



eDART March 2018 Release Enhancements

eDART XML Users Group Meeting
02/26/2018

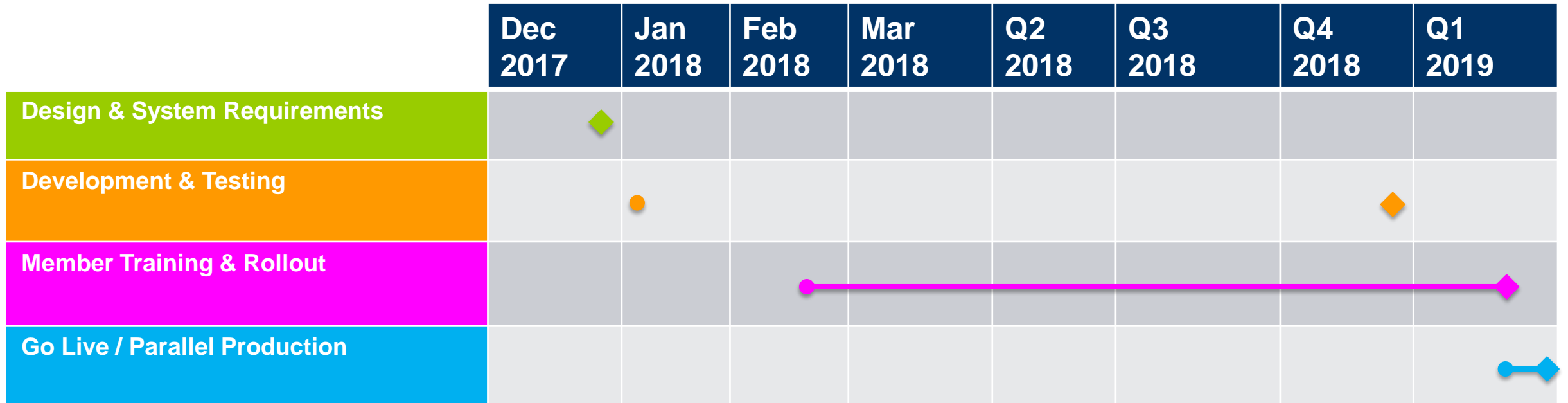
- Production release of March enhancements scheduled for Wednesday, March 21st.
 - eDART will be unavailable from 19:00 to 02:00 on Thursday, March 22nd.
- Sandbox release scheduled for today, February 26th.

- General Updates
- Generation Related Enhancements
 - March 21st Release
 - Future Enhancements
- Transmission Related Enhancements
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- Updates to the XML Documents page:
<http://pjm.com/pub/etools/edart/xmldocs/xmldoc.html>
 - Updated Schema documents and XSDs for March release to be posted today, February 26th.
 - Incorrect complex types removed from Gentic review XSD:
<http://www.pjm.com/pub/etools/edart/xmldocs/genticreview.xsd>
 - Browserless_file_transfer.doc being updated to include description and required eDART access/role for download types.
 - XML data dictionary being updated and will be posted by Monday, March 5th.

- Fixed an issue with the following downloads that were returning only headers:
 - gentix4transbydate: Generation tickets for transmission users
 - dcurvegen: D-Curve report for generation users
 - dcurvetrans: D-Curve report for transmission users

- User Experience Analysis for the eDART Refresh is ongoing.
 - Users of the eDART web UI and browserless interface interested in providing feedback should contact Chidi Ofoegbu.
 - Vendors included.
- Meeting held on January 2018 to discuss replacement service for browserless interface.
 - Meeting presentation available: <http://www.pjm.com/-/media/committees-groups/user-groups/edartxmlug/20180130/20180130-edart-browserless-refresh.ashx>.



Legend

- Start Date
- ◆ End Date

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- Per PJM Manual 14D, Attachment E.4.1, telemetered unit MW and MVAR data must be verified for MVAR Tests.
- Currently, PJM engineer enters telemetry verification data in PJM Comment field on ticket.
 - Users required to review Comment Log to find verification timestamp.
- New fields for telemetry verification dates added to genticreview download to indicate timestamp and user information for when telemetry was must recently verified for the ticket.

```
<?xml version="1.0" encoding="UTF-8"?>
- <edart xsi:noNamespaceSchemaLocation="genticreview.xsd"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  - <genticreview>
    <pjm_ticket_id>111111</pjm_ticket_id>
    <company_ticket_id/>
    <unitnumber>123456</unitnumber>
    <ticket_type>5</ticket_type>
    <operational_data>false</operational_data>
    <ticket_type_description>MVAR Test</ticket_type_description>
  + <interval_definition>
    <description>Running unit at 45, 55, 65 and 80 MW</description>
    <status>Active</status>
    <timestamp>2018-02-01 15:49:07</timestamp>
    <pjm_timestamp>2018-02-05 16:05:17</pjm_timestamp>
    <pjm_comments>Telemetry verified; 48 MW and -6 MVAR.</pjm_comments>
  + <actual_dates>
    - <telemetry_verification>
      <timestamp>2018-02-02 15:57:33.0</timestamp>
      <user>pjmtest1</user>
    </telemetry_verification>
    <infoFlag>false</infoFlag>
  </genticreview>
</edart>
```

Telemetry Verification fields are only valid for MVAR Test tickets.

- Company Name added to download list of units.
 - Company name may be different from user's company in the case of joint owned units (Owners Report access granted) and approved transmission viewers.

```

<?xml version="1.0" encoding="UTF-8"?>
- <edart>
  - <generators>
    - <generator_list>
      - <gen_unit>
        <generator_id>1234</generator_id>
        <generator_name>GEN UNIT 1</generator_name>
        <generator_type>Nug</generator_type>
        <capacity>141</capacity>
        <company_name>Gen Company 1</company_name>
        <mvar_ratings> </mvar_ratings>
        <voltageControlPhilosophy>TBD</voltageControlPhilosophy>
        <meteredMVARValue>TBD</meteredMVARValue>
      </gen_unit>
    </generator_list>
    - <generator_list>
      - <gen_unit>
        <generator_id>4321</generator_id>
        <generator_name>NUKE 1</generator_name>
        <generator_type>Nuclear</generator_type>
        <capacity>800</capacity>
        <company_name>Nuke Company</company_name>
      - <mvar_ratings>
        - <rating>
          <ta_id>12222</ta_id>
          <ems equip_name>NUKE UNIT11 GEN UNIT</ems equip_name>
          <mw_point>0</mw_point>
          <mvar_max>20</mvar_max>
          <mvar_min>-8</mvar_min>
        </rating>
      </mvar_ratings>
    </generator_list>
  </generators>
</edart>

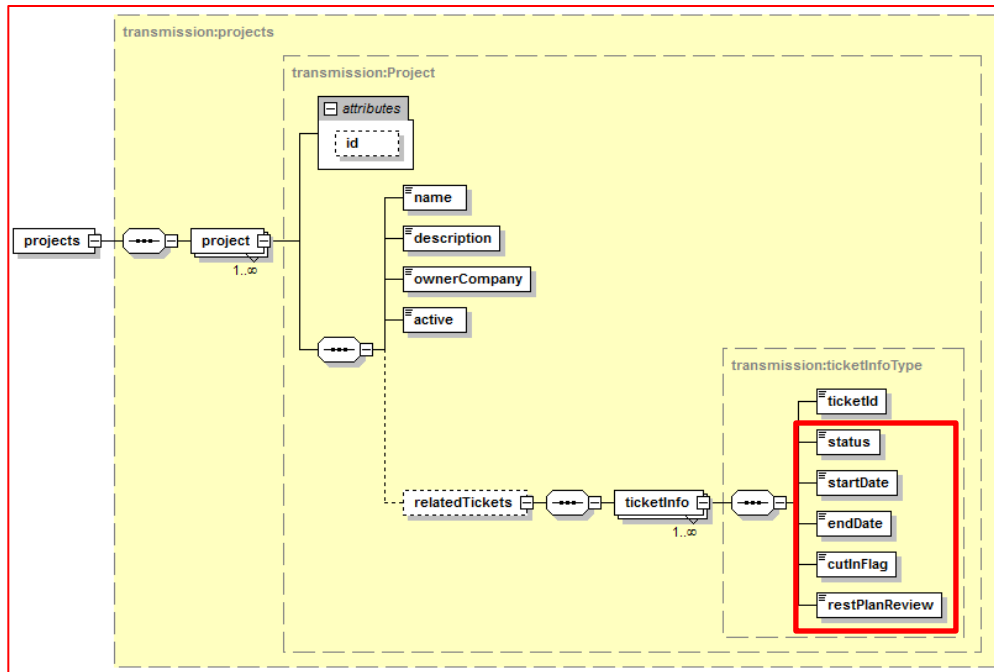
```

- Instantaneous Reserve Check (IRC) monthly statistical report.
- Global Include Historical flag:
 - By default, downloads will return current information; user can use flag to specifically request historical information.
 - Will help reduce size of files transferred and improve performance.
 - Currently being implemented for Transmission outage downloads.
 - Will be implemented for Generator outage ticket downloads in Q2.
- Generation PSSE Identifier upload to be disabled; functionality will be made read only.

- Voltage Schedule Tool: New eDART web-based tool to aid compliance monitoring of Voltage Schedule communication between PJM, TOs and GOPs (per VAR-001 R5.1 <http://www.nerc.com/pa/Stand/Reliability%20Standards/VAR-001-4.2.pdf>).
 - Voltage Schedules (kV, Power Factor, Reactive) will be stored and updated in eDART along with their Bandwidth/Tolerances.

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- Ticket status, cut-in flag, start date/time, end date/time and Restoration Plan Review status (if a cut-in ticket) added to the transmission projects download.



```

<?xml version="1.0" encoding="UTF-8" standalone="true"?>
- <transmissionprojects:projects xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:transmissionprojects="http://www.pjm.com/soa/schemas/edart/transmissionprojects/v1"
  xsi:schemaLocation="http://www.pjm.com/soa/schemas/edart/transmissionprojects/v1
    transmissionprojects.xsd">
  - <project id="2">
    <name>Sample</name>
    <description>Group related tickets into a project</description>
    <ownerCompany>Electric Company</ownerCompany>
    <active>true</active>
  - <relatedTickets>
    - <ticketInfo>
      <ticketId>515</ticketId>
      <status>Approved</status>
      <startDate>2001-08-01T00:00:00.000-04:00</startDate>
      <endDate>2001-08-09T01:00:00.000-04:00</endDate>
      <cutInFlag>true</cutInFlag>
      <restPlanReview>1119 - Approved</restPlanReview>
    </ticketInfo>
    - <ticketInfo>
      <ticketId>517</ticketId>
      <status>PJM Admin Closure</status>
      <startDate>2011-04-05T00:00:00.000-04:00</startDate>
      <endDate>2011-04-05T00:09:00.000-04:00</endDate>
      <cutInFlag>>false</cutInFlag>
    </ticketInfo>
  </relatedTickets>
</project>
- <project id="21">

```

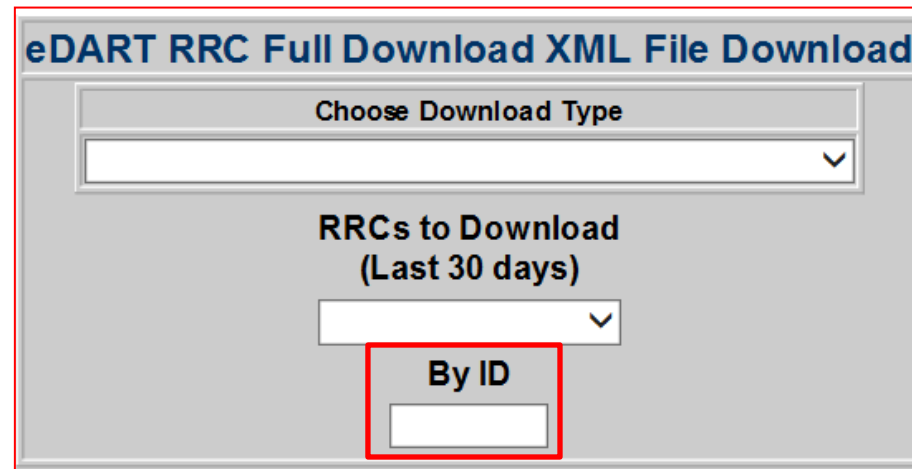
- New optional parameter created for transmission tickets download to return all tickets requiring review of restoration plan.
 - Parameter name = restplanreview (true/false; false by default).
- Restplanreview tag removed from transmission tickets uploads (create & revise tickets).
 - Users no longer required to edit this field.
 - eDART will automatically create an entry in the Pending Restoration Plan update queue for cut-in tickets.
 - Restoration Plan Review no longer needed for non-cut-in tickets.

- Restplanreview tag on transmission tickets downloads updated to reflect status of the restoration plan update request.
 - Field format changed from enumeration to string.
 - String format: [Update ID] – [Update Status]

```
<equipment_default/>  
- <restplan>  
  <restplanreview>1159 - Approved</restplanreview>  
</restplan>  
</transticreview>
```

- New Include Historical parameter:
 - By default, downloads will return current information; user can use parameter to specifically request historical information (tickets completed or cancelled more than 40 days in the past.).
 - Will help reduce size of files transferred and improve performance.
 - Parameter name = includeHistorical (true/false; false by default).
- Impacted downloads: transmission, transmissionbydate, transwithnotify, transticchanges, emstripped.

- New optional parameter created for New RRC Full download to return New RRC Report by ID.
 - Parameter name = rrcid.
 - Option to download New RRC Full by ID also added to web browser download.



eDART RRC Full Download XML File Download

Choose Download Type

RRCs to Download
(Last 30 days)

By ID

- Issue with termi download returning duplicate notification records fixed.
 - If multiple companies have ownership access to the same TERM equipment, one company is picked and returned in the download.
- Error Message displayed on submission of hotline ticket with equipment status different from default status updated.
 - Equipment information added.
“Equipment should be in its normal state (closed/open) for Information/Hotline tickets. ta_id: 12345 (Type, B1, B2, B3_Text) normal state: open”

- RRC by Date Download
 - New report to provide list of RRC reports (by ID) created between provided start and end dates.
- Transmission PSSE Identifier upload to be disabled; functionality will be made read only.
- Transmission PSSE Identifier download will be updated to include 3 Winding Transformer mapping information.

- Voltage Schedule Tool: New eDART web-based tool to aid compliance monitoring of Voltage Schedule communication between PJM, TOs and GOPs (per VAR-001 R5.1 <http://www.nerc.com/pa/Stand/Reliability%20Standards/VAR-001-4.2.pdf>).
 - Voltage Schedules (kV, Power Factor, Reactive) will be stored and updated in eDART along with their Bandwidth/Tolerances.
 - Voltage Schedule exemptions will be recorded in eDART.

- Request to receive email notification of Generator outage tickets from eDART.
- Generator outage tickets currently available via the web UI and XML downloads.
 - This will be an additional option for TOs to receive the information.
 - TO will be required to set up group email address and manage which units notification will be sent for.
 - Outage information will need to be encrypted.
 - Need to decide when the emails should be sent (all status changes? on submission of revisions? weekly emails?)

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