

Board of Managers Meeting Minutes

May 10, 2024

A meeting of the PJM Interconnection, L.L.C. (PJM) Board of Managers (Board) was convened at the Four Seasons Hotel in Baltimore, Maryland, at approximately 9 a.m. on Friday, May 10, 2024.

The following Board members were present constituting a quorum:

- Manu Asthana, President and Chief Executive Officer (ex officio)
- Mark Takahashi, Chair
- Terry Blackwell
- Paula Conboy
- Jeanine Johnson
- Margo Loebl
- David Mills
- Dean Oskvig
- Charles Robinson
- Vickie VanZandt

Present for the meeting, or a portion of the meeting, were the following PJM personnel:

- Stu Bresler, Executive Vice President Market Services and Strategy
- Mike Bryson, Sr. Vice President Operations
- Rebecca Carroll, Sr. Director Market Design
- Carl Coscia, Vice President, Chief Risk Officer
- Lisa Drauschak, Sr. Vice President, Chief Financial Officer and Treasurer
- Craig Glazer, Vice President Federal Government Policy
- Asim Hague, Sr. Vice President Governmental & Member Services
- Colleen Hicks, Managing Counsel
- Adam Keech Vice President Market Design & Economics
- Aftab Khan, Executive Vice President, Operations, Planning & Security
- Chen Lu, Associate General Counsel
- Jessica Lynch, Associate General Counsel
- Steve McElwee, Vice President, Chief Security Officer
- Paul McGlynn, Vice President Planning
- Tom O'Brien, Sr. Vice President, Chief Information Officer



- Chris O'Hara, Sr. Vice President, General Counsel
- Chris Pilong, Sr. Director Operations Planning
- Ricardo Rodriguez, Executive Director Internal Audit
- Lisa Salmon, Executive Assistant to the President & PJM Board
- Nora Swimm, Sr. Vice President Corporate Client Services

Administration

Upon a motion duly made and seconded, the Board unanimously approved the minutes (including public versions) of its February 28, 2024; April 5, 2024; and April 15, 2024, meetings.

Stu Bresler, Mike Bryson, Carl Coscia, Lisa Drauschak, Craig Glazer, Asim Haque, Colleen Hicks, Adam Keech, Aftab Khan, Steve McElwee, Paul McGlynn, Tom O'Brien, Ricardo Rodriguez, Lisa Salmon and Nora Swimm exited the meeting.

Executive Session

The Board met in an Executive Session.

* * * *

Bresler, Bryson, Coscia, Drauschak, Glazer, Haque, Hicks, Keech, Khan, McElwee, McGlynn, O'Brien, Rodriguez, Salmon and Swimm rejoined the meeting at 9:30 a.m.

Jessica Lynch joined the meeting at 9:39 a.m.

* * * *

Lynch exited the meeting at 11:41 a.m.

Capitalization of End-Use Customer

Chen Lu reviewed the materials on the inadvertent capitalization of the term "End-Use Customer" in the Reliability Assurance Agreement (RAA) and its implications for Energy Efficiency and End-Use Customers.

Upon a motion duly made, seconded and unanimously adopted, the Board approved the requested revisions to the RAA to correct the capitalization of "End-Use Customers" consistent with PJM's package in the Governing Document Enhancement & Clarification Subcommittee (GDECS). (Attachment B)

Lu exited the meeting at 11:50 a.m.

EPA's Final Greenhouse Gas Rule

Glazer reviewed the materials and the implications of the EPA Final Greenhouse Gas (GHG) rule on new and existing generation facilities in the PJM region. Glazer discussed the recent collaboration on GHG rules with the other RTOs and expected state engagement.



Becky Carroll and Chris Pilong joined the meeting at 12:15 p.m.

Strategy Session

- Bresler introduced the strategy materials, including the strategic initiatives, road map, risks and mitigations.
- Carroll reviewed the materials and set forth the importance of PJM's leadership in the stakeholder process to drive outcomes, including increased simulation analysis, thought papers and consultant engagement.
- Pilong discussed the Board materials describing the operations road map, including technology initiatives and Control Room and EMS enhancements.
- Carroll reviewed the materials describing the market design road map, including PJM's energy and ancillary market initiatives.
- McGlynn reviewed the planning road map, including initiatives impacting the Regional Transmission Expansion Plan (RTEP) projects, load forecasting, deactivation time lines, Capacity Interconnection Right transfers. interconnection queue enhancements, and RTEP enhancements including long-term regional transmission planning.
- The Board discussed the strategic road maps. Manu Asthana proposed having a discussion on planning at the next OPSI board-to-board meeting.
- Jeanine Johnson discussed an emerging trend posed by quantum computing and data encryption that warrants further examination. PJM committed to review the matter.

Carroll and Pilong exited the meeting at 1:53 p.m.

Competitive Markets Committee (CMC) Report

- Mills reported on the CMC meeting held on May 9, 2024, and the materials included therein.
 - The CMC reviewed and endorsed changes to:
 - PJM Manual 15 corresponding to OA changes related to the determination of synchronous condensing costs,
 - The Reliability Assurance Agreement (RAA) related to changes to the Effective Load Carrying Capability class definitions, and
 - The RAA regarding the inclusion of large load in areas where there are Fixed Revenue Resource (FRR) elections.

Upon a motion made and seconded, the Board unanimously endorsed a resolution approving proposed revisions to PJM Manual 15, the RAA and the OA, contingent upon endorsement by the PJM Members Committee and effective upon FERC acceptance of companion OA revisions. (Attachment B)

Upon a motion made and seconded, the Board unanimously voted on a resolution approving proposed revisions to RAA, Article 1 to update the definitions of "Gas Combined Cycle Dual Fuel" and "Gas Combustion Turbine Dual Fuel Class" to allow for resources that are dual-fuel capable but require a small amount of gas to start to qualify as dual fuel for purposes of capacity accreditation. (Attachment C)

Upon a motion made and seconded, the Board unanimously voted on a resolution approving revisions to the RAA, Article 1 and the RAA, Schedule 8 and 8.1 to modify the existing process of spreading forecasted large load additions across all Load Serving Entities in a zone for purposes of determining capacity obligation. (Attachment D)



- Mills reported that the CMC received reports on:
 - The 2025/2026 Planning Parameters and Base Residual Auction (BRA) simulation results, including the
 results of PJM's ELCC capacity accreditation, new reliability risk modeling approach and projected outcomes
 of the next BRA auction;
 - Future enhancements to PJM's capacity markets, including:
 - Clarifying the third-party review of Capacity Performance Quantifiable Risk (CPQR) components,
 - Modifying the Cost of New Entry (CONE),
 - Changing the rules for planned resource offers,
 - Clarifying offline resources are not eligible for performance excusals,
 - Implementing a forward-looking energy and ancillary services offset, and
 - An update on recent discussions with stakeholders regarding reserve market reform.
- Mills further reported that the CMC had a joint discussion with PJM staff and the IMM on Reliability Must-Run (RMR) agreements and conducted an executive session with the IMM.

Reliability & Security Committee (RSC) Report

- Dean Oskvig reported on the RSC meeting held on May 9, 2024, and the materials covered therein.
- Oskvig reported that the RSC received reports on:
 - Phase 2 of the Energy Management System (EMS) project,
 - 2024 summer readiness projections,
 - Reliability Must-Run agreements,
 - Security Key Performance Indicators and metrics, and threat information,
 - Resilience work activities with the North American Transmission Forum,
 - Value-add penetration security test results,
 - Monitoring Analytics' physical and security evaluation,
 - PJM transmission planning parameters, including Capacity Emergency Transfer Limit (CETL), Capacity Emergency Transfer Objective (CETO),
 - A joint PJM/MISO study on interregional transfer capability to improve operations at the seam,
 - The status of RTEP Window 3 considering data center growth and potential reroutings under consideration,
 - Advanced Technology Pilot projects,
 - Reserve Certainty and Flexibility Incentives, and
 - The recently passed EPA GHG rules.
- Oskvig further reported that the RSC reviewed the cybersecurity dashboard and the RSC Charter, endorsing proposed revisions.



Regulatory Committee (RC) Report

- Paula Conboy reported on the RC meeting held on May 9, 2024, and the materials included therein. The RC met
 with OPSI President and Kentucky Commission Chair Kent Chandler, and he presented his concerns related to
 resource adequacy challenges, modeling transparency and transmission planning.
- Conboy reported that the RC received reports on:
 - Federal policy updates, including the EPA GHG rules and efforts to develop collaborative messaging among RTOs/ISOs; and
 - State policy updates, including:
 - Efforts in states including Illinois, Maryland and New Jersey to include reliability reviews in state clean energy policies, and
 - Legislation in PJM states addressing data centers, co-located load, and the commencement of a co-located study.

* * * *

Finance Committee (FC) Report

Jeanine Johnson reported that the FC met on March 31, 2024, and reviewed PJM's 2023 financial results.

Bresler, Bryson, Coscia, Drauschak, Glazer, Haque, Hicks, Keech, Khan, McElwee, McGlynn, O'Brien, Rodriguez, Salmon and Swimm exited the meeting at 2:47 p.m.

Executive Session

The Board met in an Executive Session.

* * * *

Asthana and O'Hara exited the meeting.

Closed Session

The Board met in Closed Session.

* * * *

The Board adjourned at approximately 3:30 p.m.

Respectfully submitted,

Colleen Hicks Assistant Secretary





Proposed Committee Seats and Term Dates - Effective May 10, 2024

Committees							
Board Governance	Reliability & Security	Competitive Markets	Risk & Audit	Human Resources	Regulatory	Nominating	Finance
Chair	Chair	Chair	Chair	Chair	Chair	Chair	Chair
Charlie Robinson 2023–2026	Terry Blackwell 2022-2025	David Mills 2021–2024	Margo Loebl 2023–2026	Vickie VanZandt 2023–2024	Paula Conboy 2021-2024	Jeanine Johnson 2023–2026	N/A
Terry Blackwell 2022–2025	Jeanine Johnson 2023–2026	Paula Conboy 2021–2024	Jeanine Johnson 2023–2026	Terry Blackwell 2022-2025	Margo Loebl 2023–2026	David Mills 2021–2024	Terry Blackwell 2022-2025
Paula Conboy 2021-2024	Dean Oskvig 2022–2025	Margo Loebl 2023–2026	David Mills 2021–2024	Jeanine Johnson 2023–2026	Dean Oskvig 2022-2025	Charlie Robinson 2023–2026	Paula Conboy 2021–2024
Dean Oskvig 2022–2025	Vickie VanZandt 2023–2024	Charlie Robinson 2023–2026	Vickie VanZandt 2023–2024	David Mills 2021-2024			

Mark Takahashi, Board Chair 2022-2025

Confide

Confidential: Limited PJM Personnel Use PJM Board of Managers



MAY 10, 2024

Approval of Revisions to PJM Manual 15

WHEREAS, PJM Manual 15: Cost Development Guidelines details offer parameters for synchronous condensers participating in the Synchronized Reserve Market;

WHEREAS, PJM Manual 34, section 11.15 requires Board approval of revisions to PJM Manual 15;

WHEREAS, PJM is proposing revisions to the Amended and Restated Operating Agreement ("OA") to clarify and memorialize definitions for terms used in PJM Manuals related to the offer parameters for synchronous condensers representing their costs to condense;

WHEREAS, PJM is proposing to revise PJM Manuals 11, 15, and 28 to include updated references to definitions that will be added to the OA for Condense Startup Cost, Condense to Generate Cost, and Condense Energy Use, which for PJM Manual 15 includes adding and amending those definitions in sections describing the costs to condense for Synchronized Reserves for both hydro and non-hydro units;

WHEREAS, the PJM Markets and Reliability Committee endorsed the proposed revisions to PJM Manual 15 relating to synchronous condenser costs by acclamation with no objection and one abstention on April 25, 2024, while the PJM Members' Committee is expected to endorse the proposed revisions to PJM Manual 15 on May 22, 2024;

WHEREAS, PJM management recommends the revisions to PJM Manual 15 to the full Board for approval contingent upon stakeholder endorsement and FERC acceptance of the companion OA revisions; and

WHEREAS, the Board, through the Competitive Markets Committee, has been provided with summary presentation materials, and has reviewed the relevant revisions.

NOW, THEREFORE, BE IT RESOLVED, that the Board, having reviewed the proposed revisions to PJM Manual 15, hereby approves the proposed revisions to PJM Manual 15, contingent upon endorsement by the PJM Members' Committee and effective upon FERC acceptance of the companion OA revisions.



MAY 10, 2024

Approval of Revisions to PJM's Reliability Assurance Agreement

WHEREAS, Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA"), Article 6, provides that the Board has the authority to approve and authorize the filing of amendments to the RAA;

WHEREAS, RAA, section 16.4, provides that the RAA may be amended only by action of the Board, and that PJM shall file with FERC any amendment to the RAA approved by the Board;

WHEREAS, PJM is seeking Board approval to revise RAA, Article 1 to update the definitions of "Gas Combined Cycle Dual Fuel Class" and "Gas Combustion Turbine Dual Fuel Class" to allow for resources that are dual fuel capable but require a small amount of gas to start to qualify as dual fuel for purposes of capacity accreditation;

WHEREAS, the proposed revisions were developed based on stakeholder input and feedback through a "quick-fix" process advanced by a PJM stakeholder; and

WHEREAS, the PJM Board has reviewed and considered the proposed revisions to the RAA definitions of "Gas Combined Cycle Dual Fuel Class" and "Gas Combustion Turbine Dual Fuel Class."

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the aforementioned proposed revisions of the RAA and authorizes PJM to file the proposed amendments with FERC.



MAY 10, 2024

Approval of Revisions to PJM's Reliability Assurance Agreement

WHEREAS, Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA"), Article 6, provides that the Board has the authority to approve and authorize the filing of amendments to the RAA;

WHEREAS, RAA, section 16.4, provides that the RAA may be amended only by action of the Board, and that PJM shall file with FERC any amendment to the RAA approved by the Board;

WHEREAS, PJM is seeking Board approval to revise RAA, Article 1 and RAA, Schedules 8 and 8.1 to modify the existing process of spreading forecasted large load additions across all Load Serving Entities in a Zone for purposes of determining capacity obligations;

WHEREAS, PJM stakeholders proposed amendments to the RAA to more fairly allocate capacity obligations to the Load Serving Entities where the large load additions are being sited;

WHEREAS, PJM stakeholders proposed to amend the existing capacity obligation processes by excluding forecasted large load additions from the Base Zonal Scaling Factor and Final Zonal Scaling Factor;

WHEREAS, the proposal would reflect forecasted large load additions in the Obligation Peak Load of the relevant Zone, which will then be used to calculate the preliminary and final daily Fixed Resource Requirement and RPM capacity obligation that Load Serving Entities will be responsible for procuring; and

WHEREAS, the PJM Board has reviewed and considered the proposed revisions to the RAA, Article 1 and RAA, Schedules 8 and 8.1.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the aforementioned proposed revisions of the RAA and authorizes PJM to file the proposed amendments with FERC.



MAY 10, 2024

Approval of Revisions to PJM's Reliability Assurance Agreement

WHEREAS, Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA"), Article 6, provides that the Board has the authority to approve and authorize the filing of amendments to the RAA;

WHEREAS, RAA, section 16.4, provides that the RAA may be amended only by action of the Board, and that PJM shall file with FERC any amendment to the RAA approved by the Board;

WHEREAS, PJM is seeking Board approval to correct various sections of the RAA as part of a package of governing document revisions being proposed through PJM's Governing Document Enhancement & Clarification Subcommittee ("GDECS") correcting inadvertent capitalizations of the term "End-Use Customer" in PJM's governing documents;

WHEREAS, the proposed revisions were reviewed and considered by stakeholders through the GDECS and Members Committee: and

WHEREAS, the PJM Board has reviewed and considered the proposed revisions to the RAA, Article 1 and RAA, Schedule 6, section L.1.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the aforementioned proposed revisions of the RAA and authorizes PJM to file the proposed amendments with FERC.