Date Filed: October 21, 2026

Witness: Brendan J. O'Brien, Mark P. Baldwin, Garrett J. Murray, John G. Griffin and Leanne M. Landry
Request from: Public Utilities Regulatory Authority

Question:

(STORM LABOR) Interrog. Resp. EOE-123, Att. 1 and Interrog. Resp. OCC-049, Att. 1. Regarding payroll charged to storm work and the 2024 change in the use of external resources:

a. Identify the schedule and line on which the 2025 minor storm payroll of $28,548,987 is recovered and reconcile it to the incremental labor for 2025 non-catastrophic events in EOE-013, Attachment 1 and to the five-year average described in the response to OCC-383. State the amount of minor storm payroll included in the non-catastrophic storm expense in the Rate Year.

b. Explain the increase in the minor storm payroll on line 2 of EOE-123, Att. 1 from $1,535,123 in 2018 to $28,548,987 in 2025. Separate the change into storm frequency, the 2024 change in the use of external resources and any other driver.

c. Provide a net cost comparison of the Company's reduced use of external resources for outage response during non-catastrophic storm events beginning in 2024, including the more frequent assignment of Response Specialist Organization and Electric Field Operations personnel to the storm schedule on Sundays and holidays, described in the response to OCC-049. State for each of calendar years 2021 through 2025 the external contractor cost avoided, the temporary staffing cost avoided, and the internal premium pay, benefits and payroll taxes incurred.

d. Quantify, for each of calendar years 2023 through 2025, the premium pay attributable to the thirty-minute response deadline for Priority 1 emergency calls imposed in Docket No. 23-01-39, Investigation into the Response of The Connecticut Light and Power d/b/a Eversource Energy to the Accident on January 17, 2023, at 602 Greenwoods Road, Norfolk, CT, and described in the response to OCC-049, separately from the 2024 change in the use of external resources.

Response:

a. The payroll expense represented in the non-catastrophic storm expense in Schedule C-3.28 is limited to incremental overtime costs not captured in Payroll Expense in Schedule C-3.5. The inclusion of incremental overtime incurred during minor storm events is necessary to recover a representative level of expenses so that the utility has an opportunity, but not a guarantee, to cover its costs of service in any given year. To accomplish this goal, base

distribution rates must be set to reflect a representative level of expenses for storms that do not qualify for deferred treatment as a catastrophic storm event. The amount of actual incremental overtime reflected in non-catastrophic storm expense in the Rate Year is not determinable because the expense was developed using an average level of costs over the prior five years.

EOE-013[i] has been replaced with EOE-013-SP01[ii]. Please refer to RRU-051, Attachment 2, for a reconciliation of labor charges between OCC-049[iii] and EOE-013-SP01.

b. The increase in minor storm payroll expense is attributable to the significant increase in the number of minor storm events in 2025, which was almost four times the amount experienced in 2018 (47 minor events in 2025 compared to 12 in 2018). The significant increase in the number of minor storm events caused a correlated increase in payroll expense associated with minor storms. Please refer to the table below for the internal and external labor costs per storm event, which shows the total internal and contractor labor per minor storm event is actually slightly lower in 2025 ($679,231 - $607,425 internal + $71,806 contractor) compared to 2018 ($679,943 - $127,927 internal + $552,016 contractor). Please refer to the Company's response to OCC-247[iv] for a discussion of the meteorological drivers of increased minor storm conditions.

	2018	2019	2020	2021	2022	2023	2024	2025
Minor Storms Payroll Expense[1]	$ 1,535,123	$ 3,540,374	$ 4,288,241	$ 10,025,173	$ 13,769,013	$ 13,981,323	$ 22,288,186	$ 28,548,987
Minor Storm Events	12	6	13	14	27	39	40	47
Minor Storm Payroll per Event	$ 127,927	$ 590,062	$ 329,865	$ 716,084	$ 509,963	$ 358,495	$ 557,205	$ 607,425
OH Line Contractor Labor Costs	$ 6,624,195	$ 8,557,664	$ 5,809,707	$ 10,295,968	$ 10,013,896	$ 7,174,808	$ 5,075,643	$ 3,374,891
OH Line Contractor Labor per Event	$ 552,016	$ 1,426,277	$ 446,901	$ 735,426	$ 370,885	$ 183,969	$ 126,891	$ 71,806

[1] Minor storms payroll expense sourced from EOE-123 Attachment 1.

c. The storm-by-storm cost-per-trouble-spot analysis presented in Docket No. 25-12-13 for the 2018-2023 storm events, was based on data from the Company's Outage Management System ("OMS") using specific storm start and end timestamps (e.g., 6:35 a.m. on Day 1 to 8:31 p.m. on Day 3), which did not generally capture the full calendar day. The storm-by-storm cost-per-trouble-spot analysis presented in this proceeding was based on OMS data for full calendar days, from 12:00 a.m. on the first day through 11:59 p.m. on the last day of the storm. The Company's assessment is that using the full calendar day data for the start and stop points of designated storm events is a more reliable presentation of the storm-related customer outages and trouble events for comparative purposes.

To allow for comparisons across the time period 2018-2023 and 2024-2025, the Company asked Pricewaterhouse Coopers ("PwC") Consulting to perform an updated analysis of the trouble-spot benchmarks for the storm events occurring from 2018 to 2023. As part of that

analysis, PwC standardized the start and stop times used to calculate the applicable metric across storm events, thereby applying a consistent methodology. This updated analysis is based on OMS data for full calendar days, from 12:00 a.m. on the first day through 11:59 p.m. on the last day of the storm. This analysis is provided as RRU-051, Attachment 1. As shown in RRU-051, Attachment 1, only one storm (MS21L) in the June 2018-December 2021 tranche of storms changed as a result of the standardized methodology. Regarding storms in the February to December 2023 period, ten storms changed as a result of the standardized methodology.

As shown in the table below, applying the standardized methodology to the storm events reflected in the initial 2018-2021 storm event filing provides a refinement to the average cost per trouble-spot. The data reflected in Supplement 2 (February 2023-December 2023) shows a more notable difference in the average cost per trouble-spot under the standardized methodology. As shown in the table below, application of the standardized methodology to the Supplement 1 storms (January 2022-January 2023) resulted in no difference to the average cost per trouble-spot.

Storm Group	**Average Cost Per Trouble-Spot**	
	Previous	**Updated**
Initial Filing (June 2018 – December 2021)	$5,787	$5,752
Supplemental (January 2022 – January 2023)	$12,579*	$12,579
Supplemental 2 (February 2023 – December 2023)	$17,406	$14,455

*MS22B was an extreme outlier and therefore not included in the average for this tranche.

Applying a standardized methodology across all storm events shows a reduced average cost per trouble spot, as shown in the table above.

As part of this response, the Company is identifying a handful of typographical errors that appeared in the following exhibits to the initial filing regarding outage and cost-per-event figures. These errors were inadvertent and do not affect the substance of the conclusions drawn from this data.

- **Exhibit CLP-STORM-IMT-3 (Event 2-MS24B), Page 1 of 42**: The outage event count shown on the slide was entered incorrectly. The slide currently reflects **557** Outage Events, but the correct value should be **577**. The cost-per-event metric of **7,543** is correct, as that calculation was performed independently and was not impacted by the transposition error.

- **Exhibit CLP-STORM-IMT-3 (Event 9-MS24H), Page 1 of 23**: The outage event count shown on the slide was entered incorrectly. The slide currently reflects **339** Outage Events, but the correct value should be **399**. The cost-per-event metric of **9,733** is correct, as that calculation was performed independently and was not impacted by the transposition error.

- **Exhibit CLP-STORM-IMT-3 (Event 10-MN24X), Page 1 of 8**: In this instance, the outage event count is correct; however, the cost-per-event value was transposed. The slide currently shows **$4,079**, but the correct should be **$4,097**.

- **Exhibit CLP-STORM-IMT-2 Page 8 of 30**: The second column from the left in the table labeled "Storm Statistics" should be labeled "Non-Outage Events" (i.e., # of non-outage trouble spots).

d. PURA's decision in Docket No. 23-01-39 imposing a 30-minute response deadline for Priority 1 emergency calls required the Company to maintain higher RSO staffing levels after the August 9, 2023 decision through 2024 and 2025. Please refer to RRU-051, Attachment 3, which shows the average number of RSO employees charging time per day for calendar years 2021-2025. The attachment illustrates that before the August 9th decision the RSO averaged approximately 73 RSO employees charging time per day. In 2024, there were approximately 76 RSO employees charging time per day and 75 RSO employees charging time per day in 2025.

If PURA comes to the conclusion in this case that the storm threshold has to be higher than what the Company has proposed in its initial filing, PURA will need to consider that the higher the threshold, the greater the chance that PURA is asking customers to pay for costs they don't need to, or conversely, the greater the chance that PURA is disallowing storm costs without a prudence review, which is legally improper. The larger the storm threshold gets, the more that has to be put in rates and using average costs and average number of storms to compute the amount to be included in rates as the "representative" amount is unlikely to get it right in either respect.

Prior Referenced Responses:

[i] EOE-013 Question:

(NON-CATASTROPHIC STORM EVENTS) Provide a listing of all storm events subject to a Storm Work Order for the years 2024 through present that did not exceed the $4 million catastrophic storm eligibility threshold. Additionally, provide a breakdown of the associated costs and the specific date range for each event (i.e., beginning and ending).

EOE-013 Response:

Please refer to EOE-013, Attachment 1, for a listing of total cost for non-catastrophic storm events for 2024, 2025, and 2026. Storm Work Order SCMN2411 reflects multiple dates associated with the costs incurred. At the time, the Company maintained a single work order for non-catastrophic storm work, resulting in all related charges being captured under a single work order. More recently, the Company has changed that practice to initiate separate work orders.
All 2026 costs remain preliminary, as the year is still in progress. The dollar amount reflected represents charges recorded through June 30, 2026, and does not constitute final year-end total.

[ii] EOE-013-RV01 Revised Response:

Please refer to EOE-013-SP01, Attachment 1 which is a revision to EOE-013, attachment 1, to reflect the correct storm dates for MN24F to be March 9, 2024, through March 10, 2024 In addition, the attachment reflects revisions to the calculations under the Direct labor and Payroll -related overheads.

[iii] OCC-049 Question:

(Double Time) For each of the years: 2021, 2022, 2023, 2024, 2025, by year, provide the amount of double time the Company has paid to internal employees.

OCC-049 Response:

Please refer to OCC-049, Attachment 1, for the amount of pay for internal employees at the double straight time premium rate.

Please note that there are two primary factors accounting for the increase in premium pay over the course of this timeframe. First, beginning in 2024, the Company reduced the use of external resources for outage response during non-catastrophic storm events. To support this strategy, Response Specialist Organization ("RSO") and Electric Field Operations ("EFO") personnel are now placed on the storm schedule more frequently, including Sundays and holidays, reducing the need to hire external resources. A parallel decrease in external crew costs occurred in the same years.

Second, is the impact of PURA's decision in Docket No. 23-01-39, Investigation into the Response of the Connecticut Light and Power Company d/b/a Eversource Energy to the Accident on January 17, 2023, at 602 Greenwoods Road, Norfolk, CT (August 9, 2023), imposing a 30-minute response deadline for Priority 1 emergency calls. The Company had to increase Response Specialist staffing levels to ensure all shifts were appropriately covered, which necessitated the use of overtime, including on Sundays and holidays.

Please refer to the response to OCC-043i and OCC-046 for the contractual terms pertaining to internal employees.

[iv] OCC-247 Question:

(VMP) Referring to Exhibit CLP-VMP-1, page 8. Provide support for the claim the Company has experienced increased severity and frequency of strong weather systems as compared to the storm impact over the last 26 years.

OCC-247 Response:

This statement reflects the Company's observation that weather conditions affecting its electric distribution system have become increasingly challenging over time. This observation is supported by multiple, complementary sources of information, including independent climate research specific to Connecticut and the Northeast, documented changes in Connecticut's vegetation and forest environment and the Company's own operating experience.

Because the characteristics, timing, location and impact are different for every weather event, the Company does not define a "strong storm" solely by a particular wind speed, precipitation amount, or number of customer outages. Rather, the operational impact of a weather system is the result of multiple interacting factors, including wind speed and duration, precipitation intensity, soil saturation, snow or ice loading, lightning, antecedent weather conditions, vegetation health and condition, and the location of trees and other vegetation relative to electric facilities.

Independent Climate Data
Independent scientific assessments demonstrate that Connecticut and the broader Northeast are experiencing measurable changes in climate and certain types of extreme weather. Please refer to OCC-247, Attachment 1. The *Connecticut Physical Climate Science Assessment Report* found that previous studies of the Northeast document an observed increase in precipitation and in the frequency and intensity of heavy precipitation events. The report further explains that more than 75 percent of extreme precipitation days in the Northeast are associated with extratropical storms, except during September, when tropical storms account for more than 50 percent.

Connecticut-specific observations similarly show changes in precipitation patterns. Please refer to OCC-247, Attachment 2. NOAA's *Connecticut State Climate Summary 2022* reports that annual and summer precipitation have generally been above average since the 1970s and that the greatest number of days with two inches or more of precipitation occurred during the 2005–2009 and 2010–2014 periods. NOAA also projects increases in annual precipitation and in the number of extreme precipitation events, noting that these changes may increase inland and coastal flooding risks.

The Fifth National Climate Assessment1 provides additional national and regional context. This assessment concludes that climate change is increasing the frequency and severity of a number of extreme weather and climate events, including heavy precipitation and flooding.

These findings do not mean that every individual storm affecting Connecticut is stronger than storms occurring historically, nor is the Company relying on that proposition. Rather, the occurrence of these weather patterns demonstrate that the underlying weather environment in which the Company's electric system operates is changing, including changes in weather variables that can materially affect an overhead electric distribution system.

Vegetation and Antecedent Environmental Conditions
Weather alone does not determine the resulting impact on the electric system. This distinction is particularly important in Connecticut because of the significant interaction between the State's overhead electric infrastructure and its heavily forested environment. Weather conditions, antecedent soil conditions, and vegetation health can interact in ways that affect the likelihood of trees or limbs contacting electric facilities.

Connecticut's forest environment has itself experienced significant health stresses during the period relevant to this interrogatory. Please refer to OCC-247, Attachment 3. The Connecticut Agricultural Experiment Station's ("CAES") *2024 Forest Health Highlights* documented 82,214 acres of new forest damage during its 2024 aerial survey, including damage associated with beech leaf disease, spongy moth, white pine needle disease and emerald ash borer. CAES further cautioned that aerial surveys likely underestimate the actual extent of certain forest-health impacts.

Several of these forest-health threats emerged or expanded substantially during the period examined by the Company. Emerald ash borer was first detected in Connecticut in 2012 and subsequently spread throughout the State. In CAES's 2024 sampling, 314 of 387 ash trees were dead, and at sampled locations where emerald ash borer was first detected in 2012 or 2013, CAES found no living overstory or midstory ash trees. Beech leaf disease, first detected in Connecticut in 2019, subsequently spread throughout the State and has resulted in substantial deterioration in the condition and growth of affected beech trees.

These forest-health conditions demonstrate that the environment affected by weather systems has also changed. This distinction is important when evaluating impacts to an overhead electric distribution system. Heavy or prolonged

1 https://toolkit.climate.gov/NCA5_2023_FullReport

precipitation can contribute to soil saturation; wind acting upon trees rooted in saturated soils may produce different consequences than similar winds under dry conditions; and dead, diseased or otherwise stressed trees may respond differently to those same weather conditions than healthy trees.

Accordingly, the ultimate impact of a weather system cannot necessarily be determined from a single meteorological variable, such as peak wind speed. Weather severity, antecedent conditions, vegetation health and electric-system exposure interact to determine the ultimate system impact.

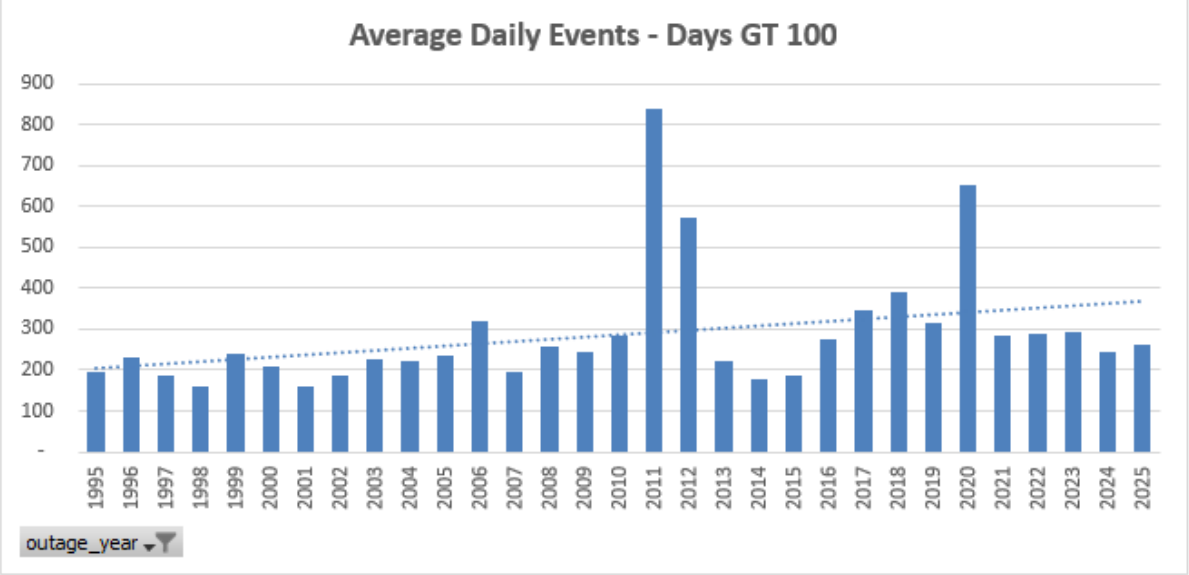
Company Operating Experience
The Company's historical operating experience provides another, complementary perspective. Whereas climate and environmental studies describe changes occurring in Connecticut's weather and natural environment, the Company's outage-event data provide a means of evaluating how frequently weather conditions are producing operationally significant impacts on the electric system.

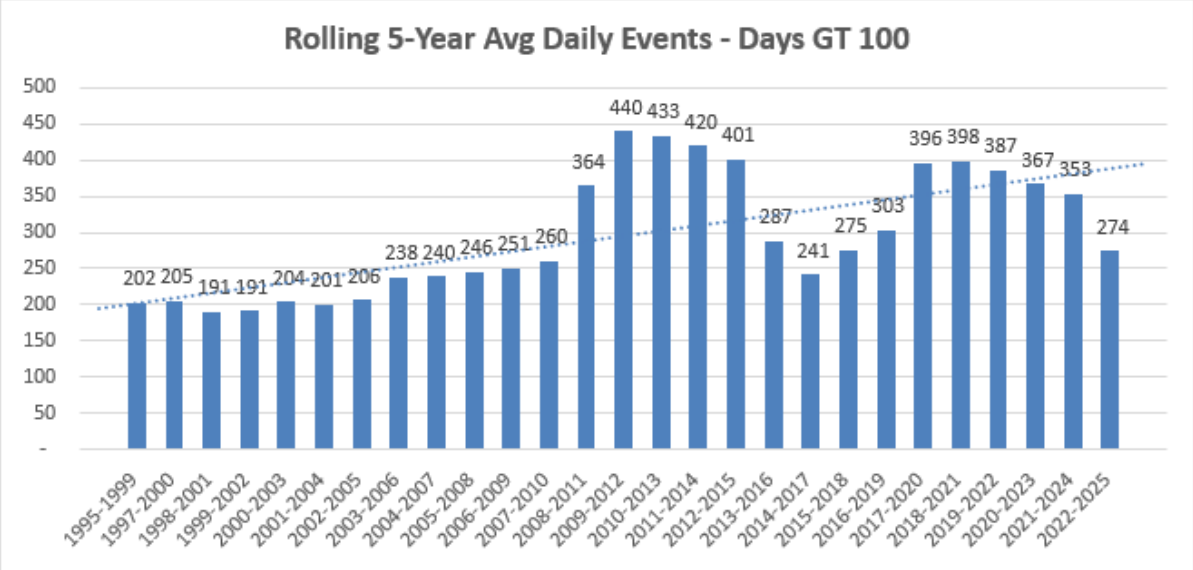
For purposes of this analysis, the Company has reviewed the frequency of days experiencing more than approximately 100 outage events. The Company does not use 100 outage events as a meteorological definition of a "strong storm," nor does reaching that level necessarily constitute activation of the Company's Emergency Response Plan. This level of outage events is simply a level of outages that would not be expected on a blue sky day and that would generally need to be provoked by an external weather impact, or other force. That is, approximately 100 outage events represents an operationally meaningful reference point because, at approximately that level of system impact, the Company's normal operating and staffing structure generally begins to require adjustment.

Under normal conditions, resources such as Response Specialist Organization personnel and lineworkers are allocated among outage response, corrective maintenance, capital work, and other normal operations. As outage-event volume increases, additional personnel may need to be redirected from their normal assignments to restoration activities, staffing structures may need to be supplemented, and additional coordination and operational support may become necessary.

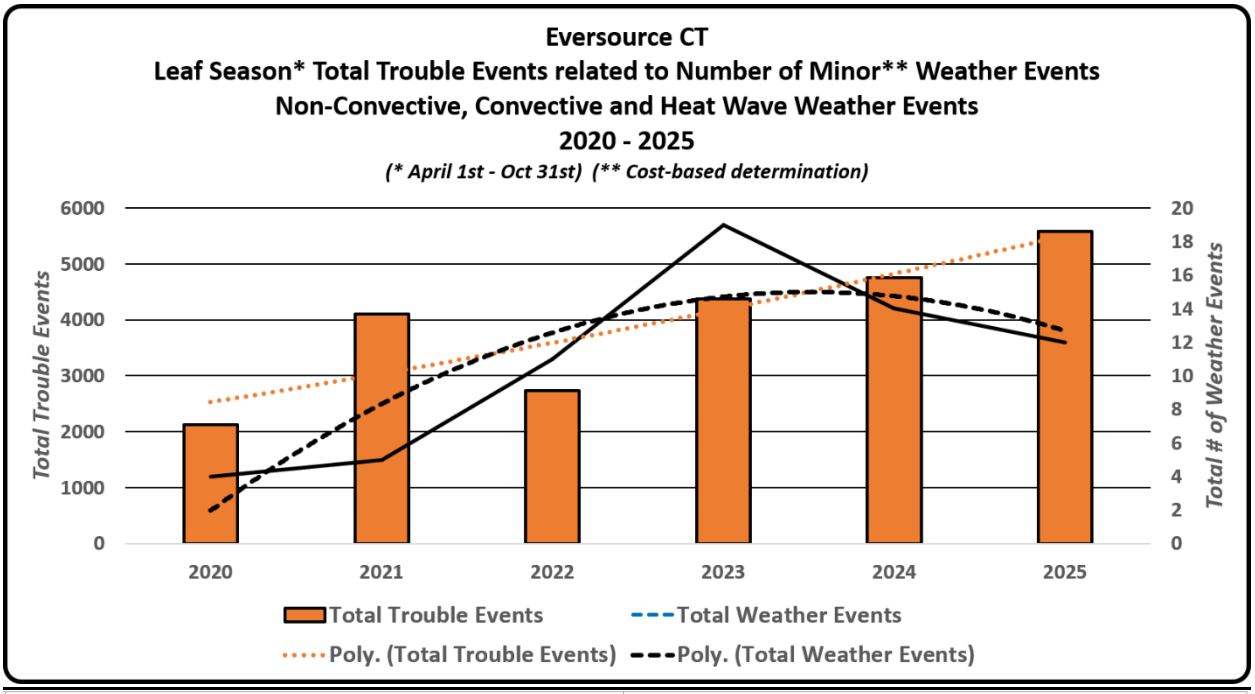
The precise point at which these actions occur is dynamic and depends upon factors including the geographic distribution and complexity of outages, expected weather duration, damage conditions, available resources, and forecast conditions. Nevertheless, approximately 100 outage events provides a reasonable and consistent reference point for examining the frequency with which weather affects the system sufficiently to cause the Company to move beyond its ordinary operating posture.

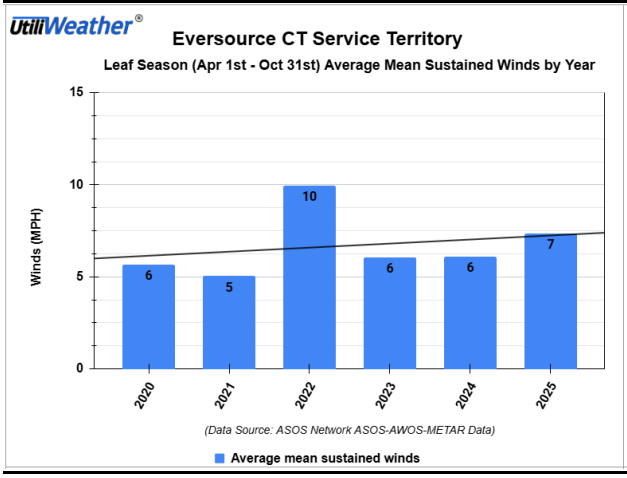
The Company's review of its historical operating data shows an increasing trend in the number of days on which the electric system experiences more than 100 outage events, including a clear upward trend. Additionally, a comparison of the rolling five-year average of days with greater than 100 outage events also shows a clear upward trend. This information is relevant because it measures the consequence of weather from an electric-system operations perspective rather than attempting to characterize storm strength through a single meteorological variable.

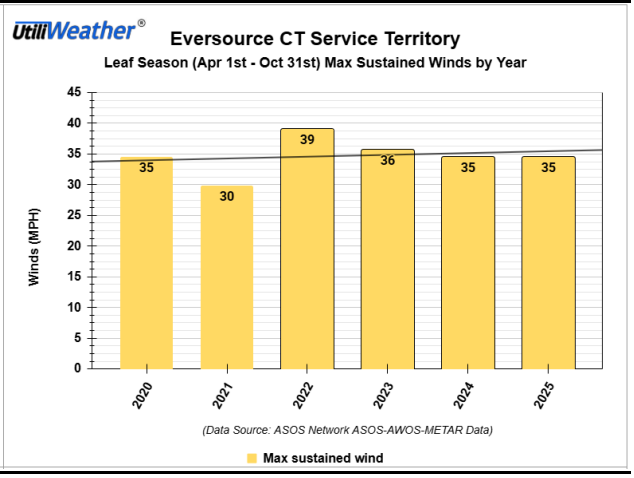


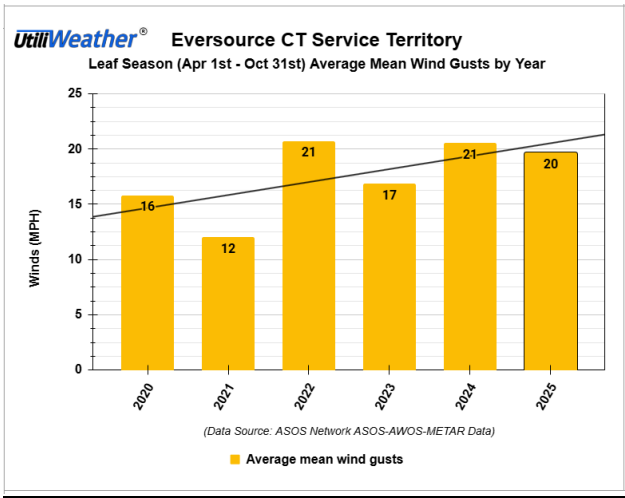


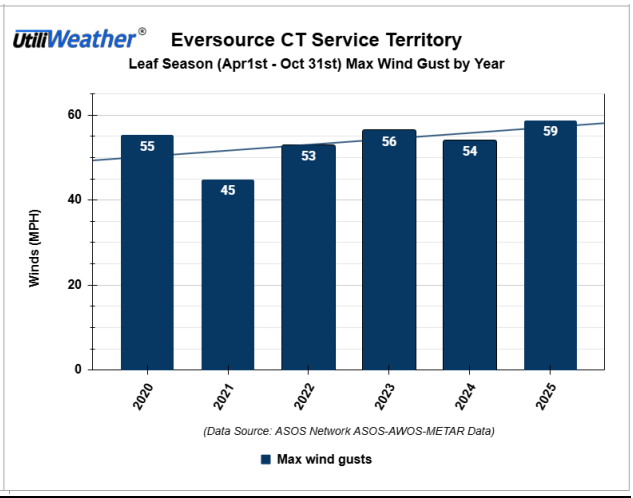
Recent meteorological data reviewed by the Company provides additional context for these observed operational trends. UtiliWeather analyzed four wind-profile parameters over a recent five-year period: average mean sustained winds, average maximum sustained winds, average mean wind gusts, and average maximum wind gusts. UtiliWeather found increasing linear trends across these wind parameters, with sustained winds exhibiting a modest increase and wind gusts exhibiting a somewhat more robust increase over the period analyzed. While the five-year period is not, standing alone, sufficient to establish a long-term climatological trend, these observations provide additional recent meteorological context that is consistent with the Company's operating experience and the longer-term regional climate information discussed above.


Eversource CT
Leaf Season* Total Trouble Events related to Number of Minor** Weather Events
Non-Convective, Convective and Heat Wave Weather Events
2020 - 2025
(* April 1st - Oct 31st) (** Cost-based determination)
Total Trouble Events
Total # of Weather Events
6000
5000
4000
3000
2000
1000
0
20
18
16
14
12
10
8
6
4
2
0
2020
2021
2022
2023
2024
2025
Total Trouble Events
Total Weather Events
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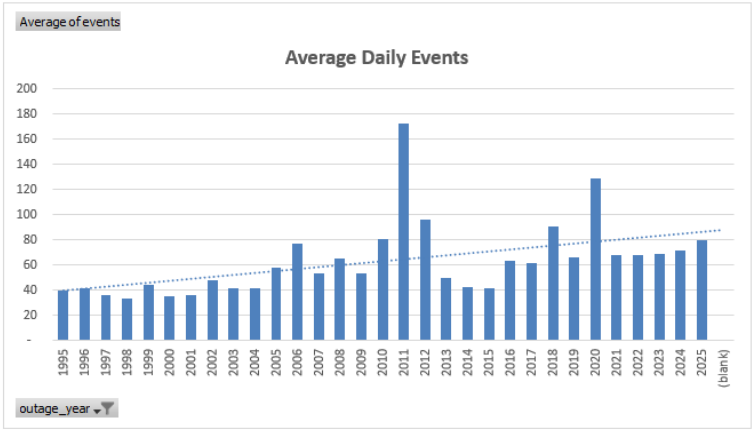

UtiliWeather
Eversource CT Service Territory
Leaf Season (Apr 1st - Oct 31st) Average Mean Sustained Winds by Year
Winds (MPH)
15
10
5
0
6
5
10
6
6
7
2020
2021
2022
2023
2024
2025
(Data Source: ASOS Network ASOS-AWOS-METAR Data)
Average mean sustained winds

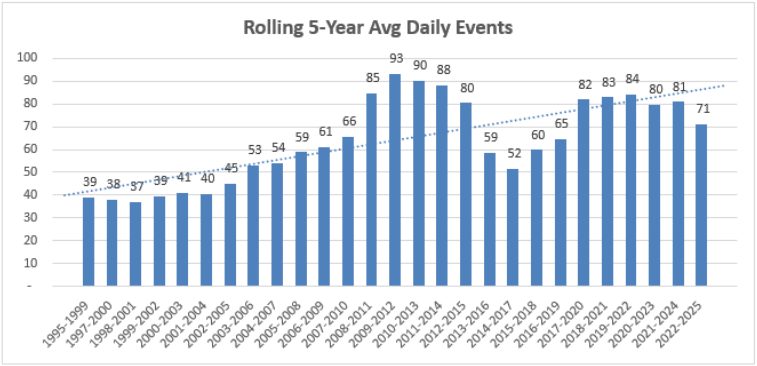

UtiliWeather
Eversource CT Service Territory
Leaf Season (Apr 1st - Oct 31st) Max Sustained Winds by Year
Winds (MPH)
45
40
35
30
25
20
15
10
5
0
35
30
39
36
35
35
2020
2021
2022
2023
2024
2025
(Data Source: ASOS Network ASOS-AWOS-METAR Data)
Max sustained wind





A look at the average amount of daily outage events also indicates a clear increase that the system is seeing increased outage activity on a daily basis.





At the same time, this operating trend, standing alone, does not necessarily prove that weather systems have become stronger or that climate change is responsible for any particular outage. Electric-system impacts are affected by multiple variables, including weather, vegetation, antecedent environmental conditions, infrastructure exposure and system configuration. Accordingly, the Company's operating data are appropriately considered together with, rather than as a substitute for, independent meteorological and environmental information.

Relationship to System Resilience
An increase in operationally significant weather impacts should also not be interpreted, by itself, as evidence of declining system resilience. Reliability and resilience investments can reduce the consequences of weather events, but they do not eliminate the underlying exposure of an overhead distribution system to weather and vegetation. In fact, system-impact data reflect the combined effect of the hazard to which the system is exposed and the system's ability to withstand and recover from that hazard.

For that reason, it is important to evaluate the trend in system impacts together with independent evidence regarding changes in the external environment rather than attempting to infer either weather severity or system resilience solely from outage counts.

This is also consistent with the broader treatment of infrastructure risk in the Fifth National Climate Assessment, which recognizes that additional climate-related loads and stressors can interact with infrastructure and its operational constraints to produce cascading impacts.

Conclusion
Weather, vegetation, antecedent environmental conditions and electric-system impacts are interrelated and changes in outage activity cannot reasonably be attributed to any single variable.

However, in addition to the Company's actual operational experience, multiple independent lines of evidence point in the same general direction. Scientific assessments document changes in Connecticut and the Northeast's climate, including increases in heavy precipitation and other extreme-weather characteristics relevant to electric infrastructure. Connecticut-specific observations demonstrate changing precipitation patterns, while broader assessments identify increasing risks to infrastructure from extreme weather. Those weather conditions interact with Connecticut's vegetation and antecedent environmental conditions, meaning that similar meteorological events do not necessarily produce similar electric-system impacts.

Added to this context, the Company's own operating experience demonstrates an increasing frequency of days on which weather-related impacts are significant enough to exceed approximately 100 outage events and require the Company to begin adjusting its normal operating posture.

Recent meteorological data reviewed by the Company also identifies increasing trends in sustained winds and wind gusts over the five-year period analyzed, with the increase in wind gusts being somewhat more pronounced

Viewed collectively, this data provides a more complete picture than any individual measure could provide: the weather and environmental conditions affecting Connecticut are changing; those conditions can increase the stresses placed on an overhead electric distribution system; and the Company is experiencing an increasing frequency of operationally significant weather-related system impacts.

Accordingly, the Company's statement is made on the basis of the increasing frequency and operational severity of weather-related impacts experienced by the Company's electric system, considered in the context of independent scientific evidence documenting changes in the weather and environmental conditions affecting Connecticut.