Maintaining PJM Tool Availability

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2 Separate Approaches

Concurrent Sessions
• Limit the number of concurrent authenticated sessions (tokens)

Usage Rates
• Limit the request rates against the PJM tools

www.pjm.com
Concurrent Sessions - Implementation Options

1. Deny access
   - 26th attempt is unsuccessful

2. Invalidate next expiring session
   - Session with longest inactivity time is destroyed on 26th attempt

3. Invalidate oldest session
   - 1st created session is destroyed on 26th attempt
• March
  – Production implementation
Usage Rates - Process

- Start monitoring
- Throttle data transfer*
- Generate daily report
- Notify client managers
- Contact affected users**

* Whenever a user goes over the maximum request rate, the response will be an http-503 error.
** We will contact affected users when we are able to identify them.
• Monitoring will be for a request rate of 10 requests/ half-second
• Data transfers throttled for excessive requests
• The impact of throttling will be a response code of HTTP-503 instead of the expected data
• Data transfer will resume once the throttling period (half-second) is completed.
• December
  – December 19\textsuperscript{th} – Production implementation
• If you have questions, please call your client manager and provide the exact error you’re seeing – it will help determine if you’re being throttled by the system or not.