July 16, 2021

PJM Board of Managers:

Mr. Mark Takahashi, Chair Mr. Manu Asthana, President and CEO Mr. Terry Blackwell Ms. Paula Conboy Ms. Jeanine Johnson Ms. Margaret Loebl Mr. David Mills Mr. O.H. Dean Oskvig Mr. Charles F. Robinson Ms. Sarah S. Rogers

PJM Interconnection, LLC 2750 Monroe Boulevard Valley Forge Corporate Center Audubon, PA 19403

Subject: Finance Committee Recommendations

PJM Interconnection, LLC ("PJM") is seeking to change the administrative cost recovery under its Open Access Transmission Tariff ("Tariff") Schedules 9-1 through 9-5 and Schedule 9-PSI. Additionally, PJM is seeking to revise the Finance Committee Financial Review, Reporting and Communications Protocol (the "Protocol") to increase transparency. This letter reflects the Finance Committee's activities related to these topics and the recommendation from the member-elected sector representatives to the Finance Committee.

Finance Committee Responsibilities

The Protocol specifies the responsibilities of PJM in reviewing proposed administrative rate changes with the Finance Committee to allow the Finance Committee to provide recommendations to the PJM Board of Managers prior to making regulatory filings to revise its administrative rates. The applicable excerpts from the current Protocol are provided below for reference.

"The purpose of the PJM Finance Committee is ... (b) to make recommendations to the PJM Board on matters pertaining to the appropriate level of PJM's rates ..."

"13. PJM shall give the Finance Committee advance notice of proposed regulatory filings to modify PJM's administrative rate structure so as to

permit the Committee to review and provide comment on the proposed modifications. The Finance Committee, in an advisory capacity, shall provide recommendations to the PJM Board regarding such proposed changes to PJM's administrative rates. In emergency situations, PJM shall provide such notice as feasible to the Finance Committee and the Finance Committee shall provide such recommendations as feasible under the circumstances."

Finance Committee Meetings and Conference Calls

The Finance Committee has met with PJM management via conference calls on the following dates during 2020 and 2021 to discuss PJM's administrative rates:

Date	Discussion Topics		
March 24, 2020	Proposal to Review Current Stated Rates		
May 5, 2020	Update on Schedule 9 Collections Rate Objectives – Past and Prospective		
August 19, 2020	Projected Cost Drivers Workplan for Administrative Rate Review		
September 9, 2020	Near-term Schedule 9-2 Discussion Only		
November 24, 2020	Regular Business of Budget Review		
January 28, 2021	Cost of Service Study – Preliminary Results		
February 26, 2021	Review of Administrative Rate Schedules Rate Design Options		
March 25, 2021	PJM Proposal on Administrative Rates		
May 4, 2021	Update on Schedule 9 Rates, PJM Settlement Rates Indicative Rates for 2021		
June 3, 2021	Transparency, Additional Financial Information Reporting Financial Reporting and Communications Protocol Poll of Member-elected Sector Representatives		
June 28, 2021	Draft Schedule 9 Open Access Transmission Tariff Language Member-Elected Sector Representatives Position and Recommendations		

Drivers for Rate Review

In 2016, PJM filed a revised stated-rate schedule that increased the Schedule 9 rates and provided an escalation of 2.5% each year, beginning in 2019, until the composite rate would finally reach \$0.41/MWh in 2024. PJM identified to the Finance Committee, in March 2020, a

need to review the stated rate sooner than anticipated during the 2016 filing. PJM highlighted the following factors as contributing to the acceleration of the rate review:

- Energy Forecast energy usage flattened and is significantly below the rate projections.
- Billing Determinants changes to activity changed the customer revenue mix.
- Risk Mitigation Efforts additional PJM costs not anticipated in the 2016 rate filing.
- Industry Dynamics PJM member organization structure changes impact collections.

Administrative Rate History

PJM provided the following history of PJM's administrative rate recovery at the May 2020 meeting of the Finance Committee:



Rate Objectives – Past and Prospective

The Finance Committee discussed, at the May 2020 meeting, the rate objectives of the 2016 PJM rate filing. The Finance Committee also reviewed objectives proposed by PJM for a potential 2021 filing. The objectives were shared with PJM members for comment and were revised based on feedback. The jointly developed objectives for the 2021 PJM rate filing are outlined below with the 2016 objectives provided for comparison.

4	pjm PJM / Stakeho	holder Jointly-Developed Objectives			
2016 Stated Rate Filing Objectives			2021 PJM Rate Filing Objectives		
1	Maintain low rate volatility and provide multi-year service fee certainty for 5-10 years	1	Ensure Revenue Adequacy and Rate Equity		
2	Establish cost recovery for post-AC ² Rider ongoing costs of second control center	2	Examine cost allocation to PJM member classes		
3	Maintain enhanced rate and cost transparency to members	3	Maintain enhanced rate and cost transparency to members		
4	Deploy effective operation and capital cost management	4	Deploy effective operation and capital cost management		
5	Maintain creditworthiness for cost-effective borrowing purposes	5	Maintain creditworthiness for cost-effective borrowing purposes		

The 2021 PJM Rate Filing prioritized Revenue Adequacy and Rate Equity over the low rate volatility and rate certainty objective while not abandoning the low volatility objective.

Administrative Rate Review – Schedules and Design

PJM engaged Analysis Group to perform both a cost of service study and administrative rate review. The Finance Committee discussed the cost of service results at the January 2021 meeting. The Finance Committee discussed the administrative rate review, both schedules and design, at the February 2021 meeting.

The specific schedules reviewed were:

- Schedule 9-1: Control Area Administration Service
- Schedule 9-2: FTR Administration Service
- Schedule 9-3: Market Support Service
- Schedule 9-4: Regulation and Frequency Response Administration Service
- Schedule 9-5; Capacity Resource & Obligation Management Service
- Schedule 9-PJM Settlement Inc.

Analysis Group highlighted updated cost assignment changes. Certain costs that were previously assigned to Schedule 9-3 from the reliability function are now aligned with Schedule 9-1 and certain costs that were previously assigned to Schedule 9-1 from the markets function are now aligned with Schedule 9-3. Additionally, certain costs that were previously assigned to overhead are now directly assigned (e.g., long-term planning function). Finally, certain costs that were previously assigned to Schedule 9-3 are now directly assigned to Schedule 9-5 (capacity markets).

Analysis Group recommended that PJM maintain its current membership fees. The Finance Committee reviewed the fees of other ISO/RTOs and noted the comparability to PJM's membership fees. PJM's membership, at the time of the study, and fees are:

- 492 voting members who pay \$5,000 per year
- 26 associate members who pay \$2,500 per year
- 16 ex-officio and special members who pay \$500 per year

Analysis Group recommended incorporating rate Schedule 9-4 into rate Schedule 9-3. However, they also recommended to maintain a separate Schedule 9-5 to isolate capacity market costs. Analysis Group explained that PJM is the only ISO/RTO that charges separately for ancillary services. The Schedule 9-4 costs associated with the provision of regulation and frequency response broadly benefit all of PJM's energy market participants. The directly assigned costs

associated with Schedule 9-4 are very small (approximately \$5 million, <2 percent of PJM's annual budget) and integral to market operations.

Analysis Group recommended maintaining PJM's current billing determinants. A majority of the cost of service is collected using load (MWh) and generation resource production (MWh) billing determinants. And these are the primary beneficiaries of the services PJM provides. Analysis Group examined the potential use of coincident and non-coincident peak demand for allocating costs to load and saw little difference in the historical growth of those metrics as shown below.



Rate Options

The Finance Committee discussed rate design options beginning at the February 2021 meeting. The options considered were:

Stated	Reconciling	Formula
Fixed rate that may be set	Rate based on an approved	Rate based on an approved
years in advance.	formula specified in the tariff.	formula specified in the tariff.
Typically includes a reserve	Typically provides for annual	Collects actual monthly costs.
that is refunded in the event	reconciliation against actual	
collections exceed a	costs.	
predefined reserve amount.		

PJM currently uses a multi-year stated rate with a refund mechanism. The rates are specified for several years into the future and re-evaluated on a periodic basis with updates requiring a FERC filing. PJM maintains a reserve of up to 6% of annual revenue. If the stated rates result in over-collections, refunds are made to members on a quarterly basis if the reserve fund is filled.

Evaluation of Options

The Finance Committee discussed the revenue adequacy concerns of maintaining a stated rate. The 2016 load forecast used to develop the current stated rate anticipated 869 GWh of consumption in 2026. The current load forecast for 2026 is 829 GWh. The difficulty in accurately forecasting billing determinants can exacerbate concerns for future revenue adequacy for PJM.

The Finance Committee compared projected 2021 monthly billing based on a stated rate versus a formula rate. The formula rate projections varied less on a month-to-month basis than the stated rate. The smaller variation for the formula rate demonstrates the relatively consistent operating costs for PJM on a month-to-month basis. The larger variation of the stated rate highlights the seasonal variation of the underlying MWh billing determinants. The largest variation in monthly charges projected for 2021 were \$5.8 million while the largest variation on the stated rate was \$13.9 million. This comparison assumed consistent and steady PJM expenses and billing determinates for both the stated and formula rates. It is important to note, that if PJM expenses or billing determinates change significantly, there would be more immediate volatility introduced to members on a unitized basis under a formula rate.

Further, under the proposed formula rate, Members will be subject to administrative rate changes on a month to month and annual basis as a result of variations in PJM expenses or billing determinants. While PJM has agreed to provide rate projections 5 years into the future based on an expected budget and forecast of billing determinants, actual rates could deviate significantly from these projections and members expectations depending on realized PJM expenses and actual billing determinants.

As highlighted during some of the Finance Committee discussions, this evolution could create new risks and costs for load serving entities and customers.



The Finance Committee discussed the consolidation of Schedule 9-4 into Schedule 9-3 and agreed with the recommendations of both Analysis Group and PJM.

The Finance Committee discussed the costs and responsibilities of PJM Settlements, Inc. (PSI) The annual budget for PSI is \$13.7 million and is billed to Schedule 9-3 customers on a MWh basis. PSI issues over 170,000 invoices annually and the cost to develop and issue invoices, along with credit/risk monitoring and transfer of funds, is similar on a billing account basis. PJM and PSI recommend aligning cost recovery with the costs to provide service and to recover costs on a per invoice issued basis. The mechanism would be a formula rate billed monthly on an actual cost basis. The projected per invoice charge is \$77.61.

PJM initially recommended no changes to the Protocol for the Finance Committee. However, PJM members requested additional transparency and PJM agreed to accept and document some of the additional transparency measures in the Protocol. The changes include:

- PJM adding an annual review and discussion by the Finance Committee of 5 years of projected rates for Schedules 9-1 through 9-5 and 9-PSI.
- PJM annual and 5-year projected capital spending would include identifying cost assignment of budgeted capital expenditures.
- PJM shall give the Finance Committee advance notice of material changes to services provided by PJM to the membership.
- PJM will conduct a cost of service study to examine the assignments of PJM's costs amongst Schedule 9-1 through 9-5 and 9-PSI every 5 years commencing in 2027.

In addition to the revisions to the protocols described above, the Member-elected sector representatives encourage PJM to continue to evaluate opportunities to increase transparency regarding PJM budgeting and operations through the Finance Committee process. Specifically, PJM should make every effort to be responsive to Member requests for information, made by the Member-elected sector representatives, regarding PJM's budget, revenues, expenses and the processes and strategic considerations affecting them, especially when those requests are supported by a cross section of sectors.

Recommendation

The member-elected sector representatives to the Finance Committee recommend the Members Committee endorse and the PJM Board of Managers approve PJM management making a section 205 filing with FERC to move from a stated rate to a formula rate effective January 1, 2022. The recommendation also includes factoring in the 2021 cost of service study assignment results and consolidating Schedule 9-4 into Schedule 9-3. Additionally, the member-elected sector representatives recommend recovering PSI costs on a per invoice issued basis.

The member-elected sector representatives to the Finance Committee also recommend making changes to the Protocol to eliminate the ex-officio participation of a PJM Chief Operating Officer and to correct errata. The member-elected sector representatives also recommend adding the following provisions to the Protocol:

- PJM adding an annual review and discussion by the Finance Committee of 5 years of projected rates for Schedules 9-1 through 9-5 and 9-PSI.
- PJM annual and 5-year projected capital spending would include identifying cost assignment of budgeted capital expenditures.
- PJM shall give the Finance Committee advance notice of material changes to services provided by PJM to the membership.
- PJM will conduct a cost of service study to examine the assignments of PJM's costs amongst Schedule 9-1 through 9-5 and 9-PSI every 5 years commencing in 2027.

The member-elected sector representatives to the Finance Committee recommend continuing the utilization of the current billing determinants for rate Schedules 9-1 through 9-5 and maintaining the annual membership costs at the current levels. The member-elected sector representatives also recommend that the Schedule 9 and 10 pass- through rates remain unchanged.

The member-elected sector representatives to the Finance Committee recommendations achieve the jointly developed objectives of the 2021 administrative rate review. The member-elected sector representatives to the Finance Committee greatly appreciate the efforts of PJM management and staff to support the administrative rate review and answer questions from the membership.

Sincerely,

Member-elected Sector Representative	Sector
Adrien Ford, ODEC	Electric Distributor
Chris Norton, AMP	Electric Distributor
Erik Heinle, DC Office of the Peoples' Counsel	End Use Customer
Greg Poulos, CAPS	End Use Customer
Dave Scarpignato, Calpine Energy Services	Generation Owner
Jeff Whitehead, Eastern Generation	Generation Owner
George Kogut, New York Power Authority	Other Supplier
Marguerite Miller, Credit Suisse	Other Supplier
Jim Benchek, ATSI	Transmission Owner
Jim Davis, Virginia Electric & Power Company	Transmission Owner

Member-elected Sector Representatives to the PJM Finance Committee