



# Joint eDART XML Forum / eDART Forum

June 6, 2022

- eDART Refresh Update
- June 2022 Enhancements
- Future Enhancements
- Weak Encryption Remediation
- Question and Answer Resolution
- Appendix – Dynamic Line Ratings Enhancements



# eDART Refresh Update

## Retirement of eDART Browserless in Production

- Users still using the legacy interface are being notified
- eDART team available to help as needed
- Retirement date will be announced when available

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

- Implementation Timeline: TBD
- Account Manager will be used for all new eDART account requests
- Plans currently underway to:
  - Review existing eDART accounts and update email addresses
  - Clean up dormant and invalid accounts
  - Work with eDART Company Account Managers (CAMs)
    - Review window: **Q1/Q2, 2022**
- See [Migration to Account Manager FAQ](#) on [eDART Forum](#) home page



# June 2022 Enhancements

Production release of April enhancements scheduled for Wednesday-Thursday, June 22-23, 2022

- eDART unavailability will be announced at least three business days prior
- Train release scheduled for Monday, June 6<sup>th</sup>

## Enhancements to Company Distributed Workflow (CDW) Unit Groups functionality:

- CDW authorized users able to delete units from Unit Groups after unit retirement or transfer.
- Automatic removal of transferred units as part of daily CDW updates.

- New business rules added for Power Factor Voltage Schedules:
  - Normal Tolerance value must be between 0 and 100%
  - Light Tolerance value must be between 0 and 100%
  - Heavy Tolerance value must be between 0 and 100%

User request to change format of ticket IDs in eDART to be more readable as IDs are growing (6-7 digits long)

- Pilot of the format change starting with TERM related tickets
- Current ticket ID format (as of 4/20): YYYYMM##### e.g. 202205000007
- New ticket ID format: YYMM### e.g. 2205107
  - ### = ID sequence that will restart each month & start at 100
  - YYMM = submission year and month

Enhancements to TERM Ack. Required report to support cases where Transmission users have a large number of tickets to acknowledge.

- Ticket status filters added.
- Option to (Un)Check All for acknowledgment.
- Tickets removed from report 40 days after final status change



# TERM Ticket Acknowledgment

## TERM Notifications Requiring Acknowledgement

Status:  Retired  Submitted  Received  Denied  Approved  Cancelled by Company  Cancelled by PJM  Revised  Implemented  Implemented w/o Approve  Restored  Completed

Apply Filter

Ackn.	Ticket ID	Ticket Status	Company	Type	Station	Voltage	Equipment	End	Est. Start	Est. End	Timestamp
<input type="checkbox"/>	<a href="#">2849124</a>	Completed	PJM Interconnection	LINE	ROBYNAN	115 KV	ROBYNAN-ROBYNAN LINE	END B	07/28/2021		07/28/2021 18:07
<input type="checkbox"/>	<a href="#">2849493</a>	Completed	PJM Interconnection	LINE	ROBYNAN	138 KV	ROBYNAN-CARROLL LINE	END B	07/28/2021		07/28/2021 18:08
<input type="checkbox"/>	<a href="#">2856683</a>	Completed	PJM Interconnection	LINE	BRANDON	230 KV	BRANDON-BRANDON LINE	END B	07/28/2021		07/28/2021 18:21
<input type="checkbox"/>	<a href="#">2858295</a>	Completed	PJM Interconnection	LINE	ROBYNAN	230 KV	ROBYNAN-ROBYNAN LINE	END B	07/28/2021		07/28/2021 18:24
<input type="checkbox"/>	<a href="#">2872827</a>	Completed	PJM Interconnection	XFMR	ROBYNAN	230 KV	ROBYNAN-ROBYNAN XFMR	LOW	11/01/2021		11/01/2021 18:01
<input type="checkbox"/>	<a href="#">2914392</a>	Completed	PJM Interconnection	LINE	ROBYNAN_PT	230 KV	ROBYNAN-ROBYNAN_PT LINE	END B	12/01/2021		12/01/2021 08:08
<input type="checkbox"/>	<a href="#">2914394</a>	Completed	PJM Interconnection	LINE	ROBYNAN_PT	230 KV	ROBYNAN-ROBYNAN_PT LINE	END B	12/01/2021		12/01/2021 08:08
<input type="checkbox"/>	<a href="#">2914396</a>	Completed	PJM Interconnection	LINE	ROBYNAN_PT	230 KV	ROBYNAN-ROBYNAN_PT LINE	END B	12/01/2021		12/01/2021 08:08
<input type="checkbox"/>	<a href="#">2914398</a>	Completed	PJM Interconnection	LINE	ROBYNAN_PT	230 KV	ROBYNAN-ROBYNAN_PT LINE	END B	12/01/2021		12/01/2021 08:08
<input type="checkbox"/>	<a href="#">2914400</a>	Completed	PJM Interconnection	LINE	ROBYNAN_PT	230 KV	ROBYNAN-ROBYNAN_PT LINE	END B	12/01/2021		12/01/2021 08:08

(Un)Check All

Acknowledge

Main Menu

- Phase 1 of DLR enhancements implemented May 2021.
  - Details available at <https://pjm.com/-/media/committees-groups/forums/edart/edart/2021/20210511/20210511-edart-enhancements.ashx>
- Phase 2 includes
  - Updates to files on Ratings Information page on [OASIS](#) and eDART Public Files
  - Dynamic equipment set up process
  - Forecasted and Real Time tickets for dynamic equipment

## Updates to files on Ratings Information page on [OASIS](#) and eDART Public Files

- DLR:Y and DLR:N added to files below to identify if equipment is set up for dynamic ratings (Y) or not (N).
  - Ratings file
  - Temporary Ratings file
  - NERC Alert Ratings file
- Dynamic Ratings Forecast files combined into 1 per company. Currently, files are posted as uploaded by company and could be 1 or more files per equipment.

```
Posted at 05-31-2022 12:09:25
----- Company: AE -----
Substn: ABSECON kV: 69 KV Dev: SERIES1 End: END B
Descr: ABSECON SERIES1 SER DEV DLR: N
----- Day ----- Night -----
Degf Norm Long Shrt Dump Norm Long Shrt Dump
95 77 94 94 108 77 94 94 108
```

New DLR Facilities section added to TERM Main Menu for transmission users.

- Dynamic Ratings Forecast from Phase 1 repurposed as Forecast Bulk Upload
- Equipment List from Phase 1 repurposed as Equipment Report

View for DLR TO with dynamic equipment



View for TO without dynamic equipment



## Update to TERM Equipment download

- downloadtype = terme
- New tag added for ICCP Name
- New parameter available: dlr
  - Values = 1, 2, 3
    - 1 = DLR Only
    - 2 = Non-DLR Only
    - 3 = Both (default)

‘Dynamic Tickets’ filter and field removed from regular TERM tickets and reports.

- IRC Pool totals download via the UI and CLI fixed to return the expected report instead of 'HTTP GET call' error.
- System error returned when user does not have access to IRCByDate download updated to return 'Error – Invalid User Qualification'.
- TERM Effective Ratings issue with Own vs. Notification Facilities filter fixed.
  - 'Both' filter removed
  - Company on Notification tickets fixed



# Future Enhancements

- Enhancements to TERM application in eDART in response to FERC Order 881 as discussed during [3/10 OC Meeting](#)
- Browserless interface for Nuclear Voltage Limits tool in eDART
  - XML uploads and downloads for NGOs
  - XML downloads for applicable TOs

# Weak Encryption Remediation

PJM working to retire TLS 1.0 and TLS 1.1 protocols, and certain insecure ciphers in internet-facing applications

- PJM will retire the obsolete TLS protocol configuration in eDART Production on **September 26**
- Impacts eDART users accessing eDART or eDART files on pjm.com via web browser using TLS 1.0 and/or TLS 1.1 protocols
- **Actions Required**: Review [Weak Encryption Remediation Guide](#) and make necessary changes
- eDART team will contact logged in users that access eDART via a web browser using TLS 1.0 and/or TLS 1.1 protocols (with exception of public files)
- Additional resource: Tech Change Forum [Special Session on Retiring Weak Encryption](#)

# Appendix

Dynamic Line Ratings  
Enhancements

New DLR Facilities section added to TERM Main Menu for transmission users.

- Dynamic Ratings Forecast from Phase 1 repurposed as Forecast Bulk Upload
- Equipment List from Phase 1 repurposed as Equipment Report

View for DLR TO with dynamic equipment



View for TO without dynamic equipment



Dynamic equipment set up process:

- TO user submits a request via Equipment Report indicating equipment, dynamic status (Yes/No), ICCP Name and Proposed Eff. Date.
- PJM reviews and processes ticket.
- Requested changes are implemented when PJM completes ticket.

Equipment Report also used to identify equipment that are DLR or Not.

XML equivalent: dlreqquipmentcreate upload.

### TERM DLR Equipment List

Own  
  Notifications  
  DLR Only  
  Non DLR Only  
  Both  
 Active Only:

Company: **PJM TEST**  
 Type: **LINE**  
 Station: **[REDACTED]**  
 Voltage: **115 KV**  
 Equipment Name: **[REDACTED]**

 
  

Company	Type	Station	Voltage	Equipment	End	DLR	Eff. Date	ICCP Name	Open Tickets
PJM TEST	LINE	[REDACTED]	115 KV	[REDACTED]	END A	No	07/28/2004		<a href="#">New Ticket</a>

 

### New TERM DLR Equipment Change Ticket

Company: **PJM TEST**  
 Type: **LINE**  
 Station: **[REDACTED]**  
 Voltage: **115 KV**  
 Equipment: **[REDACTED]**  
 End: **END A**

Dynamic:  Yes  
 No  
 Proposed Eff. Date:   
 ICCP Name:

Comments:

- Report of Equipment requests.
- Main Menu button is red if there are any tickets in 'Additional Info Needed' status.

Download the report  
downloadtype=dlrequestreport

Equipment was retired  
as part of the model build

**TERM DLR Equipment Request Report**

Company: **PJM TEST**  Own  Notifications  Both Include Historical:  From Date:  To Date:

Status:  Submitted  Additional Info Needed  Received  Approved  Completed  Denied  Cancelled by Company  Cancelled by PJM  Retired

Ticket ID	Company	Station	Voltage	Equipment	End	Current DLR Flag	Eff. Date	Status	Ticket DLR Flag	Last Status Change Date	XML Download
<a href="#">2205234</a>	PJM TEST	GEORGETOWN	138 KV	GEORGETOWN - BATTLEBORO 138KV LINE	END A	No	05/26/2022	Submitted	Yes	05/25/2022 16:43	<a href="#">Download</a>
<a href="#">2206149</a>	PJM TEST	BRIDGE	115 KV	BRIDGE - BATTLEBORO 115KV LINE	END A	No	06/07/2022	Submitted	Yes	06/06/2022 09:25	<a href="#">Download</a>

Download per ticket  
downloadtype=dlrequestrevise

## Real Time Ticket

- Created by eDART based on ratings information from PJM's EMS.
- eDART will complete previous real time ticket if another one is created for the same equipment.

Real-Time Ratings Report												
<input checked="" type="radio"/> Own <input type="radio"/> Notifications		Company: <b>PPL Electric Utilities Corp. aka PPL Electric (PSE)</b>		Type: <input type="text"/>	Station: <input type="text"/>	Voltage: <input type="text"/>	Equipment Name: <input type="text"/>					
Incl. Identical: <input type="checkbox"/>		Incl. Completed: <input type="checkbox"/>		Incl. Historical: <input type="checkbox"/>		From Date: <input type="text"/>	To Date: <input type="text"/>					
<a href="#">Apply Filter</a>			<a href="#">Refresh</a>			<a href="#">Main Menu</a>						
Ticket ID	Company	Station	Voltage	Equipment	End	Status	Start Date	End Date	Normal	Long Term	Short Term	Load Dump
2206124	PPL Electric Utilities Corp. aka PPL Electric (PSE)	FRANKFORD	230 KV	FRANKFORD - SUSQUEHANNA HBR-5022	END A	Implemented	06/03/2022 06:58		844	1021	1021	1159
2206120	PPL Electric Utilities Corp. aka PPL Electric (PSE)	FRANKFORD	230 KV	FRANKFORD - SUSQUEHANNA HBR-5022	END A	Implemented	06/03/2022 06:58		640	742	742	854
2206122	PPL Electric Utilities Corp. aka PPL Electric (PSE)	FRANKFORD	230 KV	FRANKFORD - SUSQUEHANNA HBR-5022	END A	Implemented	06/03/2022 06:58		856	1028	1028	1160

## Forecast Ticket

- Hourly forecast ratings ticket that can be created for dynamic equipment only.
- Ticket start hour is next HE from current time. E.g. HE 11 if current time is 09:30.
- Min requirement: 48 hours
- 72 hours of forecast can be submitted.
- Tickets are automatically approved and then completed when time expires or another ticket is created.

XML equivalent: `dLrForecastTicket` upload



# Create New Forecast Ticket

**New Forecasted Ticket**

<b>Company</b>	<b>Type</b>	<b>Station Name</b>	<b>Voltage</b>	<b>Equipment Name</b>	<b>End</b>
PP&L Electric Services Company (PP&L Electric (S, R))	LINE	Central PA	230 KV	Central PA, Upper Merion	END A

Comments:

06/06/2022					06/07/2022					06/08/2022					06/09/2022				
HE	Normal	Long Term	Short Term	Load Dump	HE	Normal	Long Term	Short Term	Load Dump	HE	Normal	Long Term	Short Term	Load Dump	HE	Normal	Long Term	Short Term	Load Dump
01					01					01					01				
02					02					02					02				
03					03					03					03				
04					04					04					04				
05					05					05					05				
06					06					06					06				
07					07					07					07				
08					08					08					08				
09					09					09					09				
10					10					10					10				
11					11					11					11				
12					12					12					12				
13					13					13					13				
14					14					14					14				
15					15					15					15				
16					16					16					16				
17					17					17					17				
18					18					18					18				
19					19					19					19				
20					20					20					20				
21					21					21					21				
22					22					22					22				
23					23					23					23				
00					00					00					00				

## Daylight Savings Forecast

- Spring: HE 03 not available
- Fall: Additional HE 02 available

HE	Normal	Long Term	Short Term	Load Dump
01	7	6	77	6
02	767	6	6	7
NA				
04	7	7	67	67
05	67	7	7	6

HE	Normal	Long Term	Short Term	Load Dump	HE	Normal	Long Term	Short Term	Load Dump
01					01				
02					02				
NA					02				
03					03				
04					04				

Download the report  
downloadtype=dlrforecastreport

Equipment was retired  
as part of the model build

**Forecast Ticket Report**

Company: [PPL Electric Utilities \(Corp. aka PPL Utilities \(PJM\)\)](#)  Own  Notifications Type:  Station:  Voltage:  Equipment Name:  End:  Include Historical:

Status:  Approved  Completed  Cancelled by Company (UI only)  Cancelled by PJM (UI only)  Retired (UI only) From Date:  To Date:   Occurred During  Submitted

Ticket ID	Company	Station	Voltage	Equipment	End	Status	Start Date	End Date	Submitted Date	Last Status Change Date	XML Download
<a href="#">2205110</a>	PPL Electric Utilities (Corp. aka PPL Utilities (PJM))	BL0000000	230 KV	BL0000000-0000000	END A	Completed	05/23/2022 15:00	05/25/2022 16:00	05/23/2022 13:55	05/23/2022 14:53	<a href="#">Download</a>
<a href="#">2205111</a>	PPL Electric Utilities (Corp. aka PPL Utilities (PJM))	BL0000000	230 KV	BL0000000-0000000	END A	Completed	05/23/2022 16:00	05/25/2022 16:00	05/23/2022 14:53	05/24/2022 11:24	<a href="#">Download</a>

Download per ticket  
downloadtype=dlrforecast

## Dynamic Ratings Forecast from Phase 1 repurposed as Forecast Bulk Upload

- ‘Used in Posting’ column removed – no longer needed.
- Forecast tickets created from uploaded files.
- If tickets cannot be created but file passes other validations, file will still be uploaded but no tickets created.

## TERM DLR Ratings Forecast

Company: [PPL Electric Utilities Corp.](#)

Last 72 hours:

From Date:

To Date:

File to Upload:  No file chosen

[File Example](#)

Download	Upload Time	Company	User	Last Eff. Date	Rejected	Upload Type	Comments
<input type="checkbox"/>	06/03/2022 13:51	PPL Electric Utilities Corp. - PPL (LSE)		06/05/2022 19:00	No	UI	
<input type="checkbox"/>	06/03/2022 13:49	PPL Electric Utilities Corp. - PPL (LSE)		06/05/2022 19:00	Yes	UI	Invalid Equipment: 06/05/2022 23, HAWKWOOD, 208-HI, HAWKWOOD - SUBCATHS, END A, 6, 767, 676, 67,
<input type="checkbox"/>	06/03/2022 12:01	PPL Electric Utilities Corp. - PPL (LSE)		06/05/2022 19:00	No	UI	
<input type="checkbox"/>	06/03/2022 12:00	PPL Electric Utilities Corp. - PPL (LSE)		06/05/2022 19:00	No	UI	New Forecasted Ticket(s) Errors.

[Submit Form](#)

[Download](#)

[Refresh](#)

[Main Menu](#)

## Report of current and future hourly forecasted ratings.

Download the report  
downloadtype=forecastvalue

### Forecast Value Report

Company:  Type:  Station:  Voltage:  Equipment Name:  End:  From Date:  To Date:  Order by:  Equipment Date

Include:  All Facilities  PJMTST Facilities Only  PJMTST Notifications Only  PJMTST Facilities and Notifications Only

Ticket ID	Company	Type	Station	Voltage	Equipment	End	Hour End EPT	Normal	Long Term	Short Term	Load Dump
2206150	Allegheny Power Control Area	LINE	AVONBLAND	345 KV	5-T AVONBLAND	END A	06/06/2022 12	100	101	102	103
2206150	Allegheny Power Control Area	LINE	AVONBLAND	345 KV	5-T AVONBLAND	END A	06/06/2022 13	100	101	102	103
2206150	Allegheny Power Control Area	LINE	AVONBLAND	345 KV	5-T AVONBLAND	END A	06/06/2022 14	100	101	102	103
2206150	Allegheny Power Control Area	LINE	AVONBLAND	345 KV	5-T AVONBLAND	END A	06/06/2022 15	100	101	102	103
2206150	Allegheny Power Control Area	LINE	AVONBLAND	345 KV	5-T AVONBLAND	END A	06/06/2022 16	100	101	102	103
2206150	Allegheny Power Control Area	LINE	AVONBLAND	345 KV	5-T AVONBLAND	END A	06/06/2022 17	100	101	102	103
2206150	Allegheny Power Control Area	LINE	AVONBLAND	345 KV	5-T AVONBLAND	END A	06/06/2022 18	100	101	102	103

Report to compare hourly ratings from forecasted ticket, regular TERM tickets and real time (if available).

Forecast Compare Report														
Company:		Type:		Station:		Voltage:		Equipment Name:		End:				
From Date:		Hour:		To Date:		Hour:		Temperature:		Day		Night		Day Ahead Only:
<input type="button" value="Apply Filter"/> <input type="button" value="Download"/> <input type="button" value="Refresh"/> <input type="button" value="Main Menu"/>														
Base	Submit Time	Ticket ID	Hour End: 05/25/2022 01				MVA vs. Base				% vs. Base			
			Normal	Short Term	Long Term	Load Dump	Normal	Short Term	Long Term	Load Dump	Normal	Short Term	Long Term	Load Dump
<input type="radio"/>	05/23/2022 13:55	2205110	56	56	56	56	-676711	-20	-20	49	-99.99%	-26.32%	-26.32%	700.00%
<input type="radio"/>	05/23/2022 14:53	2205111	56	56	56	56	-676711	-20	-20	49	-99.99%	-26.32%	-26.32%	700.00%
<input checked="" type="radio"/>	05/24/2022 15:26	2205205	676767	76	76	7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<input type="radio"/>	05/24/2022 15:38	2205206	676767	76	76	7	0	0	0	0	0.00%	0.00%	0.00%	0.00%
<input type="radio"/>	TERM	1564779	647	801	801	896	-676120	725	725	889	-99.90%	953.95%	953.95%	12700.00%
	Min Forecasted		56	56	56	7	-676711	-20	-20	0	-99.99%	-26.32%	-26.32%	0.00%
	Max Forecasted		676767	76	76	56	0	0	0	49	0.00%	0.00%	0.00%	700.00%
Base	Submit Time	Ticket ID	Hour End: 05/25/2022 02				MVA vs. Base				% vs. Base			
			Normal	Short Term	Long Term	Load Dump	Normal	Short Term	Long Term	Load Dump	Normal	Short Term	Long Term	Load Dump
<input type="radio"/>	05/23/2022 13:55	2205110	56	56	56	56	49	-11	-11	49	700.00%	-16.42%	-16.42%	700.00%
<input type="radio"/>	05/23/2022 14:53	2205111	56	56	56	56	49	-11	-11	49	700.00%	-16.42%	-16.42%	700.00%
<input checked="" type="radio"/>	05/24/2022 15:26	2205205	7	67	67	7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<input type="radio"/>	05/24/2022 15:38	2205206	7	67	67	7	0	0	0	0	0.00%	0.00%	0.00%	0.00%
<input type="radio"/>	TERM	1564779	647	801	801	896	640	734	734	889	9142.86%	1095.52%	1095.52%	12700.00%
	Min Forecasted		7	56	56	7	0	-11	-11	0	0.00%	-16.42%	-16.42%	0.00%
	Max Forecasted		56	67	67	56	49	0	0	49	700.00%	0.00%	0.00%	700.00%

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