

ATTACHMENT # 1



Frank J Cservak Jr <fcservak@c-mservices.com>

RE: Barn Previous NET Meter Information

1 message

Stoltenberg, Charles H. <CStoltenberg@duqlight.com>
To: "fcservak@c-mservices.com" <fcservak@c-mservices.com>

Sun, Feb 24, 2019 at 12:01 PM

Just got your voice message.

On my way out of town now.

Attached is the daily listing of readings of the old NET meter for the barn service.

There are three groups of columns (NET , Delivered and Received) containing the kilowatt hours (KWH) for each day.

The meter can only measure the electricity supplied to and from the building. (Delivered and Received)

The meter records the Delivered KWH and Received KWH separately.

The NET information is calculated by adding Delivered and subtracts Received information continuously.

Some of the register information was not available creating gaps.

The system will also create estimate readings for delivered information.

At the bottom of the spreadsheet shows the total KWH for each register and the Delivered – Received = NET.

We need to talk person to person.

After discussing with our management I have some ideas you may be of interest.

Will contact you first week in March.

Charles H. Stoltenberg

Senior Engineer Metering



 **CServak Combined.xlsx**
30K

Old Meter # F74184522 New Meter # F82092150

Data below for old meter.

- HOUSE

Itron AMI Register Net

34.129	S 09-09-2018 11:59PM EDT
62.677	S 09-08-2018 11:59PM EDT
67.078	S 09-07-2018 11:59PM EDT
73.028	S 09-06-2018 11:59PM EDT
66.209	S 09-05-2018 11:59PM EDT
65.762	S 09-04-2018 11:59PM EDT
60.686	S 09-03-2018 11:59PM EDT
62.026	S 09-02-2018 11:59PM EDT
63.554	S 09-01-2018 11:59PM EDT
59.711	S 08-31-2018 11:59PM EDT
77.542	S 08-30-2018 11:59PM EDT
67.929	S 08-29-2018 11:59PM EDT
63.154	S 08-28-2018 11:59PM EDT
62.801	S 08-27-2018 11:59PM EDT
63.918	S 08-26-2018 11:59PM EDT
57.847	S 08-25-2018 11:59PM EDT
44.535	S 08-24-2018 11:59PM EDT
39.363	S 08-23-2018 11:59PM EDT
53.622	S 08-22-2018 11:59PM EDT
76.502	S 08-21-2018 11:59PM EDT
52.059	S 08-20-2018 11:59PM EDT
54.418	S 08-19-2018 11:59PM EDT
51.522	S 08-18-2018 11:59PM EDT
80.905	S 08-17-2018 11:59PM EDT
180.131	S 08-16-2018 11:59PM EDT
55.707	S 08-13-2018 11:59PM EDT
42.192	S 08-12-2018 11:59PM EDT
108.482	S 08-11-2018 11:59PM EDT
56.936	S 08-09-2018 11:59PM EDT
26.476	S 08-08-2018 11:59PM EDT
35.684	S 08-08-2018 11:59PM EDT
57.35	S 08-07-2018 11:59PM EDT
1699.174	S 08-06-2018 11:59PM EDT

Itron AMI Register Delivered

34.129	S 09-09-2018 11:59PM EDT
62.836	S 09-08-2018 11:59PM EDT
67.206	S 09-07-2018 11:59PM EDT
73.083	S 09-06-2018 11:59PM EDT
66.211	S 09-05-2018 11:59PM EDT
65.762	S 09-04-2018 11:59PM EDT
60.715	S 09-03-2018 11:59PM EDT
63.379	S 09-02-2018 11:59PM EDT
63.733	S 09-01-2018 11:59PM EDT
59.991	S 08-31-2018 11:59PM EDT
77.676	S 08-30-2018 11:59PM EDT
68.011	S 08-29-2018 11:59PM EDT
63.173	S 08-28-2018 11:59PM EDT
63.357	S 08-27-2018 11:59PM EDT
64.309	S 08-26-2018 11:59PM EDT
60.581	S 08-25-2018 11:59PM EDT
49.389	S 08-24-2018 11:59PM EDT
45.203	S 08-23-2018 11:59PM EDT
55.369	S 08-22-2018 11:59PM EDT
76.503	S 08-21-2018 11:59PM EDT
53.922	S 08-20-2018 11:59PM EDT
55.627	S 08-19-2018 11:59PM EDT
54.543	S 08-18-2018 11:59PM EDT
80.905	S 08-17-2018 11:59PM EDT
63.295	S 08-16-2018 11:59PM EDT
57.697	S 08-15-2018 11:59PM EDT
63.118	S 08-14-2018 11:59PM EDT
57.87	S 08-13-2018 11:59PM EDT
47.143	S 08-12-2018 11:59PM EDT
53.197	S 08-11-2018 11:59PM EDT
60.868	S 08-10-2018 11:59PM EDT
59.064	S 08-09-2018 11:59PM EDT
62.672	S 08-08-2018 11:59PM EDT
57.646	S 08-07-2018 11:59PM EDT
106.482	S 08-06-2018 11:59PM EDT
53.394	S 08-05-2018 11:59PM EDT
53.394	S 08-04-2018 11:59PM EDT
53.394	S 08-03-2018 11:59PM EDT
53.394	S 08-02-2018 11:59PM EDT
53.394	S 08-01-2018 11:59PM EDT

Itron AMI Register Received

0	S 09-09-2018 11:59PM EDT
0.159	S 09-08-2018 11:59PM EDT
0.128	S 09-07-2018 11:59PM EDT
0.055	S 09-06-2018 11:59PM EDT
0.002	S 09-05-2018 11:59PM EDT
0	S 09-04-2018 11:59PM EDT
0.029	S 09-03-2018 11:59PM EDT
1.353	S 09-02-2018 11:59PM EDT
0.179	S 09-01-2018 11:59PM EDT
0.28	S 08-31-2018 11:59PM EDT
0.134	S 08-30-2018 11:59PM EDT
0.082	S 08-29-2018 11:59PM EDT
0.019	S 08-28-2018 11:59PM EDT
0.556	S 08-27-2018 11:59PM EDT
0.391	S 08-26-2018 11:59PM EDT
2.734	S 08-25-2018 11:59PM EDT
4.854	S 08-24-2018 11:59PM EDT
5.84	S 08-23-2018 11:59PM EDT
1.747	S 08-22-2018 11:59PM EDT
0.001	S 08-21-2018 11:59PM EDT
1.863	S 08-20-2018 11:59PM EDT
1.209	S 08-19-2018 11:59PM EDT
3.021	S 08-18-2018 11:59PM EDT
0	S 08-17-2018 11:59PM EDT
3.979	S 08-16-2018 11:59PM EDT
2.163	S 08-13-2018 11:59PM EDT
4.951	S 08-12-2018 11:59PM EDT
5.583	S 08-11-2018 11:59PM EDT
2.128	S 08-09-2018 11:59PM EDT
0.512	S 08-08-2018 11:59PM EDT
0.296	S 08-07-2018 11:59PM EDT
113.08	S 08-06-2018 11:59PM EDT

		53.394	§ 07-31-2018 11:59PM EDT		
		53.394	§ 07-30-2018 11:59PM EDT		
		53.394	§ 07-29-2018 11:59PM EDT		
		53.394	§ 07-28-2018 11:59PM EDT		
		53.394	§ 07-27-2018 11:59PM EDT		
		53.394	§ 07-26-2018 11:59PM EDT		
		53.394	§ 07-25-2018 11:59PM EDT		
		53.394	§ 07-24-2018 11:59PM EDT		
		53.394	§ 07-23-2018 11:59PM EDT		
		53.394	§ 07-22-2018 11:59PM EDT		
		53.394	§ 07-21-2018 11:59PM EDT		
		53.394	§ 07-20-2018 11:59PM EDT		
		53.394	§ 07-19-2018 11:59PM EDT		
		53.394	§ 07-18-2018 11:59PM EDT		
		53.394	§ 07-17-2018 11:59PM EDT		
		53.394	§ 07-16-2018 11:59PM EDT		
		53.394	§ 07-15-2018 11:59PM EDT		
		53.394	§ 07-14-2018 11:59PM EDT		
		53.393	§ 07-13-2018 11:59PM EDT		
		53.394	§ 07-12-2018 11:59PM EDT		
		53.392	§ 07-11-2018 11:59PM EDT		
		53.395	§ 07-10-2018 11:59PM EDT		
		53.388	§ 07-09-2018 11:59PM EDT		
		53.402	§ 07-08-2018 11:59PM EDT		
		53.374	§ 07-07-2018 11:59PM EDT		
		53.429	§ 07-06-2018 11:59PM EDT		
271.352	§ 07-05-2018 12:00AM EDT	53.318	§ 07-05-2018 11:59PM EDT		
		53.539	§ 07-04-2018 11:59PM EDT		
		53.096	§ 07-03-2018 11:59PM EDT		
		53.981	§ 07-02-2018 11:59PM EDT		
		52.211	§ 07-01-2018 11:59PM EDT		
		55.75	§ 06-30-2018 11:59PM EDT		
44.348	§ 06-29-2018 11:59PM EDT	48.672	§ 06-29-2018 11:59PM EDT	4.324	§ 06-29-2018 11:59PM EDT
115.7	§ 06-28-2018 11:59PM EDT	62.623	§ 06-28-2018 11:59PM EDT	2.882	§ 06-28-2018 11:59PM EDT
		55.959	§ 06-27-2018 11:59PM EDT		
47.817	§ 06-26-2018 11:59PM EDT	50.536	§ 06-26-2018 11:59PM EDT	2.719	§ 06-26-2018 11:59PM EDT
98.706	§ 06-25-2018 11:59PM EDT	61.381	§ 06-25-2018 11:59PM EDT	6.227	§ 06-25-2018 11:59PM EDT
		43.552	§ 06-24-2018 11:59PM EDT		
55.772	§ 06-23-2018 11:59PM EDT	58.191	§ 06-23-2018 11:59PM EDT	2.419	§ 06-23-2018 11:59PM EDT
64.925	§ 06-22-2018 11:59PM EDT	65.087	§ 06-22-2018 11:59PM EDT	0.162	§ 06-22-2018 11:59PM EDT
398.661	§ 06-21-2018 11:59PM EDT	103.241	§ 06-21-2018 11:59PM EDT	42.747	§ 06-21-2018 11:59PM EDT
		42.136	§ 06-20-2018 11:59PM EDT		

		42.194	§ 06-19-2018 11:59PM EDT		
		42.078	§ 06-18-2018 11:59PM EDT		
		42.31	§ 06-17-2018 11:59PM EDT		
		42.7	§ 06-16-2018 11:59PM EDT		
		42.453	§ 06-15-2018 11:59PM EDT		
		42.262	§ 06-14-2018 11:59PM EDT		
		42.034	§ 06-13-2018 11:59PM EDT		
32.041	§ 06-12-2018 11:59PM EDT	37.672	§ 06-12-2018 11:59PM EDT	5.631	§ 06-12-2018 11:59PM EDT
30.041	§ 06-11-2018 11:59PM EDT	34.326	§ 06-11-2018 11:59PM EDT	4.285	§ 06-11-2018 11:59PM EDT
61.721	§ 06-10-2018 11:59PM EDT	28.213	§ 06-10-2018 11:59PM EDT	9.436	§ 06-10-2018 11:59PM EDT
		42.944	§ 06-09-2018 11:59PM EDT		
13.459	§ 06-08-2018 11:59PM EDT	24.125	§ 06-08-2018 11:59PM EDT	10.666	§ 06-08-2018 11:59PM EDT
10.178	§ 06-07-2018 11:59PM EDT	20.877	§ 06-07-2018 11:59PM EDT	10.699	§ 06-07-2018 11:59PM EDT
24.929	§ 06-06-2018 11:59PM EDT	25.6	§ 06-06-2018 11:59PM EDT	1.671	§ 06-06-2018 11:59PM EDT
44.207	§ 06-05-2018 11:59PM EDT	47.801	§ 06-05-2018 11:59PM EDT	3.594	§ 06-05-2018 11:59PM EDT
30.534	§ 06-04-2018 11:59PM EDT	38.91	§ 06-04-2018 11:59PM EDT	8.376	§ 06-04-2018 11:59PM EDT
32.852	§ 06-03-2018 11:59PM EDT	39.456	§ 06-03-2018 11:59PM EDT	6.604	§ 06-03-2018 11:59PM EDT
35.873	§ 06-02-2018 11:59PM EDT	41.315	§ 06-02-2018 11:59PM EDT	5.442	§ 06-02-2018 11:59PM EDT
48.422	§ 06-01-2018 11:59PM EDT	49.258	§ 06-01-2018 11:59PM EDT	0.836	§ 06-01-2018 11:59PM EDT
56.136	§ 05-31-2018 11:59PM EDT	56.943	§ 05-31-2018 11:59PM EDT	0.807	§ 05-31-2018 11:59PM EDT
51.196	§ 05-30-2018 11:59PM EDT	51.898	§ 05-30-2018 11:59PM EDT	0.702	§ 05-30-2018 11:59PM EDT
29.352	§ 05-29-2018 11:59PM EDT	34.98	§ 05-29-2018 11:59PM EDT	5.628	§ 05-29-2018 11:59PM EDT
21.216	§ 05-28-2018 11:59PM EDT	31.428	§ 05-28-2018 11:59PM EDT	10.212	§ 05-28-2018 11:59PM EDT
45.283	§ 05-27-2018 11:59PM EDT	49.784	§ 05-27-2018 11:59PM EDT	4.501	§ 05-27-2018 11:59PM EDT
46.04	§ 05-26-2018 11:59PM EDT	50.235	§ 05-26-2018 11:59PM EDT	4.195	§ 05-26-2018 11:59PM EDT
31.868	§ 05-25-2018 11:59PM EDT	38.985	§ 05-25-2018 11:59PM EDT	7.117	§ 05-25-2018 11:59PM EDT
33.632	§ 05-24-2018 11:59PM EDT	39.687	§ 05-24-2018 11:59PM EDT	6.055	§ 05-24-2018 11:59PM EDT
109.878	§ 05-23-2018 11:59PM EDT	69.343	§ 05-23-2018 11:59PM EDT	2.676	§ 05-23-2018 11:59PM EDT
		43.211	§ 05-22-2018 11:59PM EDT		
174.489	§ 05-21-2018 11:59PM EDT	53.316	§ 05-21-2018 11:59PM EDT	15.03	§ 05-21-2018 11:59PM EDT
		44.676	§ 05-20-2018 11:59PM EDT		
		45.097	§ 05-19-2018 11:59PM EDT		
		46.43	§ 05-18-2018 11:59PM EDT		
53.471	§ 05-17-2018 11:59PM EDT	54.638	§ 05-17-2018 11:59PM EDT	1.167	§ 05-17-2018 11:59PM EDT
53.708	§ 05-16-2018 11:59PM EDT	54.807	§ 05-16-2018 11:59PM EDT	1.099	§ 05-16-2018 11:59PM EDT
31.615	§ 05-15-2018 11:59PM EDT	34.78	§ 05-15-2018 11:59PM EDT	3.165	§ 05-15-2018 11:59PM EDT
29.669	§ 05-14-2018 11:59PM EDT	36.338	§ 05-14-2018 11:59PM EDT	6.669	§ 05-14-2018 11:59PM EDT
30.109	§ 05-13-2018 11:59PM EDT	34.987	§ 05-13-2018 11:59PM EDT	4.878	§ 05-13-2018 11:59PM EDT
26.279	§ 05-12-2018 11:59PM EDT	34.257	§ 05-12-2018 11:59PM EDT	7.978	§ 05-12-2018 11:59PM EDT
38.075	§ 05-11-2018 11:59PM EDT	39.935	§ 05-11-2018 11:59PM EDT	1.86	§ 05-11-2018 11:59PM EDT
53.059	§ 05-10-2018 11:59PM EDT	54.482	§ 05-10-2018 11:59PM EDT	1.423	§ 05-10-2018 11:59PM EDT
39.186	§ 05-09-2018 11:59PM EDT	42.7	§ 05-09-2018 11:59PM EDT	3.514	§ 05-09-2018 11:59PM EDT

34.06	S 05-08-2018 11:59PM EDT	39.505	§ 05-08-2018 11:59PM EDT	5.445	S 05-08-2018 11:59PM EDT
8.032	S 05-07-2018 11:59PM EDT	20.374	§ 05-07-2018 11:59PM EDT	12.342	S 05-07-2018 11:59PM EDT
20.874	S 05-06-2018 11:59PM EDT	23.802	§ 05-06-2018 11:59PM EDT	2.928	S 05-06-2018 11:59PM EDT
22.3	S 05-05-2018 11:59PM EDT	30.194	§ 05-05-2018 11:59PM EDT	7.894	S 05-05-2018 11:59PM EDT
41.907	S 05-04-2018 11:59PM EDT	44.072	§ 05-04-2018 11:59PM EDT	2.165	S 05-04-2018 11:59PM EDT
30.064	S 05-03-2018 11:59PM EDT	33.263	§ 05-03-2018 11:59PM EDT	3.199	S 05-03-2018 11:59PM EDT
-8.19	S 05-02-2018 11:59PM EDT	11.509	§ 05-02-2018 11:59PM EDT	19.699	S 05-02-2018 11:59PM EDT
16.375	S 05-01-2018 11:59PM EDT	32.875	§ 05-01-2018 11:59PM EDT	16.5	S 05-01-2018 11:59PM EDT
50.96	S 04-30-2018 11:59PM EDT	55.368	§ 04-30-2018 11:59PM EDT	4.408	S 04-30-2018 11:59PM EDT
69.709	S 04-29-2018 11:59PM EDT	69.782	§ 04-29-2018 11:59PM EDT	0.073	S 04-29-2018 11:59PM EDT
48.852	S 04-28-2018 11:59PM EDT	52.989	§ 04-28-2018 11:59PM EDT	4.137	S 04-28-2018 11:59PM EDT
56.664	S 04-27-2018 11:59PM EDT	59.323	§ 04-27-2018 11:59PM EDT	2.659	S 04-27-2018 11:59PM EDT
32.528	S 04-26-2018 11:59PM EDT	50.054	§ 04-26-2018 11:59PM EDT	17.526	S 04-26-2018 11:59PM EDT
73.323	S 04-25-2018 11:59PM EDT	73.324	§ 04-25-2018 11:59PM EDT	0.001	S 04-25-2018 11:59PM EDT
65.839	S 04-24-2018 11:59PM EDT	65.839	§ 04-24-2018 11:59PM EDT	0	S 04-24-2018 11:59PM EDT
-15.701	S 04-23-2018 11:59PM EDT	11.911	§ 04-23-2018 11:59PM EDT	27.612	S 04-23-2018 11:59PM EDT
23.451	S 04-22-2018 11:59PM EDT	32.38	§ 04-22-2018 11:59PM EDT	8.929	S 04-22-2018 11:59PM EDT
52.956	S 04-21-2018 11:59PM EDT	56.543	§ 04-21-2018 11:59PM EDT	3.587	S 04-21-2018 11:59PM EDT
51.917	S 04-20-2018 11:59PM EDT	56.162	§ 04-20-2018 11:59PM EDT	4.245	S 04-20-2018 11:59PM EDT
87.21	S 04-19-2018 11:59PM EDT	87.222	§ 04-19-2018 11:59PM EDT	0.012	S 04-19-2018 11:59PM EDT
57.065	S 04-18-2018 11:59PM EDT	58.163	§ 04-18-2018 11:59PM EDT	1.098	S 04-18-2018 11:59PM EDT
87.754	S 04-17-2018 11:59PM EDT	87.754	§ 04-17-2018 11:59PM EDT	0	S 04-17-2018 11:59PM EDT
48.024	S 04-16-2018 11:59PM EDT	48.353	§ 04-16-2018 11:59PM EDT	0.329	S 04-16-2018 11:59PM EDT
1.424	S 04-15-2018 11:59PM EDT	9.235	§ 04-15-2018 11:59PM EDT	7.811	S 04-15-2018 11:59PM EDT
-3.277	S 04-14-2018 11:59PM EDT	12.643	§ 04-14-2018 11:59PM EDT	15.92	S 04-14-2018 11:59PM EDT
22.092	S 04-13-2018 11:59PM EDT	34.335	§ 04-13-2018 11:59PM EDT	12.243	S 04-13-2018 11:59PM EDT
69.912	S 04-12-2018 11:59PM EDT	70.526	§ 04-12-2018 11:59PM EDT	0.614	S 04-12-2018 11:59PM EDT
75.643	S 04-11-2018 11:59PM EDT	76.195	§ 04-11-2018 11:59PM EDT	0.552	S 04-11-2018 11:59PM EDT
77.407	S 04-10-2018 11:59PM EDT	77.771	§ 04-10-2018 11:59PM EDT	0.364	S 04-10-2018 11:59PM EDT
82.813	S 04-09-2018 11:59PM EDT	82.813	§ 04-09-2018 11:59PM EDT	0	S 04-09-2018 11:59PM EDT
61.915	S 04-08-2018 11:59PM EDT	63.63	§ 04-08-2018 11:59PM EDT	1.715	S 04-08-2018 11:59PM EDT
66.027	S 04-07-2018 11:59PM EDT	67.697	§ 04-07-2018 11:59PM EDT	1.67	S 04-07-2018 11:59PM EDT
74.625	S 04-06-2018 11:59PM EDT	74.625	§ 04-06-2018 11:59PM EDT	0	S 04-06-2018 11:59PM EDT
66.759	S 04-05-2018 11:59PM EDT	68.376	§ 04-05-2018 11:59PM EDT	1.617	S 04-05-2018 11:59PM EDT
736.088	S 04-04-2018 11:59PM EDT	317.58	§ 04-04-2018 11:59PM EDT	7.876	S 04-04-2018 11:59PM EDT
		47.376	§ 04-03-2018 11:59PM EDT		
		47.376	§ 04-02-2018 11:59PM EDT		
		47.376	§ 04-01-2018 11:59PM EDT		
		47.376	§ 03-31-2018 11:59PM EDT		
		47.376	§ 03-30-2018 11:59PM EDT		
		47.376	§ 03-29-2018 11:59PM EDT		
		47.376	§ 03-28-2018 11:59PM EDT		

		47.376	§ 03-27-2018 11:59PM EDT		
		47.376	§ 03-26-2018 11:59PM EDT		
380.962	S 03-25-2018 11:59PM EDT	217.124	§ 03-25-2018 11:59PM EDT	7.613	S 03-25-2018 11:59PM EDT
		45.187	§ 03-24-2018 11:59PM EDT		
		41.974	§ 03-23-2018 11:59PM EDT		
		42.145	§ 03-22-2018 11:59PM EDT		
		42.145	§ 03-21-2018 11:59PM EDT		
90.257	S 03-20-2018 11:59PM EDT	90.257	§ 03-20-2018 11:59PM EDT	0	S 03-20-2018 11:59PM EDT
61.982	S 03-19-2018 11:59PM EDT	63.801	§ 03-19-2018 11:59PM EDT	1.819	S 03-19-2018 11:59PM EDT
60.915	S 03-18-2018 11:59PM EDT	63.3	§ 03-18-2018 11:59PM EDT	2.385	S 03-18-2018 11:59PM EDT
81.969	S 03-17-2018 11:59PM EDT	81.969	§ 03-17-2018 11:59PM EDT	0	S 03-17-2018 11:59PM EDT
73.175	S 03-16-2018 11:59PM EDT	73.804	§ 03-16-2018 11:59PM EDT	0.629	S 03-16-2018 11:59PM EDT
77.344	S 03-15-2018 11:59PM EDT	77.688	§ 03-15-2018 11:59PM EDT	0.344	S 03-15-2018 11:59PM EDT
89.162	S 03-14-2018 11:59PM EDT	89.162	§ 03-14-2018 11:59PM EDT	0	S 03-14-2018 11:59PM EDT
82.931	S 03-13-2018 11:59PM EDT	83.613	§ 03-13-2018 11:59PM EDT	0.682	S 03-13-2018 11:59PM EDT
69.003	S 03-12-2018 11:59PM EDT	70.807	§ 03-12-2018 11:59PM EDT	1.804	S 03-12-2018 11:59PM EDT
56.067	S 03-11-2018 11:59PM EDT	57.817	§ 03-11-2018 11:59PM EDT	1.75	S 03-11-2018 11:59PM EDT
158.333	S 03-10-2018 11:59PM EST	142.268	§ 03-10-2018 11:59PM EST	2.094	S 03-10-2018 11:59PM EST
		18.159	§ 03-09-2018 11:59PM EST	0.709	S 03-08-2018 11:59PM EST
52.682	S 03-08-2018 11:59PM EST	53.391	§ 03-08-2018 11:59PM EST	0.887	S 03-07-2018 11:59PM EST
37.084	S 03-07-2018 11:59PM EST	22.44	§ 03-07-2018 11:59PM EST		
		15.531	§ 03-06-2018 11:59PM EST	20.522	S 03-05-2018 11:59PM EST
-11.548	S 03-05-2018 11:59PM EST	8.974	§ 03-05-2018 11:59PM EST	19.914	S 03-04-2018 11:59PM EST
-9.772	S 03-04-2018 11:59PM EST	10.142	§ 03-04-2018 11:59PM EST	20.074	S 03-03-2018 11:59PM EST
-9.714	S 03-03-2018 11:59PM EST	10.36	§ 03-03-2018 11:59PM EST	8.294	S 03-02-2018 11:59PM EST
25.538	S 03-02-2018 11:59PM EST	16.713	§ 03-02-2018 11:59PM EST		
		17.119	§ 03-01-2018 11:59PM EST		
15.511	S 02-28-2018 11:59PM EST	10.63	§ 02-28-2018 11:59PM EST	36.065	S 02-28-2018 11:59PM EST
		20.473	§ 02-26-2018 11:59PM EST		
		20.473	§ 02-25-2018 11:59PM EST		
18.198	S 02-24-2018 11:59PM EST	18.209	§ 02-24-2018 11:59PM EST	0.011	S 02-24-2018 11:59PM EST
71.788	S 02-23-2018 11:59PM EST	78.049	§ 02-23-2018 11:59PM EST	6.261	S 02-23-2018 11:59PM EST

6.725 S 02-19-2018 11:59PM EST 6.88 § 02-19-2018 11:59PM EST 0.155 S 02-19-2018 11:59PM EST

9904.901

10606.80

701.906

9904.901 Delivered minus received

ATTACHMENT #2



Frank J Cservak Jr <fcservak@c-mservices.com>

Re: PUC BCS Case # 3691697 - Cservak vs DLC

1 message

HOUSE

Frank J Cservak Jr <fcservak@c-mservices.com>

Thu, May 16, 2019 at 11:17 AM

To: RA-PCBCSFAXPC1@pa.gov, "Stoltenberg, Charles H." <CStoltenberg@duqlight.com>, DLCCustomerService@duqlight.com, "Frank J. Cservak" <fcservak@c-mservices.com>, Brandon Schrier <bschrier@c-mservices.com>

All,

I have completed my analysis of DLC's most recent Bill ID 779602783466 Dtd. 5/8/19 which CONFIRMS that I have NOT received any Energy Credits for the Energy generated by my Solar Panels since they were installed. I have re-calculated the Credit Due on DLC Acct. # 8796-070-000 now to be \$1742.31 due to this most recent Data... That amount may be credited to me at your earliest convenience...

DLC continues to bill at the RA rate when it should be Heat Pump rate after repeated attempts to get it changed. And, it is now painfully apparent that you can get your "Smart Meter" to spin at any speed, in any direction... And, Since October of 2017 the "SMART Meters" are monitoring the Wrong Accounts! Fraud!

Frank J. Cservak Jr.
 FCservak@C-MServices.com
 412-427-4385

On Mon, May 13, 2019 at 4:18 PM Frank J Cservak Jr <fcservak@c-mservices.com> wrote:
 To Whom it Concerns,

DLC Account Number: 7796-070-000 Bill Prepared 05/08/19 in which they appear to do a "Reset" on the Bill with **no explanation of what they are doing**... They continuing to bill at the **Rate:RS-Residential Service Rider 21** after repeated attempts by me to be changed to the **Add-On Heat Pump** rate that I should have been on since the beginning... Deception.

I continue to monitor all electricity usage and have performed an accounting of that usage and the appropriate Heat Pump Rate that should have been charged IAW our Contract. That accounting of KW and Dollars shows that DLC has **OVERBILLED: \$2208.92** before you add their most recent bill of \$56.76.

I also continue to request my Net Metering Summary Statement, for nearly two years now, also required by our Contract. Had this Net Metering Summary Statement been provided, we would not be in the situation we are in.

Thank you.

Frank J. Cservak Jr.
 FCservak@C-MServices.com
 412-427-4385

Cservak-7796-r1.pdf
 321K

FRANK USER V# K
174 BARBERRY ROAD

ACCOUNT # - House - 8796-070-000

10/17 THRU 12/19/18

METERED FAIRLY ACCURATELY

ACCEPTABLE

(6% SYSTEM ENERGY LOSS)

2/19/18

OVERBILLED 9905 - 6825 =
3080 x .15 = \$462.00

NO SOLAR CREDIT 5495 x .06241 =
\$342.94

METER NOW MONITORS BARN

UNDERBILLED 13733 - 16257 =
-2523 x .15 = \$378.45

NO SOLAR CREDIT 1590 x .06241 =
\$99.23

\$525.72

(NOW MONITORING BARN)

CREDIT DUE

HOUSE: ACCT 8796

070-000

DATE	METER #	Meter Reading	Bill	DLC NET W	TED NET W	Ted & Telsa SOLAR (W)
10/7/17	F73789721	26830.5090	\$256.64	1635.5730	441.2	
11/5/17		28482.8930	\$262.29	1652.3840	721.7	
12/5/17		30794.0300	\$356.02	2311.1370	1625.5	-231.3
1/7/18		33395.4500	\$405.57	2601.4200	3556.0	-210
2/6/18		35846.5940	\$379.95	2451.1440	4216.6	
2/19/18		36424.0000	\$92.65	577.4060	1970.5	-94.2
		Total		\$1,753.12	11229.0640	12531.5
2/19/18		0.0000		Change Meter		
3/7/18	F74184522	143.8100	\$30.37	143.8100		-219.8
4/8/18		2484.0060	\$363.89	2340.1960	2337.8	-750.1
5/7/18		3731.9330	\$206.03	1247.9270	1088.6	-847.6
6/6/18		4937.0710	\$195.31	1205.1380	553.8	-933.2
7/5/18		6181.7920	\$202.02	1244.7210	908.6	-877.7
8/6/18		7880.9660	\$272.42	1699.1740	1744.3	-1016.8
9/8/18		9870.7720	\$313.35	1989.8060	191.8	-850.2
9/10/18		9905.0000		34.2280		
	Total		1583.39	9905.0000	6824.9	-5495.4
9/10/18		0.0000		Change Meter 9-10-18		
10/7/18	F82092150	991.5180	\$168.95	991.5180	1353.4	-606.7
11/5/18		2839.0670	\$284.74	1847.5490	712.6	-384.5
12/5/18		5684.9620	\$429.56	2845.8950	3058.3	-172.8
1/7/19		8491.7320	\$397.67	2806.7700	3541.3	-159.8
2/6/19		11228.6080	\$440.21	2736.8760	4188.9	-50
3/9/19		13733.1370	\$404.86	2504.5290	3402.8	-216.6
		Total		\$2,125.99	13733.1370	16257.3

AS OF 3/9/19 BILL:

METER CONTINUES TO METER INCORRECTLY

ACCOUNT # - Service Never Ends Barn - 7796 - 070-000

FRANK CSERNAK
174 BARBERRY ROAD
SEWICKLEY, PA 15143

METER #

F82092154

DATE	Meter Reading	Bill	DLC NET (W)	Ted NET (W)	Ted & Telsa SOLAR (W)
11/8/17	0.0000	Change Meter			
12/5/17	2150.5320	\$356.93	2150.5320	1,868.3	-83
1/7/18	5354.8930	\$494.71	3204.3610	2,025.6	-128.8
2/6/18	8450.5110	\$475.67	3095.6180	1,956.2	-120
3/7/18	10815.4870	\$367.15	2364.9760	1,825.6	-195
4/8/18	12830.5650	\$315.56	2015.0780	1,795.7	-520.2
5/7/18	13882.3840	\$176.26	1051.8190	1,725.3	-559.9
6/6/18	14509.9780	\$109.34	627.5940	1,143.8	-722.9
7/8/18	15707.3030	\$194.89	1197.3250	1,266.1	-706.4
8/6/18	17310.4280	\$258.05	1603.1250	1,599.7	-858.7
	Sub Total	\$2,748.56	17310.4280	15,206.3	-3894.9
Metering Rate Changed 9/8/18					
9/8/18	19221.5820	\$301.58	1911.1540	1,454.5	-730.6
10/7/18	20132.1300	\$151.77	910.5480	1,309.2	-453.1
11/5/18	21230.9680	\$175.87	1098.8380	1,506.5	-258.2
12/5/18	24388.2690	\$474.81	3157.3010	2,742.5	-137.4
1/7/19	28125.2920	\$533.05	3737.0230	1,151.2	-54.8
2/6/19	32395.9390	\$678.42	4270.6470	2,781.1	-83.3
3/9/19	35992.8470	\$576.28	3596.9080	2,358.6	-236.1
	Sub Total	\$2,891.78	18682.4190	13,303.6	-1953.5

OVERBILLED 17310 - 15206 =
2104 x .15 = \$315.60

NO SOLAR CREDIT 3895 x 0.06241
\$243.09

(53% METERING ERROR)

OVERBILLED 18682 - 13,303
5379 x .15 = \$806

NO CREDIT SOLAR
1953 x .06241 = \$121.88

(60% METERING ERROR)

11,350

\$1486.5

AS OF 3/9/19 BILL METER
CONTINUES TO METER INCORRECTLY

BALANCE ON 3/9/19 BILL SHOULD BE \$1486.57

THIS METER SEEMS TO BE MONITORING
THE HOUSE SINCE 9/8/18

CREDIT
DUE
BARN-7796
070-000

ATTACHMENT #3



Frank J Cservak Jr <fcservak@c-mservices.com>

PUC Case # 3691576 & #3691697 - Cservak

1 message

Frank J Cservak Jr <fcservak@c-mservices.com>

Fri, Dec 20, 2019 at 2:43 PM

To: azepp@pa.gov, "Frank J. Cservak" <fcservak@c-mservices.com>

Bcc: Chris Cservak <Chris.Cservak@gmail.com>, Reid Cservak <reidfc@gmail.com>

Hello Angie,

As promised, please see my Updated Spreadsheets detailing the Meter Readings and Billing Statements dating back to October 2017 when my Solar Panels became operational. Also attached is Phone Records, Emails and Data exchanged with DLC and in particular. Charles Stoltenberg, Senior Metering "Engineer" dating back to January 2019.


Please confirm your receipt of this email.

Thank you very much, I look forward to continuing our discussion.

Frank

Frank J. Cservak Jr.
FCservak@C-MServices.com
412-427-4385

2 attachments

 **Cservak-DLC-8796-7796.pdf**
1462K

 **DLC-Response-Feb2018.pdf**
2302K

12/20/2019

Re: Cservak vs Duquesne Light Company
PUC BCS Case # 3691697 & # 3691576

Frank J Cservak
174 Barberry Road
Sewickley, PA 15143

Dear Angie,

It was good to speak with you today so that you have a better understanding of my claim. I am pleased to provide further background and update to the cost data surrounding my case.

1. In February 2015, when switching from temporary to permanent electrical service for our new House, We were **required** by DLC to install a second electrical meter for the barn which I did in order to get our Occupancy permit. I was forced to install the second meter. I am in the process of having one of the meters removed but now request reimbursement for the second meter charges back to Feb 15, 2015, the date we occupied the House. 59 mo. X \$13.50/mo = \$796.50.
2. In September 2017, we installed solar panels on both the house and barn and at the same time installed TED (The Energy Detective) Electricity Monitoring Systems in both the House and Barn. At that time DLC was to have installed "Net" meters and provide me with Net Metering Statements which were not provided until June 2019 and October 2019. Curiously enough, my data observes that the "Net" meters would not run backwards (which happens on a second to second basis)... effectively not providing the Solar Credit (\$\$\$) to my (2) accounts.
3. In January of 2019 I complained to DLC regarding their erroneous Meter Readings and Billing Statements of 2017 and 2018 and their apparent inability to keep track of the KWH and Dollars associated with my Bills regarding my Solar Power Generation Credits. Attached are Emails w/ Notes and Charles Stoltenberg's "Data" regarding my Accounts. This is the extent of DLC's response to my Complaint thus far which provides the backdrop to my Claim.
4. I have also provided updated Spreadsheets detailing Metering Data and Account Billing Reconciliations from September 2017 to today as I previously provided in these Cases. The net result which is Highlighted on the spreadsheets result in a Credit Due: \$2555.79 to Account #8796 and a Credit Due: \$3485.78 to Account #7796. Please see the Spreadsheets. **The Credit Due Totals: \$6041.56 over the 3 Year Period.**

5. I am in the process of having one of the Meters removed which will Eliminate one of the Accounts and request that once the Credit Checks are issued to me in those amounts, DLC restarts their billing process on the Remaining Account.

Dec 28

Thank you for your attention to my Claim.



Frank J. Cservak Jr. P.E.
412-427-4385
CM Services
174 Barberry Road
Sewickley, PA 15143



Fwd: PUC Case # 3691576 & #3691697 - Cservak

1 message

Frank J Cservak Jr <fcservak@c-mservices.com>

Tue, Dec 24, 2019 at 12:49 PM

To: azepp@pa.gov, josdiaz@pa.gov, "Frank J. Cservak" <fcservak@c-mservices.com>

Angie and Jose,

On my previous email update, I failed to provide back-up to the meter readings since June 2019... That data is provided along with the updated spreadsheets as attachment: Cservak-BCS3691576-BCS36911697

The Charges on these two accounts are inextricably intertwined since May of 2019 when DLC Flip-Flopped the two Billing Accounts for No Good Reason other than to cause confusion and take advantage... Again. I am Very Upset about this Chicanery...

Thank you for your help in setting this matter right. DLC should be Punished for doing this.

Frank
Frank J. Cservak Jr. P.E.
FCservak@C-MServices.com
412-427-4385

----- Forwarded message -----

From: **Frank J Cservak Jr** <fcservak@c-mservices.com>
Date: Fri, Dec 20, 2019 at 2:43 PM
Subject: PUC Case # 3691576 & #3691697 - Cservak
To: <azepp@pa.gov>, Frank J. Cservak <fcservak@c-mservices.com>

Hello Angie,

As promised, please see my Updated Spreadsheets detailing the Meter Readings and Billing Statements dating back to October 2017 when my Solar Panels became operational. Also attached is Phone Records, Emails and Data exchanged with DLC and in particular. Charles Stoltenberg, Senior Metering "Engineer" dating back to January 2019.

Please confirm your receipt of this email.

Thank you very much, I look forward to continuing our discussion.

Frank

Frank J. Cservak Jr.
FCservak@C-MServices.com
412-427-4385

3 attachments

-  **Cservak-DLC-8796-7796.pdf**
1462K
-  **DLC-Response-Feb2018.pdf**
2302K
-  **Cservak-BCS3691576-BCS3691697.pdf**
3637K

House - 8796

DATE	METER #	Meter Reading	Duq Lt Co Kw Rate	DLC Kw	Duq Lt Co Bill	TED Usage Kw	Ted & Telsa Solar Kw	Cservak Net Kw	Corrected Heat Pump Kw Rate	Heat Pump Rate (Fixed)	Corrected Bill	Adjustments House - 8796	
10/7/17	F73789721	26830.5090	\$0.1569	1635.5730	\$256.64	441.2		441.2	\$0.1569	\$0.1569	\$69.22	-\$187.42	
11/5/17		28482.8930	\$0.1587	1652.3840	\$262.29	721.7		721.7	\$0.1333	\$0.1333	\$96.20	-\$166.09	
12/5/17		30794.0300	\$0.1540	2311.1370	\$356.02	1625.5	-231.3	1394.2	\$0.1024	\$0.1194	\$166.47	-\$189.55	
1/7/18		33395.4500	\$0.1559	2601.4200	\$405.57	3556.0	-210	3346.0	\$0.1153	\$0.1225	\$409.89	\$4.32	
2/6/18		35846.5940	\$0.1550	2451.1440	\$379.95	4216.6		4216.6	\$0.1004	\$0.1004	\$423.35	\$43.40	
2/19/18		36424.0000	\$0.1805	577.4060	\$92.65	1314.0	-94.2	1219.8	\$0.0994	\$0.1071	\$130.64	\$37.99	
		Sub Total			11229.0640	\$1,753.12	11875.0	-535.5	11339.5			\$1,295.77	-\$457.35
2/19/18	F74184522	0.0000					Change Meter						
3/7/18		143.8100	\$0.2112	143.8100	\$30.37	656.0	-219.8	436.2	\$0.0608	\$0.0915	\$39.91	\$9.54	
4/8/18		2484.0060	\$0.1555	2340.1960	\$363.89	2337.8	-750.1	1587.7	\$0.0722	\$0.1063	\$168.77	-\$195.12	
5/7/18		3731.9330	\$0.1651	1247.9270	\$206.03	1088.6	-847.6	241.0	\$0.0357	\$0.1611	\$38.83	-\$167.20	
6/6/18		4937.0710	\$0.1621	1205.1380	\$195.31	553.8	-933.2	-379.4	-\$0.1317	\$0.1923	-\$72.96	-\$268.27	
7/5/18		6181.7920	\$0.1623	1244.7210	\$202.02	908.6	-877.7	30.9	\$0.0058	\$0.1715	\$5.30	-\$196.72	
8/6/18		7880.9660	\$0.1603	1699.1740	\$272.42	1744.3	-1016.8	727.5	\$0.0660	\$0.1583	\$115.16	-\$157.26	
9/8/18		9870.7720	\$0.1575	1989.8060	\$313.35	191.8	-850.2	-658.4	-\$1.1829	\$0.3446	-\$226.88	-\$540.23	
9/10/18		9905.0000	\$0.0000	34.2280									
		Sub Total			9905.0000	1583.39	7480.9	-5495.4	1985.5			\$68.13	-\$1,515.26
9/10/18	F82092150	0.0000					Change Meter						
10/7/18		991.5180	\$0.1704	991.5180	\$168.95	1353.4	-606.7	746.7	\$0.0906	\$0.1643	\$122.68	-\$46.27	
11/5/18		2839.0670	\$0.1541	1847.5490	\$284.74	712.6	-384.5	328.1	\$0.0756	\$0.1643	\$53.91	-\$230.83	
12/5/18		5684.9620	\$0.1509	2845.8950	\$429.56	3058.3	-172.8	2885.5	\$0.1018	\$0.1079	\$311.35	-\$118.21	
1/7/19		8491.7320	\$0.1417	2806.7700	\$397.67	3541.3	-159.8	3381.5	\$0.1008	\$0.1056	\$357.09	-\$40.58	
2/6/19		11228.6080	\$0.1608	2736.8760	\$440.21	4188.9	-50	4138.9	\$0.1021	\$0.1033	\$427.55	-\$12.66	
3/9/19		13733.1370	\$0.1617	2504.5290	\$404.86	3402.8	-216.6	3186.2	\$0.0956	\$0.1021	\$325.31	-\$79.55	
4/7/19		15596.2680	\$0.1665	1883.1310	\$310.19	3077.6	-556.6	2521.0	\$0.0829	\$0.1012	\$255.13	-\$55.06	
		Sub Total			15596.2680	2436.18	19334.90	-2147.00	17187.90			\$1,853.01	-\$583.17
								Flip-Flop Billing Accounts					
5/7/19		15605.5590	\$1.5703	9,2910	\$14.59	711.3	-770.4	-59.1	\$0.0205	\$0.1079	\$14.59	\$0.00	
6/9/19		15260.6720	-\$0.0386	-344.887	13.32	110	-941	-831	\$0.1211	\$0.1803	\$13.32	\$0.00	
7/17/19		15014.0000	-\$0.0549	-246.632	13.53	45.2	-44.5	0.7	\$0.2993	\$0.1803	\$13.53	\$0.00	
8/8/19		15414.0530	\$0.0329	400.013	13.18	843	-1038	-195	\$0.0156	\$0.3243	\$13.18	\$0.00	
9/9/19		15264.8300	N/A	-149.223	14.37	395.5	-1048.4	-652.9	N/A	N/A	\$14.37	\$0.00	
10/9/19		15197.8170	N/A	-67.013	14.06	-113.6	-880.7	-994.08	N/A	N/A	\$14.06	\$0.00	
11/10/19 (EST)		15106.0611	N/A	-91.7559	14.37	34.9	-605.7	-570.8	N/A	N/A	\$14.37	\$0.00	
12/8/19		15605.0000	N/A	489.9369	13.36	92.2	-39.5	52.7	N/A	N/A	\$13.36	\$0.00	
		Sub Total		-0.2700	\$110.78	2118.50	-5368.90	-3250.18			\$110.78	\$0.00	
		Grand Totals		36730.0620	\$5,883.47	40809.3	-13546.8	27262.7			\$3,327.68	-\$2,555.79	



LIVE DASHBOARD

HISTORY

GRAPHING

SPYDER

NET

SOLAR ▼

Month History

Hour History

This Year			Last Year		
Month	Energy	Cost	Month	Energy	Cost
Nov 19	92.2 kWh ✓	\$9.22	Nov 18	3058.3 kWh	\$305.83
Oct 19	34.9 kWh ✓	\$3.49	Oct 18	712.6 kWh	\$71.26
Sep 19	-113.6 kWh ✓	\$0.00	Sep 18	1353.4 kWh	\$135.35
Aug 19	395.5 kWh ✓	\$39.56	Aug 18	191.8 kWh	\$19.17
Jul 19	843.0 kWh ✓	\$84.30	Jul 18	1744.3 kWh	\$174.44
Jun 19	45.2 kWh	\$4.52	Jun 18	908.6 kWh	\$90.87
May 19	110.0 kWh	\$11.01	May 18	553.8 kWh	\$55.39
Apr 19	711.3 kWh	\$71.14	Apr 18	1088.6 kWh	\$108.85
Mar 19	3077.6 kWh	\$307.76	Mar 18	2337.8 kWh	\$292.23
Feb 19	3402.8 kWh	\$340.29	Feb 18	1970.5 kWh	\$246.32
Jan 19	4188.9 kWh	\$418.89	Jan 18	4216.6 kWh	\$527.09
Dec 18	3541.3 kWh	\$354.14	Dec 17	0.0 kWh	\$0.00

Today			Yesterday		
Hour	Energy	Cost	Hour	Energy	Cost
12/19 09 AM	5.1 kWh	\$0.51	12/18 09 AM	0.0 kWh	\$0.00
12/19 08 AM	3.1 kWh	\$0.31	12/18 08 AM	2.5 kWh	\$0.25
12/19 07 AM	4.9 kWh	\$0.49	12/18 07 AM	2.5 kWh	\$0.25
12/19 06 AM	3.8 kWh	\$0.38	12/18 06 AM	1.8 kWh	\$0.18
12/19 05 AM	2.7 kWh	\$0.27	12/18 05 AM	2.3 kWh	\$0.22
12/19 04 AM	2.7 kWh	\$0.27	12/18 04 AM	2.5 kWh	\$0.25
12/19 03 AM	3.3 kWh	\$0.33	12/18 03 AM	2.5 kWh	\$0.25
12/19 02 AM	3.4 kWh	\$0.34	12/18 02 AM	2.0 kWh	\$0.21
12/19 01 AM	3.2 kWh	\$0.32	12/18 01 AM	1.5 kWh	\$0.15
12/19 12 AM	3.1 kWh	\$0.31	12/18 12 AM	2.3 kWh	\$0.23
12/18 11 PM	2.3 kWh	\$0.23	12/17 11 PM	1.1 kWh	\$0.11
12/18 10 PM	2.3 kWh	\$0.23	12/17 10 PM	1.1 kWh	\$0.11
12/18 09 PM	2.1 kWh	\$0.21	12/17 09 PM	1.2 kWh	\$0.11
12/18 08 PM	1.9 kWh	\$0.19	12/17 08 PM	1.4 kWh	\$0.14
12/18 07 PM	2.4 kWh	\$0.24	12/17 07 PM	2.4 kWh	\$0.24
12/18 06 PM	3.3 kWh	\$0.33	12/17 06 PM	2.9 kWh	\$0.29
12/18 05 PM	2.0 kWh	\$0.20	12/17 05 PM	1.4 kWh	\$0.14
12/18 04 PM	1.7 kWh	\$0.17	12/17 04 PM	2.9 kWh	\$0.29
12/18 03 PM	1.8 kWh	\$0.18	12/17 03 PM	2.7 kWh	\$0.27
12/18 02 PM	2.9 kWh	\$0.29	12/17 02 PM	2.6 kWh	\$0.26
12/18 01 PM	1.1 kWh	\$0.11	12/17 01 PM	1.0 kWh	\$0.10
12/18 12 PM	-0.1 kWh	\$0.00	12/17 12 PM	1.5 kWh	\$0.15
12/18 11 AM	-0.3 kWh	-\$0.02	12/17 11 AM	0.1 kWh	\$0.01
12/18 10 AM	0.0 kWh	\$0.00	12/17 10 AM	0.5 kWh	\$0.05

Day History

This Week			Last Week		
Day	Energy	Cost	Day	Energy	Cost
Wed 12/18	43.5 kWh	\$4.35	Wed 12/11	27.8 kWh	\$2.78
Tue 12/17	45.5 kWh	\$4.56	Tue 12/10	25.6 kWh	\$2.57
Mon 12/16	43.7 kWh	\$4.37	Mon 12/09	40.7 kWh	\$4.06
Sun 12/15	38.7 kWh	\$3.87	Sun 12/08	34.0 kWh	\$3.41
Sat 12/14	32.7 kWh	\$3.27	Sat 12/07	27.6 kWh	\$2.76
Fri 12/13	38.2 kWh	\$3.83	Fri 12/06	54.0 kWh	\$5.40
Thu 12/12	17.6 kWh	\$1.75	Thu 12/05	54.9 kWh	\$5.49



LIVE DASHBOARD

HISTORY

GRAPHING

SPYDER

SPYDER SOLAR ▼

Month History

This Year			Last Year		
Month	Energy	Cost	Month	Energy	Cost
Nov 19	-39.5 kWh ✓	-\$3.95	Nov 18	-172.8 kWh	-\$17.28
Oct 19	-605.7 kWh ✓	-\$60.57	Oct 18	-384.5 kWh	-\$38.45
Sep 19	-880.7 kWh ✓	-\$88.07	Sep 18	-606.7 kWh	-\$60.67
Aug 19	-1048.4 kWh ✓	-\$104.84	Aug 18	-59.7 kWh	-\$5.97
Jul 19	-1038.4 kWh ✓	-\$103.84	Jul 18	-1016.8 kWh	-\$101.68
Jun 19	-44.5 kWh	-\$4.45	Jun 18	-877.7 kWh	-\$87.77
May 19	-941.3 kWh	-\$94.14	May 18	-933.2 kWh	-\$93.32
Apr 19	-770.4 kWh	-\$77.04	Apr 18	-847.6 kWh	-\$84.75
Mar 19	-556.6 kWh	-\$55.66	Mar 18	-41.3 kWh	-\$5.16
Feb 19	-216.6 kWh	-\$21.65	Feb 18	0.0 kWh	\$0.00
Jan 19	-50.0 kWh	-\$4.99	Jan 18	0.0 kWh	\$0.00
Dec 18	-159.8 kWh	-\$15.98	Dec 17	0.0 kWh	\$0.00

Hour History

Today			Yesterday		
Hour	Energy	Cost	Hour	Energy	Cost
12/19 09 AM	0.0 kWh	\$0.00	12/18 09 AM	-0.6 kWh	-\$0.05
12/19 08 AM	0.0 kWh	\$0.00	12/18 08 AM	-0.1 kWh	\$0.00
12/19 07 AM	0.0 kWh	\$0.00	12/18 07 AM	0.0 kWh	\$0.00
12/19 06 AM	0.0 kWh	\$0.00	12/18 06 AM	0.0 kWh	\$0.00
12/19 05 AM	0.0 kWh	\$0.00	12/18 05 AM	0.0 kWh	\$0.00
12/19 04 AM	0.0 kWh	\$0.00	12/18 04 AM	0.0 kWh	\$0.00
12/19 03 AM	0.0 kWh	\$0.00	12/18 03 AM	0.0 kWh	\$0.00
12/19 02 AM	0.0 kWh	\$0.00	12/18 02 AM	0.0 kWh	\$0.00
12/19 01 AM	0.0 kWh	\$0.00	12/18 01 AM	0.0 kWh	\$0.00
12/19 12 AM	0.0 kWh	\$0.00	12/18 12 AM	0.0 kWh	\$0.00
12/18 11 PM	0.0 kWh	\$0.00	12/17 11 PM	0.0 kWh	\$0.00
12/18 10 PM	0.0 kWh	\$0.00	12/17 10 PM	0.0 kWh	\$0.00
12/18 09 PM	0.0 kWh	\$0.00	12/17 09 PM	0.0 kWh	\$0.00
12/18 08 PM	0.0 kWh	\$0.00	12/17 08 PM	0.0 kWh	\$0.00
12/18 07 PM	0.0 kWh	\$0.00	12/17 07 PM	0.0 kWh	\$0.00
12/18 06 PM	0.0 kWh	\$0.00	12/17 06 PM	0.0 kWh	\$0.00
12/18 05 PM	0.0 kWh	\$0.00	12/17 05 PM	0.0 kWh	\$0.00
12/18 04 PM	0.0 kWh	\$0.00	12/17 04 PM	0.0 kWh	\$0.00
12/18 03 PM	0.0 kWh	\$0.00	12/17 03 PM	0.0 kWh	\$0.00
12/18 02 PM	0.0 kWh	\$0.00	12/17 02 PM	0.0 kWh	\$0.00
12/18 01 PM	0.0 kWh	\$0.00	12/17 01 PM	-0.1 kWh	-\$0.01
12/18 12 PM	-0.8 kWh	-\$0.07	12/17 12 PM	-0.5 kWh	-\$0.04
12/18 11 AM	-0.9 kWh	-\$0.08	12/17 11 AM	-0.5 kWh	-\$0.04
12/18 10 AM	-0.6 kWh	-\$0.06	12/17 10 AM	-0.3 kWh	-\$0.02

Day History

This Week			Last Week		
Day	Energy	Cost	Day	Energy	Cost
Wed 12/18	-3.0 kWh	-\$0.30	Wed 12/11	-15.1 kWh	-\$1.51
Tue 12/17	-1.5 kWh	-\$0.14	Tue 12/10	-1.1 kWh	-\$0.11
Mon 12/16	-2.2 kWh	-\$0.22	Mon 12/09	0.0 kWh	\$0.00
Sun 12/15	-1.2 kWh	-\$0.12	Sun 12/08	-9.6 kWh	-\$0.96
Sat 12/14	-0.0 kWh	\$0.00	Sat 12/07	-16.2 kWh	-\$1.62
Fri 12/13	-3.1 kWh	-\$0.31	Fri 12/06	-1.4 kWh	-\$0.14
Thu 12/12	-8.8 kWh	-\$0.88	Thu 12/05	0.0 kWh	\$0.00

Service Never Ends Barn - 7796

METER #	DATE	Meter Reading	Duq Lt Co Kw Rate	DLC Kw	Duq Lt Co Bill	Ted Usage Kw	Ted & Telsa Solar Kw	Cservak Net Kw	Heat Pump Rate (Fixed)	Corrected Bill	Adjustments Barn - 7796		
F82092154	11/8/17	0.0000				Change Meter							
	12/5/17	2150.5320	\$0.1660	2150.5320	\$356.93	1,868.3	-83	1,785.3	\$0.1085	\$193.71	-\$163.22		
	1/7/18	5354.8930	\$0.1544	3204.3610	\$494.71	2,025.6	-128.8	1,896.8	\$0.1137	\$215.67	-\$279.04		
	2/6/18	8450.5110	\$0.1537	3095.6180	\$475.67	1,956.2	-120	1,836.2	\$0.1140	\$209.33	-\$266.34		
	3/7/18	10815.4870	\$0.1552	2364.9760	\$367.15	1,825.6	-195	1,630.6	\$0.1110	\$181.00	-\$186.15		
	4/8/18	12830.5650	\$0.1566	2015.0780	\$315.56	1,795.7	-520.2	1,275.5	\$0.1093	\$139.41	-\$176.15		
	5/7/18	13882.3840	\$0.1676	1051.8190	\$176.26	1,725.3	-559.9	1,165.4	\$0.1508	\$175.74	-\$0.52		
	6/6/18	14509.9780	\$0.1742	627.5940	\$109.34	1,143.8	-722.9	420.9	\$0.1580	\$66.50	-\$42.84		
	7/8/18	15707.3030	\$0.1628	1197.3250	\$194.89	1,266.1	-706.4	559.7	\$0.1614	\$90.34	-\$104.55		
	8/6/18	17310.4280	\$0.1610	1603.1250	\$258.05	1,599.7	-858.7	741.0	\$0.1594	\$118.12	-\$139.93		
		Sub Total			17310.4280	\$2,748.56	15,206.3	-3894.9	11,311.4		\$1,389.80	-\$1,358.76	
		Metering Rate Changed											
	9/8/18	19221.5820	\$0.1578	1911.1540	\$301.58	1,454.5	-730.6	723.9	\$0.1642	\$118.86	-\$182.72		
	10/7/18	20132.1300	\$0.1667	910.5480	\$151.77	1,309.2	-453.1	856.1	\$0.1671	\$143.05	-\$8.72		
	11/5/18	21230.9680	\$0.1601	1098.8380	\$175.87	1,506.5	-258.2	1,248.3	\$0.1166	\$145.55	-\$30.32		
	12/5/18	24388.2690	\$0.1504	3157.3010	\$474.81	2,742.5	-137.4	2,605.1	\$0.1050	\$273.54	-\$201.27		
	1/7/19	28125.2920	\$0.1426	3737.0230	\$533.05	1,151.2	-54.8	1,096.4	\$0.1245	\$136.50	-\$396.55		
	2/6/19	32395.9390	\$0.1589	4270.6470	\$678.42	2,781.1	-83.3	2,697.8	\$0.1111	\$299.73	-\$378.69		
	3/9/19	35992.8470	\$0.1602	3596.9080	\$576.28	2,358.6	-236.1	2,122.5	\$0.1118	\$237.30	-\$338.98		
					18682.4190	\$2,891.78	13303.6000	-1953.5000				-\$1,537.25	
		Flip-Flop Billing Accounts											
	4/7/19	38382.0070	\$0.1658	2389.1600	\$396.16	2,182.7	-411.6	1,771.1	\$0.1079	\$191.10	-\$205.06		
	5/7/19	38665.6000	\$0.2001	283.5930	\$56.76	444	-568.7	-124.7	\$0.1803	\$16.24	-\$40.52		
	6/8/19	38681.0350	\$1.0522	15.435	16.24	-242.3	-699.6	-941.9	\$0.1803	\$16.24	\$0.00		
	7/9/19	39086.868	\$0.3685	405.833	149.56	-8.9	-35.2	-44.1	\$0.1441	\$16.24	-\$133.32		
	8/8/19	39856.602	\$0.1734	769.734	133.5	280.1	-769.8	-489.7	\$0.1533	\$59.17	-\$74.33		
	9/9/19	40100.375	\$0.1441	243.773	54.19	-30.9	-742.2	-773.1	\$0.1441	\$16.24	-\$37.95		
	10/9/19	40031.695	N/A	-68.68	17.34	-131.3	-583.8	-715.1	\$0.1441	\$17.65	\$0.31		
11/6/19	40038.099	N/A	6.404	17.65	-26.8	-384.0	-410.8	\$0.1441	\$17.34	-\$0.31			
12/18/19	40848.153	\$0.1998	810.054	132.34	364.5	-216.1	148.4	\$0.1200	\$33.75	-\$98.59			
	Sub Total			4855.3060	\$973.74	2,831.1	-4411	-1,579.9		\$1,578.11	-\$589.77		
	Grand Totals			40848.1530	\$6,614.08	31,341.0	-10259.4	9,731.5		\$2,967.91	-\$3,485.78		



LIVE DASHBOARD

HISTORY

GRAPHING

SPYDER

NET

Solar

Month History

This Year			Last Year		
Month	Energy	Cost	Month	Energy	Cost
Nov 19	364.5 kWh ✓	\$54.67	Nov 18	2742.5 kWh	\$274.26
Oct 19	-26.8 kWh ✓	\$0.00	Oct 18	1506.5 kWh	\$150.65
Sep 19	-131.3 kWh ✓	\$0.00	Sep 18	1309.2 kWh	\$130.92
Aug 19	-30.9 kWh ✓	\$0.00	Aug 18	173.3 kWh	\$17.32
Jul 19	280.1 kWh	\$42.02	Jul 18	1599.7 kWh	\$159.98
Jun 19	-8.9 kWh	\$0.00	Jun 18	1266.1 kWh	\$126.61
May 19	-242.3 kWh	\$0.00	May 18	1143.8 kWh	\$114.39
Apr 19	444.0 kWh	\$44.40	Apr 18	1725.3 kWh	\$172.54
Mar 19	2182.7 kWh	\$218.28	Mar 18	1795.7 kWh	\$179.57
Feb 19	2358.6 kWh	\$235.86	Feb 18	0.0 kWh	\$0.00
Jan 19	2781.1 kWh	\$278.11	Jan 18	0.0 kWh	\$0.00
Dec 18	1151.2 kWh	\$115.12	Dec 17	0.0 kWh	\$0.00

Hour History

Today			Yesterday		
Hour	Energy	Cost	Hour	Energy	Cost
12/19 09 AM	1.0 kWh	\$0.15	12/18 09 AM	0.9 kWh	\$0.14
12/19 08 AM	1.0 kWh	\$0.14	12/18 08 AM	1.4 kWh	\$0.20
12/19 07 AM	1.8 kWh	\$0.27	12/18 07 AM	1.5 kWh	\$0.22
12/19 06 AM	1.8 kWh	\$0.27	12/18 06 AM	0.9 kWh	\$0.14
12/19 05 AM	1.6 kWh	\$0.24	12/18 05 AM	0.9 kWh	\$0.14
12/19 04 AM	1.2 kWh	\$0.17	12/18 04 AM	1.5 kWh	\$0.23
12/19 03 AM	1.0 kWh	\$0.16	12/18 03 AM	1.4 kWh	\$0.22
12/19 02 AM	1.6 kWh	\$0.25	12/18 02 AM	1.5 kWh	\$0.23
12/19 01 AM	1.7 kWh	\$0.26	12/18 01 AM	1.4 kWh	\$0.21
12/19 12 AM	1.7 kWh	\$0.25	12/18 12 AM	1.0 kWh	\$0.14
12/18 11 PM	1.2 kWh	\$0.18	12/17 11 PM	0.9 kWh	\$0.14
12/18 10 PM	1.0 kWh	\$0.15	12/17 10 PM	1.5 kWh	\$0.23
12/18 09 PM	1.5 kWh	\$0.23	12/17 09 PM	1.4 kWh	\$0.21
12/18 08 PM	1.7 kWh	\$0.25	12/17 08 PM	1.5 kWh	\$0.22
12/18 07 PM	1.6 kWh	\$0.24	12/17 07 PM	1.3 kWh	\$0.19
12/18 06 PM	1.3 kWh	\$0.20	12/17 06 PM	0.8 kWh	\$0.13
12/18 05 PM	0.9 kWh	\$0.14	12/17 05 PM	1.0 kWh	\$0.16
12/18 04 PM	1.3 kWh	\$0.20	12/17 04 PM	1.5 kWh	\$0.23
12/18 03 PM	1.6 kWh	\$0.24	12/17 03 PM	1.4 kWh	\$0.21
12/18 02 PM	1.5 kWh	\$0.22	12/17 02 PM	1.3 kWh	\$0.20
12/18 01 PM	1.4 kWh	\$0.21	12/17 01 PM	0.8 kWh	\$0.11
12/18 12 PM	0.4 kWh	\$0.06	12/17 12 PM	0.3 kWh	\$0.04
12/18 11 AM	0.0 kWh	\$0.00	12/17 11 AM	0.8 kWh	\$0.12
12/18 10 AM	0.7 kWh	\$0.11	12/17 10 AM	1.1 kWh	\$0.16

Day History

This Week			Last Week		
Day	Energy	Cost	Day	Energy	Cost
Wed 12/18	28.7 kWh	\$4.30	Wed 12/11	23.8 kWh	\$3.57
Tue 12/17	27.8 kWh	\$4.17	Tue 12/10	28.8 kWh	\$4.31
Mon 12/16	28.5 kWh	\$4.27	Mon 12/09	28.0 kWh	\$4.21
Sun 12/15	27.7 kWh	\$4.16	Sun 12/08	28.5 kWh	\$4.28
Sat 12/14	27.4 kWh	\$4.12	Sat 12/07	21.0 kWh	\$3.15
Fri 12/13	31.5 kWh	\$4.73	Fri 12/06	22.5 kWh	\$3.37
Thu 12/12	13.3 kWh	\$1.99	Thu 12/05	27.9 kWh	\$4.19



LIVE DASHBOARD

HISTORY

GRAPHING

SPYDER

SPYDER Solar

Month History

Hour History

This Year			Last Year		
Month	Energy	Cost	Month	Energy	Cost
Nov 19	-216.1 kWh ✓	-\$32.42	Nov 18	-137.4 kWh	-\$13.74
Oct 19	-384.0 kWh ✓	-\$57.60	Oct 18	-258.2 kWh	-\$25.81
Sep 19	-583.8 kWh ✓	-\$87.57	Sep 18	-453.1 kWh	-\$45.31
Aug 19	-742.2 kWh ✓	-\$111.33	Aug 18	-46.1 kWh	-\$4.60
Jul 19	-769.8 kWh ✓	-\$115.48	Jul 18	-858.7 kWh	-\$85.87
Jun 19	-35.2 kWh	-\$5.27	Jun 18	-706.4 kWh	-\$70.64
May 19	-699.6 kWh	-\$69.96	May 18	-722.9 kWh	-\$72.29
Apr 19	-568.7 kWh	-\$56.87	Apr 18	-559.9 kWh	-\$55.99
Mar 19	-411.6 kWh	-\$41.16	Mar 18	-44.2 kWh	-\$4.42
Feb 19	-236.1 kWh	-\$23.61	Feb 18	0.0 kWh	\$0.00
Jan 19	-83.3 kWh	-\$8.32	Jan 18	0.0 kWh	\$0.00
Dec 18	-54.8 kWh	-\$5.47	Dec 17	0.0 kWh	\$0.00

Today			Yesterday		
Hour	Energy	Cost	Hour	Energy	Cost
12/19 09 AM	-0.0 kWh	\$0.00	12/18 09 AM	-0.6 kWh	-\$0.08
12/19 08 AM	0.0 kWh	\$0.00	12/18 08 AM	-0.1 kWh	-\$0.01
12/19 07 AM	0.0 kWh	\$0.00	12/18 07 AM	0.0 kWh	\$0.00
12/19 06 AM	0.0 kWh	\$0.00	12/18 06 AM	0.0 kWh	\$0.00
12/19 05 AM	0.0 kWh	\$0.00	12/18 05 AM	0.0 kWh	\$0.00
12/19 04 AM	0.0 kWh	\$0.00	12/18 04 AM	0.0 kWh	\$0.00
12/19 03 AM	0.0 kWh	\$0.00	12/18 03 AM	0.0 kWh	\$0.00
12/19 02 AM	0.0 kWh	\$0.00	12/18 02 AM	0.0 kWh	\$0.00
12/19 01 AM	0.0 kWh	\$0.00	12/18 01 AM	0.0 kWh	\$0.00
12/19 12 AM	0.0 kWh	\$0.00	12/18 12 AM	0.0 kWh	\$0.00
12/18 11 PM	0.0 kWh	\$0.00	12/17 11 PM	0.0 kWh	\$0.00
12/18 10 PM	0.0 kWh	\$0.00	12/17 10 PM	0.0 kWh	\$0.00
12/18 09 PM	0.0 kWh	\$0.00	12/17 09 PM	0.0 kWh	\$0.00
12/18 08 PM	0.0 kWh	\$0.00	12/17 08 PM	0.0 kWh	\$0.00
12/18 07 PM	0.0 kWh	\$0.00	12/17 07 PM	0.0 kWh	\$0.00
12/18 06 PM	0.0 kWh	\$0.00	12/17 06 PM	0.0 kWh	\$0.00
12/18 05 PM	0.0 kWh	\$0.00	12/17 05 PM	0.0 kWh	\$0.00
12/18 04 PM	0.0 kWh	\$0.00	12/17 04 PM	0.0 kWh	\$0.00
12/18 03 PM	0.0 kWh	\$0.00	12/17 03 PM	0.0 kWh	\$0.00
12/18 02 PM	0.0 kWh	\$0.00	12/17 02 PM	0.0 kWh	\$0.00
12/18 01 PM	0.0 kWh	\$0.00	12/17 01 PM	-0.4 kWh	-\$0.06
12/18 12 PM	-0.6 kWh	-\$0.08	12/17 12 PM	-0.6 kWh	-\$0.07
12/18 11 AM	-0.8 kWh	-\$0.11	12/17 11 AM	-0.6 kWh	-\$0.07
12/18 10 AM	-0.6 kWh	-\$0.08	12/17 10 AM	-0.4 kWh	-\$0.05

Day History

This Week			Last Week		
Day	Energy	Cost	Day	Energy	Cost
Wed 12/18	-2.7 kWh	-\$0.41	Wed 12/11	-8.0 kWh	-\$1.20
Tue 12/17	-2.0 kWh	-\$0.30	Tue 12/10	-1.9 kWh	-\$0.28
Mon 12/16	-2.3 kWh	-\$0.34	Mon 12/09	-0.2 kWh	-\$0.04
Sun 12/15	-2.0 kWh	-\$0.30	Sun 12/08	-6.7 kWh	-\$1.01
Sat 12/14	-0.9 kWh	-\$0.14	Sat 12/07	-8.7 kWh	-\$1.30
Fri 12/13	-3.3 kWh	-\$0.50	Fri 12/06	-2.3 kWh	-\$0.35
Thu 12/12	-6.0 kWh	-\$0.89	Thu 12/05	0.0 kWh	\$0.00