

Darsh Singh, Esq.
(610) 212-8331
(330) 315-9263 (Fax)

August 19, 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 August 4, 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 Bidelspach – 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 Electric Company ("Penelec")
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:
August 4, 2022 2000
(Date) *(Time)*

5. Interruption or Outage:
(a) Number of customers affected: 25,556
(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
Bedford	1,465	23	11
Blair	2,076	19	7
Bradford	138	14	4
Cambria	2,622	36	31
Centre	1	1	0
Clarion	3	2	4
Clearfield	3,144	44	8
Crawford	31	2	2
Cumberland	1	1	0
Erie	1,097	8	15
Forest	92	5	0
Franklin	2	1	1
Huntingdon	1,515	8	1
Indiana	438	21	9
Jefferson	231	4	4
Lycoming	21	6	2
McKean	535	11	3
Mifflin	81	6	4
Potter	360	12	4
Somerset	137	9	7
Sullivan	1,396	8	1
Susquehanna	1,115	8	8
Tioga	774	18	7
Venango	4,893	28	13
Warren	1,257	14	10
Wayne	13	4	3
Westmoreland	974	6	0
Wyoming	1,144	16	8
TOTAL	25,556	335	167

- (d) Approximate number of outage cases exceeding 6 or more hours in duration: 90
- (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 Thursday, August 4, 2022, and continuing through Friday, August 5,

2022, strong thunderstorms moved throughout the Penelec service territory. See Attachment B for maximum wind gusts and the 24-hour total precipitation for August 4 and 5, 2022.

Damage as a result of the high winds included downed trees, broken poles, downed wires, and damaged equipment. The Altoona, Clearfield, Oil City and Towanda regions were the hardest hit. Approximately 24% of the total outages that occurred were tree related.

Preliminary data indicates that this outage resulted in approximately 2.3 minutes of SAIDI, 51.9 minutes of CAIDI, and 0.044 SAIFI impact.

- (g) Projected time of restoration: It was estimated that the majority of customers would be restored by 1500 on August 5, 2022. By that time, 16,000 out of 17,681 (90%) customers that were out of power had been restored. After that time, an additional 7,875 customers lost power due to additional storms that moved through the service territory.

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	165	Line Workers
Subtotal	165	Line Workers
Davey Tree	10	Forestry Contractor
Penn Line Services, Inc.	35	Forestry Contractor
Lewis Tree	3	Forestry Contractor
Treesmiths	11	Forestry Contractor
AMS	26	Forestry Contractor
ECI	4	Forestry Contractor
Subtotal	89	Forestry Contractor
Henkel's & McCoy	6	Line Contractor
Thompson Electric	16	Line Contractor
Subtotal	22	Line Contractor
Penelec	43	Supporting Roles
Subtotal	43	Supporting Roles
Grand Total	319	

- (i) The date and time of the first information of a service interruption: August 4, 2022, at 1324.
- (j) The date and time that repair crews were assembled: Crews were on duty at the time the event began.
- (k) The actual time that service was restored to the last affected customer: August 7, 2022, at 1651.
- (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	49
Secondary Spans Down	29
Crossarms Replaced	37
Cutouts Replaced	23
Poles Replaced	11
Transformers Replaced	14
Wire & Cable Replaced (feet)	165

- (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.

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
12116885-3	Bedford	4	4,050	8/4/2022 21:21	8/7/2022 16:51
12119447-1	Cambria	2	3,128	8/4/2022 15:11	8/6/2022 19:19
12116117-4	Cambria	9	2,891	8/4/2022 15:11	8/6/2022 15:22
12116117-3	Cambria	7	2,149	8/4/2022 15:11	8/6/2022 3:00
12117281-2	Bedford	1	1,996	8/4/2022 15:08	8/6/2022 0:24
12116356-2	Blair	1	1,799	8/4/2022 16:28	8/5/2022 22:27
12116356-2	Blair	1	1,775	8/4/2022 16:48	8/5/2022 22:23
12116535-2	Indiana	1	1,643	8/4/2022 17:42	8/5/2022 21:05
12117329-2	Susquehanna	1	1,590	8/5/2022 7:50	8/6/2022 10:20
12116301-2	Indiana	3	1,564	8/4/2022 16:31	8/5/2022 18:35
12116371-4	Bedford	1	1,546	8/4/2022 16:52	8/5/2022 18:38
12116371-3	Bedford	5	1,546	8/4/2022 16:52	8/5/2022 18:38
12115960-3	Potter	10	1,536	8/4/2022 14:26	8/5/2022 16:02
12116371-3	Bedford	64	1,521	8/4/2022 16:52	8/5/2022 18:13
12116482-1	Cambria	3	1,491	8/4/2022 17:21	8/5/2022 18:12
12116679-2	Tioga	6	1,448	8/4/2022 13:35	8/5/2022 13:43
12117840-1	Cambria	9	1,448	8/4/2022 16:32	8/5/2022 16:40
12116298-3	Cambria	19	1,384	8/4/2022 16:32	8/5/2022 15:36
12116038-2	Lycoming	2	1,378	8/4/2022 14:52	8/5/2022 13:50
12116106-1	Blair	1	1,342	8/4/2022 15:28	8/5/2022 13:50
12117100-2	Bedford	6	1,273	8/4/2022 22:43	8/5/2022 19:56
12116530-2	Clearfield	1	1,271	8/4/2022 17:39	8/5/2022 14:50
12116317-2	Clearfield	1	1,221	8/4/2022 16:39	8/5/2022 13:00
12116808-2	Clearfield	2	1,205	8/4/2022 17:37	8/5/2022 13:42
12116547-2	Bradford	10	1,144	8/4/2022 15:33	8/5/2022 10:37
12116537-2	Clearfield	15	1,138	8/4/2022 16:56	8/5/2022 11:54
12116298-2	Cambria	17	1,113	8/4/2022 16:32	8/5/2022 11:05
12116098-1	Venango	11	1,091	8/4/2022 14:30	8/5/2022 8:41
12116420-2	Clearfield	1	1,086	8/4/2022 17:00	8/5/2022 11:06
12116808-2	Clearfield	6	1,067	8/4/2022 19:55	8/5/2022 13:42

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
12116651-2	Bedford	40	1,062	8/4/2022 18:08	8/5/2022 11:50
12116145-2	Tioga	3	1,062	8/4/2022 15:40	8/5/2022 9:22
12119602-1	Clearfield	3	978	8/6/2022 19:54	8/7/2022 12:12
12116908-1	Huntingdon	2	975	8/4/2022 20:45	8/5/2022 13:00
12115872-2	Venango	16	965	8/4/2022 13:43	8/5/2022 5:48
12117100-2	Bedford	5	962	8/4/2022 22:43	8/5/2022 14:45
12116585-1	McKean	1	957	8/4/2022 18:03	8/5/2022 10:00
12117253-2	Susquehanna	12	894	8/5/2022 2:06	8/5/2022 17:00
12118882-2	Tioga	6	862	8/5/2022 22:22	8/6/2022 12:44
12116835-1	Bradford	2	853	8/4/2022 19:49	8/5/2022 10:02
12117086-2	Bedford	2	852	8/4/2022 22:27	8/5/2022 12:39
12117086-2	Bedford	1	852	8/4/2022 22:27	8/5/2022 12:39
12116137-1	Sullivan	8	843	8/4/2022 15:37	8/5/2022 5:40
12116651-2	Bedford	112	727	8/4/2022 23:43	8/5/2022 11:50
12117263-1	Cambria	2	718	8/5/2022 0:47	8/5/2022 12:45
12115991-3	Forest	18	713	8/4/2022 14:31	8/5/2022 2:24
12115858-2	Potter	21	706	8/4/2022 13:44	8/5/2022 1:30
12116141-2	Potter	9	703	8/4/2022 15:38	8/5/2022 3:21
12116904-2	Bradford	1	680	8/4/2022 20:40	8/5/2022 8:00
12116367-1	Clearfield	1	672	8/4/2022 16:53	8/5/2022 4:05
12118976-1	Clearfield	29	618	8/6/2022 0:57	8/6/2022 11:15
12117512-1	Westmoreland	1	600	8/5/2022 10:16	8/5/2022 20:16
12116696-1	Bedford	11	596	8/4/2022 18:19	8/5/2022 4:15
12118976-1	Clearfield	9	580	8/6/2022 0:57	8/6/2022 10:37
12119307-2	Bedford	1	567	8/6/2022 12:11	8/6/2022 21:38
12116870-1	Clearfield	13	555	8/4/2022 20:05	8/5/2022 5:20
12117175-1	Wyoming	1	502	8/5/2022 0:36	8/5/2022 8:58
12118980-2	Clearfield	50	497	8/6/2022 1:13	8/6/2022 9:30
12116170-2	Indiana	1	494	8/4/2022 15:49	8/5/2022 0:03
12117237-1	Clearfield	62	494	8/5/2022 3:04	8/5/2022 11:18
12116170-2	Indiana	11	492	8/4/2022 15:49	8/5/2022 0:01
12116396-2	Cambria	1	491	8/4/2022 16:55	8/5/2022 1:06
12116356-1	Blair	39	490	8/4/2022 16:48	8/5/2022 0:58
12116396-2	Cambria	27	484	8/4/2022 16:55	8/5/2022 0:59
12118597-1	Warren	5	477	8/5/2022 20:03	8/6/2022 4:00

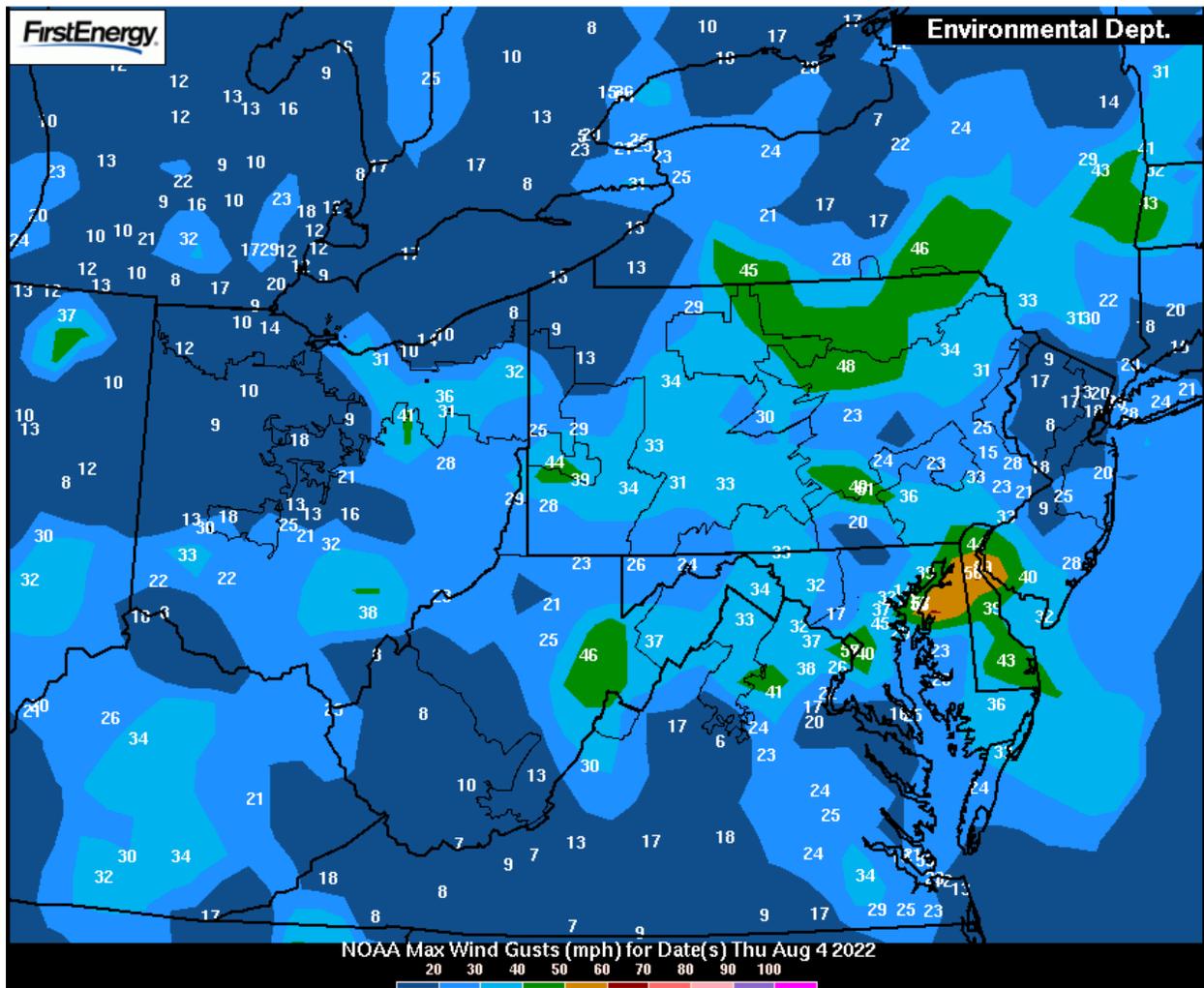
Penelec Storm Report

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
12116356-1	Blair	1	477	8/4/2022 16:48	8/5/2022 0:45
12116567-1	Bedford	4	467	8/4/2022 17:58	8/5/2022 1:45
12116420-2	Clearfield	4	465	8/4/2022 17:00	8/5/2022 0:45
12119460-2	Clearfield	1	460	8/6/2022 16:26	8/7/2022 0:06
12116758-1	Indiana	1	453	8/4/2022 18:57	8/5/2022 2:30
12117997-2	Cambria	1	447	8/5/2022 17:29	8/6/2022 0:56
12119775-1	Warren	13	441	8/7/2022 0:04	8/7/2022 7:25
12116630-1	Wyoming	16	435	8/4/2022 15:10	8/4/2022 22:25
12119572-2	Indiana	7	435	8/6/2022 18:57	8/7/2022 2:12
12116902-1	Venango	8	419	8/4/2022 20:31	8/5/2022 3:30
12116739-1	Mifflin	7	419	8/4/2022 18:49	8/5/2022 1:48
12119622-1	Wyoming	3	419	8/6/2022 20:31	8/7/2022 3:30
12116178-1	Wyoming	3	417	8/4/2022 15:54	8/4/2022 22:51
12119622-1	Wyoming	59	409	8/6/2022 20:31	8/7/2022 3:20
12116301-2	Indiana	1	404	8/4/2022 16:31	8/4/2022 23:15
12117763-2	Bedford	2	403	8/5/2022 14:42	8/5/2022 21:25
12116338-2	Clearfield	97	390	8/4/2022 16:41	8/4/2022 23:11
12118591-1	Franklin	2	387	8/5/2022 20:00	8/6/2022 2:27
12117219-1	Somerset	15	385	8/5/2022 2:38	8/5/2022 9:03
12119333-2	Blair	6	377	8/6/2022 13:03	8/6/2022 19:20
12118536-2	Forest	1	372	8/5/2022 19:41	8/6/2022 1:53
12119621-1	Venango	1	371	8/6/2022 14:19	8/6/2022 20:30
12116287-1	Indiana	35	368	8/4/2022 16:21	8/4/2022 22:29
12119376-1	Cumberland	1	368	8/6/2022 13:57	8/6/2022 20:05
12116535-1	Indiana	8	363	8/4/2022 17:42	8/4/2022 23:45

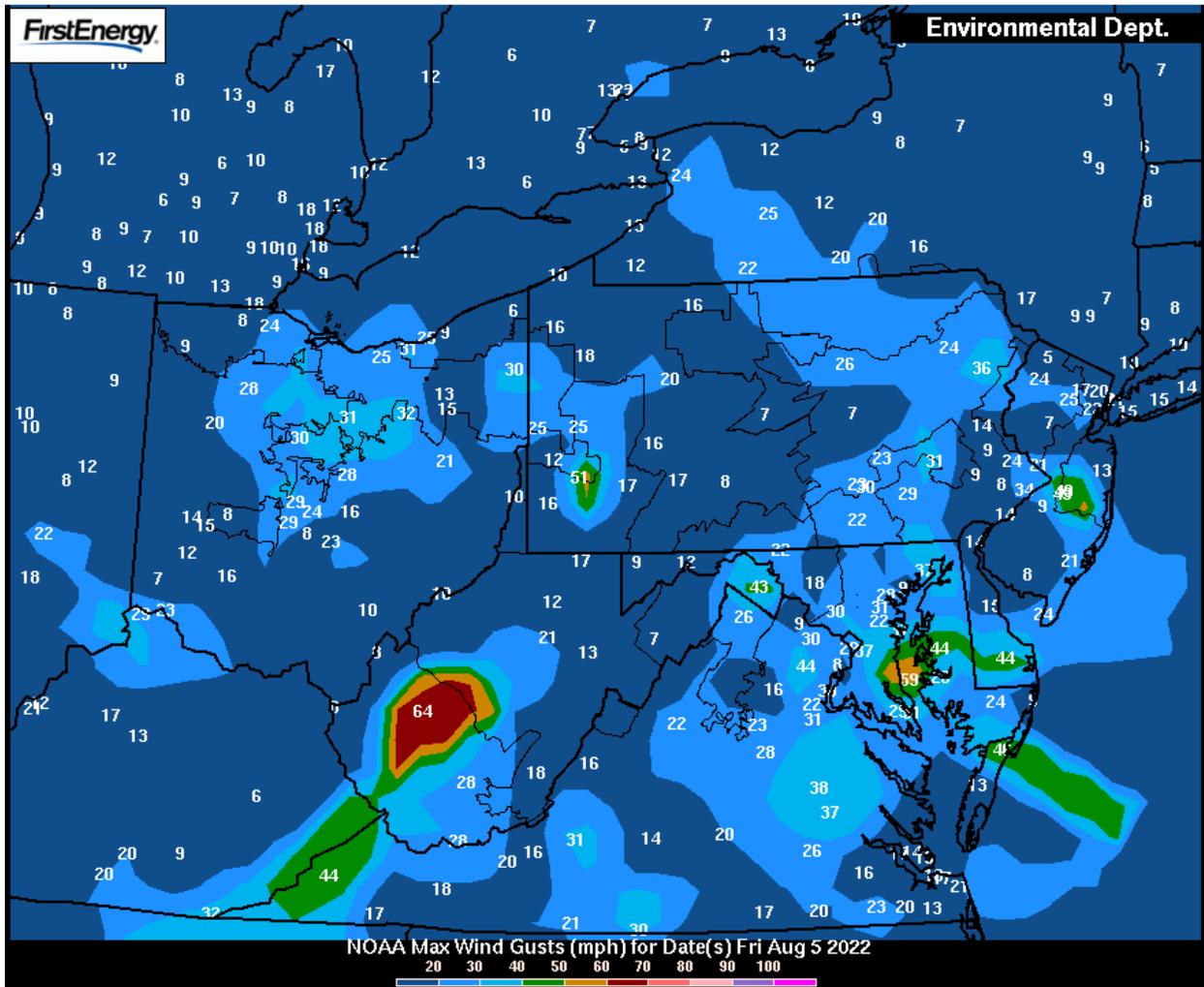
Attachment B: Wind and Precipitation Report

Wind and Precipitation Reports: Graphic 1 illustrates the Maximum Wind Gusts in the Penelec service territory on August 4 and 5, 2022. Graphic 2 illustrates 24-Hour Total Precipitation in the Penelec service territory on August 4 and 5, 2022. The graphics are from the National Oceanic and Atmospheric Administration (“NOAA”).

Graphic 1: Wind Gusts - Thursday, August 4, 2022

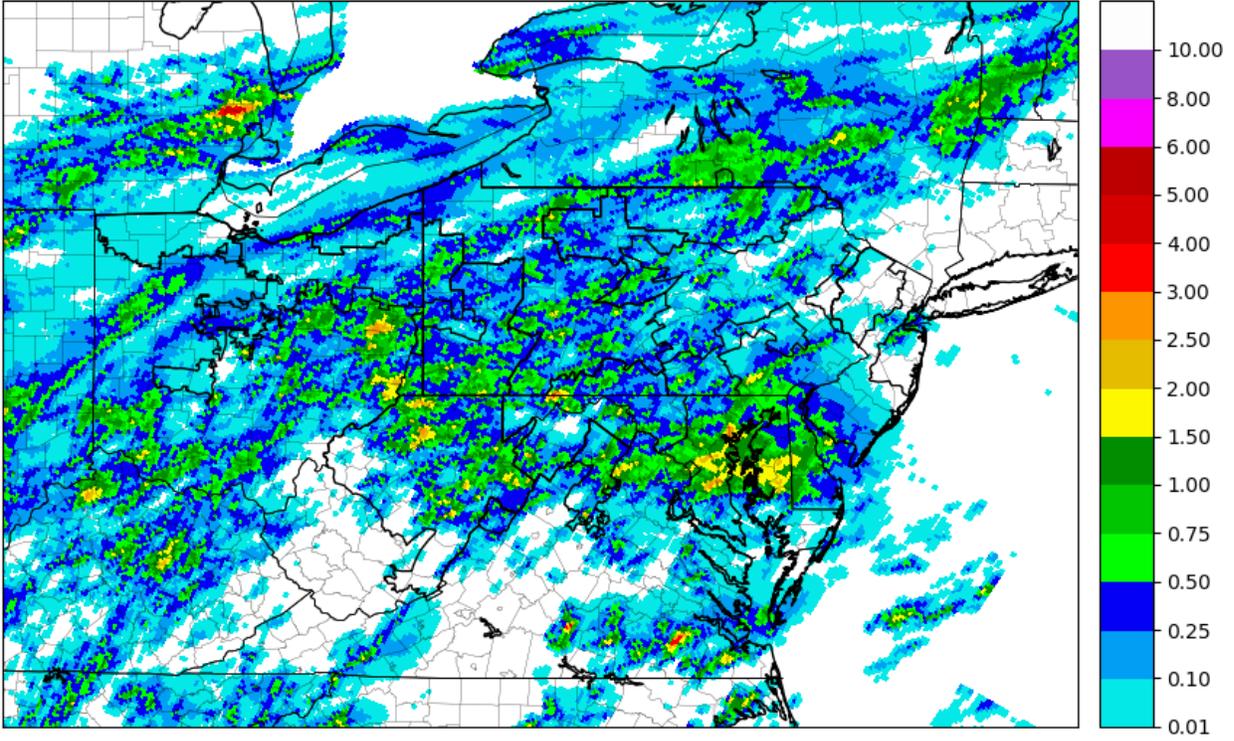


Graphic 1: Wind Gusts - Friday, August 5, 2022



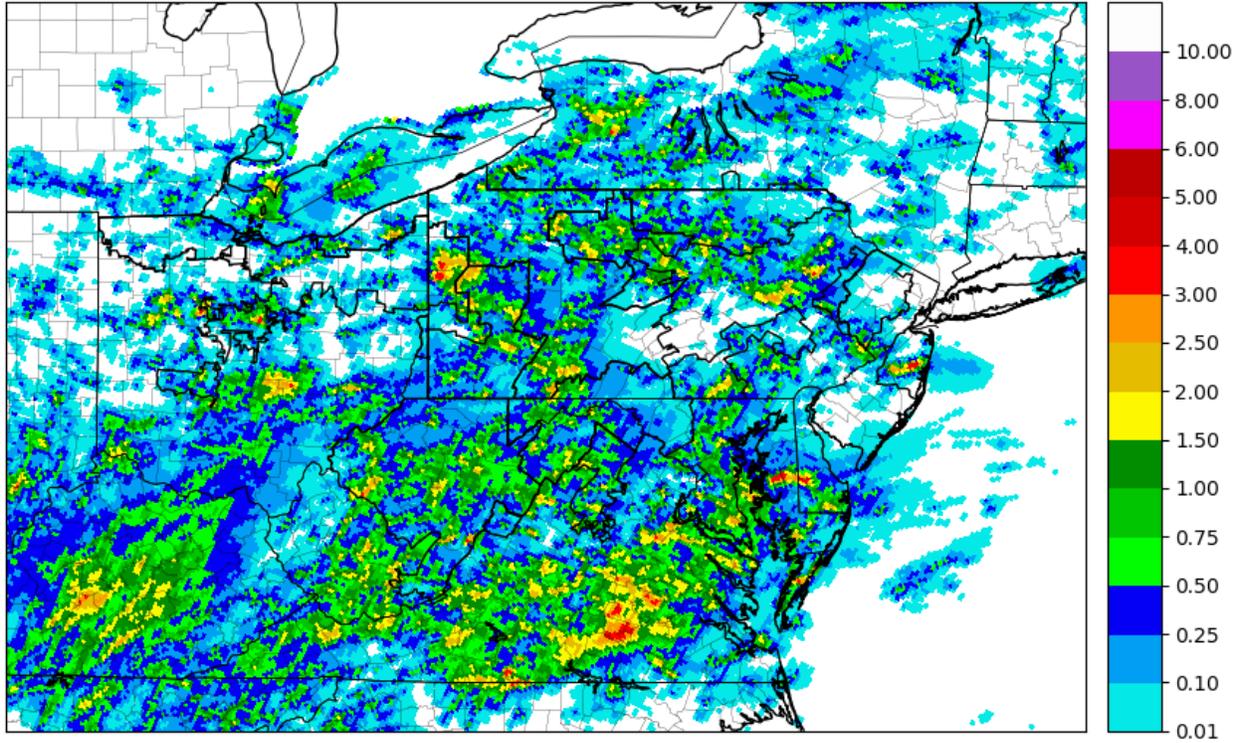
Graphic 2: 24-Hour Total Precipitation - Thursday, August 4, 2022

24 Hour Total Precipitation (Liquid Equivalent) for 04 Aug 22 from NOAA Stage 4

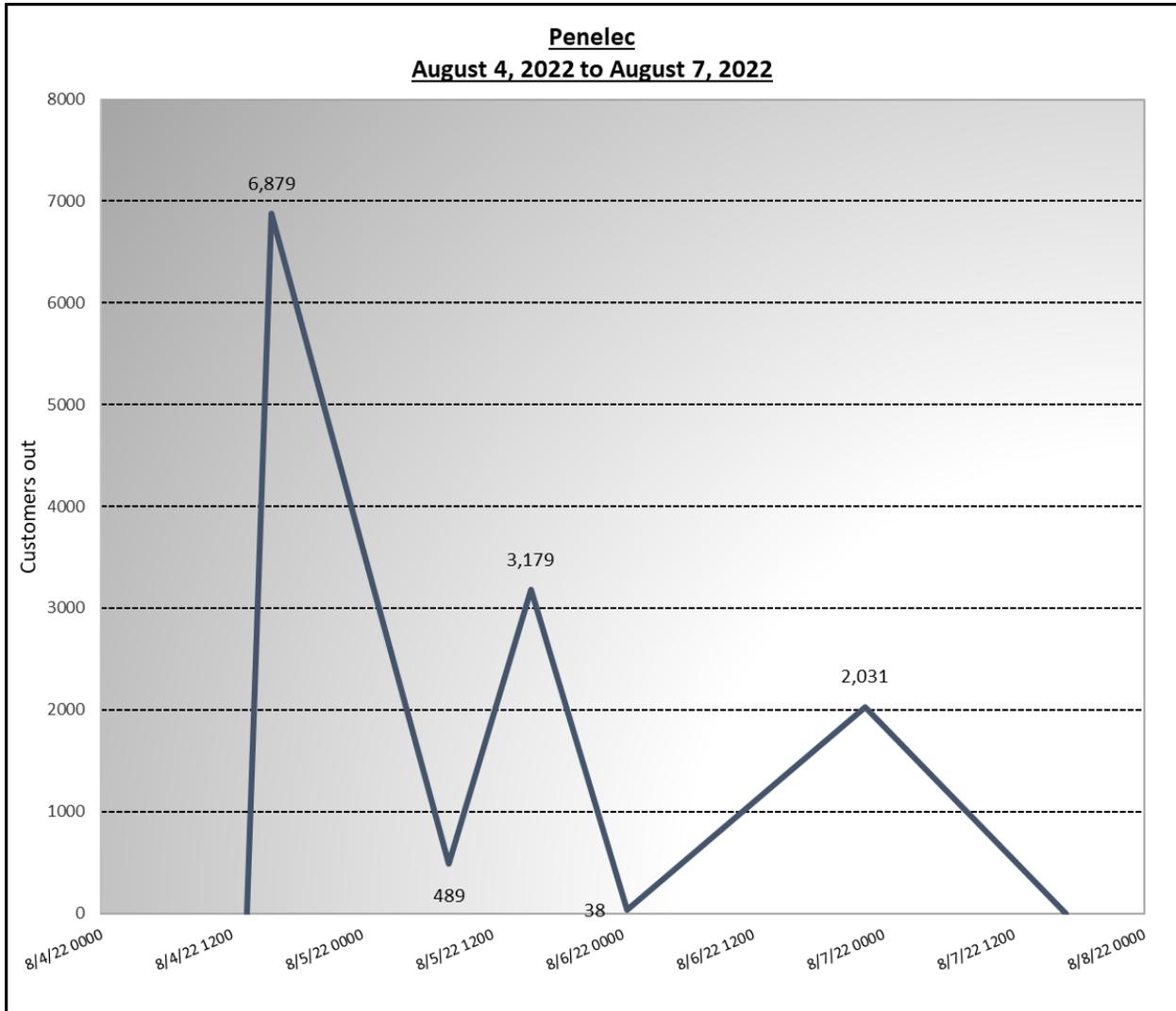


Graphic 2: 24-Hour Total Precipitation - Friday, August 5, 2022

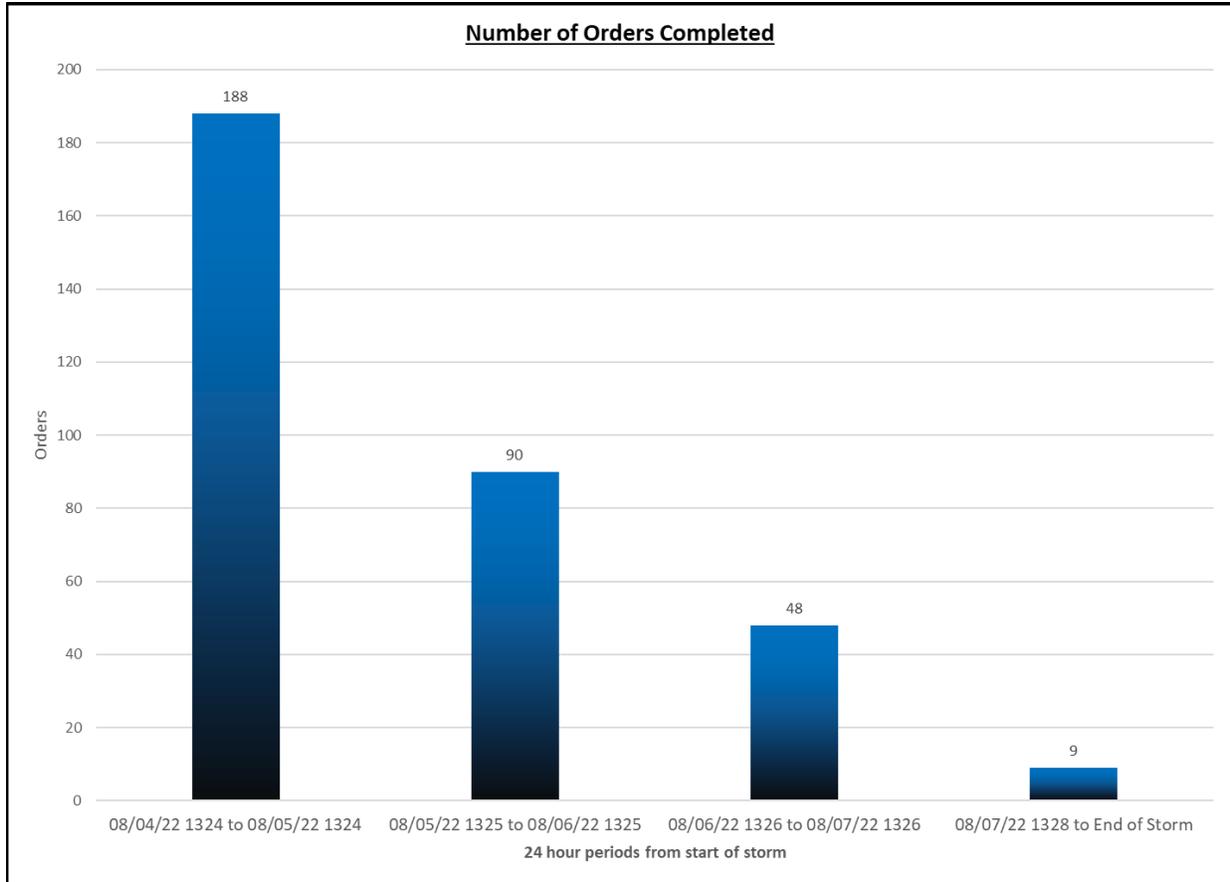
24 Hour Total Precipitation (Liquid Equivalent) for 05 Aug 22 from NOAA Stage 4



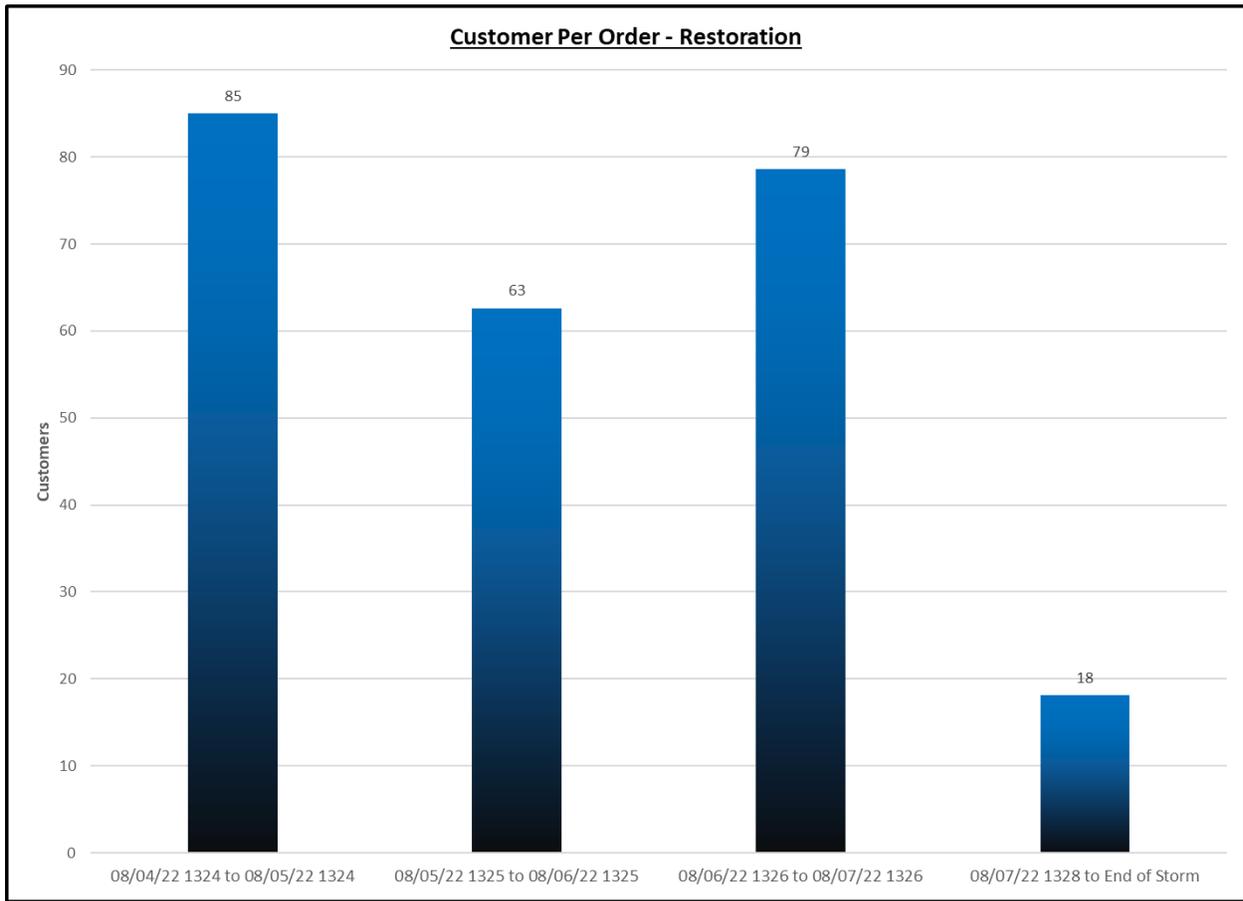
Attachment C: Order Restoration Curve



Attachment D: Order Restoration Graphs



Penelec Storm Report



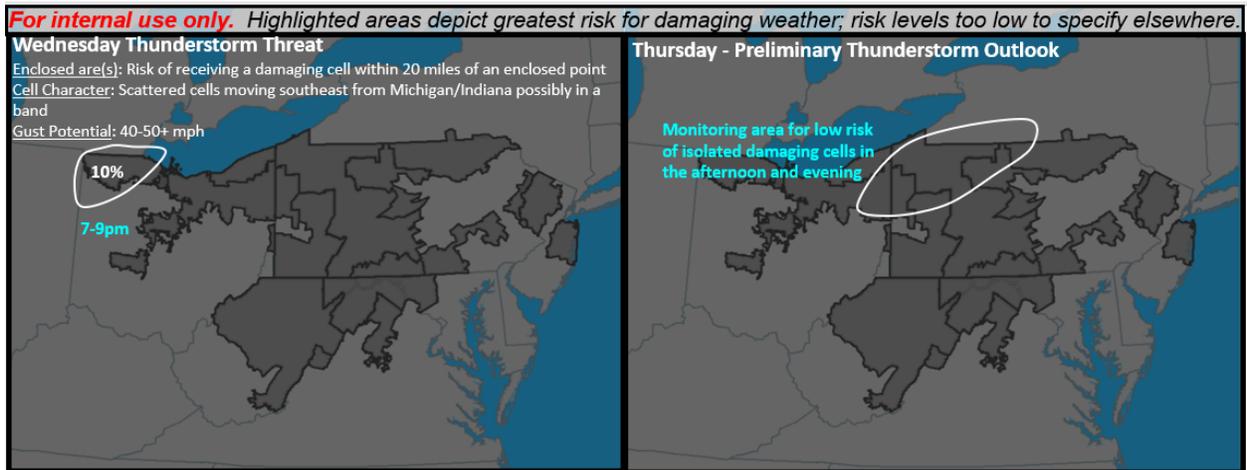
Attachment E: Meteorologist Reports

Tuesday August 2, 2022 @ 0910

New Issuance:

Wednesday – confidence is below normal as it is not clear if a band of cells expected to form in Michigan and Indiana late in the afternoon will run out of gas before reaching the Ohio border in the evening.

Thursday – confidence is below normal for this panel as although cells are expected in the afternoon, the risk of damaging potential is low.

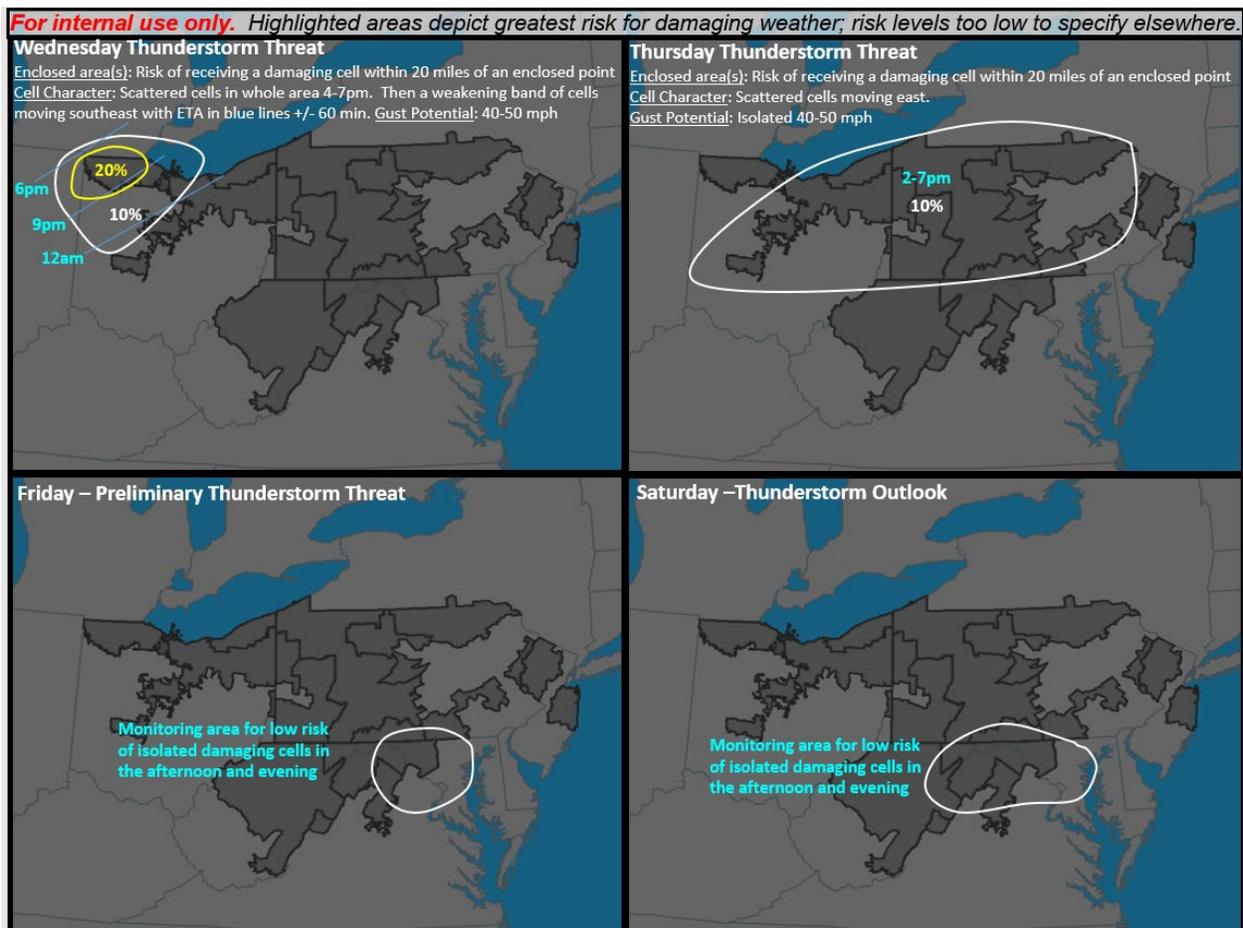


Wednesday August 3, 2022 @ 0947

Changes:

1. **Wednesday:** Added detail to threat in northwest OH, expanded area slightly, and increased risk in extreme northwest OH. Confidence is normal with this panel.
2. **Thursday:** Expanded low risk area due to typical scattered afternoon cells. Confidence is normal with this panel.
3. **Friday & Saturday:** For situational awareness added areas being monitored for similar low risk due to typical scattered afternoon cells.
4. **Sunday:** Not depicted – we are also monitoring a similar low-risk afternoon threat in central PA.

After this weekend, the next and more significant threat for storms comes with a cold frontal passage in north or northwest half of FE Mon and then through the remainder of FE on Tuesday. Then FE gets a possible break mid to late next work week.

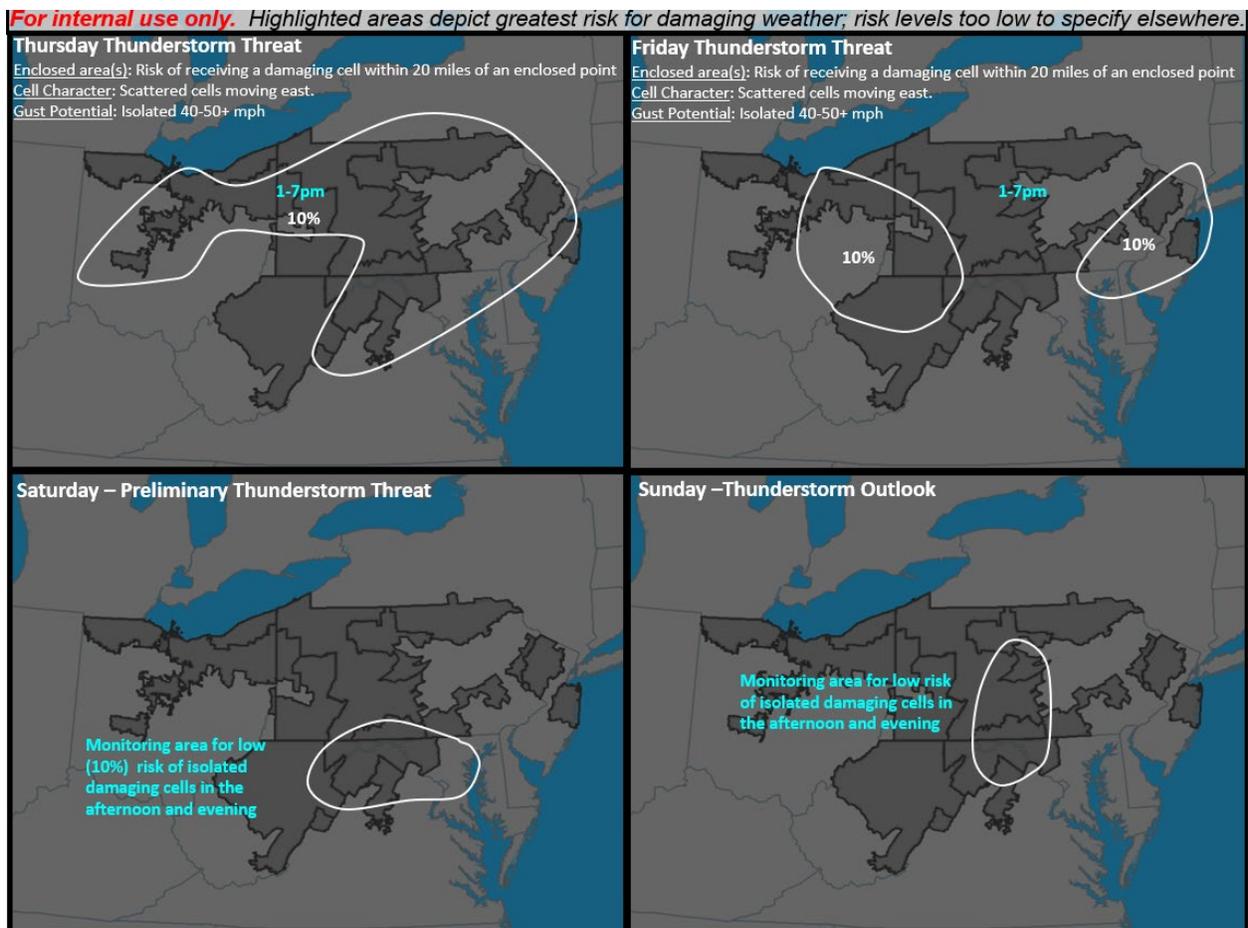


Thursday August 4, 2022 @ 0852

Changes:

1. **Thursday:** Added detail to outlined area. Confidence is slightly below normal with this panel given the risk levels are low and the cells will be scattered.
2. **Friday:** Changed areas for low-risk and added details of timing. Confidence is below normal for this panel for the same reasons mentioned for today's panel.
3. **Saturday:** Added risk level. Confidence is below normal for this panel as it is just outside the range of our better models and risk level is low.
4. **Sunday:** Added area being monitored for similar low-risk afternoon cells. Confidence is below normal for this panel for the same reasons mentioned for Sat.

The front mentioned in the previous alert for early next week looks to come on Tuesday instead of Monday and may linger in the southeast half of FE on Wednesday.



Friday August 5, 2022 @ 0924

Changes:

1. **Friday:** Expanded low-risk area. Confidence remains slightly below normal with this panel given the risk levels are low and there is nothing significant driving the scattered cells other than heating.
2. **Saturday:** Changed risk areas. Confidence is below normal for the same reasons mentioned for today’s panel.
3. **Sunday:** Added risk level to area being monitored for similar low-risk afternoon cells. Confidence is below normal for this panel for the same reasons mentioned for today.
4. **Monday:** Added larger risk area being monitored. Confidence is below for details because this panel is outside the range of our better models, but confidence is above normal activity will form in the afternoon.

For Tuesday, we are monitoring a similar risk as on Monday for the same area, although the area will likely extend into east FE, and we are also monitoring a residual risk Wednesday in the south/southwest half of FE.

