

Witness: Warshaw

## **Exhibits**

Schedule JDW-1	Summary of Transmission Expenses Estimated for 2018
Schedule JDW-2	Summary of ISO Tariff Section II Charges Estimated for 2018
Schedule JDW-3	Summary of System Restoration and Reactive Supply Charges Estimated for 2018
Schedule JDW-4	Summary of New England Power Schedule No. 21 Charges Estimated for 2018

### Summary of Transmission Expenses Estimated For the Year 2018

<b>ISO-NE Tariff Schedule 21 NEP LNS Tariff Charges</b>		
1	Local Network Service (Monthly Demand Charges)	\$3,691,810
2	Other NEP Charges	<u>1,015,755</u>
<b>Subtotal NEP Charges</b>		<u>\$4,707,565</u>
<b>ISO-NE OATT Tariff Section II Charges</b>		
3	OATT Schedule 9 - Regional Network Service Charges	\$17,875,539
4	OATT Schedule 1 - Scheduling, System Control & Dispatch	276,411
5	OATT Schedule 16 - System Restoration and Planning Service	80,616
6	OATT Schedule 2 - Reactive Supply and Voltage Control Service	<u>161,567</u>
<b>Subtotal ISO-NE Tariff Section II Charges</b>		<u>\$18,394,133</u>
<b>ISO-NE Tariff Section IV.A - Administrative Charges</b>		
7	ISO-NE Schedule 1 - Scheduling & Dispatch Service	\$328,255
8	ISO-NE Schedule 5 - NESCOE Budget	<u>11,898</u>
<b>Subtotal ISO-NE Tariff Section IV.A Charges</b>		<u>\$340,153</u>
9	<b>Subtotal of ISO-NE Tariff Charges</b>	<u>\$18,734,286</u>
10	<b>Total Estimated Expenses Flowing Through Current Rates</b>	<u>\$23,441,852</u>

Note: Includes actual January 2018 charges invoiced by ISO-NE on March 12, 2018 and New England Power on February 23, 2018.

Line 1 = JDW-4: Column (1), Line 13  
Line 2 = JDW-4: Sum of Column (2) thru (6), Line 13  
Line 3 = JDW-2, page 1: Column (2), Line 13  
Line 4 = JDW-2, page 1: Column (3), Line 13  
Line 5 = JDW-2, page 1: Column (5), Line 13  
Line 6 = JDW-2, page 1: Column (6), Line 13  
Line 7 = JDW-2, page 2: Column (2), Line 13  
Line 8 = JDW-2, page 2: Column (3), Line 13  
Line 9 = Sum of Line 3 thru Line 8  
Line 10 = Sum of Line 1 thru Line 8

**Summary of Estimated Transmission Expenses  
2017 vs. 2018 Filing Years**

		1 2017 Retail Filing	2 2018 Estimate	3 Yr/Yr Incr/(Decr)
<b>ISO-NE Tariff Schedule 21 NEP LNS Tariff Charges</b>				
1	Local Network Service (Monthly Demand Charges)	\$ 3,188,210	\$ 3,691,810	\$ 503,600
2	Other NEP Charges	998,630	1,015,755	17,125
	<b>Subtotal</b>	<b>\$ 4,186,841</b>	<b>\$ 4,707,565</b>	<b>\$ 520,725</b>
<b>ISO-NE OATT Tariff Section II Charges</b>				
3	OATT Schedule 9 - Regional Network Service Charges	\$ 16,253,185	\$ 17,875,539	\$ 1,622,355
4	OATT Schedule 1 - Scheduling, System Control & Dispatch	270,901	276,411	5,510
5	OATT Schedule 16 - System Restoration and Planning Service	87,427	80,616	(6,812)
6	OATT Schedule 2 - Reactive Supply and Voltage Control Service	153,134	161,567	8,433
	<b>Subtotal</b>	<b>\$ 16,764,647</b>	<b>\$ 18,394,133</b>	<b>\$ 1,629,486</b>
<b>ISO-NE Tariff Section IV.A - Administrative Charges</b>				
7	ISO-NE Schedule 1 - Scheduling & Dispatch Service	\$ 345,601	\$ 328,255	\$ (17,346)
8	ISO-NE Schedule 5 - NESCOE Budget	12,272	11,898	(374)
	<b>Subtotal</b>	<b>\$ 357,873</b>	<b>\$ 340,153</b>	<b>\$ (17,720)</b>
9	<b>Subtotal of ISO-NE Tariff Charges</b>	<b>\$ 17,122,520</b>	<b>\$ 18,734,286</b>	<b>\$ 1,611,766</b>
10	<b>Total Estimated Expenses</b>	<b>\$ 21,309,361</b>	<b>\$ 23,441,852</b>	<b>\$ 2,132,491</b>

Note: Includes actual January 2018 charges invoiced by ISO-NE on March 12, 2018 and New England Power on February 23, 2018.

**Summary of ISO-NE Tariff Section II Charges  
Estimated For the Year 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Monthly PTF kW Load	OATT Schedule 9 - Regional Network Service Charges	OATT Schedule 1 - Scheduling, System Control & Dispatch	OATT Schedule 16 - System Restoration and Planning Service	OATT Schedule 2 - Reactive Supply and Voltage Control Service	ISO-NE OATT Tariff Section II Charges	ISO-NE Schedule 1 - Scheduling & Dispatch Service	ISO-NE Schedule 5 - NESCOE Budget	Total ISO-NE Transmission Charges
1 January	156,411	\$1,580,557	\$25,511	\$9,471	\$14,612	\$1,630,151	\$ 30,247	\$ 1,102	\$ 1,661,499
2 February	136,250	1,271,189	20,517	5,818	12,017	1,309,542	24,370	883	1,334,794
3 March	127,717	1,191,578	19,232	5,454	11,265	1,227,528	22,843	828	1,251,199
4 April	120,558	1,124,785	18,154	5,148	10,633	1,158,721	21,563	781	1,181,065
5 May	162,420	1,515,351	24,458	6,935	14,325	1,561,070	29,050	1,052	1,591,173
6 June	182,750	1,827,500	27,520	7,803	16,119	1,878,942	32,687	1,184	1,912,813
7 July	177,988	1,779,880	26,803	7,600	15,699	1,829,981	31,835	1,153	1,862,970
8 August	177,913	1,779,130	26,791	7,597	15,692	1,829,210	31,822	1,153	1,862,185
9 September	169,218	1,692,180	25,482	7,226	14,925	1,739,813	30,266	1,097	1,771,175
10 October	127,877	1,278,770	19,257	5,460	11,279	1,314,766	22,872	829	1,338,466
11 November	130,926	1,309,260	19,716	5,591	11,548	1,346,114	23,417	848	1,370,380
12 December	152,536	1,525,360	22,970	6,513	13,454	1,568,297	27,283	988	1,596,568
13 12-Mo Total		\$17,875,539	\$276,411	\$80,616	\$161,567	\$18,394,133	\$328,255	\$11,898	\$18,734,286

Line 1: Actual charges invoiced by ISO-NE on March 12, 2018

Line 1-12: Column (1) = 2017 Monthly Coincident Network Load of LU

Line 1-5: Column (2) = 2017 OATT Schedule 9 RNS Rate \* Column (1) / 12

2017 RNS Rate= \$ 111.96 /kW-YR

Line 6-12: Column (2) = Estimated 2018 RNS Rate \* Column (1) / 12

2018 RNS Rate= \$ 120.00 /kW-YR

Line 1-12: Column (3) = Current OATT Schedule 1 Rate \* Column (1) / 12

Rate = \$ 1.80704 /kW-YR

Line 1-12: Column (4) = 0 [No Reliability Must Run Contracts are currently in effect for New Hampshire]

Line 1-12: Column (4) = JDW-3, Line 8 \* Column (1)

Rate = \$ 0.04270 /kW-Month

Line 1-12: Column (5) = JDW-3, Line 4 \* Column (1)

Rate = \$ 0.08820 /kW-Month

Line 1-12: Column (6) = Sum of Columns (2) thru (5)

Line 1-12: Column (7) = JDW-2 Column (2)

Rate = \$ 0.17886 kW-month

Line 1-12: Column (8) = JDW-2 Column (3)

Rate = \$ 0.00648 kW-month

Line 1-12: Column (9) = Sum of Columns (6) thru (8)

Line 13 = Sum of Line 1 thru Line 12

**Summary of ISO Tariff Section IV.A Administrative Charges  
Estimated For the Year 2018**

Period	(1) Monthly Regional Network Load	(2) ISO-NE Schedule 1 - Scheduling & Dispatch Service	(3) ISO-NE Schedule 5 - NESCOE Budget	(4) ISO-NE Tariff Section IV.A - Administrative
1 January	145,509	\$26,026	\$943	\$26,969
2 February	136,250	24,370	883	25,253
3 March	127,717	22,843	828	23,671
4 April	120,558	21,563	781	22,344
5 May	162,420	29,050	1,052	30,103
6 June	182,750	32,687	1,184	33,871
7 July	177,988	31,835	1,153	32,988
8 August	177,913	31,822	1,153	32,974
9 September	169,218	30,266	1,097	31,363
10 October	127,877	22,872	829	23,701
11 November	130,926	23,417	848	24,266
12 December	152,536	27,283	988	28,271
13	<b>Totals</b>	<b>\$324,034</b>	<b>\$11,740</b>	<b>\$335,773</b>

Column (1) = 2017 Monthly Coincident Network Load of LU

Column (2) = Column (1) \* \$0.17886 per kW-month per ISO 2018 Capital Budget Filing

Column (3) = Column (1) \* \$0.00648 per kW-month per NESCOE 2018 Budget Filing

Column (4) = Column (2) + Column (3)

## Summary of Reactive Power & Black Start Costs Estimated For the Year 2018

### Section I: Development of ISO-NE Schedule 2 Costs

1	Granite Total ISO-NE Schedle 2 Costs	\$193,497
2	2017 Granite Peak Load (KW)	<u>182,750</u>
3	Estimated Rate / KW-Yr	<u>\$1.0588</u>
4	Estimated Rate / KW-Mo	\$0.0882

### Section II: Development of ISO-NE Schedle 16 Costs

5	GraniteTotal ISO-NE Schedule 17 Settlement Costs	\$93,678
6	2017 Granite Peak Load (KW)	<u>182,750</u>
7	Estimated Rate / KW-Yr	<u>\$0.5126</u>
8	Estimated Rate / KW-Mo	\$0.0427

Line 1 = Granite ISO-NE Schedule 2 costs for the 12 months ending December 2017

Line 2 = Granite Peak Load in 2017

Line 3 = Line 1 / Line 2

Line 4 = Line 3 / 12

Line 5 = ISO Schedule 16 Settlement Reports for the 12 months ending December 2017

Line 6 = Line 2

Line 7 = Line 5 / Line 6

Line 8 = Line 7 / 12

**Summary of New England Power - Schedule No. 21 Charges  
Estimated For the Year 2018**

Period	(1) Net Monthly Demand Charge	(2) Load Dispatch Charge	(3) Specific Distribution	(4) Transformer Surcharge	(5) Meter Surcharge	(6) Maintenance Service Credit	(7) Total NEP Costs
1 January	<b>\$147,177</b>	<b>\$2,066</b>	<b>\$20,005</b>	<b>\$64,863</b>	<b>\$1,297</b>	<b>(\$2,081)</b>	<b>\$220,009</b>
2 February	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
3 March	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
4 April	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
5 May	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
6 June	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
7 July	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
8 August	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
9 September	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
10 October	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
11 November	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
12 December	322,239	1,637	20,005	64,863	1,297	(2,081)	407,960
<b>13 12- Mo Total</b>	<b>\$3,691,810</b>	<b>\$20,068</b>	<b>\$240,055</b>	<b>\$778,354</b>	<b>\$15,567</b>	<b>-\$24,972</b>	<b>\$4,707,565</b>

Line 1: Actual charges invoiced by New England Power on February 23, 2018

Column (1) = Monthly Average of the PTF & Non-PTF Monthly Demand Charges for the 12 month period ending December 2017

Column (2) = Monthly Average of the Load Dispatch Charge for the 12 month period ending December 2017

Column (3) = 28,578 kW & \$0.70 per NEP Tariff as of June 1, 2017

Column (4) = 196,554 kW & \$0.33 per NEP Tariff as of June 1, 2017

Column (5) = 18 meters \* \$72.07 per meter per NEP Tariff as of June 1, 2017

Column (6) Per the Integrated Facilities Supplement dated July 3, 2012 between NEP and Granite State

Column (7) = Sum of Columns (1) through (6)

**Comparison of Actual LNS Transmission Expenses  
For the Years 2016 and 2017**

NEP Schedule 21 Actual Expenses						
						(1)
	Coincident Network Load - PTF	NEP Monthly Demand Charge - PTF	NEP Monthly Demand Charge - NON-PTF	Load Dispatch Charge	Sum of Other NEP LNS Charges	Non-PTF  Sch 21-NEP
January-2016	142,969	89,293	324,598	3,737	84,342	\$501,970
February-2016	138,917	(82,187)	261,653	2,897	80,448	\$262,811
March-2016	131,167	77,171	337,002	2,130	84,606	\$500,908
April-2016	126,512	76,068	290,951	1,325	84,591	\$452,935
May-2016	152,609	140,517	332,906	1,666	84,342	\$559,432
June-2016	163,247	76,709	348,259	(4,940)	83,384	\$503,412
July-2016	181,922	(247,779)	259,709	1,704	83,384	\$97,019
August-2016	196,554	(185,990)	363,738	(1,336)	83,385	\$259,797
September-2016	176,795	(461,385)	289,904	(5,171)	85,310	(\$91,343)
October-2016	123,554	(163,117)	362,456	(3,280)	128,187	\$324,245
November-2016	130,793	63,484	326,405	814	127,748	\$518,451
December-2016	145,053	(3,584)	311,429	(2,256)	128,306	\$433,895
			<b>3,188,210</b>	<b>(\$2,710)</b>	<b>\$1,138,034</b>	<b>\$4,323,534</b>
January-2017	145,509	(11,584)	352,372	(3,654)	3,419	\$340,553
February-2017	136,250	(29,810)	349,006	12,226	83,619	\$415,040
March-2017	127,717	73,579	354,112	(14,220)	83,564	\$497,035
April-2017	120,558	(7,899)	325,767	2,035	83,445	\$403,348
May-2017	162,420	126,715	363,755	2,284	82,288	\$575,042
June-2017	182,750	(18,536)	363,491	3,674	79,594	\$428,223
July-2017	177,988	(227,948)	356,594	(9,537)	79,594	\$198,703
August-2017	177,913	(233,934)	364,333	(5,189)	79,594	\$204,805
September-2017	169,218	(144,984)	396,813	(3,871)	79,563	\$327,521
October-2017	127,877	(127,326)	345,146	(3,672)	79,594	\$293,742
November-2017	130,926	51,231	353,995	(1,855)	106,795	\$510,165
December-2017	152,536	124,931	367,055	41,417	86,166	\$619,570
			<b>3,866,873</b>	<b>\$19,639</b>	<b>\$927,235</b>	<b>\$4,813,747</b>
% increase in NEP Expenses from previous year						11%