



eDART Forum

November 21, 2022

- eDART Refresh Update
- December 2022 Enhancements
- Future Enhancements
- Question and Answer Resolution

eDART Advance Winter 2022 Model Build scheduled for today,
November 21

- Email notifications will be sent when completed
- [GO and TO Users] Download updated equipment lists in eDART
- [TO R/W Users] Transmission Tickets can be created or updated with future equipment
- Equipment List/Complete Descriptions posting:
<https://edart.pjm.com/reports/equiplist.csv> will be updated on
Model Build Date: December 6



eDART Refresh Update

Retirement of eDART Browserless in Production

- filetransfer.jar was replaced with PJM CLI
- Retirement date ETA Q3/2023
- eDART team available to help as needed
- See [Browserless User Guide](#) for more information

With the eDART refresh, management of eDART user accounts will be migrated to Account Manager.

- Implementation Timeline: Beginning Q1/2023
- Account Manager will be used for all new eDART account requests
- Continue efforts to:
 - Clean up of dormant and invalid accounts
 - Identify Account Manager Usernames to match to existing eDART users
 - Prepare for development and steps to migrate eDART user accounts
- See [Migration to Account Manager FAQ](#) on [eDART Forum](#) home page

With the eDART user migration to Account Manager, PKI certificates will be required for all browserless communications.

- Implementation Timeline: Beginning Q1/2023
- Actions Required:
 - 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.

- For more information, see the following in the [PJM Security](#) home page:
 - PKI Certificates and PKI/Two Factor Browserless/API [FAQs](#) (PDF)
 - PKI Authentication [Guide](#) (PDF)
 - Exporting Public Keys [Guide](#) (PDF)

Related information will be sent to the eDART XML Forum distribution list.



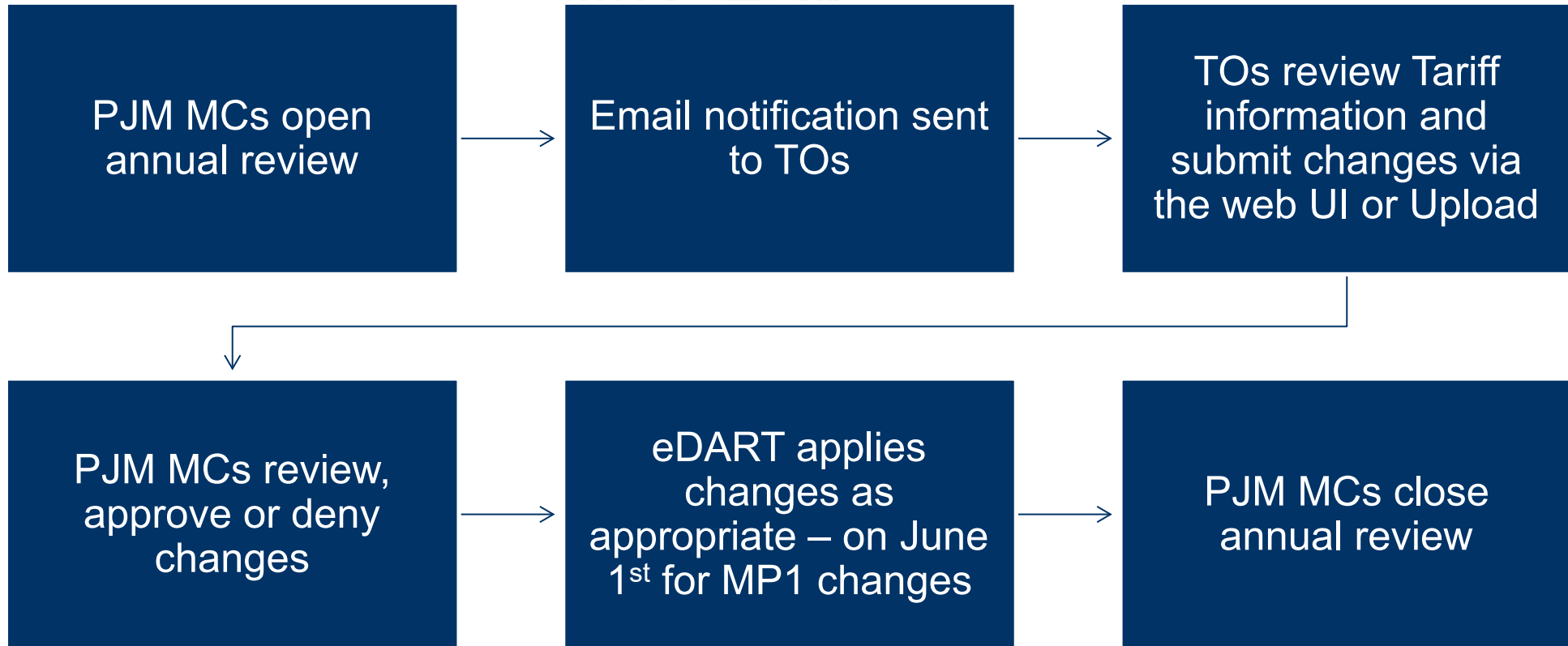
December 2022 Enhancements

Production release of December 2022 enhancements scheduled for Wednesday-Thursday, December 14-15, 2022

- eDART unavailability will be announced at least three business days prior
- Train release scheduled for Thursday, December 1, 2022

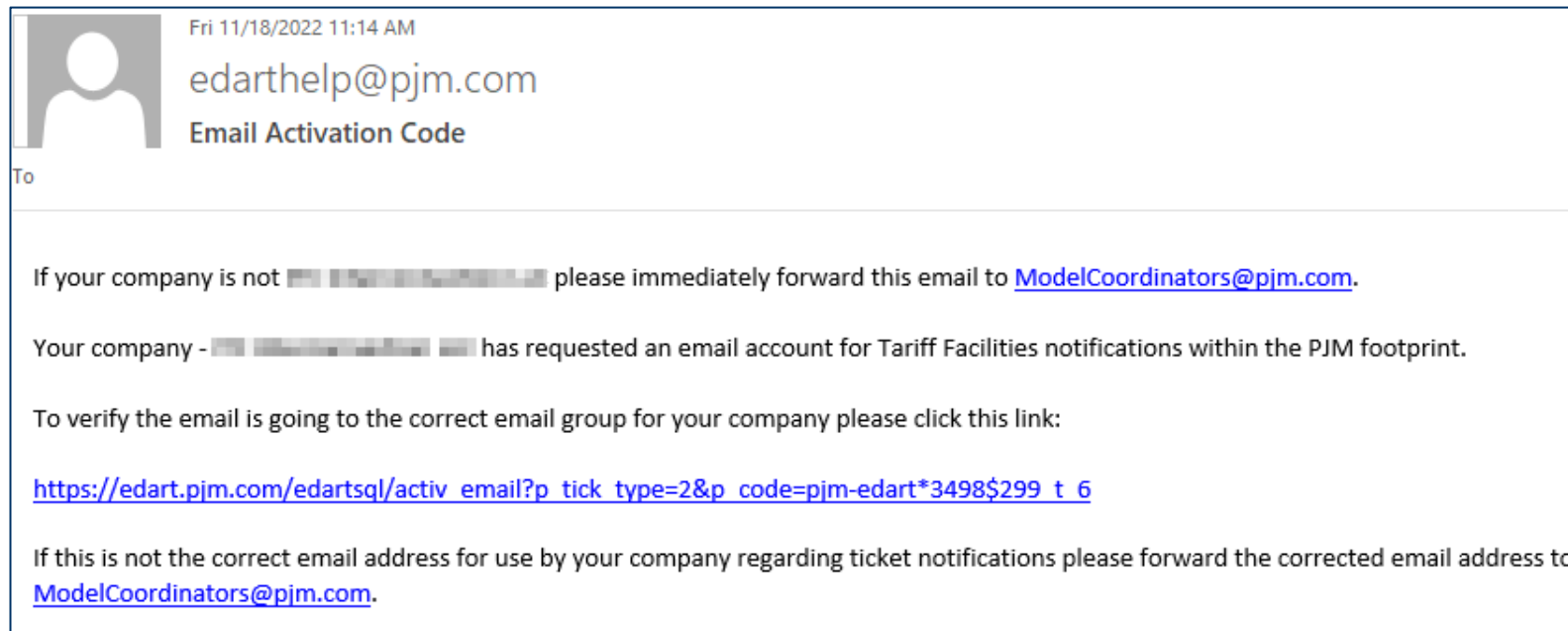
Request from PJM Model Coordinators (MCs) to allow bulk updates of tariff data in eDART usually done as part of the annual updates.

- Email notification will be sent out when review is started.
 - Will need group emails per TO
- MP1 changes will be made as part of the annual update period. Only non-MP1 changes can be requested outside that.
- Users can download a pre-populated CSV file, make edits and upload it to eDART.



PJM MCs will coordinate with TOs to set up Tariff Review email notifications.

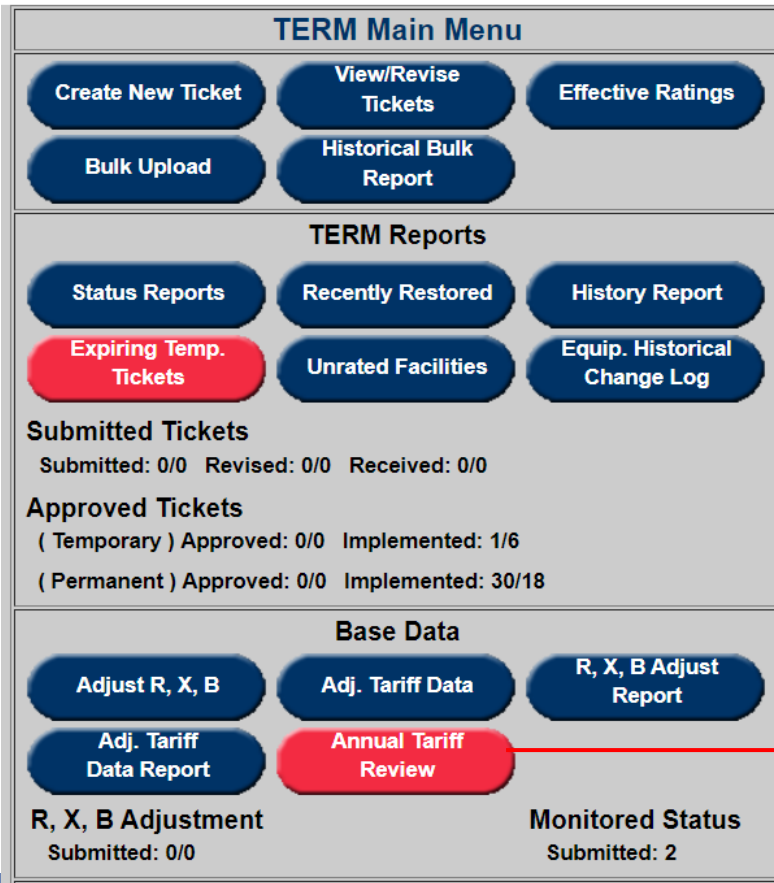
- Emails will be sent to verify initial set up and any subsequent edits.



- Emails will be sent when the annual review is open.
 - CSV file included that can be edited and uploaded to eDART.



- Annual Tariff Review button added to Base Data section of TERM Main Menu



TERM Main Menu

Create New Ticket View/Revise Tickets Effective Ratings
Bulk Upload Historical Bulk Report

TERM Reports

Status Reports Recently Restored History Report
Expiring Temp. Tickets Unrated Facilities Equip. Historical Change Log

Submitted Tickets
Submitted: 0/0 Revised: 0/0 Received: 0/0

Approved Tickets
(Temporary) Approved: 0/0 Implemented: 1/6
(Permanent) Approved: 0/0 Implemented: 30/18

Base Data

Adjust R, X, B Adj. Tariff Data R, X, B Adjust Report
Adj. Tariff Data Report **Annual Tariff Review**

R, X, B Adjustment **Monitored Status**
Submitted: 0/0 Submitted: 2

Annual Tariff Review and Current Review buttons will be red when the review is open and user has required actions.



Annual Tariff Review

Current Review Review Report Main Menu



Annual Tariff Review

Number of rows displayed is limited
Use filters to display desired Tariff records

Annual Tariff Review

Company: [REDACTED] Review ID: 1 Active: Yes Review Start: 11/18/2022 Review End: 11/19/2022 Submit to PJM: Not Ready

PJM EMS Station Name:

Tariff Count	Confirmed Count	Adj. Count	Remaining Count	Error Count
10	0	0	10	0

Facility Name:

Include	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Tariff ID	Facility Name	Tariff Type	Equipment Type	Station	Voltage	Equipment Name	OATT Status	Adj. OATT Status	Reportable	Adj. Reportable	PJM Monitored Status	Adj. PJM Monitored Status	BES	Adj. BES	Confirm	Adj. Ticket
127762	[REDACTED]	Voltage Combination		[REDACTED]	16 KV		Yes	Yes	No	No	Not monitored, no status	Not monitored, no status	No	No	<input type="checkbox"/>	
79677	[REDACTED]	Voltage Combination		[REDACTED]	345 KV		Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes	<input type="checkbox"/>	
131190	[REDACTED]	Flow CB	BRKR	[REDACTED]	345 KV	[REDACTED]	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes	<input type="checkbox"/>	
79795	[REDACTED]	Generator Step Up (GSU) transformer	XFMR	[REDACTED]	345 KV	[REDACTED]	No	No	No	No	GSU	GSU	Yes	Yes	<input type="checkbox"/>	
79796	[REDACTED]	Generator Step Up (GSU) transformer	XFMR	[REDACTED]	345 KV	[REDACTED]	No	No	No	No	GSU	GSU	Yes	Yes	<input type="checkbox"/>	
79797	[REDACTED]	Generator Step Up (GSU) transformer	XFMR	[REDACTED]	345 KV	[REDACTED]	No	No	No	No	GSU	GSU	Yes	Yes	<input type="checkbox"/>	
128812	[REDACTED]	Tie-line	LINE	[REDACTED]	345 KV	[REDACTED]	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes	<input type="checkbox"/>	
131430	[REDACTED]	Flow CB	BRKR	[REDACTED]	345 KV	[REDACTED]	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes	<input type="checkbox"/>	
79666	[REDACTED]	Tie-line	LINE	[REDACTED]	345 KV	[REDACTED]	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes	<input type="checkbox"/>	
83815	[REDACTED]	Tie-line	LINE	[REDACTED]	345 KV	[REDACTED]	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes	<input type="checkbox"/>	



Annual Tariff Review Errors

Tariff ID highlighted in yellow where there is an error.

Annual Tariff Review

Company: [PJM Public Company](#) Review ID: 1 Active: Yes Review Start: 11/18/2022 Review End: 11/19/2022 Submit to PJM: Not Ready

PJM EMS Station Name:

Facility Name:

Tariff Count	Confirmed Count	Adj. Count	Remaining Count	Error Count
264	0	0	264	1

Include

[Apply](#) [Files](#) [Select All / None](#) [Submit Form](#) [Refresh](#) [Back](#)

Tariff ID	Facility Name	Tariff Type	Equipment Type	Station	Voltage	Equipment Name	OATT Status	Adj. OATT Status	Reportable	Adj. Reportable	PJM Monitored Status	Adj. PJM Monitored Status	BES	Adj. BES	Confirm	Adj. Ticket
98102		Voltage Combination			69 KV		Yes	Yes	No	No	Reliability & Markets	Reliability & Markets	No	No	<input type="checkbox"/>	Reliability and Markets Facility must have OATT Status and Reportable set to Yes.

[Select All / None](#) [Submit Form](#) [Refresh](#) [Back](#)

Via UI form

- Edit OATT Status, Reportable, PJM Monitored Status or BES
- Check Confirm for records that do not require revision
- Click Submit Form
- Check Submit to PJM when done and Submit Form
 - Additional edits not allowed after submission
 - Send request to PJM to re-open the TO's review if additional changes are needed.

Tariff IDs and Counts will be highlighted in green.

Tickets will be created for the records with revisions.



Annual Tariff Review – Revisions

Via UI form

Click Adj. Report to view submitted changes

Annual Tariff Review

Company: [Company Name] Review ID: 1 Active: Yes Review Start: 11/18/2022 Review End: 11/19/2022 Submit to PJM: Yes Submitted by: [User Name]

PJM EMS Station Name: Facility Name:

Tariff Count	Confirmed Count	Adj. Count	Remaining Count	Error Count
10	9	1	0	0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Buttons: Apply Files **Adj. Report** Refresh Main Menu

Tariff ID	Facility Name	Tariff Type	Equipment Type	Station	Voltage	Equipment Name	OATT Status	Adj. OATT Status	Reportable	Adj. Reportable	PJM Monitored Status	Adj. PJM Monitored Status	BES	Adj. BES	Confirm	Adj. Ticket
127762	COBERT 16 KV BUS	Voltage Combination		COBERT	16 KV		Yes		No		Not monitored, no status		No		Yes	
79677	COBERT 345KV BUS	Voltage Combination		COBERT	345 KV		Yes		Yes		Reliability & Markets		Yes		Yes	
131190	COBERT 345KV CB	Flow CB	BRKR	COBERT	345 KV	COBERT 345KV CB	Yes		Yes		Reliability & Markets		Yes		Yes	
79795	COBERT 345KV	Generator Step Up (GSU) transformer	XFMR	COBERT	345 KV	COBERT 345KV TRANSFORMER	No		No		GSU		Yes			201
79796	COBERT 345KV	Generator Step Up (GSU) transformer	XFMR	COBERT	345 KV	COBERT 345KV TRANSFORMER	No		No		GSU		Yes		Yes	
79797	COBERT 345KV	Generator Step Up (GSU) transformer	XFMR	COBERT	345 KV	COBERT 345KV TRANSFORMER	No		No		GSU		Yes		Yes	
128812	COBERT 345KV TIE LINE	Tie-line	LINE	COBERT	345 KV	COBERT 345KV TIE LINE	Yes		Yes		Reliability & Markets		Yes		Yes	
131430	COBERT 345KV CB	Flow CB	BRKR	COBERT	345 KV	COBERT 345KV CB	Yes		Yes		Reliability & Markets		Yes		Yes	
79666	COBERT 345KV TIE LINE	Tie-line	LINE	COBERT	345 KV	COBERT 345KV TIE LINE	Yes		Yes		Reliability & Markets		Yes		Yes	
83815	COBERT 345KV TIE LINE	Tie-line	LINE	COBERT	345 KV	COBERT 345KV TIE LINE	Yes		Yes		Reliability & Markets		Yes		Yes	

Buttons: Adj. Report Refresh Main Menu

Adj. Tariff Data Report

Company: [PJM Transmission Inc.](#) Last 30 Days:

Facility Name: PJM EMS Station Name:

Status: Submitted Approved Cancelled Implemented Replaced

Ticket ID	Facility Name	Tariff Type	Type	EMS Station Name	Voltage	Equipment Name	Cur. OATT Status	Adj. OATT Status	Cur. Reportable	Adj. Reportable	Cur. Tariff Monitored Status	Adj. Tariff Monitored Status	Cur. BES	Adj. BES	Latest Update	Status	TO Comments	PJM Comments
201		Generator Step Up (GSU) transformer	XFMR		345 KV		No	No	No	Yes	GSU	GSU	Yes	Yes	11/18/2022 15:39 History	Submitted	Annual review adjustment.	

User can cancel ticket

Changes approved will be implemented immediately if non-MP1 changes.

MP1 changes will be implemented June 1st after the review is closed.

Via File Upload (for bulk review/update)

- Click on Files
- Download 'Original' file (same as file sent in review announcement email)
- Edit OATT Status, Reportable, PJM Monitored Status or BES
- Save file and then Upload to eDART
 - Tickets will be created for adjusted records
 - Records with no adjustments will be confirmed
- Check Submit to PJM when done and Submit Form

Via File Upload (for bulk review/update)

Annual Tariff Review Files

Company: XXXXXX Review ID: 1 Active: Yes Review Start: 11/18/2022 Review End: 11/19/2022 Ready for PJM Review: No

Upload Review File: No file chosen

	Download	File Name	Upload Date	Errors
<input type="checkbox"/>		Original PJM Tariff Review File		

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
tariff_id	facility_name	tariff_type	equipment_type	station	voltage	equipment_name	oatt_status	adj_oatt_status	reportable	adj_reportable	pjm_monitored_status	adj_pjm_monitored_status	bes	adj_bes
127762	XXXXXX	Voltage Combination		XXXXXX	16 KV		Yes	Yes	No	No	Not monitored, no status	Not monitored, no status	No	No
79677	XXXXXX	Voltage Combination		XXXXXX	345 KV		Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes
131190	XXXXXX	Flow CB	BRKR	XXXXXX	345 KV	XXXXXX	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes
79795	XXXXXX	Generator Step Up (GSU) transformer	XFMR	XXXXXX	345 KV	XXXXXX	No	No	No	No	GSU	GSU	Yes	Yes
79796	XXXXXX	Generator Step Up (GSU) transformer	XFMR	XXXXXX	345 KV	XXXXXX	No	No	No	No	GSU	GSU	Yes	Yes
79797	XXXXXX	Generator Step Up (GSU) transformer	XFMR	XXXXXX	345 KV	XXXXXX	No	No	No	No	GSU	GSU	Yes	Yes
128812	XXXXXX	Tie-line	LINE	XXXXXX	345 KV	XXXXXX	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes
131430	XXXXXX	Flow CB	BRKR	XXXXXX	345 KV	XXXXXX	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes
79666	XXXXXX	Tie-line	LINE	XXXXXX	345 KV	XXXXXX	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes
83815	XXXXXX	Tie-line	LINE	XXXXXX	345 KV	XXXXXX	Yes	Yes	Yes	Yes	Reliability & Markets	Reliability & Markets	Yes	Yes

Report of current and past Annual Reviews.
Click ID to view review details.

Annual Tariff Review Report			
ID	Start Date	End Date	Completed
5	10/19/2022	12/29/2022	No
4	10/05/2022	01/27/2023	Yes
3	09/19/2022	11/23/2022	Yes
2	09/15/2022	11/25/2022	Yes
1	09/15/2022	11/25/2022	Yes

[Main Menu](#)

Only non-MP1 changes can be requested outside the Annual Tariff Review. i.e. changes to PJM Monitored Status to and from 'Reliability & Markets'.

Columns added to allow revision of additional data:

- Adj. OATT Status
- Adj. Reportable

Future Enhancements

[Nuclear Voltage Limits](#) (NVL) tool deployed in eDART (UI only) in January 2020.

Browserless Interface for the tool planned for Q1 2023

- Uploads for the forms on the UI (for NGOs)
- Downloads for the reports on the UI (for NGOs and applicable TOs)

eDART UI	Browserless Type
Unit Setup Report	Download
Effective Limits	Download
Create Ticket	Upload
Revise Ticket	Upload
Review Tickets	Download
Late Tickets Report	Download
Implemented w/o Approval Report	
Upcoming Tickets Report	
Recently Completed Report	Download
File Attachment Download	

TO request for email notification to be sent to TOs when:

- Network Model request status changes.
- Files are added or removed.

Will need group emails set up per TO (similar to Annual Tariff Review)

Planned for 2023.

Revisions to the *pro forma* Open Access Transmission Tariff (OATT) and the Commission's regulations under the Federal Power Act to improve accuracy and transparency of electric transmission line ratings.

- Impacts eDART TERM Application
- eDART Project begins January 2023
- Compliance due July 2025
- See [presentation](#) from 10/07/2022 OC Special Session for Order 881 Compliance

2023 Deliverables:

- Functionality to submit and view ratings lookup tables
- Functionality to manage AAR exceptions and TO Methodology
- AAR Seasonal rating functionality
- Ability to pull ratings for the Operations Time Horizon for all eDART users.
- Enhancements available in Train only
 - CLI to support current and new functionality
 - UI updated to reflect new functionality

Future dedicated eDART Forums to discuss enhancements in detail

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