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June 8, 2022

VIA E-FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

***Re: Completed Restoration of Momentary and Sustained Interruptions –
Pennsylvania Electric Company; Docket No. M-2021-3023564***

Dear Secretary Chiavetta:

Pursuant to 52 Pa. Code § 67.1, Pennsylvania Electric Company (“Penelec”) submits written notification of completed restoration efforts following storm conditions that began on May 21, 2022 that caused multiple service interruptions in the Penelec service territory.

Attached please find the details relative to the impact of this recent outage event and the restoration activities that took place. It should be noted that the review and approval process of this outage information is still in progress at the time of filing this report and as such, all outage information contained in this report should be considered preliminary.

If you have any questions, please contact me at (610) 212-8331.

Sincerely,



Darsh Singh

Enclosures

- c: Dan Searfoorce - PaPUC Bureau of Technical Utility Services (via electronic mail)
Derek Ruhl - PaPUC Bureau of Technical Utility Services (via electronic mail)
John Van Zant - PaPUC Bureau of Technical Utility Services (via electronic mail)
Harry Bidelsbach – PaPUC Bureau of Technical Utility Services (via electronic mail)

(c) Approximate number of outages for each county affected during the event:

County	Outages	Outage Cases	Trouble Cases
Blair	89	7	14
Bradford	1,357	19	7
Cambria	43	3	5
Centre	5	1	1
Clarion	556	22	8
Clearfield	192	5	5
Crawford	440	25	12
Cumberland	95	2	0
Erie	253	16	41
Forest	486	12	3
Franklin	56	1	2
Huntingdon	279	3	3
Indiana	758	11	8
Jefferson	2,778	29	15
McKean	20	2	3
Mifflin	738	14	9
Potter	3	1	1
Somerset	24	3	7
Susquehanna	127	11	5
Tioga	18	5	4
Venango	1,631	49	14
Warren	668	7	8
Wayne	282	5	2
Wyoming	2	2	3
Total	10,900	255	180

(d) Approximate number of outage cases exceeding 6 or more hours in duration: 135

(e) A listing of each outage case exceeding 6 or more hours in duration:
See Attachment A.

(d) Reason for the interruption or outages: Beginning late Saturday afternoon on May 21, 2022 and continuing into Sunday morning on May 22, 2022, a thunderstorm producing periods of rain, lightning, and wind gusts moved into Pennsylvania including the Penelec service territory. Wind gusts in the Penelec service territory exceeded 40 miles per hour and portions of the service territory received up to two inches of rain. See Attachment B for the maximum wind gusts for May 21 and May 22, 2022, and the 24-hour total precipitation for May 21, 2022.

Damage as a result of the wind and rain included downed trees/power lines, damaged and broken poles/crossarms, and damaged equipment. The Oil city area was the hardest hit area with the majority of damage. Approximately 50% of the total outages that occurred were tree related.

Preliminary data indicate the reliability impact of the storm was 7.1 minutes of SAIDI, 0.02 of SAIFI, and an overall storm CAIDI of 375.6 minutes.

- (g) Projected time of restoration: The estimated time of restoration for the majority of customers was 1500 on May 23, 2022.

See Attachment C for the restoration curve and Attachment D for the order restoration graphs.

- (h) The number of utility workers, contract workers, and workers received as mutual aid assigned specifically to the repair work by general function:

Company	# of Workers	General Function
Penelec	113	Line Workers
Subtotal	113	
Henkels & McCoy	4	Line Contractor
J.W. Didado	9	Line Contractor
Thayer	9	Line Contractor
Thompson	8	Line Contractor
Subtotal	30	
Asplundh	4	Forestry Contractor
Davey Tree	24	Forestry Contractor
Lewis	17	Forestry Contractor
PennLine Services	13	Forestry Contractor
TreeSmiths	4	Forestry Contractor
Subtotal	62	
Penelec	52	Supporting Roles
Subtotal	52	
Grand Total	257	

- (i) The date and time of the first information of a service interruption: May 21, 2022 at 1820.

- (j) The date and time that repair crews were assembled: Crews were on duty with additional crews called in to support restoration.
- (k) The actual time that service was restored to the last affected customer: May 24, 2022 at 0513.
- (l) A general description of the physical damage sustained by the utility facilities as a result of the interruption/outage:

Equipment	Number
Primary Spans Down	161
Secondary Spans Replaced	79
Crossarms Replaced	19
Cutouts Replaced	19
Poles Replaced	8
Transformers Replaced	12
Wire & Cable Replaced (feet)	536

- (m) If the interruption/outage event was weather-related, the utility’s weather reports, outlooks, or scenarios for the day before and the day of the interruption/outage event:

See Attachment E for the weather forecast reports.

- (n) If the interruption/outage event caused approximate outages that exceed 10% or more of the number of customers in the utility’s entire service territory, rank the event in terms of the number and duration of outages and provide 2 comparable events, including the number and duration of outages for those comparable events.

The outages that were a result of this event did not exceed 10% or more of customers in the utility’s entire service territory.

Remarks: The storm statistics contained in this report are preliminary. The review and approval of the storm statistics were still in progress as of the time this report was filed.

Attachment A: A listing of each outage case exceeding six or more hours in duration, including the following information¹:

Order #	Approximate Location (County)	Total Number of Customers Affected	Duration of the Outage (minutes)	Initial Date and Time of the Outage	Restoration Date and Time
12026807-1	Clarion	2	3,048	05/21/2022 2110	05/23/2022 2358
12027410-1	Venango	4	2,878	05/21/2022 2053	05/23/2022 2051
12026810-2	Clarion	1	2,689	05/21/2022 2110	05/23/2022 1759
12026808-2	Clarion	3	2,687	05/21/2022 2053	05/23/2022 1740
12026728-1	Venango	1	2,628	05/21/2022 2052	05/23/2022 1640
12026704-2	Crawford	18	2,503	05/21/2022 2038	05/23/2022 1421
12026662-2	Venango	9	2,480	05/21/2022 2025	05/23/2022 1345
12026820-2	Forest	25	2,431	05/21/2022 2111	05/23/2022 1342
12026722-2	Clarion	18	2,428	05/21/2022 2046	05/23/2022 1314
12026710-2	Venango	18	2,372	05/21/2022 2045	05/23/2022 1217
12026746-1	Clarion	4	2,364	05/21/2022 2056	05/23/2022 1220
12026829-2	Forest	8	2,348	05/21/2022 2116	05/23/2022 1224
12027049-1	Forest	8	2,347	05/21/2022 2245	05/23/2022 1352
12026864-1	Clarion	11	2,340	05/21/2022 2130	05/23/2022 1230
12027072-1	Forest	10	2,314	05/21/2022 2148	05/23/2022 1222
12026724-2	Crawford	19	2,268	05/21/2022 2042	05/23/2022 1030
12026946-1	Forest	21	2,265	05/21/2022 2140	05/23/2022 1125
12028951-1	Venango	1	2,263	05/21/2022 2032	05/23/2022 1015
12027216-1	Forest	19	2,252	05/21/2022 2118	05/23/2022 1050
12028950-1	Venango	11	2,239	05/21/2022 2032	05/23/2022 0951
12028776-1	Venango	2	2,200	05/21/2022 2032	05/23/2022 0912
12028776-1	Venango	20	2,193	05/21/2022 2032	05/23/2022 0905
12028774-1	Venango	1	2,154	05/21/2022 2032	05/23/2022 0826
12027228-1	Venango	2	2,147	05/22/2022 0603	05/23/2022 1750
12026937-1	Forest	1	2,146	05/21/2022 2142	05/23/2022 0928
12028955-1	Venango	6	2,051	05/21/2022 2032	05/23/2022 0643
12028949-1	Venango	9	2,011	05/21/2022 2032	05/23/2022 0603
12027105-1	Venango	7	2,002	05/21/2022 2040	05/23/2022 0602
12028360-1	Venango	34	1,962	05/21/2022 2032	05/23/2022 0514
12027105-1	Venango	1	1,960	05/21/2022 2040	05/23/2022 0520
12026996-1	Clarion	4	1,951	05/22/2022 0908	05/23/2022 1739
12028360-1	Venango	42	1,931	05/21/2022 2032	05/23/2022 0443

¹ When applicable, the individual restoration steps for an order are provided for those customers that were out of service for 6 hours or more.

Penelec Storm Report

Order #	Approximate Location (County)	Total Number of Customers Affected	Duration of the Outage (minutes)	Initial Date and Time of the Outage	Restoration Date and Time
12026690-1	Venango	3	1,931	05/21/2022 2038	05/23/2022 0449
12026714-1	Clarion	1	1,925	05/21/2022 2046	05/23/2022 0451
12027657-2	Clarion	1	1,845	05/22/2022 1242	05/23/2022 1927
12026697-1	Venango	5	1,812	05/21/2022 2040	05/23/2022 0252
12028401-1	Venango	7	1,793	05/21/2022 2032	05/23/2022 0225
12028401-1	Venango	19	1,753	05/21/2022 2032	05/23/2022 0145
12026832-1	Clarion	4	1,747	05/21/2022 2117	05/23/2022 0224
12028366-1	Venango	42	1,675	05/21/2022 2032	05/23/2022 0027
12028638-1	Venango	54	1,675	05/21/2022 2032	05/23/2022 0027
12028479-1	Crawford	6	1,674	05/22/2022 0833	05/23/2022 1227
12026643-1	Venango	4	1,649	05/21/2022 2025	05/22/2022 2354
12026694-2	Crawford	31	1,585	05/21/2022 2039	05/22/2022 2304
12026652-2	Venango	4	1,514	05/21/2022 2022	05/22/2022 2136
12026996-1	Clarion	5	1,481	05/22/2022 0908	05/23/2022 0949
12026688-2	Venango	35	1,458	05/21/2022 2037	05/22/2022 2055
12028739-1	Jefferson	2	1,442	05/21/2022 2208	05/22/2022 2210
12029008-1	Mifflin	1	1,362	05/22/2022 1353	05/23/2022 1235
12027686-1	Venango	1	1,350	05/22/2022 1320	05/23/2022 1150
12026662-1	Venango	10	1,337	05/21/2022 2025	05/22/2022 1842
12026865-2	Venango	21	1,311	05/21/2022 2120	05/22/2022 1911
12027047-2	Jefferson	7	1,300	05/21/2022 2208	05/22/2022 1948
12027165-2	Indiana	1	1,282	05/22/2022 0148	05/22/2022 2310
12028211-1	Wayne	1	1,280	05/22/2022 1700	05/23/2022 1420
12026674-2	Venango	4	1,244	05/21/2022 2032	05/22/2022 1716
12027660-1	Crawford	1	1,227	05/22/2022 0700	05/23/2022 0327
12026800-2	Clarion	9	1,179	05/21/2022 2104	05/22/2022 1643
12026800-2	Clarion	132	1,177	05/21/2022 2104	05/22/2022 1641
12026923-3	Jefferson	15	1,129	05/21/2022 2139	05/22/2022 1628
12026802-2	Crawford	1	1,071	05/21/2022 2109	05/22/2022 1500
12026674-2	Venango	2	1,057	05/21/2022 2335	05/22/2022 1712
12028355-2	Wayne	1	1,055	05/22/2022 1728	05/23/2022 1103
12026893-2	Jefferson	31	1,040	05/21/2022 2135	05/22/2022 1455
12026450-2	Tioga	2	1,040	05/21/2022 1900	05/22/2022 1220
12026893-2	Jefferson	1	1,035	05/21/2022 2135	05/22/2022 1450
12026674-2	Venango	75	1,028	05/21/2022 2335	05/22/2022 1643
12027260-1	Crawford	1	1,028	05/22/2022 0625	05/22/2022 2333
12026492-1	Susquehanna	1	1,007	05/21/2022 1933	05/22/2022 1220

Penelec Storm Report

Order #	Approximate Location (County)	Total Number of Customers Affected	Duration of the Outage (minutes)	Initial Date and Time of the Outage	Restoration Date and Time
12026848-1	Jefferson	2	995	05/21/2022 2123	05/22/2022 1358
12029635-2	Venango	5	990	05/23/2022 1243	05/24/2022 0513
12026865-2	Venango	41	947	05/21/2022 2120	05/22/2022 1307
12027168-1	Crawford	6	928	05/21/2022 1903	05/22/2022 1031
12027230-2	Jefferson	2	907	05/22/2022 0608	05/22/2022 2115
12026806-1	Forest	98	907	05/21/2022 2110	05/22/2022 1217
12026806-1	Forest	19	895	05/21/2022 2110	05/22/2022 1205
12026826-1	Clarion	77	868	05/21/2022 2105	05/22/2022 1133
12027653-1	Venango	1	858	05/22/2022 1237	05/23/2022 0255
12027092-1	Jefferson	13	856	05/21/2022 2119	05/22/2022 1135
12027057-1	Clarion	9	819	05/21/2022 2051	05/22/2022 1030
12027167-1	Venango	161	802	05/22/2022 0018	05/22/2022 1340
12026642-2	Crawford	9	784	05/21/2022 2024	05/22/2022 0928
12026684-1	Crawford	19	710	05/21/2022 2038	05/22/2022 0828
12027093-2	Clearfield	2	708	05/22/2022 0016	05/22/2022 1204
12026910-1	Jefferson	37	707	05/21/2022 2137	05/22/2022 0924
12027093-2	Clearfield	161	693	05/22/2022 0016	05/22/2022 1149
12027167-1	Venango	255	682	05/22/2022 0018	05/22/2022 1140
12027222-2	Crawford	9	680	05/22/2022 0555	05/22/2022 1715
12027622-1	Indiana	3	651	05/22/2022 1205	05/22/2022 2256
12026962-1	Jefferson	43	650	05/21/2022 2140	05/22/2022 0830
12026740-1	Clarion	13	622	05/21/2022 2053	05/22/2022 0715
12026800-2	Clarion	2	619	05/22/2022 0622	05/22/2022 1641
12029767-2	Jefferson	1	615	05/23/2022 1630	05/24/2022 0245
12027273-2	Jefferson	1	611	05/22/2022 0645	05/22/2022 1656
12026740-1	Clarion	161	602	05/21/2022 2053	05/22/2022 0655
12027209-2	Crawford	15	601	05/22/2022 0114	05/22/2022 1115
12026915-1	Jefferson	1	597	05/21/2022 2138	05/22/2022 0735
12027621-2	Crawford	1	580	05/22/2022 1203	05/22/2022 2143
12027738-1	Mifflin	3	574	05/22/2022 1353	05/22/2022 2327
12027706-1	Mifflin	29	542	05/22/2022 1335	05/22/2022 2237
12028211-1	Wayne	1	535	05/23/2022 0525	05/23/2022 1420
12026918-1	Jefferson	95	523	05/21/2022 2133	05/22/2022 0616
12027784-2	Bradford	34	512	05/22/2022 1434	05/22/2022 2306
12027738-1	Mifflin	26	510	05/22/2022 1353	05/22/2022 2223
12029208-2	Crawford	1	510	05/23/2022 0756	05/23/2022 1626
12029208-2	Crawford	1	510	05/23/2022 0756	05/23/2022 1626

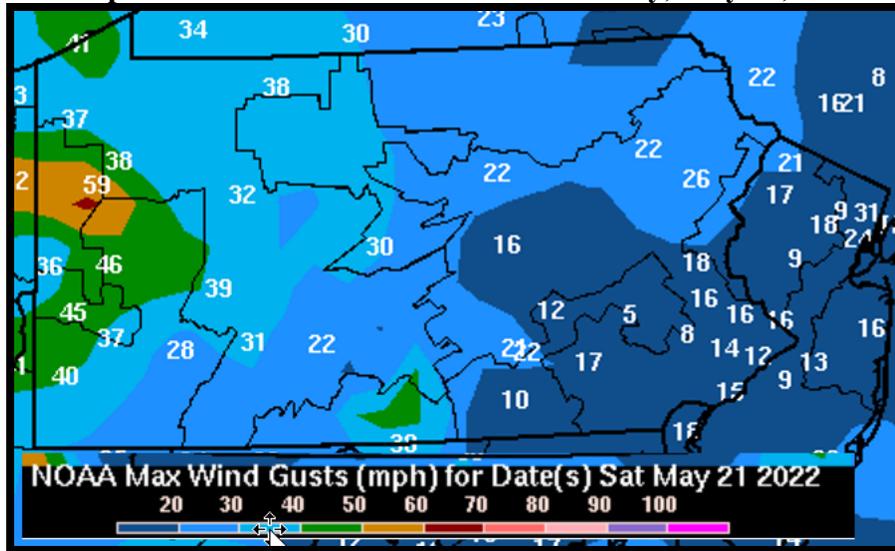
Penelec Storm Report

Order #	Approximate Location (County)	Total Number of Customers Affected	Duration of the Outage (minutes)	Initial Date and Time of the Outage	Restoration Date and Time
12026844-1	Forest	158	502	05/21/2022 2110	05/22/2022 0532
12026852-1	Susquehanna	2	501	05/21/2022 2124	05/22/2022 0545
12027203-1	Jefferson	10	494	05/21/2022 2141	05/22/2022 0555
12027602-1	Erie	20	484	05/22/2022 1143	05/22/2022 1947
12027294-1	Indiana	41	478	05/22/2022 0850	05/22/2022 1648
12027294-1	Indiana	52	477	05/22/2022 0850	05/22/2022 1647
12029149-1	Wyoming	1	462	05/23/2022 0708	05/23/2022 1450
12027622-1	Indiana	18	461	05/22/2022 1515	05/22/2022 2256
12026694-1	Crawford	19	453	05/21/2022 2039	05/22/2022 0412
12026622-1	Crawford	17	450	05/21/2022 2020	05/22/2022 0350
12027294-1	Indiana	102	444	05/22/2022 0834	05/22/2022 1558
12028998-2	Cambria	4	443	05/23/2022 0142	05/23/2022 0905
12029273-1	Venango	1	440	05/23/2022 0837	05/23/2022 1557
12026918-1	Jefferson	8	435	05/21/2022 2133	05/22/2022 0448
12027273-2	Jefferson	13	431	05/22/2022 0945	05/22/2022 1656
12026868-2	Warren	4	428	05/21/2022 2132	05/22/2022 0440
12027005-1	Jefferson	422	421	05/21/2022 2129	05/22/2022 0430
12026443-2	Bradford	1	418	05/21/2022 1847	05/22/2022 0145
12029243-1	Clarion	1	417	05/23/2022 0818	05/23/2022 1515
12028971-1	Bradford	2	417	05/22/2022 1903	05/23/2022 0200
12026861-1	Jefferson	32	411	05/21/2022 2129	05/22/2022 0420
12026456-2	Crawford	94	406	05/21/2022 1903	05/22/2022 0149
12027294-1	Indiana	116	398	05/22/2022 0920	05/22/2022 1558
12028059-2	Somerset	4	397	05/22/2022 1613	05/22/2022 2250
12027723-1	Mifflin	226	395	05/22/2022 1336	05/22/2022 2011
12027699-1	Blair	5	391	05/22/2022 1152	05/22/2022 1823
12027799-2	Forest	118	376	05/22/2022 1448	05/22/2022 2104
12026696-2	Bradford	9	372	05/21/2022 2038	05/22/2022 0250
12026704-1	Crawford	152	364	05/21/2022 2038	05/22/2022 0242

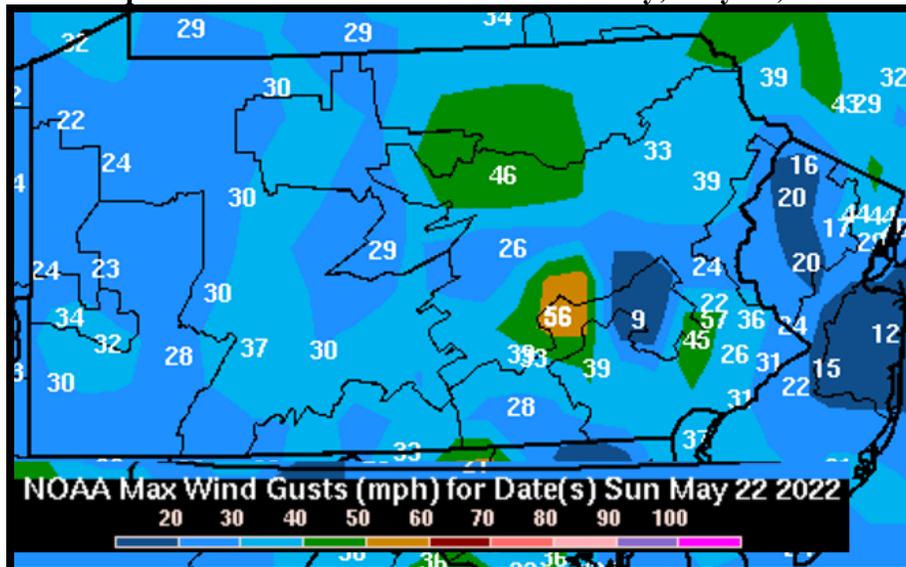
Attachment B: FirstEnergy Wind and Precipitation Report

Wind and Precipitation Reports: Graphics 1 and 2 illustrate the maximum wind gusts in the Penelec service territory on May 21, 2022 and May 22, 2022. Graphics 2 illustrates the 24-Hour Total Precipitation in the Penelec service territory on May 21, 2022. The graphics are from the National Oceanic and Atmospheric Administration (“NOAA”).

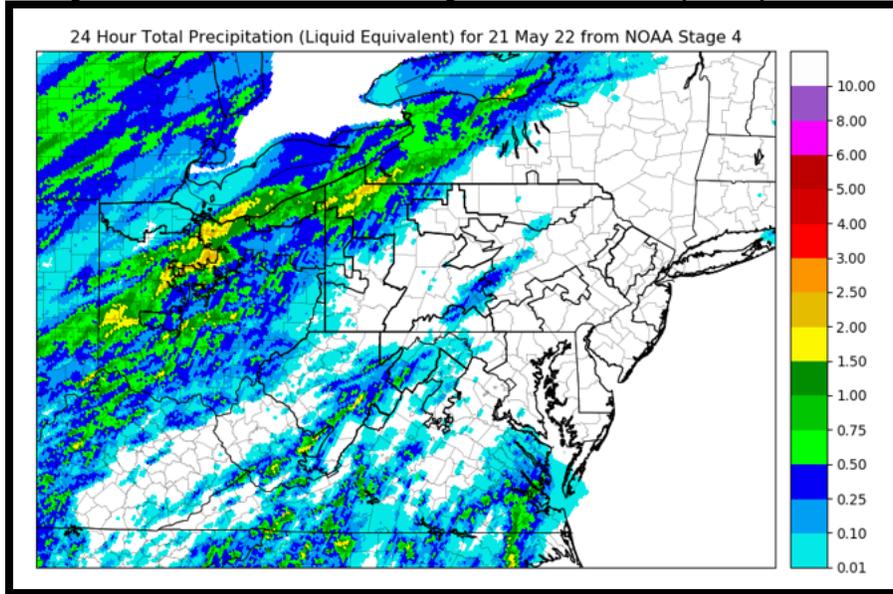
Graphic 1: Maximum Wind Gusts: Saturday, May 21, 2022



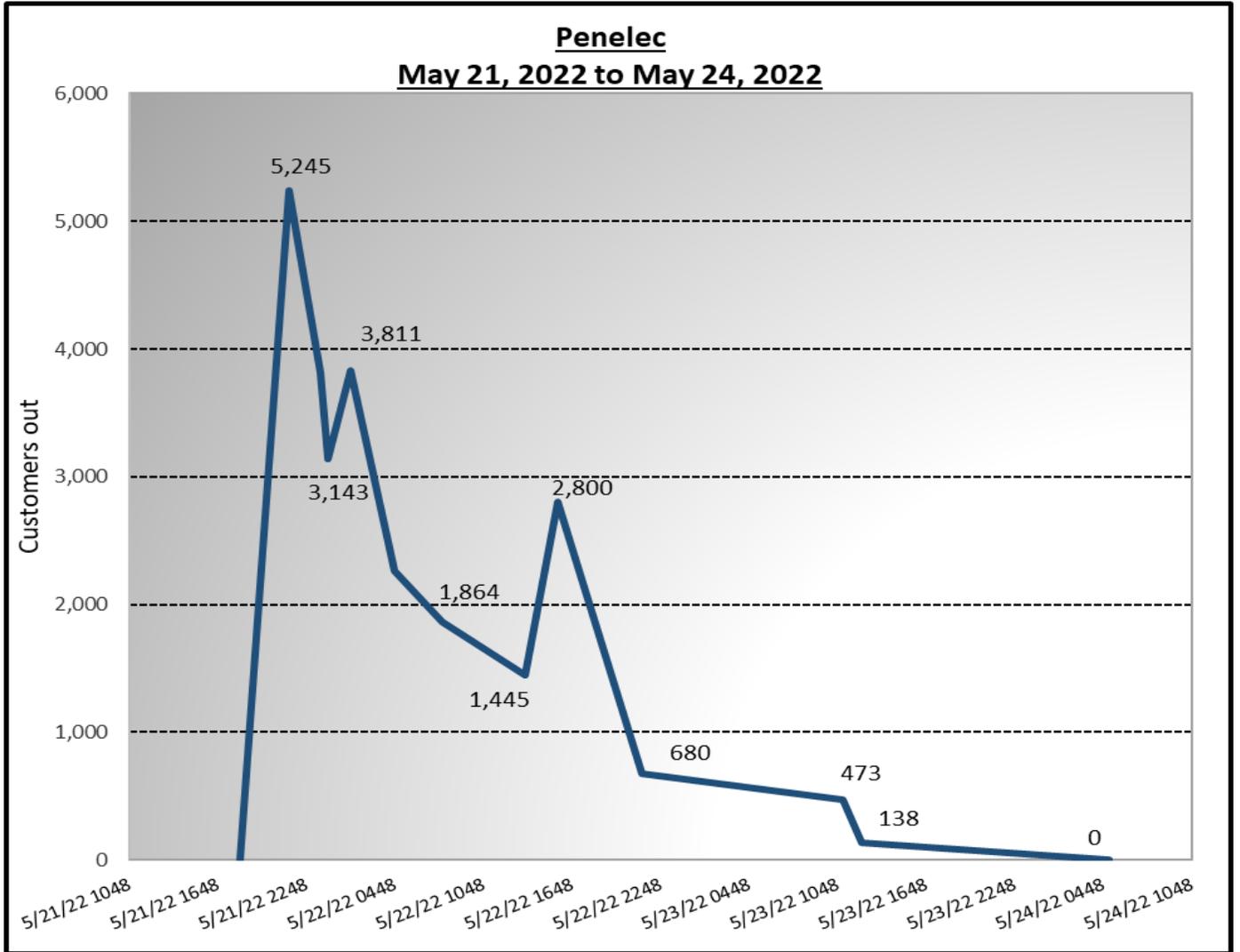
Graphic 2: Maximum Wind Gusts: Sunday, May 22, 2022



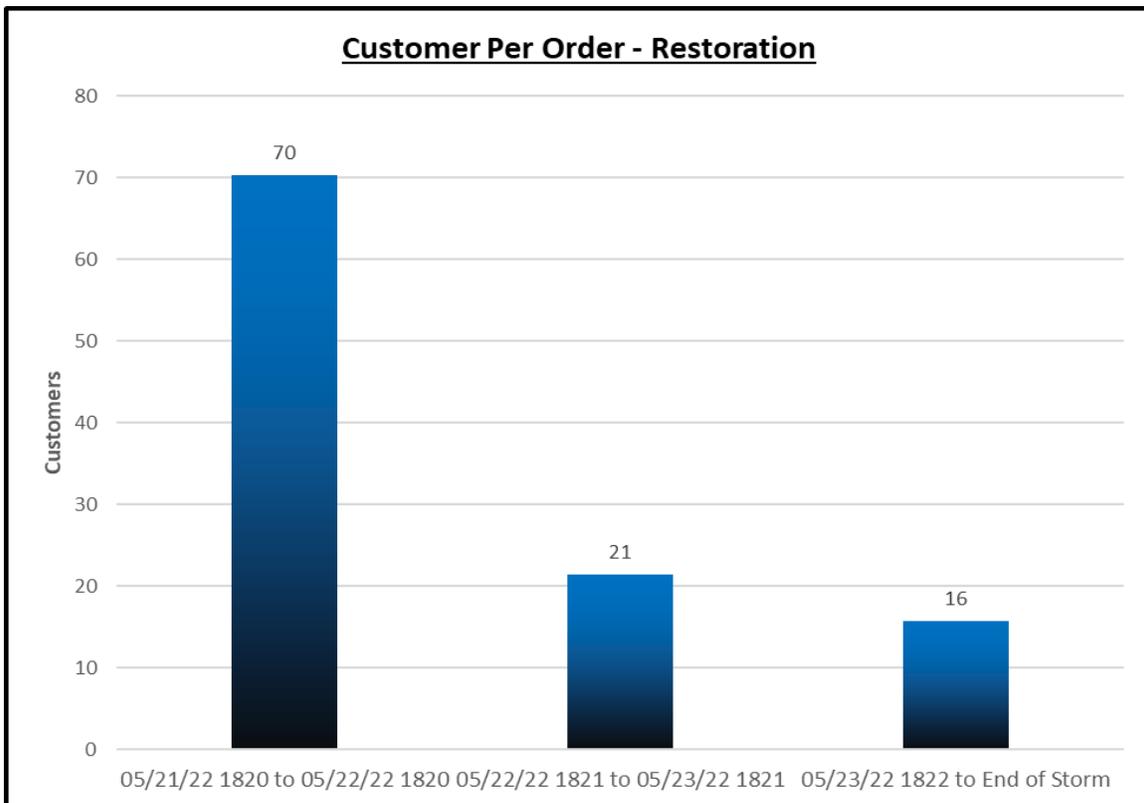
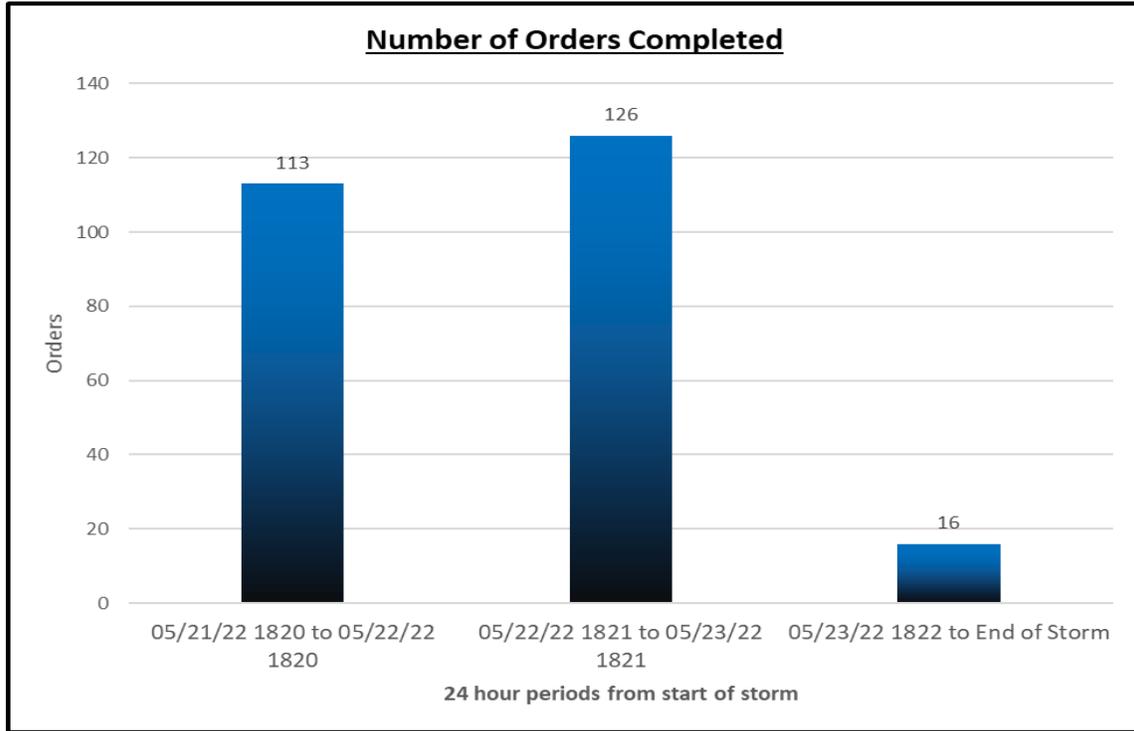
Graphic 3: 24-Hour Total Precipitation: Saturday, May 21, 2022



Attachment C: Restoration Curve



Attachment D: Order Restoration Graphs



Attachment E: FirstEnergy Meteorologist Reports

Friday May 20, 2022 @ 0908

New Issuance:

Several rounds of thunderstorms will be possible across the FE footprint over the next three days.

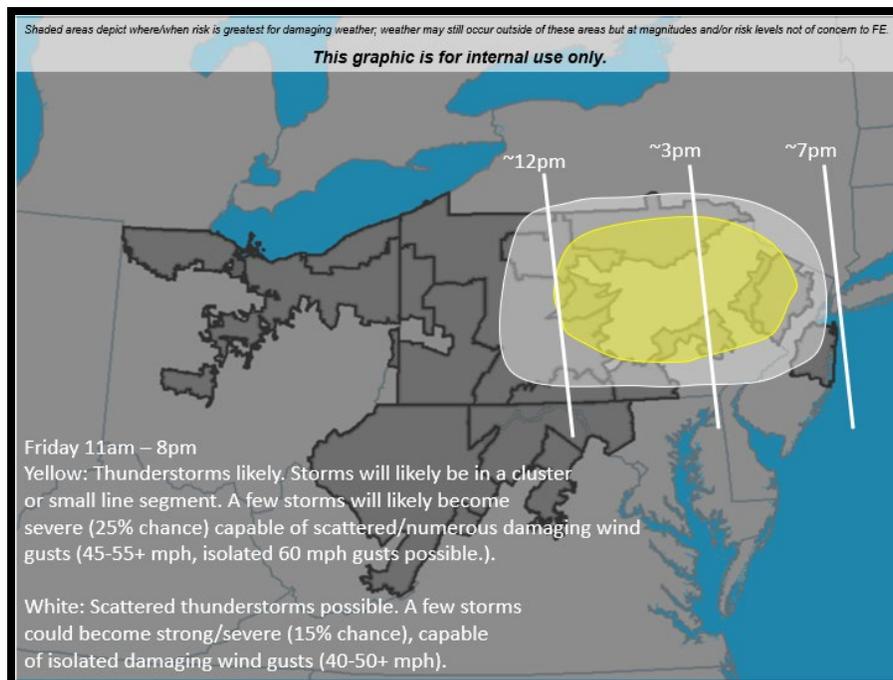
Friday: A complex of thunderstorms currently in western OH will continue to move eastward throughout the day. It is expected that this complex will re-gain intensity later this afternoon as it moves through central/eastern PA and perhaps into NJ. Scattered—perhaps numerous—pockets of damaging wind gusts and locally heavy rainfall will be possible with this system.

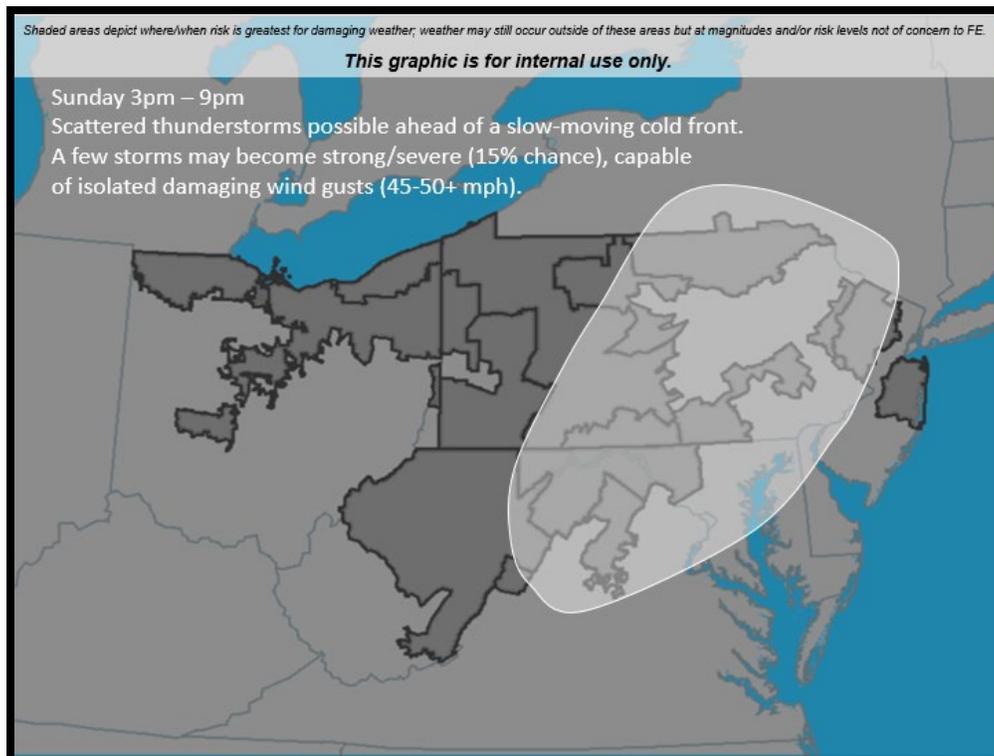
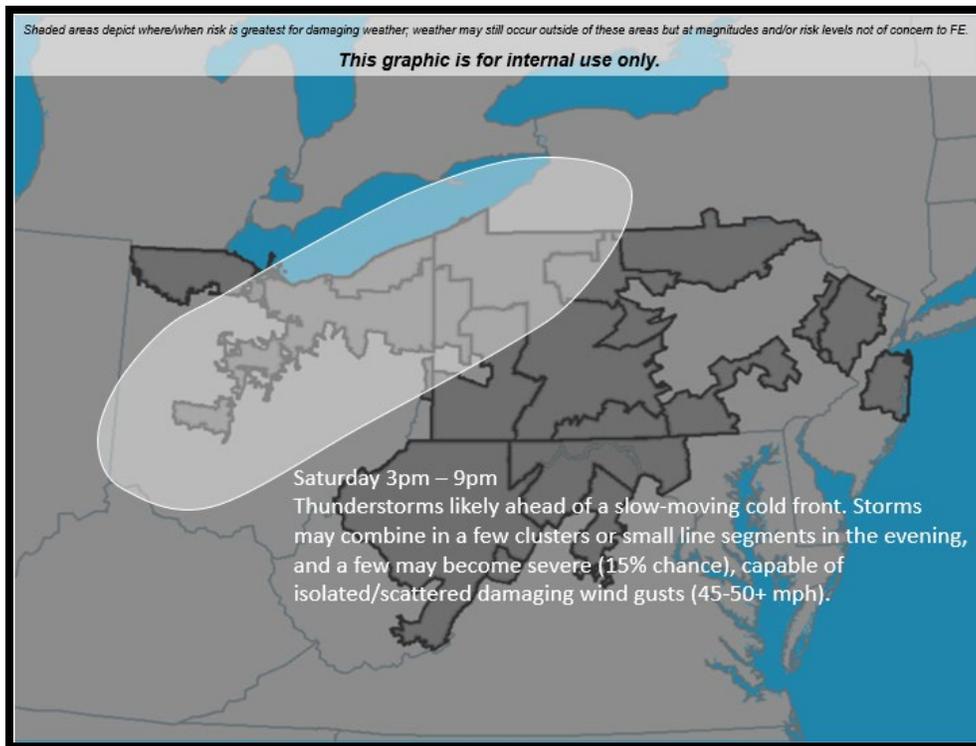
Saturday: A slow moving cold front will enter OH during the afternoon. Given the high heat and humidity, a round of thunderstorms is likely to develop along/ahead of this front, and pockets of damaging wind gusts will be possible.

Sunday: The cold front will push eastward into central/eastern FE during the day Sunday. Again, given the high heat and humidity that will be in place, thunderstorms are likely to redevelop as the front moves east. Scattered damaging wind gusts will again be possible before the cold front moves offshore late Sunday evening.

As mentioned previously, abnormally hot and humid conditions will affect nearly all of FE Friday/Saturday/Sunday. Accordingly, dangerous heat and random thunderstorms will be possible across the FE footprint, even if not specifically indicated in a formal weather alert.

See graphics below for further information.





Friday, May 20, 2022 @ 1234

Update:

Expanded today (Friday's) thunderstorm alert area south to include areas of MD this afternoon/evening. Also increased possibility of damaging wind gusts, and increased the risk of a few significant wind gusts (60+ mph) throughout the afternoon.

A complex of thunderstorms across central PA/western MD has organized and begun to intensify this morning. Given expected conditions this afternoon/evening, this line of storms is expected to continue to maintain/intensify as it moves eastward throughout the day. Pockets of damaging wind gusts, a few possibly in excess of 60 mph, will be possible—especially across areas of central/eastern PA and eastern MD later this afternoon.

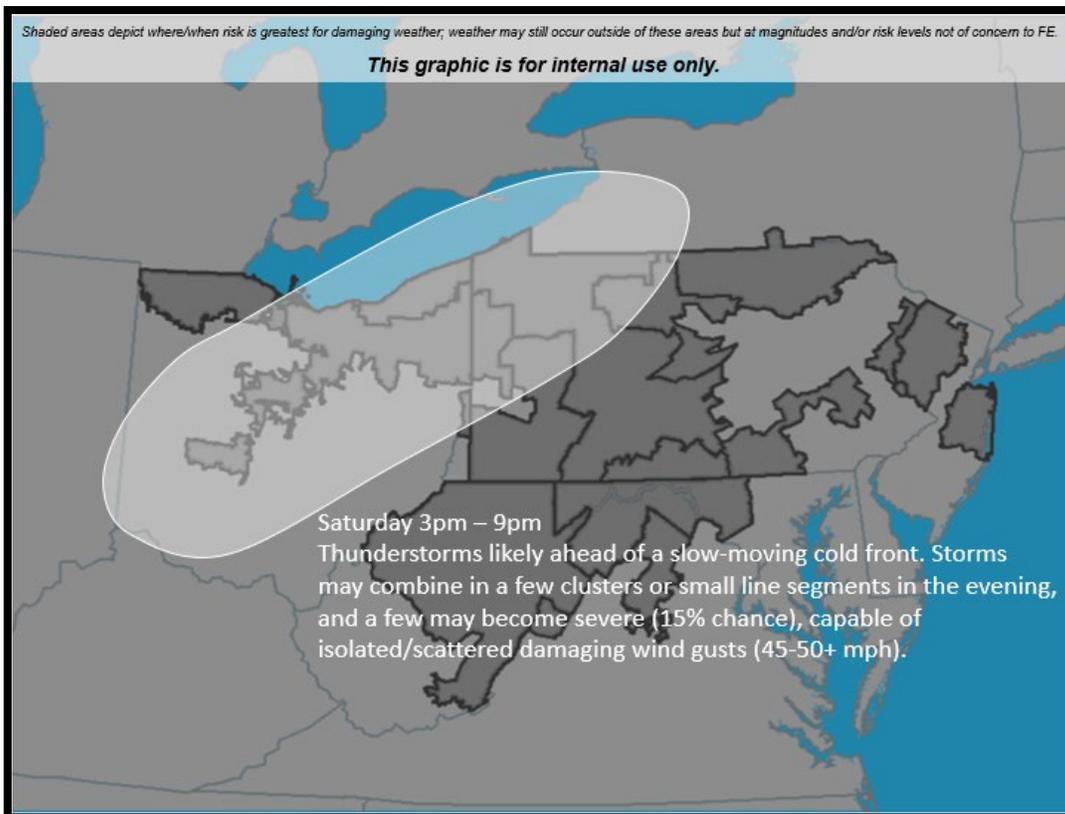
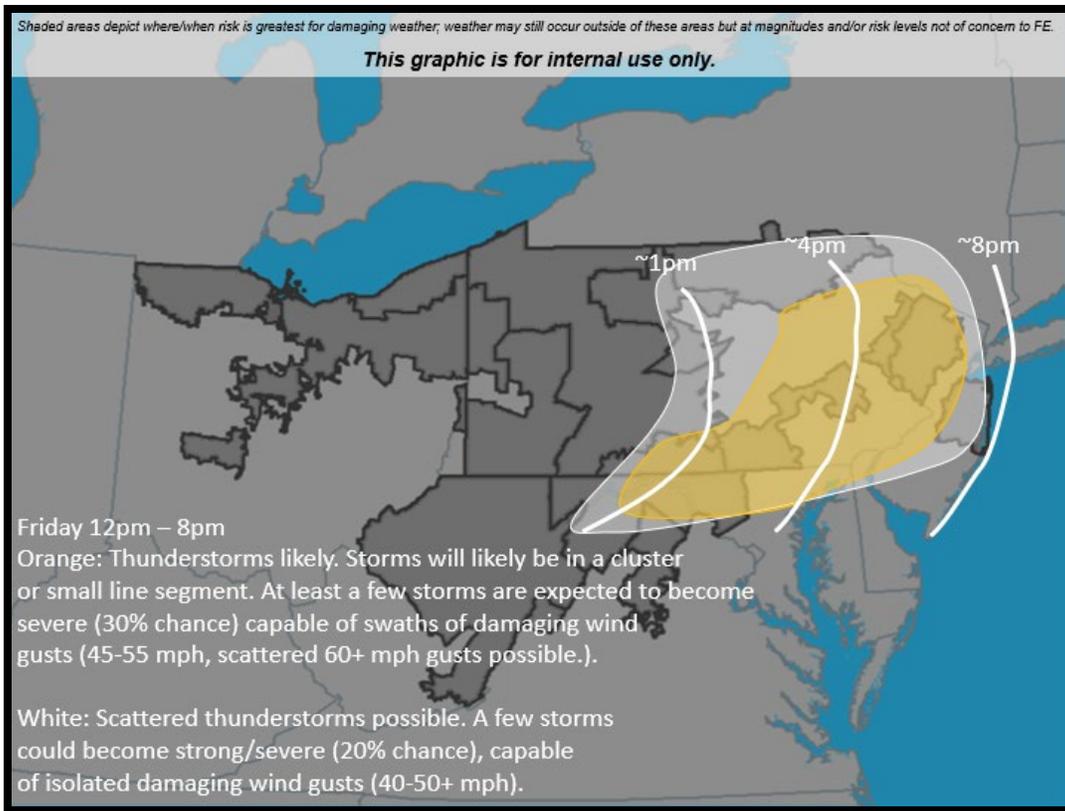
See updated first graphic below for further information. No other changes to the forecast at this time.

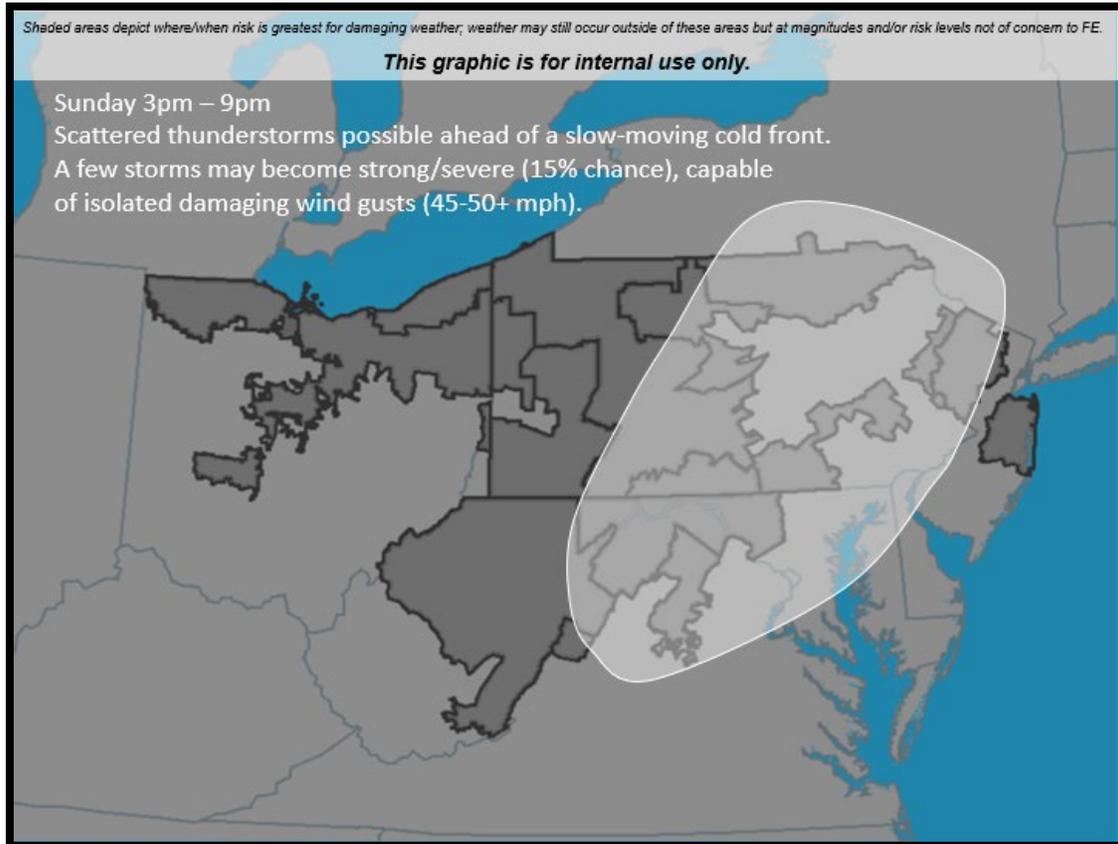
Saturday: A slow moving cold front will enter OH during the afternoon. Given the high heat and humidity, a round of thunderstorms is likely to develop along/ahead of this front, and pockets of damaging wind gusts will be possible.

Sunday: The cold front will push eastward into central/eastern FE during the day Sunday. Again, given the high heat and humidity that will be in place, thunderstorms are likely to redevelop as the front moves east. Scattered damaging wind gusts will again be possible before the cold front moves offshore late Sunday evening.

As mentioned previously, abnormally hot and humid conditions will affect nearly all of FE Friday/Saturday/Sunday. Accordingly, dangerous heat and random thunderstorms will be possible across the FE footprint, even if not specifically indicated in a formal weather alert.

See graphics below for further information.





Saturday, May 21, 2022 @ 0859

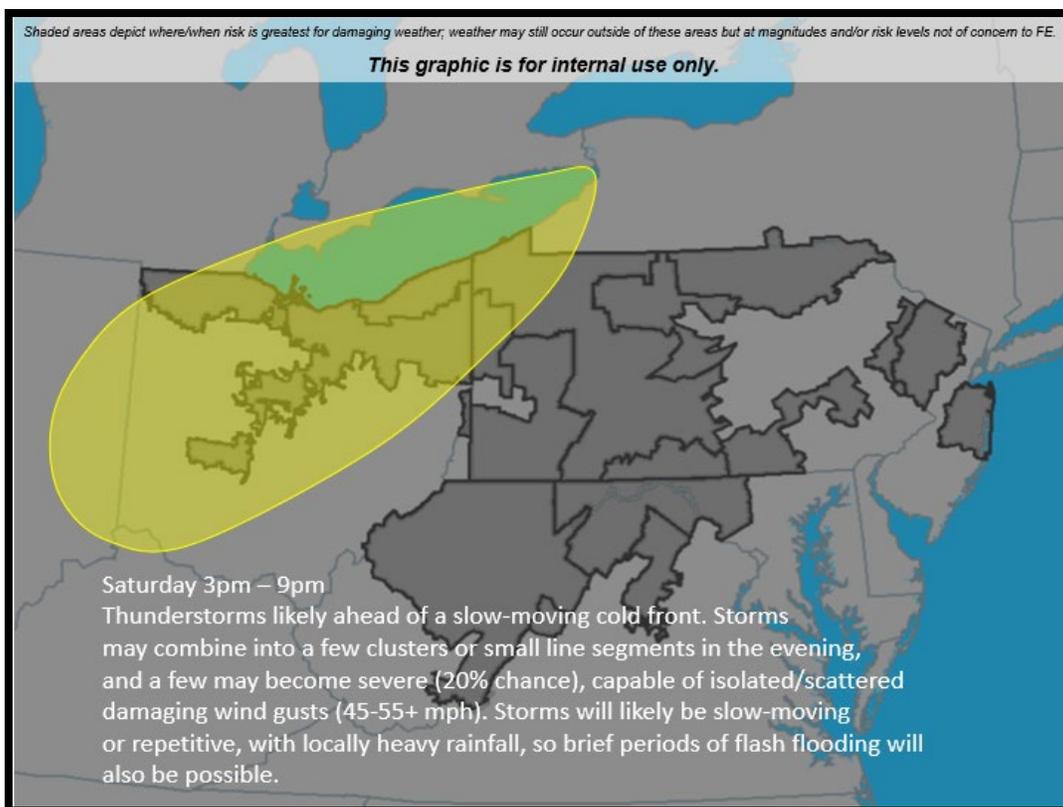
Update:

Saturday: Slight increase in damaging wind gust risk, mainly due to the expected widespread nature of thunderstorm development late this afternoon/evening. Also made mention of slow moving/repetitive thunderstorms, which when paired with the potential for locally heavy rainfall, may create localized areas of flooding.

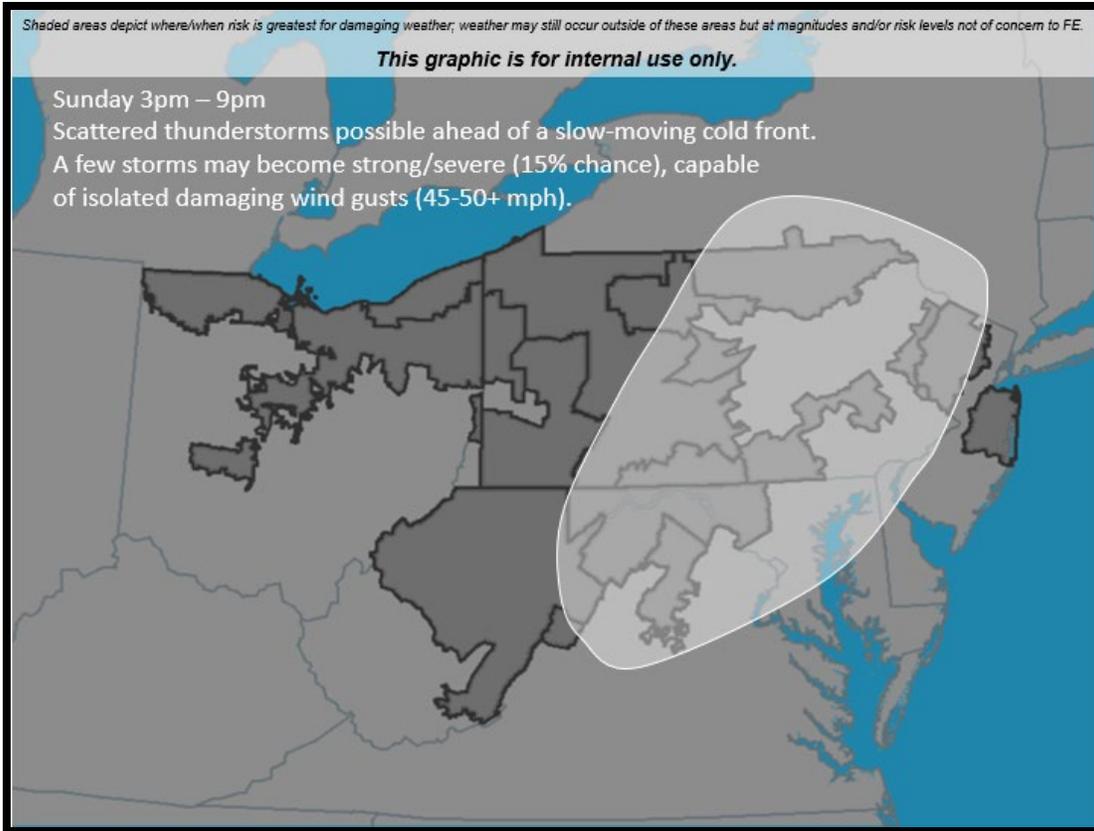
Sunday: Isolated/scattered thunderstorms remain likely across portions of eastern FE during the afternoon/evening—but there are no changes to this forecast at this time.

As mentioned previously, abnormally hot and humid conditions will affect nearly all of FE Saturday/Sunday. Accordingly, dangerous heat and random thunderstorms will be possible across the FE footprint, even if not specifically indicated in a formal weather alert.

See graphics below for further information.



Penelec Storm Report

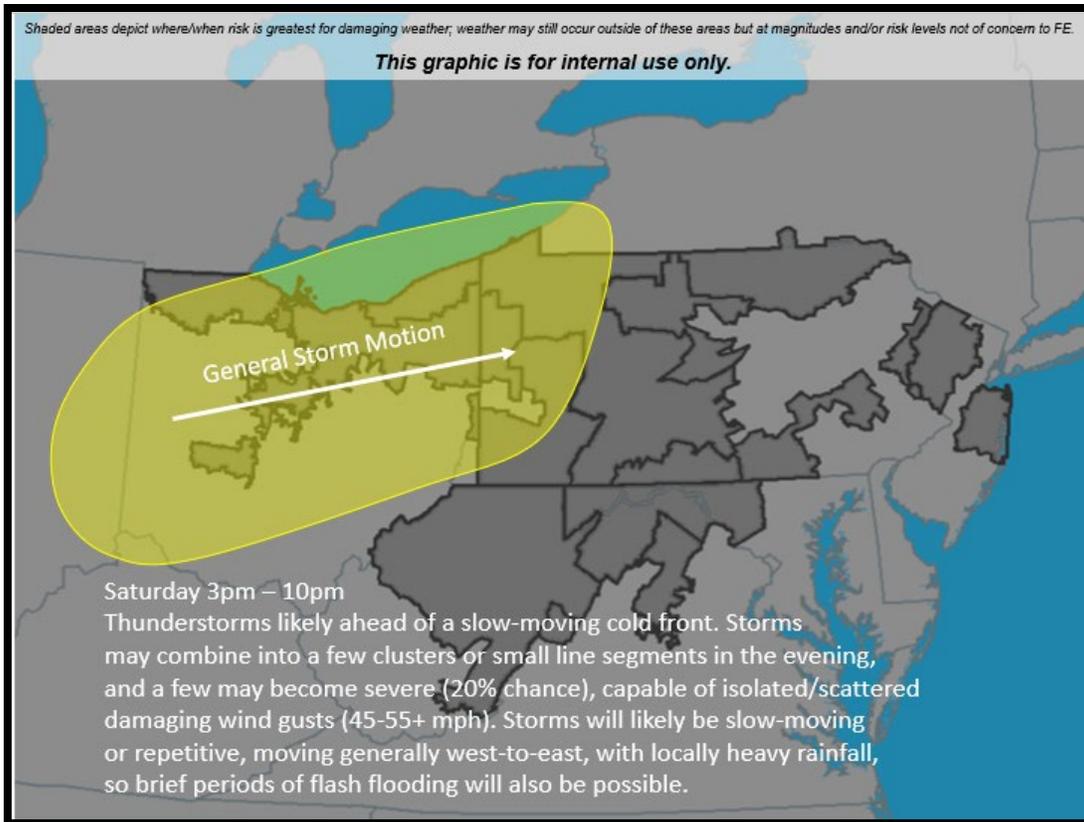


Saturday, May 21, 2022 @ 1334

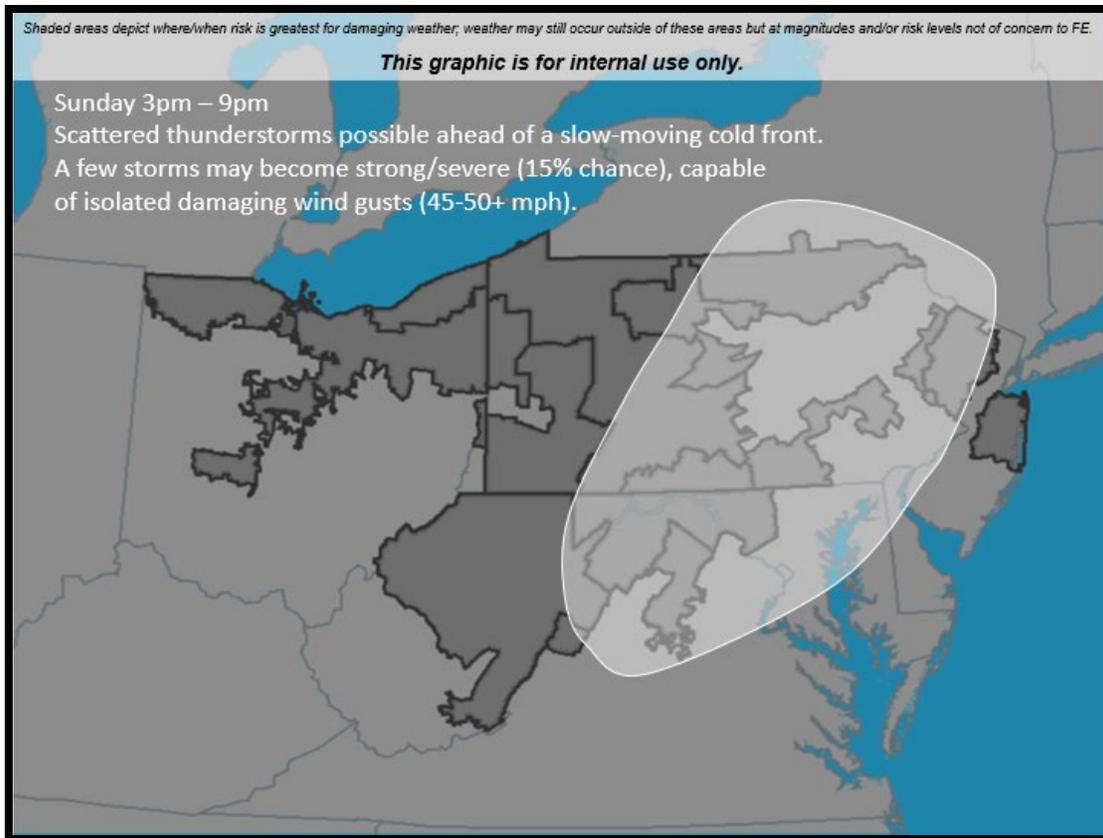
Update:

Expanded storm risk Saturday evening into areas of western PA and the panhandle of WV—mainly after 6pm. No other changes.

See graphics below for further information.



Penelec Storm Report



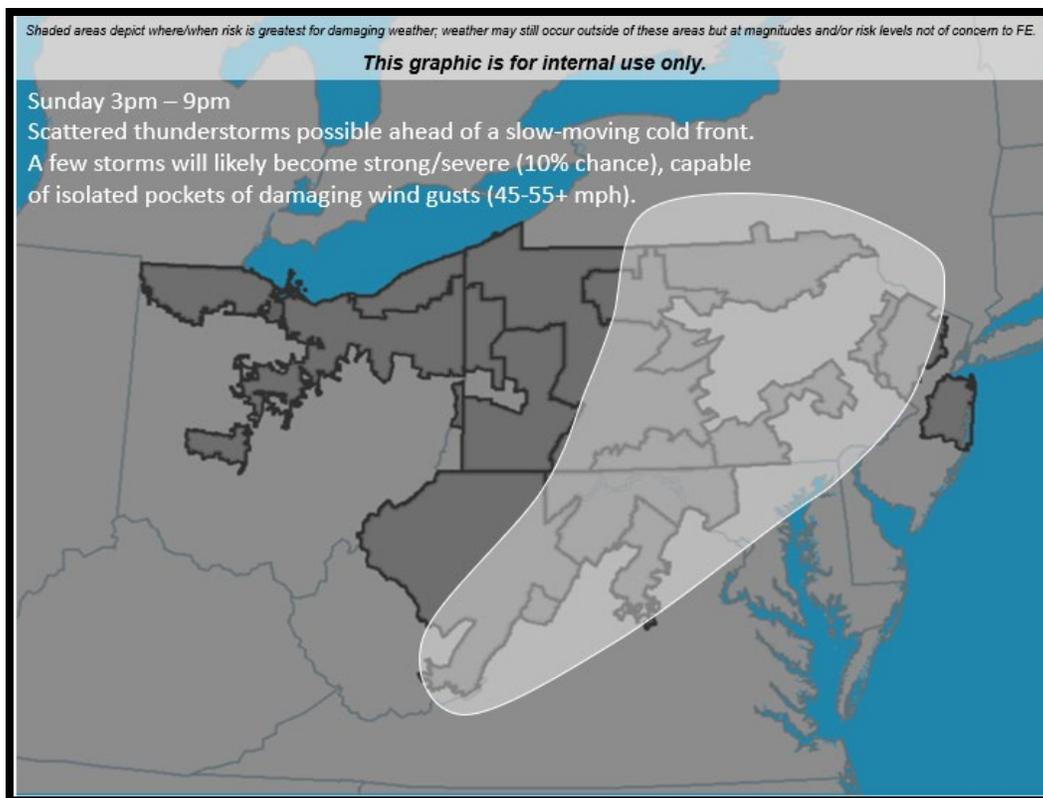
Sunday, May 22, 2022 @ 0858

Update:

Small changes this morning: slight reduction of severe storm threat (due to scattered nature of storms), and expanded the risk area southward into areas of WV.

Scattered thunderstorms—a few strong/severe—are still expected to develop across eastern FE this afternoon. The hit-or-miss nature of these storms will keep the wind damage risk low at most locations, but any storms that do develop later today will be capable of at least pockets of damaging gusts and locally heavy rain.

See graphic below for further information.



Sunday, May 22, 2022 @ 1325

Update:

Increasing risk of strong storms/damaging gusts across portions of eastern PA, central MD and western NJ this afternoon/evening, where A) storms are most likely to develop, and B) most likely to become intense enough to cause damaging gusts. Also slightly extended risk of storms eastward into central NJ.

No other changes.

See graphic below for further information.

