

Operating Committee
PJM Conference & Training Center, Audubon, PA
October 9, 2018
9:00 a.m. – 12:00 p.m. EPT

Administration

1. The Operating Committee (OC) Agenda for this meeting was approved.
2. The Draft Minutes of the September 11, 2018 OC meeting were approved.
3. The Operating Committee Work Plan was reviewed. Mr. Don Wallin, PJM, stated the addition of a status slide that visualizes completed, in-progress and planned work status will be presented at the November OC meeting.
- 3a. Ms. Janell Fabiano, PJM, solicited feedback on the new Stakeholder Impact Slide which has been added to PJM committee presentations. PJM will explore options that highlight what agenda items contain stakeholder impact slides.

Review of Operations

4. **Review of Operational Events**
Mr. Chris Pulong, PJM, reviewed PJM operations since the last OC meeting. The operations review included a review of 2018 Summer operations.
5. **Review of Operating Metrics**
Ms. Stephanie Monzon, PJM, provided a review of the September 2018 PJM operating metrics slides. Metrics included PJM's load forecast error, BAAL performance, transmission / generation outage statistics, and Perfect Dispatch historical performance.

Endorsements / Approvals

6. **Manual 3A Changes**
Mr. Andy Ford, PJM, reviewed proposed changes to Manual 3A: Energy Management System (EMS) Model Updates and Quality Assurance (QA). The Operating Committee endorsed these changes by acclamation with no objections or abstentions.
7. **Manual 13 Changes**
Mr. Dean Manno, PJM, reviewed proposed changes to Manual 13: Emergency Operations. The Operating Committee endorsed these changes by acclamation with no objections or abstentions.
8. **Resource Tracker Problem Statement and Issue Charge**
Ms. Rebecca Stadelmeyer, PJM presented a problem statement and issue charge to address timing requirements associated with confirming information within Resource Tracker, along with the location of where these requirements reside in PJM documents. PJM will provide additional data on the survey and how each company should submit the survey response. The Operating Committee endorsed the problem statement and issue charge by acclamation with no objections or abstentions.

First Readings

9. **2018/19 Winter Weekly Reserve Target (WWRT) Analysis Review**
Mr. Andrew Gledhill, PJM, reviewed the results of the 2018/19 Winter Weekly Reserve Target (WWRT) analysis. **The Operating Committee will be asked to endorse these results at the next OC meeting.**

10. **2019 Day Ahead Scheduling Reserve (DASR) Requirement**
Mr. Eric Endress, PJM, reviewed proposed changes to the 2019 Day Ahead Scheduling Reserve (DASR) requirement. The DASR requirement for 2018 is 5.28%. The preliminary 2019 DASR requirement is 5.30%. **The Operating Committee will be asked to endorse these changes at the next OC meeting.**

11. **Manual 03 Changes**
Mr. Yuri Smolanitsky, PJM, reviewed proposed changes to Manual 03: Transmission Operations. **The Operating Committee will be asked to endorse these changes at the next OC meeting.**

12. **Manual 10 Changes**
Mr. Vince Stefanowicz, PJM, reviewed proposed changes to Manual 10: Pre-Scheduling Operations. **The Operating Committee will be asked to endorse these changes at the next OC meeting.**

13. **Manual 14D Changes**
Mr. Vince Stefanowicz, PJM, reviewed proposed changes to Manual 14D: Generator Operational Requirements. **The Operating Committee will be asked to endorse these changes at the next OC meeting.**

OC Subcommittee / Task Force Updates

14. **System Operations Subcommittee (SOS)**
Mr. Chris Pulong, PJM, provided a summary of the most recent SOS meeting.

15. **Data Management Subcommittee (DMS)**
There were no DMS updates presented at this OC meeting.

16. **System Restoration Coordinators Subcommittee (SRCS)**
There were no SRCS updates to be presented at this OC meeting due to the Fall System Restoration drills that are currently in progress. A report will be provided at the conclusion of the drills.

17. **Primary Frequency Response Sr. Task Force (PFRSTF)**
Ms. Danielle Croop, PJM, provided an update on the Primary Frequency Response Sr. Task Force (PFRSTF).

Unit Specific Parameter Adjustment Updates

18. Unit Specific Parameter Updates

Ms. Lauren Strella, PJM, provided an update on Unit Specific Parameters.

Tool and Informational Updates

19. Bright Ideas Review

Ms. Rebecca Stadelmeyer, PJM, provided a review of PJM's Bright Ideas initiative.

20. PJM.com Update

Mr. Jon Ruffin and Ms. Tawnya Luna, PJM, provided an update of web-based agreements in PJM.com.

21. PJM/NYISO Interface Operational Base Flow (OBF) Review

Mr. Phil D'Antonio, PJM, provided a review of the PJM/NYISO Interface Operational Base Flow (OBF). The OBF limit has been reduced to 100 MW due to line outages between PJM and NYISO. PJM and NYISO have mutually agreed to reduce the OBF to zero on October 31, 2019.

22. Synchrophasor Data Event Analysis Review

Mr. Shaun Murphy, PJM, provided a review of synchrophasor data analysis that was performed for a recent system event.

23. System Resilience

Mr. Jonathon Monken, PJM, provided an update on PJM's Resilience Roadmap efforts. PJM will continue to provide additional educational sessions to the OC regarding potential process or tool changes as a result of resilience efforts.

24. Regulation Update

Ms. Danielle Croop, PJM, provided an update on PJM's regulation performance with an analysis of shorter duration regulation signal pegging. PJM believes that regulation is performing well with the new regulation signal changes but will continue to analyze performance.

25. Load Management Event Update

Mr. Dave Souder, PJM, provided an update regarding PJM load management events. There were no load management events to date for 2018. Testing is currently being conducted for the 2018/2019 delivery year. PJM will provide a review of the test results at the January 2019 OC meeting.

26. Winter Preparations

Mr. Vince Stefanowicz, PJM, provided a review of PJM's winter preparation efforts. PJM reminded the OC that PJM has issued a new eDART GO Survey on October 8, 2018 effective 16:00 EPT, with a focus on Generator Fuel Inventory and Emissions updates for the upcoming 2018/2019 winter season.

27. Electric Storage Participation FERC Order 841

Ms. Laura Walter, PJM presented the PJM straw proposal for compliance with FERC Order 841 to be filed by December 3, 2018. PJM will provide more information at a future OC meeting as to how DER resources will be metered.

28. Reliability Compliance Update

Mr. Chris Moran, PJM, provided an update on NERC, SERC and RFC standards, and other pertinent regulatory and compliance information, and solicited feedback from the members on Reliability Compliance efforts.

29. Flint Run and Spotsylvania Energy Center 500 kV Line Designation Review

Mr. Yuri Smolanitsky, PJM, provided a review of the Flint Run and Spotsylvania Energy Center 500 kV line designation requests.

30. BGE Mt. Washington RAS Retirement Review

Mr. Ken Braerman, BGE, provided a review of the retirement of the Mount Washington Remedial Action Scheme (RAS) in the BGE transmission zone.

31. NERC Lessons Learned

There were no NERC Lessons Learned presented at this month's meeting.

32. Pricing Interface Update

There have been no newly created pricing interfaces.

Action Items

1. PJM will review how the OC work plan data is presented and consider different ways to present completed vs. planned work.
2. PJM will follow up on the Resource Tracker survey voting process.
3. PJM will provide additional educational session regarding new initiatives/technologies that arise as a result of resilience activities.
4. PJM will provide additional information regarding metering of DER resources in regards to FERC Order 841.

Future Meeting Dates

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|-------------------|-----------|--|
| November 6, 2018 | 9:00 a.m. | PJM Interconnection - Conference and Training Center |
| December 11, 2018 | 9:00 a.m. | PJM Interconnection - Conference and Training Center |
| January 8, 2019 | 9:00 a.m. | PJM Interconnection - Conference and Training Center |
| February 5, 2019 | 9:00 a.m. | PJM Interconnection - Conference and Training Center |

Author: Don Wallin

In Attendance (In Person)

| Last Name | First Name | Company | Sector |
|--------------------|------------|-----------------------------------|----------------------|
| Souder (Chair) | Dave | PJM Interconnection, LLC | Not Applicable |
| Wallin (Secretary) | Don | PJM Interconnection, LLC | Not Applicable |
| Braerman | Kenneth | Baltimore Gas & Electric | Transmission Owner |
| Ford | Adrien | Old Dominion Electric Cooperative | Electric Distributor |
| Greiner | Gary | PSEG Energy Resources and Trading | Other Supplier |
| Kogut | George | New York Power | Other Supplier |
| Lowe | Connie | Dominion Virginia Power | Not Applicable |
| Midgley | Sharon | Exelon Business Services Company | Transmission Owner |
| Pratton | Dave | GT Power Group | Not Applicable |
| Scarpignato | David | Calpine Energy Services, LP | Generation Owner |
| Stewart | Travis | Gabel and Associates | Not Applicable |
| Sturgeon | John | Duke Energy | Transmission Owner |
| Sweeney | Rory | RTO Insider | Not Applicable |
| Trayers | Barry | Citigroup Energy Inc. | Other Supplier |

In Attendance (Via Conference Call)

| Last Name | First Name | Company | Sector |
|-----------|------------|--------------------------------------|--------------------|
| Ainspan | Malcolm | Energy Curtailment Specialists, Inc. | Other Supplier |
| Benchek | Jim | First Energy Solutions Corporation | Transmission Owner |
| Bleiweis | Bruce | DC Energy LLC | Other Supplier |
| Bonner | Charles | Dominion Virginia Power | Not Applicable |
| Brodbeck | John | EDP Renewables North America | Other Supplier |
| Campbell | Bruce | Energy Connect, Inc. | Other Supplier |

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|---------------|---------|---|--------------------|
| Carmean | Greg | OPSI | Not Applicable |
| Cox | Edward | Appalachian Power Company | Transmission Owner |
| D'Alessandris | Lou | First Energy Solutions Corporation | Transmission Owner |
| DeGiusto | Vince | UGI Development | Generation Owner |
| Depillo | Raymond | PSEG Energy Resources and Trading | Other Supplier |
| Duan | Bob | Ontario Power Generation Inc. | Other Supplier |
| Filomena | Guy | Customized Energy Solutions, Ltd. | Not Applicable |
| Fitch | Neal | NRG Power Marketing LLC | Generation Owner |
| Garza | Mark | First Energy Solutions Corporation | Transmission Owner |
| Gebele | Don | Dayton Power & Light | Transmission Owner |
| Gilani | Rehan | ConEdison Energy, Inc. | Other Supplier |
| Grear | Mark | Constellation Energy | Generation Owner |
| Hanebuth | Michele | Consolidated Edison | Transmission Owner |
| Hastings | David | Market Interconnection LLC. | Not Applicable |
| Hoatson | Tom | Riverside Generating, LLC. | Other Supplier |
| Horstmann | John | Dayton Power & Light | Transmission Owner |
| Hyzinski | Tom | GT Power Group | Not Applicable |
| Janicki | Diane | Boston Energy Trading and Marketing LLC | Generation Owner |
| Johnson | Carl | Customized Energy Solutions | Not Applicable |
| Kelly | Stephen | Brookfield Energy Marketing LP | Other Supplier |
| Kinser | Cynthia | Tennessee Department of Agriculture | Not Applicable |
| Krawczyk | Leslie | Reliability First Corporation | Not Applicable |
| Libbos | Robin | First Energy Solutions Corporation | Transmission Owner |

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| Mabry | Dave | McNees Wallace & Nurick LLC | Not Applicable |
| Markiewicz | Cindy | First Energy Solutions Corporation | Transmission Owner |
| Matuszak | Alex | UGI Development | Generation Owner |
| Ondayko | Brock | AEP Energy Supply | Generation Owner |
| Pakela | Gregory | DTE Energy Trading | Other Supplier |
| Phillips | Marjorie | Direct Energy Business, LLC. | Other Supplier |
| Poulos | Greg | CAPS | Not Applicable |
| Reams | William | CCS Energy | Not Applicable |
| Rohrbach | John | Southern Maryland Electric Cooperative | Electric Distributor |
| Runowski | Brian | Commonwealth Edison | Transmission Owner |
| Rutigliano | Tom | Achieving Equilibrium LLC. | Not Applicable |
| Sasser | Jonathan | Customized Energy Solutions, Ltd. | Not Applicable |
| Sauriol | Dennis | AEP Ohio Transmission Company, Inc. | Transmission Owner |
| Skumanich | William | PPL Electric Utilities Corp. | Transmission Owner |
| Stern | Alex | Public Service Electric Gas & Company | Transmission Owner |
| Sturgeon | John | Duke Energy Carolinas LLC | Other Supplier |
| Sullivan | James | Neptune Regional Transmission System, LLC | Transmission Owner |
| Tangirala | Subha | ABB | Not Applicable |
| Vargo | Daniel | Allegheny Electric Cooperative, Inc. | Electric Distributor |

PJM Attendees

| Last Name | First Name | Company | Sector |
|-----------|------------|--------------------------|----------------|
| Anders | Dave | PJM Interconnection, LLC | Not Applicable |
| Bielak | Donnie | PJM Interconnection, LLC | Not Applicable |

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|------------|-----------|--------------------------|----------------|
| Caven | Augustine | PJM Interconnection, LLC | Not Applicable |
| Ciabattoni | Joseph | PJM Interconnection, LLC | Not Applicable |
| Croop | Danielle | PJM Interconnection, LLC | Not Applicable |
| Dajewski | Paul | PJM Interconnection, LLC | Not Applicable |
| D'Antonio | Phil | PJM Interconnection, LLC | Not Applicable |
| Davis | Elizabeth | PJM Interconnection, LLC | Not Applicable |
| Endress | Eric | PJM Interconnection, LLC | Not Applicable |
| Fabiano | Janell | PJM Interconnection, LLC | Not Applicable |
| Greening | Michele | PJM Interconnection, LLC | Not Applicable |
| Handlin | Mike | PJM Interconnection, LLC | Not Applicable |
| Hendrzak | Chantal | PJM Interconnection, LLC | Not Applicable |
| Herel | Suzanne | PJM Interconnection, LLC | Not Applicable |
| Hislop | Dave | PJM Interconnection, LLC | Not Applicable |
| Hoang | Liem | PJM Interconnection, LLC | Not Applicable |
| Jani | Alpa | PJM Interconnection, LLC | Not Applicable |
| Kimmel | David | PJM Interconnection, LLC | Not Applicable |
| Manno | Dean | PJM Interconnection, LLC | Not Applicable |
| McGlynn | Paul | PJM Interconnection, LLC | Not Applicable |
| Monken | Jonathan | PJM Interconnection, LLC | Not Applicable |
| Monzon | Stephanie | PJM Interconnection, LLC | Not Applicable |
| Moran | Chris | PJM Interconnection, LLC | Not Applicable |
| Murphy | Shaun | PJM Interconnection, LLC | Not Applicable |
| O'Neill | Jack | PJM Interconnection, LLC | Not Applicable |

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| Pilong | Chris | PJM Interconnection, LLC | Not Applicable |
| Ruffin | Jonathan | PJM Interconnection, LLC | Not Applicable |
| Schmitt | Jeff | PJM Interconnection, LLC | Not Applicable |
| Schweizer | David | PJM Interconnection, LLC | Not Applicable |
| Stefanowicz | Vince | PJM Interconnection, LLC | Not Applicable |
| Stone | Andy | PJM Interconnection, LLC | Not Applicable |
| Strella | Lauren | PJM Interconnection, LLC | Not Applicable |
| Walter | Laura | PJM Interconnection, LLC | Not Applicable |
| Ward | Mike | PJM Interconnection, LLC | Not Applicable |