7.33%	7.70%	63.05%
Payment Date**	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	
Lead Period	531.50	502.00	472.50	442.00	411.50	381.00	350.50	319.50	289.00	258.50	228.00	197.50	
Weighted Days	-	-	-	-	22.79	32.61	29.71	28.52	25.65	19.77	16.72	15.20	190.97 days
<b>REC Purchases***</b>													
Period Begin	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	2/1/2017	
Period End	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	2/28/2017	
\$ Amount	\$2,415	\$2,056	\$1,905	\$2,253	\$1,549	\$901	\$1,353	\$1,695	\$3,045	\$5	\$34	\$3,686	
% to Total	1.17%	1.00%	0.92%	1.09%	0.75%	0.44%	0.66%	0.82%	1.48%	0.00%	0.02%	1.79%	
Payment Date	5/19/2017	6/9/2017	7/21/2017	8/3/2017	8/18/2017	8/30/2017	8/31/2017	9/15/2017	9/29/2017	10/13/2017	10/31/2017	10/31/2017	
Lead Period	123.50	144.50	186.50	199.50	214.50	226.50	227.50	242.50	256.50	270.50	288.50	259.00	
Weighted Days	1.45	1.44	1.72	2.18	1.61	0.99	1.49	1.99	3.79	0.01	0.05	4.63	
<b>REC Purchases***</b>													
Period Begin	2/1/2017	2/1/2017	2/1/2017	2/1/2017	3/1/2017	3/1/2017	3/1/2017	4/1/2017	4/1/2017	4/1/2017	4/1/2017	4/1/2017	
Period End	2/28/2017	2/28/2017	2/28/2017	2/28/2017	3/31/2017	3/31/2017	3/31/2017	4/30/2017	4/30/2017	4/30/2017	4/30/2017	4/30/2017	
\$ Amount	\$2,007	\$1,005	\$1,900	\$9,651	\$14,505	\$1,873	\$1,061	\$457	\$1,838	\$1,590	\$11,218	\$143	
% to Total	0.97%	0.49%	0.92%	4.68%	7.04%	0.91%	0.51%	0.22%	0.89%	0.77%	5.44%	0.07%	
Payment Date	11/2/2017	11/16/2017	12/8/2017	12/20/2017	12/20/2017	12/29/2017	1/23/2018	1/23/2018	2/1/2018	2/8/2018	2/13/2018	2/15/2018	
Lead Period	261.00	275.00	297.00	309.00	279.50	288.50	313.50	283.00	292.00	299.00	304.00	306.00	
Weighted Days	2.54	1.34	2.74	14.47	19.67	2.62	1.61	0.63	2.60	2.31	16.55	0.21	
<b>REC Purchases***</b>													
Period Begin	4/1/2017	4/1/2017	4/1/2017	5/1/2017	5/1/2017								
Period End	4/30/2017	4/30/2017	4/30/2017	5/31/2017	5/31/2017								
\$ Amount	\$413	\$1,018	\$886	\$789	\$4,888								\$76,138
% to Total	0.20%	0.49%	0.43%	0.38%	2.37%								36.95%
Payment Date	2/16/2018	2/28/2018	3/6/2018	3/6/2018	3/9/2018								
Lead Period	307.00	319.00	325.00	294.50	297.50								
Weighted Days	0.62	1.58	1.40	1.13	7.06								100.43 days
<b>Total \$ Amount</b>													\$206,063

00233

Weighted Days

291.40 days

\* Estimated cost of RECs included in rates in 2017

\*\* The last day to acquire 2017 Renewable Energy Credits and/or make alternative compliance payments is July 1, 2018

\*\*\* Actual purchasing activity for 2017 RECs applied in chronological order to monthly budgeted amounts.

**UNITIL ENERGY SYSTEMS, INC**  
**LEAD IN PAYMENT OF DEFAULT SERVICE COSTS AND RENEWABLE ENERGY CREDITS**

	Reference Page	Cost	% of Total	Average Days Lead	Weighted Days Lead
Non-G1 Default Service Supplier Costs	Schedule DTN-2	\$ 44,137,367	92.75%	37.90 days	35.15 days
Non-G1 Renewable Energy Credits	23	\$ 3,451,301	7.25%	301.20 days	21.84 days
Total		<u>\$ 47,588,667</u>	100.00%		<u>56.99 days</u>

UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF RENEWABLE ENERGY CREDITS

NON-G1	2017												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>RECs*</b>													
Period Begin	1/1/2017	2/1/2017	3/1/2017	4/1/2017	5/1/2017	6/1/2017	7/1/2017	8/1/2017	9/1/2017	10/1/2017	11/1/2017	12/1/2017	
Period End	1/31/2017	2/28/2017	3/31/2017	4/30/2017	5/31/2017	6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017	12/31/2017	
\$ Amount	\$0	\$0	\$0	\$101,277	\$258,633	\$237,746	\$309,116	\$323,043	\$265,838	\$245,082	\$248,849	\$307,157	\$2,296,740
% to Total	0.00%	0.00%	0.00%	2.93%	7.49%	6.89%	8.96%	9.36%	7.70%	7.10%	7.21%	8.90%	66.55%
Payment Date**	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	7/1/2018	
Lead Period	531.50	502.00	472.50	442.00	411.50	381.00	350.50	319.50	289.00	258.50	228.00	197.50	
Weighted Days	-	-	-	12.97	30.84	26.25	31.39	29.91	22.26	18.36	16.44	17.58	206.00 days
<b>REC Purchases***</b>													
Period Begin	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	
Period End	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	1/31/2017	
\$ Amount	\$34,967	\$29,777	\$27,579	\$34,689	\$23,845	\$13,862	\$20,831	\$26,088	\$46,873	\$75	\$57,254	\$29,370	
% to Total	1.01%	0.86%	0.80%	1.01%	0.69%	0.40%	0.60%	0.76%	1.36%	0.00%	1.66%	0.85%	
Payment Date	5/19/2017	6/9/2017	7/21/2017	8/3/2017	8/18/2017	8/30/2017	8/31/2017	9/15/2017	9/29/2017	10/13/2017	10/31/2017	11/2/2017	
Lead Period	123.50	144.50	186.50	199.50	214.50	226.50	227.50	242.50	256.50	270.50	288.50	290.50	
Weighted Days	1.25	1.25	1.49	2.01	1.48	0.91	1.37	1.83	3.48	0.01	4.79	2.47	
<b>REC Purchases***</b>													
Period Begin	2/1/2017	2/1/2017	2/1/2017	2/1/2017	3/1/2017	3/1/2017	3/1/2017	3/1/2017	3/1/2017	3/1/2017	4/1/2017	4/1/2017	
Period End	2/28/2017	2/28/2017	2/28/2017	2/28/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	4/30/2017	4/30/2017	
\$ Amount	\$1,524	\$15,478	\$29,245	\$281,222	\$90,622	\$28,826	\$21,982	\$28,294	\$24,472	\$109,692	\$52,736	\$2,206	
% to Total	0.04%	0.45%	0.85%	8.15%	2.63%	0.84%	0.64%	0.82%	0.71%	3.18%	1.53%	0.06%	
Payment Date	11/2/2017	11/16/2017	12/8/2017	12/20/2017	12/20/2017	12/29/2017	1/23/2018	2/1/2018	2/8/2018	2/13/2018	2/13/2018	2/15/2018	
Lead Period	261.00	275.00	297.00	309.00	279.50	288.50	313.50	322.50	329.50	334.50	304.00	306.00	
Weighted Days	0.12	1.23	2.52	25.18	7.34	2.41	2.00	2.64	2.34	10.63	4.65	0.20	
<b>REC Purchases***</b>													
Period Begin	4/1/2017	4/1/2017	4/1/2017	4/1/2017									
Period End	4/30/2017	4/30/2017	4/30/2017	4/30/2017									
\$ Amount	\$6,358	\$15,667	\$25,781	\$75,246									\$1,154,561
% to Total	0.18%	0.45%	0.75%	2.18%									33.45%
Payment Date	2/16/2018	2/28/2018	3/6/2018	3/9/2018									
Lead Period	307.00	319.00	325.00	328.00									
Weighted Days	0.57	1.45	2.43	7.15									95.20 days
<b>Total \$ Amount</b>													<b>\$3,451,301</b>

00235

Weighted Days

301.20 days

\* Estimated cost of RECs included in rates in 2017

\*\* The last day to acquire 2017 Renewable Energy Credits and/or make alternative compliance payments is July 1, 2018

\*\*\* Actual purchasing activity for 2017 RECs applied in chronological order to monthly budgeted amounts

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UNITIL ENERGY SYSTEMS, INC.

REDACTED WORKPAPERS

FOR THE

DEFAULT SERVICE AND  
RENEWABLE ENERGY CREDITS

LEAD/LAG STUDY

FOR G1 AND NON-G1 CUSTOMERS

2017

**REDACTED**

**UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF DEFAULT SERVICE COSTS AND RENEWABLE ENERGY CREDITS**

	Reference Page	Cost	% of Total	Average Days Lead	Weighted Days Lead
<b>Summary</b>					
Total G1 Default Service Supplier Costs	Detail below	\$ 1,740,581	89.41%	33.65 days	30.09 days
G1 Renewable Energy Credits	Schedule DTN-1 p 21	\$ 206,063	10.59%	291.40 days	30.85 days
Total		<u>\$ 1,946,644</u>	100.00%		<u>60.94 days</u>
<u>Detail for G1 Default Service Supplier Costs</u>					
Supplier A	3	\$ 1,141,471	65.58%		
Supplier B	4	\$ 599,110	34.42%		
Total G1 Default Service Supplier Costs		<u>\$ 1,740,581</u>	100.00%		<u>33.65 days</u>

**REDACTED**  
 UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF ELECTRIC COSTS

**DS SERVICE POWER SUPPLY CONTRACTS**

G1 SUPPLIERS	MONTH ENERGY PURCHASES DELIVERED												
	2017												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Supplier A</b>													
<b>Normal Service</b>													
Period Begin	1/1/2017	2/1/2017	3/1/2017	4/1/2017	5/1/2017							12/1/2017	
Period End	1/31/2017	2/28/2017	3/31/2017	4/30/2017	5/31/2017							12/31/2017	
\$ Amount	\$ 194,626	\$ 147,997	\$ 165,510	\$ 144,152	\$ 129,774							\$ 369,668	\$ 1,151,727
% to Total	17.05%	12.97%	14.50%	12.63%	11.37%							32.39%	100.90%
Payment Date													
Lead Period													
Weighted Days													
<b>Prior Period Adjustments (shown in billing period in 2017)</b>													
Period Begin	1/1/2017				5/1/2017								
Period End	1/31/2017				5/31/2017								
\$ Amount	\$ (10,409)				\$ 153								\$ (10,256)
% to Total	-0.91%				0.01%								-0.90%
Payment Date													
Lead Period													
Weighted Days													
<b>Total \$ Amount</b>	<b>\$ 184,217</b>	<b>\$ 147,997</b>	<b>\$ 165,510</b>	<b>\$ 144,152</b>	<b>\$ 129,926</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 369,668</b>	<b>\$ 1,141,471</b>
Weighted Days													

00239

**REDACTED**  
 UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF ELECTRIC COSTS

**DS SERVICE POWER SUPPLY CONTRACTS**

G1 SUPPLIERS	MONTH ENERGY PURCHASES DELIVERED												
	2017												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Supplier B</b>													
<b>Normal Service</b>													
Period Begin							7/1/2017		9/1/2017		11/1/2017		
Period End							7/31/2017		9/30/2017		11/30/2017		
\$ Amount							\$ 214,547		\$ 196,875		\$ 205,687		\$ 617,109
% to Total							35.81%		32.86%		34.33%		103.00%
Payment Date													
Lead Period													
Weighted Days													
<b>Prior Period Adjustments (shown in billing period in 2017)</b>													
Period Begin				4/1/2017		6/1/2017	7/1/2017		9/1/2017	10/1/2017			
Period End				4/30/2017		6/30/2017	7/31/2017		9/30/2017	10/31/2017			
\$ Amount				\$ 16,190		\$ (16,831)	\$ (28,362)		\$ 1,121	\$ 9,884			\$ (17,999)
% to Total				2.70%		-2.81%	-4.73%		0.19%	1.65%			-3.00%
Payment Date													
Lead Period													
Weighted Days													
<b>Total \$ Amount</b>	\$ -	\$ -	\$ -	\$ 16,190	\$ -	\$ (16,831)	\$ 186,185	\$ -	\$ 197,995	\$ 9,884	\$ 205,687	\$ -	\$ 599,110
Weighted Days													

00240

**REDACTED**

**UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF DEFAULT SERVICE COSTS AND RENEWABLE ENERGY CREDITS**

	Reference Page	Cost	% of Total	Average Days Lead	Weighted Days Lead
<b>Summary</b>					
Total Non-G1 Default Service Supplier Costs	see below	\$ 44,137,367	92.75%	37.90 days	35.15 days
Renewable Energy Credits	Schedule DTN-1 p 23	\$ 3,451,301	7.25%	301.20 days	21.84 days
Total		<u>\$ 47,588,667</u>	100.00%		<u>56.99 days</u>
<b>Detail for Non-G1 Default Service Supplier Costs</b>					
Supplier C	6	\$ 7,000,416	15.86%		
Supplier D	7	\$ 16,547,590	37.49%		
Supplier E	8	\$ 15,340,282	34.76%		
Supplier F	9	\$ 1,433,474	3.25%		
Supplier G	10	\$ 3,815,606	8.64%		
Total Non-G1 Default Service Supplier Costs		<u>\$ 44,137,367</u>	100.00%		<u>37.90 days</u>

**REDACTED**  
 UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF ELECTRIC COSTS

**DS SERVICE POWER SUPPLY CONTRACTS**

NON-G1 SUPPLIERS	MONTH ENERGY PURCHASES DELIVERED												
	2017												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Supplier C</b>													
<b>Normal Service - 1st Period</b>													
Period Begin						6/1/2017	7/1/2017	8/1/2017	9/1/2017	10/1/2017	11/1/2017		
Period End						6/15/2017	7/15/2017	8/15/2017	9/15/2017	10/15/2017	11/15/2017		
\$ Amount						\$ 478,832	\$ 564,610	\$ 614,210	\$ 677,981	\$ 479,865	\$ 498,356		\$ 3,313,854
% to Total						6.84%	8.07%	8.77%	9.68%	6.85%	7.12%		47.34%
Payment Date													
Lead Period													
Weighted Days													
<b>Normal Service - 2nd Period</b>													
Period Begin						6/16/2017	7/16/2017	8/16/2017	9/16/2017	10/16/2017	11/16/2017		
Period End						6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017		
\$ Amount						\$ 522,353	\$ 640,487	\$ 620,780	\$ 922,577	\$ 487,674	\$ 501,066		\$ 3,694,937
% to Total						7.46%	9.15%	8.87%	13.18%	6.97%	7.16%		52.78%
Payment Date													
Lead Period													
Weighted Days													
<b>Prior Period Adjustments (shown in billing period in 2017)</b>													
Period Begin						6/1/2017	7/1/2017						
Period End						6/30/2017	7/31/2017						
\$ Amount						\$ (2,278)	\$ (6,097)						-\$8,376
% to Total						-0.03%	-0.09%						-0.12%
Payment Date													
Lead Period													
Weighted Days													
<b>Total \$ Amount</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 998,908	\$ 1,198,999	\$ 1,234,990	\$ 1,600,557	\$ 967,539	\$ 999,422	\$ -	\$ 7,000,416

Weighted Days

00242

**REDACTED**  
**UNITIL ENERGY SYSTEMS, INC**  
**LEAD IN PAYMENT OF ELECTRIC COSTS**

**DS SERVICE POWER SUPPLY CONTRACTS**

NON-G1 SUPPLIERS	MONTH ENERGY PURCHASES DELIVERED												
	2017												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Supplier D</b>													
<b>Normal Service</b>													
Period Begin	1/1/2017	2/1/2017	3/1/2017	4/1/2017	5/1/2017	6/1/2017		8/1/2017		10/1/2017			
Period End	1/31/2017	2/28/2017	3/31/2017	4/30/2017	5/31/2017	6/30/2017		8/31/2017		10/31/2017			
\$ Amount	\$ 4,574,759	\$ 4,028,674	\$ 3,207,333	\$ 2,027,290	\$ 1,964,194	\$ 192,233		\$ 220,993		\$ 192,028			\$ 16,407,504
% to Total	27.65%	24.35%	19.38%	12.25%	11.87%	1.16%		1.34%		1.16%			99.15%
Payment Date													
Lead Period													
Weighted Days													
<b>Prior Period Adjustments (shown in billing period in 2017)</b>													
Period Begin	1/1/2017	2/1/2017	3/1/2017		5/1/2017								
Period End	1/31/2017	2/28/2017	3/31/2017		5/31/2017								
\$ Amount	\$ 43,101	\$ 24,040	\$ 66,885		\$ 6,060								\$ 140,086
% to Total	0.26%	0.15%	0.40%		0.04%								0.85%
Payment Date													
Lead Period													
Weighted Days													
<b>Total \$ Amount</b>	<b>\$ 4,617,860</b>	<b>\$ 4,052,714</b>	<b>\$ 3,274,218</b>	<b>\$ 2,027,290</b>	<b>\$ 1,970,254</b>	<b>\$ 192,233</b>	<b>\$ -</b>	<b>\$ 220,993</b>	<b>\$ -</b>	<b>\$ 192,028</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 16,547,590</b>
Weighted Days													

00243

**REDACTED**  
 UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF ELECTRIC COSTS

**DS SERVICE POWER SUPPLY CONTRACTS**

NON-G1 SUPPLIERS	MONTH ENERGY PURCHASES DELIVERED												
	2017												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Supplier E</b>													
<b>Normal Service</b>													
Period Begin						6/1/2017	6/1/2017	7/1/2017	8/1/2017	9/1/2017	10/1/2017	11/1/2017	
Period End						6/30/2017	6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017	
\$ Amount						\$ 2,250,301	\$ 270,362	\$ 2,812,764	\$ 2,543,590	\$ 1,946,088	\$ 2,104,933	\$ 2,610,988	\$ 14,539,025
% to Total						14.67%	1.76%	18.34%	16.58%	12.69%	13.72%	17.02%	94.78%
Payment Date													
Lead Period													
Weighted Days													
<b>Prior Period Adjustments (shown in billing period in 2017)</b>													
Period Begin						6/1/2017	6/1/2017	7/1/2017	8/1/2017	9/1/2017			
Period End						6/30/2017	6/30/2017	7/31/2017	8/31/2017	9/30/2017			
\$ Amount						\$ 39,151	\$ (3,789)	\$ 97,851	\$ 227,555	\$ 440,489			\$ 801,256
% to Total						0.26%	-0.02%	0.64%	1.48%	2.87%			5.22%
Payment Date													
Lead Period													
Weighted Days													
<b>Total \$ Amount</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,289,453	\$ 266,572	\$ 2,910,615	\$ 2,771,145	\$ 2,386,577	\$ 2,104,933	\$ 2,610,988	\$ -
<b>Weighted Days</b>													

00244



**REDACTED**  
 UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF ELECTRIC COSTS

**DS SERVICE POWER SUPPLY CONTRACTS**

NON-G1 SUPPLIERS	MONTH ENERGY PURCHASES DELIVERED												
	2017												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Supplier F</b>													
<b>Normal Service</b>													
Period Begin												12/1/2017	
Period End												12/31/2017	
\$ Amount												\$ 1,433,474	\$ 1,433,474
% to Total												100.00%	100.00%
Payment Date													
Lead Period													
Weighted Days													
<b>Prior Period Adjustments (shown in billing period in 2017)</b>													
Period Begin													
Period End													
\$ Amount													\$ -
% to Total													0.00%
Payment Date													
Lead Period													
Weighted Days													
<b>Total \$ Amount</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,433,474	\$ 1,433,474
Weighted Days													

00245

**REDACTED**  
 UNITIL ENERGY SYSTEMS, INC  
 LEAD IN PAYMENT OF ELECTRIC COSTS

**DS SERVICE POWER SUPPLY CONTRACTS**

NON-G1 SUPPLIERS	MONTH ENERGY PURCHASES DELIVERED												
	2017												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Supplier G</b>													
<b>Normal Service</b>													
Period Begin												12/1/2017	
Period End												12/31/2017	
\$ Amount												\$ 3,815,606	\$ 3,815,606
% to Total												100.00%	100.00%
Payment Date													
Lead Period													
Weighted Days													
<b>Prior Period Adjustments (shown in billing period in 2017)</b>													
Period Begin													
Period End													
\$ Amount													\$ -
% to Total													0.00%
Payment Date													
Lead Period													
Weighted Days													
<b>Total \$ Amount</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,815,606	\$ 3,815,606
Weighted Days													

00246