

## BOARD OF MANAGERS MEETING MINUTES

December 8, 2021

A meeting of the PJM Interconnection, L.L.C. (PJM) Board of Managers (Board) was convened via Webex at approximately 1:30 p.m. on December 8, 2021. The following Board members were present, constituting a quorum:

- Mark Takahashi, Chairperson
- Manu Asthana, President and Chief Executive Officer (ex officio)
- Terry Blackwell
- Paula Conboy
- Jeanine Johnson
- Margo Loebel
- David Mills
- Dean Oskvig
- Charles Robinson
- Sarah Rogers

Present for the meeting were the following PJM personnel:

- Stephen Bennett, Manager – State & Member Services
- Nigeria Bloczynski, Vice President, Chief Risk Officer – Risk Management
- Stu Bresler, Senior Vice President – Market Services
- Mike Bryson, Senior Vice President – Operations
- Lisa Drauschak, Vice President, Chief Financial Officer and Treasurer – Finance
- Craig Glazer, Vice President – Federal Government Policy
- Asim Haque, Vice President – State & Member Services
- Scott Heffentrager, Executive Director, Physical Security & Facility Services – Corporate Client Services
- Eric Hsia, Senior Manager – Market Simulation
- Adam Keech, Vice President – Market Design & Economics
- Maureen McCormick, Sr. Director, Total Rewards – Total Rewards Center
- Tom O'Brien, Senior Vice President, Chief Information Officer – Technology Service
- Chris O'Hara, Senior Vice President, General Counsel, Secretary & Chief Compliance Officer
- Ricardo Rodriguez, Senior Director – Internal Audit
- Lisa Salmon, Executive Assistant to the President & PJM Board
- Kenneth Seiler, Vice President – Planning
- Nora Swimm, Senior Vice President – Corporate Client Services
- Jessica Troiano, Sr. Counsel and Assistant Corporate Secretary

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## Approve Minutes

Mark Takahashi asked for approval of the minutes of the Board's meeting held on September 22, 2021. **Upon a motion duly made, seconded and unanimously adopted, the Board approved the minutes of its September 22, 2021, meeting.**

## Update on COVID-19 Actions & Impacts Including Return-to-Campus Plans

Maureen McCormick reviewed the posted materials and provided an update on PJM's vaccine requirements for employees, contractors and vendors who will come onto PJM's campus and those who will travel for PJM business. McCormick provided an update from the PJM-engaged epidemiologist regarding the omicron variant. Scott Heffentrager reviewed the posted materials on the return-to-campus plan.

Heffentrager and McCormick left the meeting.

## Update: Winter Readiness/Fuel Update

Mike Bryson reviewed the posted materials and provided an update regarding the winter 2021/2022 weather and fuel outlook, including potential scenarios and fuel inventory overviews. The Board discussed winter readiness.

## Update on the Administrative Rate Proposal

Lisa Drauschak provided an update on the status of the administrative rate review, including the FERC Order dated December 1, 2021, and next steps. Craig Glazer provided background on FERC-specific settlement processes utilized in rate cases.

## Update on Illinois Legislation

Asim Haque and Stephen Bennett provided an overview of the Illinois Clean Energy Jobs Act, including provisions that are pertinent to operations of the PJM system related to emissions restrictions, fossil fuel (coal, natural gas) generation operating restrictions, and reliability exemptions. Next steps including additional reliability analyses and engagement with the State of Illinois governmental authorities were discussed.

Bennett left the meeting.

## Update on Strategy

Stu Bresler reviewed the posted materials and provided an update regarding PJM's implementation of its five-year strategic plan, including progress updates from 2021 and initiatives for 2022. The Board discussed the accomplishments and initiatives, indicating support for the process and reports.

## Review: PJM Marginal Emission Rates

Eric Hsia reviewed the posted materials regarding PJM's development of marginal emission rates, including: (1) development and production timeline, (2) data sources (historic, not prospective in nature), (3) reasons for publishing this data (stakeholder interests, innovations and decarbonization), (4) examples of possible use cases, and (5) the path forward including future opportunities.

Hsia left the meeting.

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## Competitive Markets Committee (CMC) Report

Mark Takahashi reported on the CMC meeting held on December 7, 2021, and the materials presented therein. **Upon a motion duly made and seconded, the Board unanimously approved the proposed PJM Manual 15/Cost Development Guidelines, appended to these minutes as Attachment A.**

Takahashi reported that the committee received an update on the 2023/24 Base Residual Auction, including pre-auction activities and an update on the implementation of the new Market Seller Offer Cap rules. Takahashi provided a summary of a report on the capacity market reform stakeholder process regarding capacity market reforms and an update on stakeholder discussions to implement circuit breaker provisions in PJM to address issues relating to high prices during extreme events (as part of lessons learned from the 2021 winter storm event in Texas that affected ERCOT, SPP and MISO).

Takahashi reported that Andrew Levitt provided the committee with a presentation on market participation and rules for solar battery hybrid resources.

Takahashi reported on the joint and executive sessions with the IMM.

## Reliability & Security Committee (RSC) Report

Dean Oskvig provided a high-level summary of the changes to the Regional Transmission Expansion Plan (RTEP), which the RSC endorsed. **Upon a motion duly made and seconded, the Board unanimously approved the proposed RTEP resolution appended to these minutes as Attachment B.**

Oskvig reviewed the Installed Reserve Margin (IRM) and Forecast Pool Requirements (FPR) for Delivery Years 2022/23, 2023/24, 2024/25 and 2025/26. **Upon a motion duly made and seconded, the Board unanimously approved the Installed Reserve Margin (IRM) and Forecast Pool Requirements (FPR) for Delivery Years 2022/23, 2023/24, 2024/25 and 2025/26, appended to these minutes as Attachment C.**

Oskvig reported further on the RSC meeting held on December 7, 2021, and the materials presented therein. Oskvig provided a report on the Cybersecurity Dashboard/Operational Metrics, lessons learned from NERC security drill, and reliability metrics. Oskvig also reported on the Committee's discussion of the grid of the future. Finally, Oskvig reported on PJM's ANOPR filing.

## Regulatory Committee (RC) Report

Sarah Rogers reported on the RC meeting held on December 7, 2021, which included a federal regulatory summary by Craig Glazer that addressed, among other things, a report on the federal-state ANOPR joint effort and the infrastructure bill. A state regulatory update was provided by Haque to the Committee which included an overview of current state alignment including an update on the state of Virginia after the latest election.

## Finance Committee (FC) Report

Margo Loebel provided a Committee report, noting that the formula rate case proposal and interactions with FERC were effectively as reported on from the RAC.



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At approximately 5:55 p.m., the Board went into executive session and Bloczynski, Bresler, Bryson, Drauschak, Glazer, Haque, Keech, Rodriguez, Salmon, Seiler, Swimm and Troiano left the meeting.

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**Attachment A**

**Resolution for the Meeting of the Board of Managers  
Approval of Updates to PJM Manual 15**

WHEREAS, Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., Schedule 2, section 1.2 provides that the PJM Board of Managers (Board) is responsible for defining in detail the method of determining the cost components for cost-based offers in the PJM energy markets;

WHEREAS, PJM Manual 15: Cost Development Guidelines details the method of determining the cost components for cost-based offers;

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

WHEREAS, PJM is proposing revisions to the definitions of No-Load Cost and Incremental Energy Offers in the Tariff and Operating Agreement, as well as Manual 15 to include more guidance to Market Sellers on the calculation of No-Load Cost and Incremental Energy Offers;

WHEREAS, the PJM Markets and Reliability Committee reviewed the proposed updates to PJM Manual 15 on October 20, 2021 and endorsed them by acclamation with no objection and no abstention, while the PJM Members Committee reviewed the proposed revisions on November 17, 2021 and endorsed them by acclamation with no objection and no abstention;

WHEREAS, PJM filed proposed revisions to the definition of No-Load Cost and Incremental Energy Offers with the Federal Energy Regulatory Commission on November 18, 2021, with a requested effective date of January 18, 2022;

WHEREAS, PJM management recommends the proposed revisions to PJM Manual 15 revisions to the full Board for approval;

WHEREAS, the Board, through the Competitive Markets Committee, has been provided with summary presentation materials, which include a link to the proposed revisions to PJM Manual 15, as posted on the PJM website under the November 17, 2021 Members Committee meeting materials; and

NOW, THEREFORE, BE IT RESOLVED, that the Board, having reviewed the proposed PJM Manual 15 revisions, hereby approves, contingent upon approval of PJM's filing by the Federal Energy Regulatory Commission, the proposed revisions to effectuate the aforementioned revisions.

**Attachment B**

**Resolution for the Meeting of the Board of Managers**

**December 8, 2021**

**2021 Regional Transmission Expansion Plan**

WHEREAS, Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., Schedule 6, section 1.6 (a) provides that the PJM Board of Managers is responsible for approving changes to the Regional Transmission Expansion Plan (RTEP) and cost allocations for transmission enhancements and expansions consistent with PJM Open Access Transmission Tariff, Schedule 12 (Tariff, Schedule 12);

WHEREAS, the Transmission Expansion Advisory Committee (TEAC) has reviewed and been provided the opportunity to comment on the elements of the changes to the 2021 RTEP; and

WHEREAS, the Board of Managers has reviewed the RTEP material developed by PJM in consultation with the TEAC, including the elements and cost allocations related to the proposed changes to the 2021 RTEP, and the recommendations of the Board of Managers Reliability and Security Committee.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Managers hereby approves the 2021 RTEP including changes resulting in an overall net increase of approximately \$134.79 million, and associated cost allocations in accordance with Tariff, Schedule 12, resulting from:

- (a) New baseline projects totaling approximately \$165.73 million comprised of: transmission owner FERC Form 715 planning criteria enhancements totaling approximately \$71.47 million, and PJM reliability criteria enhancements totaling approximately \$94.26 million;
- (b) Scope and cost changes to eight existing approved RTEP baseline projects totaling a \$70.08 million net decrease;
- (c) Acceleration of two existing approved RTEP baseline projects that have no impact to cost;
- (d) New network projects totaling approximately \$47.64 million;
- (e) Scope changes to four existing approved RTEP network projects totaling approximately a \$1.15 million net increase; and
- (f) The cancellation of seven network upgrade projects totaling approximately a \$9.65 million net decrease.

The Board of Managers further directs PJM to file with the Federal Energy Regulatory Commission under Federal Power Act section 205, within 30 days of the date of this approval, the cost allocations for each approved RTEP project as required pursuant to the PJM Tariff, Schedule 12, section (b)(viii).

**Attachment C**

**Resolution for the Meeting of the PJM Board of Managers**

**December 8, 2021**

**Installed Reserve Margin**

WHEREAS, Reliability Assurance Agreement Among Load Serving Entities in the PJM Region, Schedule 4, section B, provides that the PJM Board of Managers (Board) is responsible for annually establishing the Forecast Pool Requirement, including the PJM Region Installed Reserve Margin, no later than three months in advance of each Base Residual Auction for a Delivery Year based on the projections described in Reliability Assurance Agreement Among Load Serving Entities in the PJM Region, Schedule 4, section C, and after consideration of the recommendation of the Members Committee;

WHEREAS, Reliability Assurance Agreement among Load Serving Entities in the PJM Region, Schedule 4.1, also provides that the Board is responsible for approving the Forecast Pool Requirement;

WHEREAS, PJM has developed proposed Installed Reserve Margins and Forecast Pool Requirements for the 2022/2023, 2023/2024, 2024/2025 and 2025/2026 Delivery Years;

WHEREAS, the Members Committee has reviewed the proposed Installed Reserve Margins and Forecast Pool Requirements and endorsed them by acclamation with no objections and one abstention; and

WHEREAS, the Reliability & Security Committee has endorsed the proposed Installed Reserve Margins and Forecast Pool Requirements for the 2022/2023, 2023/2024, 2024/2025 and 2025/2026 Delivery Years and recommends them to the full Board for approval;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the Installed Reserve Margins (IRM) and Forecast Pool Requirements (FPR) for the 2022/2023, 2023/2024, 2024/2025 and 2025/2026 Delivery Years, as follows:

Delivery Year: 2022/2023

Installed Reserve Margin = 14.9%  
Forecast Pool Requirement = 1.0906

Delivery Year: 2023/2024

Installed Reserve Margin = 14.8%  
Forecast Pool Requirement = 1.0901

Delivery Year: 2024/2025

Installed Reserve Margin = 14.7%  
Forecast Pool Requirement = 1.0894

Delivery Year: 2025/2026

Installed Reserve Margin = 14.7%  
Forecast Pool Requirement = 1.0894