

# **Emergency Procedures Roadmap**

As of December 15, 2020





• Added dates for the upcoming releases



# **Impact Details**

<b>Product - Action Required</b>	Deadline	Who May Be Affected
Enhancements released to Train. No action is necessary	<b>December 22,</b> 2020	Up to 10 minute outage to UI for users.
Enhancements released to Production. No action is necessary	January 20, 2021	Up to 30 minute outage to UI for users.
	10	

<b>A</b> pjn	n®				20	)20-20	021 R	loadm	nap			
				2021								
	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
2020 Enhancements								Train: I	Dec 22 🔶	🔶 Pro	duction: Jan	20







### **User Profile Enhancements**

- Allows for a more visual selection of messages
- Users can create multiple profiles
- Profile list allows users to easily edit a profile or add a new one
  - Users select a Profile that drives their dashboard view
- Profile selection also available on dashboard
- PJM Default profile sends emails for and displays all postings issued within the RTO
- Current profile selections will be migrated as initial user profiles
- Removal of unused Government Agency functionality



## **Profile List**

- Create new profiles to add custom messaging profiles
- Dashboard Default indicates which profile is selected for view upon login
- Profile Enabled indicates which profiles are set up to receive email notifications and are available for dashboard filtering

My Tools 🔻		PJM (USER)   Profiles   Sign Out   Contact   Help
Apjm Emergency Procedures		
Profiles	Profile List	
	Procedures Dashboard View, as well as allow you to En board and receives all email notifications.	able your custom Email profiles.
Profiles (4)		Create New Profile

FIOITIES	(ד)					
Dashboard	Profile	Profile Name 😝	Description \varTheta			Actions
Default				Enabled Email Addresses 😁	Total Email Addresses 😝	ACTIONS
۲	<b>√</b>	Profile A	State of Virginia	2	3	
0	<ul><li>✓</li></ul>	Profile B	State of Illinois	1	1	
0		Profile C	Personal profile	1	1	
0		PJM Default Profile	The PJM Default Profile displays all postings (including PJM Drills) for all Message Types and all Regions.	N/A	N/A	
						Save Changes

### **Profile Settings**



- Within each profile, users can select which Message Types and Regions they'd like to receive emails for
- Special Notice is selected by default for all user profiles

Profile Settings						
Profile name *		Description				
Profile A						
Profile options:						
Profile Enabled	l	L				
Include PJM Drills						
Regions" (0 of 26 total)						
All						
Message types *						
٩		6		٩		
Available message types (38)		Sele	cted message types (	0		
Emergency Energy Request		Special Notice				
Emergency Load Mgmt Reduction Action	Include PAI					
Emergency Voluntary Energy Only Demand Response				Updated fro	m	
Gas Pipeline Contingencies						
Geomagnetic Disturbance Action			m	ulti-select d	rop	
Geomagnetic Disturbance Warning				down		
HLV Action	**					
HLV Warning	•					
High System Voltage						
Hot Weather Alert						
	Add					
	Add		Enabled	Receive Full Text	Status	
New email address	Add		Enabled	Receive Full Text	Status Confirmed	
	Add		in the second			

## **Region Hierarchy**



- New Region drop down organized by region hierarchy
- Users will receive all messages that apply for the specific region(s) selected
  - E.g. If you only select DUQ, you will still get messages issued to Western and PJM RTO

Select all Select	by state	
PJM-RTO		
Mid-Atlantic	Western	Southern
AE	AEP	DOW
BGE	COMED	
DPL	DAY	
FE-JC	DEOK	
FE-ME	DUQ	
FE-PN	EKPC	
PECO	FE-AP	
PEPCO	FE-ATSI	
SMECO	CPP	
PSEG	ІТСІ	
PPL	OVEC	
UGI		
RECO		



## Performance Assessment Interval (PAI) Enhancements

- Updates made to ensure PAI events are more easily understood
  - Dashboard banner will also include PAI start time

Tools <b>V</b>	Stage	AD-EMERPROC-I	PJMReadOnly-STG			s	ession Expiration: 05:58:04 PJM   Internal (BEACHM)   I	Profile   Sign Out (	Contact   H
<b>e</b> pji	m   Er	mergency Pr	ocedures Interna	l - Stage					
					P	Ostings Dashboard bar	nner updated Performance Assessment Interv See PAI Active Guidance		
Postings	_		ctive To * 10/19/2020		tive Guidance Flor e Types  PJM Drill		PAI Only Reset		XML
					09.2020 15:05:35 Filt Records Per Page: 15	v < < (1 of 3) > x			
History	Msg ID ¢	Priority \$	Message Type 🕈	Effective Start Time •	Regions 0		Emergency Message ¢	Effective End Time \$	Actions
Θ	104154	Action	Pre-Emergency Load Mgmt Reduction Action	10.19.2020 16:52	AEP BGE PEPCO		See PAI Active Guidance tab part Reduction Action has been issued. Load reduction start icking on the hyperlink(s) in the Regions column. Load e until released by PJM. Reductions are mandatory based on Ps should review DR Hub for specific registration details. Lead ns . Product(s) dispatched: test		Q
0	104153	Action	Curtailment of Non-	10.19.2020 16:45	COMED	N/III A	See PAI Active Guidance tab		Q



- Combination of PAI Guidance Matrix and Drill/PAI Active Guidance
- Active Guidance will be displayed by default.
- Drill Active Guidance will only be displayed if there is an active Drill PAI message.
  - Drills do not occur during when a real-time PAI is in effect
- Guidance History is a newly available report.

			PAI Guidance				
Postings Message Definitions	PAI Guidance	Flowgates					
PAI Active Guidance As of 6.4.2019 13:50  Auto-refresh			View:	Active Guidance	Drill: Active Guidance	Guidance History	Guidance Matrix
ww.pjm.com   Public			10				PJM©2(



- Collapsible lists of guidance, ordered by severity
- Users can disable auto-refresh

Al Active Guids s of 6.4.2019 13:50					View:	Active Guidance	Guidance History	Guidance Matrix
<ul> <li>Level 3 Guida</li> </ul>		1						
Zone 💿	.,	able Time 😝			Message Type  😌		Msg ID ⊕	Issued Time 😝
AMPT	2	019-06-04 13:45 L	.oad Shed Directive				104154	2019-06-04 13:4
PEPCO	20		2019-06-04 13:45 Load Shed Directive				104150	2019-06-04 13:4
JGI	2	019-06-04 13:47 L	oad Shed Directive.				104158	2019-06-04 13:4
Online Generator		5			lispatch instructions, if provided. Online generator asepoint will not be eligible for Bonus Performance		2	5
Offline Generator				at are available to help r et the PJM dispatch inst	nitigate the emergency. uctions may be assessed a Non-Performance Charg	ge.		
Pre-Emergency Lo Emergency Load <i>N</i>			, 5		at are available to help mitigate the emergency. 9JM dispatch instructions may be assessed a Non-Pe	erformance Charge.		
Level 2 Guida	nce (6)							

**PAI Guidance** 

#### No Active Guidance (3)

There is no active guidance for the following transmission zones.

- DUQ EKPC
- PSEG

# PAI Active Guidance



### **Guidance History**

- Users can search previously issued PAI messages
- Drills are highlighted in pink
  - Not in default view

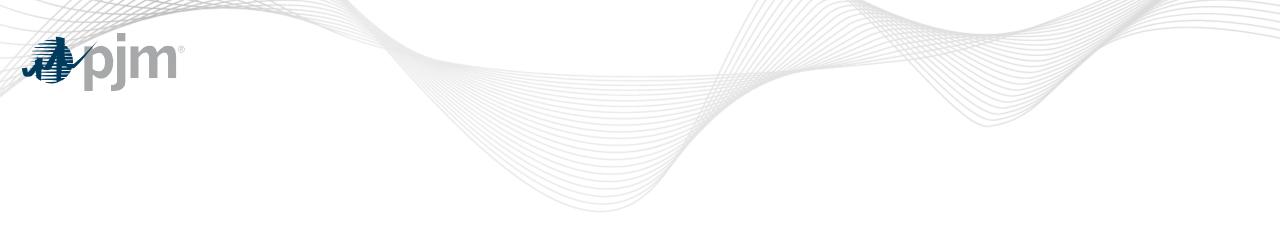
				r	Al Guidance				
Postings	Message Definitions	PAI Guidance	Regions	Emergency Bid Form					
Guidance H		ective To *	PJM Drill	Include 💌		View:	Active Guidance	Guidance History	Guidance Matrix
Zone	e 😝 Category	/ ⊖ Applicable	e Time 😝	End Time 🛛 😝	Message Type	0		Msg ID 😁	Issued Time 😝
AEP	Level 2	2.13.	2020 07:30	2.13.2020 12:30	Deploy All Resources Action			104154	2.13.2020 07:0
AEP	Level 3	2.13.	2020 09:30	2.13.2020 11:30	Load Shed Directive			104150	2.13.2020 09:1
DEOK	Level 3	2.13.	2020 09:30	2.13.2020 11:15	Load Shed Directive			104158	2.13.2020 09:1
DAY	Level 3	2.13.	2020 09:32	2.13.2020 12:49	Load Shed Directive			104157	2.13.2020 09:1
AEP	Level 1	2.13.	2020 10:45	2.13.2020 13:15	Primary Reserve Warning			104152	2.13.2020 10:4
DOM	Level 1	2.13.	2020 11:55	2.13.2020 14:05	Maximum Generation Emergency Action			104160	2.13.2020 11:5
DPL	Level 1	2.13.	2020 11:57	2.13.2020 14:16	Maximum Generation Emergency Action			104160	2.13.2020 11:5
DPL	Level 1	2.1.	2020 11:57	2.3.2020 14:16	Maximum Generation Emergency Action			104160	2.1.2020 11:5
				Records Per Pag	e: 15 🗸 << < (1 of 1) >	>>			

PAI Guidance



### **Enhancements Summary**

- User Profile Enhancements
  - Ability for users to set up profiles and manage preferences for their dashboard view, summary view of profile selections and ability to manage email notifications per profile
- Zone/Region Hierarchy
  - Functionality to view and apply the hierarchy between EP regions
- PAI Enhancements
  - Enhancements to the PAI functionality and reports resulting from October 2019 PAI events feedback.
- Removal of unused Government Agency functionality



# **Product Details**



**Emergency Procedures Background** 

The Emergency Procedures tool informs PJM members, PJM personnel and other interested parties about important and/or emergency events as they occur within the PJM Regional Transmission Organization (RTO). Examples of emergency events include hot weather alerts, transmission loading relief (TLR) procedures and minimum generation events.

### **Key Product Features**

- Allows PJM dispatchers and reliability coordinators to post emergency procedures messages for all to see.
- User access, which permits email notification setup, to Emergency Procedures is available in Account Manager.
  - Guest access is also available via the Guest Sign In.