



# Browserless/API Two Factor Authentication

June 27, 2022

Product - Action Required	Dates	Who May Be Affected
<p><b>Browserless/API Two Factor Authentication (Mandatory)</b></p> <ul style="list-style-type: none"> <li>• Obtain valid PKI certificates from approved Certificate Authorities</li> <li>• Rewrite Browserless/API authentication code OR use PJM provided command line interface(CLI)</li> <li>• Make sure 2-Way SSL Connections, Client Certificates &amp; Connection Renegotiation are enabled at Firewall &amp; Security devices for outgoing PJM SSO traffic</li> <li>• <b>Opt in now</b></li> </ul>	<p><b>Production: Q2-Q3</b></p>	<p><b>Browserless users of</b></p> <ul style="list-style-type: none"> <li>• Markets Gateway</li> <li>• InSchedule</li> <li>• Power Meter</li> <li>• FTR Center</li> <li>• Capacity Exchange</li> <li>• DR Hub</li> <li>• MSRS</li> </ul>



## Change impacts only Browserless transfers

Web Browser  
(Today)

- **Source:** Web browsers
- **Authentication Mechanism:** Password + Soft Token(One Time Password)

Browserless  
(Upcoming)

- **Source:** Machine to Machine
  - Interactions with PJM web service Application Programming Interfaces (APIs) via custom code or PJM Command Line Interface (CLI)
- **Authentication Mechanism:** Password + Certificate using Public Key Infrastructure (PKI)

InSchedule

DR Hub

MSRS

Power  
Meter

FTR  
Center

Market  
Gateway

Capacity  
Exchange



# 2022 Dates for Mandatory PKI/Two-Factor cutover

Product	Train	Production
InSchedule	January 6 at 4 p.m. (complete)	July 13 22 at 4 p.m.
Power Meter	January 6 at 4 p.m. (complete)	July 13 at 4 p.m.
FTR Center	January 13 at 4 p.m. (complete)	June 28 at 4 p.m.
DR Hub	February 2 at 4 p.m. (complete)	September TBD
Capacity Exchange	January 13 at 4 p.m. (complete)	June 28 at 4 p.m.
MSRS	January 20 at 4 p.m. (complete)	July 20 at 4 p.m.
Markets Gateway	January 18 at 4 p.m. (complete)	August TBD

- PKI Certificates and PKI/Two-Factor Browserless/API [FAQs](#)
- PKI Authentication [Guide](#)
- Exporting public [keys](#)

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**Browserless/API Two Factor Authentication**



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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](mailto:it_ops_ctr_shift@pjm.com)

