



Demand Response Subcommittee PJM Conference and Training Center January 12, 2018 9:30 a.m. – 12:00 p.m. EPT

Administration

- 1. Welcome, Announcements and Anti-trust and Code of Conduct announcement
 - A. Roll was called in the room. Participants on the Webex were reminded that per Manual 34, they are to use their first and last names and company email address when signing in. Participants not following these guidelines will be removed from the Webex, but may log in again using the correct credentials.
 - B. Minutes from the 12/8/2017 meeting were approved without any changes.
 - C. Item 6 was added to the agenda.
 - D. Brief update/discussion of DR related activity in other stakeholder groups
 - a. MIC Energy Efficiency was approved and will go to MRC for first read.
 - b. DER Subcommittee ongoing and involves Demand Response that uses behind the meter generators or storage.
 - E. There will be Load Management registration training in-person and Webex today at 1:30 pm and also after the next DRS on 2/12/2018 at 1:30 pm.

RPM Demand Resource modeling for CP and Base Capacity in the 2018/19 DY

2. Mr. Pat Bruno, Capacity Market Operations, led a discussion of the RPM Demand Resource modeling for the 18/19 Delivery Year. Although CP and Base Capacity commitments cleared together, they will be split into separate eRPM CP and Base DR Resources after the 3rd IA. This was done to be consistent with the current Delivery Year and in line with business rule that that each registration must be product specific (either Base or CP). **CSPs should not link their Base or CP registrations to RPM DR Resources until after the 3rd IA**. In addition, it was noted that load reductions from Base registrations dispatched outside the required availability period are aggregated with load reduction from dispatched CP registration to meet the resources CP commitment. PJM will review DR performance process for 18/19 DY at the next DRS meeting.

DR CP Winter Peak Load Calculation

3. Mr. Jack O'Neill, PJM, presented examples to address the maintenance outage problem statement. Both an administrative and quantitative approach were reviewed. Each approach was based on excluding a limited amount of atypically low usage days from the WPL calculation for outages and, for the administrative option, the need to develop an added back process for event days. The administrative approach for outage exclusions would require an approval/denial process/system for CSPs to request exclusion of outage time periods from the WPL calculation. The administrative approach for event add backs would use the existing WPL calculation and apply add backs to scale the





load data when there is an event. This would require an add back process and a way for CSP with prospective customers to be able to determine addbacks (so they can calculate WPL which is key item that determines the customer's capacity nomination on a registration). The quantitative approach relies solely on meter data and excludes atypical low usage time periods, such as maintenance outages and load management events. These are determined by a usage threshold (similar to logic used in the economic CBL) under which if load is below, the day would be excluded. CSPs would be able to calculate WPLs without the need to contact PJM regarding outages or the need to obtain event add back data. Many stakeholders supported the quantitative approach but would need to figure out the appropriate usage threshold amount (existing economic CBL usage threshold is 25% but it was mentioned this is based on economic energy events which is significantly different that capacity nomination and therefore may need a higher threshold). DRS members asked PJM for additional information on the quantitative approach to help determine if an approach threshold can be determined. The IMM did express some concerns regarding the quantitative approach. PJM will bring additional analysis for stakeholders to consider at the next DRS.

Seasonal DR Aggregation Registration Rules – Problem Statement and Issue Charge

4. Ms. Katie Guerry, EnerNOC, reviewed the documentation presented at the MIC for this issue. The example showed a CSP's winter and summer nominated ICAP for a number of registrations under the current rules, and how winter capability is not recognize by PJM under the existing aggregation rules. The example showed that winter and summer capability aggregated at the resource level instead of the registration level may be a more effective way to account for the CP capability which is based on the minimum of summer and winter capability (less administration for everyone, more transparency, more flexible dispatch for PJM, recognition of all CSP winter capability). Interests were also collected from members.

Monthly DR Activity Report

5. Mr. James McAnany, PJM, highlighted that the report contains 12 months of data, but the Economic activity is not complete as CSPs have 60 days from the event date to upload meter data. Also, the Revenue data for Capacity in Figure 14 is for the 2017 Calendar Year and as such, combines revenue data from six months of the prior and six months of the current Delivery Years. It was also noted that MWs cleared by Demand Response registrations in the Synchronized Reserve market as a percent of the overall Synch Reserve Requirement reached a max over 20% in December 2017, a level not realized since late 2013.

The Cold Day Activity report was also reviewed which covers estimated economic activity in the energy market for the recent cold snap: 12/27/17 and 1/5/2018. Estimated load reductions were less than 60 MWs during this period although wholesale prices were fairly high.

2nd Read Manual 40: Training and Certification Requirements Updates

6. Mr. Michael Hoke, PJM, reviewed the Manual 40 training requirements for CSPs with Load Management registrations for the second time. This new training, covering emergency procedures and load management processes, is required for agents of any CSP with Load Management (Emergency and Pre-Emergency) resources. Training must be completed within 3 months of the 6/1/2018 effective date. As a first step in assigning this training to the applicable individuals, all entities subject to this





new requirement will need to designate a PJM Training Liaison. The Training Liaison serves an administrative role in keeping PJM informed of personnel changes. PJM will work with the Training Liaisons to establish LMS accounts for identified personnel. Once those accounts are established, the training can be assigned to those that will be required to complete it.

Future Agenda Items

No future agenda items were identified.

Future Meeting Dates

Monday	2/12/2018	9:30 am – 12:00 pm	PJM Conference & Training Center/ Webex
Tuesday	3/27/2018	9:30 am – 4:00 pm	PJM Conference & Training Center/ Webex
Wednesday	4/18/2018	9:30 am – 4:00 pm	PJM Conference & Training Center/ Webex
Monday	5/21/2018	9:30 am - 4:00 pm	PJM Conference & Training Center/ Webex
Friday	6/22/2018	9:30 am - 4:00 pm	PJM Conference & Training Center/ Webex
Monday	7/16/2018	9:30 am - 4:00 pm	PJM Conference & Training Center/ Webex
Thursday	8/30/2018	9:30 am - 4:00 pm	PJM Conference & Training Center/ Webex
Tuesday	9/25/2018	9:30 am - 4:00 pm	PJM Conference & Training Center/ Webex
Wednesday	10/24/2018	9:30 am - 4:00 pm	PJM Conference & Training Center/ Webex
Friday	11/16/2018	9:30 am – 4:00 pm	PJM Conference & Training Center/ Webex
Monday	12/10/2018	9:30 am - 4:00 pm	PJM Conference & Training Center/ Webex

In Attendance

Langbein, Peter (Chair) Not Applicable PJM Interconnection, LLC Yeaton, Andrea (Secretary) PJM Interconnection, LLC Not Applicable Bruno, Patrick Not Applicable PJM Interconnection. LLC Guerry, Katie EnerNOC, Inc. Other Supplier Hendrzak, Chantal PJM Interconnection, LLC Not Applicable Hoke, Michael PJM Interconnection, LLC Not Applicable PJM Interconnection, LLC Jack, O'Neill Not Applicable James, McAnany PJM Interconnection, LLC Not Applicable Customized Energy Solutions, Ltd.* Not Applicable Johnson, Carl Kauffman, Brian NRG Curtailment Solutions Other Supplier Kogut, George New York Power Authority Other Supplier Long, Glenn PJM Interconnection, LLC Not Applicable Maureen, Curley PJM Interconnection, LLC Not Applicable Scarpignato, David Calpine Energy Services, L.P. Generation Owner Thomas, Henry PJM Interconnection, LLC Not Applicable Not Applicable Watts, Shane PJM Interconnection, LLC Whitehead, Jeffrey **GT Power Group** Not Applicable

In Attendance via WebEx / Teleconference

Not Applicable Anders. David PJM Interconnection. LLC Anthony, Jason KORenergy, Ltd. Other Supplier NextEra Energy Power Marketing, LLC Brown, David R. Generation Owner Campbell, Bruce EnergyConnect, Inc. Other Supplier Carmean, Gregory Not Applicable East Kentucky Power Cooperative, Inc. Cornett, Stephanie Transmission Owner Covino, Susan PJM Interconnection, LLC Not Applicable Cox, EdwardP Appalachian Power Company Transmission Owner Dugan, Chuck East Kentucky Power Cooperative, Inc. Transmission Owner Ehrichs, Lisa Duke Energy Business Services LLC Generation Owner Feldman, Brett Navigant Consulting, Inc. Not Applicable Appalachian Power Company Transmission Owner Feliks, Kent Fiano, Anna KeyTex Energy, LLC Other Supplier



Filomena, Guy Ford, Adrien Fox, Angela Freeh, Larissa Gebolys, Debbie Hastings, David Hoatson, Tom Holland, Risa Horstmann, John Jett, William Lokhandwalla, Faizminr Long, Glenn Mabry, David Marton, David Marzewski, Skyler Matheson, Doug McDaniel, John Midgley, Sharon Miller, John Nyemko, Masha Ondayko, Brock Peoples, John Pisarcik, Dave Polka, Joseph Poulos, Greg Powers, Sean Rohrbach, John Rutigliano, Tom

Wilmoth, Emily

Author: Andrea Yeaton

Sasser, Jonathan

Swalwell, Brad

Webster, John

Trevino, Rita

Customized Energy Solutions, Ltd. Old Dominion Electric Cooperative Wylan Energy, L.L.C. Appalachian Power Company Public Utilities Commission of Ohio (The) Market Interconnection LLC Riverside Generating, LLC PJM Interconnection, LLC Davton Power & Light Company (The) Duke Energy Business Services LLC Dynegy PJM Interconnection, LLC McNees Wallace & Nurick LLC FirstEnergy Solutions Corp. Monitoring Analytics, LLC EnerNOC, Inc. Baltimore Gas and Electric Company Exelon Business Services Company, LLC Commonwealth Edison Company PJM Interconnection, LLC Appalachain Power Company Duquesne Light Company Customized Energy Solutions, Ltd.* Duquesne Light Company CAPS Linde Energy Services, Inc. Southern Maryland Electric Cooperative Achieving Equilibrium LLC Customized Energy Solutions, Ltd.* Tangent Energy Solutions, Inc. Siemens Industry, Inc. Dyon LLC

Dominion Virginia Power

Not Applicable Electric Distributor Not Applicable Transmission Owner Not Applicable Not Applicable Other Supplier Not Applicable Transmission Owner Generation Owner Generation Owne Not Applicable Not Applicable Transmission Owner Not Applicable Other Supplier Transmission Owner Transmission Owner Transmission Owner Not Applicable Transmission Owner Transmission Owner Not Applicable Transmission Owner Not Applicable End User Customer Electric Distributor Other Supplier Not Applicable Other Supplier Other Supplier Other Supplier Not Applicable