

Tori L. Giesler, Esq.
(610) 921-6658
(330) 315-9263 (Fax)

April 8, 2020

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 Power Company; Docket No. M-2021-3023564***

Dear Secretary Chiavetta:

Pursuant to 52 Pa. Code § 67.1, Pennsylvania Power Company (“Penn Power”) submits written notification of completed restoration efforts following storm conditions that began on March 26, 2021 that caused multiple service interruptions in the Penn Power 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) 921-6658.

Sincerely,



Tori L. Giesler

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)

ELECTRIC UTILITY REPORT OF OUTAGE TO
PENNSYLVANIA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU
P O BOX 3265
HARRISBURG, PA 17105-3265

1. Reporting Utility: Pennsylvania Power Company ("Penn Power")
Address: 800 Cabin Hill Road
Greensburg, PA 15601

2. Name and title of person making report:

Scott Wyman President, Pennsylvania Operations
(Name) *(Title)*

3. Telephone number: (724) 838-6150
(Telephone Number)

4. Date and time report was made to Commission:

March 26, 2021 1340
(Date) *(Time)*

5. Interruption or Outage:

- (a) Number of customers affected: 18,666 (Represents 11.3% of Penn Power's total customers).
- (b) Approximate number of outage cases and trouble cases for each county affected during event: See response to 5(c).

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

County	Outages	Outage Cases	Trouble Cases
Allegheny	472	14	21
Beaver	2,748	30	36
Butler	456	24	43
Crawford	1,106	8	12
Lawrence	11,992	51	97
Mercer	1,892	81	188
Total	18,666	208	397

(d) Approximate number of outage cases exceeding 6 or more hours in duration: 117

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

See Attachment A.

(f) Reason for the interruption or outages: Beginning the morning of Friday, March 26, 2021, a cold front moved through Pennsylvania, including the Penn Power service territory. This front formed a strong storm system which produced wind and rain with maximum wind gusts up to of 52 miles per hour in some areas. See Attachment B for maximum wind speeds measured on March 26, 2021.

The Penn Power service territory suffered widespread damage. Damage included downed trees and power lines, damaged and broken poles and crossarms. The hardest hit areas were Lawrence, New Castle and Mercer areas. Approximately 81% of the total outages that occurred in the Penn Power service territory were tree-related.

Preliminary data indicates the reliability impact of the storm was 21.2 minutes of SAIDI, 0.11 of SAIFI, and an overall storm CAIDI of 187.8 minutes.

(g) Projected time of restoration: The estimated time of restoration for the majority of customers was 2300 on March 27, 2021.

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
Penn Power	82	Line Workers
Subtotal	82	
Main Lite Electric	5	Line Contractor
Subtotal	5	
Penn Power	2	Forestry
Asplundh	13	Forestry Contractor
Davey	29	Forestry Contractor
PennLine	31	Forestry Contractor
Townsend	12	Forestry Contractor
Wright	14	Forestry Contractor
Subtotal	101	
Penn Power	21	Hazard Responders/Damage Assessors
Subtotal	21	
Penn Power	20	Substation /Network
Subtotal	20	
Penn Power	48	Supporting Roles
Contractors	1	Supporting Roles
Subtotal	49	
Grand Total	278	

- (i) The date and time of the first information of a service interruption: March 26, 2021 at 0529.
- (j) The date and time that repair crews were assembled: March 26, 2021 at 0500. Crews were pre-staged in anticipation of the weather.
- (k) The actual time that service was restored to the last affected customer: March 28, 2021 at 1754. Additionally, Penn Power was able to restore 86.1% of the impacted customers in less than six hours.

- (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	112
Crossarms Replaced	29
Cutouts Replaced	14
Poles Replaced	33
Transformers Replaced	13
Wire & Cable Replaced (feet)	19,637

- (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 customer 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.

Penn Power reviewed a total of eight historic events that caused outages that exceeded 10% or more of its customers in the service territory. Below are the two comparable Penn Power events based on the number of outages.

Rank by Number of Outages	Operating Company	Date	Event Description	Duration (hours)	Customers Affected
1	Penn Power	April 17 to 18, 2011	High Winds	20 hours 11 minutes	22,009
2	Penn Power	March 26 to 28, 2021	High Winds & Rain	60 hours 25 minutes	18,666
3	Penn Power	March 8 to 11, 2017	High Winds	65 hours 1 minute	16,557

Remarks: The storm statistics contained in this report are preliminary. The review and approval of the storm statistics is still in progress at the time of filing this report.

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
20974062-2	Mercer	1	3,503	03/26/2021 0731	03/28/2021 1754
20973217-4	Mercer	1	3,451	03/26/2021 0704	03/28/2021 1635
20977394-2	Mercer	2	3,364	03/26/2021 0944	03/28/2021 1748
20974084-2	Crawford	2	3,347	03/26/2021 0732	03/28/2021 1519
20974214-2	Mercer	3	3,324	03/26/2021 0737	03/28/2021 1501
20974110-3	Mercer	1	3,287	03/26/2021 0733	03/28/2021 1420
20976291-2	Mercer	1	3,231	03/26/2021 0842	03/28/2021 1433
20976086-3	Mercer	7	3,184	03/26/2021 0831	03/28/2021 1335
20972577-3	Mercer	1	3,153	03/26/2021 0643	03/28/2021 1116
20976431-3	Mercer	4	3,151	03/26/2021 0851	03/28/2021 1322
20980364-4	Mercer	3	3,093	03/26/2021 0728	03/28/2021 1101
20975284-2	Mercer	12	3,081	03/26/2021 0755	03/28/2021 1116
20980120-3	Mercer	1	2,963	03/26/2021 1501	03/28/2021 1624
20977157-2	Mercer	1	2,888	03/26/2021 0934	03/28/2021 0942
20980619-3	Crawford	1	2,864	03/26/2021 1641	03/28/2021 1625
20976516-3	Mercer	4	2,780	03/26/2021 0755	03/28/2021 0615
20979110-3	Mercer	2	2,612	03/26/2021 1753	03/28/2021 1325
20977244-3	Mercer	3	2,577	03/26/2021 0938	03/28/2021 0435
20979656-3	Mercer	17	2,434	03/26/2021 0751	03/28/2021 0025
20980122-3	Mercer	3	2,414	03/26/2021 0740	03/27/2021 2354
20972647-3	Mercer	5	2,385	03/26/2021 0643	03/27/2021 2228
20979330-6	Mercer	5	2,384	03/26/2021 0819	03/28/2021 0003
20977693-3	Mercer	1	2,382	03/26/2021 1003	03/28/2021 0145
20974375-3	Mercer	15	2,235	03/26/2021 0659	03/27/2021 2014
20976901-2	Mercer	3	2,224	03/26/2021 0920	03/27/2021 2224
20973910-2	Mercer	6	2,217	03/26/2021 0703	03/27/2021 2000
20973910-2	Mercer	3	2,217	03/26/2021 0703	03/27/2021 2000
20971562-2	Beaver	23	2,135	03/26/2021 0610	03/27/2021 1745
20970896-3	Lawrence	8	2,090	03/26/2021 0529	03/27/2021 1619

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.

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
20973994-3	Beaver	1	2,068	03/26/2021 0729	03/27/2021 1757
20976119-3	Lawrence	4	2,022	03/26/2021 0833	03/27/2021 1815
20975788-2	Lawrence	6	2,018	03/26/2021 0757	03/27/2021 1735
20973762-2	Lawrence	2	1,989	03/26/2021 0559	03/27/2021 1508
20976847-3	Beaver	1	1,989	03/26/2021 0916	03/27/2021 1825
20979062-2	Lawrence	5	1,946	03/26/2021 0809	03/27/2021 1635
20977086-3	Beaver	3	1,868	03/26/2021 0930	03/27/2021 1638
20977086-3	Beaver	3	1,868	03/26/2021 0930	03/27/2021 1638
20979080-3	Mercer	7	1,843	03/26/2021 1223	03/27/2021 1906
20973731-2	Lawrence	6	1,839	03/26/2021 0719	03/27/2021 1358
20974526-3	Mercer	19	1,833	03/26/2021 0747	03/27/2021 1420
20973544-3	Allegheny	3	1,828	03/26/2021 0712	03/27/2021 1340
20973433-2	Mercer	6	1,818	03/26/2021 0709	03/27/2021 1327
20974883-2	Butler	1	1,758	03/26/2021 0755	03/27/2021 1313
20978725-2	Lawrence	1	1,737	03/26/2021 1133	03/27/2021 1630
20976757-2	Lawrence	8	1,710	03/26/2021 0910	03/27/2021 1340
20980058-2	Mercer	7	1,671	03/26/2021 1451	03/27/2021 1842
20977306-2	Mercer	27	1,640	03/26/2021 0940	03/27/2021 1300
20981316-3	Mercer	23	1,627	03/26/2021 0803	03/27/2021 1110
20976090-2	Mercer	9	1,584	03/26/2021 0824	03/27/2021 1048
20975138-2	Allegheny	3	1,579	03/26/2021 0801	03/27/2021 1020
20973388-2	Beaver	12	1,557	03/26/2021 0707	03/27/2021 0904
20975820-2	Butler	1	1,484	03/26/2021 0821	03/27/2021 0905
20976789-2	Butler	1	1,484	03/26/2021 0912	03/27/2021 0956
20976099-2	Butler	6	1,445	03/26/2021 0800	03/27/2021 0805
20974832-2	Butler	2	1,445	03/26/2021 0755	03/27/2021 0800
20979684-2	Lawrence	1	1,411	03/26/2021 0936	03/27/2021 0907
20978354-2	Butler	2	1,395	03/26/2021 1046	03/27/2021 1001
20979722-2	Beaver	1	1,290	03/26/2021 1350	03/27/2021 1120
20981228-3	Mercer	2	1,235	03/26/2021 0955	03/27/2021 0630
20979684-2	Lawrence	1	1,085	03/26/2021 1501	03/27/2021 0906
20976825-2	Mercer	7	1,041	03/26/2021 0914	03/27/2021 0235
20980137-3	Mercer	8	1,008	03/26/2021 0936	03/27/2021 0224
20972844-3	Crawford	20	958	03/26/2021 0652	03/26/2021 2250

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
20973659-2	Lawrence	20	928	03/26/2021 0710	03/26/2021 2238
20978790-2	Lawrence	8	927	03/26/2021 0751	03/26/2021 2318
20974307-3	Mercer	22	924	03/26/2021 0736	03/26/2021 2300
20975329-2	Lawrence	1	898	03/26/2021 0806	03/26/2021 2304
20976748-2	Lawrence	38	885	03/26/2021 0910	03/26/2021 2355
20973189-3	Lawrence	20	873	03/26/2021 0658	03/26/2021 2131
20974057-3	Mercer	33	872	03/26/2021 0731	03/26/2021 2203
20979491-2	Butler	2	815	03/26/2021 0755	03/26/2021 2130
20978537-2	Mercer	72	812	03/26/2021 0717	03/26/2021 2049
20976159-2	Lawrence	54	805	03/26/2021 0830	03/26/2021 2155
20972391-1	Lawrence	1	765	03/26/2021 0636	03/26/2021 1921
20974572-3	Mercer	23	764	03/26/2021 0749	03/26/2021 2033
20980619-1	Crawford	4	748	03/26/2021 1641	03/27/2021 0509
20973393-1	Mercer	5	731	03/26/2021 0707	03/26/2021 1918
20977803-1	Mercer	6	728	03/26/2021 1006	03/26/2021 2214
20980320-1	Mercer	9	727	03/26/2021 0849	03/26/2021 2056
20975182-3	Butler	7	698	03/26/2021 0800	03/26/2021 1938
20975182-3	Butler	4	698	03/26/2021 0800	03/26/2021 1938
20975182-3	Butler	11	694	03/26/2021 0800	03/26/2021 1934
20975428-2	Mercer	28	693	03/26/2021 0809	03/26/2021 1942
20980321-1	Mercer	3	652	03/26/2021 0953	03/26/2021 2045
20978807-1	Lawrence	6	651	03/26/2021 1147	03/26/2021 2238
20974957-1	Mercer	3	640	03/26/2021 0757	03/26/2021 1837
20977510-1	Mercer	1	640	03/26/2021 0952	03/26/2021 2032
20976804-1	Mercer	10	633	03/26/2021 0913	03/26/2021 1946
20976086-1	Mercer	10	631	03/26/2021 0831	03/26/2021 1902
20976144-2	Allegheny	13	630	03/26/2021 0812	03/26/2021 1842
20981941-2	Lawrence	2	618	03/27/2021 1233	03/27/2021 2251
20973886-3	Mercer	30	608	03/26/2021 0724	03/26/2021 1732
20975869-2	Beaver	77	593	03/26/2021 0823	03/26/2021 1816
20975567-3	Lawrence	128	591	03/26/2021 0753	03/26/2021 1744
20980749-1	Mercer	2	577	03/26/2021 1246	03/26/2021 2223
20977035-1	Mercer	7	571	03/26/2021 0709	03/26/2021 1640
20979352-2	Mercer	58	524	03/26/2021 0731	03/26/2021 1615

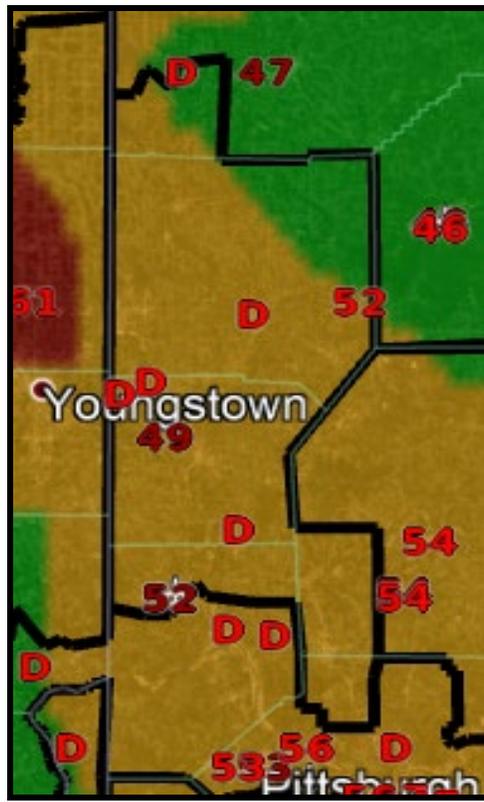
Penn Power Storm Report

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
20977089-2	Allegheny	9	520	03/26/2021 0931	03/26/2021 1811
20978161-1	Lawrence	1	507	03/26/2021 0834	03/26/2021 1701
20976866-2	Lawrence	1	506	03/26/2021 0909	03/26/2021 1735
20980131-1	Mercer	6	501	03/26/2021 0814	03/26/2021 1635
20972944-3	Mercer	57	492	03/26/2021 0655	03/26/2021 1507
20975420-2	Butler	32	482	03/26/2021 0807	03/26/2021 1609
20975420-4	Butler	2	482	03/26/2021 0807	03/26/2021 1609
20974672-1	Mercer	25	449	03/26/2021 0751	03/26/2021 1520
20982728-2	Lawrence	7	436	03/28/2021 0726	03/28/2021 1442
20977273-2	Mercer	50	429	03/26/2021 0940	03/26/2021 1649
20974356-1	Butler	83	426	03/26/2021 0742	03/26/2021 1448
20983212-2	Mercer	19	396	03/28/2021 1043	03/28/2021 1719
20979220-1	Lawrence	1	395	03/26/2021 1239	03/26/2021 1914
20974062-1	Mercer	31	374	03/26/2021 0731	03/26/2021 1345
20975573-2	Allegheny	70	373	03/26/2021 0814	03/26/2021 1427
20974262-2	Lawrence	712	371	03/26/2021 0736	03/26/2021 1347
20974262-2	Lawrence	324	371	03/26/2021 0736	03/26/2021 1347
20974719-1	Mercer	28	364	03/26/2021 0752	03/26/2021 1356
20971562-1	Beaver	36	363	03/26/2021 0610	03/26/2021 1213
20976138-3	Beaver	30	362	03/26/2021 0826	03/26/2021 1428

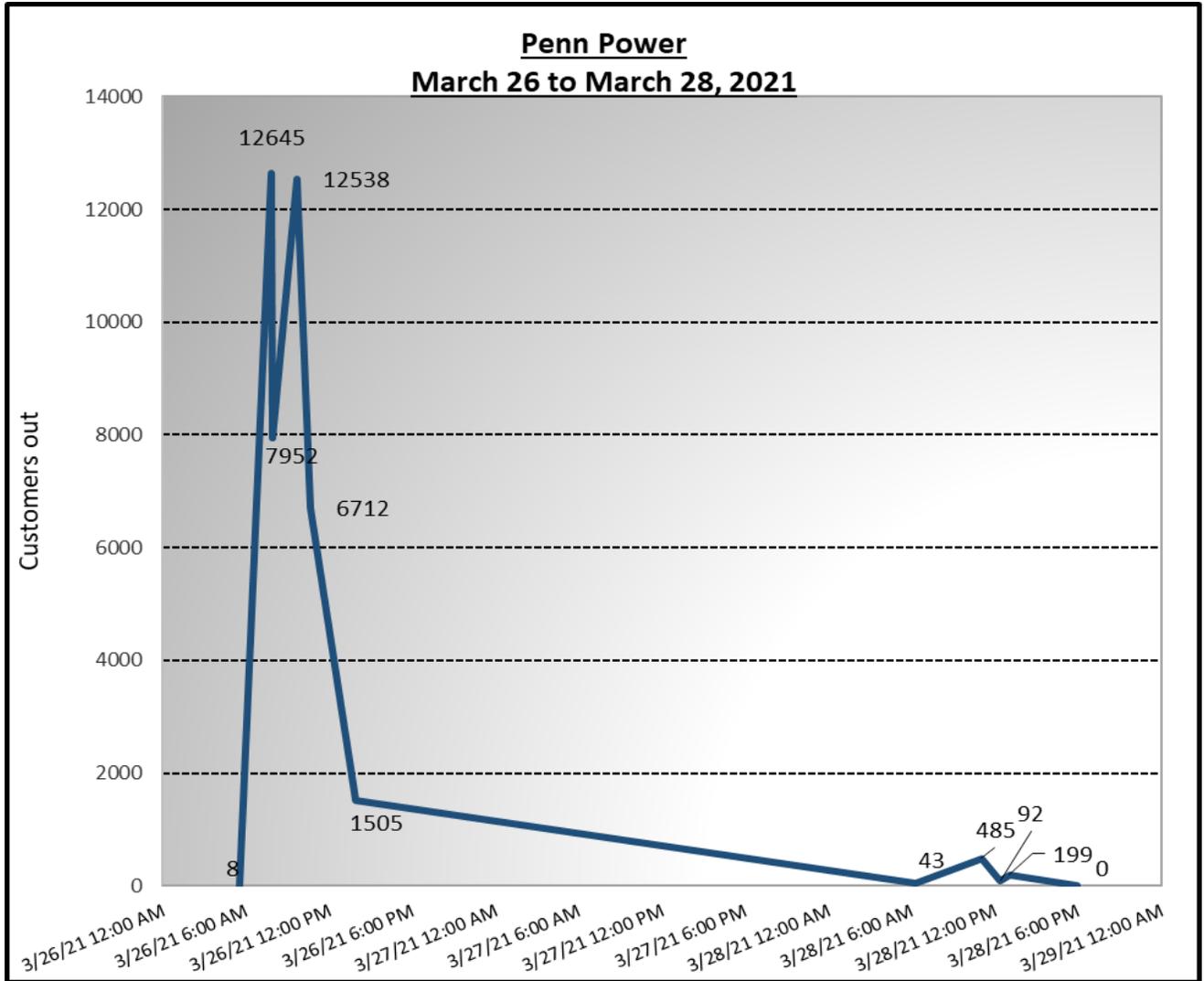
Attachment B: FirstEnergy Wind Report

Wind Report: The graphic below illustrates the maximum wind gusts in the Penn Power service territory on March 26, 2021. The graphic is from the National Oceanic and Atmospheric Administration (“NOAA”).

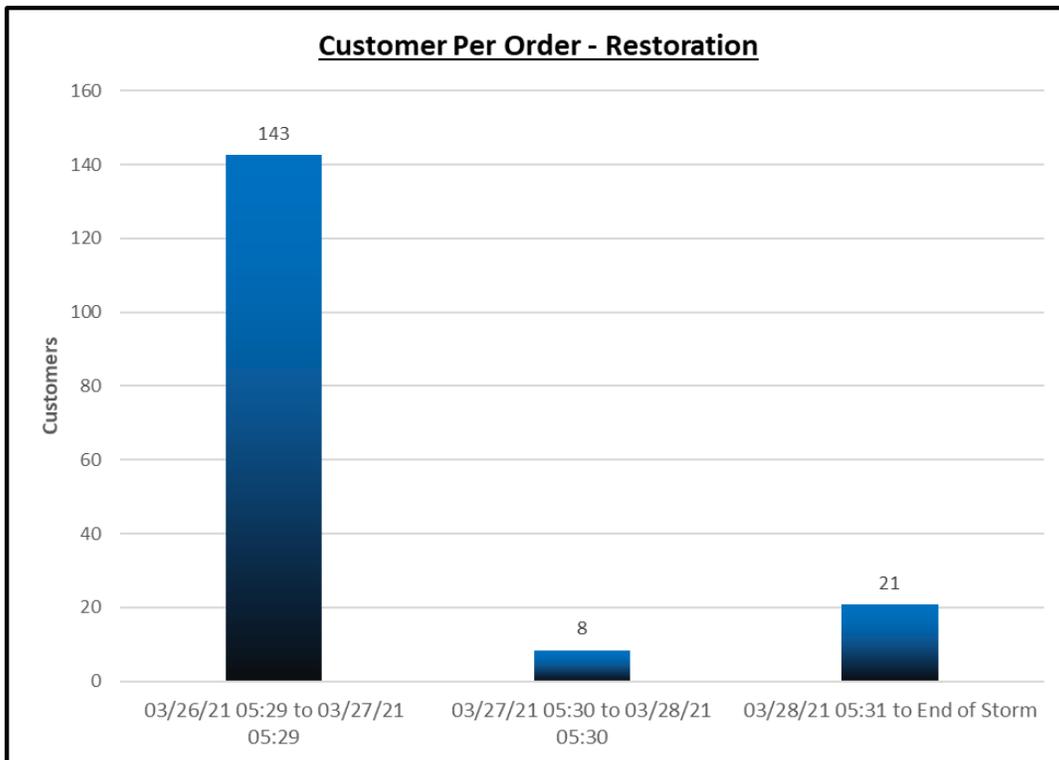
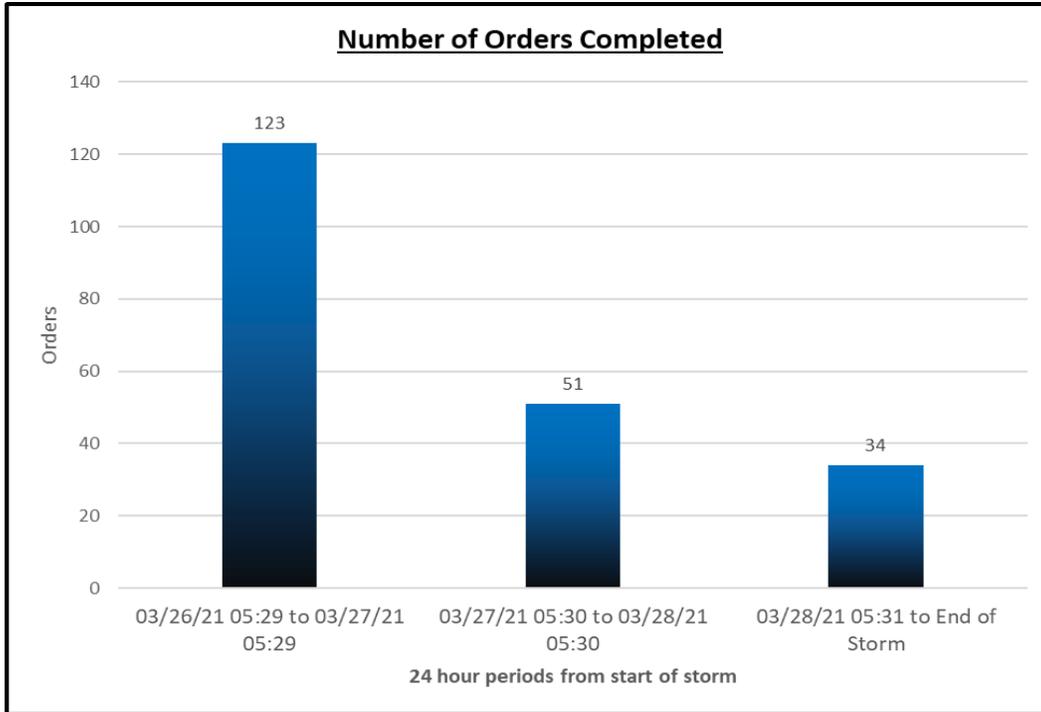
Maximum Wind Gusts: Friday, March 26, 2021



Attachment C: Restoration Curve



Attachment D: Order Restoration Graphs



Attachment E: FirstEnergy Meteorologist Reports

Tuesday, March 23, 2021 at 1246

New Issuance:

A strong storm system appears likely to affect most of FirstEnergy with strong gusts throughout the day on Friday. Strong wind gusts are expected to move into southern Ohio and West Virginia early Friday morning, and spread northeast across most of the FirstEnergy footprint throughout the day.

Quick thoughts:

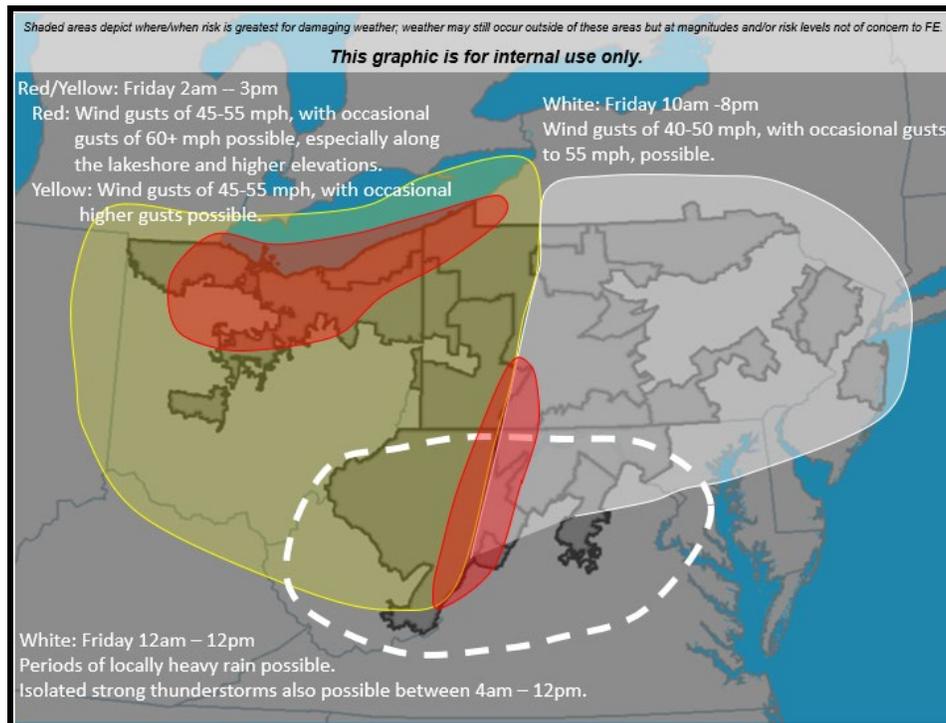
--In general, wind gusts of 45-55 mph, with occasional higher gusts appear possible, but the magnitude of these gusts could change as the event gets closer.

--The strongest gusts are expected across central Ohio, the Lake Erie shoreline, and potentially the higher elevations of West Virginia and Maryland early in the day Friday—but this too may change in the coming days.

--Periods of heavy rain, and perhaps a strong thunderstorm or two, are possible across areas of West Virginia and Maryland early Friday as well.

--There is still some uncertainty regarding the magnitude, location and timing of the winds, but there is good consensus that strong wind gusts will occur.

See graphic below for further details.



Wednesday, March 24, 2021 at 1033

Update:

--General increase of expected wind gusts in western FirstEnergy, especially across Ohio and northwest Pennsylvania. A period of strong winds (55-60+ mph gusts, sustained winds of 30-40 mph) is possible in these areas.

--Added more information on expected wind gust magnitudes and timing across FirstEnergy for Friday.

--Introduced the risk of strong/severe thunderstorms across western FirstEnergy Thursday evening. This is before the passage of the cold front and strong wind event on Friday.

--Updated areas that could see heavy rainfall and localized flash flooding late Thursday into Friday.

General storm information:

--A strong storm system will approach and move through FirstEnergy late Thursday through the day on Friday.

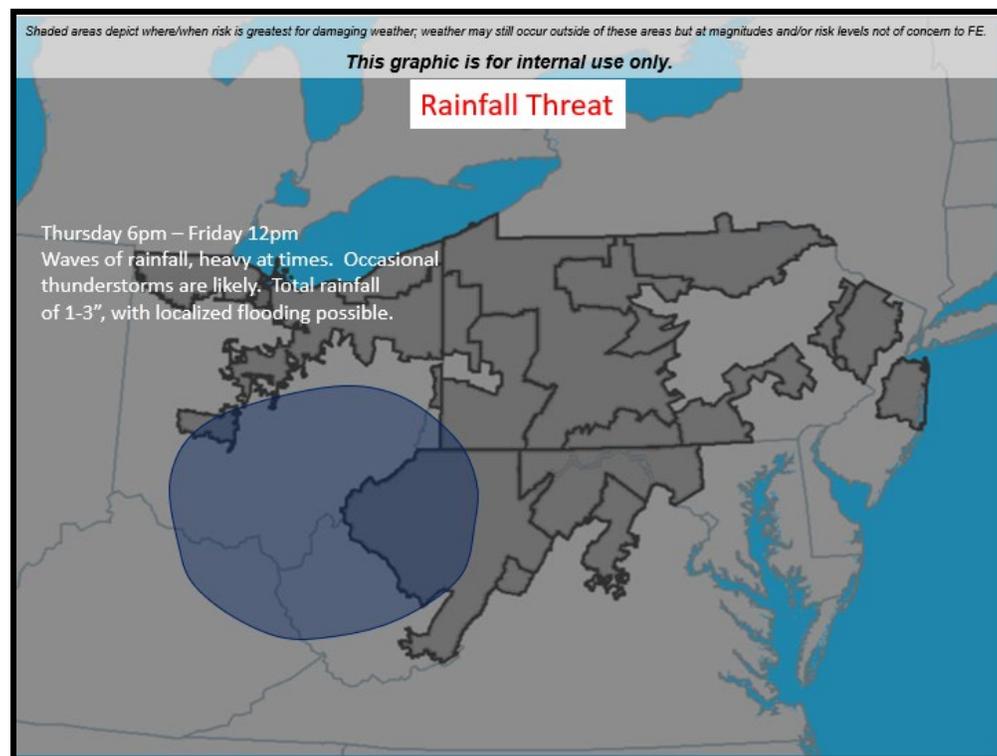
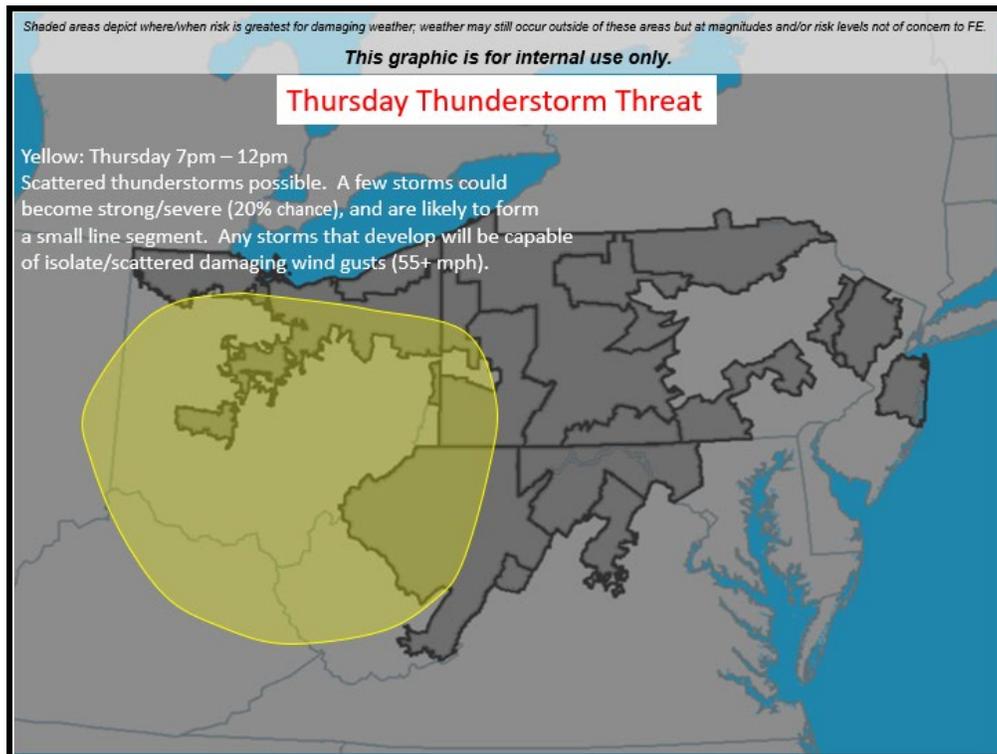
--The storm will drag a sharp cold front across the area, generally in a west-to-east fashion, beginning early Friday in western FirstEnergy and moving through far eastern FirstEnergy early Friday afternoon.

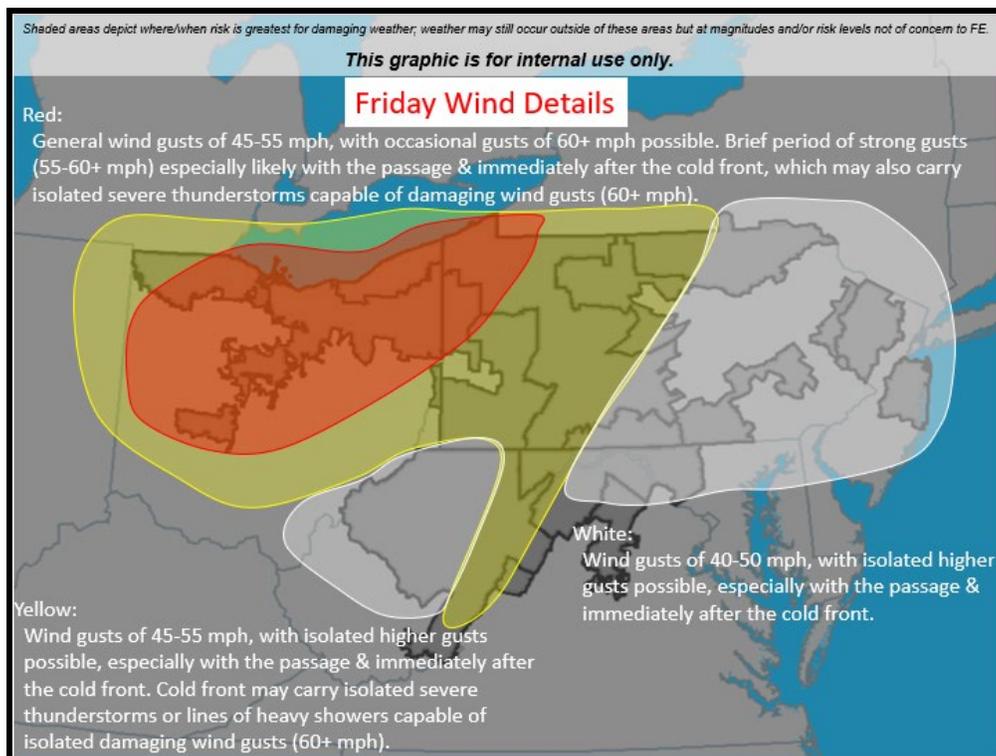
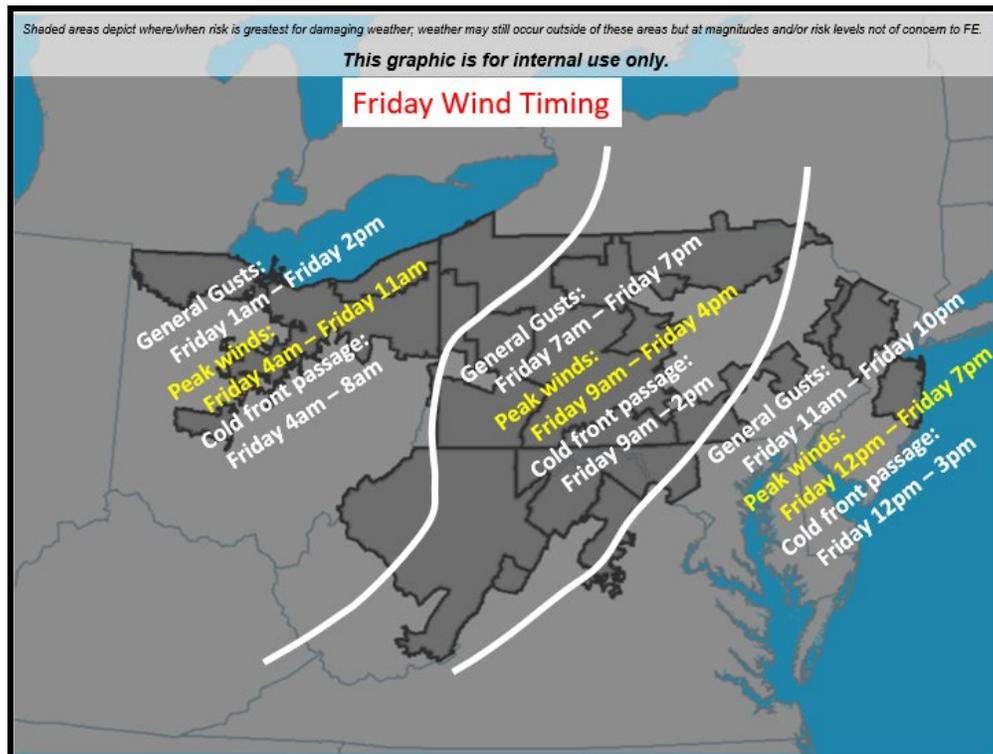
--Strong wind gusts are possible with the passage, and a few hours immediately after, of the front. The strongest gusts are expected across portions of Ohio and western Pennsylvania.

--A band of thunderstorms or heavy rain showers may be riding along the front. These will increase the likelihood of strong gusts.

--In a separate event, thunderstorms are likely to develop Thursday evening across western FirstEnergy before the arrival of the main storm system.

See four graphics below for further details.





Thursday, March 25, 2021 at 1018

Update:

--Increase in expected wind gusts for most of FirstEnergy—this is most relevant for areas of Ohio, Pennsylvania, and New Jersey.

--Updated thunderstorm forecast and introduced a second risk area for strong thunderstorms across western FirstEnergy—there are now two thunderstorm threats across these areas:

1) A small risk of isolated strong thunderstorms Thursday evening.

2) A risk of severe thunderstorms capable of significant wind gusts along/ahead of the cold front early Friday.

--Removed areas of heavy rainfall—although areas across Ohio and western West Virginia could see >1 inch of rain from multiple rounds of storms Thursday evening & Friday morning.

--Small adjustments to timing of cold front and expected winds.

Additional Details:

--At any given location, wind speeds will likely increase very quickly as the cold front (or any thunderstorms) arrives.

--At any given location, the strongest winds (i.e. ‘peak winds’) will likely last for 1-3 hour period after the front passes. However, ‘general wind gusts’ (>40+ mph) may linger for 4-8 hours after the front.

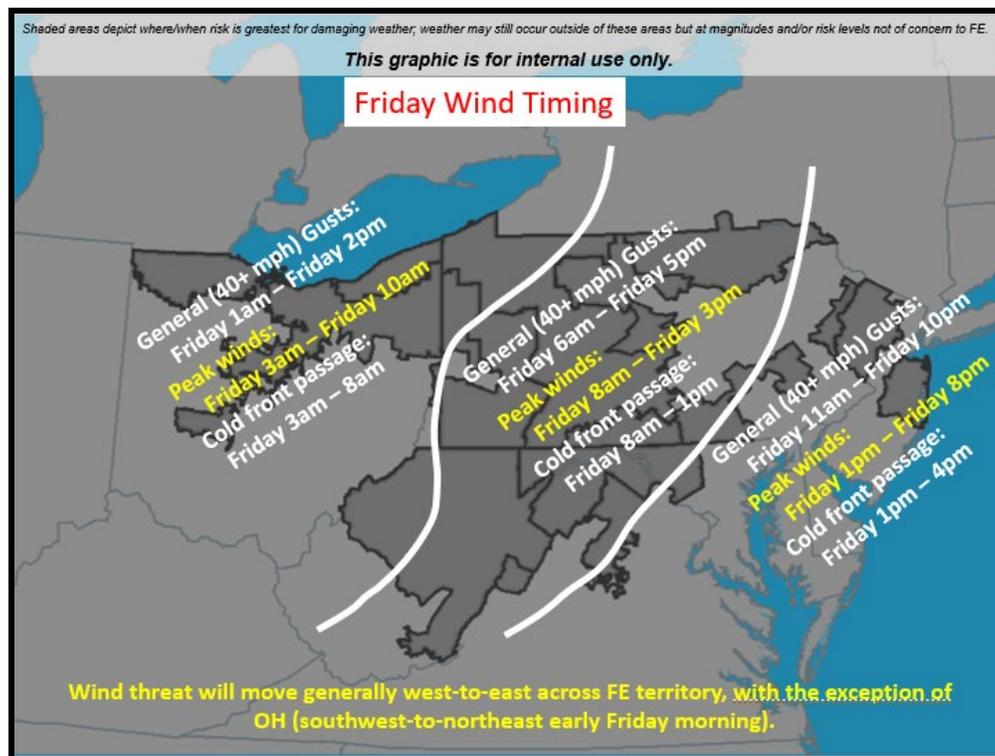
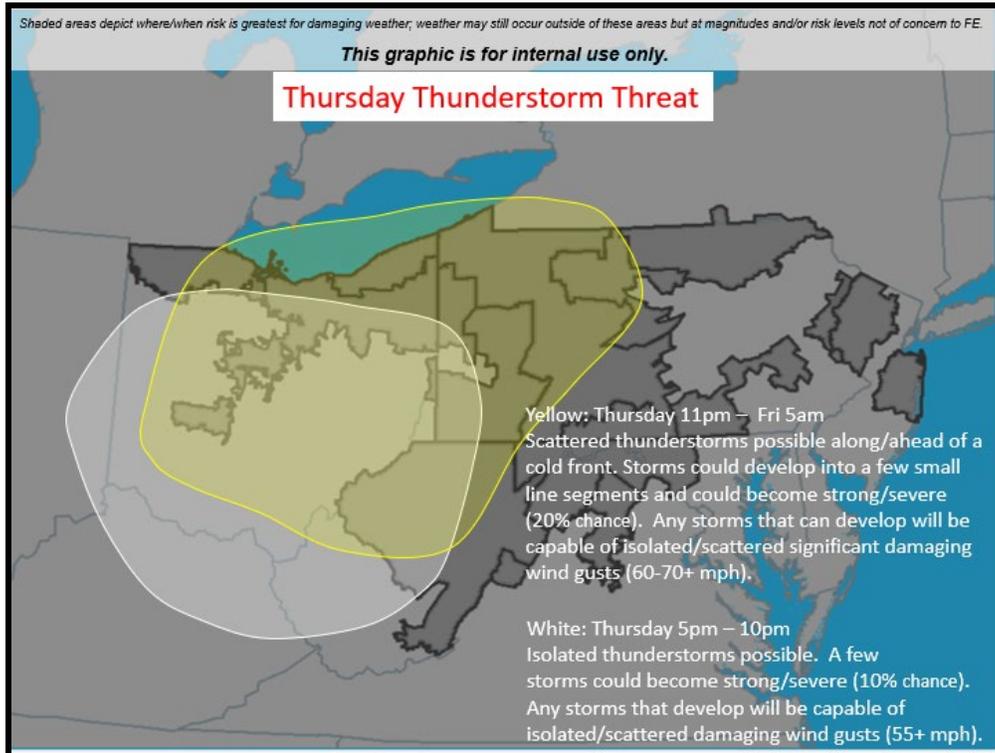
--The exception to this is in the elevations of eastern West Virginia, western Maryland, and southern Pennsylvania, where wind gusts will last a bit longer.

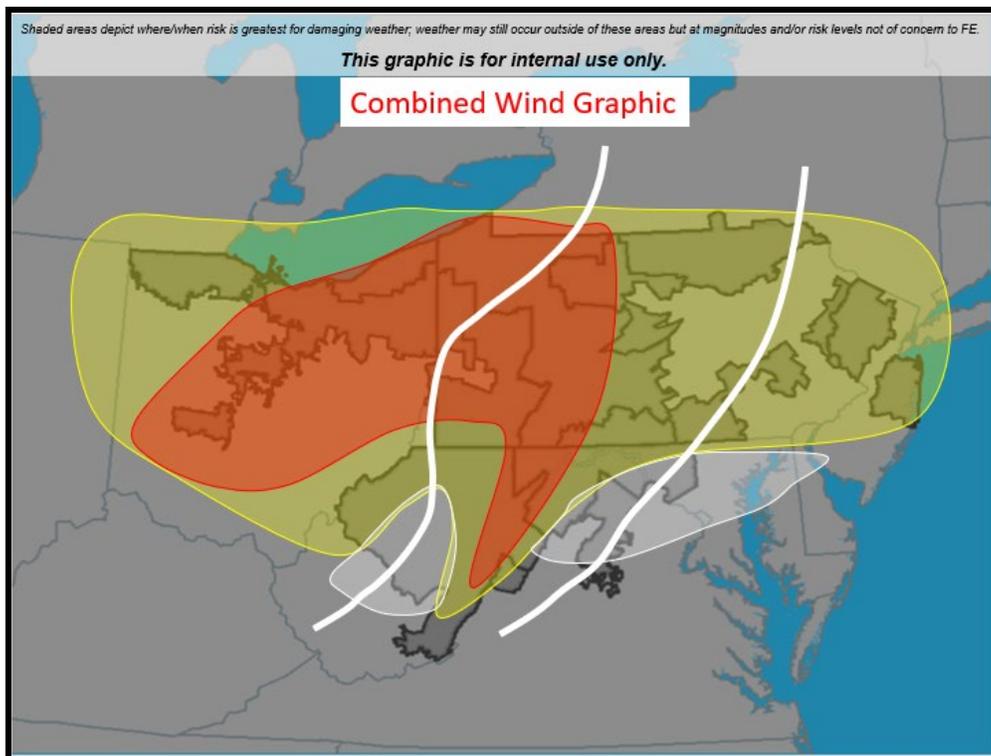
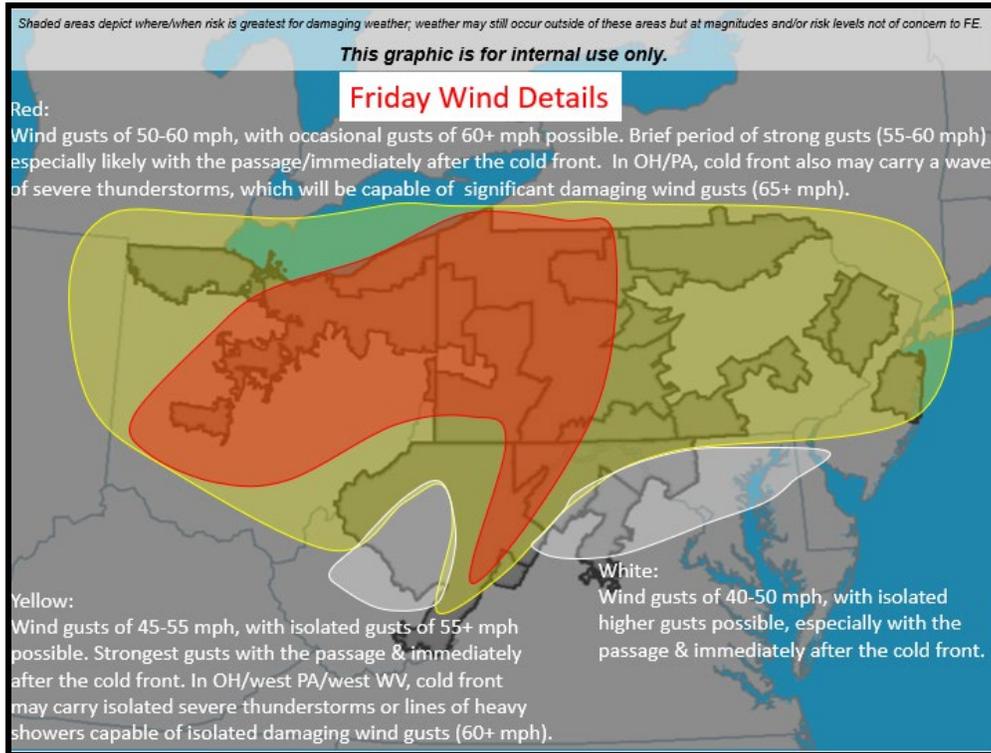
--Thunderstorms may not get the chance to develop along the cold front in Ohio/Pennsylvania early Friday, but:

A) Wind gusts of 55-60+ mph will still be possible with the front itself

B) Any storms that do develop in this window will be capable of significant localized wind gusts (60-70 mph)

See four graphics below for further details.





Thursday, March 25, 2021 at 1502

Update:

Only small changes this afternoon; no major changes to the forecast.

--Small adjustments to the timing of the cold front and peak winds—moving them an hour or two earlier than discussed in this morning's alert.

--Updated thunderstorm forecast to include a bit more area in Pennsylvania and West Virginia, and also to mention the possibility of a few tornados early Friday morning—tornado risk is mainly for central Ohio.

No changes to the rest of the forecast.

Additional Details:

--At any given location, wind speeds will likely increase very quickly as the cold front (or any thunderstorms) arrives.

--At any given location, the strongest winds (i.e. 'peak winds') will likely last for 1-3 hour period after the front passes. However, 'general wind gusts' (>40+ mph) may linger for 4-8 hours after the front.

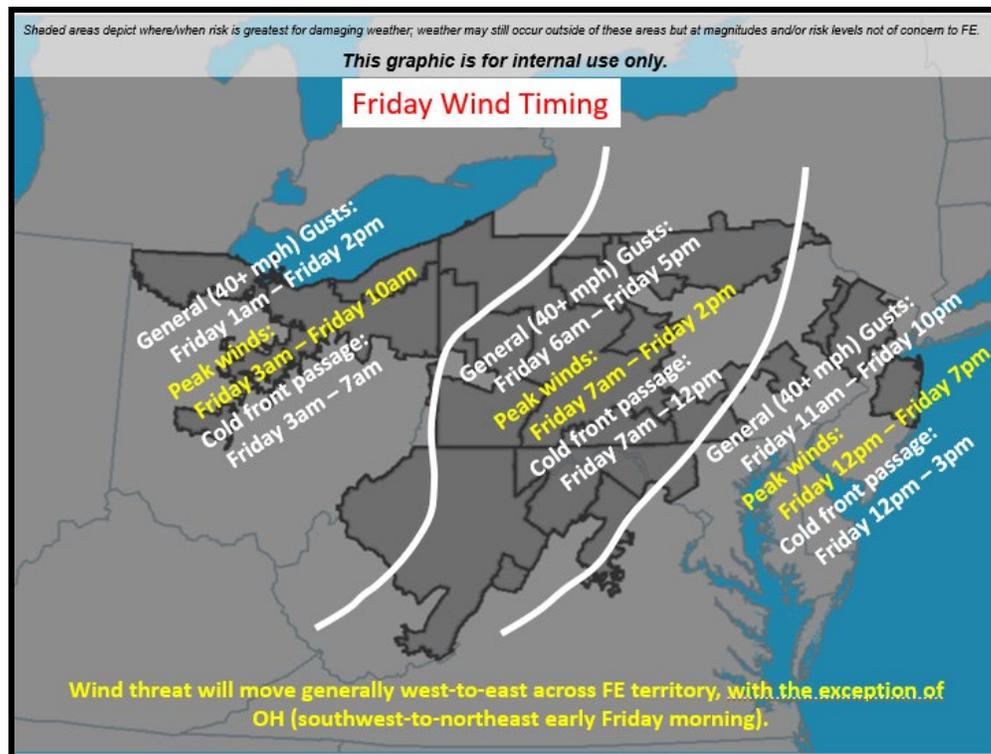
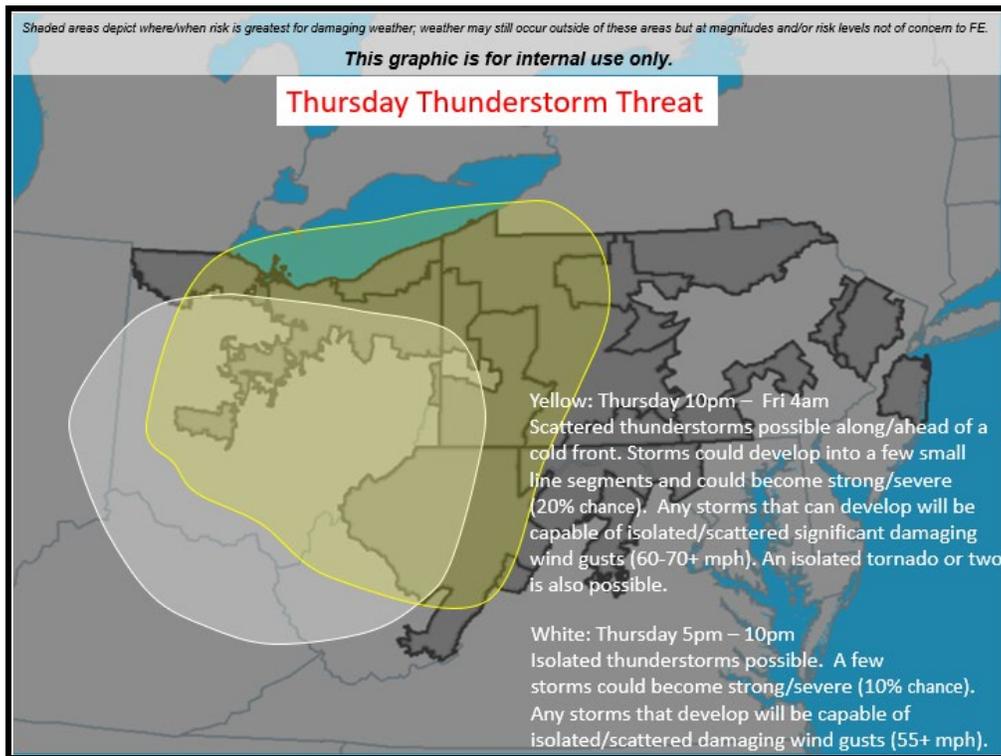
--The exception to this is in the elevations of eastern West Virginia, western Maryland, and southern Pennsylvania, where wind gusts will last a bit longer.

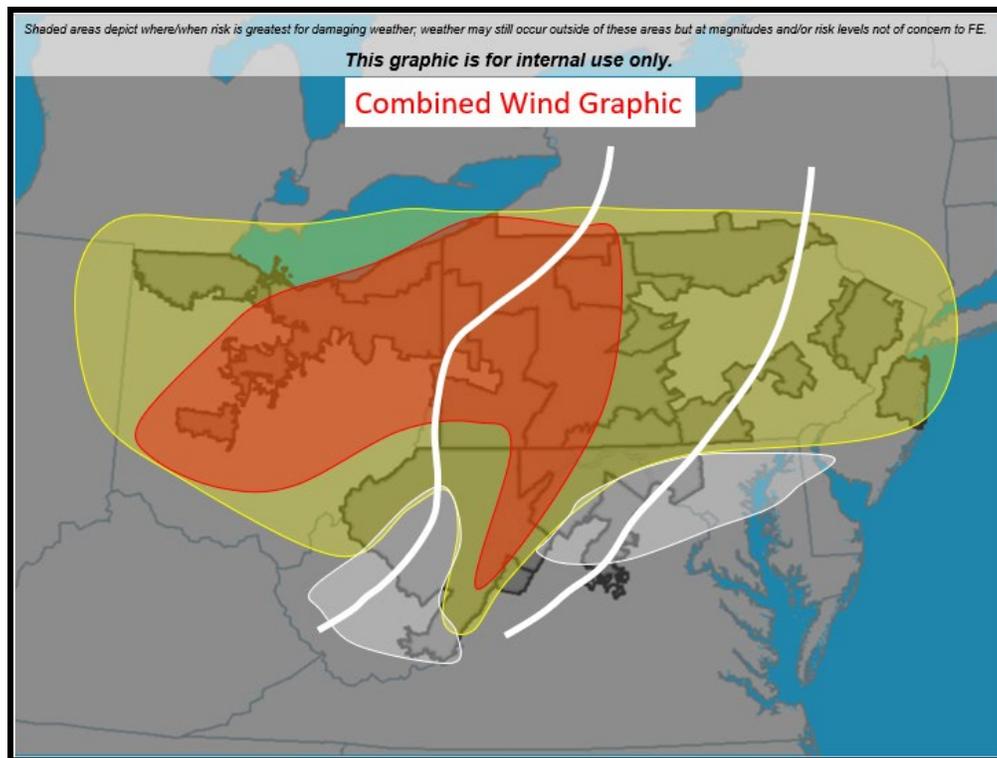
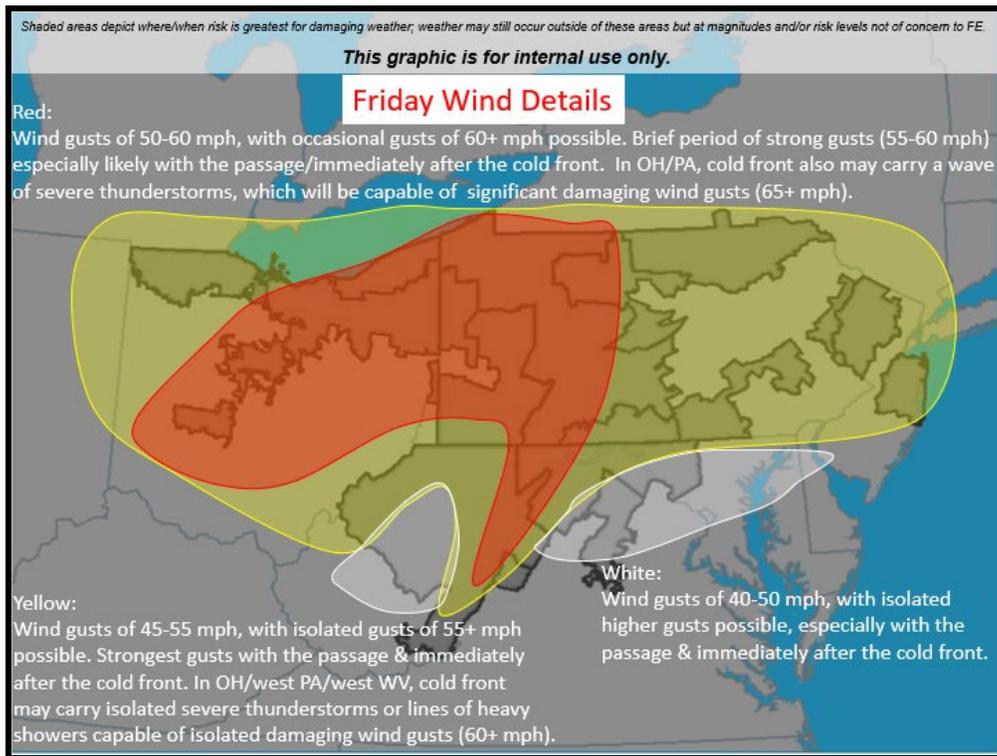
--Thunderstorms may not get the chance to develop along the cold front in Ohio/Pennsylvania early Friday, but:

A) Wind gusts of 55-60+ mph will still be possible with the front itself

B) Any storms that do develop in this window will be capable of significant localized wind gusts (60-70 mph)

See four graphics below for further details.





Friday March 26, 2021 at 0841

Update: *No major changes to the forecast this morning. The small changes:*

- Removed all mention of thunderstorms along the cold front for the rest of the event.
- Expanded 45-55 mph wind gust area to include all of Potomac Edison.
- Small changes to the timing details for central and eastern FirstEnergy.

Additional Details:

- Given current observations this morning, the ‘peak wind’ period has lasted for roughly 2-3 hours after the arrival of the cold front.
- Winds will stay gusty (40-50 mph) for 5-8 hours after the passage of the front.
- Winds will generally relax across all of the FirstEnergy footprint after sunset tonight; this will occur earlier (this afternoon) across the western half of FirstEnergy.

See two graphics below for further details.

Last Scheduled Update

