eDART Roadmap

As of December 6th, 2017
eDART (electronic Dispatcher Application and Reporting Tool) is a suite of electronic applications used to facilitate dispatcher-to-dispatcher communications, along with other engineering communication and coordination functions.
Background – eDART Applications

- **IRC**
  - Used to verify if enough reserve MW available.

- **Used to verify generation will not over-exceed light load margins.**

- **Used to schedule the output of Susquehanna River Hydroelectric Assets**

- **Used to record and schedule:**
  - Generator MW Outages
  - Voltage Regulator Outages
  - Governor Outages
  - D-Curve Adjustments
  - Reactive Tests
  - Reactive Test Results Tickets
  - GO Survey

- **(IRC)**
  - Used to verify if enough reserve MW available.

- **Used to capture unit data and determine critical load in system restoration plans.**
Background – eDART Applications

- **Feedback**: Used for reporting issues or providing feedback.
- **My eDART**: Used to view updates made to Object IDs.
- **Upload**: Used to practice and coordinate restoration of service in PJM area after a blackout.
- **Download**: Used to record and schedule non-generator transmission facility outages.
- **Trans. Tickets**: Used to record and schedule non-generator transmission facility outages.
- **Network Model**: Used to coordinate the update of system restoration plans.
- **Black Start**: Used by companies to submit changes to the transmission grid.
- **Telemetry Coordination**: Used to record and schedule line, transformer, phase shifters, series and flow devices temperature apparent power ratings.
- **TERM**: Used to update facility clearing times data used in dynamic studies.
- **Reactive Reserve**: Used to practice and coordinate restoration of service in PJM area after a blackout.
- **Instantaneous Reserve Check**: Used to view updates made to Object IDs.
- **Minimum Gen. Report**: Used to record and schedule non-generator transmission facility outages.
- **PJM Status Report**: Used to coordinate the update of system restoration plans.
- **NERC Data**: Used to practice and coordinate restoration of service in PJM area after a blackout.
- **Restoration Data**: Used to record and schedule non-generator transmission facility outages.
- **Facility Data**: Used to practice and coordinate restoration of service in PJM area after a blackout.
- **Online Help**: Used to practice and coordinate restoration of service in PJM area after a blackout.
- **Logout**: Used to practice and coordinate restoration of service in PJM area after a blackout.
Background – eDART Applications

Current Status Report
15 minute snapshot of current status

Peak Status Report
Forecast of system condition for the peak of the day

Supplemental Status Report (SSR)
72 hour forecast of system condition; typically for extreme hot/cold weather conditions

Gen Checkout
Used to compare and highlight discrepancies between Market Gateway bids and Available Capacity. Brings Markets and Operations together in real-time

Used to record and coordinate
- Reactive Reserve Check (RRC)
- D-Curve Review (on Gen. Tickets menu for Gen users)

Used to manage PSSE mapping information for the purpose of sending and receiving info to/from NERC SDX
<table>
<thead>
<tr>
<th>Event</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>eDART Refresh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RRC Rewrite Phase 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Group Meetings: May 31 &amp; June 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Train: June 13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prod: July 26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GO Survey Enhancements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reactive Testing Results Browserless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhancements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blackstart Enhancements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend**
- Green square: **Start Date**
- Green diamond: **End Date**

**Notes:**
- **Calculation updates**
  - Train: Nov. 20
  - Prod: Dec. 13
- **Parallel Operations**
  - TBD
- **eDUG-G Meeting:**
  - May 5
  - May 16
  - June 26
  - Sept. 27
  - Dec. 13
Q4 2017 Release

• Release Date: December 13th
  – Blackstart Calculator Enhancements
  – Updates to RRC forms, report, downloads and uploads based on feedback.
  – Details and other Q4 enhancements discussed in User Group Meetings.
    • [http://pjm.com/committees-and-groups/user-groups/edart-ug.aspx](http://pjm.com/committees-and-groups/user-groups/edart-ug.aspx)
Current timeline for Web UI refresh

- 2017
  - User Experience Analysis and Design
    - Interested eDART web UI users should contact Chidi.Ofoegbu@pjm.com.
  - Requirements gathering

- 2018
  - Work planning (overall project schedule & web UI page sequencing)
  - Web UI refresh
  - Progress review
# eDART Browserless Refresh Roadmap

<table>
<thead>
<tr>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Q2 2018</th>
<th>Q3 2018</th>
<th>Q4 2018</th>
<th>Q1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design &amp; System Requirements</td>
<td></td>
<td></td>
<td></td>
<td>⬤</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; Testing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>⬤ Users Meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member Training &amp; Rollout</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Go Live / Parallel Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>⬤ End Date</td>
</tr>
</tbody>
</table>

**Legend**
- ⬤ Start Date
- ⬤ End Date

[Image of roadmap with timeline and markers for each phase of the refresh process.]
• User Experience Analysis for the eDART Refresh is ongoing.
  – Users of the eDART browserless interface interested in providing feedback should contact Chidi.Ofoegbu@pjm.com.

• Meeting will be scheduled in January 2018 to discuss replacement service for browserless interface.