Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Base Energy Service Reconciliation
August 2018 - July 2019

	Month	(Over)/Under Beginning Balance (a)	Base Energy Service Revenue (b)	Base Energy Service Expense (c)	Monthly (Over)/Under (d)	(Over)/Under Ending Balance (e)	Balance Subject to Interest (f)	Effective Interest Rate (g)	Interest (h)	Cumulative Interest (i)
[1]		$ (650,150)								
[2]		$ 650,150								
[3]	Aug-18	$ -	$ 3,860,759	$ 3,120,242	$ (740,517)	$ (740,517)	$ (370,258)	5.00%	$ (1,543)	$ (1,543)
[4]	Sep-18	$ (742,060)	$ 3,014,622	$ 2,647,937	$ (366,685)	$ (1,108,744)	$ (925,402)	5.00%	$ (3,856)	$ (5,399)
[5]	Oct-18	$ (1,112,600)	$ 2,990,175	$ 2,734,989	$ (255,186)	$ (1,367,786)	$ (1,240,193)	5.25%	$ (5,426)	$ (10,824)
[6]	Nov-18	$ (1,373,212)	$ 3,014,682	$ 3,014,866	$ 184	$ (1,373,028)	$ (1,373,120)	5.25%	$ (6,007)	$ (16,832)
[7]	Dec-18	$ (1,379,035)	$ 3,993,254	$ 4,025,825	$ 32,570	$ (1,346,465)	$ (1,362,750)	5.25%	$ (5,962)	$ (22,794)
[8]	Jan-19	$ (1,352,427)	$ 4,648,811	$ 5,386,912	$ 738,102	$ (614,325)	$ (983,376)	5.50%	$ (4,507)	$ (27,301)
[9]	Feb-19	$ (618,832)	$ 3,249,475	$ 5,184,955	$ 1,935,480	$ 1,316,648	$ 348,908	5.50%	$ 1,599	$ (25,702)
[10]	Mar-19	$ 1,318,247	$ 3,383,220	$ 3,890,845	$ 507,624	$ 1,825,871	$ 1,572,059	5.50%	$ 7,205	$ (18,497)
[11]	Apr-19	$ 1,833,076	$ 2,750,459	$ 2,762,641	$ 12,182	$ 1,845,259	$ 1,839,168	5.50%	$ 8,430	$ (10,067)
[12]*	May-19	$ 1,853,688	$ 3,037,683	$ 2,483,082	$ (554,601)	$ 1,299,087	$ 1,576,388	5.50%	$ 7,225	$ (2,842)
[13]*	Jun-19	$ 1,306,312	$ 3,175,823	$ 2,776,923	$ (398,900)	$ 907,412	$ 1,106,862	5.50%	$ 5,073	$ 2,231
[14]*	Jul-19	$ 912,486	$ 3,859,837	$ 3,206,504	$ (653,333)	$ 259,152	$ 585,819	5.50%	$ 2,685	$ 4,916
			$ 40,978,799	$ 41,235,720						

Cumulative (Over)/Under Collection of Base Energy Service: $ 261,837

[1] Estimated July 2018 balance in DE 18-041 dated June 18, 2018, Bates 129
[2] Adjustment to zero out the Base Energy beginning balance. Adjustment to agree with reconciled accounting records as of July 31, 2018 is included in DBS-5 and DBS-6.
(a) Prior Month Column (e) + Prior Month Column (h)
(b) Monthly Revenue calculated on DBS-3 P2
(c) Monthly Expenses calculated on DBS-3 P3
(d) Column (c) - Column (b)
(e) Column (a) + Column (d)
(f) [Column (a) + Column (e)] ÷ 2
(g) Interest rate on Customer Deposits
(h) Column (f) x Column (g) / 12
(i) Column (h) + Prior Month Column (i)
* Projection

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Energy Service Revenue
August 2018 - July 2019

	Month	Energy Service Revenue (a)	Renewable Portfolio Standard Revenue (b)	Energy Service Adjustment Revenue (c)	Energy Service Cost Reclass. Adjustment Factor (d)	Base Energy Service Revenue (e)
[1]	Aug-18	$ 3,576,286	$ 200,040	$ (419,997)	$ (64,515)	$ 3,860,759
[2]	Sep-18	$ 2,748,891	$ 186,214	$ (390,969)	$ (60,976)	$ 3,014,622
[3]	Oct-18	$ 2,783,046	$ 144,527	$ (303,445)	$ (48,212)	$ 2,990,175
[4]	Nov-18	$ 2,806,473	$ 145,964	$ (306,461)	$ (47,712)	$ 3,014,682
[5]	Dec-18	$ 3,728,314	$ 186,295	$ (391,140)	$ (60,096)	$ 3,993,254
[6]	Jan-19	$ 4,413,168	$ 233,973	$ (407,457)	$ (62,158)	$ 4,648,811
[7]	Feb-19	$ 2,914,119	$ 117,392	$ (392,656)	$ (60,091)	$ 3,249,475
[8]	Mar-19	$ 3,059,323	$ 113,269	$ (378,866)	$ (58,301)	$ 3,383,220
[9]	Apr-19	$ 2,485,666	$ 92,848	$ (310,562)	$ (47,080)	$ 2,750,459
[10]*	May-19	$ 2,745,243	$ 101,514	$ (339,545)	$ (54,408)	$ 3,037,683
[11]*	Jun-19	$ 2,857,699	$ 110,609	$ (369,969)	$ (58,764)	$ 3,175,823
[12]*	Jul-19	$ 3,482,064	$ 131,575	$ (440,097)	$ (69,251)	$ 3,859,837
	Total	$ 37,600,292	$ 1,764,221	$ (4,451,163)	$ (691,565)	$ 40,978,799

(a) Adjustment to agree with reconciled accounting records
(b) Actual kWh sales multiplied by approved RPS Adder
(c) Actual kWh sales multiplied by approved Energy Service Adjustment Factor
(d) Actual kWh sales multiplied by the Energy Service Cost Reclassification Adjustment Factor approved
(e) Column (a) - Column (b) - Column (c) - Column (d) - Column (e)
* Projection

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Energy Service Expense Calculation
August 2018 - July 2019

		Energy Service Expense (a)	RPS Expense (b)	Base Energy Service Expense (c)
[1]	Aug-18	$ 3,132,905	$ 12,663	$ 3,120,242
[2]	Sep-18	$ 2,647,937	$ -	$ 2,647,937
[3]	Oct-18	$ 3,042,581	$ 307,591	$ 2,734,989
[4]	Nov-18	$ 3,264,586	$ 249,721	$ 3,014,866
[5]	Dec-18	$ 4,025,825	$ -	$ 4,025,825
[6]	Jan-19	$ 5,561,288	$ 174,376	$ 5,386,912
[7]	Feb-19	$ 5,184,955	$ -	$ 5,184,955
[8]	Mar-19	$ 3,897,407	$ 6,563	$ 3,890,845
[9]	Apr-19	$ 2,762,641	$ -	$ 2,762,641
[10]*	May-19	$ 2,538,468	$ 55,386	$ 2,483,082
[11]*	Jun-19	$ 3,470,478	$ 693,555	$ 2,776,923
[12]*	Jul-19	$ 3,206,504	$ -	$ 3,206,504
	Total	$ 42,735,574	$ 1,499,854	$ 41,235,720

(a) Adjustment to agree with reconciled accounting records
(b) Adjustment to agree with reconciled accounting records
(c) Column (a) - Column (b)
* Projection

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Renewable Portfolio Standard Reconciliation
2018 Program Year

	Month	Beginning Balance (a)	Revenue (b)	Expense (c)	Monthly (Over)/Under (d)	Ending Balance (e)	Balance Subject to Interest (f)	Interest Rate (g)	Interest (h)	Cumulative Interest (i)
[1]		$ (34,546)								
[2]		$ 34,546								
[3]	Jul-18	$ -	$ 180,968	$ 297,919	$ 116,951	$ 116,951	$ 58,475	5.00%	$ 244	$ 244
[4]	Aug-18	$ 117,195	$ 200,040	$ 12,663	$ (187,377)	$ (70,182)	$ 23,506	5.00%	$ 98	$ 342
[5]	Sep-18	$ (70,084)	$ 186,214	$ -	$ (186,214)	$ (256,298)	$ (163,191)	5.00%	$ (680)	$ (338)
[6]	Oct-18	$ (256,978)	$ 144,527	$ 307,591	$ 163,064	$ (93,915)	$ (175,446)	5.25%	$ (768)	$ (1,106)
[7]	Nov-18	$ (94,682)	$ 145,964	$ 249,721	$ 103,757	$ 9,075	$ (42,804)	5.25%	$ (187)	$ (1,293)
[8]	Dec-18	$ 8,888	$ 186,295	$ -	$ (186,295)	$ (177,408)	$ (84,260)	5.25%	$ (369)	$ (1,662)
[9]	Jan-19	$ (177,777)	$ 233,973	$ 174,376	$ (59,597)	$ (237,374)	$ (207,575)	5.50%	$ (951)	$ (2,613)
[10]	Feb-19	$ (238,325)	$ 117,392	$ -	$ (117,392)	$ (355,717)	$ (297,021)	5.50%	$ (1,361)	$ (3,975)
[11]	Mar-19	$ (357,078)	$ 113,269	$ 6,563	$ (106,707)	$ (463,785)	$ (410,432)	5.50%	$ (1,881)	$ (5,856)
[12]	Apr-19	$ (465,666)	$ 92,848	$ -	$ (92,848)	$ (558,515)	$ (512,090)	5.50%	$ (2,347)	$ (8,203)
[13]*	May-19	$ (560,862)	$ 101,514	$ 55,386	$ (46,128)	$ (606,989)	$ (583,925)	5.50%	$ (2,676)	$ (10,879)
[14]*	Jun-19	$ (609,665)	$ 110,609	$ 693,555	$ 582,945	$ (26,720)	$ (318,193)	5.50%	$ (1,458)	$ (12,338)
			$ 1,813,614	$ 1,797,773						
	Cumulative (Over)/Under Collection of RPS Compliance Costs						$ (28,178)			

[1] Estimated July 2018 balance in DE 18-041 dated June 18, 2018, Bates 132
[2] Adjustment to zero out the Base Energy beginning balance. Adjustment to agree with reconciled accounting records as of July 31, 2018 is included in DBS-5 and DBS-6.
(a) Prior Month Column (e) + Prior Month Column (h)
(b) Actual kWh sales multiplied by the RPS adder
(c) Actual Monthly REC expenses
(d) Column (c) - Column (b)
(e) Column (a) + Column (d)
(f) [Column (a) + Column (e)] ÷ 2
(g) Interest Rate on Customer Deposits
(h) Column (f) x Column (g) / 12
(i) Column (h) + Prior Month Column (i)
* Projection

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Calculation of Energy Service Adjustment Factor
Effective August 1, 2019

[1]	Base Energy Service (Over)/Under Collection	$	261,837
[2]	Energy Service Adjustment Factor (Over)/Under Collection	$	(4,950,201)
[3]	RPS (Over)/Under Collection	$	(28,178)
[4]	Total (Over)/Under Collection	$	(4,716,543)
[5]	Estimated Energy Service kWh Deliveries		480,169,454
[6]	Energy Service Adjustment Factor per kWh	$	(0.00982)

[1] Schedule DBS-3, Page 1
[2] Schedule DBS-5 Page 2
[3] Schedule DBS-4
[4] Sum of Lines 1 - 3
[5] Per Company forecast August 2019 - July 2020
[6] Line (4) ÷ Line (5), truncated after 5 decimal places

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Reconciliation of Energy Service Adjustment Factor (Over)/Under
Balance Incurred August 2018 - July 2019

	Month	Beginning (Over)/Under Balance (a)	Energy Service Adjustment Revenue (b)	Ending (Over)/Under Balance (c)	Balance Subject to Interest (d)	Effective Interest Rate (e)	Interest (f)	Cumulative Interest (g)
[1]		$ (4,385,505)						
[2]		$ (4,643,046)						
[3]	Aug-18	$ (9,028,551)	$ (419,997)	$ (8,608,554)	$ (8,818,552)	5.00%	$ (36,744)	$ (36,744)
[4]	Sep-18	$ (8,645,298)	$ (390,969)	$ (8,254,329)	$ (8,449,813)	5.00%	$ (35,208)	$ (71,952)
[5]	Oct-18	$ (8,289,536)	$ (303,445)	$ (7,986,091)	$ (8,137,814)	5.25%	$ (35,603)	$ (107,554)
[6]	Nov-18	$ (8,021,694)	$ (306,461)	$ (7,715,233)	$ (7,868,464)	5.25%	$ (34,425)	$ (141,979)
[7]	Dec-18	$ (7,749,658)	$ (391,140)	$ (7,358,518)	$ (7,554,088)	5.25%	$ (33,049)	$ (175,028)
[8]	Jan-19	$ (7,391,567)	$ (407,457)	$ (6,984,110)	$ (7,187,839)	5.50%	$ (32,944)	$ (207,972)
[9]	Feb-19	$ (7,017,054)	$ (392,656)	$ (6,624,398)	$ (6,820,726)	5.50%	$ (31,262)	$ (239,234)
[10]	Mar-19	$ (6,655,660)	$ (378,866)	$ (6,276,794)	$ (6,466,227)	5.50%	$ (29,637)	$ (268,871)
[11]	Apr-19	$ (6,306,431)	$ (310,562)	$ (5,995,869)	$ (6,151,150)	5.50%	$ (28,193)	$ (297,064)
[12]*	May-19	$ (6,024,062)	$ (339,545)	$ (5,684,516)	$ (5,854,289)	5.50%	$ (26,832)	$ (323,896)
[13]*	Jun-19	$ (5,711,349)	$ (369,969)	$ (5,341,380)	$ (5,526,364)	5.50%	$ (25,329)	$ (349,225)
[14]*	Jul-19	$ (5,366,709)	$ (440,097)	$ (4,926,613)	$ (5,146,661)	5.50%	$ (23,589)	$ (372,814)
			$ (4,451,163)					
		Total (Over)/Under Collection:		$ (4,950,201)				

[1] Estimated July 2018 balance in DE 18-041 dated June 18, 2018, (Line 6 on Bates 133)
[2] Adjustment to agree with reconciled accounting records as of July 31, 2018
(a) Prior month Column (c) + Prior month Column (f)
(b) Actual kWh sales multiplied by the approved Energy Service Adjustment Factor
(c) Column (a) - Column (b)
(d) [Column (a) + Column (c)] ÷ 2
(e) Interest rate on Customer Deposits
(f) Column (d) x Column (e) / 12
(g) Column (f) + Prior Month Column (g)
* Projection

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Energy Service Cost Reclassification Adjustment Factor (ESCRAF)
Effective August 1, 2019

		Total	Residential and Small C&I	Medium and Large C&I
[1]	Total Forecast of 2019 Costs	$ 393,465	$ 226,640	$ 166,825
[2]	Undercollection Related to ESCRAF	$ 357,839	$ 206,119	$ 151,720
[3]	Net Estimated Commodity Related Costs	$ 751,304	$ 432,759	$ 318,545
[4]	Estimated Forecast Energy Service kWh Deliveries	480,169,454	353,579,265	126,590,189
[5]	2018 ESCRAF per kWh	$ 0.00156	$ 0.00122	$ 0.00251

(1) Forecast of costs using previous period; Schedule DBS-6, Page 3, Line 4
(2) Schedule DBS-6, Page 2
(3) Line (1) + Line (2)
(4) Per Company forecast
(5) Line (3) ÷ Line (4), truncated after 5 decimal places

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Energy Service Cost Reclassification Adjustment Factor (ESCRAF) Reconciliation
August 2018 - July 2019

	Month	Beginning Balance (a)	Revenue (b)	Expense (c)	Monthly (Over)/Under (d)	Ending Balance (e)	Balance Subject to Interest (f)	Interest Rate (g)	Interest (h)	Cumulative Interest (i)
[1]		$ (701,081)								
[2]		$ -								
[3]	Aug-18	$ (701,081)	$ (64,515)	$ 26,630	$ 91,145	$ (609,936)	$ (655,508)	5.00%	$ (2,731)	$ (2,731)
[4]	Sep-18	$ (612,667)	$ (60,976)	$ 24,695	$ 85,671	$ (526,996)	$ (569,832)	5.00%	$ (2,374)	$ (5,106)
[5]	Oct-18	$ (529,371)	$ (48,212)	$ 26,753	$ 74,965	$ (454,406)	$ (491,888)	5.25%	$ (2,152)	$ (7,258)
[6]	Nov-18	$ (456,558)	$ (47,712)	$ 29,659	$ 77,371	$ (379,187)	$ (417,872)	5.25%	$ (1,828)	$ (9,086)
[7]	Dec-18	$ (381,015)	$ (60,096)	$ 41,545	$ 101,641	$ (279,374)	$ (330,195)	5.25%	$ (1,445)	$ (10,530)
[8]	Jan-19	$ (280,819)	$ (62,158)	$ 42,972	$ 105,130	$ (175,689)	$ (228,254)	5.50%	$ (1,046)	$ (11,577)
[9]	Feb-19	$ (176,735)	$ (60,091)	$ 38,790	$ 98,882	$ (77,853)	$ (127,294)	5.50%	$ (583)	$ (12,160)
[10]	Mar-19	$ (78,436)	$ (58,301)	$ 31,344	$ 89,645	$ 11,208	$ (33,614)	5.50%	$ (154)	$ (12,314)
[11]	Apr-19	$ 11,054	$ (47,080)	$ 28,068	$ 75,148	$ 86,202	$ 48,628	5.50%	$ 223	$ (12,091)
[12]*	May-19	$ 86,425	$ (54,408)	$ 29,691	$ 84,099	$ 170,524	$ 128,475	5.50%	$ 589	$ (11,502)
[13]*	Jun-19	$ 171,113	$ (58,764)	$ 27,711	$ 86,475	$ 257,588	$ 214,350	5.50%	$ 982	$ (10,520)
[14]*	Jul-19	$ 258,570	$ (69,251)	$ 28,608	$ 97,859	$ 356,430	$ 307,500	5.50%	$ 1,409	$ (9,111)
			$ (691,565)	$ 376,466						

Cumulative (Over)/Under Collection of Energy Service Cost Reclassification Adjustment Provision: $ 357,839

[1] Estimated July 2018 balance in DE 18-041 dated June 18, 2018, Bates 135 Line 3
(a) Prior Month Column (e) + Prior Month Column (h)
(b) Actual kWh sales multiplied by approved ESCRAF
(c) DBS-6 Page 4 Column (d)
(d) Column (c) - Column (b)
(e) Column (a) + Column (d)
(f) [Column (a) + Column (e)] ÷ 2
(g) Interest Rate on Customer Deposits
(h) Column (f) x Column (g) / 12
(i) Column (h) + Prior Month Column (i)
* Projection

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Energy Service Cost Reclassification Adjustment Factor (ESCRAF)
Expense Summary August 2018 - July 2019

		Total	Residential and Small C&I	Medium and Large C&I
	Wholesale Costs:			
[1]	Procurement and Ongoing Administration Costs	$39,496	$19,748	$19,748
	Direct Retail:			
[2]	Bad Debt Expense	$209,122	$122,230	$86,892
	Cash Working Capital:			
[3]	Working Capital Impact	$144,847	$84,662	$60,185
[4]	Total Estimated Commodity Related Costs	$393,465	$226,640	$166,825

(1) Schedule DBS-6 Page 4 Column (a), allocated evenly
(2) Bad debt calculation August 2018 - July 2019. Allocated to customer group based on method agreed to in the settlement in Docket DE 05-126.
(3) Schedule DBS-6 Page 4 Column (c), allocated to customer group based on DR 95-169 allocation.
(4) Line (1) + Line (2) + Line (3)

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Energy Service Cost Reclassification Adjustment Factor Expenses
August 2018 - July 2019

		Payroll and Other Admin Expenses	Bad Debt Expense	Cash Working Capital Expense	Total Expense
		(a)	(b)	(c)	(d)
[1]	Aug-18	$2,660	$13,316	$10,654	$26,630
[2]	Sep-18	$113	$13,927	$10,654	$24,695
[3]	Oct-18	$226	$15,873	$10,654	$26,753
[4]	Nov-18	$2,671	$16,335	$10,654	$29,659
[5]	Dec-18	$11,131	$19,760	$10,654	$41,545
[6]	Jan-19	$4,705	$27,614	$10,654	$42,972
[7]	Feb-19	$927	$27,209	$10,654	$38,790
[8]	Mar-19	$925	$19,765	$10,654	$31,344
[9]	Apr-19	$3,583	$13,831	$10,654	$28,068
[10]*	May-19	$5,206	$13,831	$10,654	$29,691
[11]*	Jun-19	$3,225	$13,831	$10,654	$27,711
[12]*	Jul-19	$4,123	$13,831	$10,654	$28,608
	Total	$39,496	$209,122	$127,848	$376,466

(a) Per general ledger
(b) Actual bad debt calculation for period
(c) Approved cash working capital in DE 18-041, Bates 139 Line 7 ÷ 12
(d) Column (a) + Column (b) + Column (c)
* Projection based on previous period's costs

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Energy Service Cost Reclassification Adjustment Factor Expenses
Working Capital Summary

		Days of Cost (a)	Annual Percent (b)	Customer Payment Lag % (c)	CWC % (d)	Expense (e)	Working Capital Requirement (f)
[1]	2018 Purchase Power Costs	(37.227)	-10.20%	16.68%	6.48%	$ 36,553,274	$ 2,368,652
[2]	Renewable Portfolio Standard	(228.437)	-62.59%	16.68%	-45.91%	$ 1,813,614	$ (832,630)
[3]	Working Capital Requirement						$ 1,536,022
[4]	Capital Structure Post-tax						7.69%
[5]	Working Capital Impact						$ 118,120
[6]	Capital Structure Pre-tax						9.43%
[7]	Working Capital Impact						$ 144,847

Columns:
[1](a) Schedule DBS-6 Page 6
(b) Column (a) ÷ 365
(c) Schedule DBS-6 Page 8
(d) Column (b) + Column (c)
(e) Schedule DBS-6 Page 6
[2](a) Schedule DBS-6 Page 7
(b) Column (a) ÷ 365
(c) Schedule DBS-6 Page 8
(d) Column (b) + Column (c)
(e) Schedule DBS-6 Page 7
(f) Column (d) x Column (e)

Lines:
[3] Line 1(f) + Line 2(f)
[4] Docket No. DE 19-051
[5] Line (3) x Line (4)
[6] Docket No. DE 19-051
[7] Line (3) x Line (6)

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Energy Service Cost Reclassification Adjustment Factor Expenses

Invoice Month	Expense Description	Invoice Amount	Mid-Point Service Period	Invoice Date	Due Date	Payment Date	Elapsed Days	% of Total	Weighted Days
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
January 2018	Current Charge for January 2018	$ 1,068,762.12	1/16/2018	2/7/2018	2/20/2018	2/20/2018	35	2.92%	1.02
January 2018	Supplier Reallocation	$ (17,390.95)	1/16/2018	2/7/2018	2/20/2018	2/20/2018	35	-0.05%	(0.02)
January 2018	Current Charge for January 2018	$ 3,676,356.37	1/16/2018	2/7/2018	2/20/2018	2/27/2018	42	10.06%	4.22
January 2018	Supplier Reallocation	$ (25,073.11)	1/16/2018	2/7/2018	2/20/2018	2/27/2018	42	0.00%	0.00
February 2018	Current Charge for February 2018	$ 1,004,308.06	2/15/2018	3/12/2018	3/23/2018	3/23/2018	36	2.75%	0.99
February 2018	Supplier Reallocation	$ (9,498.45)	2/15/2018	3/15/2018	3/25/2018	3/20/2018	33	-0.03%	(0.01)
February 2018	Current Charge for February 2018	$ 2,895,253.85	2/15/2018	3/13/2018	3/20/2018	3/20/2018	33	7.92%	2.61
February 2018	Supplier Reallocation	$ (66,832.74)	2/15/2018	3/15/2018	3/25/2018	3/20/2018	33	0.00%	0.00
March 2018	Current Charge for March 2018	$ 2,133,259.20	3/16/2018	4/9/2018	4/20/2018	4/19/2018	34	5.84%	1.98
March 2018	Supplier Reallocation	$ 51,037.72	3/16/2018	4/9/2018	4/20/2018	4/19/2018	34	0.14%	0.05
March 2018	Current Charge for March 2018	$ 863,176.93	3/16/2018	4/10/2018	4/20/2018	4/19/2018	34	2.36%	0.80
March 2018	Supplier Reallocation	$ (31,111.26)	3/16/2018	4/11/2018	4/21/2018	4/20/2018	35	-0.09%	(0.03)
April 2018	Current Charge for April 2018	$ 1,620,470.68	4/15/2018	5/7/2018	5/21/2018	5/21/2018	36	4.43%	1.60
April 2018	Supplier Reallocation	$ 46,639.47	4/15/2018	5/8/2018	5/18/2018	5/17/2018	32	0.00%	0.00
April 2018	Current Charge for April 2018	$ 669,211.01	4/15/2018	5/10/2018	5/21/2018	6/13/2018	59	1.83%	1.08
April 2018	Supplier Reallocation	$ (18,980.56)	4/15/2018	5/9/2018	5/19/2018	5/18/2018	33	-0.05%	(0.02)
May 2018	Current Charge for May 2018	$ 1,413,030.61	5/16/2018	6/7/2018	6/20/2018	6/20/2018	35	3.87%	1.35
May 2018	Supplier Reallocation	$ (14,058.94)	5/16/2018	6/11/2018	6/21/2018	6/20/2018	35	-0.04%	(0.01)
May 2018	Current Charge for May 2018	$ 686,970.28	5/16/2018	7/10/2018	7/17/2018	7/17/2018	62	1.88%	1.17
May 2018	Supplier Reallocation	$ (78,439.37)	5/16/2018	6/11/2018	6/21/2018	6/20/2018	35	-0.21%	(0.08)
June 2018	Current Charge for June 2018	$ 1,629,525.71	6/15/2018	7/9/2018	7/20/2018	7/20/2018	35	4.46%	1.56
June 2018	Supplier Reallocation	$ (136,080.16)	6/15/2018	7/9/2018	7/20/2018	7/20/2018	35	0.00%	0.00
June 2018	Current Charge for June 2018	$ 668,418.59	6/15/2018	7/13/2018	7/20/2018	7/20/2018	35	1.83%	0.64
June 2018	Supplier Reallocation	$ 24,973.90	6/15/2018	7/13/2018	7/20/2018	7/20/2018	35	0.07%	0.02
July 2018	Current Charge for July 2018	$ 2,171,681.70	7/16/2018	8/8/2018	8/20/2018	8/20/2018	35	5.94%	2.08
July 2018	Supplier Reallocation for March 2018	$ (21,477.71)	7/16/2018	8/8/2018	8/20/2018	8/20/2018	35	-0.06%	(0.02)
July 2018	Current Charge for July 2018	$ 760,622.96	7/16/2018	8/13/2018	8/24/2018	8/24/2018	39	2.08%	0.81
July 2018	Supplier Reallocation for March 2018	$ (7,037.56)	7/16/2018	8/13/2018	8/24/2018	8/24/2018	39	-0.02%	(0.01)
August 2018	Current Charge for August 2018	$ 2,405,725.37	8/16/2018	9/10/2018	9/20/2018	9/20/2018	35	6.58%	2.30
August 2018	Supplier Reallocation	$ (27,806.19)	8/16/2018	9/12/2018	9/22/2018	9/20/2018	35	-0.08%	(0.03)
August 2018	Current Charge for August 2018	$ 726,183.41	8/16/2018	9/10/2018	9/20/2018	9/20/2018	35	1.99%	0.70
September 2018	Current Charge for September 2018	$ 2,016,868.19	9/15/2018	10/10/2018	10/22/2018	10/22/2018	37	5.52%	2.04
September 2018	Supplier Reallocation	$ 33,487.19	9/15/2018	10/9/2018	10/19/2018	10/18/2018	33	0.09%	0.03
September 2018	Current Charge for September 2018	$ 665,230.81	9/15/2018	10/10/2018	10/22/2018	10/22/2018	37	1.82%	0.67
September 2018	Supplier Reallocation	$ (1,423.95)	9/15/2018	10/3/2018	10/13/2018	11/13/2018	59	0.00%	(0.00)
September 2018	Supplier Reallocation	$ (32,335.56)	9/15/2018	10/23/2018	11/2/2018	11/1/2018	47	-0.09%	(0.04)
October 2018	Current Charge for October 2018	$ 2,087,127.99	10/16/2018	11/10/2018	11/20/2018	11/20/2018	35	5.71%	2.00
October 2018	Supplier Reallocation	$ 84,620.87	10/16/2018	11/6/2018	11/20/2018	11/20/2018	35	0.00%	0.00
October 2018	Current Charge for October 2018	$ 697,476.58	10/16/2018	11/10/2018	11/20/2018	11/20/2018	35	1.91%	0.67
November 2018	Current Charge for November 2018	$ 2,192,114.54	11/15/2018	12/10/2018	12/20/2018	12/19/2018	34	6.00%	2.04
November 2018	Supplier Reallocation	$ 69,802.77	11/15/2018	12/10/2018	12/20/2018	12/19/2018	34	0.19%	0.06
November 2018	Current Charge for November 2018	$ 737,046.46	11/15/2018	12/17/2018	12/31/2018	1/8/2019	54	2.02%	1.09
December 2018	Current Charge for December 2018	$ 2,996,838.44	12/16/2018	1/9/2019	1/22/2019	1/22/2019	37	8.20%	3.03
December 2018	Supplier Reallocation	$ 23,151.91	12/16/2018	1/9/2019	1/22/2019	1/22/2019	37	0.06%	0.02
December 2018	Current Charge for December 2018	$ 921,446.75	12/16/2018	1/14/2019	1/22/2019	1/18/2019	33	2.52%	0.83
	[1] Total	$ 36,553,273.93						Days	37.23

Columns:

(a) Month in which obligation for payment occurred
(b) Per invoices
(c) Per invoices
(d) Midpoint of applicable service period
(e) Per invoices
(f) Per agreements
(g) Date paid
(h) Number of days between Column (d) and Column (g)
(i) Column (c) ÷ Line (1)
(j) Column (h) x Column (i)

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
RPS Obligation Program Year 2018

Invoice Month (a)	Obligation Amount (b)	Mid-Point of Service Period (c)	Due Date (d)	Elapsed (Days) (e)	% of Total (f)	Weighted Days (g)
Jul-18	$ 180,968	7/16/2018	3/31/2019	258	9.98%	25.74
Aug-18	$ 200,040	8/16/2018	3/31/2019	227	11.03%	25.04
Sep-18	$ 186,214	9/15/2018	3/31/2019	197	10.27%	20.23
Oct-18	$ 144,527	10/16/2018	6/30/2019	257	7.97%	20.48
Nov-18	$ 145,964	11/15/2018	6/30/2019	227	8.05%	18.27
Dec-18	$ 186,295	12/16/2018	6/30/2019	196	10.27%	20.13
Jan-19	$ 233,973	1/16/2019	9/30/2019	257	12.90%	33.16
Feb-19	$ 117,392	2/14/2019	9/30/2019	228	6.47%	14.76
Mar-19	$ 113,269	3/16/2019	9/30/2019	198	6.25%	12.37
Apr-19	$ 92,848	4/15/2019	12/31/2019	260	5.12%	13.31
May-19	$ 101,514	5/16/2019	12/31/2019	229	5.60%	12.82
Jun-19	$ 110,609	6/15/2019	12/31/2019	199	6.10%	12.14
[1] Total	$ 1,813,614				[2] Days	228.44

Columns:
(a) Month in which obligation occurred
(b) Obligation based on kWh sales mulitplied by the approved RPS rates for period
(c) Midpoint of Service Period
(d) Date of Obligation for Payment
(e.) Number of days between Column (c) and Column (d)
(f) Column (b) / Line 1
(g) Column (c) multiplied by Column (e.)

Lines:
(1) Sum of Column (b)
(2) Sum of Column (g)

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Revenue Lead/Lag Applied to Energy Service

Service Period		Monthly Customer Accts.Receivable (a)	Monthly Sales (b)	Days In Month (c)	Average Daily Revenues (d)
1/1/2018	1/31/2018	$ 12,464,067	$ 9,336,310	31	$ 301,171
2/1/2018	2/28/2018	$ 12,094,179	$ 8,339,213	28	$ 297,829
3/1/2018	3/31/2018	$ 11,587,778	$ 8,030,574	31	$ 259,051
4/1/2018	4/30/2018	$ 11,275,943	$ 7,650,209	30	$ 255,007
5/1/2018	5/31/2018	$ 10,359,173	$ 7,002,414	31	$ 225,884
6/1/2018	6/30/2018	$ 11,587,820	$ 8,115,425	30	$ 270,514
7/1/2018	7/31/2018	$ 13,472,970	$ 9,427,852	31	$ 304,124
8/1/2018	8/31/2018	$ 12,357,067	$ 10,057,582	31	$ 324,438
9/1/2018	9/30/2018	$ 13,555,964	$ 9,129,873	30	$ 304,329
10/1/2018	10/31/2018	$ 10,519,662	$ 7,458,512	31	$ 240,597
11/1/2018	11/30/2018	$ 10,408,897	$ 7,535,632	30	$ 251,188
12/1/2018	12/31/2018	$ 12,634,538	$ 9,093,725	31	$ 293,346
	Average	$ 11,859,838			$ 277,290

[1] Service Lag	15.21
[2] Collection Lag	42.77
[3] Billing Lag	2.92
[4] Total Average Days Lag	60.90
[5] Customer Payment Lag-annual percent	16.68%

Columns:
(a) Accounts Receivable per general ledger at end of applicable mo
(b) Per Company billing data
(c) Number of days in applicable service period
(d) Column (b) ÷ Column (c.)

Lines:
[1] Docket No. DE 16-383
[2] (a) / (d)
[3] Docket No. DE 16-383
[4] Sum of Lines 1-3
[5] Line (4) ÷ 365