



MEETING MINUTES

PJM Interconnection

Net Energy Metering Senior Task Force (NEMSTF) - Meeting #13

Conference & Training Center, Franklin 1&2

2750 Monroe Blvd

Norristown, PA

05.25.2012

9:30am – 3:30pm

1. ADMINISTRATION (20 MIN)

Mr. Barrett called the meeting to order at 9:30am with a reminder of meeting & Anti-trust guidelines. Mr. Callis led the roll call and reviewed minutes and status of action items from prior meeting.



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2. REVIEW AND FINALIZE DRAFT FINAL REPORT (1.0 HR)

Reviewed and discussed the most current redlined report. Stakeholders provided numerous edits and refinements that were incorporated into the final draft. The document was tabled pending completion of agenda items 3 and 4.

3. DISCUSSION TOPIC: CASH FLOWS ASSOCIATED WITH DISTRIBUTION-LEVEL NEM INJECTIONS (1.0 HR)

Mr. Pat Cook and Mr. Brian Shaffer provided a presentation of an illustrative PJM zone including tie flows, generation, and apparent and actual NEM energy injections. Stakeholders discussed the use-case and came to understand that by including the ability to reconcile for NEM injections, the zonal settlement more accurately reflects true assignments of both dollars and MWh to/from suppliers. Mr. Dessender concurred with the approach, which further amplified the desire to treat net energy injections as a positive contribution, rather than a negative load.

4. MEMORANDUM REVIEW (30 MIN)

Mr. Keyes provided a general overview to the NEM stakeholders regarding a memorandum written by Mr. Jason Keyes and Mr. Thad Culley. Mr. Keyes was seeking to gain clarity on specialized types of NEMs, such as aggregators and community energy projects. Mr. Keyes posited that the absence of clear definitions for these types of NEM serves as a barrier for investment and construction.

After consideration by the stakeholders, and given that no such definitions exist under federal regulation, it was agreed that parties pursuing such projects should approach the relevant state first (for guidance and/or clarification) and may also elect to independently seek clarification or a declaratory order from the FERC.



Mr. Keyes offered for consideration proposed edits to the NEMSTF glossary. After discussion, it was agreed that the NEMSTF glossary served as an educational tool to unify the understandings of the NEMSTF participants, however did not reflect the authoritative definitions for each state. The parties agreed to maintain the document as an artifact of the senior task force, but to remove it as a supplemental document to the final report.

5. UPCOMING MEETING (15 MIN)

- a. Stakeholders agreed that all documents reflected each parties comments and could be finalized. Therefore, it was agreed to cancel the scheduled May 30th meeting.
- b. Mr. Dessender agreed to provide electronic copies of the proposed Manual edits and requested stakeholders to provide electronic feedback. Mr. Barrett will also prepare a draft Power Point presentation summarizing the NEMSTF proceedings and findings and will distribute it to the stakeholders for their feedback. If substantial feedback is obtained, the NEMSTF Facilitation Team will schedule a teleconference / Webex to finalize the proposed materials that will be reviewed and endorsed by the MRC.

6. MEETING SUMMARY AND CALL FOR FUTURE AGENDA ITEMS (5 MIN)

Mr. Barrett summarized the meeting and reviewed open action items with the stakeholders. Mr. Barrett called for consensus on the finalized NEMSTF report and supplemental documents and further sought any objections to presenting the finalized report to the MRC. Hearing no objections, Mr. Barrett thanked the participants for their active participation throughout the process.

7. FUTURE MEETING DATES AND MEETING VENUES

2012

May 30	9:30—3:30pm	PJM Interconnection, Conference and Training Center, Tesla Cancelled
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8. ACTION ITEMS LOG

Created	Description	Owner	Status
Action Items Created Monday, January 30 th , 2012			
Jan-30 #1	PJM – When determining jurisdiction (PURPA, QF, FERC, etc), a process flow diagram was recommended. PJM to produce draft before next meeting ➤ 2/6: PJM distributed and Pauline reviewed with the participants	PJM	Closed
Jan-30 #2	PJM - Ensure uniformity of NEMSTF matrix definitions; e.g. standby charges	PJM	Closed - Will be included in the 6/28 presentation
Jan-30 #3	PJM - Create a glossary for the state and legislative NEMSTF matrix under	PJM	Closed

	development (updated glossary provided on April ____) <ul style="list-style-type: none"> ➤ Closed, posted on 4/25. Ongoing updates will be communicated, and reposted. 		
Jan-30 #4	Harry Dessender – create a use case regarding materiality (< ____ MW) in individual and aggregate MW. When are the positive net energy injections too small to warrant modeling? (ref Metering slide on Modeling, bullet 2, 1st sub bullet) <ul style="list-style-type: none"> ➤ 2/6: WIP, querying the eMTR data for NULL values ➤ 2/28: Harry indicated this is a WIP and will need several more weeks to complete due to amount of data ➤ 3/7: Harry indicated WIP including data analysis on generators in State Estimator (SE), Load buses going negative (due to modeling issues). 	PJM	Closed
Jan-30 #5	PJM - Include an education session with the NEM impact on the planning model including peak load and peak generations calculations (John Reynolds to provide training)	PJM	Closed
Jan-30 #6	TO's and utilities – "How do you manage NEM's in your region?" Document and share your practices with respect to NEM projects. Note: PJM build a posting template for TO's and utilities <ul style="list-style-type: none"> ➤ Split into 3 distinct items Feb-6 #1, #2, and #6 	Joint	Closed
Jan-30 #7	PJM - It was noted that some March and April NEMSTF meetings fall on "No Meeting dates". An action item was taken to see if the dates could be mitigated or rescheduled <ul style="list-style-type: none"> ➤ 2/6: Meetings moved to 3/7 (from 3/5) and 4/4 (from 4/2). 	PJM	Closed
Action Items Created Monday, February 6th, 2012			
Feb-6 #1	Stakeholders "Interests" – Document and share your company's interest w/r/t NEM by noon on Monday, March 5th, 2012 <ul style="list-style-type: none"> ➤ 3/7: there were a handful of responses, these were discussed and edits/additions were captured online. PJM will distribute the results Friday, 3/9. ➤ 4/30 – Closed as of March 31st 	PJM	Closed
Feb-6 #2	Stakeholders "Questionnaire" – Document and share how you deal with NEM projects in your region; types and number of interactions, number of NEM projects, number of 2012 projected NEM projects, NEM project magnitude (MW), etc. by noon on Monday, March 5th, 2012 <ul style="list-style-type: none"> ➤ 3/7 Update: 14 responses gathered (13 via EDCs). The results were reviewed; there were some suggestions for making changes to the questionnaire to provide better, more consistent information. PJM took an action item to formulate - 3-5 new survey questions and re-distribute. The timing to publish the new data is coincident with the NEMSTF meeting on March 19th. 	PJM, Stakeholders	Closed
Feb-6 #3	PJM (Bhavana Keshavamurthy) Day Ahead Markets a. Revise slide # 11 for clarity of MWh for demand and MWh/MVar for energy and capacity b. Distribute additional resources regarding D/A Markets (web link for eMKT user guide, web link for detailed D/A training, hotline phone number for Markets questions) <ul style="list-style-type: none"> ➤ There are three main resources that new participants can use to 	PJM	Closed

	<p>familiarize themselves with the Day ahead market and eMkt:</p> <ol style="list-style-type: none"> 1) Day ahead training : Day-Ahead Scheduling & eMkt - http://www.pjm.com/sitecore/content/Globals/Training/Courses/ol-da-sched.aspx 2) eMkt User guide : http://www.pjm.com/markets-and-operations/etools/~media/etools/emkt/ts-userguide.ashx 3) Customer support: The Client Managers assigned to the participant will help with the paperwork needed to get their accounts setup. For specific questions related to portfolio setup, participants can contact the PJM Markets Hotline at 610-666-8998 or send an email to markets_hotline@pjm.com. 		
Feb-6 #4	<p>PJM publish any FERC Order and tariff citations with respect to non-retail generation</p> <ul style="list-style-type: none"> ➤ 1.27AA Non-Retail Behind The Meter Generation: Behind the Meter Generation that is used by municipal electric systems, electric cooperatives, or electric distribution companies to serve load. ➤ Non-Retail Behind the Meter Generation (NRBTMG) is in Schedule 8 of the Reliability Assurance Agreement (RAA). ➤ Section 1.27AA Non-Retail Behind The Meter Generation: ➤ Section 34.3 Netting of Non-Retail Behind The Meter Generation. ➤ SCHEDULE 15 - Non-Retail Behind The Meter Generation Maximum Generation Emergency Obligations 	PJM	Closed
Feb-6 #5	<p>PJM (Pauline Foley) – edit/revise and distribute the Jurisdictional decision table</p> <ol style="list-style-type: none"> a. Correction for QF non-purpose sale, slide 2 b. Add a NEM row to the table c. Revise high level flow chart (Jason Keyes, Pauline Foley) <ul style="list-style-type: none"> ➤ 2/28 – Items a and b are complete. Pauline and Jason are discussing a topic related to item c, and when complete, the document will be re-issued to the stakeholders (and included in the final deliverables). ➤ 4/30 - Closed – issued on April 25, 2012 	PJM	Closed
Feb-6 #6	PJM publish NEM template for stakeholders by 2/13/12.	PJM	Closed
Action Items Created Monday, February 27th, 2012			
Feb-27 #1	<p>Review Reliability Assurance Agreement (RAA) Schedule 6, § L for potential conflict with current NEM legislation (reducing load below zero).</p> <ul style="list-style-type: none"> ➤ This was completed and no conflict was confirmed by Pauline. 	Pauline Foley	Closed
Feb-27 #2	Create a chart/visual of the NEM project options and alternatives regarding Behind the Meter, energy only, or capacity resource.	PJM	Closed
Feb-27 #3	Ensure the state and legislature matrix can be pivoted by State or Feature/variable	Brad	Closed
Feb-27 #4	<p>Re-issue the NEMSTF Survey Questionnaire to include</p> <ol style="list-style-type: none"> a) "Please identify the respondents sector" with a special emphasis on EDC data b) Add "NEM" to question #3 	Tracy	Closed
Feb-27 #5	<p>Provide refresher for Senior Task Force polling expectations</p> <ul style="list-style-type: none"> ➤ 3/7: Fran updated the NEMSTF that the group will employ straw polls and Webex online polling in order to permit timely, efficient and 	Fran	Closed



	extensive task force feedback. Mr. Barrett noted the guiding sections of the PJM Stakeholder Meeting Manual (Manual 34) and informed the stakeholders that, as a Senior Task Force, certain voting guidelines must be upheld prior to submission for consideration by the MRC.		
Feb-27 #6	PJM will circulate a brief narrative for each of the panels (one panel on physical interconnection and real time metering, and a second panel on data aggregation and market settlements), solicit speakers and their availability, and identify the timing of the panels (March 7 th and/or March 19 th). Panelists shall be stakeholder practitioners dealing with NEM Projects.	Tracy	Closed
Action Items Created Monday, March 7th, 2012			
Mar-7 #1	Schedule two (2) "HOLD" NEMSTF meeting dates in May to alleviate any potential workload/schedule conflicts. PJM agreed to determine if future meetings may be relocated to the Visitor's Center in the Technology Center.	PJM	Closed
Mar-7 #2	PJM took an action item to formulate ~ 3-5 new survey questions and re-distribute. The timing to publish the new data is coincident with the NEMSTF meeting on March 19 th . <ul style="list-style-type: none"> • Number of net MWh positive (2011 and any possible multiyear trends) • Peak, instantaneous NEM generation that might affect PJM reliability and real time operations • Revised meter survey question – (David Ellis to assist in formulation) • Survey question on queue timing and cost data 	Facilitation Team	Closed
Mar-7 #3	Review Manual 41 for Glossary terms for energy injections and formulate a term specific to excess distribution level, NEM generation that affects the wholesale administered markets <ul style="list-style-type: none"> ➤ 4/30 – Initial posting to occur this evening. This will be re-distributed as updates come in 	H. Dessender	Closed
Action Items Created Monday, April 4th, 2012			
Apr-4 #1	Related to the Glossary and Flowchart/Decision Tree: <ol style="list-style-type: none"> A) Review FERC NEM definition. With respect to net excess injections at a transmission node at the end of the FERC defined billing period, does PJM have any liability? B) Review the "Wall Mart" example. <ul style="list-style-type: none"> ➤ Closed April 25, 2012 Ongoing, part of 6/1 deliverables 	F Barrett, P Foley, Sarah Cosby (Dominion)	Closed
Apr-4 #2	Connect and complete the coordination with the ISPTF as outlined in the charter	F. Barrett	Closed
Action Items Created Monday, April 16th, 2012			
Apr-16 #1	Research or develop "basic" flowchart for when an ISA or WMPA is utilized. <ul style="list-style-type: none"> ➤ K Graff draft developed, being finalized internally in PJM and then will be distributed 	PJM	Closed. Will be sent out with minutes from 5/25 meeting.
Apr-16 #2	Determine if a regular, periodic survey of BTM units, capacity and location takes place. <ol style="list-style-type: none"> A) If so, report out (documenting Manual, Tariff citation) as to its purpose (e.g. Operations, Reliability, Security) B) If reported – document "what happens next" with this information C) Document "Who solicits this information from whom." (Does PJM contact BTM Customer or does EDC or other PJM Member collect information from BTM Customer?) 	Fran, PJM	Closed



	<ul style="list-style-type: none"> ➤ 4/30 - Part of PJM Quality Project. Non-Retail BTM (NRBTM) are surveyed according to OATT Schedule 15 		
Apr-16 #3	Ensure that NEMSTF Report footnotes or hyperlinks Physical Interconnection decision tree	Barrett	Closed
Apr-16 #4	Discuss unique example of LSE "switching" during a "billing period." <ul style="list-style-type: none"> ➤ Item removed, being worked offline 	PJM/FE (Dessender, Ed Stein)	Cancelled
Apr-16 #5	Re-visit Feb-6 #5: A) Finalize action item to complete the Physical Interconnection Decision Tree. Update on website. B) Inform stakeholders (NEMSTF Secretaries) <ul style="list-style-type: none"> ➤ 4/30 - Posted to NEMSTF website 4/25 	Pauline Foley, Jason Keyes	Closed
Action Items Created Monday, April 30th, 2012			
Apr-30 #1	Harry D to provide example node data that is going negative (separate from the solution design option of a more in depth analysis) <ul style="list-style-type: none"> ➤ Part of the DC#2 Option D 	PJM, Harry	Closed
Apr-30 #2	Reschedule the May 24 th meeting to be May 23 rd ; Reissue meeting calendar to NEMSTF Stakeholders <ul style="list-style-type: none"> ➤ Complete 	PJM	Closed
Apr-30 #2	Conduct offline voting to determine potential packages. Voting to close COB May 8. Results to be shared with NEMSTF Stakeholders on or before May-11 <ul style="list-style-type: none"> ➤ Complete 	PJM	Closed
Action Items Created Friday, May 11th, 2012			
May-11#1	Update the NEM "use" case to be specific to DC, DE, MD, and NJ. Issue template to stakeholders to update for remaining PJM states	PJM/NEMSTF Stakeholders	Closed
May-11#2	Facilitation team documents agreed upon principles of new option 1F	PJM	Complete
May-11#3	Document principles for revised Option 5A/B	Dessender/Cook	Closed
May-11#4	Mr. Schofield asked if an artifact could be created to represent and document the potential timing/cash flow symmetry and scenarios. (Note – upon consideration, it was noted that PJM does not possess the data to conduct such an analysis. Mr. Barrett and Mr. Dessender to reach out to Mr. Schofield.)	Barrett/Dessender	Closed

Anti-trust:

You may not discuss any topics that violate, or that might appear to violate, the antitrust laws including but not limited to agreements between or among competitors regarding prices, bid and offer practices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that might unreasonably restrain competition. If any of these items are discussed the chair will re-direct the conversation. If the conversation still persists, parties will be asked to leave the meeting or the meeting will be adjourned.

Code of Conduct:

As a mandatory condition of attendance at today's meeting, attendees agree to adhere to the PJM Code of Conduct as detailed in PJM Manual M-34 section 4.5, including, but not limited to, participants' responsibilities and rules regarding the dissemination of meeting discussion and materials.

Public Meetings/Media Participation:

Unless otherwise noted, PJM stakeholder meetings are open to the public and to members of the media. Members of the media are asked to announce their attendance at all PJM stakeholder meetings at the beginning of the meeting or at the point they join a meeting already in progress. Members of the Media are reminded that speakers at PJM meetings cannot be quoted without explicit permission from the speaker. PJM Members are reminded that "detailed transcriptional meeting notes" and white board notes from "brainstorming sessions" shall not be disseminated. PJM Members are also not allowed to create audio, video or online recordings of PJM meetings.