

**Intermittent Resource Subcommittee**  
**PJM Conference and Training Center**  
**June 19, 2019**  
**1:00 p.m. – 3:00 p.m. EPT**

## Administration

Mr. Ken Schuyler opened the meeting and reviewed the Agenda.

Mr. Joseph Carl reviewed the Anti-Trust and Code of Conduct and performed the roll call.

The meeting minutes from the March 13, 2019 meeting were approved.

## Education

Mr. Joe Mulhern provided information on improving Load Forecasting with the Behind-the-Meter Solar Forecast. Mr. Mulhern covered the importance of short term load forecasting, the tools involved and how various types of solar resources impact the PJM load forecast in terms of grid connected solar and behind the meter. Also provided was information as to how the various load forecasts account for solar resources and introduced the concept of reconstituted load in the load forecast.

Mr. Joe Mulhern provided an update on the Reaching Out to Behind the Meter Resources and PJM's efforts to increase visibility of non-wholesale Distributed Energy Resources. Efforts will continue through 2019 to work with the transmission owners to identify resources and gain access to information as needed to populate a directory of these resources.

Mr. Andrew Levitt will provided an update on the IEEE Interconnection Standards. A DER Ride-Through Task Force has been established by PJM to harmonize ride-through requirements between transmission and distribution systems. Currently an analysis is under way to understand the impact of different trip settings and ride-through modes to determine what may be appropriate. A draft guidance document is expected in September.

Mr. Scott Baker provided an update from the Distributed Energy Resources Subcommittee. Currently two issues under discussion, Wholesale DER Interconnection and Utility Microgrids. Regarding Wholesale DER Interconnections the main focus is reducing the cost and duration associated with small non-FERC jurisdictional projects that enter the PJM New Services Queue. A draft solutions matrix is currently being discussed. Similarly with microgrids, energy settlements when islanded, ancillary services, telemetry, capacity performance and islanded operations are being discussed in a solutions matrix format.

Ms. Laura Walter provided an update on Energy Storage as PJM responds to FERC Order 841 on the final rule of Electric Storage Participation in Markets. Storage is expected to be modeled as one

continuous resource, with 3 modes of operation: continuous, charge, and discharge. Resource owners will manage the state of charge, mode of operation, offers and parameters.

## Future Agenda Items

None at this time

## Future Meeting Dates

|                    |           |       |
|--------------------|-----------|-------|
| September 18, 2019 | 1:00 p.m. | WebEx |
| December 9, 2019   | 1:00 p.m. | WebEx |

## In-Person Attendees:

|          |        |                          |                |
|----------|--------|--------------------------|----------------|
| Schuyler | Ken    | PJM Interconnection, LLC | Not Applicable |
| Carl     | Joseph | PJM Interconnection, LLC | Not Applicable |
| Mulhern  | Joseph | PJM Interconnection, LLC | Not Applicable |
| Walter   | Laura  | PJM Interconnection, LLC | Not Applicable |
| Levitt   | Andrew | PJM Interconnection, LLC | Not Applicable |

## In Attendance via WebEx / Teleconference:

|             |          |                                      |                    |
|-------------|----------|--------------------------------------|--------------------|
| Ayres       | Rachael  | Exelon Generation Co. LLC            | Generation Owner   |
| Baker       | Scott    | PJM Interconnection, LLC             | Not Applicable     |
| Borgatti    | Mike     | Gabel and Associates                 | Not Applicable     |
| Brodbeck    | John     | EDP Renewables North America Inc.    | Other Supplier     |
| Christopher | Mahilla  | Public Utilities Commission of Ohio  | Not Applicable     |
| Denby       | Brett    | Novec                                | Not Applicable     |
| Durinsky    | Mike     | First Energy Solutions Corp.         | Transmission Owner |
| Filomena    | Guy      | Customized Energy Solutions, Ltd     | Not Applicable     |
| Foladare    | Ken      | Tangibl Inc.                         | Not Applicable     |
| George      | Brian    | Federal Energy Regulatory Commission | Not Applicable     |
| Hohenshilt  | Jennifer | Talen Energy Marketing LLC           | Generation Owner   |
| Hyzinski    | Tom      | GT Power Group                       | Not Applicable     |
| Kilgallen   | Kevin    | Avangrid Renewables LLC              | Generation Owner   |
| Peoples     | John     | Duquesne Light Company               | Transmission Owner |
| Rainey      | John     | Novec                                | Not Applicable     |
| Rutigliano  | Tom      | NRDC                                 | Not Applicable     |
| Sweeney     | Rory     | GT Power Group                       | Not Applicable     |
| Whitehead   | Jeff     | GT Power Group                       | Not Applicable     |

Author: Joseph M. Carl