



Demand Response Subcommittee PJM Conference and Training Center January 30, 2019 9:30 a.m. – 12:30 p.m. EPT

(9:30-9:45) Administration

- 1. Welcome, Announcements and Anti-trust and Code of Conduct announcement
 - A. Roll call: in-person only
 - B. Reviewed and approved minutes from the 11/16/2018 meeting
 - C. Request for any additional agenda items
 - a. PJM reminded CSP to provide updated Expected Reduction information used to guide PJM Load Management dispatch process during emergency conditions. PJM expects high load conditions January 30th through February 1.
 - b. PJM posted Manual 11 redline, executive summary and presentation that will go to MIC for first read. This was posted so DRS could provide comments prior to MIC discussion.
 - D. Brief update/discussion of DR related activity in other stakeholder groups MIC, OC, PC, or other
 - a. There are Manual and OATT changes that came out of the DERS (These were covered in item 4)
 - b. EPFSTF potential markets changes that affect DR.
 - SR will effectively be required to offer at 0 since there are no cost based offers. Secondary Reserve market will work similar to DASR market except there is DA and RT and is treated similar to energy. There was ongoing discussion regarding the DR 33% cap on SR today.
 - An <u>AEMA presentation</u> on Demand response Elements was presented at the EPFSTF Cathleen encouraged everyone to view it.
 - c. The PRD measurement and verification changes were approved. PJM is expected to file with FERC on 2/7/19.

(9:45-10:45) Load Management Test requirement problem statement

 Jack O'Neill reviewed the draft Problem Statement and Issue Charge regarding Load Management (LM) Testing that will be presented for first read at next MIC meeting. PJM requested input from DRS prior to presenting at the MIC.

Problem Statement and Issue Charge brought forward by PJM. PJM outlined some of the key issues with existing testing requirement (CP required to respond on annual basis, existing test results do not reflect actual performance during events, system changes, energy settlements are complicated).

More information on the specific actual LM events was requested.





LM event history can found at this link on PJM's Demand Response website: https://www.pjm.com/-/media/planning/res-adeg/load-forecast/alm-history.ashx?la=en

Questions on winter season testing and multiple testing in a year were raised and will be discussed during the process. A request was made to remove the word "true" from the Issue Charge to help make it more general. Any other feedback on the Problem Statement and Issue Charge is gladly welcomed.

Education on the testing requirements for CP resources (not just DR) was requested.

(10:45 – 11:10) Input on DR training material and courses

 Andrea Yeaton and Shane Watts from PJM would like to get input on existing DR training material and courses. PJM plans to review existing training material and courses and enhance for 2020 and would like stakeholder input on Who, What, When and How regarding training.

A survey is being developed to ask for potential training items related to DR. This will be sent to DRS mailing group. A question was posed to the group if they thought a DR certification is wanted or needed? This would be similar to Trans/Gen certifications.

DR registration training was held after the DRS. The training slides can be found at https://www.pjm.com/training/-/media/D37963906DED4A6DA798835CF8DA13BB.ashx

(11:10-11:20) Break

(11:20-11:50) BtMG/DER used to reduce load for DR

4. Pete Langbein reviewed the existing rules and provided an update based on recently approved business rule changes from the Distributed Energy Resource Subcommittee.

There were discussions around on-site generators that have ISA/WMPA having the possibility to participate as Economic DR resource in energy market. The CSP is required to identify if unit at location has interconnection rights. On-site generator that injects will need telemetry set up per Manual 14D. An On-Site generator that operates as DR to reduce load and normal "front of the meter" generator for the injection MWs is set up as two different resources in the PJM system (one operates under the DR rules and the other under the front of the meter generator rules).

PJM went through the overall process to manage On-Site generators in DR Hub and details of what is needed for those that would like to participate as Economic DR resource. On-Site generators are not eligible for Economic DR energy market participation unless the load reductions are done because of wholesale market participation (they would not have operated otherwise and therefore considered part of normal operations) and can be accurately quantified by PJM.

Market Monitor had concerns on using retail rates in a wholesale market for injections (PJM deals with wholesale only).





If a generator is also a Capacity Resource ("front of the meter") for injection and is dispatched by PJM, then Economic DR is not eligible for same interval. A question was raised about self-scheduled generation injection.

(11:50-12:00) DR data share with EDC (DERS suggestion)

PJM received feedback about sharing additional information on source of load reduction to EDCs. A
couple EDCs indicated the additional information would add value. PJM would like feedback from
CSPs if sharing this information will create any issues.

The EDCs would use the information to help determine what is happening on the distribution system. CSPs requested details on how information would be actually used by the EDCs. Pete will reach out to the EDCs to determine what value it will specifically add having this information. It was mentioned that some CSPs may not be comfortable providing this information.

(12:00 – 12:30) DR Hub enhancement for CSP scheduled Load Management tests

Andrea Yeaton reviewed upcoming DR Hub enhancements that will be implemented mid-March. This
will include DR Hub user interface and web services changes for a CSP to acknowledge their
scheduled Load Management tests and re-tests.

DR Hub Training release is scheduled for February 28, 2019. Production release scheduled for March 14, 2019. It was noted that the duplicate registrations portion may not make this release.

CSP will need to change webservice code, because this is a new endpoint. PJM tried to keep xml structure as consistent as possible with existing Load Management event acknowledgment. The new web services schema changes will be posted on DR Hub support website by end of February. The training environment will be posted first. Production will be posted a few weeks later.

Future Agenda Items

Participants will have the opportunity to request the addition of any new item(s) to the agenda of a future meeting.

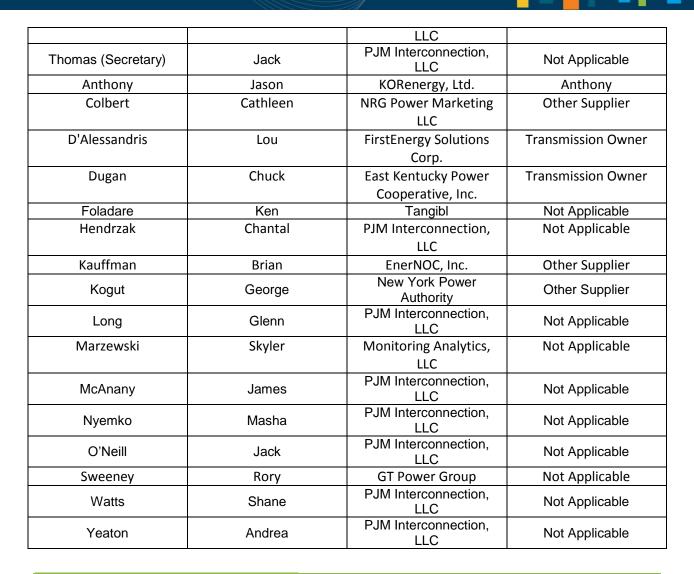
Future Meeting Dates

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1/30/2019	9:30 am – 12:30 pm	PJM Conference & Training Center/ Webex
2/27/2019	9:00 am - 12:00 pm	PJM Conference & Training Center/ Webex
3/28/2019	9:00 am - 4:00 pm	PJM Conference & Training Center/ Webex
4/24/2019	9:00 am – 4:00 pm	PJM Conference & Training Center/ Webex
5/28/2019	9:00 am - 4:00 pm	PJM Conference & Training Center/ Webex
6/19/2019	9:00 am – 4:00 pm	PJM Conference & Training Center/ Webex
7/23/2019	9:00 am - 4:00 pm	PJM Conference & Training Center/ Webex
8/13/2019	9:00 am - 4:00 pm	PJM Conference & Training Center/ Webex
9/5/2019	9:00 am - 4:00 pm	PJM Conference & Training Center/ Webex
10/2/2019	9:00 am - 4:00 pm	PJM Conference & Training Center/ Webex
11/6/2019	9:00 am – 4:00 pm	PJM Conference & Training Center/ Webex
12/9/2019	9:00 am - 4:00 pm	PJM Conference & Training Center/ Webex
	3/28/2019 4/24/2019 5/28/2019 6/19/2019 7/23/2019 8/13/2019 9/5/2019 10/2/2019 11/6/2019	2/27/2019 9:00 am - 12:00 pm 3/28/2019 9:00 am - 4:00 pm 4/24/2019 9:00 am - 4:00 pm 5/28/2019 9:00 am - 4:00 pm 6/19/2019 9:00 am - 4:00 pm 7/23/2019 9:00 am - 4:00 pm 8/13/2019 9:00 am - 4:00 pm 9/5/2019 9:00 am - 4:00 pm 10/2/2019 9:00 am - 4:00 pm 11/6/2019 9:00 am - 4:00 pm

Author: Jack Thomas

Langbein (Chair) Peter PJM Interconnection, Not Applicable	
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In Attendance via WebEx / Teleconference

Ainspan	Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Baker	Scott	PJM Interconnection, LLC	Not Applicable
Behr	Chris	Evergreen Community Power	Generation Owner
Benchek	Jim	American Transmission Systems, Inc.	Transmission Owner
Brooks	Royce	ODEC	Electric Distributor
Brown	David	NJ Board of Public Utilities	Not Applicable
Campbell	Bruce	EnergyConnect, Inc.	Other Supplier
Christopher	Mahila	Public Utilities	Not Applicable

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		Commission of Ohio	
		(The)	
Cornett	Stephanie	East Kentucky Power Cooperative, Inc.	Transmission Owner
Cox	Edward (Phil)	Appalachian Power Company	Transmission Owner
D'Alessandris	Lou	FirstEnergy Solutions Corp.	Transmission Owner
Davis	James Jim	Dominion Energy Marketing, Inc.	Generation Owner
Fiano	Anna	KeyTex Energy, LLC	Other Supplier
Filomena	Guy	Customized Energy Solutions, Ltd.	Not Applicable
Garnett	Bryan	Duke Energy Ohio, Inc.	Transmission Owner
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Hastings	David	Market Interconnection LLC	Not Applicable
Hoatson	Tom	Riverside Generating, LLC	Other Supplier
Horning	Lynn	Customized Energy Solutions, Ltd.	Not Applicable
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Johnson	Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Kolb	Lloyd	Ensync Energy Systems	Not Applicable
Kozhuharov	Dimitar	State of Delaware	Not Applicable
Langbein	Pete	PJM Interconnection, LLC	Not Applicable
Mabry	David	McNees Wallace & Nurick LLC	Not Applicable
Mariam	Yohannes	Office of the Peoples Counsel for the District of Columbia	End User Customer
Marzewski	Skyler	Monitoring Analytics, LLC	Not Applicable
Matheson	Doug	EnerNOC, Inc.	Other Supplier
McDaniel	John	Baltimore Gas and Electric Company	Transmission Owner
Miller	John	Commonwealth Edison Company	Transmission Owner
Norton	Chris	American Municipal	Electric Distributor



		Power, Inc.	
Nyemko	Masha	PJM Interconnection,	Not Applicable
•		LLC	
Ondayko	Brock	Appalachain Power	Transmission Owner
		Company	
Philips	Marjorie (Marji)	Direct Energy Business,	Other Supplier
		LLC	
Pisarcik	Dave	Customized Energy	Not Applicable
		Solutions, Ltd.*	
Rutigliano	Tom	Achieving Equilibrium	Other Supplier
		LLC	
Sasser	Jonathan	Customized Energy	Not Applicable
		Solutions, Ltd.*	
Singer	Chad	Fellon McCord	Not Applicable
Singer	Chad	Fellon McCord	Not Applicable
Stroud	Elizabeth	FirstEnergy Corporation	Transmission Owner
Trevino	Rita	Siemens Industry, Inc.	Other Supplier
Vayda	Brian	Borough of Park Ridge,	Electric Distributor
		NJ	
Webster	John	Icetec.com, Inc.	Other Supplier
Wilmoth	Emily	Dominion Virginia	Not Applicable
		Power	
Yeaton	Andrea	PJM Interconnection,	Not Applicable
		LLC	
Zuschak	Joseph	Allegheny Power	Not Applicable

Antitrust:

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. Stakeholders are also not allowed to create audio, video or online recordings of PJM meetings.

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- 2. Enter name (First and Last*) and corporate email
- 3. Under "Select Audio Option" select "Call Me" option from the dropdown menu

*Note: Anonymous users or those using false usernames or emails will be dropped from the teleconference.

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