

Markets and Reliability Committee Webex Only March 29, 2021 9:00 a.m. – 11:15 a.m.

# Administration

Stu Bresler and Dave Anders welcomed stakeholders and provided the Anti-trust, Code of Conduct, and Meeting Participation announcements.

## **Consent Agenda**

Items A through E were <u>approved/endorsed</u> by acclamation with no objections or abstentions:

- A. Minutes of the February 24, 2021 meeting of the Markets and Reliability Committee (MRC).
- B. Proposed revisions to Manual 02: Transmission Service Request resulting from its periodic coverto-cover review.
- C. Proposed revisions to Manual 11: Energy & Ancillary Service Market Operations resulting from its periodic cover-to-cover review.
- D. Proposed revisions to Manual 37: Reliability Coordination resulting from its periodic cover-to-cover review.
- E. Proposed\_revisions to remove the TLR buy-through congestion process from Schedule 1, Section 1.10.6A of the Operating Agreement. Issue Tracking: Transmission Loading Relief (TLF) Buy-Through

# Endorsements/ Approvals

None

# First Readings

1. Long-Term 5-Minute Dispatch & Pricing

Aaron Baizman reviewed the proposed solution and associated Tariff revisions addressing the Long-Term Five Minute Dispatch & Pricing changes. The committee will be asked to endorse the proposed solutions at its next meeting. Members Committee endorsement will be sought on the same day. <u>Issue Tracking: Five Minute Dispatch and Pricing</u>

2. Capital Recovery Factor for Avoidable Project Investment Cost Determinations

Jeff Bastian reviewed the proposed solution and associated Tariff revisions addressing the Capital Recovery Factor for Avoidable Project Investment Cost Determinations. The committee will be asked



to approve the proposed solution at its next meeting. Members Committee endorsement will be sought on the same day.

<u>Issue Tracking: Capital Recover Factor (CRF) for Avoidable Project Investment Cost Determinations</u> (APIR)

- 3. Critical Infrastructure Stakeholder Oversight (CISO)
  - A. Christina Stotesbury provided an overview of the CISO work activities and timeline.
  - B. Mike Herman reviewed the proposed solutions to address the Mitigation and Avoidance of future CIP-014 facilities.
  - C. Alejandro Bautista reviewed Operating Agreement revisions supporting the solutions.

The committee will be asked to endorse the proposed Mitigation solution and the proposed Avoidance solution at its next meeting. Issue Tracking: Critical Infrastructure Stakeholder Oversight

4. <u>Interconnection Construction Service Agreement Superseding Language and Automatic Termination</u> <u>Provision</u>

Mark Sims reviewed a proposed solution and associated Tariff revisions addressing concerns associated with the pro forma Interconnection Construction Service Agreement's lack of superseding language and current automatic termination provision. The committee will be asked to endorse the proposed solution at its next meeting.

- 5. PJM Manuals
  - A. Chris Franks reviewed proposed revisions to Manual 14D: Generator Operational Requirements, Section 5.3.7 regarding the Resource Tracker Ownership Confirmation Requirement. The committee will be asked to endorse the proposed solution at its next meeting. <u>Issue Tracking: Resource Tracker Ownership Confirmation Requirement</u>

# Informational Reports

6. <u>High Voltage Direct Current Senior Task Force (HVDCSTF) Update (11:00-11:15)</u>

Lisa Krizenoskas provided an update regarding the status of the HVDCSTF. Issue Tracking: Integration of HVDC Converter as a New Type of Capacity Resource

## Future Agenda Items

No new future agenda items were identified.

Future Meeting Dates				
April 21, 2021 May 26, 2021	9:00 a.m. 9:00 a.m.	WebEx WebEx		
June 23, 2021	9:00 a.m.	WebEx		
July 28, 2021 August 25, 2021	9:00 a.m. 9:00 a.m.	TBD TBD		
August 25, 2021	9:00 a.m.	IBD		



September 29, 2021	9:00 a.m.	TBD
October 20, 2021	9:00 a.m.	TBD
November 17, 2021	9:00 a.m.	TBD
December 15, 2021	9:00 a.m.	TBD

Author: D. Anders

# Meeting Attendance

### Chair/Secretary

Last Name	First Name	Company	Sector
Bresler	Stu	PJM Interconnection, LLC	Not Applicable
Anders	David	PJM Interconnection, LLC	Not Applicable

### **Voting Attendees**

Last Name	First Name	Company	Sector
Barker	Jason	Exelon Business Services Company, LLC	Transmission Owner
Benchek	Jim	American Transmission Systems, Inc.	Transmission Owner
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Bruce	Susan	Rep.'g Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	Rep.'g Cleveland-Cliffs Steel LLC	End-Use Customer
Bruce	Susan	Rep.'g Gerdau Ameristeel Energy, Inc.	End-Use Customer
Bruce	Susan	Rep.'g Industrial Energy Users-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 Messer LLC	End-Use Customer
Bruce	Susan	Rep.'g Procter & Gamble Paper Products Company (The)	End-Use Customer
Bruce	Susan	Rep.'g Trustees of the University of Pennsylvania	End-Use Customer
Bruce	Susan	Rep.'g Wellsboro Electric Company	Electric Distributor
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Davis	James	Virginia Electric & Power Company	Transmission Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Foladare	Kenneth	Geenex Solar LLC	Generation Owner
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Fuess	Christian	Rep.'g Diamond State Generation Partners, LLC	Generation Owner
Fuess	Christian	Rep.'g Icetec.com, Inc.	Other Supplier
Fuess	Christian	Rep.'g Kuehne Chemical Company, Inc.	End-Use Customer
Fuess	Christian	Rep.'g NextPower III US Holdco Inc.	Generation Owner
Fuess	Christian	Rep.'g PBF Power Marketing, LLC	Generation Owner
Garnett	Bryan	Duke Energy Business Services LLC	Transmission Owner
Greiner	Gary	Public Service Electric & Gas Company	Transmission Owner
Hastings	David	Rep.'g Northstar Trading Ltd.	Other Supplier
Hastings	David	Rep.'g Saracen Energy East LP	Other Supplier
Hastings	David	Rep.'g SESCO Enterprises, LLC	Other Supplier
Hastings	David	Rep.'g Solios Power Mid-Atlantic Trading, LLC	Other Supplier
Hoatson	Tom	Riverside Generating Company, L.L.C.	Generation Owner
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Hyzinski	Thomas	Rep.'g Carroll County Energy LLC	Generation Owner



# Minutes

Hyzinski	Thomas	Rep.'g Dynegy Marketing and Trade, LLC	Generation Owner
Hyzinski	Thomas	Rep.'g GenOn Energy Management, LLC	Generation Owner
Jardot	Gina	NRG Power Marketing, LLC	Generation Owner
Johnson	Carl	Rep.'g Allegheny Electric Cooperative, Inc.	Electric Distributor
Johnson	Carl	Rep.'g Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson	Carl	Rep.'g Borough of Chambersburg	Electric Distributor
Johnson	Carl	Rep.'g Borough of Mont Alto, Pennsylvania	Electric Distributor
Johnson	Carl	Rep.'g Buckeye Power, Inc.	Electric Distributor
Johnson	Carl	Rep.'g Central Virginia Electric Cooperative	Electric Distributor
Johnson	Carl	Rep.'g City of Dover, Delaware	Electric Distributor
Johnson	Carl	Rep.'g Delaware Municipal Electric Corporation, Inc.	Electric Distributor
	Carl	Rep.'g Easton Utilities Commission	
Johnson			Electric Distributor
Johnson	Carl	Rep.'g Energy Cooperative Association of Pennsylvania (The)	Other Supplier
Johnson	Carl	Rep.'g Galt Power, Inc.	Other Supplier
Johnson	Carl	Rep.'g Hagerstown Light Department	Electric Distributor
Johnson	Carl	Rep.'g Illinois Municipal Electric Agency	Electric Distributor
Johnson	Carl	Rep.'g Indiana Municipal Power Agency	Electric Distributor
Johnson	Carl	Rep.'g Madison Gas & Electric Co.	Other Supplier
Johnson	Carl	Rep.'g Michigan Public Power Agency	Generation Owner
Johnson	Carl	Rep.'g North Carolina Electric Membership Corporation	Electric Distributor
Johnson	Carl	Rep.'g North Carolina Municipal Power Agency Number 1	Other Supplier
Johnson	Carl	Rep.'g Northern Illinois Municipal Power Agency	Electric Distributor
Johnson	Carl	Rep.'g Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Rep.'g Thurmont Municipal Light Company	Electric Distributor
Johnson	Carl	Rep.'g Town of Williamsport (The)	Electric Distributor
Johnson	Carl	Rep.'g WPPI Energy	Other Supplier
Kauffman	Brian	Enel X North America, Inc.	Other Supplier
Keenan	Matthew	Elwood Energy, LLC	Generation Owner
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP	Other Supplier
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner
Laios	Takis	Appalachian Power Company	Transmission Owner
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
Pakela	Greg	Rep.'g DTE Energy Trading, Inc.	Other Supplier
		Rep.'g Consumer Protection and Advocate Division of the Tennessee	
Poulos	Greg	Attorney General	End-Use Customer
Poulos	Greg	Rep.'g Delaware Division of the Public Advocate	End-Use Customer
Poulos	Greg	Rep.'g Illinois Citizen Utility Board	End-Use Customer
Poulos	Greg	Rep.'g Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Poulos	Greg	Rep.'g Maryland Office of People's Counsel	End-Use Customer
		Rep.'g Michigan Department of Attorney General, Environment,	
Poulos	Greg	Natural Resources, & Agriculture Division	End-Use Customer
Poulos	Greg	Rep.'g New Jersey Division of Rate Counsel	End-Use Customer
Poulos	Greg	Rep.'g Office of the Attorney General, Kentucky	End-Use Customer
Poulos	Greg	Rep.'g Office of the People's Counsel for the District of Columbia	End-Use Customer
Poulos	Greg	Rep.'g Ohio Consumers' Counsel	End-Use Customer
Poulos	Greg	Rep.'g Pennsylvania Office of Consumer Advocate	End-Use Customer
Poulos	Greg	Rep.'g Public Staff - North Carolina Utilities Commission	End-Use Customer
Poulos	Greg	Rep.'g Virginia Division of Consumer Counsel	End-Use Customer
Poulos	Greg	Rep.'g West Virginia Consumer Advocate Division	End-Use Customer
Rohrbach	John	Rep.'g Big Savage, LLC	Generation Owner
Rohrbach	John	Rep.'g Kentucky Municipal Energy Agency	Electric Distributor
Rohrbach	John	Rep.'g Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rohrbach	John	Rep.'g Wabash Valley Power Association, Inc.	Electric Distributor
		PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Rumsey	Amanda		



Seireg	Bahaa	Rockland Electric Company	Transmission Owner
Stewart	Travis	Rep.'g Energy Harbor LLC	Generation Owner
Stewart	Travis	Rep.'g Jersey Green Energy, LLC	Other Supplier
Stewart	Travis	Rep.'g Longview Power, LLC	Generation Owner
Stewart	Travis	Rep.'g York County Solid Waste and Refuse Authority	Generation Owner
Swalwell	Bradley	Tangent Energy Solutions, Inc.	Other Supplier
Vayda	Brian	Rep.'g Borough of Butler, Butler Electric Division	Electric Distributor
Vayda	Brian	Rep.'g Borough of Lavallette, New Jersey	Electric Distributor
Vayda	Brian	Rep.'g Borough of Madison, New Jersey	Electric Distributor
Vayda	Brian	Rep.'g Borough of Milltown, New Jersey	Electric Distributor
Vayda	Brian	Rep.'g Borough of Park Ridge, New Jersey	Electric Distributor
Vayda	Brian	Rep.'g Borough of Pemberton, New Jersey	Electric Distributor
Vayda	Brian	Rep.'g Borough of Seaside Heights, New Jersey	Electric Distributor
Vayda	Brian	Rep.'g Borough of South River, New Jersey	Electric Distributor
Vayda	Brian	Rep.'g Vineland Municipal Electric Utility	Electric Distributor
Whitehead	Jeffrey	Rep.'g Eastern Generation, LLC	Generation Owner
Whitehead	Jeffrey	Rep.'g Essential Power Rock Springs, LLC	Generation Owner
Whitehead	Jeffrey	Rep.'g Neptune Regional Transmission System, LLC	Transmission Owner
Whitehead	Jeffrey	Rep.'g Wheelabrator Falls Inc.	Generation Owner

### **Non-Voting Attendees**

Last Name	First Name	Company	Sector
Abend	Erik	EA Consulting	None
Berton	Tyler	AEP Energy Partners, Inc.	Transmission Owner
Bhathal	Gurmit	Ontario Power Generation Inc.	Other Supplier
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Bowring	Joe	Monitoring Analytics	None
Carmean	Gregory	OPSI	None
Carrado	Regina	Exelon Business Services Company, LLC	Transmission Owner
Dadourian	John	Monitoring Analytics	None
D'Alessandris	Lou	Energy Harbor LLC	Generation Owner
DeLosa	Joseph	New Jersey Board of Public Utilities	None
Elkins	Rachel	Energy Harbor LLC	Generation Owner
Ericson	Christine	Illinois Commerce Commission	None
Everngam	Scott	Blue Horseshoe Energy	None
Filomena	Guy	Customized Energy Solutions, Ltd.*	None
Foster	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Gahimer	Michael	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Gilani	Rehan	Consolidated Edison Company of New York, Inc.	Transmission Owner
Guntle	Vince	American PowerNet Management, L.P.	End-Use Customer
Heinle	Frederick	Office of the People's Counsel for the District of Columbia	End-Use Customer
Heitmeyer	Chad	AEP Energy Partners, Inc.	Transmission Owner
Hollis	Gabriel	NextEra Energy Marketing, LLC	Other Supplier
Horning	Lynn	Customized Energy Solutions, Ltd.*	None
Hudis	Gabriella	Gabel Associates	None
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
Huntoon	Steve	Chesapeake Transmission LLC	Other Supplier
ller	Arthur	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Jens	Tom	Black Oak Capital, LLC	Other Supplier
Jett	William	Duke Energy Business Services LLC	Transmission Owner
Johnston	David	Indiana Utility Regulatory Commission	None
Kogut	George	New York Power Authority	Other Supplier
Lawson	Ryen	Dominion Energy Generation Marketing, Inc.	Generation Owner
Liang-Nicol	Cecilia	Energy Harbor LLC	Generation Owner



# Minutes

Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Mariam	Yohannes	Office of the People's Counsel for the District of Columbia	End-Use Customer
Markiewicz	Cindy	Energy Harbor LLC	Generation Owner
Mazzacano	Edward	Dynasty Power Inc	Other Supplier
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Nix	Emma	Gabel Associates	None
Ondayko	Brock A.	AEP Energy Partners, Inc.	Transmission Owner
Patel	Anjali	Office of the People's Counsel for the District of Columbia	End-Use Customer
Pelletier	Eveline	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Peoples	John	Duquesne Light Company	Transmission Owner
Price	Ruth	Delaware Division of the Public Advocate	End-Use Customer
Rainey	John	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Rainey	John	PEI Power LLC	Generation Owner
Robinson	Becky	Dynegy Marketing and Trade, LLC	Generation Owner
Rodriguez	Tomas	OPSI	None
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	None
Schisler	Ken	CPower Energy Management	None
Segner	Sharon	LS Power	None
Shah	Pulin	Exelon Business Services Company, LLC	Transmission Owner
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Skucas	Ruta	Pierce Atwood	None
Sotkiewicz	Paul	E-Cubed Policy Advisors	None
Squibb	William	Ohio Valley Electric Corporation	Transmission Owner
Stone	Andy	Gabel Associates	None
Stuchell	Jeff	Energy Harbor LLC	Generation Owner
Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner
Suh	Jung	Calpine Energy Services, L.P.	Generation Owner
Sweeney	Rory	GT Power Group, LLC	None
Tatum	Ed	American Municipal Power, Inc.	Electric Distributor
Taylor	Robert	Exelon Business Services Company, LLC	Transmission Owner
Thomas	Amber	Exelon Business Services Company, LLC	Transmission Owner
Tibbetts	Maeve	Pierce Atwood	None
Vargo	Daniel	Allegheny Electric Cooperative, Inc.	Electric Distributor
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Wisersky	Megan	Madison Gas & Electric Co.	Other Supplier
Zemanek	Kevin	Buckeye Power, Inc.	Electric Distributor

#### PJM Attendees

Last Name	First Name	Company	Sector
Asthana	Manu	PJM Interconnection, LLC	None
Bastian	Jeff	PJM Interconnection, LLC	None
Berner	Aaron	PJM Interconnection, LLC	None
Bloczynski	Nigeria	PJM Interconnection, LLC	None
Boyle	Glen	PJM Interconnection, LLC	None
Bruno	Patrick	PJM Interconnection, LLC	None
Bryson	Mike	PJM Interconnection, LLC	None
Buehler	Susan	PJM Interconnection, LLC	None
Connell	Jason	PJM Interconnection, LLC	None
D'Antonio	Phil	PJM Interconnection, LLC	None
DeVita	Thomas	PJM Interconnection, LLC	None
Drauschak	Lisa	PJM Interconnection, LLC	None
Egan	Amanda	PJM Interconnection, LLC	None
Fabiano	Janell	PJM Interconnection, LLC	None
Foley	Pauline	PJM Interconnection, LLC	None
Foley	Sheila	PJM Interconnection, LLC	None



#### Christine PJM Interconnection, LLC Franks None PJM Interconnection, LLC None Frogg Darrell PJM Interconnection, LLC Glatz None Suzanne PJM Interconnection, LLC Glazer Craig None PJM Interconnection, LLC Gluck Jim None Greening Michele PJM Interconnection, LLC None Guistwhite Jeff PJM Interconnection. LLC None Haque Asim PJM Interconnection, LLC None Hauske Tom PJM Interconnection, LLC None Herman Michael PJM Interconnection, LLC None Horger PJM Interconnection, LLC Tim None Hugee Jacqulynn PJM Interconnection, LLC None PJM Interconnection, LLC Keech Adam None Krizenoskas Lisa PJM Interconnection, LLC None Chen PJM Interconnection, LLC None Lu McElwaine Kathleen PJM Interconnection. LLC None PJM Interconnection, LLC McGlynn Paul None PJM Interconnection, LLC McLaughlin Jeffrey None McLaverty Megan PJM Interconnection, LLC None Militello PJM Interconnection, LLC Nicole None Morelli Lisa PJM Interconnection, LLC None PJM Interconnection, LLC Muhl Nancy None PJM Interconnection, LLC O'Hara Chris None Pacella Christopher PJM Interconnection, LLC None Phillips Darlene PJM Interconnection, LLC None Pincus Steve PJM Interconnection, LLC None PJM Interconnection. LLC Robinson Charles None Salmon Lisa PJM Interconnection, LLC None Schweizer David PJM Interconnection, LLC None Seiler Ken PJM Interconnection, LLC None Seiler Ken PJM Interconnection, LLC None Sims PJM Interconnection, LLC Mark None PJM Interconnection, LLC Souder Dave None Souder Michelle PJM Interconnection, LLC None Souder Rich PJM Interconnection, LLC None Christina PJM Interconnection, LLC None Stotesbury Strella Wahba PJM Interconnection, LLC None Lauren PJM Interconnection, LLC Swimm Nora None Tribulski Jen PJM Interconnection, LLC None

**Minutes**