



Browserless/API 2 Factor Authentication

As of January 13, 2022

Product - Action Required	Dates	Who May Be Affected
<p>Browserless/API 2 Factor Authentication (Mandatory)</p> <ul style="list-style-type: none"> • Obtain valid PKI certificates from approved Certificate Authorities • Rewrite Browserless/API authentication code OR use PJM provided command line interface(CLI) • Make sure 2-Way SSL Connections, Client Certificates & Connection Renegotiation are enabled at Firewall & Security devices for outgoing PJM SSO traffic • Opt in to PKI Opt-in ahead of time 	<ul style="list-style-type: none"> • Train: January 2022 • Production: February – March 2022 	<p>Browserless users of</p> <ul style="list-style-type: none"> • Markets Gateway • InSchedule • Power Meter • FTR Center • Capacity Exchange • DR Hub • MSRS





Legend

- Start Date
- ◆ End Date

Change impacts only Browserless transfers

Web
Browser

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

Browserless

- **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 cutover

Product	Train	Production
InSchedule	January 6 at 4 p.m.	February 23 at 4 p.m.
Power Meter	January 6 at 4 p.m.	February 23 at 4 p.m.
FTR Center	January 13 at 4 p.m.	February 23 at 4 p.m.
Capacity Exchange	January 13 at 4 p.m.	March 16 at 4 p.m.
DR Hub	January 20 at 4 p.m.	March 2 at 4 p.m.
Markets Gateway	January 18 at 4 p.m.	March 30 at 4 p.m.
MSRS	January 20 at 4 p.m.	March 23 at 4 p.m.

- FAQs for PKI Certificates and Two-Step Verification Browserless/API: <https://www.pjm.com/-/media/etools/security/pki-faqs.ashx?la=en>
- PKI-Based Authentication Guide: <https://www.pjm.com/-/media/etools/security/pki-authentication-guide.ashx?la=en>
- Exporting public keys from pfx/p12 : <https://www.pjm.com/-/media/etools/security/pki-export-public-keys.ashx?la=en>

Facilitator:

Foluso Afelumo, Foluso.Afelumo@pjm.com

Secretary:

Risa Holland, Risa.Holland@pjm.com

SME/Presenter:

Sunil Kumar Rachakonda

SunilKumar.Rachakonda@pjm.com

Tool Security Changes



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com