



DMS Report to the OC

**Data Management Subcommittee – Joint (DMS–Joint)
PJM Conference and Training Center
January 25, 2018**

Administration

- Introductions and Roll Call done in room and for those joining via teleconference.
- DMS-Joint Agenda approved.
- Meeting Minutes from November 15, 2017 DMS-Joint Meeting approved
- Ms. Baptiste provided an update on PJM’s approach to create a view-only solution for sending the last good data value. A change request is being prepared for PJM’s EMS vendor to assess and estimate scope and cost of this work. Updates will be ongoing at upcoming DMS-Joint meetings.

Metrics Review

- ICCP Data Link Report: Mr. Smith reported summary of ICCP data links data for November and December 2017. One RCA is required by NCEMC who had an outage that lasted over four hours.
- Phasor Data Quality Metrics: Mr. Erkan Tuna provided an update on Synchrophasor Data Quality reports. Mr. Tuna reported a trend whereby issues have been declining.

Phasor Measurement Unit (PMU) Overview

Mr. Shaun Murphy provided an overview of PJM’s PMU management. Mr. Murphy’s presentation included a brief history of the PMU project at PJM as well as a roadmap for 2018. It was noted that this year the Synchrophasor team will be meeting with individual Transmission Owners to discuss their current PMU efforts and future plans.



**Data Management Subcommittee (DMS) – Confidential
Conference and Training Center
January 25, 2018**

Administration:

- Introductions and roll call conducted in the room and on the phone.
- Agenda approved.
- Meeting notes approved for November 16, 2017 and January 9, 2018 DMS-Confidential Meetings
- Members encouraged to review PJM Stakeholder language printed on agenda and to provide feedback routinely on Stakeholder process.

Spring 2018 Project Submissions:

Ms. Lake reflected on system enhancements for members to view modeling projects and asked if providing the projects online before the meeting is meaningful or not. Mr. Daniels (PPL) does look at the one-line diagrams prior to the meeting. However, going through each slide at the meeting is tedious and only relative for his individual company during the presentation. He feels they do not need to be presented at the meeting. Mr. Nick Goerger (DOM) feels it's not necessary to walk through the projects per their process. Ms. Hartman (FE) suggested that instead of going through them during the meeting, Ms. Hartman provides the materials to their EMS group members that can't attend individually. In short, members request that files be posted, TOs will take responsibility for review prior to meeting, and then report any questions at the meeting. PJM will consider this feedback and advise how we will proceed.

Roundtable :

CIM File Upload: Mr. DeLoach advised that availability of CIM models could potentially speed up the model update process and the need for less information when updating. Mr. DeLoach asked where individual companies stand on CIM files and whether they would be interested in sharing. Mr. Hessenauer (BGE) noted BGE does not do anything with CIM and has no plans in the near future. Mr. Zheng (PEPCO) noted same for PEPCO. Mr. Morehouse (PPL) could send CIM from PL, but not sure how much information PJM could derive. Ms. Hartman (FE) not using CIM; Mr. Jain (COMED) advised COMED could provide CIM file, but noted file is not typically available until one week prior to model build. Mr. Goerger (DOM) also models a week or so in advance and uses Alstom for model build checks. Mr. Goerger believes this is something that DOM would consider but is unsure of next steps. Mr. Roberts (DUKE) is not using CIM right now and is unfamiliar with CIM data. Mr. Roberts asked about data output and Mr. DeLoach advised that data can be extracted from MMD tool.

- **ACTION ITEM:** Mr. Daniels (PPL) reflected on a presentation previously done at a past DMS about CIM and asked if we could revisit that presentation in a future meeting.

Member Site Visits: Ms. Lake advised that two site visits (AEP and DEOK) have occurred since last DMS meeting. Meetings continue to be positive and PJM derives a great benefit in information sharing and relationship building. Ms. Lake's goal is to visit all or as many member sites as possible during 2018.

Future eDART Enhancements: Ms. Lake addressed the following enhancements:

- A. Add 'In Progress' status to NM Ticket: Would generate notification to TOs that PJM is working on NM submission.

- B. Add a check box for Preliminary Parameters: Will indicate parameters are a first pass and will likely be changed prior to cut in. Mr. Daniels (PPL) asked where in process PJM would prompt TO to send final parameters. Mr. DeLoach noted that during cut-in process, as energization date nears, there is currently a check in place to check for final parameters. This is outside NM request and in line with energization process. Mr. Chang (PSEG) questioned when in process to update parameters. Mr. DeLoach encouraged Mr. Chang to reach out if he sees gaps. Mr. Chang asked if updating ratings in TERM is sufficient. Ms. Lake advised we can take this offline to discuss and clarify process. Ms. Hartman (FE) asked if preliminary impedance are actually permanent. Ms. Lake advised permanent impedances will be addressed during energization. Mr. Daniels (PPL) noted that as long as PJM confirms final impedances, he is satisfied. Mr. Valmikan (Exelon) asked if PJM could utilize data in planning cases to share with TOs. Ms. Lake noted that for NM, it's the TO's responsibility to provide this data when submitting the NM ticket.

- C. Notification to submitter of status change in NM ticket: Mr. Creiglow (AEP) noted at bare minimum it would be good to receive final confirmation that change is complete, as they track this information in their process.
 - **ACTION ITEM:** Mr. DeLoach advised PJM will poll DMS about email notifications to pinpoint specific statuses or if receiving notification on all status changes is beneficial.Add searchable field for B1 name: Ms. Hartman (FE) and Mr. Hessenauer (BGE) confirmed this would be good. Ms. Lake advised this enhancement is at concept stage right now. Ms. Hartman (FE) noted additional enhancement for system to check and note if name is already in use to prevent user from entering duplicate. Ms. Lake will take this back and report to group. Mr. Creiglow (AEP) noted that he would like ability to search beforehand. Mr. Chang (PSE&G) asked if he can edit ticket when marked Approved status. Ms. Lake advised that all editing should be done preliminarily and when at Approved, TOs can view only.

Following the break, Mr. DeLoach advised an additional need surfaces for PJM to add a report to show all impedances that have changed over a specified period of time. Details about this will be discussed going forward. Mr. Chang (PSEG) asked if he can see neighboring company RXB and Mr. DeLoach confirmed this report would enable that.

TOP-010 Updates:

- A. TOP-010, R1 and R4 Standards –Ms. Bilge Derin addressed R1 Standards and PJM’s response to each sub-section (R1, R2, R3), which were outlined in presentation. Mr. Brian Orme addressed R4 Standards and PJM’s response. Mr. Orme offered clarification as R4 standard can appear complex. Alarm notification process for PJM will be external to PJM EMS to avoid internal issues, have acyclic check on new alarms, and also contain a PI display solution.
- B. TOP-010, R3 Standard: Mr. Julian Feng’s presentation followed up on the 1/9/2018 DMS-Confidential WebEx, which is an FAQ based on follow-up questions from the 1/9/2018 meeting. Mr. Chang (PSEG) requested clarification on 30-minute bad quality minimum and Mr. DeLoach explained PJM is using this NERC threshold. Mr. Scurria (Exelon) drew a parallel between this requirement to TOP-004 which is similar, and Mr. Srinivas Kappangantula from PJM’s NERC and Regional Compliance concurred. TOP-004 addresses complete lack of monitoring capability which is different than R3. Mr. Kuras clarified R3 only applies to TOP TOs. Mr. Scurria (Exelon) advised additional analysis should be done against event requirements to concur. Mr. DeLoach pointed to RSCS and TTMS to confirm appropriate event notification processes for compliance, and that the M03A, Rev. 14 updates will address required changes. Mr. Brian Selestak (FE) asked if TO should prove criteria to PJM and what notification should include. Mr. DeLoach advised TOs should develop criteria to comply in the event of audit and proof of compliance is necessary. Email notification would serve as evidence of compliance for notification. If TOs would like to have PJM’s NERC and Regional Compliance review procedure they develop, the door is open for TOs to do that. Mr. Daniels (PPL) asked if phone call is acceptance to comply; Mr. DeLoach advised email is more traceable form for audit. Regarding reference to periodic monitoring, is audit looking for documentation that TO is checking every 30 minutes, or frequency of checking? Mr. DeLoach noted that requirement is when quality is unstable for 30 minutes, that’s when reporting is required. Mr. Daniels (PPL) asked if proof of frequency for checking is required (e.g., checking every 5 minutes, etc.). Mr. Ford and Mr. Kappangantula clarified that TO processes and procedures are required outside this standard and this question is in line with processes and procedures.
- **ACTION ITEM:** The next of the next RSCS and TTMS meeting is 2/15 and PJM will generate an email reminder to DMS members about the upcoming meetings (which is in-person attendance only) if they want to attend.
- Mr. Kappangantula is also welcome to accept positions from TOs as well. Currently working through Version 12 – TOs should get any suggested changes to Mr. Kappangantula by **end of January 2018**. Exact wording for email notification is not available right now; Mr. Feng advised content of email can be high level to meet requirement. Mr. Zheng (PEPCO) advised that PEPCO does not have anything in place with CA solution is questionable, only when it fails. Mr. Kuras offered that this requirement notification is about solving or not solving. Any interim activity is not necessarily required. Additional detail is OK, but not required. Mr. DeLoach sees opportunity for TOs to present at future DMS meetings on what they have developed for performance quality indicators.
- **ACTION ITEM:** Identify TOs who would like to present for their company and identify best forum to do this. Members will also be asked what type of EMS system they have.

Mr. Kappangantula reminded that 4/1/2018 is when standard is in effect. PJM should generate poll ASAP and schedule meeting for mid-February / early to mid-march for TOs to provide TO presentations. Mr. Morehouse (PPL) addressed different options available per individual EMS systems and idea of exploring common solutions per EMS systems. Mr. DeLoach noted this discussion/analysis could come after TO presentations. Mr. Ford suggested availability of a tool for Mr. Morehouse to investigate. Mr. Daniels (PPL) noted there's not enough time and while a collaborative session is valuable, grouping TOs by EMS systems would be beneficial to tackle notification solution.

Manual 3A, Revision 14 Review:

Mr. Ford reviewed revisions to M03A, Revision 14, where new Section 5.6 is added. Mr. Ford noted while this was technically a first read of these changes, members were asked if they were willing to either forego the second read or have the second read at the interim DMS meeting to occur mid-February/early-March. This is due to the fact that 4/1/2018 is the implementation date for TOP-010. Members reported no objection to foregoing second read for endorsement; however, PJM will advise if the second read will occur at upcoming special meeting.

Manual 1, Revision 37:

Ms. Derin addressed changes to three different sections in M01 per TOP-010-A(i). Impact appears at Section 3.2.3, Section 5.2 and Section 5.2.1. This review is for informational purposes only (no endorsement required).

PJM Cut-in Process Enhancements

Mr. Sexauer provided an update on recent enhancements to the cut-in process, displaying screen shots of tables, function, and notifications associated with the Keystone tool utilized for cut-ins. TOs are encouraged to submit feedback if they're interested in receiving any data maintained in the Keystone Tool.

Metrics Review:

Submit-on-time Statistics: Mr. DeLoach noted that in the near future Submit-on-Time Statistics will routinely be presented to SOS-T. Mr. Androwick summarized stats for Spring 2018, which indicate that 92% submissions were provided on time. While the goal is to achieve 95%; some very explainable factors contributed to the slight drop. Moving forward, all TOs have now been assigned an identification number to help them to easily identify their specific statistics on the submit-on-time report.

Telemetry Update: Mr. Brophy provided an update on telemetry, outlining plans to add update to M01 regarding members sending a full telemetry file on a regular basis. PJM would also like to receive non-telemetered data.

Mr. Morehouse requested an update in frequency in receiving telemetry data dumps. Mr. Brophy advised they send telemetry quarterly after each model build; however, Ms. Fahr advised that if data needed more frequently, to please submit a request and PJM will work to generate an ad hoc telemetry data dump to send to Mr. Morehouse.

Tie Line Process:

Mr. Tuna provided an update on tie lines in addition to an update on 60-90-day lead time requirements for notifying of tie lines. Mr. Tuna also appealed for TOs to provide projected in service dates in order to update the tie-line list now maintained by Mr. Tuna.

Ratings Update

Mr. Orme addressed the ongoing effort to align Planning and Operations Ratings Databases. This effort was successful last year and will continue.

- **ACTION ITEM:** Mr. DeLoach noted that the same effort to update is needed for impedances (transformers only) to align databases. This effort (to give trigger point to resolve differences) will be added to the next DMS agenda (Julan F. to present). Mr. Orme also addressed 2017 effort to clean up permissions in the database, address lines, tie lines, and two-winding and three-winding transformers.

Regarding the effort to receive ratings dump files from TOs, members are encouraged to consider methods to do this and we can discuss at a future DMS meeting. Regarding the Ratings Distribution List, there are still a couple of TOs missing contacts on the Ratings Distribution List. These contacts are identified as primary points of contact to receive notifications on ratings. Mr. Orme will be following up.