DRAFT Notes
PJM Interconnection
Cost Development Subcommittee (269th Meeting)
PJM Service Center – S-1
Monday February 13, 2012
10:00 AM

Members in Attendance:

Williams, Stanley (Chair)	PJM Interconnection	Not Applicable
Ciampaglio, Tony	Constellation Energy Commodities Group, Inc.	Generation Owner
Scarpignato, David	Direct Energy Business LLC	Other Supplier
Gomez, Luis	Exelon Generation Co., LLC	Transmission Owner
Hansel, David	Exelon Generation Co., LLC	Transmission Owner
Walter, Laura (Secretary)	PJM Interconnection	Not Applicable

Also in Attendance:

Dugan, William	Monitoring Analytics	Not Applicable
Bowring, Joseph	Monitoring Analytics, LLC	Not Applicable
Dirani, Rami	PJM Interconnection	Not Applicable
Hauske, Thomas	PJM Interconnection	Not Applicable
Hendrzak, Chantal	PJM Interconnection	Not Applicable
Zadlo, Thomas	PJM Interconnection	Not Applicable

Attended via WebEx / Teleconference:

Jacobson, Casey	AES Energy Storage LLC	Generation Owner
Gilani, Rehan	ConEdison Energy, Inc.	Other Supplier
Filomena, Guy	Customized Energy Solutions, Ltd.*	Not Applicable
McDonald, Steve	Customized Energy Solutions, Ltd.*	Not Applicable
Horstmann, John	Dayton Power & Light Company (The)	Transmission Owner
Keefer, Brian	Dominion Energy Marketing, Inc.	Generation Owner
Simms, Chris	Downes Associates, Inc.	Other Supplier
Hoag, Richard	FirstEnergy Solutions Corp.	Transmission Owner
Palcic, Ron	FirstEnergy Solutions Corp.	Transmission Owner
Siegrist, Hal	GenOn Energy Management, LLC	Generation Owner
O'Connell, Robert	J.P. Morgan Ventures Energy Corporation	Other Supplier
Wisersky, Megan	Madison Gas and Electric Company	Other Supplier
Jeremko, Steven	New York State Electric & Gas Corporation	Other Supplier
Ford, Adrien	PJM Interconnection	Not Applicable
Sandherr, Bob	PPL Energy Plus, LLC	Generation Owner
Miller, Rod	PPL Generation, LLC	Generation Owner
Diamant, Martin	Public Service Electric and Gas Company	Transmission Owner
Hastings, David	Saracen Energy East LP	Other Supplier
Brodbeck, John	Shell Energy North America (US), LP	Other Supplier
Dolan, Patrick	Wisconsin Electric Power Co. d/b/a WE Power Co.	Generation Owner
Jacobs, Michael	Xtreme Power	Other Supplier

1.   ADMINISTRATION

CDS endorsed the amended minutes from the 268th CDS held on January 9, 2012 by acclamation.

One member requested that the proposed Manual 15 language for storage devices (Agenda Item 3) be tabled to allow for additional PJM staff contact with the battery industry; CDS decided that it should stay on the agenda to be discussed. CDS endorsed the Agenda for the 269th CDS.

2.   CDS UPDATE

Stan Williams updated the CDS on the Combined Cycle modeling Issue (issue tracking). The MRC directed PJM to draft a problem statement for consideration and action by the MRC at their next meeting based on feedback from received from stakeholders. Mr. Williams also asked for any feedback to be sent to PJM.

The proposals to remove overhaul costs for Combined Cycles and Combustion Turbines from Variable Operation and Maintenance (VOM) Costs, clarity on the development of No Load Costs and updates to Manual 15 with respect to Non-Regulatory and Energy Market Opportunity Costs were approved by the PJM Board of Managers February 8. These changes to Manual 15 will be incorporated as soon as practicable and noticed to stakeholders.

3.   INFORMATION FOR UNIT TYPES NOT ADDRESSED BY MANUAL 15: ISSUE TRACKING

CDS reviewed draft manual language for Flywheels and Batteries. CDS members also expressed the opinion that compressed air units may be another unit type that may need to be address as part of this effort. CDS members asserted that batteries have different types of costs, such as:

- Wear and tear through MWh throughput/ lifecycle deterioration
- Accessory Costs (auxiliary equipment) such as filters, fans and cooling equipment
- Labor and Maintenance
- Inverter Conversion Loss (similar to a heat rate)
- Energy cost to charge
- Ambient Adjustment (unknown, question by a CDS member)

Battery owners agreed to meet with PJM staff to develop categories of costs that are relevant as well as a glossary of terms. PJM will meet with stakeholders who own smaller aggregated regulating units or thermal storage to see if there is a need for cost offer development for these categories.

The Independent Market Monitor (IMM) emphasized the importance of finding the short run incremental cost, while discussing costs for new unit types.

Laura Walter, PJM, reviewed PJM Discussion Paper: $0 cost offers. After some discussion CDS decided that $0 cost floor was appropriate for wind units and units that fire solid waste, biomass, or landfill gas. PJM staff will modify the proposed wind language to incorporate a $0 floor in section 2.3 of M15.

4. IMMATURE UNIT DEFINITION: ISSUE TRACKING

CDS reviewed interest investigation and filled out the collaborative solution matrix design criteria for immature units. The following was agreed upon:

1. Immature unit status will be for units that have less than 30,000 equivalent service hours and less than 10 years of operational history.
2. All units shall submit their basis for maintenance cost development to the IMM
3. Immature units may blend calculated cost and forecasted cost to be reviewed by IMM
   a. The weighted blend should be based on the ratio of historical operating hours to projected,
   b. Or achieving ten years of operation,
   c. With priority going to the one satisfied first.
4. A Mature unit owner can choose either a 10 or 20 year history and use actual costs (i.e. 11 year old unit can use 11 years of history if 20 year history is selected. If a 10 year history is selected, then only 10 years of historical cost data can be used).
5. Market Participant estimates are based on methodologies such as, but not limited to: regional industry average, industry average in PJM, budgeted value for the business case, information from OEM or information from sister units. All methodologies are submitted per the Cost Development and Approval Process.

PJM will bring 2 numerical examples to the next CDS:

1. A Combustion Turbine with a 2% capacity factor after 10 years with unknown VOM
2. Base load steam unit with 3 years of operational history

PJM will attempt to explain the impact that the proposed matrix has on these 2 examples. PJM will also bring draft manual language incorporating the consensus decisions of CDS.

5. CDS WORK PLAN AND FUTURE TOPICS

Cyclic Peaking Factors: Issue Tracking (referred by MRC)

6. FUTURE MEETINGS

Monday, March 12, 2012   10:00 am until 3:00 pm   PJM Interconnection Offices

Monday, April 9, 2012   10:00 am until 3:00 pm   PJM Interconnection Offices
Monday, May 7, 2012   10:00 am until 3:00 pm   PJM Interconnection Offices
Monday, June 11, 2012   10:00 am until 3:00 pm   PJM Interconnection Offices
Monday, July 9, 2012   10:00 am until 3:00 pm   PJM Interconnection Offices
Monday, September 10, 2012   10:00 am until 3:00 pm   PJM Interconnection Offices
Monday, October 15, 2012   10:00 am until 3:00 pm   PJM Interconnection Offices
Monday, November 5, 2012   10:00 am until 3:00 pm   PJM Interconnection Offices