

Witness: Warshaw

Exhibits

Schedule JDW-1	Summary of Transmission Expenses Estimated for 2019
Schedule JDW-2	Summary of ISO Tariff Section II Charges Estimated for 2019
Schedule JDW-3	Summary of System Restoration and Reactive Supply Charges Estimated for 2019
Schedule JDW-4	Summary of New England Power Schedule No. 21 Charges Estimated for 2019

Summary of Transmission Expenses Estimated For the Year 2019

ISO-NE Tariff Schedule 21 NEP LNS Tariff Charges		
1	Local Network Service (Monthly Demand Charges)	\$3,021,353
2	Other NEP Charges	<u>1,021,646</u>
Subtotal NEP Charges		<u>\$4,042,999</u>
ISO-NE OATT Tariff Section II Charges		
3	OATT Schedule 9 - Regional Network Service Charges	\$17,354,472
4	OATT Schedule 1 - Scheduling, System Control & Dispatch	240,628
5	OATT Schedule 16 - System Restoration and Planning Service	88,738
6	OATT Schedule 2 - Reactive Supply and Voltage Control Service	<u>122,378</u>
Subtotal ISO-NE Tariff Section II Charges		<u>\$17,806,216</u>
ISO-NE Tariff Section IV.A - Administrative Charges		
7	ISO-NE Schedule 1 - Scheduling & Dispatch Service	\$314,310
8	ISO-NE Schedule 5 - NESCOE Budget	<u>12,929</u>
Subtotal ISO-NE Tariff Section IV.A Charges		<u>\$327,238</u>
9	Subtotal of ISO-NE Tariff Charges	<u>\$18,133,455</u>
10	Total Estimated Expenses Flowing Through Current Rates	<u>\$22,176,454</u>

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
2018 vs. 2019 Filing Years**

		1 2018 Retail Filing	2 2019 Estimate	3 Yr/Yr Incr/(Decr)
ISO-NE Tariff Schedule 21 NEP LNS Tariff Charges				
1	Local Network Service (Monthly Demand Charges)	\$ 3,691,810	\$ 3,021,353	\$ (670,457)
2	Other NEP Charges	1,015,755	1,021,646	5,891
	Subtotal	\$ 4,707,565	\$ 4,042,999	\$ (664,566)
ISO-NE OATT Tariff Section II Charges				
3	OATT Schedule 9 - Regional Network Service Charges	\$ 17,875,539	\$ 17,354,472	\$ (521,067)
4	OATT Schedule 1 - Scheduling, System Control & Dispatch	276,411	240,628	(35,783)
5	OATT Schedule 16 - System Restoration and Planning Service	80,616	88,738	8,122
6	OATT Schedule 2 - Reactive Supply and Voltage Control Service	161,567	122,378	(39,189)
	Subtotal	\$ 18,394,133	\$ 17,806,216	\$ (587,917)
ISO-NE Tariff Section IV.A - Administrative Charges				
7	ISO-NE Schedule 1 - Scheduling & Dispatch Service	\$ 328,255	\$ 314,310	\$ (13,945)
8	ISO-NE Schedule 5 - NESCOE Budget	11,898	12,929	1,030
	Subtotal	\$ 340,153	\$ 327,238	\$ (12,915)
9	Subtotal of ISO-NE Tariff Charges	\$ 18,734,286	\$ 18,133,455	\$ (600,832)
10	Total Estimated Expenses	\$ 23,441,852	\$ 22,176,454	\$ (1,265,398)

**Summary of ISO-NE Tariff Section II Charges
Estimated For the Year 2019**

	(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	1,439,352	20,698	7,633	10,526	1,478,209	27,036	1,112	1,506,357
2 February	137,545	1,265,740	18,201	6,712	9,257	1,299,910	23,775	978	1,324,663
3 March	129,308	1,189,940	17,111	6,310	8,702	1,222,064	22,351	919	1,245,334
4 April	119,856	1,102,959	15,861	5,849	8,066	1,132,735	20,717	852	1,154,304
5 May	141,427	1,301,463	18,715	6,902	9,518	1,336,598	24,446	1,006	1,362,049
6 June	165,030	1,609,043	21,838	8,053	11,107	1,650,041	28,525	1,173	1,679,740
7 July	189,659	1,849,175	25,098	9,255	12,764	1,896,292	32,783	1,348	1,930,423
8 August	191,271	1,864,892	25,311	9,334	12,873	1,912,410	33,061	1,360	1,946,831
9 September	174,034	1,696,832	23,030	8,493	11,712	1,740,067	30,082	1,237	1,771,386
10 October	139,458	1,359,716	18,454	6,806	9,386	1,394,361	24,105	992	1,419,458
11 November	133,152	1,298,232	17,620	6,498	8,961	1,331,311	23,015	947	1,355,273
12 December	141,244	1,377,129	18,691	6,893	9,506	1,412,218	24,414	1,004	1,437,637
13 12-Mo Total		\$17,354,472	\$240,628	\$88,738	\$122,378	\$17,806,216	\$314,310	\$12,929	\$18,133,455

Line 1-12: Column (1) = 2018 Monthly Coincident Network Load of LU

Line 1-5: Column (2) = June 1, 2018 OATT Schedule 9 RNS Rate * Column (1) / 12

2018 RNS Rate= \$ **110.43** /kW-YR

Line 6-12: Column (2) = Estimated June 1, 2019 RNS Rate * Column (1) / 12

2019 RNS Rate= \$ **117.00** /kW-YR

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

Rate = \$ **1.58796** /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 = \$ **0.04880** /kW-Month

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

Rate = \$ **0.06730** /kW-Month

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

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

Rate = \$ 0.17285 kW-month

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

Rate = \$ 0.00711 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 2019**

	(1)	(2)	(3)	(4)
Period	Monthly Regional Network Load	ISO-NE Schedule 1 - Scheduling & Dispatch Service	ISO-NE Schedule 5 - NESCOE Budget	ISO-NE Tariff Section IV.A - Administrative Charges
1 January	156,411	\$27,036	\$1,112	\$28,148
2 February	137,545	23,775	978	24,753
3 March	129,308	22,351	919	23,270
4 April	119,856	20,717	852	21,569
5 May	141,427	24,446	1,006	25,451
6 June	165,030	28,525	1,173	29,699
7 July	189,659	32,783	1,348	34,131
8 August	191,271	33,061	1,360	34,421
9 September	174,034	30,082	1,237	31,319
10 October	139,458	24,105	992	25,097
11 November	133,152	23,015	947	23,962
12 December	141,244	24,414	1,004	25,418
13	Totals	\$314,310	\$12,929	\$327,238

Column (1) = 2018 Monthly Coincident Network Load of LU

Column (2) = Column (1) * \$0.17285 per kW-month per ISO 2019 Capital Budget Filing \$ 0.17285

Column (3) = Column (1) * \$0.00711 per kW-month per NESCOE 2019 Budget Filing \$ 0.00711

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

Summary of Reactive Power & Black Start Costs Estimated For the Year 2019

Section I: Development of ISO-NE Schedule 2 Costs

1	Granite Total ISO-NE Schedule 2 Costs	\$154,572
2	2018 Granite Peak Load (KW)	191,271
3	Estimated Rate / KW-Yr	\$0.8081
4	Estimated Rate / KW-Mo	\$0.0673

Section II: Development of ISO-NE Schedule 16 Costs

5	Granite Total ISO-NE Schedule 16 Settlement Costs	\$111,909
6	2018 Granite Peak Load (KW)	191,271
7	Estimated Rate / KW-Yr	\$0.5851
8	Estimated Rate / KW-Mo	\$0.0488

Line 1 = Granite ISO-NE Schedule 2 costs for the 12 months ending December 2018

Line 2 = Granite Peak Load in 2018

Line 3 = Line 1 / Line 2

Line 4 = Line 3 / 12

Line 5 = ISO Schedule 16 Settlement Reports for the 12 months ending December 2018

Line 6 = Line 5

Line 7 = Line 5 / Line 6

Line 8 = Line 7 / 12

**Summary of New England Power - Schedule No. 21 Charges
Estimated For the Year 2019**

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	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
2 February	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
3 March	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
4 April	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
5 May	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
6 June	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
7 July	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
8 August	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
9 September	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
10 October	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
11 November	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
12 December	251,779	3,691	18,155	64,263	1,110	(2,081)	336,917
13 12- Mo Total	\$3,021,353	\$44,294	\$217,854	\$771,153	\$13,317	-\$24,972	\$4,042,999

Column (1) = Monthly Average of the PTF & Non-PTF Monthly Demand Charges for the 12 month period ending December 2018

Column (2) = Monthly Average of the Load Dispatch Charge for the 12 month period ending December 2018

Column (3) = 25,935 kW & \$0.70 per NEP Tariff as of June 1, 2018

Column (4) = 173,683 kW & \$0.37 per NEP Tariff as of June 1, 2018

Column (5) = 17 meters * \$65.28 per meter per NEP Tariff as of June 1, 2018

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 2017 and 2018**

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-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
			3,866,873	\$19,639	\$927,235	\$4,813,747
January-2018	156,411	(175,792)	322,969	2,066	72,847	\$222,090
February-2018	137,545	(119,614)	353,493	2,202	85,790	\$321,870
March-2018	129,308	18,596	358,045	(1,290)	84,031	\$459,382
April-2018	119,856	34,887	341,845	4,852	84,084	\$465,668
May-2018	141,427	209,001	412,307	1,307	84,083	\$706,699
June-2018	165,030	(151,498)	291,006	1,506	81,446	\$222,460
July-2018	189,659	(217,242)	317,137	(90)	78,160	\$177,965
August-2018	191,271	(168,588)	353,546	(2,796)	81,446	\$263,608
September-2018	174,034	(335,804)	297,434	(2,603)	78,190	\$37,217
October-2018	139,458	(260,168)	362,781	64,926	81,447	\$248,985
November-2018	133,152	10,207	372,992	1,520	81,446	\$466,165
December-2018	141,244	15,830	377,984	(27,304)	81,446	\$447,956
			3,021,353	\$44,294	\$974,416	\$4,040,063
% increase in NEP Expenses from previous year						-16%