



eDART September 2016 Release Enhancements

eDART XML Users Group Meeting
8/24/2016

- Production
 - Release of September enhancements scheduled for Wednesday, September 28th.
 - eDART will be unavailable from 19:00 to 02:00 on Thursday, September 29th.
- Sandbox
 - *TBD*

- September 2016 Enhancements:
 - Generator Outage Ticket Enhancements
 - Other Enhancements
 - Reactive Reserve Check Refresh
- Other Discussion Topics
- Question & Answer Resolution Session

- 48 hour rule being implemented for Planned Outages per Manual 10:

2.2.3 Planned Outage Extension

A Planned Outage may be extended beyond its originally estimated completion date in those instances when the original scope of work requires more time to complete than originally scheduled. The outage extension is not used for those instances when unexpected problems or delays are encountered to render the generation resource in question, out of service past the expected date of the Planned Outage.

The request for a Planned Outage Extension must be submitted via eDART at least 48 hours before the end date of the outage.

- Error message displayed for revisions to Est. End Date that violate 48 hour rule.

- Current Switch End Date auto-approval rules for Active tickets:
 - |Reduction| < 50 MW &
 - Reduction < 100 MW &
 - Switch End Date between now - 18 hours and now + 1 hour.
(editable parameters)
 - If rules not passed, ticket needs to be manually closed.
- New Switch End Date auto-approval rule for Active tickets:
 - Switch End Date between now - 18 hours and now + 1 hour.
(editable parameters)

- Current issue:
 - Unit ownership is transferred from Company A to Company B.
 - Company B unable to view Latest Completed Default MVAR Ticket created under Company A used for D-Curve Report.
- Solution:
 - On unit ownership transfer, eDART will create a copy of the Latest Completed Default MVAR Ticket under the new owner.
 - Added PJM comments: “Copy of Default MVAR Ticket# XXXXX due to eDART ownership change.”
 - Previous ticket remains as is and referenced in new ticket.

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- External Outages from SDX added to Conflict Analyzer functionality.
 - PJM to add identified impactful equipment and generators to conflict scenarios.
 - Company/TO Zone = 'EXTERNAL'
 - Visible if TO has access to equipment otherwise "Contact PJM for more info." is displayed.
 - Tickets created for reported external outages.
 - No changes to TO conflict functionality.


```
<?xml version="1.0" encoding="UTF-8"?>
- <edart>
  - <primary_facility_conflicts>
    - <conflict active="true">
      <category>Thermal</category>
      <scenario_id>1001</scenario_id>
      <title>Apples - Bacon Conflicts</title>
    - <primary_equipment>
      <ta_id>112233</ta_id>
    </primary_equipment>
    <comments>One or more IDs cannot be displayed. Contact PJM for more information</comments>
    <review_comments/>
  - <equipment>
    <ta_id>12345</ta_id>
    <ta_id>54321</ta_id>
    <ta_id>01234</ta_id>
    <generator_id>1111</generator_id>
  </equipment>
</conflict>
</primary_facility_conflicts>
</edart>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
- <edart xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="transticreview.xsd">
  - <transticreview>
    <company_name>EXTERNAL</company_name>
    <pjm_ticket_id>68087</pjm_ticket_id>
    <description>External Outage created from SDX file for Conflict Analysis</description>
    <project_ids />
    <pjm_comments>External Outage created from SDX file for Conflict Analysis. Do not change.</pjm_comments>
    <at_risk>false</at_risk>
    <availability>Duration</availability>
    <lock_status>locked</lock_status>
  - <ticket_status>
    <status>Active</status>
    <submittime>2016-08-10 11:16:29</submittime>
    <submituser>EDART System</submituser>
    <activetime>2016-08-10 11:16:29</activetime>
    <activeuser>EDART System</activeuser>
    <approvedtime>2016-08-10 11:16:29</approvedtime>
    <approveduser>EDART System</approveduser>
  </ticket_status>
```

- Current:
 - Uncancelled tickets retain Submit on Time status from before cancellation.
- New:
 - When ticket is uncancelled, Submit on Time status will be re-evaluated based on date of re-submission.

- Termcreate upload to be fixed for submission of multiple tickets in one upload.
 - Currently, the adjustments are not recorded correctly for upload of multiple tickets.
- Transtic review and revise downloads to be fixed for multiple tickets request.
 - Currently, only the first ticket is returned.
- ‘Unsupported download type’ error message to be fixed for genwithnotifywithacknowledge & transwithnotifywithacknowledge.

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- Current Reactive Reserve Check done on company level.
- New Reactive Reserve Check to be done per facility.
 - Reserve data pre-populated from eDART and PJM EMS systems for:
 - Capacitors
 - Reactors
 - SVCs/Statcom
 - Units/Condensers
 - Reserve data available for Peak and Valley RRC.
 - Display of current reserve data when RRC is not in progress.

- Phase 1a (9/28 release - *tentative*):
 - Availability of RRC Self-Check download.
- Phase 1b (Q4 2016):
 - Availability of RRC Self-Check data; updated every 5 minutes.
- Phase 2 – 2017:
 - Ability for PJM to issue new RRC.
 - Functionality to retrieve/submit real time reserve values.
 - Design still in progress.
 - Testing and Parallel Operations with current RRC.

Peak MVAR Reserves Self-Check

Company: **Electric Company** Request Timestamp: **08/23/2016 10:38**
 User Name: Data Updated: **08/03/2016 15:32**

	Capacitors	Reactors	SVCs/Statcom	Units/Condensers
PJM Estimate:				

Capacitors Reactors SVCs/Statcom Units/Condensers

Capacitors

Station/Equipment Name	Zone	KV	eDart Availability	SE Status	SE KV	SE MVAR	Rated MVAR	Lagging Reserve MVAR

- Network Model
- Black Start
- Telemetry Coordination
- TERM
- Reactive Reserve
- New Reactive Reserve**
- Instantaneous Reserve Check
- Minimum Gen. Report

Peak MVAR Reserves Self-Check

Company: **Electric Company** Request Timestamp: **08/23/2016 10:43**
 User Name: Data Updated: **08/03/2016 15:32**

	Capacitors	Reactors	SVCs/Statcom	Units/Condensers
PJM Estimate:				

Capacitors
 Reactors
 SVCs/Statcom
 Units/Condensers

SVCs/Statcom

Station/Equipment Name	Zone	KV	eDart Availability	SE Status	SE Mode	SE MW	SE MVAR	Max MVAR	Lagging Reserve MVAR

-
-
-
-
-
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-
-

Peak MVAR Reserves Self-Check

Company: **Electric Company**

User Name:

Request Timestamp: **08/23/2016 10:46**

Data Updated: **08/03/2016 15:32**

	Capacitors	Reactors	SVCs/Statcom	Units/Condensers
PJM Estimate:				

Apply Sort Refresh Main Menu Help

Capacitors
 Reactors
 SVCs/Statcom
 Units/Condensers

Units/Condensers

Station/Equipment Name	Zone	KV	eDart Availability	Unit Status	AVR Status	SE MW	SE MVAR	Max MVAR	Lagging Reserve MVAR

- TERM
- Reactive Reserve
- New Reactive Reserve
- Instantaneous Reserve Check
- Minimum Gen. Report
- PJM Status Report
- NERC Data
- Restoration Data

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- About halfway through loading CB ratings listed on the OASIS System Information page.
 - Double modelled low impedance devices have been bypassed.
 - Actively monitoring flow CBs in real-time and near-term outage studies.
 - Spreadsheets posted on OASIS will be removed, ratings have been integrated into existing posting.

- PJM will screen breaker ratings on a pre and post contingency basis.
 - Non-deterministic flow breakers, like in a fully closed ring bus, will be ignored.
- PJM EMS can screen breaker and branch elements separately.
 - More efficient operations when branches aren't de-rated all the time due to a switch limitation.
 - May result in operational differences if EMS does not screen breakers.
- Rating updates will go through same TERM process.
 - New equipment type of 'BRKR'.
 - New flow breakers will require a Network Model ticket to be added in the next model build.

- **Reactive Testing Tickets:**
 - replacement of current MS Excel and email method of GOs communicating reactive test data and analysis results.
- **Network Model Request Form Refresh:**
 - to improve coordination for model build processing.
- **Non-SVG One-Line Diagram Files:**
 - availability of one-line diagrams in alternate file format(s).
- **Equipment Outages Preview:**
 - user preview of what would be outaged based on equipment entered on the Transmission Ticket.

- Coordinated Testing in Sandbox:
 - 2 hour conference call session on Wednesday, 9/14 (tentative).
 - SMEs available to perform PJM functions e.g. update tickets (lock, approve, activate, recall, etc.) as needed.
 - Members confirm all functionalities frequently used.
- Tech Change Forum meetings scheduled for:
 - Tuesday, 9/27: change awareness discussion
 - Wednesday, 9/28: technical implementation discussion.
- User Guide and Training updates in progress.

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