



Outage Coordination

Paul McGlynn

Operating Committee

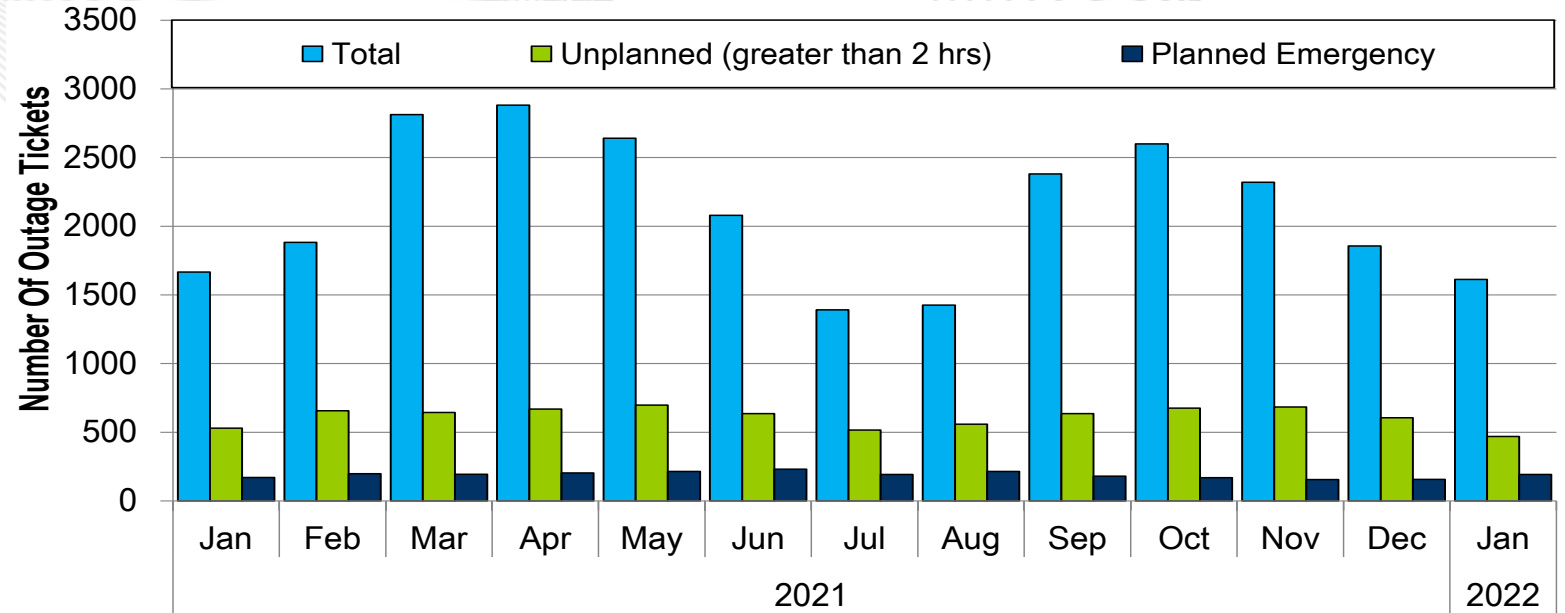
March 10, 2022

- Maintenance

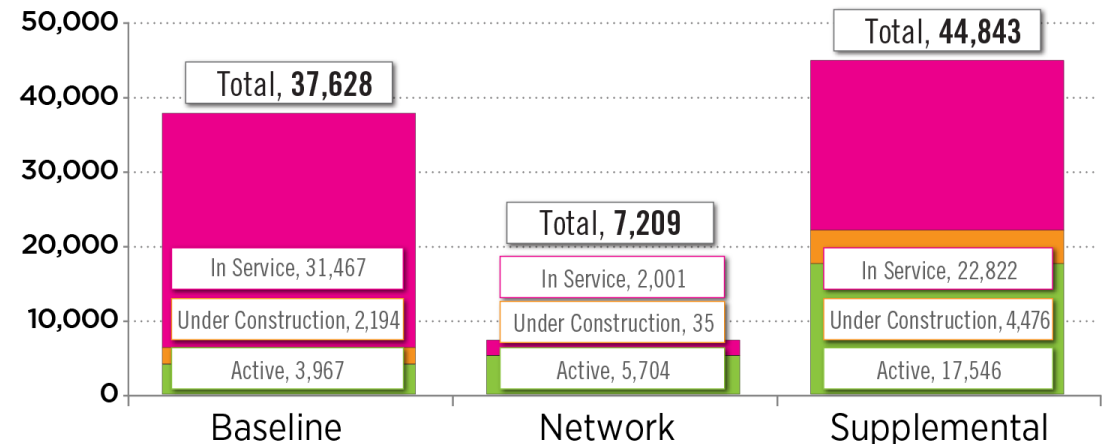
- Preventive
- Corrective

- RTEP

- Baseline Upgrades
- Network Upgrades
- Supplemental Projects



Estimated Cost, Inflation Adjusted (\$M)



M03 Transmission Outage Submission Requirements

Outage Duration	Request to be submitted
Outage > 30 Calendar Days	Before February 1 (for the following Planning Year June 1 – May 31) OR before the 1 st of the month six months prior to the starting month of the outage (whichever is more restrictive)
5 Calendar Days < Outage ≤ 30 Calendar Days	Before the 1 st of the month six months prior to the starting month of the outage
Outage ≤ 5 Calendar Days	Before the 1 st of the month prior to the starting month of the outage

- **“On Time”** outage - The outage will be approved, provided it does not jeopardize system reliability.
 - Planned transmission outages are given priority based on the date of submission.
- **“Late”** outage - The outage may be cancelled if it causes congestion requiring off-cost operations.
 - In order to avoid cancellation or rescheduling of a late outage, a Transmission Owner may elect to pay for off-cost operations associated with the outage
- **Peak Period Scheduling Guidelines :**
 - June 15 – September 15 (summer)
 - January 1 – February 28 (winter)
 - Transmission owners should avoid scheduling any outage in excess of 5 days that may result in increased risk to system reliability during peak periods.

- PJM does not schedule outages, Generation Owners do.
 - Can be a full plant outage or reduction in plant capability.
- PJM either approves, suggests alternate dates, or denies based on Generator Outage Reserve Margins
- Rules governing generation resource outage scheduling documented in [PJM Manual 10: Pre-Scheduling Operations](#)
- The PJM footprint is broken into zones, by Transmission Owner.
 - PJM evaluates generator outages for effect on reliability in each zone as well as PJM RTO overall

- Planned outages
 - Submitted at least 30 days prior to the outage and must be outside “peak” period (week 24 through week 36 of year)
 - Evaluated against expected reserve margin over requested period
 - Not subject to same recall provisions as a maintenance outage
- Maintenance outages
 - Submitted at least 3 days in advance and are generally limited to nine days in duration for maintenance activities between major “overhauls”
 - Evaluated against expected reserve margin over requested period
 - Can be recalled for reliability reasons with 72 hour notice
- Forced
 - Happen any time without advance warning or approval

- Are there things we could do to improve coordination, enhance transparency or make the process more efficient?
 - Post RTEP upgrade approval / project implementation
 - Coordinating generation outages with transmission outages
 - Transmission outage acceleration
 - Outages that exceed 5 days and cause more than \$500K in congestion revenue inadequacy – are they the right metrics?
 - Current process for planned and forced transmission outages. Should it be expanded to address de-rated facilities?
 - Tools and Transparency
 - OASIS transmission outage postings
 - Outage planning / coordination and Risk

- PJM believes there is merit to having further stakeholder dialogue around current outage planning / coordination processes and how they can be improved
- PJM is intending to bring a draft Problem Statement / Issue Charge to the April meeting to look into the opportunities reviewed on the previous slide

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Outage Coordination



Member Hotline

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**PROTECT THE
POWER GRID
THINK BEFORE
YOU CLICK!**

Be alert to
malicious
phishing emails.



Report suspicious email activity to PJM.
(610) 666-2244 / it_ops_ctr_shift@pjm.com

