Public Service of New Hampshire d/b/a Eversource Energy Docket No. DE 20-170

Date Request Received: 08/13/2021 Date of Response: 08/27/2021

Request No. CLF-CENH 2-001 Page 1 of 1

Request from: Conservation Law Foundation & Clean Energy New Hampshire

Witness: Kevin Boughan

Request:

Please provide the number of registered EVs in Eversource's service territory?

Response:

Based on data from the New Hampshire Division of Motor Vehicles provided for analysis by New Hampshire Department of Environmental Services, the Company estimates that as of January 2021 there are approximately 4,800 EVs in Eversource's service territory in New Hampshire, comprised of approximately 2,300 Battery Electric Vehicles and 2,500 Plug-In Hybrid Electric Vehicles.

Attachment 1 below provides the number of BEVs and PHEVs by town. The data may overestimate the number of vehicles registered in Eversource's service territory as there are many towns where Eversource is not the sole electric distribution company.

						Attachment 1
Town	# of BEV	# of PHEV	# of Unknown	Total EVs 2021	Ownership Rate	Total Cars Registered
ACWORTH	2	1	0	3	0.27%	1,111
ALBANY	1	2	0	3	0.22%	1,364
ALEXANDRIA	0	3	1	4	0.17%	2,353
ALLENSTOWN	2	3	1	6	0.13%	4,615
ALSTEAD	5	7	1	13	0.58%	2,241
ALTON	13	7	1	21	0.28%	7,500
AMHERST	53	33	2	88	0.72%	12,222
ANDOVER	4		1	11	0.36%	3,056
ANTRIM	3			6	0.20%	3,000
ASHLAND	1			4	0.18%	2,222
ATKINSON	7			18	0.22%	8,182
AUBURN	23		0	30	0.42%	7,143
BARNSTEAD	1		0	2	0.10%	2,000
BARRINGTON	11		3	25	0.24%	10,417
BARTLETT	8		0	9	0.28%	3,214
BATH	0		0	1	0.08%	1,250
BEDFORD	110		17	175	0.80%	21,875
BELMONT	5		4	173	0.16%	8,125
BENNINGTON	0			2	0.11%	1,818
BERLIN	0		3	8	0.10%	8,000
BETHLEHEM	3			6	0.21%	2,857
BOSCAWEN	1	_	0	6	0.16%	3,750
BOW	24	_	3	47	0.50%	9,400
BRADFORD	3		1	4	0.18%	2,222
BRENTWOOD	15		4	29	0.54%	5,370
BRIDGEWATER	6			9	0.55%	1,636
BRISTOL	2	_	2	7	0.18%	3,889
BROOKLINE	13		1	24	0.42%	5,714
CAMPTON	4	_	0	14	0.36%	3,889
CANAAN	3		1	10	0.22%	4,545
CANDIA	2		0	7	0.13%	5,385
CANTERBURY	5	15	1	21	0.68%	3,088
CARROLL	1	0	1	2	0.20%	1,000
CENTER HARBOR	1	0	0	1	0.09%	1,111
CHARLESTOWN	3	4	1	8	0.15%	5,333
CHESTER	16	4	1	21	0.35%	6,000
CHESTERFIELD	6	10	3	19	0.49%	3,878
CHICHESTER	2	6	1	9	0.26%	3,462
CLAREMONT	4	11	1	16	0.14%	11,429
COLEBROOK	1	0	0	1	0.04%	2,500
CONCORD	51	69	5	125	0.32%	39,063
CONWAY	9	6	2	17	0.23%	7,391
CORNISH	1	4	1	6	0.30%	2,000
CROYDON	2	2	1	5	0.52%	962
DALTON	2	2	0	4	0.34%	1,176
DANVILLE	6			10		5,263
DEERFIELD	3		3	15	0.24%	6,250
DEERING	2			4	0.17%	2,353
DERRY	36			73	0.22%	33,182
DORCHESTER	0			1	0.21%	476
DOVER	52		5	101	0.36%	28,056
DUBLIN	3		0	12	0.66%	1,818
DUMMER	2			3	0.82%	366
DUNBARTON	6		0	11	0.31%	3,548
DURHAM	45		3	87	1.39%	6,259
20111111VI	40	39	3	87	1.33/0	0,233

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EAST KINGSTON	5	7	2	14	0.71%	1,972
EASTON	1	0	0	14	0.29%	345
EATON	1	1	1	3	0.50%	600
EFFINGHAM	2	1	1	4	0.19%	2,105
ELLSWORTH	1	0	0	1	0.79%	127
ENFIELD	11	15	1	27	0.53%	5,094
EPPING	12	8	1	21	0.25%	8,400
EPSOM	3	8	1	12	0.21%	5,714
ERROL	0	0	1	1	0.20%	500
FARMINGTON	3	5	1	9	0.12%	7,500
FITZWILLIAM	2	6	1	9	0.31%	2,903
FRANCESTOWN	1	4	0	5	0.25%	2,000
FRANCONIA	2	2	0	4	0.31%	1,290
FRANKLIN	5	10	0	15	0.18%	8,333
FREEDOM	0	1	0	1	0.05%	2,000
FREMONT	3	6	0	9	0.17%	5,294
GILFORD	19	8	9	36	0.38%	9,474
GILMANTON	2	3	0	5	0.10%	5,000
GILSUM	1	7	1	9	0.93%	968
GOFFSTOWN	19	23	4	46	0.27%	17,037
GORHAM	3	1	1	5	0.15%	3,333
GRAFTON	1	0	0	1	0.06%	1,667
GRANTHAM	11	13	1	25	0.70%	3,571
GREENFIELD	3	4	0	7	0.38%	1,842
GREENLAND	11	8	0	19	0.41%	4,634
GREENVILLE	3	1	0	4	0.18%	2,222
GROTON	0	1	0	1	0.13%	, 769
HAMPSTEAD	10	7	1	18	0.19%	9,474
HAMPTON	23	28	2	53	0.29%	18,276
HANCOCK	4	4	0	8	0.40%	2,000
HANOVER	64	43	13	120	1.91%	6,283
HARRISVILLE	1	11	0	12	1.01%	1,188
HARTS LOCATION	0	1	0	1	1.39%	72
HAVERHILL	0	1	0	1	0.02%	5,000
HEBRON	1	1	3	5	0.52%	962
HENNIKER	11	4	0	15	0.31%	4,839
HILL	0	0	1	1	0.08%	1,250
HINSDALE	1	17	0	18	0.46%	3,913
HOLDERNESS	5	6	0	11	0.42%	2,619
HOLLIS	61	39	1	101	1.09%	9,266
HOOKSETT	21	21	6	48	0.30%	16,000
HOPKINTON	14	16	1	31	0.48%	6,458
HUDSON	45	36	8	89	0.32%	27,813
JACKSON	5	3	0	8	0.67%	1,194
JAFFREY	10	16	3	29	0.49%	5,918
JEFFERSON	0	3	0	3	0.21%	1,429
KEENE	28	84	3	115	0.65%	17,692
KENSINGTON	7	4	1	12	0.46%	2,609
LACONIA	11	16	7	34	0.21%	16,190
LANCASTER	5	7	2	14	0.41%	3,415
LANDAFF	1	0	0	1	0.20%	500
LANGDON	2	3	0	5	0.55%	909
LEE	11	13	2	26	0.55%	4,727
LEMPSTER	1	3	0	4	0.26%	1,538
LINCOLN	5	2	1	8	0.45%	1,778
LISBON	1	5	0	6	0.36%	1,667

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LITCHFIELD	6	11	3	20	0.23%	8,696
LITTLETON	3	10	1	14	0.23%	6,087
LONDONDERRY	44	36	5	85	0.26%	32,692
LOUDON	4	5	3	12	0.17%	7,059
LYMAN	0	2	0	2	0.26%	769
LYME	18	12	1	31	1.56%	1,987
LYNDEBOROUGH	2	4	0	6	0.29%	2,069
MADBURY	8	6	1	15	0.73%	2,055
MADISON	3	4	0	7	0.22%	3,182
MANCHESTER	95	91	12	198	0.20%	99,000
MARLBOROUGH	0	11	0	11	0.47%	2,340
MARLOW	1	5	0	6	0.62%	968
MASON	1	4	0	5	0.27%	1,852
MEREDITH	16	4	0	20	0.25%	8,000
MERRIMACK	50	37	5	92	0.34%	27,059
MIDDLETON	1	2	0	3	0.14%	2,143
MILAN	1	0	0	1	0.06%	1,667
MILFORD	20	18	1	39	0.24%	16,250
MILTON	4	9	0	13	0.25%	5,200
MONROE	2	6	0	8	0.73%	1,096
MONT VERNON	9	7	1	17	0.60%	2,833
NASHUA	173	137	24	334	0.41%	81,463
NELSON	7	4	0	11	1.28%	859
NEW BOSTON	11	5	0	16	0.23%	6,957
NEW CASTLE	16	4	4	24	2.07%	1,159
NEW DURHAM	5	3	0	8	0.23%	3,478
NEW HAMPTON	2	3	4	9	0.31%	2,903
NEW IPSWICH	2	10	1	13	0.21%	6,190
NEW LONDON	22	13	3	38	0.87%	4,368
NEWBURY	7	7	1	15	0.53%	2,830
NEWFIELDS	9	2	1	12	0.60%	2,000
NEWINGTON	3	8	2	13	0.94%	1,383
NEWMARKET	12	17	0	29	0.33%	8,788
NEWPORT	1	8	2	11	0.16%	6,875
NEWTON	4	5	0	9	0.16%	5,625
NORTH HAMPTON	9	5	2	16	0.45%	3,556
NORTHFIELD	4	1	1	6	0.11%	5,455
NORTHUMBERLAND	1	0	0	1	0.04%	2,500
NORTHWOOD	5	10	1	16	0.29%	5,517
NOTTINGHAM	9	5	2	16	0.27%	5,926
ORANGE	1	2	0	3	0.87%	345
ORFORD	6	6	0	12	0.76%	1,579
OSSIPEE	1	1	1	3	0.09%	3,333
PELHAM	31	30	9	70	0.44%	15,909
PEMBROKE	9	10	1	20	0.24%	8,333
PETERBOROUGH	21	27	1	49	0.80%	6,125
PIERMONT	1	1	0	2	0.23%	870
PITTSBURG	0	1	0	1	0.08%	1,250
PITTSFIELD						
PLAINFIELD	1 11	0 9	0	1 23	0.02% 0.80%	5,000 2,875
	7			15		2,875
PLAISTOW PLYMOUTH	8	7 11	1	20	0.17%	8,824
PORTSMOUTH	8 82	72	1	163	0.46%	4,348
RANDOLPH	2		9	3	0.75%	21,733
		1			0.71%	423
RAYMOND	9	4	1 0	14 5	0.12%	11,667
RICHMOND	U	5	U	5	0.36%	1,389

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RINDGE	8	8	1	17	0.27%	6,296
ROCHESTER	21	26	3	50	0.16%	31,250
ROLLINSFORD	8	2	0	10	0.36%	2,778
ROXBURY	1	1	0	2	0.69%	290
RUMNEY	0	7	0	7	0.37%	1,892
RYE	40	13	4	57	0.86%	6,628
SALEM	55	32	7	94	0.30%	31,333
SALISBURY	0	2	0	2	0.11%	1,818
SANDOWN	5	2	1	8	0.11%	7,273
SANDWICH	5	2	0	7	0.43%	1,628
SEABROOK	19	10	5	34	0.34%	10,000
SHELBURNE	0	1	0	1	0.22%	455
SOMERSWORTH	9	12	1	22	0.20%	11,000
SOUTH HAMPTON	4	4	0	8	0.87%	920
SPRINGFIELD	4	6	0	10	0.62%	1,613
STEWARTSTOWN	1	0	0	1	0.10%	1,000
STODDARD	2	4	1	7	0.44%	1,591
STRAFFORD	2	6	0	8	0.16%	5,000
STRATHAM	27	16	2	45	0.59%	7,627
SUGAR HILL	2	4	0	6	0.73%	822
SULLIVAN	0	2	0	2	0.24%	833
SULLIVAN COUNTY	110	102	22	234	0.43%	54,419
SUNAPEE	9	8	1	18	0.43%	4,186
SURRY	0	1	0	1	0.10%	1,000
SUTTON	2	2	0	4	0.20%	2,000
SWANZEY	6	27	1	34	0.42%	8,095
TAMWORTH	5	5	1	34 11	0.42%	
TEMPLE	3	2	2	7	0.43%	3,438 1,628
THORNTON	2	4	0	6	0.45%	
						3,158
TILTON TROY	1	3	1	5	0.12%	4,167
	1	4	0	5	0.23%	2,174
TUFTONBORO	4	3	2	9	0.27%	3,333
UNITY	0	1	0	1	0.05%	2,000
WAKEFIELD	3	7	0	10	0.16%	6,250
WARNER	2	8	1	11	0.33%	3,333
WARREN	0	1	0	1	0.10%	1,000
WASHINGTON	3	2	2	7	0.42%	1,667
WEARE	9	8	1	18	0.17%	10,588
WEBSTER	2	1	0	3	0.12%	2,500
WENTWORTH	0	1	0	1	0.09%	1,111
WESTMORELAND	2	6	0	8	0.38%	2,105
WHITEFIELD	1	3	0	4	0.16%	2,500
WILMOT	10	5	1	16	0.93%	1,720
WILTON	14	7	0	21	0.47%	4,468
WINCHESTER	0	10	1	11	0.23%	4,783
WINDHAM	57	35	6	98	0.63%	15,556
WINDSOR	1	0	0	1	0.36%	278
WOLFEBORO	8	9	2	19	0.24%	7,917
WOODSTOCK	1	1	4	6	0.36%	1,667
DCNH convod towns or !	2206	2100	240	4042	0.259/	1 200 027
PSNH served towns only	2306	2188	348	4842	0.35%	1,389,927

Data as of January 2021 from NH Division of Motor Vehicles provided for analysis by NHDES

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Date Request Received: 08/13/2021 Date of Response: 08/27/2021

Request No. CLF-CENH 2-002 Page 1 of 1
Request from: Conservation Law Foundation & Clean Energy New Hampshire

Witness: Kevin Boughan

Request:

Please provide the total number of customers in Eversource's service territory?

Response:

PSNH serves approximately 528,000 electric customers in New Hampshire.

Public Service of New Hampshire d/b/a Eversource Energy Docket No. DE 20-170

Date Request Received: 08/13/2021 Date of Response: 08/27/2021

Request No. CLF-CENH 2-003 Page 1 of 1

Request from: Conservation Law Foundation & Clean Energy New Hampshire

Witness: Kevin Boughan, Michael R. Goldman

Request:

Please explain whether Eversource has conducted any forecasts of expected EV adoption levels in its service territory for the next 2-, 5-, and/or 10-year periods. At the August 9, 2021 technical session, Eversource noted that it had conducted forecasts in developing its demand charge alternative proposal and for a separate NH PUC proceeding earlier this year. Please produce these forecasts, as well as any other forecasts that Eversource has conducted regarding expected EV adoption levels.

Response:

Yes, the Company annually conducts an internal forecast of expected EV adoption levels in its service territory in New Hampshire. The latest, prepared in September of 2020 forecasts baseline adoption through 2030, and is included below as Attachment 1.

In developing its demand charge alternative proposal, the Company was informed by the typical load factor forecast for a DC Fast Charger as estimated by the Rocky Mountain Institute in its February, 2020 report "DCFC RATE DESIGN STUDY FOR THE COLORADO ENERGY OFFICE" (Attachment 2), page 5:

- · "A 5% utilization rate for the first three years to represent a typical public DCFC load in today's early EV market
- A 10% utilization rate for the next three years to represent what a typical public DCFC load might be when the market begins to grow
- A 30% utilization rate for the next four years to represent what a typical public DCFC load might look like as the market matures"

Eversource Baseline NH EV Forecast (Fall 2020)

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	Vehicles in Operation (cumulative)					
Year	BEV	PHEV	Total			
2011	3	27	30			
2012	45	218	263			
2013	146	405	551			
2014	229	542	771			
2015	294	658	952			
2016	374	827	1,201			
2017	484	1,217	1,701			
2018	980	1,624	2,604			
2019	1,656	1,841	3,497			
2020	2,214	2,111	4,325			
2021	3,070	2,507	5,577			
2022	3,940	2,579	6,519			
2023	4,890	2,468	7,358			
2024	5,682	2,423	8,104			
2025	7,312	2,951	10,263			
2026	9,269	3,507	12,775			
2027	11,617	4,089	15,706			
2028	13,691	4,342	18,032			
2029	16,514	4,714	21,228			
2030	19,716	4,993	24,709			

Methodology uses the following national factors:

- Battery and gas price forecasts
- New model release plans
- Federal tax and emissions standards policies

And the following regional / state factors:

- State ZEV / GWSA commitments
- Regional energy price forecasts
- State vehicle / charger rebate programs and policies
- Planned / expected EVSE investment

Other Notes:

- Historical to 2017 figures based on Auto Alliance (grey)
- Incorporates fleet turnover
- Accounts for pandemic related slowdown in vehicle sales

Baseline forecast for a nascent market – will be revised often as more information becomes available

