

Witness: Warshaw

## **Schedules**

Schedule JDW-1	Summary of Transmission Expenses Estimated for 2020
Schedule JDW-2	Summary of ISO Tariff Section II Charges Estimated for 2020
Schedule JDW-3	Summary of System Restoration and Reactive Supply Charges Estimated for 2020
Schedule JDW-4	Summary of New England Power Schedule No. 21 Charges Estimated for 2020

**Summary of Transmission Expenses  
Estimated For the Year 2020**

<b>ISO-NE Tariff Schedule 21 NEP LNS Tariff Charges</b>		
1	Local Network Service (Monthly Demand Charges)	\$4,184,278
2	Other NEP Charges	<u>1,201,811</u>
	<b>Subtotal NEP Charges</b>	<u>\$5,386,088</u>
 <b>ISO-NE OATT Tariff Section II Charges</b>		
3	OATT Schedule 9 - Regional Network Service Charges	\$17,035,068
4	OATT Schedule 1 - Scheduling, System Control & Dispatch	232,222
5	OATT Schedule 16 - System Restoration and Planning Service	129,941
6	OATT Schedule 2 - Reactive Supply and Voltage Control Service	<u>124,694</u>
	<b>Subtotal ISO-NE Tariff Section II Charges</b>	<u>\$17,521,924</u>
 <b>ISO-NE Tariff Section IV.A - Administrative Charges</b>		
7	ISO-NE Schedule 1 - Scheduling & Dispatch Service	\$308,255
8	ISO-NE Schedule 5 - NESCOE Budget	<u>15,425</u>
	<b>Subtotal ISO-NE Tariff Section IV.A Charges</b>	<u>\$323,680</u>
9	<b>Subtotal of ISO-NE Tariff Charges</b>	<u>\$17,845,604</u>
10	<b>Total Estimated Expenses Flowing Through Current Rates</b>	<u>\$23,231,692</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  
2019 vs. 2020 Filing Years**

	1	2	3	
	2019	2020	Yr/Yr	
	Retail Filing	Estimate	Incr/(Decr)	
<b>ISO-NE Tariff Schedule 21 NEP LNS Tariff Charges</b>				
1	Local Network Service (Monthly Demand Charges)	\$ 3,021,353	\$ 4,184,278	\$ 1,162,924
2	Other NEP Charges	1,021,646	1,201,811	180,165
	<b>Subtotal</b>	\$ 4,042,999	\$ 5,386,088	\$ 1,343,089
<b>ISO-NE OATT Tariff Section II Charges</b>				
3	OATT Schedule 9 - Regional Network Service Charges	\$ 17,354,472	\$ 17,035,068	\$ (319,404)
4	OATT Schedule 1 - Scheduling, System Control & Dispatch	240,628	232,222	(8,407)
5	OATT Schedule 16 - System Restoration and Planning Service	88,738	129,941	41,203
6	OATT Schedule 2 - Reactive Supply and Voltage Control Service	122,378	124,694	2,316
	<b>Subtotal</b>	\$ 17,806,216	\$ 17,521,924	\$ (284,292)
<b>ISO-NE Tariff Section IV.A - Administrative Charges</b>				
7	ISO-NE Schedule 1 - Scheduling & Dispatch Service	\$ 314,310	\$ 308,255	\$ (6,055)
8	ISO-NE Schedule 5 - NESCOE Budget	12,929	15,425	2,496
	<b>Subtotal</b>	\$ 327,238	\$ 323,680	\$ (3,558)
9	<b>Subtotal of ISO-NE Tariff Charges</b>	\$ 18,133,455	\$ 17,845,604	\$ (287,851)
10	<b>Total Estimated Expenses</b>	\$ 22,176,454	\$ 23,231,692	\$ 1,055,238

**Summary of ISO-NE Tariff Section II Charges  
Estimated For the Year 2020**

	(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	152,467	1,422,246	20,245	11,328	10,871	1,464,691	26,874	1,345	1,492,909
2 February	135,924	1,267,929	18,049	10,099	9,691	1,305,769	23,958	1,199	1,330,925
3 March	135,529	1,264,245	17,996	10,070	9,663	1,301,974	23,888	1,195	1,327,058
4 April	119,726	1,116,831	15,898	8,896	8,536	1,150,161	21,103	1,056	1,172,320
5 May	131,552	1,227,146	17,468	9,774	9,380	1,263,768	23,187	1,160	1,288,116
6 June	161,645	1,616,450	21,464	12,010	11,525	1,661,449	28,492	1,426	1,691,367
7 July	188,300	1,883,000	25,003	13,991	13,426	1,935,420	33,190	1,661	1,970,270
8 August	184,624	1,846,240	24,515	13,718	13,164	1,897,636	32,542	1,628	1,931,807
9 September	147,737	1,477,370	19,617	10,977	10,534	1,518,498	26,040	1,303	1,545,841
10 October	112,715	1,127,150	14,967	8,375	8,037	1,158,528	19,867	994	1,179,389
11 November	135,261	1,352,610	17,961	10,050	9,644	1,390,265	23,841	1,193	1,415,299
12 December	143,385	1,433,850	19,039	10,654	10,223	1,473,766	25,273	1,265	1,500,304
<b>13 12-Mo Total</b>		<b>\$17,035,068</b>	<b>\$232,222</b>	<b>\$129,941</b>	<b>\$124,694</b>	<b>\$17,521,924</b>	<b>\$308,255</b>	<b>\$15,425</b>	<b>\$17,845,604</b>

Line 1-12: Column (1) = 2019 Monthly Coincident Network Load of LU  
 Line 1-5: Column (2) = June 1, 2019 OATT Schedule 9 RNS Rate \* Column (1) / 12  
 2019 RNS Rate= \$ 111.94 /kW-YR  
 Line 6-12: Column (2) = Estimated June 1, 2019 RNS Rate \* Column (1) / 12  
 2020 RNS Rate= \$ 120.00 /kW-YR  
 Line 1-12: Column (3) = Current OATT Schedule 1 Rate \* Column (1) / 12  
 Rate = \$ 1.59341 /kW-YR  
 Line 1-12: Column (4) = 0 [No Reliability Must Run Contracts are currently in effect for New Hampshire]  
 Rate = \$ 0.07430 /kW-Month  
 Line 1-12: Column (5) = JDW-3, Line 4 \* Column (1)  
 Rate = \$ 0.07130 /kW-Month  
 Line 1-12: Column (6) = Sum of Columns (2) thru (5)  
 Line 1-12: Column (7) = JDW-2 Column (2)  
 Rate = \$ 0.17626 kW-month  
 Line 1-12: Column (8) = JDW-2 Column (3)  
 Rate = \$ 0.00882 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 2020**

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	152,467	\$26,874	\$1,345	\$28,219
2 February	135,924	23,958	1,199	25,157
3 March	135,529	23,888	1,195	25,084
4 April	119,726	21,103	1,056	22,159
5 May	131,552	23,187	1,160	24,348
6 June	161,645	28,492	1,426	29,917
7 July	188,300	33,190	1,661	34,851
8 August	184,624	32,542	1,628	34,170
9 September	147,737	26,040	1,303	27,343
10 October	112,715	19,867	994	20,861
11 November	135,261	23,841	1,193	25,034
12 December	143,385	25,273	1,265	26,538
13	<b>Totals</b>	<b>\$308,255</b>	<b>\$15,425</b>	<b>\$323,680</b>

Column (1) = 2019 Monthly Coincident Network Load of LU

Column (2) = Column (1) \* \$0.17626 per kW-month per ISO 2020 Capital Budget Filing      \$      0.17626

Column (3) = Column (1) \* \$0.00882 per kW-month per NESCOE 2020 Budget Filing      \$      0.00882

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

**Summary of Reactive Power & Black Start Costs  
Estimated For the Year 2020**

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

1	Granite Total ISO-NE Schedule 2 Costs	\$161,063
2	2019 Granite Peak Load (KW)	188,300
		<hr/>
3	Estimated Rate / KW-Yr	\$0.8554
		<hr/>
4	Estimated Rate / KW-Mo	\$0.0713

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

5	GraniteTotal ISO-NE Schedule 17 Settlement Costs	\$167,782
6	2019 Granite Peak Load (KW)	188,300
		<hr/>
7	Estimated Rate / KW-Yr	\$0.8910
		<hr/>
8	Estimated Rate / KW-Mo	\$0.0743

Line 1 = Granite ISO-NE Schedule 2 costs for the 12 months ending December 2019

Line 2 = Granite Peak Load in 2019

Line 3 = Line 1 / Line 2

Line 4 = Line 3 / 12

Line 5 = ISO Schedule 16 Settlement Reports for the 12 months ending December 2019

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 2020**

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	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
2 February	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
3 March	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
4 April	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
5 May	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
6 June	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
7 July	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
8 August	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
9 September	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
10 October	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
11 November	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
12 December	348,690	4,368	26,466	70,301	1,097	(2,081)	448,841
<b>13 12- Mo Total</b>	<b>\$4,184,278</b>	<b>\$52,419</b>	<b>\$317,587</b>	<b>\$843,608</b>	<b>\$13,168</b>	<b>-\$24,972</b>	<b>\$5,386,088</b>

Column (1) = Monthly Average of the PTF & Non-PTF Monthly Demand Charges for the 12 month period ending December 2019

Column (2) = Monthly Average of the Load Dispatch Charge for the 12 month period ending December 2019

Column (3) = 37,808 kW & \$0.70 per NEP Tariff as of June 1, 2019

Column (4) = 200,859 kW & \$0.35 per NEP Tariff as of June 1, 2019

Column (5) = 17 meters \* \$64.55 per meter per NEP Tariff as of June 1, 2019

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-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
			<b>3,021,353</b>	<b>\$44,294</b>	<b>\$974,416</b>	<b>\$4,040,063</b>
January-2019	152,467	28,718	380,791	(222)	83,623	\$492,909
February-2019	135,924	(134,556)	356,600	(2,028)	82,505	\$302,521
March-2019	135,529	(44,499)	371,670	3,512	83,642	\$414,324
April-2019	119,726	36,375	402,859	2,455	86,648	\$528,337
May-2019	131,552	132,703	419,292	1,984	123,786	\$677,766
June-2019	161,645	116,843	410,126	3,563	95,777	\$626,309
July-2019	188,300	(92,989)	366,364	(211)	95,782	\$368,946
August-2019	184,624	(257,527)	395,462	(8,008)	94,586	\$224,513
September-2019	147,737	(259,231)	375,267	(5,164)	96,007	\$206,879
October-2019	112,715	(8,805)	374,654	57,400	95,613	\$518,861
November-2019	135,261	30,053	354,726	310	96,772	\$481,861
December-2019	143,385	43,514	385,870	(1,172)	96,427	\$524,639
			<b>4,184,278</b>	<b>\$52,419</b>	<b>\$1,131,168</b>	<b>\$5,367,865</b>
	% increase in NEP Expenses from previous year					33%