

# PEAK DAY ALERTS - SYSTEM REPORT

## Summer 2023



**Energy  
Artisans**

Powered by EFW Inc.

**enerconnex**  
AN SJI COMPANY

- Peak Red Day Call
- PJM Top 5 Day

## 2023 JUNE

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

## 2023 JULY

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## 2023 AUGUST

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## 2023 SEPTEMBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

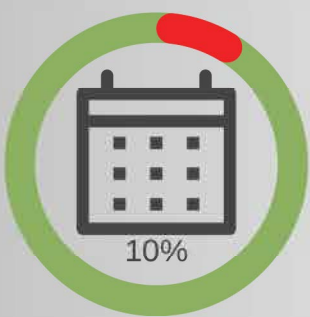
# The 2023 PJM System Peak Hours

## Overview

The 2023 PJM summer Peak Day Alert notifications are now complete. We made 9 calls for load curtailment out of the 87 eligible days. With the 9 calls that were made, 7 of the top 10 days were signaled as red days. Within those 9 calls, all 5 days contributing to capacity were covered. Below are the official PJM peak days:

Date	MW	HE
7/27/2023	146,799	18
9/5/2023	146,122	17
7/28/2023	144,408	18
9/6/2023	141,311	17
7/5/2023	137,762	18

The top five days that will determine your capacity tags all occurred in hours ending 17 and 18. Our approach to curtailment includes a four-hour window that guards against daily weather shifts, behind the meter energy, demand response, reporting time differences and other programs anticipating peaks. This also considers potential changes in peak hour due to PJM weather adjustments.

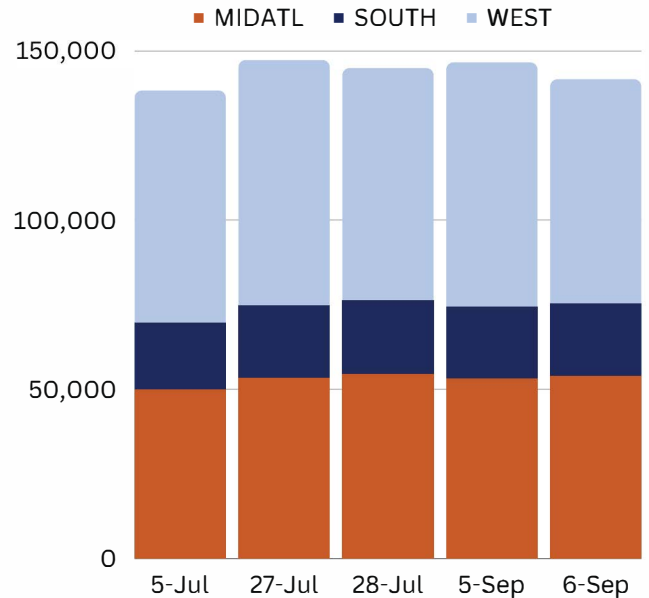


We made 9 system red day calls this year, staying under the summer target of 10-12 action days. This accounted for roughly 10% of eligible days.

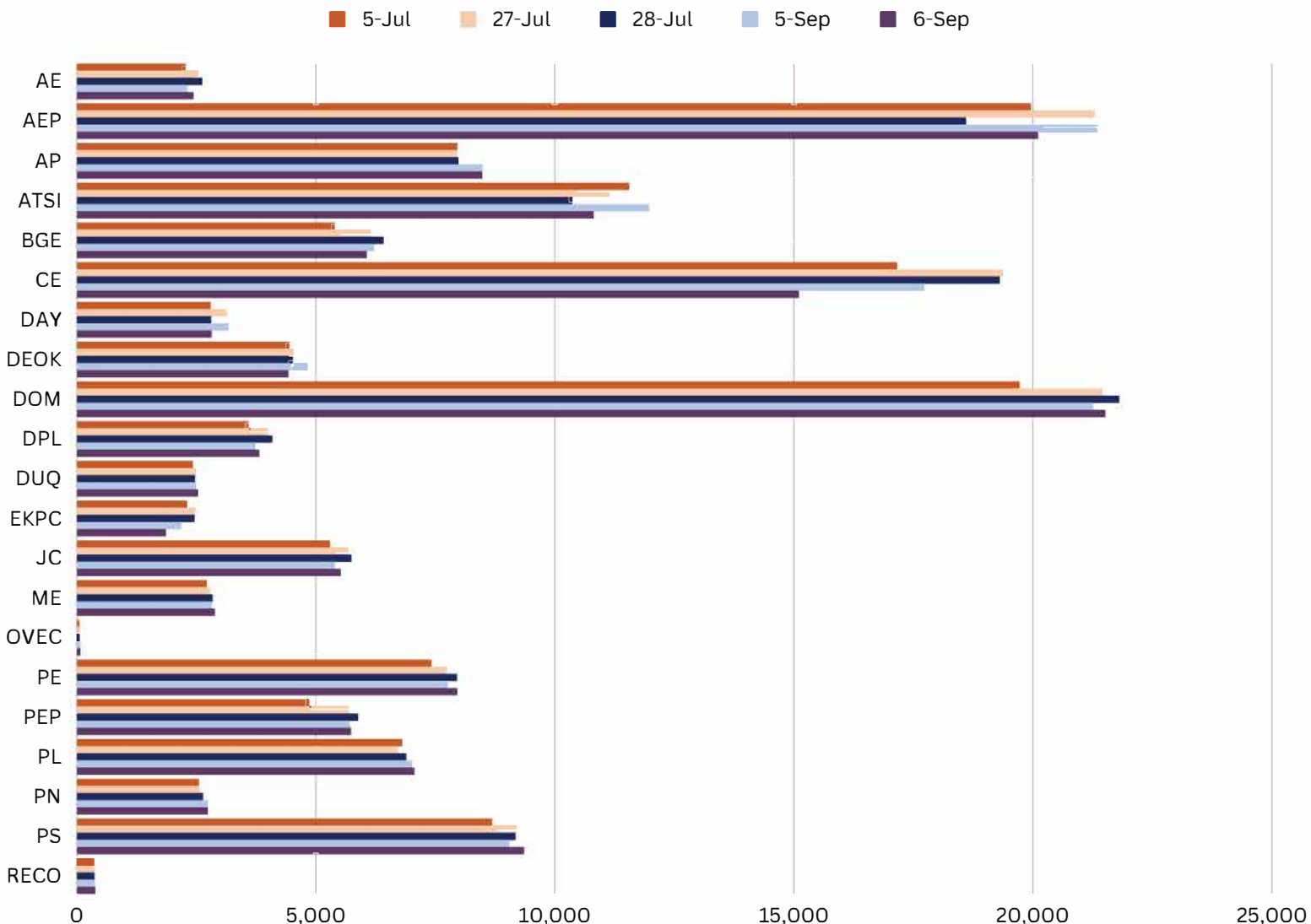
# Around the Grid

During peak hours the Mid-Atlantic region accounts for roughly 37% of the demand from the grid, the Southern region uses 15% and the Western region is responsible for the most consumption with 48%. The southern region is made up of only one zone (DOM), but it is the highest single zone contributor during peak hours. The Mid Atlantic is more evenly distributed by zone. The Western region is contributed to largely by its two largest zones (AEP and CE), which together make up over half of the Western regions peak power contributions.

## Region Activity



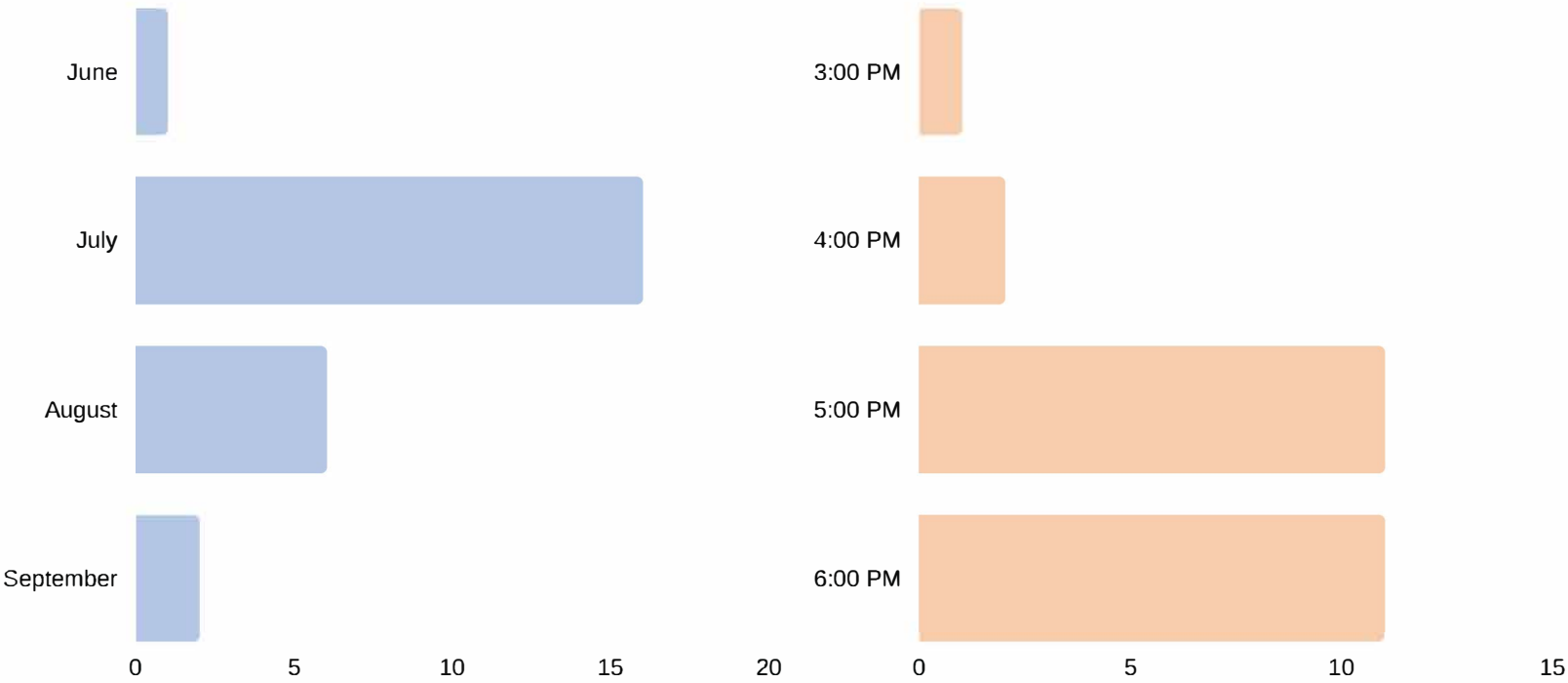
## Zone Activity



# Past Peaks

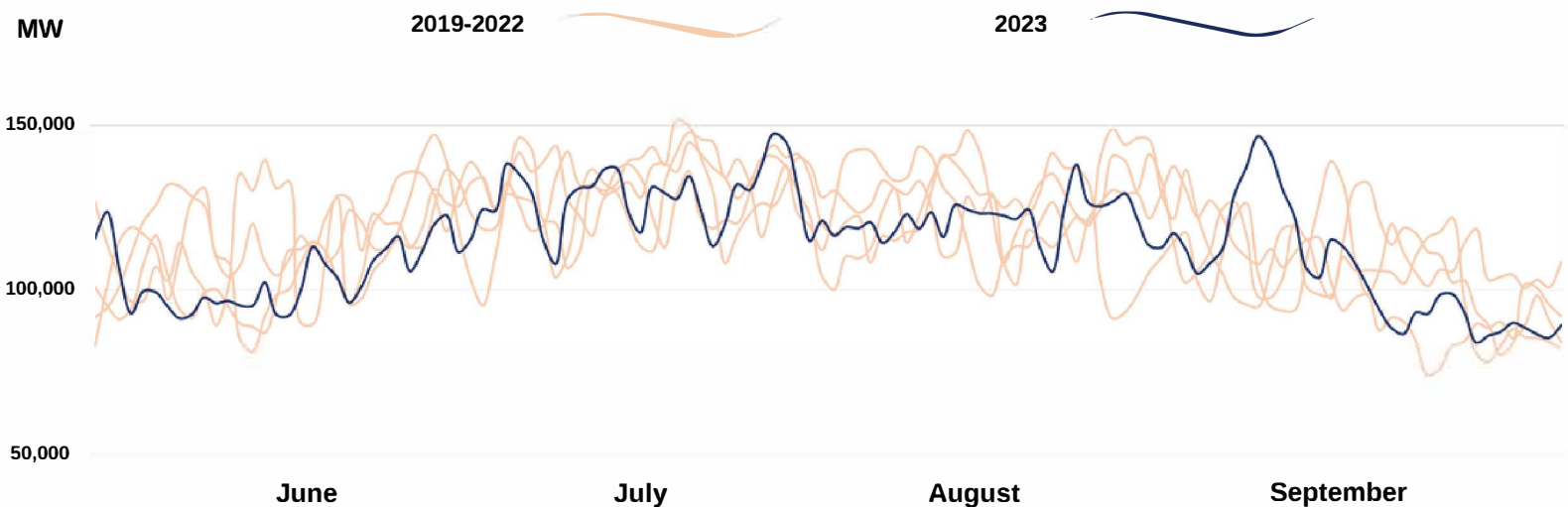
## 5 Year Month Occurrence

## 5 Year Hour Ending Occurrence



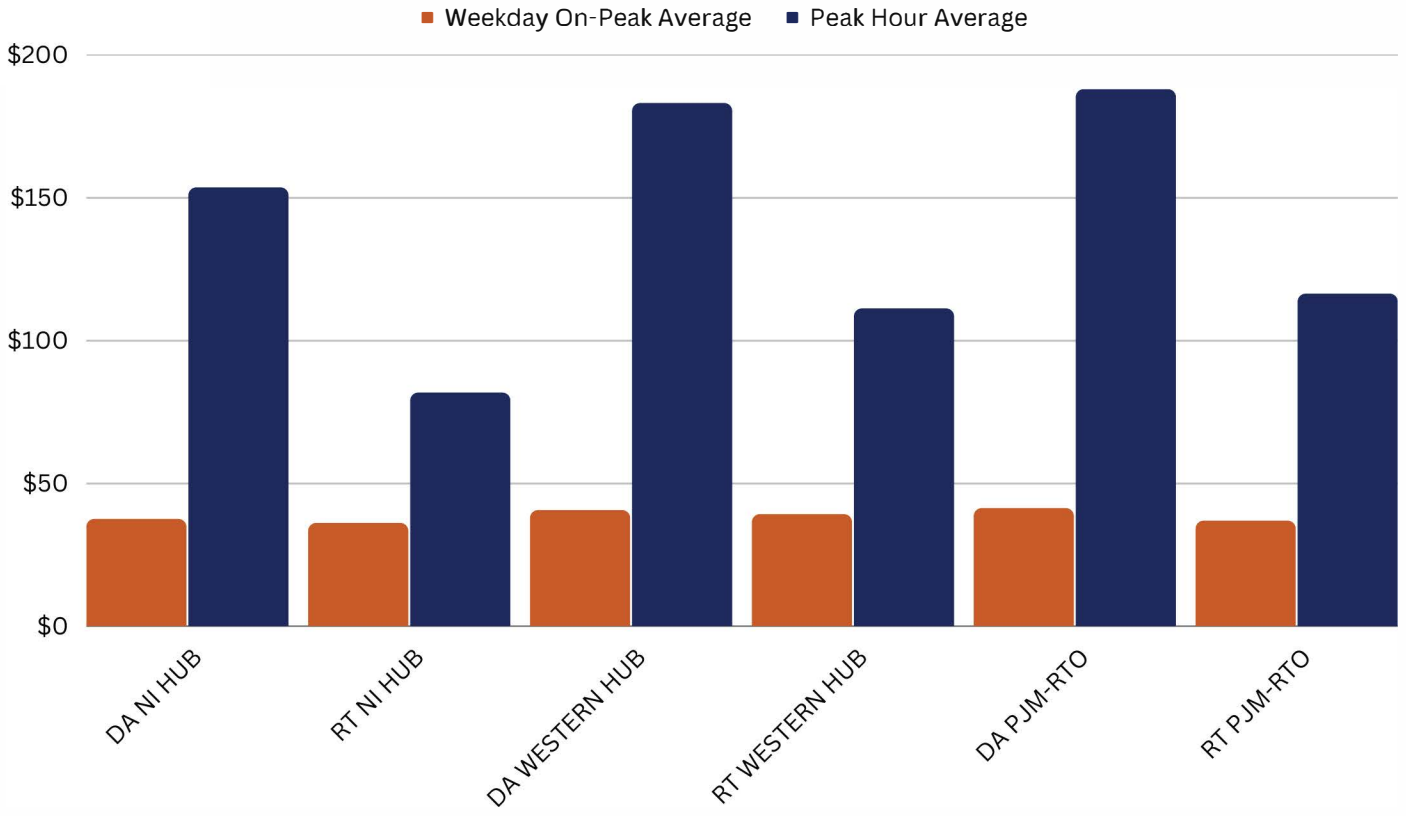
As seen in the row charts above the majority of peaks in the past 5 years have come in the middle of the summer during July and August. In addition to the common months the timing of the peaks is generally happening in either hour ending 5:00 PM (17:00) or 6:00 PM (18:00). This trend has remained with occasional outliers, one example being this summer containing two peaks in September. As seen below the trend in peak load goes down in September but the heat wave early in the month can be clearly seen on the line graph.

## 5 Year Summer Comparison

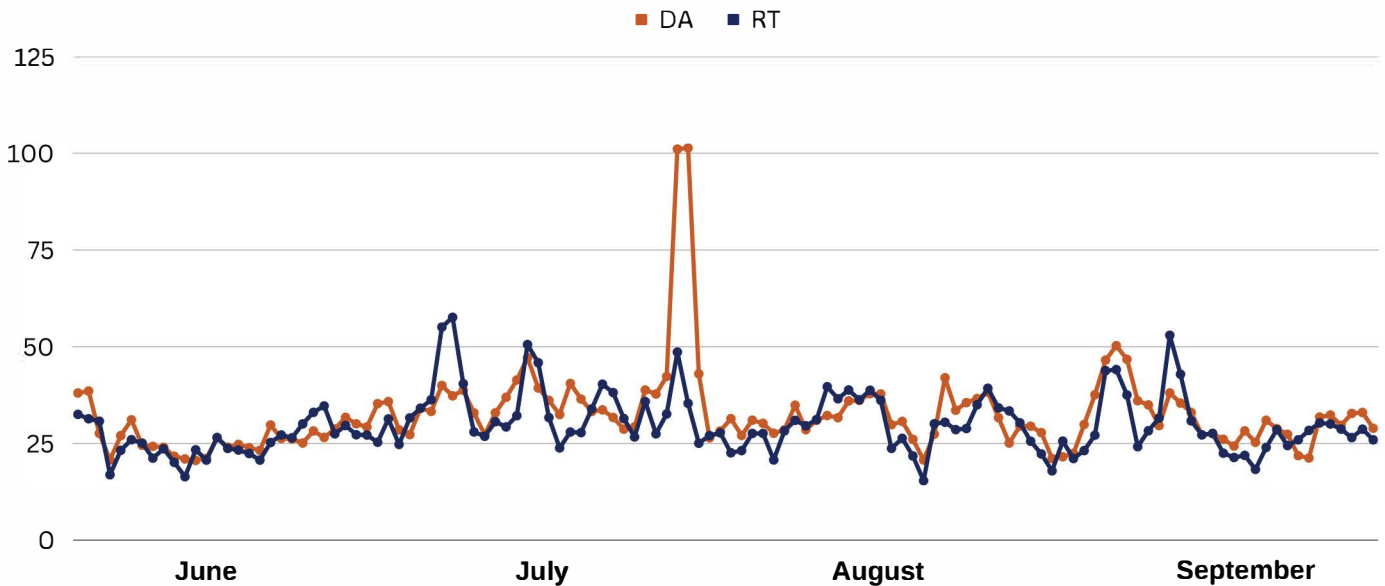


# LMP

## Summer Average

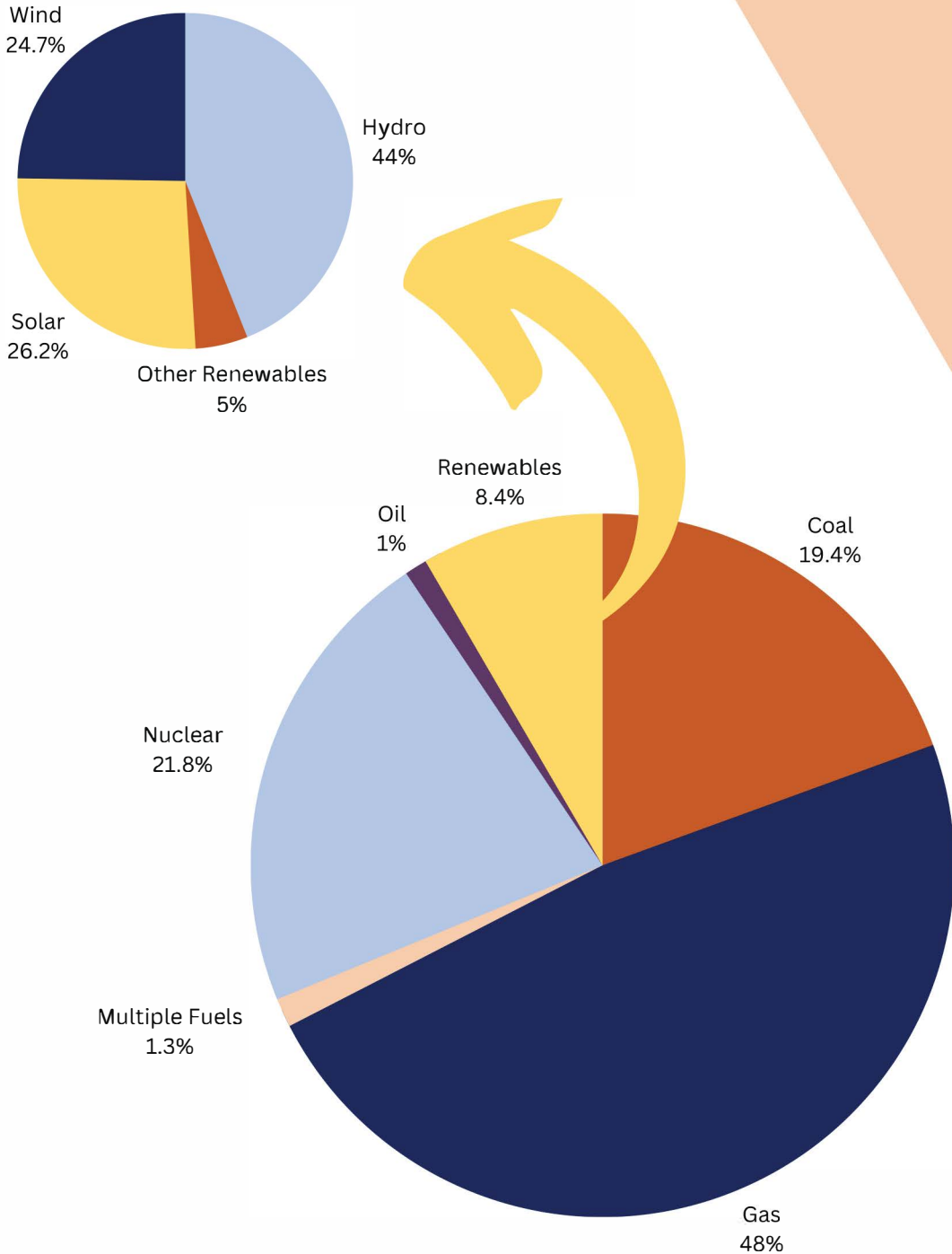


## Daily Average



LMP During peak hours this summer saw a rise in DA price of 550% when compared to the daily average of eligible days. The RT price had an increase of 375%. This increase can be reflective of the types of resources used for generation that need to be called on to regulate the grid during peak events.

# Generation During Peak Hours

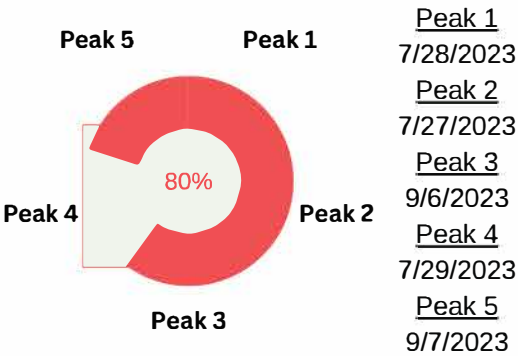


The generation mix above displays the average mix in PJM during the top 5 peak hours. Relying heavily on natural gas resources the grid used approximately 91.6% of non-renewable resources to operate during the time of day with the most consumption. This leaves 8.4% of the generation during peak events coming from renewable sources, with hydro contributing the most at about 44% of renewables.

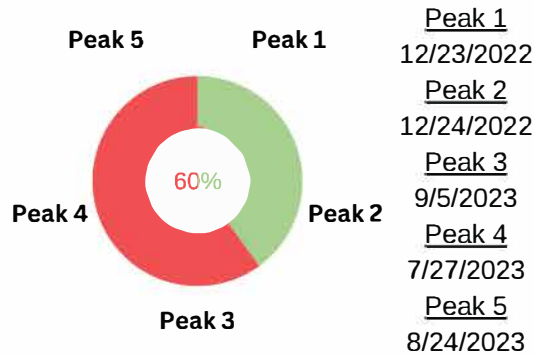
# Transmission Peaks

In addition to our system calls, Action Hours alerts you during potential local transmission peaks. Transmission peaks may or may not overlap with system peaks. Each of these zones have their own rules for how their respective peaks are used to determine capacity. However, listed below you will find each PJM zone and the top five unofficial peaks along with which and how many were covered by a system or local curtailment call.

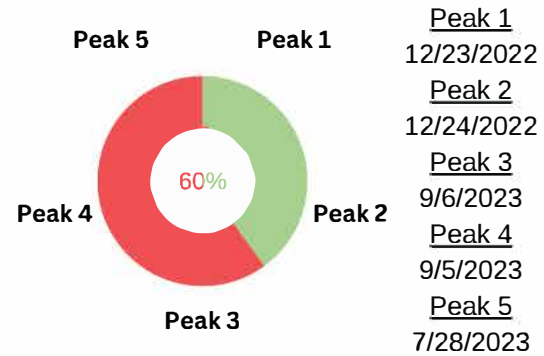
## AE



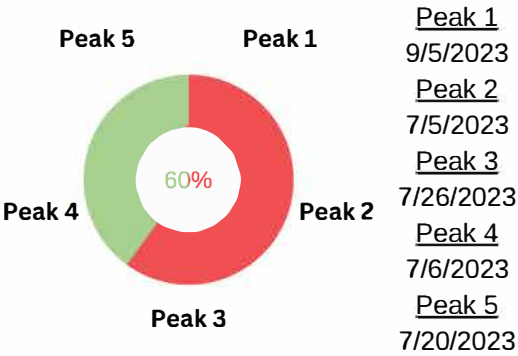
## AEP



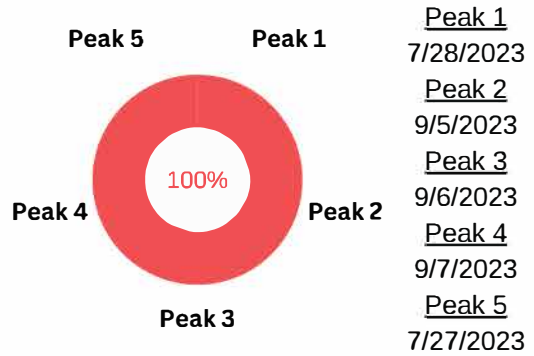
## AP



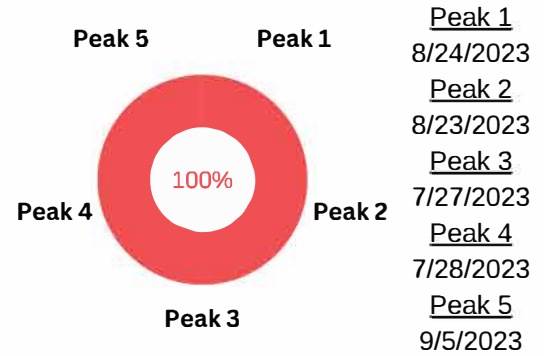
## ATSI



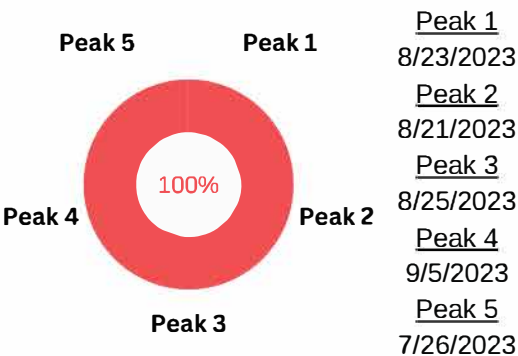
## BGE



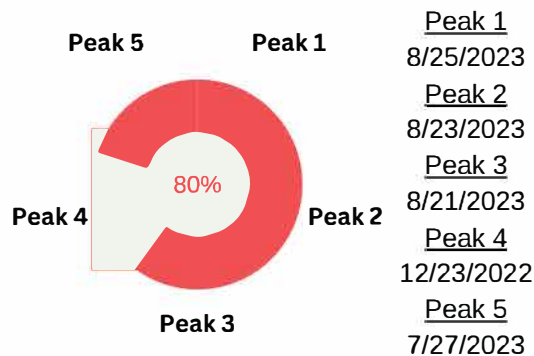
## COMED



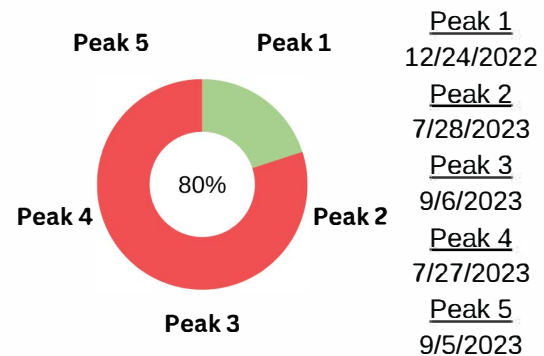
## DAYTON



## DEOK



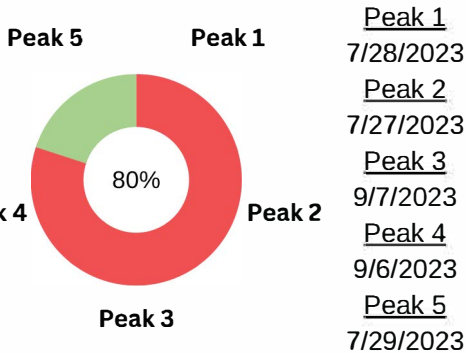
## DOM



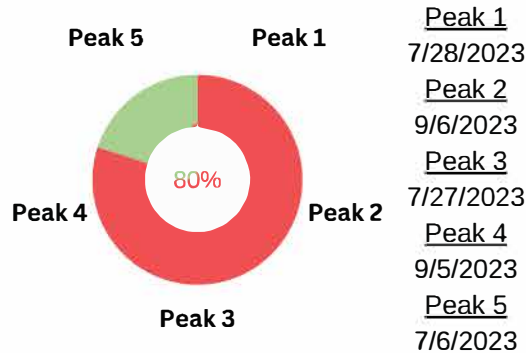


# Transmission Peaks (Continued)

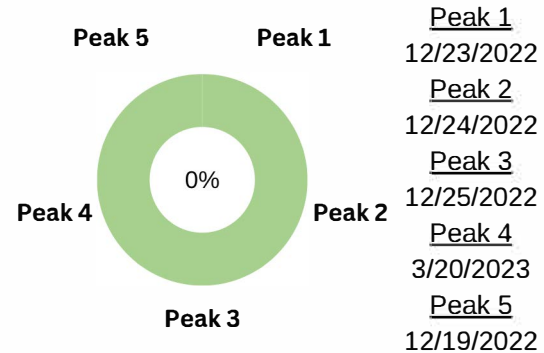
## DPL



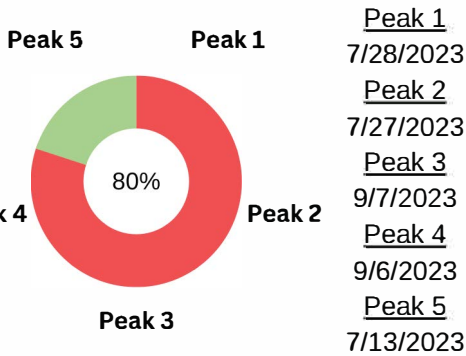
## DUQ



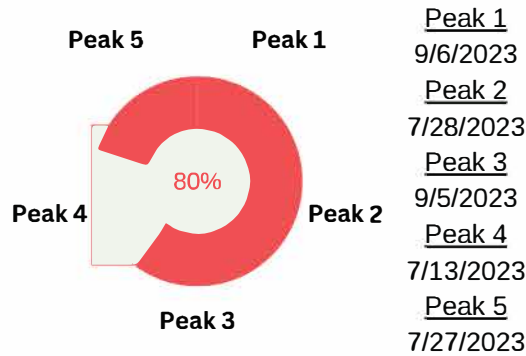
## EKPC



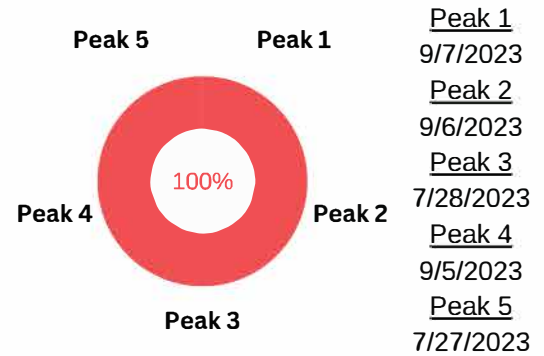
## JCPL



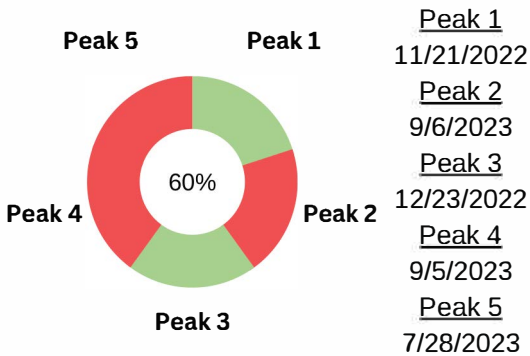
## METED



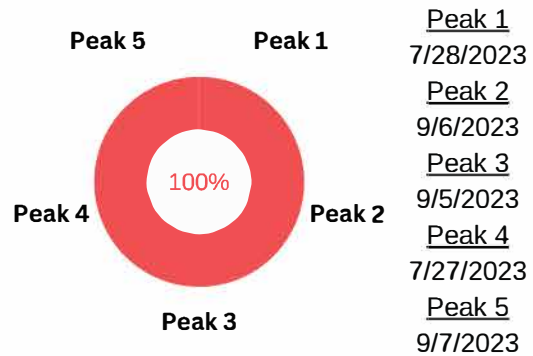
## PECO



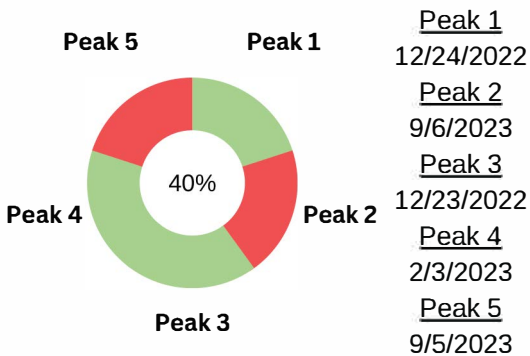
## PENEL



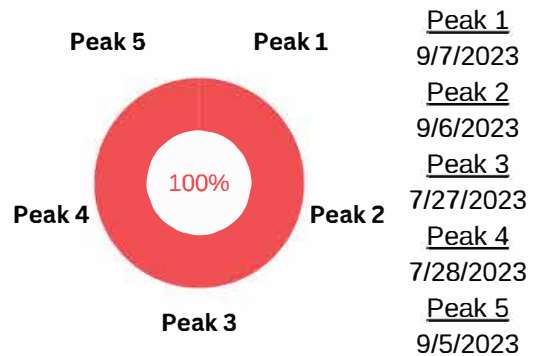
## PEPCO



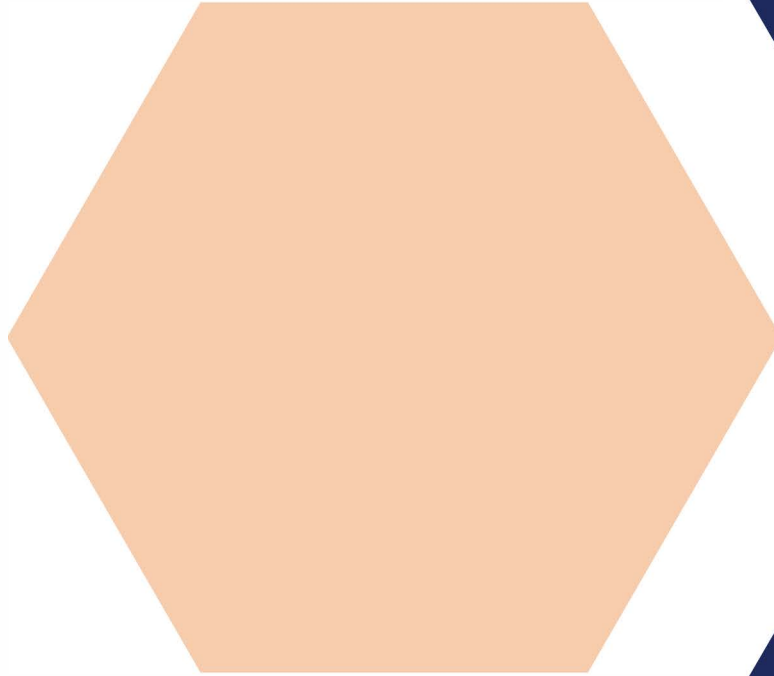
## PPL



## PSEG







**THANK YOU**

**Energy  
Artisans**

**enerconnex**  
AN SJI COMPANY