

<u>DRAFT</u>

<u>Minutes</u> <u>PJM Interconnection</u> <u>Markets and Reliability Committee</u> <u>The Chase Center on the Riverfront, Wilmington, DE</u> <u>September 15, 2011</u> <u>9:30 a.m. – 3:00 p.m.</u>

Chair/Secretary:

Kormos	Michael	PJM Interconnection, LLC	Not Applicable
Anders	David	PJM Interconnection, LLC	Not Applicable

Voting Members Present:

Last Name	First Name	Company Name	Sector
Barker	Jason	Baltimore Gas and Electric Company	Transmission Owner
Batta	Michael	Virginia Electric & Power Company	Transmission Owner
Bearden	Joel	Cargill Power Markets, L.L.C.	Other Supplier
Bleiweis	Bruce I.	DC Energy, L.L.C.	Other Supplier
Breidenbaugh	Aaron	EnerNOC, Inc.	Other Supplier
Brodbeck	John	Shell Energy North America (US), LP	Other Supplier
Bruce	Susan	Rep.'g Air Liquide Industrials US, L.P.	End-Use Customer
Bruce	Susan	Rep.'g Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	Rep.'g Castlebridge Energy Group, LLC	Other Supplier
Bruce	Susan	Rep.'g Gerdau Ameristeel Energy, Inc.	Other Supplier
Bruce	Susan	Rep.'g Industrial Energy Users-Ohio (IEU-Ohio)	Other Supplier
Bruce	Susan	Rep.'g Kimberly-Clark Corporation	Generation Owner
Bruce	Susan	Rep.'g Lehigh Portland Cement Company	End-Use Customer
Bruce	Susan	Rep.'g Letterkenny Industrial Development Authority-PA	Electric Distributor
Bruce	Susan	Rep.'g Linde, Inc.	End-Use Customer
Bruce	Susan	Rep.'g MeadWestvaco Corporation	End-Use Customer
Bruce	Susan	Rep.'g Praxair, Inc.	End-Use Customer
Bruce	Susan	Rep.'g Procter and Gamble Paper Products Company	End-Use Customer
Bruce	Susan	Rep.'g RG Steel Sparrows Point, L.L.C.	End-Use Customer
Bruce	Susan	Rep.'g Sunoco Inc. (R&M)	End-Use Customer
Bruce	Susan	Rep.'g Wellsboro Electric Company	Electric Distributor
Campbell	Bruce	Rep.'g EnergyConnect, Inc.	Other Supplier
Citrolo	John	Calpine Energy Services, L.P.	Generation Owner
Coulbeck	Robert	ENBALA Power Networks, Inc.	Other Supplier
Cox	Jason	Dynegy Power Marketing, Inc.	Generation Owner
Eribrick	Michael	EDF Trading North America, LLC	Other Supplier
Esposito	Pat	NRG Power Marketing, L.L.C	Generation Owner
Fahey	Reem	Edison Mission Marketing and Trading, Inc.	Generation Owner
Fitch	Neal	GenOn Energy Management, LLC	Generation Owner



Flaherty	Dale	Duquesne Light Company	Transmission Owner
Francis	Franklin	Brookfield Energy Marketing, Inc.	Other Supplier
Franklin	Clifford	Westar Energy, Inc.	Other Supplier
Fuess	Jay	Rep.'g Energy Consulting Services, LLC	Other Supplier
Fuess	Jay	Rep.'g Evraz Claymont Steel	Other Supplier
Fuess	Jay	Rep.'g Icetec.com, Inc.	Other Supplier
Fuess	Jay	Rep.'g Kuehne Chemical Company, Inc.	Other Supplier
Fuess	Jay	Rep.'g PBF Power Marketing LLC	Generation Owner
Gates	Ken	Rep.'g Atlantic Grid Operations A, LLC	Other Supplier
Gates	Ken	Rep.'g Primary Power LLC	Other Supplier
Giles	Steven	Allegheny Electric Cooperative, Inc.	Transmission Owner
Greening	Michele	PPL EnergyPlus, L.L.C.	Transmission Owner
Griffiths	Daniel	Enerwise Global Technologies, Inc.	Other Supplier
Hebert	Damase	Rep.'g Covanta Energy Group	Generation Owner
Hebert	Damase	Rep.'g NAEA Rock Springs, L.L.C.	Transmission Owner
Hebert	Damase	Rep.'g RC Cape May Holdings, L.L.C.	Generation Owner
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Horton	Dana	Appalachian Power Company	Transmission Owner
Huis	Diane	North Carolina Electric Membership Corporation	Electric Distributor
Jablonski	James A	Rep.'g Borough of Lavallette, New Jersey	Electric Distributor
Jablonski	James A	Rep.'g Borough of Park Ridge, New Jersey	Electric Distributor
Jablonski	James A	Rep.'g Borough of Seaside Heights, New Jersey	Electric Distributor
Jablonski	James A	Rep.'g Borough of South River, New Jersey	Electric Distributor
Jablonski	James A	Rep.'g Vineland Municipal Electric Utility	Electric Distributor
Jennings	Kenneth	Duke Energy Business Services, Inc.	Generation Owner
Jeremko	Steven T.	New York State Electric & Gas Corporation	Other Supplier
Johnson	Carl	Long Island Lighting Company d/b/a LIPA	Other Supplier
Judson	Judith	Beacon Power Corporation	Other Supplier
LaFalce	Michael	Public Service Electric & Gas Company	Transmission Owner
Lieberman	Steve	Old Dominion Electric Cooperative	Electric Distributor
McDonald	Steve	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Miller	Don	FirstEnergy Solutions Corp.	Transmission Owner
Minalga	Jason	Invenergy LLC	Generation Owner
Norton	Chris	American Municipal Power, Inc.	Generation Owner
O'Connell	Robert	J.P. Morgan Ventures Energy Corporation	Other Supplier
Orzel	Chris	NextEra Energy Power Marketing, LLC	Generation Owner
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Philips	Marji	Hess Corporation	Other Supplier
Plante	Matthieu	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Pratzon	David	Exelon Generation Co., LLC	Transmission Owner
Quinlan	Pamela	Rockland Electric Company	Transmission Owner
Rainey	Frank	PEI Power Corporation	Generation Owner
Rushing	Nathan	EMC Development Company, LLC	Other Supplier
Scarpignato	David	Direct Energy Business, LLC	Other Supplier
Schofield	Bill	Rep.'g Buckeye Power, Inc.	Electric Distributor
Schofield	Bill	Rep.'g City of Dover, Delaware	Electric Distributor
Schofield	Bill	Rep.'g Illinois Municipal Electric Agency	Electric Distributor
Schofield	William	Rep.'g Blue Ridge Power Agency, Inc.	Electric Distributor



Schofield	William	Rep.'g Borough of Chambersburg	Electric Distributor
Schofield	William	Rep.'g Delaware Municipal Electric Corporation	Electric Distributor
Schofield	William	Rep.'g Easton Utilities Commission	Electric Distributor
Schofield	William	Rep.'g Energy Cooperative Association of Pennsylvania	Other Supplier
Schofield	William	Rep.'g Hagerstown Light Department	Electric Distributor
Schofield	William	Rep.'g Indiana Municipal Power Agency	Generation Owner
Schofield	William	Rep.'g Town of Williamsport	Electric Distributor
Schofield	William	Rep.'g WPPI Energy	Other Supplier
Summers	James	Potomac Electric Power Company	Electric Distributor
Trayers	Barry	Citigroup Energy, Inc.	Other Supplier
Wadsworth	Joe	Vitol Inc.	Other Supplier
Williams	Paul	ArcelorMittal USA LLC	End-Use Customer
Wolfe	Samuel	Viridity Energy, Inc.	Other Supplier

Non - Voting Members Present:

Last Name	First Name	Company	Sector
Ainspan	Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Beattie	Jeff	Consumers Energy Company	Other Supplier
Berg	William	Exelon Generation Co., LLC	Transmission Owner
Berlinski	Michael	Beacon Power Corporation	Other Supplier
Biden	Douglas	Electric Power Generation Association	Not Applicable
Bloom	David	Baltimore Gas and Electric Company	Transmission Owner
Bockhorn	Tim	Dayton Power & Light Company (The)	Transmission Owner
Borgatti	Michael	New Jersey Board of Public Utilities	Not Applicable
Borrell	Joanne	Lake Point Energy Consulting	Not Applicable
Bowring	Joe	Monitoring Analytics, LLC	Not Applicable
Burner	Bob	Duke Energy Carolinas, LLC	Other Supplier
Butcher	Angela	Michigan Public Service Commission	Not Applicable
Canter	David	AEP	Transmission Owner
Chapman	Mike	Magnolia Energy L.P.	Generation Owner
Chatterjee	Dhiman	Midwest ISO	Not Applicable
Chiasson	Michael	Potomac Economics	Not Applicable
Christiansen	Kevin	Ameren Energy Marketing Company	Other Supplier
Clark	Carmen	Midwest ISO	Not Applicable
Clover	Bernita	Duquesne Light Company	Transmission Owner
Cutsor	Billy	Municipal Energy Agency of Nebraska	Not Applicable
Devon	Chris	Michigan Public Service Commission	Not Applicable
Donovan	Brendan	Northern Indiana Public Service Company	Other Supplier
Dugan	William	Monitoring Analytics, LLC	Not Applicable
DuPeire	Michael	Ventyx	Not Applicable
Elliott	Tia	LURC	Not Applicable
Ellis	Jeff	Edison Mission Marketing and Trading, Inc.	Generation Owner
Feliks	Kent	American Electric Power	Transmission Owner
Fernandez	Jonathan	Federal Energy Regulatory Commission	Not Applicable
Filomena	Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Fraiture	Christian	Royal Bank of Canada	Other Supplier
Freeman	Al	Michigan Public Service Commission	Not Applicable



Garg	Rishi	Office of the People's Counsel for the District of Columbia	End-Use Customer
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Gribik	Paul	Midwest ISO	Not Applicable
Hammer	Neil	MidAmerican Energy Company	Other Supplier
Hanson	Mark	Illinois Commerce Commission	Not Applicable
Heizer	Fred	Public Utilities Commission of Ohio	Not Applicable
Heraeus	Mathias	Midwest ISO	Not Applicable
Hoag	Richard	FirstEnergy Solutions Corp.	Transmission Owner
Hoatson	Tom	Riverside Generating, LLC	Other Supplier
Hochbaum	George	Cargill Power Markets LLC	Other Supplier
Hoffmann	Adam	Cargill Power Markets LLC	Other Supplier
Huntoon	Steve	NextEra Energy Power Marketing, LLC	Generation Owner
Hurley	Dan	Public Service Commission of Maryland	Not Applicable
Hyzinski	Tom	PPL EnergyPlus, L.L.C.	Transmission Owner
Jacobs	Michael	Extreme Power	Not Applicable
Kathpal	Praveen	AES Energy Storage, LLC	Generation Owner
Kopon	Owen	Brickfield, Burchette, Ritts & Stone, P.C.	Not Applicable
Koval	Amy	Ameren Energy Marketing Company	Other Supplier
Krauthamer	Michael	Public Service Commission of Maryland	Not Applicable
Kuhn	Ted	Midwest ISO	Not Applicable
Laverty	Eric	Midwest ISO	Not Applicable
Liao	Huaiwei	Louis Dreyfus Energy Services, L.P.	Other Supplier
Lindeman	Tony	FirstEnergy Solutions Corp.	Transmission Owner
Logan	Sharon	Federal Energy Regulatory Commission	Not Applicable
Marinelli	Richard	Public Service Electric & Gas Company	Transmission Owner
Martin	Valerie	Federal Energy Regulatory Commission	Not Applicable
МсСоу	Paul	Atlantic Wind Connection	Not Applicable
Miller	John	Commonwealth Edison Company	Transmission Owner
Minalga	Jason	Invenergy LLC	Generation Owner
Mukanik	Blair	Manitoba Hydro	Not Applicable
Palcic	Ron	FirstEnergy Solutions Corp.	Transmission Owner
Patrylo	Bob	H-P Energy Resources LLC	Other Supplier
Patty	Sandra	Maryland Department of Natural Resources	Not Applicable
Peebles	Andy	Shell Energy North America (US), LP	Other Supplier
Penner	Audrey	Manitoba Hydro	Not Applicable
Perry	Jason	Vectren Retail, LLC	Other Supplier
Plutschak	Richard	Easton Utilities Commission	Electric Distributor
Ramy	Todd	Midwest ISO	Not Applicable
Rismiller	Randy	Illinois Commerce Commission	Not Applicable
Robinson	Michael	Midwest ISO	Not Applicable
Ruch	Roger	FirstEnergy Solutions Corp.	Transmission Owner
Ryckman	Ron	Ameren Energy Marketing Company	Other Supplier
Sapper	David	Customized Energy Solutions, Ltd.*	Not Applicable
Seymour	Melissa	IBERDROLA RENEWABLES, Inc.	Generation Owner
Shamash	Hertzel	Dayton Power & Light Company (The)	Transmission Owner
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Shaw	Marka	Exelon Energy Company	Transmission Owner
Shipp	Kevin	Ameren Energy Marketing Company	Other Supplier



Siegrist	Hal	GenOn Energy Management, LLC	Generation Owner
Sillin	John	Federal Energy Regulatory Commission	Not Applicable
Splinter	Donald	Wisconsin Electric Power Company d/b/a WE Power Company	Generation Owner
Sprecher	Daniel	VCharge, Inc.	Other Supplier
Stadelmeyer	Rebecca	Exelon Energy Company	Transmission Owner
Stein	Ed	FirstEnergy Solutions Corp.	Transmission Owner
Stewart	Courtney	The Delaware Public Service Commission	Not Applicable
Stuchell	Jeff	FirstEnergy Solutions Corp.	Transmission Owner
Tackett	Nicholas	Federal Energy Regulatory Commission	Not Applicable
Tatum	Ed	Old Dominion Electric Cooperative	Electric Distributor
Trost	Jason	Dayton Power & Light Company (The)	Transmission Owner
Volpe	Mark	Dynegy Power Marketing, Inc.	Generation Owner
Wang	Yaoyu	Midwest ISO	Not Applicable
Weaver	David	PECO Energy Company	Transmission Owner
Webber	Sharon	PPL EnergyPlus, L.L.C.	Transmission Owner
Webster	John	Icetec.com, Inc.	Other Supplier
Wisersky	Megan	Madison Gas & Electric Company	Other Supplier
Wood	Ayana	UGI Utilities, Inc.	Transmission Owner
Yu	Haibin	Calpine Energy Services, L.P.	Generation Owner

PJM Present:

Last Name	First Name	Company Name	Sector
Alesius	Alan	PJM Interconnection	Not Applicable
Bresler	Stu	PJM Interconnection	Not Applicable
Burdis	Tim	PJM Interconnection	Not Applicable
Chandler	Priscilla	PJM Interconnection	Not Applicable
Covino	Susan	PJM Interconnection	Not Applicable
Dessender	Harry	PJM Interconnection	Not Applicable
Egan	Amanda	PJM Interconnection	Not Applicable
Eichorn	Sarah	PJM Interconnection	Not Applicable
Ennis	Brad	PJM Interconnection	Not Applicable
Falin	Tom	PJM Interconnection	Not Applicable
Flynn	Paul	PJM Interconnection	Not Applicable
Foley	Pauline	PJM Interconnection	Not Applicable
Ford	Adrien	PJM Interconnection	Not Applicable
Herling	Steve	PJM Interconnection	Not Applicable
Horning	Lynn	PJM Interconnection	Not Applicable
Hugee	Jacquelyn	PJM Interconnection	Not Applicable
Kelley	Mike	PJM Interconnection	Not Applicable
Ма	Alex	PJM Interconnection	Not Applicable
Manion	Evelyn	PJM Interconnection	Not Applicable
McGlynn	Paul	PJM Interconnection	Not Applicable
McNamara	Sean	PJM Interconnection	Not Applicable
Morelli	Lisa	PJM Interconnection	Not Applicable
Pfeiffer	Lisa	PJM Interconnection	Not Applicable
Schleiden	Jeanine	PJM Interconnection	Not Applicable



Schmitt	Jeff	PJM Interconnection	Not Applicable
Sims	Mark	PJM Interconnection	Not Applicable
Sotkiewicz	Paul	PJM Interconnection	Not Applicable
Souder	Dave	PJM Interconnection	Not Applicable
Ulmer	David	PJM Interconnection	Not Applicable
Walter	Laura	PJM Interconnection	Not Applicable
Williams	Jeff	PJM Interconnection	Not Applicable
Williams	Stan	PJM Interconnection	Not Applicable
Withrow	David	PJM Interconnection	Not Applicable

1. ADMINISTRATION

Minutes of the August 17, 2011 Markets and Reliability Committee (MRC) meeting were reviewed. The phrase "... review and ..." was added to the last line of item 6. The minutes were **<u>approved</u>** as amended by acclamation with no objections and one abstention.

2. <u>PJM MANUALS</u>

- A. Mr. Dessender reviewed proposed Manual 27: Open Access Transmission Tariff Accounting and Manual 28: Operating Agreement Accounting updates identified through PJM's Quality Project. There were no significant changes impacting members.
- B. Mr. Dessender presented proposed revisions to Manual 11: Energy and Ancillary Services Market Operations which has been updated for the .5 to .1 MW minimum threshold change for ancillary service offers.
- C. Mr. Sims presented Manual 14B revisions to incorporate and retire Manual 05.

Items 2 A, B and C were endorsed by acclamation with no objections or abstentions.

D. Mr. R. Souder presented proposed revisions to Manual 38: Operations Planning. The committee will be asked to endorse the proposed revisions at its next meeting.

3. MISCELLANEOUS OA, TARIFF AND RAA REVISIONS



Ms. Hugee presented proposed Operating Agreement (OA), Tariff and Reliability Assurance agreement (RAA) revisions resulting from PJM's Quality Project and review of the documents. Following discussion, it was resolved that special conference calls would be convened to allow stakeholders to review and vet the proposed revisions further. The Committee will be asked to approve and endorse the propose revisions at its next meeting.

4. <u>REGIONAL PRACTICE CHANGES FOR THE SPOT-IN ISSUE</u>

This item was removed from the agenda, as the Market Implementation Committee had not yet taken action on the proposed revisions. The Committee will be asked to approve and endorse the propose revisions at its next meeting.

5. BROADER REGIONAL MARKETS SOLUTIONS TO LAKE ERIE LOOP FLOW

- A. Mr. Williams provided an informational update on Inter-Regional Coordination and Broader Regional Markets efforts to develop solutions to address seams issues and Lake Erie Loop Flows. He referred to activities of the New York ISO and Midwest ISO (MISO).
- B. Mr. Ramey and Mr. Larson of MISO discussed MISO's perspective on the benefits of the MISO capacity portability proposal. Stakeholders expressed concern that a problem requiring significant change to PJM markets and operations had not yet been adequately demonstrated. Mr. Gribik and Mr. Chatterjee discussed MISO's perspective on efforts to improve interchange coordination with PJM, and the status of MISO's Extended LMP (ELMP) discussion. Potential paths forward were discussed with stakeholders suggesting that the issues might better be discussed later in 2012.

6. <u>RPM RELATED ISSUES</u>

Ms. Ford discussed the status of the stakeholder process and future work plan regarding the



various RPM related issues before the stakeholders and PJM. She discussed the three tracts of related efforts and their status: Triennial Review, Performance Assessment and MRC Charged Items. She discussed the proposed Charge related to the Performance Assessment activities which was developed by the MRC-RPM subgroup. This proposed Charge addressed issues identified in the Performance Assessment which stakeholders wish to pursue prior to the next base residual auction. Following discussion, the Committee **approved** the proposed Charge with no objections and one abstention.

7. PRICE RESPONSIVE DEMAND (PRD)

Ms. Horning discussed posted draft Tariff, RAA and OA revisions to implement PRD. She reported on questions and edits requested suggested by stakeholders. She noted that the Members Committee would be asked to endorse and approve these proposed revisions at its meeting on September 22, 2011.

8. <u>RESIDUAL ZONE PRICING</u>

Ms. Morelli reviewed proposed Residual Zone Pricing business rules and associated Manual, Tariff and OA changes. She noted that the committee would be asked to endorse the proposed business rules and Manual Tariff and OA revisions at a future meeting.

9. 2011 INSTALLED RESERVE MARGIN (IRM) STUDY

Mr. Falin reviewed the preliminary results of the 2011 IRM Study, discussing the study methodology and proposed values of the IRM, Forecast Pool Requirement and DR Factors for Delivery Years 2012/2013, 2013/2014, 2014/2015 and 2015/2016. He noted that the Committee would be asked to endorse the proposed values at its next meeting.



10. LOAD FORECAST RECOMMENDATIONS

Mr. Falin reviewed potential PJM load forecast model changes and associated Manual 19 revisions based on Itron recommendations. He noted that the committee will be asked to endorse the proposed revisions at its next meeting.

11. FERC ORDER 1000

Ms. P. Foley discussed plans for the stakeholder process related to PJM's compliance filing in response to FERC Order 1000. She explained the compliance requirements of Order 1000, and how they relate to ongoing activities of the Regional Planning Process Task Force. She also noted initial activities of the Transmission Owners Agreement – Administrative Committee (TOA-AC) to develop proposed responses to the Order's requirements related to cost allocation. She noted that any proposed solutions developed by the TOA-AC would be further vetted by the MRC.

12. UPDATE LANGUAGE TO INSURANCE PROVISIONS IN PRO FORMA INTERCONNECTION SERVICE AGREEMENTS

Ms. Foley presented proposed Tariff modifications to modernize the insurance provision language contained in Interconnection Service Agreements in order to more closely conform to current industry terminology. She noted that the committee would be asked to endorse the proposed business rules and revisions at its next meeting.

13. <u>REGULATION PERFORMANCE SR. TASK FORCE (RPSTF)</u>

Mr. Ogburn provided an update on activities of the RPSTF. He discussed both short term (phase 1 – implementation in 1Q12) and long term (phase 2 – implementation in late 2012) potential solutions. He noted that proposed OA and Tariff revisions to implement phase 1 improvements would be reviewed with the MRC at its next meeting.



14. REGIONAL PLANNING PROCESS TASK FORCE (RPPTF)

Mr. McNamara and Mr. Herling provided an update on activities of the RPPTF. They discussed the proposed potential solutions under consideration, including Baseline Reliability Improvements, a FYI Approach, a State Agreement Approach, a Critical Mass Approach and a Proactive Build Approach. They discussed next steps, including updating a whitepaper on the FYI Approach and further development of the Critical Mass and Proactive Build Approaches. It was expected that the proposals would be reviewed with the MRC at its October and November 2011 meetings.

15. INTERCONNECTION PROCESS SR. TASK FORCE (IPSTF)

Mr. McGlynn provided an update on activities of the IPSTF. He discussed proposed solutions under development including changing the frequency of interconnection queues, implementation of a sliding queue concept, and implementation of separate queue for proposed projects under 20 MW. He noted next steps including completion of proposed solutions.

16. LOST OPPORTUNITY COST FOR WIND

Mr. Ma discussed a proposal regarding Lost Opportunity Cost for wind resources which was developed by the Intermittent Resources Task Force and reviewed by the Market Implementation Committee (MIC). He noted that the MIC had reviewed the posted proposed Tariff and OA revisions and confirmed that they reflected the proposal previously endorsed by the MIC. He noted that the Committee will be asked to endorse the draft language revisions at a future meeting.

17. AC2 IMPLEMENTATION

Mr. D. Souder discussed the current status of implementation of the AC2 Migration and the plans for communication with the stakeholders on final integration of AC2.



18. <u>REPORTS</u>

The following reports were posted for information and were not presented at the meeting. There was opportunity for questions on the reports.

- A. Eastern Interconnection Planning Collaborative (EIPC)
- B. Duke Energy Integration Report
- C. Transmission Expansion Projects
- D. Cost Development Subcommittee (CDS)
- E. Operating Committee (OC)
- F. Market Implementation (MIC)
- G. Planning Committee (PC)

19. <u>FUTURE AGENDA ITEMS</u>

No new future agenda items were identified.

20. FUTURE MEETINGS

9:30 AM	Wilmington, DE
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9:30 AM	Wilmington, DE
	9:30 AM

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