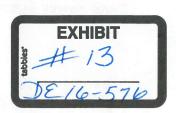
# DOMESTIC DISTRIBUTED ENERGY RESOURCES SCHEDULE DDER



#### AVAILABILITY

Service under this Schedule is available for Domestic Customers who would otherwise be eligible for Schedule D, having Distributed Energy Resources connected behind the retail meter and which are not eligible for Net Energy Metering under RSA 362-A:9 and the PUC 900 rules due to the maximum capacity for the Net Energy Metering eligibility having been reached. Distributed Energy Resources may include, but are not limited to, Wind, Solar, Combined Heat and Power, and Hydro generation installations with a nameplate kW rating of 100 kW or less. Domestic Customers who install Distributed Energy Resources of more than 100 kW shall be considered General Service G2 Customers for billing purposes.

#### CHARACTER OF SERVICE

Electricity will normally be delivered at 120/240 volts using three wire, single phase service. In some areas service may be 120/208 volts, single phase, three wire.

#### DELIVERY SERVICE CHARGES - MONTHLY

The Delivery Service Charges shall include Distribution Charges, Adjustments and Credits, set forth below. The Distribution Charges are subject to annual adjustment as approved in DE 16-384.

#### **DISTRIBUTION CHARGES - MONTHLY**

Customer Charge:

\$15.00 per meter

Distribution Charge:

All kW: All kWh: \$5.32 per kW 0.000¢ per kWh

#### **METERING**

The metering under this Schedule shall be the net metering method, with a single net meter that internally measures the delivered inflow and received outflow of kWh electricity in separate recording channels such that delivered kWh electricity usage and received kWh electricity surplus production can be periodically read. The meter shall also measure the delivered demand kW usage and record the maximum delivered 15 minute integrated kW demand usage reading during the billing cycle.

Authorized by NHPUC Order No. \_\_\_\_ in Case No. DE 16-384 dated ...

Issued: April 29, 2016 Issued by: Mark H. Collin Effective: June 1, 2016

## DOMESTIC DISTRIBUTED ENERGY RESOURCES SCHEDULE DDER (continued)

#### MINIMUM CHARGE

The minimum charge per month, or fraction thereof, shall be the Customer Charge and the minimum Demand Charge less any credits for surplus production, if applicable.

# DETERMINATION OF NET KWH ENERGY FOR BILLING PURPOSES

The metered kWh usage for billing purposes shall be the kWh usage as recorded on the usage channel in the meter during the current billing month less the kWh usage as recorded on the electricity surplus production channel in the meter during the current billing month, if greater than zero. This kWh is the net positive amount of delivered kWh electricity that flows from the Company to the Customer during the billing month and shall not be less than zero.

### DETERMINATION OF NET KWH ENERGY FOR CREDITING PURPOSES

The metered kWh usage for crediting purposes shall be the kWh usage as recorded on the electricity surplus production channel in the meter during the current billing month less the kWh usage as recorded on the usage channel in the meter during the current billing month, if greater than zero. This kWh is the net positive amount of received kWh electricity that flows from the Customer to the Company during the billing month and shall not be less than zero.

# DETERMINATION OF DEMAND FOR BILLING PURPOSES

The metered demand used for billing purposes shall be the maximum fifteen-minute integrated kilowatt (kW) demand determined during the current billing month, but in no case less than one kW or the minimum available demand capacity specified by an agreement between the Customer and the Company. The billing demand shall be taken in 0.1 kW intervals, and those demands falling between the intervals shall be billed on the next lower 0.1 kW.

# CREDITS FOR NET SURPLUS KWH PRODUCTION

Customers shall receive a credit on their bill at the ISO-New England Average Locational Marginal Price for the New Hampshire load zone for the calendar month prior to the current billing month times the kWh calculated in DETERMINATION OF NET KWH ENERGY FOR CREDITING PURPOSES above. Any unused credits on the Customer's account when closed shall be refunded to the Customer upon request.

Authorized by NHPUC Order No. \_\_\_ in Case No. DE 16-384 dated \_\_\_.

Issued by: Mark H. Collin Issued: April 29, 2016 Effective: June 1, 2016

# DOMESTIC DISTRIBUTED ENERGY RESOURCES SCHEDULE DDER (continued)

#### **ADJUSTMENTS**

These Adjustments, included in the Delivery Service Charges, shall be adjusted from time to time.

External Delivery Charge: All energy delivered under this Schedule shall be subject to the External Delivery Charge as provided in Schedule EDC of the Tariff of which this is a part.

<u>Stranded Cost Charge</u>: All energy delivered under this Schedule shall be subject to the Stranded Cost Charge as provided in Schedule SCC of the Tariff of which this is a part.

Storm Recovery Adjustment Factor: All energy delivered under this Schedule shall be subject to the Storm Recovery Adjustment Factor as provided in Schedule SRAF of the Tariff of which this is a part.

System Benefits Charge: All energy delivered under this Schedule shall be subject to the System Benefits Charge as provided in Schedule SBC of the Tariff of which this is a part.

<u>Default Service Charge</u>: For Customers receiving Default Service from the Company, all energy delivered under this Schedule shall be subject to the Default Service Charge as provided in Schedule DS of the Tariff of which this is a part.

#### LOW INCOME ENERGY ASSISTANCE PROGRAM

Customers taking service under this rate may be eligible to receive discounts under the statewide low-income electric assistance program ("LI-EAP") authorized by the New Hampshire Public Utilities Commission. Eligibility for the LI-EAP shall be determined by the Community Action Agencies. Customers participating in the LI-EAP will continue to take service under this rate, but will receive a discount as provided under this Tariff as applicable towards delivery service charges and adjustments.

#### **ELECTRICITY CONSUMPTION TAX**

Effective: June 1, 2016

All Customers shall be obligated to pay the Electricity Consumption Tax in accordance with New Hampshire Statute RSA Chapter 83-E, which may be revised from time to time, in addition to all other applicable rates and charges under this Tariff. The Electricity Consumption Tax shall appear separately on all Customer bills.

Authorized by NHPUC Order No. \_\_\_ in Case No. DE 16-384 dated \_\_\_.

Issued: April 29, 2016 Issued by: Mark H. Collin

# DOMESTIC DISTRIBUTED ENERGY RESOURCES SCHEDULE DDER (continued)

#### TERMS OF PAYMENT

The charges for service hereunder are net, billed monthly and due within 25 days following the date postmarked on the bill, as specified in the Terms and Conditions for Distribution Service, which is a part of this Tariff. Amounts not paid prior to the due date shall be subject to interest on past due accounts, as provided in Appendix A of the Terms and Conditions for Distribution Service, and will apply to the unpaid balance. When billing on the OL Schedule is combined with billing on this rate, the interest on past due accounts shall apply to the total bill. The Company will waive the residential late payment fee if the Customer can provide evidence of their eligibility in any of the following programs: Statewide Low-Income Electric Assistance Program (NHPUC Order No. 23,980), Fuel Assistance, Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI), Aid to the Permanently and Totally Disabled (APTD), Aid to the Needy Blind (ANB), Old Age Assistance (OAA), Subsidized School Lunch Programs, Title XX Day Care Program, Food Stamps, Medicaid, Subsidized Housing, or Women, Infant and Children Program (WIC).

#### TERM OF CONTRACT

Service may be terminated at any time upon notice to the Company in accordance with the Terms and Condition for Distribution Service, which is part of this Tariff.

#### SPECIAL PROVISIONS

(a) <u>Extra Service Charges</u>:

In addition to the charges for electric service herein specified, additional charges for extra services rendered will be made in accordance with the Tariff which this Schedule is a part.

(b) <u>Multiple Apartments</u>:

Where more than one individual apartment or dwelling is served through one meter, the billings shall be calculated as though each individual dwelling or apartment were served through a separate meter by assuming the use was divided equally among them. This special provision is closed to new locations as of December 1, 2002.

#### TARIFF PROVISIONS

Effective: June 1, 2016

The Company's complete Tariff, where not inconsistent with any specific provisions hereof, is a part of this Schedule.

Authorized by NHPUC Order No. \_\_\_ in Case No. DE 16-384 dated \_\_\_.

Issued: April 29, 2016 Issued by: Mark H. Collin

#### UNITIL ENERGY 2016 Rate Case Electric Rate Design Revenue Allocation

		<u>Total</u>	Domestic	G2: Sec	G1: Sec		<u>OL</u>
1	Current Rates per ACOSS	\$ 51,823,377	\$ 26,615,662	\$ 16,442,452	\$ 7,114,162	\$	1,651,100
2 3 4	Revenue Excess/Deficiency for ACOSS Percent Excess/Deficiency Revenue to Cost ratio	\$ (6,255,276) -12.07% 0.89	\$ (12,140,464) -45.61% 0.69	\$ 5,402,059 32.85% 1.49	\$ <b>2,241,086</b> 31.50% 1.46	\$	(1,757,957) -106.47% 0.48
5 6 7 8	Increase based on Actuals Total Increase Amount % Total Increase Parity Increase %	\$ 6,255,276 12.07%	125%				125%
9 10	Class % Increase (Parity) Class Parity Increase	\$ 4,264,880	\$ 15.09% 4,015,763	\$ 0.00%	\$ 0.00%	\$	15.09% 249,117
11 12	Class % Increase (Remaining) Class Remaining Increase	\$ 1,990,396	\$ 0.00%	\$ 8.45% 1,389,291	\$ 8.45% 601,105	\$	0.00%
13 14	Total Class Increase % Final Increase	\$ 6,255,276 12.07%	\$ 4,015,763 15.09%	\$ 1,389,291 8.45%	\$ 601,105 8.45%	\$	249,117 15.09%
15 16	Proposed Revenue Revenue to Cost ratio	\$ 58,078,653	\$ 30,631,425 0.79	\$ 17,831,742 1.62	\$ 7,715,267 1.58	\$	1,900,218 0.56

			Actual		Actual Rat	es &	Revenue	P	roposed R	ates	s & Revenue	ifference Over I		Rounding E	
Row	Description	Units	Bill Units		Rate		Revenue		Rate		Revenue	Amount	%	Amount	%
A	В	C	D		E		F		G	-	Н	1	J	K	L
A	В														
1	Domestic														
			785,306	¢	10.27	\$	8,065,095	Ś	15.00	Ś	11,779,594	\$3,714,499	46.1%		
2	Customer Charge	_	763,300	~	10.27	~	0,000,000	Ť		•	,				
3	Energy Charge														
	Energy Charge	kWh	177,320,752	ė	0.03404	Ġ	6,035,998	Ś	0.03786	\$	18,849,579	\$12,813,580	212.3%		
4	First 250 kWh	1 1			0.03904	\$	12,514,470	~	0.007.00	Ś		(\$12,514,470)	-100.0%		
5	Excess 250 kWh	kWh	320,555,076	۶	0.05504	\$	18,550,469	1		Ś	18,849,579	\$299,110	1.6%		
6	Subtotal: Enegy Charge					Ş	10,330,403			7	10,045,575	7233,110	2.070		
7	Subtotal: Domestic		-			\$	26,615,564			\$	30,629,172				
8	Domestic - Distributed Generation												_		
9	Customer Charge		0	\$	10.27	\$	-	\$	15.00	\$	-	\$0	0.0%		
								١.				40	0.004		
10	Demand Charge	kW	0	\$	-	\$	-	\$	5.32	\$	-	\$0	0.0%		
										_		20	0.00/		
11	Subtotal: Domestic - Distributed Generation	1		_		\$	-			\$	-	\$0	0.0%		
						_	26.645.564	-		-	20 (20 172	\$4,013,609	15.1%	(\$2,154)	0.09
12	Total Schedule D					\$	26,615,564	├-		\$	30,629,172	\$4,013,609	15.170	(32,134)	0.07
13	G2 - kWh								40.00	4	00.530	¢26.506	36.3%		
14	Customer Charge		5,238	\$	13.94	\$	73,023	\$	19.00	\$	99,529	\$26,506	30.3%		
									0.00404		014	(618 600)	-95.8%		
15	Energy Charge	kWh	607,397	\$	0.03211	\$	19,504	15	0.00134	\$	814	(\$18,690)	-95.670		
											400.343	¢7 017	8.4%		
16	Subtotal G2 kWh					\$	92,526			\$	100,343	\$7,817	0.470		
	100											1			
17	G2 QR WH /SH							1	0.00		24 005	¢0.400	44.00/		
18	Customer Charge		3,454	\$	6.25	Ş	21,587	\$	9.00	\$	31,085	\$9,498	44.0%		
									0.00400		402 604	¢7.225	4 10/		
19	Energy Charge	kWh	5,742,223	\$	0.03073	\$	176,459	\$	0.03199	\$	183,694	\$7,235	4.1%		
								1			244 770	¢16.722	8.4%		
20	Subtotal G2 QR WH/SH					\$	198,045			\$	214,778	\$16,733	0.470		
													100		
21	G2 Demand			١.			2 267 742		27.00	ė	2 225 050	\$1,058,116	46.7%		
22	Customer Charge		123,180	\$	18.41	\$	2,267,743	٦	27.00	Þ	3,325,859	\$1,030,110	40.770		
	Colorest Carlotte Carlotte			١.			40.000.640	1.	10.54	4	14,213,780	\$310,168	2.2%		
23	Demand Charge	kW	1,348,556	\$	10.31	\$	13,903,613	>	10.54	Þ	14,213,760	3310,100	2.270		
					/co 20		(10.005)	ے ل	(0.50)	ė	(25,134)	(\$5,530)	28.2%		
24	Transformer Ownnership credit	kW	50,269	1	(\$0.39)	) >	(19,605)	기 ?	(0.50)	Ş	(23,134	(55,550)	20.270		
						4		١,		ė		\$0	0.0%	/	
25	Energy Charge	kWh	347,811,789	\$	-	\$	-	\$	-	\$	-	30	0.070		
			ja ja				40 454 754			\$	17,514,505	\$1,362,754	8.4%		
26	Subtoal G2 Demand		1	1		\$	16,151,751			Þ	17,314,303	71,302,734	0.770		
						A .	46 442 222	-		\$	17,829,626	\$1,387,304	8.4%	(\$1,987)	0.0
27	Total G2		1			\$	16,442,322			Ş	11,029,020	71,307,304	0.470	(71,507)	0.0

#### UNITIL ENERGY 2016 Rate Case Electric Rate Design Rate Design

			Actual		Actual Ra	tes 8	& Revenue	P	roposed R	ates &	Revenue	ifference Over N	Vormalize	Rounding E	
Row	Description	Units	Bill Units		Rate		Revenue		Rate		evenue	Amount	%	Amount	%
A	В	С	D		E		F		G		Н		J	К	L
				1											
28	G1														
29	Customer Charge			١.											
30	Secondary		1,497	\$	97.16		145,449	\$		\$	224,550	\$79,101	54.4%		
31	Primary		381	\$	57.58	\$	21,938	\$	80.00	\$	30,480	\$8,542	38.9%		
32	Subtotal: Customer Charge					\$	167,387			\$	255,030	\$87,644	52.4%		
33	Demand Charge	kVA	1,022,850	\$	6.95	\$	7,108,808	\$	7.50	\$	7,671,375	\$562,568	7.9%		
34	Energy Charge	kWh	353,924,392	\$	-	\$	-	\$	-	\$		\$0	0.0%		
35	Transformer Ownnership credit	kVA	415,470		(\$0.39)	\$	(162,033)	\$	(0.50)	\$	(207,735)	(\$45,702)	28.2%		
0.6	7 1 100					ċ	7 114 161	_		\$	7,718,670	\$604,509	8.5%	\$3,404	0.0
36	Total G2					\$	7,114,161	-		Ş	7,710,070	\$604,303	0.370	33,404	0.0
37	OL	- 1													
38	100W Mercury Vapor Street		17,494	\$	11.28	\$	197,331	\$	13.53	\$	236,693	\$39,361	19.9%		
39	175W Mercury Vapor Street		894	s	13.65	\$	12,206	\$	15.90	\$	14,218	\$2,012	16.5%		
40	250W Mercury Vapor Street		945	Ś	15.67	\$	14,809	\$	17.92	\$	16,936	\$2,126	14.4%		
41	400W Mercury Vapor Street		1,940	\$	18.94	\$	36,747	\$	21.19	\$	41,112	\$4,365	11.9%		
42	1000W Mercury Vapor Street	- 1	24	Ś	39.06	Ś	937	\$	41.31	\$	991	\$54	5.8%		
43	250W Mercury Vapor Flood		850	Ś	16.79	Ś	14,266	S	19.04	Ś	16,178	\$1,912	13.4%		
44	400W Mercury Vapor Flood		1,403	Ś	20.38		28,598	S	22.63	\$	31,755	\$3,157	11.0%		
45	1000W Mercury Vapor Flood		272	Ś	34.74		9,455	Ś		\$	10,067	\$612	6.5%		
46	100W Mercury Vapor Power Bracket		4,860	\$	11.40		55,407	Ś		Ś	66,342	\$10,936	19.7%		
47	175W Mercury Vapor Power Bracket		715	\$	12.81		9,160	\$	15.06	Ś	10,769	\$1,609	17.6%		
48	50W Sodium Vapor Street		41,383	Š	11.51		476,317	Š		\$	569,428		19.5%		
49	100W Sodium Vapor Street		1,182	Ś	13.14		15,530	Ś	15.39	\$	18,189		17.1%		
		-	4,221	Š	13.20		55,721	Ś		\$	65,219		17.0%		
50	150W Sodium Vapor Street		13,250	\$	16.91		224,054	\$	19.16	\$	253,866	\$29,812	13.3%		
51	250W Sodium Vapor Street			\$	21.70		67,410	Ś		\$	74,399	\$6,990	10.4%		
52	400W Sodium Vapor Street		3,106	\$	38.55		66,616	S	40.80	\$	70,504	\$3,888	5.8%		
53	1000W Sodium Vapor Street		1,728	1 :			43,167	\$	17.69	\$	49,457	\$6,291	14.6%		
54	150W Sodium Vapor Flood	1	2,796	\$	15.44		•	\$		\$	76,836		12.2%		
- 55	250W Sodium Vapor Flood		3,708	\$	18.47		68,492	,		\$		\$10,628	10.6%		
56	400W Sodium Vapor Flood		4,724	\$	21.18		100,049	\$	23.43		110,677		5.8%		
57	1000W Sodium Vapor Flood		2,789	\$	38.90		108,494	\$	41.15	\$	114,769		21.3%		
58	50W Sodium Vapor Power Bracket		1,304	\$	10.54		13,748	\$		\$	16,682				
59	100W Sodium Vapor Power Bracket		777	\$	12.01		9,330	\$		\$	11,078		18.7%		
60	175W Metal Halide Street		19	\$	17.65		334	\$	19.90	\$	376		12.7%		
61	250W Metal Halide Street		0	\$	19.32			\$	21.57	\$	_	\$0	0.0%		
62	400W Metal Halide Street		0	\$	20.09		-	\$	22.34	\$	-	\$0	0.0%		
63	175W Metal Halide Flood		0	\$	20.62			\$	22.87	\$		\$0	0.0%		
64	250W Metal Halide Flood		0	\$	22.38		-	\$	24.63	\$		\$0	0.0%		
65	400W Metal Halide Flood		0	\$	22.42			\$	24.67	\$	-	\$0	0.0%		
66	175W Metal Halide Power Bracket		0	\$	16.42			\$		\$		\$0	0.0%		
67	250W Metal Halide Power Bracket		0	\$	17.55	\$	-	\$		\$		\$0	0.0%		
68	400W Metal Halide Power Bracket		0	\$	18.86	\$		\$		\$		\$0	0.0%		
69	1000W Metal Halide Flood (Contracts)		465	\$	29.48	\$	13,696	\$	31.73	\$	14,741	\$1,045	7.6%		

#### UNITIL ENERGY 2016 Rate Case Electric Rate Design Rate Design

			Actual		Actual I	Rates 8	Revenue	Pi	roposed R	ates	& Revenue	ifference Over N	ormalize	Rounding Er	ror
Row	Description	Units	Bill Units		Rate		Revenue		Rate		Revenue	Amount	%	Amount	%
Α	В	С	D		E		F		G		Н	I	J	К	L
70	LED											1 12 4			
71	42W 3780 K LED Area Light Fixture		0	Ś	-	\$	-	\$	13.19	\$	-	\$0	0.0%		
72	57W 5130K LED Area Light Fixture		0	\$	-	\$		\$	13.24	\$	-	\$0	0.0%		
73	25W 2500K LED Cobra Head Fixture		0	\$	-	\$	-	\$	13.14	\$	-	\$0	0.0%		
74	88W 8800K LED Cobra Head Fixture		0	Ś		\$	-	\$	13.33	\$	- 27	\$0	0.0%		
75	108W 10800K LED Cobra Head Fixture		0	S	16.2	\$		\$	13.39	\$	-	\$0	0.0%		
76	193W 19300K LED Cobra Head Fixture		0	Ś		\$		\$	13.65	\$		\$0	0.0%		
77	123W 11070K LED Flood Light Fixture		0	Ś		\$	-	\$	13.44	\$		\$0	0.0%		
78	227W 20340K LED Flood Light Fixture		0	Ś	-	\$		\$	13.65	\$	-	\$0	0.0%		
79	365W 32850K LED Flood Light Fixture		0	\$	-	\$	7.7	\$	13.96	\$	W 17 h	\$0	0.0%		
80	Pole Charges			2		\$	9,247	Ì.		\$	9,247	\$0	0.0%		
81	Total OL					\$	1,651,120			\$	1,900,532	\$249,412	15.1%	\$294	0.0%
82	Total System					\$	51,823,167			\$	58,078,000	\$ 6,254,834	12.1%	\$ (442)	0.09

# UNITIL ENERGY 2016 Rate Case Electric Rate Design DER Demand Charge Calculations

	Total	<u>Notes</u>
Proposed Revenue less Proposed Customer Charge Revenues - Domestic	\$ 18,849,579	Demand, Energy, and Unrecovered Customer classified revenue requirement for the Domestic class of service;
Sum of Monthly Customer NCP Domestic (kW) - 2015	3,542,104	Sum of Customer Max Demands by Class and Voltage Level at customer meter (at meter measure) (kW) CY 2015: Company load research
Monthly Demand Charge (\$-kw-mo) DER	\$ 5.32	Monthly; assumes monthly AMI meter reads of maximum customer demand