

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

DE 21-138

Calendar Year 2022 Vegetation Management Program (VMP) Plan

Department of Energy Data Requests - Set 1

Date Request Received: 3/28/22
Request No. DOE 1-9

Date of Response: 4/11/22
Respondent: Anthony Strabone
Michael Cooper

REQUEST:

Please provide the reliability assessment and statistics for 2021 in the same format used in recent Liberty RMP/VMP filings – see, for example, DE 21- 049, Exhibit 1, Bates 22-26 and 34.

RESPONSE:

Reliability metrics for CY2021 are presented in the table below based on both the PUC Standard for excluding major weather events and the IEEE Standard 1366 method for excluding major event days. The metrics also exclude transmission supply outages, planned or notified outages, and all other applicable exclusions¹. The metrics include customers interrupted (“CI”), customer minutes interrupted (“CMI”), system average interruption frequency index (“SAIFI”), system average interruption duration index (“SAIDI”), customer average interruption duration index (CAIDI), and customers interrupted per interruption index (CIII).

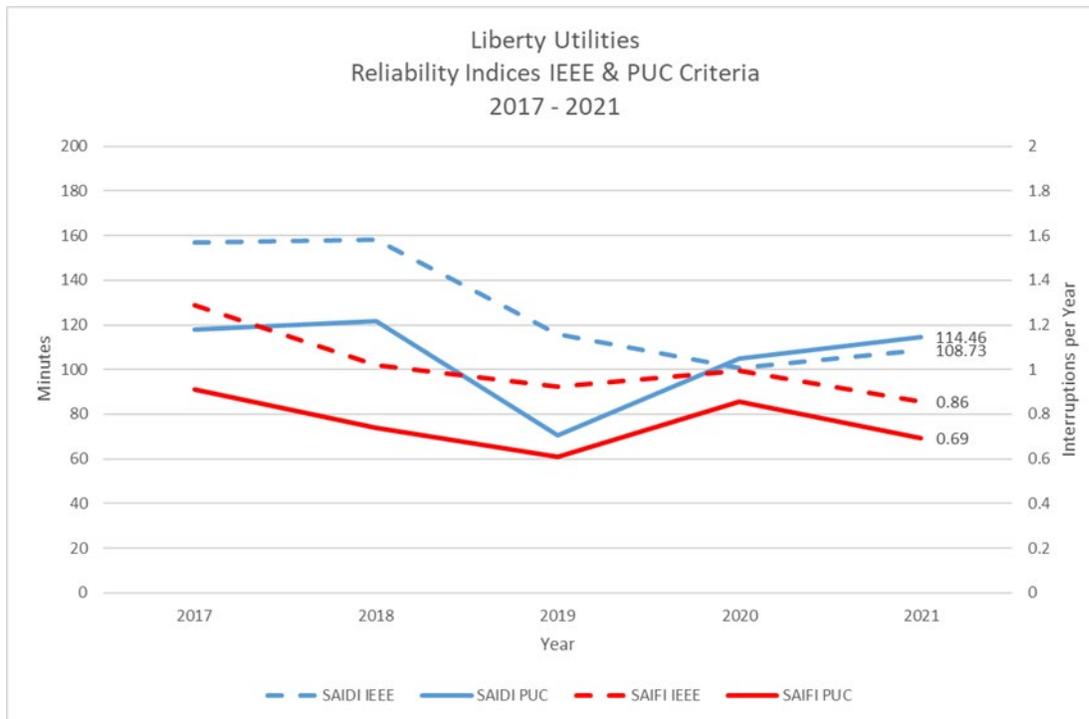
¹ Events that are excluded are those involving loss of supply from another utility, customer-owned facilities, fire or police emergencies, load shedding, planned maintenance, events whose duration was 5 minutes or less and/or events which involve only one customer.

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No Exclusions								
Year	Events	Customers Interrupted	Customer Minutes Interrupted	Customers Served	SAIFI	SAIDI	CAIDI	CIII
2021	729	47,428	7,514,755	45,468	1.0434	165.284	158.45	65.06
Excludes Only IEEE Major Events								
Year	Events	Customers Interrupted	Customer Minutes Interrupted	Customers Served	SAIFI	SAIDI	CAIDI	CIII
2021	695	38,887	4,945,481	45,468	0.8552	108.729	127.18	55.95
Excludes Only PUC Major Events								
Year	Events	Customers Interrupted	Customer Minutes Interrupted	Customers Served	SAIFI	SAIDI	CAIDI	CIII
2021	696	40,864	6,001,199	45,468	0.8985	131.881	146.86	58.71
Excludes Only Loss of Supply by Other Utility or Transmission Outage								
Year	Events	Customers Interrupted	Customer Minutes Interrupted	Customers Served	SAIFI	SAIDI	CAIDI	CIII
2021	721	41,166	7,005,838	45,468	0.9061	154.127	170.19	57.10
Excludes Only Planned Maintenance								
Year	Events	Customers Interrupted	Customer Minutes Interrupted	Customers Served	SAIFI	SAIDI	CAIDI	CIII
2021	709	46,986	7,475,305	45,468	1.0336	164.413	159.10	66.27
All Exclusions: IEEE Major Events, loss of supply, transmission, planned maintenance, Load Shedding, Single Customer Outages, Fire/Police Request								
Year	Events	Customers Interrupted	Customer Minutes Interrupted	Customers Served	SAIFI	SAIDI	CAIDI	CIII
2021	563	29,906	4,199,967	45,468	0.6579	92.3519	140.44	53.12
All Exclusions: PUC MEDs, loss of supply, transmission, planned maintenance, Load Shedding, Single Customer Outages, Fire/Police Request								
Year	Events	Customers Interrupted	Customer Minutes Interrupted	Customers Served	SAIFI	SAIDI	CAIDI	CIII
2021	511	31,534	5,208,246	45,468	0.6936	114.462	165.16	61.71

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The Company’s historical reliability performance for the period from 2017 to 2021 is outlined in the chart below. This chart displays annual SAIDI and SAIFI performance using IEEE-1366 and PUC criteria.

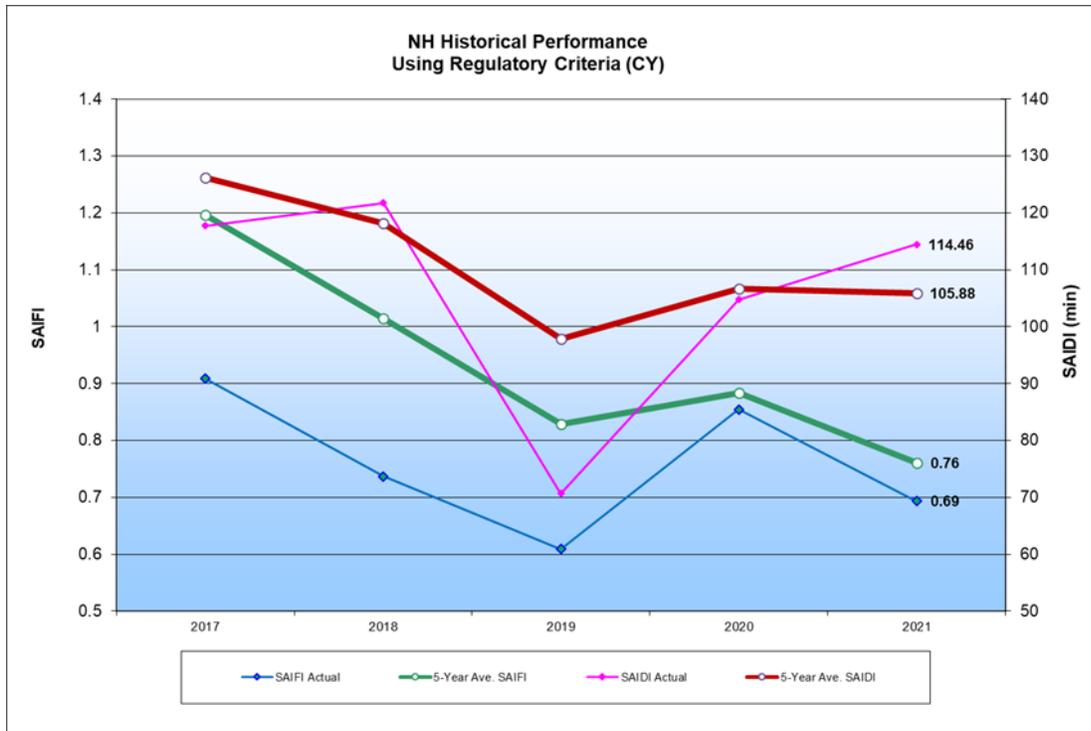


In terms of SAIDI, the reliability performance for the Company in 2021 (based on IEEE-1366) was higher (worse) than in the last two years. The SAIDI performance of 114.46 minutes for 2021 was above the five-year average of 105.88 minutes.

In terms of SAIFI, the reliability performance of the Company in 2021 (based on IEEE-1366) was the second-best performance in the last five years. The SAIFI performance of .69 is lower than the five-year average of .76.

In 2021, there was one event that met the IEEE-1366 criteria for a Major Event Day.

As shown on the NH Historical Performance chart below (based on PUC criteria), the SAIFI performance of 0.69 is an improvement from 2020, and the SAIDI performance of 114.46 is an increase (worse performance) from 2020. The 2021 SAIFI five-year average being the best in five years and the SAIDI five-year average being the second-best in five years. In summary, the company met the SAIFI target of .88 but fell short of the SAIDI target of 106.61 minutes, which are both based on a rolling five-year average.



The tree-related reliability performance for the Company was reviewed using NH PUC criteria. The chart below displays the number of tree-related incidents per year and the number of customers interrupted by tree-related incidents from 2017 to 2021. For comparison, the five-year average of the number of customers interrupted by tree-related incidents is also shown.

