



eDART April 2019 Release Enhancements

eDART Users Group Meeting
3/4/2019

Production release of April enhancements tentatively scheduled for Wednesday, April 10th.

- eDART will be unavailable from 19:00 to 02:00 on Thursday, April 11th.

Sandbox release scheduled for Monday, March 25th.

- **General Discussion Topics**
- Generation Related Enhancements
- Transmission Related Enhancements
- Question and Answer Resolution Session

Voltage Schedules

- Current voltage schedules loaded into eDART.
- Augustine Caven working with TOs to review voltage schedules.
- GOs required to acknowledge voltage schedules by March 8th (target date).
 - Email notifications of required actions will be sent out daily until completed.

Hardware upgrades planned for March.

Outage notifications will be sent to eDART User Group distribution lists.

- Q3 2018: Development and Testing of Transmission Tickets and Reports
- Q4 2018: Development and Testing of:
 - Hydro Schedule
 - Generation Reports
 - Instantaneous Reserve Check (IRC) Forms and Reports

Q1 2019: Development and Testing of:

- Generation Tickets
- Reactive Reserve Check (RRC) Forms and Reports

Q2 2019: Development and Testing of:

- TERM Tickets

Q3 2019: Development and Testing of:

- Tariff Reports

With the eDART refresh, management of eDART accounts will be migrated to Account Manager. In preparation for that:

- Use Account Manager User ID for new eDART account requests.
- Update email addresses for existing accounts.
- Clean Up Dormant Accounts:
 - Lock accounts with last login more than 365 days in the past.
 - Revoke accounts locked for more than 365 days.
 - Customer Account Managers (CAM) will be notified.



Company Distributed Workflow

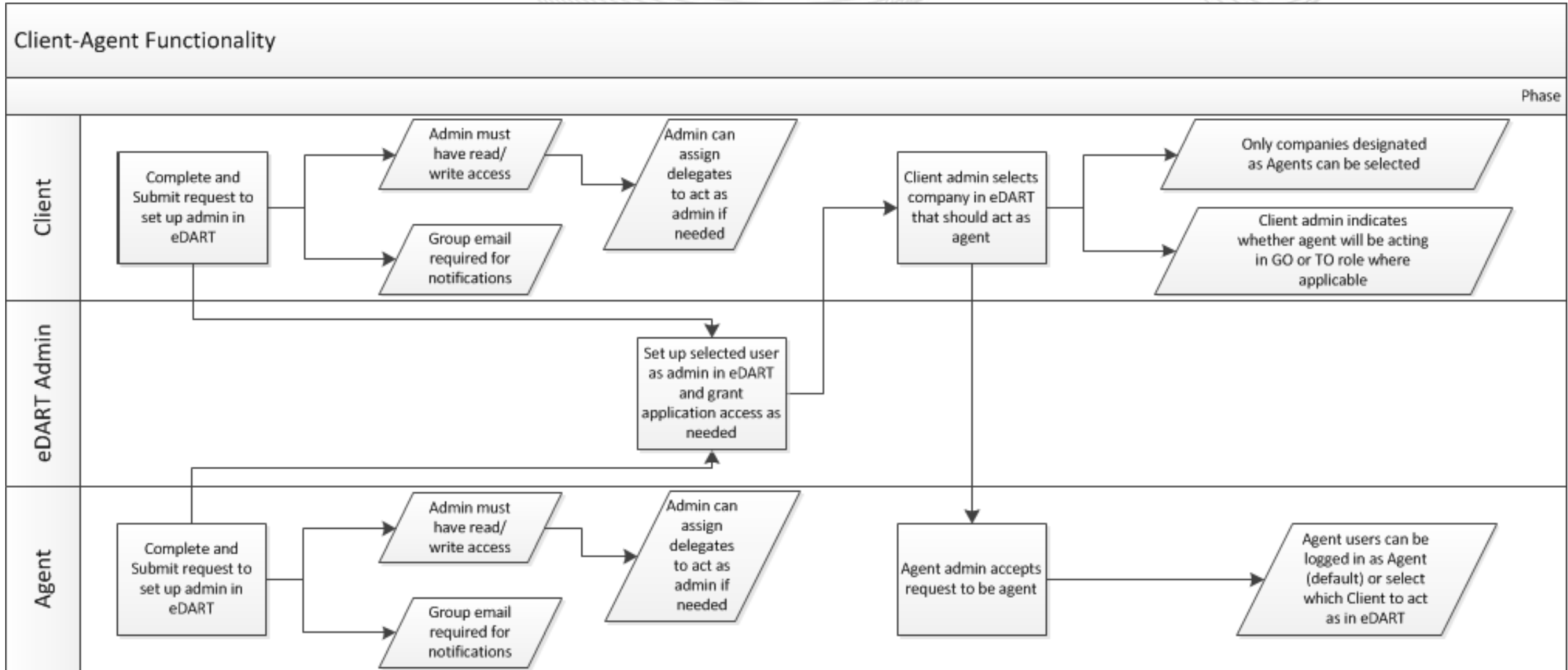
Company Distributed Workflow (CDW)

- Minimize the need for multiple sub-accounts per company and multiple user accounts per person.
- Client-Agent Functionality: Company admins of clients will be able to request agent companies to act on their behalf in eDART.
- Unit-Task Functionality: Company admins for Generation companies will be able to split eDART tasks on per unit/per user basis.

Member requested functionality for one company (Agent) to perform eDART functions on behalf of another company (Client).

- Agent users will need only one eDART account under Agent.
- Agent users will be able to perform transmission and generation functions in eDART.
- Agent users will be able to switch Clients within a single session of eDART. (No need to logout, and login.)

This functionality will NOT be available for eDART browserless interaction. (i.e., eDART Web UI only.)



Client can only have one Agent for either generation or transmission functions in eDART.

Agent can have multiple Clients.

Client and Agent Admins can terminate relationship at any time.

To change Agents, Client will need to remove current Agent before requesting another Agent.

Client and Agent Admins can set up other users to act as delegates.

Member requested functionality to enable the distribution of eDART tasks and/or units to various responsible parties.

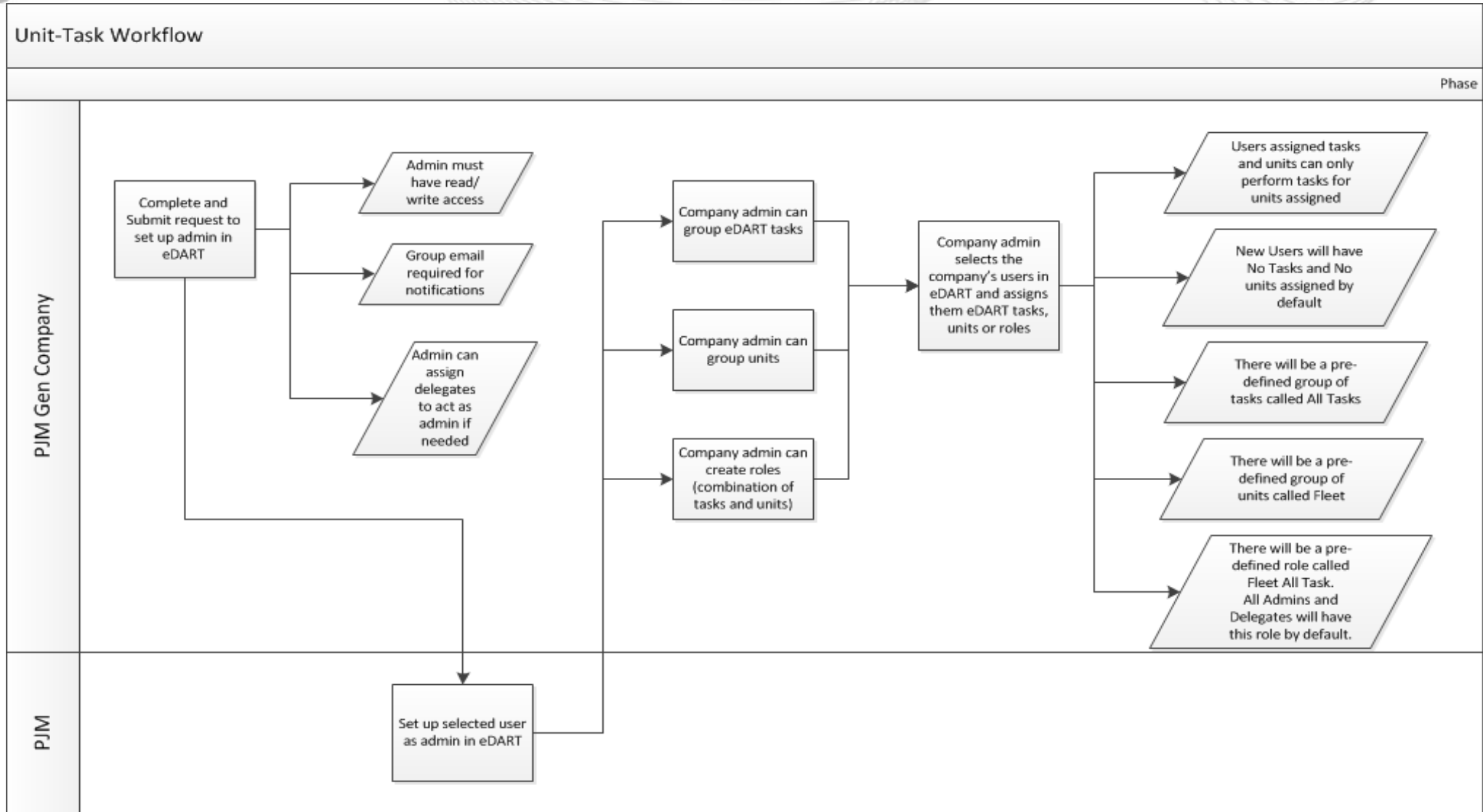
- Ability to discretely assign tasks / units per user.
- Once assigned, user visibility restricted to assigned tasks and units.
- eDART tasks include Generation Tickets, Reactive Testing Tickets, GO Survey, IRC, MinGen, Gen Checkout, etc.

Objective

Eliminate PJM - MOC work-arounds* to assist members in fully supporting PJM RC/TOP/BA & RTO requirements as well as the MOC fleet-related Generation Owner responsibilities within the PJM RTO.

** e.g. use of emails for splitting and sending GO Survey information via Excel spreadsheets, and Voltage Schedules.*

With this functionality, MOCs can assign individual Generation Owner support staff with discrete eDART tasks & units, or optionally at the fleet and full task level, as needed.



Admin Reports:

- Unit Focused Report
 - Units missing assignments at the top
 - All unit assignments
- User Focused Report
 - Users with no assigned tasks and units at the top
 - All user assignments



General April 2019 Enhancements

Retired facilities still in the PJM model are currently excluded from Current Facility Outages section of linesout.txt.

- Results in missing lines in linesout file.
- Included in eDART EMS Outage List.

Enhancement is to include the retired facilities in linesout.txt and append 'RETIRED' to Facility Name.

- Currently implemented in [linesout_new.txt](#).

Before

```

CURRENT FACILITY OUTAGES
-----
ITEM TICKET FACILITY NAME |
-----
1      0 BRKR AMOS      765 KV  AMOS      T57      DIS |
-----
3 782865 BRKR DUMONT2  765 KV  DUMONT2  A1      CB |
-----
4      0 BRKR DUMONT2  765 KV  DUMONT2  RSFG     DIS |
-----
5      0 CAP  DUMONT2  765 KV  DUMONT2  RXFG     REACTOR |
-----
6      0 BRKR DUMONT2  765 KV  DUMONT2  T27     DIS |
-----
7 752085 XFMR DUMONT2  765 KV  DUMONT2  T2 XFORMER |
-----
8      0 BRKR GAVINAEP 765 KV  GAVINAEP  RSCA     DIS |
-----
9      0 CAP  GAVINAEP 765 KV  GAVINAEP  RXCA     REACTOR |
-----
10 730707 BRKR JACKSONS 765 KV  JACKSONS  B2      CB |
-----
11 780053 BRKR KAMMER2  765 KV  KAMMER2  QQ1     CB |
-----
12 787503 CAP  KAMMER2  765 KV  KAMMER2  RXCA     REACTOR |
-----
    
```

After

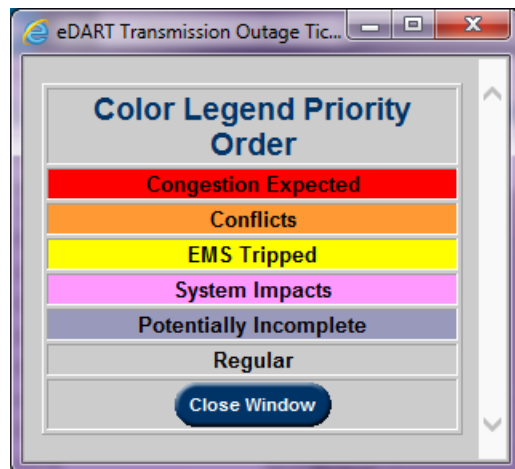
```

CURRENT FACILITY OUTAGES
-----
ITEM TICKET FACILITY NAME |
-----
1      0 BRKR AMOS      765 KV  AMOS      T57      DIS |
-----
2      0 XFMR DUMONT2  765 KV  DUMONT2  1-P  XFMR - RETIRED |
-----
3 782865 BRKR DUMONT2  765 KV  DUMONT2  A1      CB |
-----
4      0 BRKR DUMONT2  765 KV  DUMONT2  RSFG     DIS |
-----
5      0 CAP  DUMONT2  765 KV  DUMONT2  RXFG     REACTOR |
-----
6      0 BRKR DUMONT2  765 KV  DUMONT2  T27     DIS |
-----
7 752085 XFMR DUMONT2  765 KV  DUMONT2  T2 XFORMER |
-----
8      0 BRKR GAVINAEP 765 KV  GAVINAEP  RSCA     DIS |
-----
9      0 CAP  GAVINAEP 765 KV  GAVINAEP  RXCA     REACTOR |
-----
10 730707 BRKR JACKSONS 765 KV  JACKSONS  B2      CB |
-----
11 780053 BRKR KAMMER2  765 KV  KAMMER2  QQ1     CB |
-----
12 787503 CAP  KAMMER2  765 KV  KAMMER2  RXCA     REACTOR |
-----
    
```

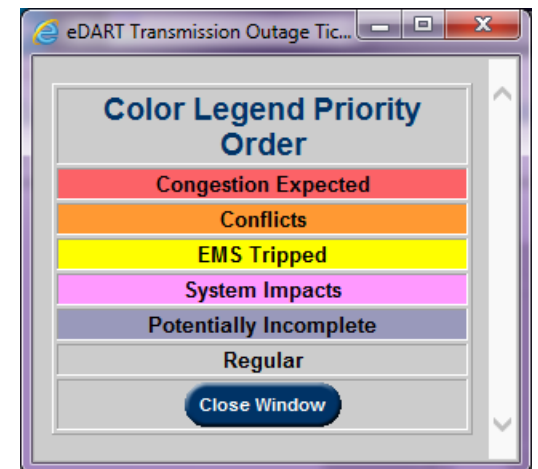
eDART user request to change the red color used to highlight rows in eDART.

- Request is for a lighter shade of red to make it easier to view data within the Web UI.
- This change affects all screens with the red row highlight.

Old Shade of Red



New Shade of Red



- General Discussion Topics
- **Generation Related Enhancements**
- Transmission Related Enhancements
- Question and Answer Resolution Session

New report to track GO's response to Instantaneous Reserve Checks (IRCs) per month.

- Report also available to PJM Dispatch.
- Displays available capacity , total units, total reserves acknowledged, total reserves unacknowledged and score.
- $\text{Score} = (\text{Total Reserves Acknowledged} / \text{Total Reserves}) \times 100$

When modifying IRC values, a note/comment is required for the PJM Operator.

- Error message returned if note/comment is not included updated for clarity since the XML tag is <comments>.
- Previous error message: “A Note for the PJM Operator is required when modifying IRC values.”
- New error message: “A Note/Comment for the PJM Operator is required when modifying IRC values.”

Download and Delete buttons reversed for Reactive Result Ticket File page to reduce accidental deletion of files.

Reactive Result Ticket GO Support Files

Reactive Result Ticket ID: 148 Unit: Test: Max Load Lagging

File to upload:

Select	File Name	Upload Time
<input type="checkbox"/>	Test File.txt	03/03/2019 16:58

- General Discussion Topics
- Generation Related Enhancements
- **Transmission Related Enhancements**
- Question and Answer Resolution Session

Submit Button Removed for Units/Condensers page for Active RRC.

- The page is read only for users.

Apply Sort/Filter button added to the RRC Self Check.



The screenshot shows a control panel for the RRC Self Check. At the top, there are four radio buttons: 'Capacitors' (selected), 'Reactors', 'SVCs/Statcom', and 'Units/Condensers'. Below these are three input fields: 'Name:', 'Min KV:', and 'Max KV:'. The 'SE Status:' dropdown menu is set to 'Both'. To the right of the dropdown is a checkbox labeled 'Discrepancies Only:'. At the bottom, there are five buttons: 'Apply Sort/Filter' (circled in red), 'Refresh', 'Main Menu', 'Help', and 'Color Legend'.

Unit Retirement added as a reason to update the system restoration plans in eDART.

Designed to work similar to update due to cut-in transmission tickets:

- Included in Pending Restorations Plan queue.
- Option to indicate No Update Needed.
- Attachment G required for submitting updates and for no update needed.
- Email notification sent when retirement date is submitted and beginning 30 days to Next Update Request Date if pending.



Inclusion of Unit Retirements in Restoration Plans Update

Pending Restoration Plans										
Company: Energy Company										
Plan ID	Plan Name	Update Status	Plan Status	Restoration Plan Updated	No Update Needed	Next Update Request	Update Reason	History	Restoration Plan/ Attachment G	Queue
109	Test Plan	Update Required ▾	Approved	11/01/2015 00:05	No Update Needed	03/14/2019	Unit Retirement GHOST UNIT 3	View	Submit Update	4

[Annual Deadline](#)
[Add New Plan](#)
[Submit Form](#)
[Refresh](#)
[Color Legend](#)
[Main Menu](#)

Generator Unit Details			
Unit ID	Commercial Name		Parent Name
7152	GHOST UNIT 3		
Next Update Request	GO Company		Installed Capacity
03/14/2019	Casper Electric		300
Type	Primary Fuel	Secondary Fuel	
Combustion Turbine	Kerosene	DualFuel: Natural Gas + Kerosene	
Equipment			
Station	Voltage	Equipment	TO Zone
AD GHOST	20 KV	AD GHOST U-3	PJM
Restoration Data			
Restoration Zone	Restoration Type	Allocated MW	
PJM	Non-Critical Load	150	
Effective Date	Est. Retirement Date	Terminate Date	
04/04/2007	03/16/2019		

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Inclusion of Unit Retirements in Restoration Plans Update

Next Update Request = Greater of (Today + 30) and (Est. Retirement Date – 30 days)

– Example 1:

Today = 3/4/2019

Est. Retirement Date = 3/24/2019

Next Update Request = greater of (4/3/2019 and 2/22/2019) = 4/3/2019

– Example 2:

Today = 3/4/2019

Est. Retirement Date = 6/1/2019

Next Update Request = greater of (4/3/2019 and 5/2/2019) = 5/2/2019

When retirement date changes, Next Update Request re-calculated based on delta and Update Status.

Queue						
Company:			Plan ID: 109			
Plan Name: Test Plan			Plan Status: Approved			
Next Update Request	Update Reason	Update Status	History	No Update Needed	Update Required	Comments
06/30/2019	Ticket 81268	Update Required	View	No Update Needed	<input type="checkbox"/>	
07/01/2019	Ticket 81267	Update Required	View	No Update Needed	<input type="checkbox"/>	
07/16/2019	Annual	Update Required	View		<input type="checkbox"/>	
02/29/2020	Unit Retirement GHOST UNIT 4	Update Required	View	No Update Needed	<input type="checkbox"/>	

[Refresh](#)
[Attachment G Form](#)
[Save Changes](#)
[Back](#)



Inclusion of Unit Retirements in Restoration Plans Update

No Update Needed Reason

Company: [PJM Energy Company](#) Plan ID: [12345](#) Plan Name: [Test Plan](#)
Update Reason: [Unit Retirement](#) Next Update Request: [06/13/2019](#)

[Attachment G](#)

I verify that this unit retirement does not impact the company restoration plan:

Please write a brief description of why no update is needed for unit retirement:

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[Submit Form](#) [Refresh](#) [Attachment G Form](#) [Back](#)

Submit Update

Rest Plan: [Browse...](#)

Date submitted to PJM for approval (must be 30 days prior to Effective Date for the Annual Update)

PJM approval indicates that the plan has been reviewed and accepted and is compatible with the RC restoration plan and other TO Restoration Plans as per EOP-006, R5.1. Any required changes are communicated to plan owner. The PJM approval will be provided via the eDART tool.

User: [\[User\]](#) Company: [PJM Energy Company](#)

Point of Contact: Eff. Date of Restoration Plan:
(Name, Position/Title and Department) (mm/dd/yyyy)

Phone Number: e-Mail:

[Attachment G](#)

1 When was the Restoration Plan last updated: (mm/dd/yyyy)

2 Reason for this update:
 Unit Retirement (Complete all questions)

Relationships and Responsibilities:
Were there any significant changes to the plan's identified responsibilities and relationships, since the last update?
 No Yes

3 Comments:

Updates made to the emails sent out when a Cut-In Ticket is submitted and daily emails sent beginning 30 days from ticket end if the Restoration Plan update is still unresolved.

- Added language about TO/TOP Matrix (<https://pjm.com/library/compliance.aspx>).
- Sender changed to Restoration Plan Reviewers group email address to facilitate easy reply to appropriate group.
- Subject of daily email updated to display Next Update Date instead of email date.

Request from a DMS meeting in 2018 to include the Effective Ticket ID on the Effective Ratings page.

- This indicates what TERM ticket the effective ratings were derived from.

Effective Ratings									
<i>Number of rows in report is limited to 500 rows.</i>									
Company:	PJM TEST								
Zone:	PJM								
Type:	LINE								
Station Name:	TARIFF								
Voltage:	0 KV								
Equip. Name:	DUMMY TARIFF FACILITY								
TERM Equip. ID:	47851								
End:	END A								
Impedance R:	0								
Impedance X:	0								
Congestion Mgmt. Priority:	Not monitored, no status								
Effective Ticket:	74917								
		Normal		Long Term		Short Term		Load Dump	
Temp	Day	Night	Day	Night	Day	Night	Day	Night	
95	207	207	242	242	242	242	278	278	
86	207	207	242	242	242	242	278	278	
77	207	207	242	242	242	242	278	278	
68	207	207	242	242	242	242	278	278	
59	207	207	242	242	242	242	278	278	
50	207	207	242	242	242	242	278	278	
41	207	207	242	242	242	242	278	278	
32	207	207	242	242	242	242	278	278	

Historical filter added for TERM Tickets.

- By default, reports will return current tickets; user can use filter to specifically request historical information.
- Will help reduce size of data returned and improve performance.

Historical tickets: completed or cancelled more than 40 days in the past.

View/Revise Reports Filter			
Company		Tickets/Notifications	
Energy Company		<input checked="" type="radio"/> Current <input type="radio"/> Historical <input type="radio"/> Both	
		<input checked="" type="radio"/> Tickets <input type="radio"/> Notifications <input type="radio"/> Shared Tickets	
Group Name			
Ticket ID	Company Ticket ID	Type	Station Name
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Reason For Change		Voltage	Equipment Name
<input type="text"/>		<input type="text"/>	<input type="text"/>
Temporary		Permanent	Include Dynamic Tickets

Voltage Limits - new tool for Transmission users to update and view current voltage limits on buses.

RRC Enhancements

- Display of eDART Ticket ID when Availability is No.
- Addition of Company Timestamp: last time data was submitted.

Network Model – addition of Equipment Type Field Report.

TERM – CSV Export option for Effective Ratings Report from report page.

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