

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**Inquiry Regarding the Commission’s
Electric Transmission Incentives Policy**

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Docket No. PL19-3-000

COMMENTS OF PJM INTERCONNECTION, L.L.C.

Pursuant to the Federal Energy Regulatory Commission’s (“Commission”) Notice of Inquiry published in the above-referenced docket on March 28, 2019, PJM Interconnection, L.L.C. (“PJM”) hereby submits comments that affirm the importance of the Commission’s continued application of the Congressionally-mandated incentive for joining a Transmission Organization, including independent regional transmission organizations (“RTOs”) like PJM (the “RTO Participation Adder”).¹

I. COMMENTS

In reviewing the RTO Participation Adder, the Commission should consider:

- the legislative and policy backdrop of the Energy Policy Act of 2005 (“EPAAct”)²;
- the Commission’s existing RTO Participation Adder rules implementing Congress’s statutory directive and intent³; and
- the many functions RTOs perform today, and the corresponding value consumers derive from transmission owners’ participation in RTOs.

¹ PJM expressly limits its Comments in this proceeding to Part II, Section C1(b) of the Notice of Inquiry relating to RTO/ISO Participation, including some or all of Questions 61 through 66 set forth therein.

² Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005).

³ *Promoting Transmission Investment through Pricing Reform*, Order No. 679, FERC Stats. & Regs. P 31,222, *order on reh’g*, Order No. 679-A, FERC Stats. & Regs. P 31,236, at P 86 (2006), *order on reh’g*, Order No. 679-B, 119 FERC P 61,062 (2007); *see also Promoting Transmission Investment Through Pricing Reform*, 141 FERC P 61,129 (2012).

A. The EPA Act Expresses Congress's Intent to Mandate the RTO Participation Adder.

Congress's enactment of the EPA Act clearly recognizes the value of independent RTOs. Congress relies upon the continued effective functioning of RTOs as a lynchpin to promote Congress's (and ultimately the Commission's) energy policy goals. Congress incorporated into the EPA Act provisions that emphasize the benefits of an independently operated transmission grid and independently administered auction-based day ahead and real time wholesale markets. By way of example:

- EPA Act amended the Public Utility Regulatory Policies Act ("PURPA") to provide an exemption to the mandatory obligation to purchase electric energy and capacity from qualifying cogeneration or small power production facilities ("QF") with a net capacity in excess of 20 megawatts if a QF has non-discriminatory access to certain independently administered auction-based and wholesale markets and transmission and interconnection services provided by a FERC-approved regional transmission entity (EPA Act § 1253(a); PURPA section 210(m)(1));
- EPA Act authorizes federal utilities to transfer control of their transmission systems to RTOs (EPA Act § 1222);
- EPA Act calls for regional coordination of state energy policies "to provide reliable and affordable demand response services to the public" (EPA Act § 1252(e)(1)); and
- EPA Act provides that RTO reliability standards that conflicted with proposed Electric Reliability Organization reliability standards were to remain in place until the Commission addressed the conflict (EPA Act § 1211(d)(2)).

To further drive home the importance of independent RTOs, Congress directed that through rulemaking, "the Commission shall, to the extent within its jurisdiction, provide for incentives to each transmitting utility or electric utility that joins a Transmission Organization."⁴

⁴ EPA Act § 1241; Federal Power Act ("FPA") § 219(c); codified at 16 U.S.C. 824s(c). This statutory requirement is notably different from the "would consider" RTO Participation Adder language the Commission previously employed in Order No. 2000 and its Pricing Policy Statement issued in 2003. *Regional Transmission Organizations*, Order No. 2000, 65 Fed. Reg. 809 (Jan. 6, 2000), FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 P 31,089 (1999), *order on reh'g*, Order No. 2000-A, 65 Fed. Reg. 12,088 (Mar. 8, 2000), FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 P 31,092 (2000), *aff'd sub nom. Public*

In 2006, the Commission promulgated precisely such RTO Participation Adder rules through the adoption of Order No. 679 and the rehearing orders that followed.⁵

Congress's enactment of the EAct clearly sought to provide a stronger push toward the RTO model by superseding Order No. 2000's provisions (which merely called for transmission owners to "consider" joining RTOs) with explicit policy directives, including mandatory RTO Participation Adder requirements as embodied in section 1241 of the EAct.

B. The Commission's Observations in Order No. 679 Are Equally Applicable Today.

In promulgating the RTO Participation Adder rules, the Commission summarized Congress's purpose in enacting section 1241 of the EAct as follows:

the incentive applies to all utilities joining transmission organizations, irrespective of the date they join, based on a reading of section [1241 of EAct] in its entirety. . . . The stated purpose of section [1241 of EAct] is to provide incentive-based rate treatments that benefit consumers by ensuring reliability and reducing the cost of delivered power. We consider an inducement for utilities to join, and remain in, Transmission Organizations to be entirely consistent with those purposes.⁶

The Commission further noted that the benefits of RTO participation inure to customers on an ongoing basis and also noted the continued value of transmission owning utilities' stable membership in RTOs:

Utility District No. 1 of Snohomish County, Washington v. FERC, 272 F.3d 607 (D.C. Cir. 2001); *Proposed Pricing Policy for Efficient Operation and Expansion of Transmission Grid*, 102 FERC P 61,032 (2003).

This Congressional directive codified in statute also evidences the abandonment of an alternative proposal that had been considered. In lieu of a softer "sense of Congress" policy statement that suggested approval of an RTO Participation Adder (Energy Policy Act, H.R. 6, 108th Cong. § 16022(b) (2003) (passed by the House only)), Congress ultimately went a step further to direct the issuance of Commission rules to implement an RTO Participation Adder.

⁵ *Promoting Transmission Investment through Pricing Reform*, Order No. 679, FERC Stats. & Regs. P 31,222, *order on reh'g*, Order No. 679-A, FERC Stats. & Regs. P 31,236, at P 86 (2006), *order on reh'g*, Order No. 679-B, 119 FERC P 61,062 (2007).

⁶ Order No. 679-A P 86.

The consumer benefits, including reliability and cost benefits, provided by Transmission Organizations are well documented, and the best way to ensure those benefits are spread to as many consumers as possible is to provide an incentive that is widely available to member utilities of Transmission Organizations and is effective for the entire duration of a utility's membership in the Transmission Organization. To limit the incentive to only utilities yet to join Transmission Organizations offers no inducement to stay in these organizations for members with the option to withdraw, and hence risks reducing Transmission Organization membership and its attendant benefits to consumers. Because the incentive is applicable to utilities that join Transmission Organizations and is consistent with the requirements of section 219 of the FPA, the incentive complies with EAct 2005 and the FPA.⁷

The Commission's observations about membership stability and the need for an incentive that is ongoing, rather than static, is even more relevant today than in the past as RTOs continue to expand in different parts of the nation. Incentivizing consistent and stable RTO membership is essential to the RTO's ability to achieve grid reliability and consumer cost benefits.

C. In Response to Question 61⁸ from the Notice of Inquiry, the Present RTO Participation Adder Rules Should Not Be Revised Because They Achieve a Fair and Appropriate Balance Between Costs and Benefits.

Congress was well aware that RTO participation was voluntary in light of the Commission's Order No. 2000. Thus, at its core, the RTO Participation Adder, as implemented by the Commission, was required by Congress to promote RTO membership while providing some symmetry between, on the one hand, the costs borne by the transmission owners for joining an RTO (in the form of relinquishing functional control of its assets, agreeing to RTO oversight and approval of the use of the owner's assets, planned maintenance outages, and RTO-made grid expansion decisions), and, on the other hand, the benefits consumers uniquely enjoy due to the efficiencies of the grid system realized by transmission owners' decisions to relinquish control

⁷ Order No. 679-A P 86 (emphasis added).

⁸ Question 61 provides: "Should the Commission revise the RTO-participation incentive?"

over system operation and attendant market rules (for example, on account of the RTO's markets and more efficient dispatch).⁹ Greater alignment between these costs and benefits should continue to be encouraged and preserved by the Commission because, as noted further below, the dollar value of benefits for consumers are related to RTOs' reliability, market, and planning functions – benefits that do not necessarily show up in the bottom line of transmission owner operations.

The RTO Participation Adder, as currently designed, appropriately balances the noted asymmetry in terms of the size of benefits that consumers receive versus the added costs and more limited benefits that transmission owners receive. Although the benefits continue to far outweigh the costs to consumers, the RTO Participation Adder rules represent a modest attempt by the Commission to address this asymmetry between the transmission owners' costs and benefits as between consumers and transmission owners. This modest effort devised in 2006 through the design of the RTO Participation Adder continues to be sound public policy today.

D. Commission Orders Since 2006 Further Underscore the Need for the RTO Participation Adder to Better Align Costs to the Transmission Owners and Benefits to Customers.

Continuing the RTO Participation Adder in its present form also recognizes that a number of Commission Orders have underscored the need to maintain some balance between costs of RTO participation to transmission owners versus customer benefits. For example, as a result of the competitive bidding processes directed in Order No. 1000 and largely administered by RTOs, incumbent transmission owners face a greater degree of competition and resulting challenges to their expected revenue streams. Thus, the RTO Participation Adder should be

⁹ Order No. 679 P 8 ("Section 219(c) requires that the Rule provide for incentives to each transmitting utility or electric utility that joins a Transmission Organization and to ensure that any recoverable costs associated with joining may be recovered through transmission rates charged by the utility or through the transmission rates charged by the Transmission Organization that provides transmission service to the utility.").

maintained to promote membership stability given the altered landscape for economic opportunities compared to the landscape at the time of the rules' initiation in 2006. Although it is true that if a transmission owner were to leave an RTO, the transmission owner would still maintain an Order No. 1000 obligation, the larger footprint-based planning process utilized by RTOs, by definition, triggers more robust competitive alternatives which benefits customers. Transmission owners maintaining membership in RTOs are therefore exposed to increased uncertainty as to whether they will be awarded designations for new regional transmission projects, while customers realize the benefits of that increased competition.¹⁰ In short, the competitive benefits to customers of the RTO applying Order No. 1000 competitive bidding across the large RTO footprint outweighs the costs to the consumers of the RTO Participation Adder.

By the same token, RTO markets have facilitated the recognition of demand response and energy efficiency resources. These developments, which have clearly benefited consumers, can potentially erode the need for new transmission. This represents another changed circumstance that weighs in favor of maintaining the RTO Participation Adder to address asymmetries between costs to the transmission owner and benefits to the consumer.

E. The Annual Value to Consumers from Transmission Owner Participation in PJM Is Between \$3.2 to \$4 Billion.

Despite significant developments in how transmission is planned, developed, operated, and maintained (for example, the issuance of Order No. 1000), in the years since the Commission promulgated Order No. 679 and a related policy statement, the justifications for the Congressional and Commission policies favoring the creation and vitality of RTOs continue to

¹⁰ Although it is true that the new non-incumbent entities would join the RTO, Order No. 1000 should not be allowed to create a “zero sum game” where non-incumbents joining RTOs might displace incumbents who otherwise exercise a right to leave. Moreover, investors evaluating a utility in an RTO region as compared to a non-RTO region are cognizant of the disparate regulatory environments.

grow. The present day realities fortify the Commission's already strong policy justifications for implementing the Congressionally-mandated RTO Participation Adder.

By way of example, as with all other RTOs and ISOs, PJM's Value Proposition for consumers has continued to increase over the last thirteen years. Today, PJM calculates that it provides a total estimated annual savings of \$3.2 to \$4.0 billion to the energy marketplace driven in no small part because of the stability of PJM's membership and the corresponding geographic footprint PJM services. Breaking this overall value down reveals:

- \$300 million in annual reliability savings, inclusive of savings relating to congestion reduction;
- \$1.2 to \$1.8 billion in annual savings relating to lower reserve margins and competition from alternative resources due to planning efficiencies over a large region;
- \$1.1 to \$1.3 billion in annual savings relating to integrating more efficient resources; and
- \$600 million in annual savings relating to energy production costs on account of the PJM footprint's expanded dispatch area.

A copy of PJM's Value Proposition is attached hereto as Exhibit A, and can be accessed on the PJM website.¹¹

Thus, in Response to Question 64, which asks, "Should the RTO-participation incentive be awarded for a fixed period of time after a transmission owner joins an RTO or ISO?", the ongoing value of RTOs based on the stability of their membership and footprint strongly suggests that the incentive should be continuously awarded (because the benefits to consumers

¹¹ The Commission should take note of the fact that other RTOs and ISOs publish similarly compelling value propositions that add further support to the points PJM advances in these comments. *See, e.g.*, MISO claims \$3.5 billion in annual benefits to its members (<https://www.misoenergy.org/about/miso-strategy-and-value-proposition/miso-value-proposition/>).

accrue based upon ongoing RTO membership by transmission owners), and not simply awarded once or for a fixed period of time.¹²

It should also be noted that PJM does not have expensive exit fees that could work to disincentive transmission owners from opportunistically leaving PJM's membership ranks depending upon short-term market conditions (which could impose costs on members who remain to absorb the costs of longer-term market impacts).¹³ At the very least, the Commission should consider the appropriateness of maintaining the RTO Participation Adder in order to ensure membership stability for such RTOs, including PJM, that do not have expensive exit fees. PJM does not believe that imposing exit fees should be a means to drive membership stability. Rather, Congress's incentive-based directive is consistent with the current PJM model for transmission owner participation in the PJM RTO.

F. Answers to Two Other Questions from the Notice of Inquiry Further Affirm the Continued Application of the RTO Participation Adder.

With the above context in mind, responses to two other of the Commission's questions specific to the RTO Participation Adder establish the propriety of continuing to apply the RTO Participation Adder rules as they exist today.

- 1) Question 65: Should the RTO-participation adder be awarded on a project-specific basis?

The Commission should not analyze the RTO Participation Adder's applicability on a project-specific basis. In the first instance, most benefits are ongoing in nature and are not tied to specific transmission projects. In addition, an incentive that favors, for example, the construction of transmission projects might skew today's mission of an RTO to provide a

¹² This response would also be an applicable response to Question 84 in the Notice of Inquiry, which asks whether the incentive for "joining an RTO/ISO . . . could be limited to a set number of years."

¹³ See generally Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., Section 18.18.2.

nondiscriminatory, level playing field for competition between generation, demand side, and transmission solutions. Moreover, tying the incentive to specific projects might also perversely lead to transmission owners developing projects simply to obtain an incentive. A project-based nexus also ignores the post-Order No. 1000 world where a developer of a new project may not be a transmission owner, thus potentially leaving the transmission owner without any financial reward for the use of its facilities. For the reasons set forth at length above, robust policy reasons exist for the Commission to promote stable RTO membership independent of any project-specific basis.

- 2) Question 66: In Order No. 679, the Commission found that “the basis for the incentive is a recognition that benefits flow from membership in such organizations and the fact that continuing membership is generally voluntary.” Should voluntary participation remain a requirement for receiving RTO/ISO incentives?

The Commission should not condition receipt of the RTO Participation Adder based on an examination as to whether a particular transmission owner’s decision was truly “voluntary.” A “voluntary” requirement has never been an express requirement for the RTO Participation Adder under Order No. 679 and the orders on rehearing for good reason: the benefits realized from the transmission owners’ relinquishment of functional control exist regardless of whether that relinquishment is voluntary or not. As a practical matter, any reliance on the “voluntariness” of RTO membership would likely require the Commission to determine what “voluntary” membership actually means under the fifty states’ different laws or under the circumstances of a regulatory concession in a corporate merger. The Commission should avoid getting mired in having to examine, on a transmission owner-by-transmission owner basis, the motivations for the entity joining an RTO and the degree of ‘voluntariness’ of that decision given the unique facts

facing the transmission owners' management at the time the decision to join was made.¹⁴ Such a standard is impracticable, susceptible to unnecessarily complex legal and practical challenges, and overlooks the merits associated with stable, robust RTO membership.

It is also important to recall that although several states have mandatory RTO membership provisions in their statutes, such provisions were generally included at the time of passage as part of a comprehensive state restructuring statute to transform the then-vertically integrated utility framework. As part of that restructuring initiative, RTO participation language was included as part of the *quid pro quo* of the state opening up retail markets and granting stranded costs. For example, the Ohio statute is explicit in this regard: “no entity shall own or control transmission facilities as defined under federal law and located in this state *on or after the starting date of competitive retail electric service* unless that entity is a member of, and transfers control of those facilities to, one or more qualifying transmission entities[.]”¹⁵ As noted above, the RTO Participation Adder serves to re-balance the asymmetry between these costs to the transmission owners and the benefits received by the consumers.

Congress assigned the creation of an RTO Participation Adder to the Commission. Congress was well aware at the time that some states such as Ohio had passed their own mandates for RTO participation. Nevertheless, Congress did not condition its directive to FERC on the existence or non-existence of such state legislation. As a result, the Commission should be cautious about having Congress's policy directives on this targeted issue turn on state legislation.

¹⁴ A “voluntary” requirement could also precipitate a flood of state legislation that would make RTO membership mandatory under the guise of saving consumers the costs of the RTO Participation Adder. But such a result would work a state law end-run around Congress's express statutory directive to implement the RTO Participation Adder in furtherance of federal energy policy objectives. The Commission should not invite a new round of FERC/state jurisdictional tensions.

¹⁵ Ohio Revised Code Ann. § 4928.12 (emphasis added).

As noted above, RTO benefits to consumers are ongoing. State legislation does not void the need for this Commission to ensure fair alignment between the costs to transmission owners to remain members of an RTO versus the ongoing benefits realized by consumers.

III. CONCLUSION

PJM thanks the Commission for this opportunity to submit comments affirming the importance of the Commission's continued application of the Congressionally-mandated RTO Participation Adder.

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Respectfully submitted,

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June 26, 2019

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Audubon, PA, this 26th day of June, 2019.

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Exhibit A

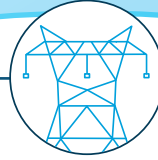
PJM Value Proposition

PJM Interconnection's operation of the high-voltage power grid, wholesale electricity markets and its long-term planning process provide significant value to the 65 million people in the region it serves.

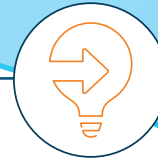
PJM operations, markets and planning result in annual savings of \$3.2–4 billion. These savings represent the vital functions that PJM provides and that lead to less cost to consumers:



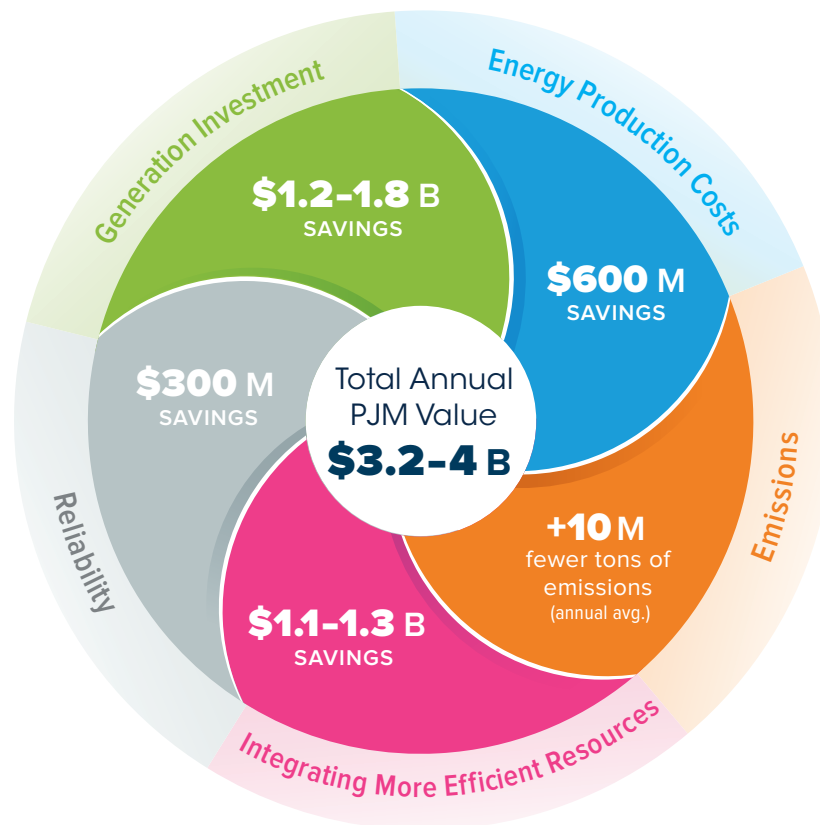
- Ensuring reliable power 24 hours a day, 7 days a week
- Providing capacity for the future and reserves for emergencies



- Managing generation and other resources in real time to meet consumer demand
- Procuring specialized services that protect the stability of the grid



- Lowering emissions by encouraging generator efficiency
- Offering additional benefits including training, compliance audits and knowledge sharing



All numbers are estimates.

Reliability

Transmission enhancements in PJM are expected to reduce costs by nearly \$300 million a year by alleviating congestion.

Regional Planning Efficiencies

PJM's regional planning process assesses the need for transmission upgrades to ensure reliability, increase efficiency and support public-policy goals.

PJM's large footprint makes the transmission planning process more effective by considering the region as a whole, rather than by individual states or separate transmission-owner territories, in determining transmission needs.

Investing in the transmission system can increase its ability to move more power, which can decrease congestion costs. *Transmission enhancements in PJM are expected to reduce costs by nearly \$300 million a year by alleviating congestion.*

\$300 M
SAVINGS

Generation Investment

This results in savings of \$1.2–1.8 billion.

Lower Reserve Margin and Competition from Alternative Resources

The fact that PJM plans for resource adequacy over a large region results in a lower reserve margin than otherwise would be necessary.

Resource adequacy means having enough generating resources available to meet the demand for electricity, plus a reserve margin to cover emergencies.

There is considerable diversity in electrical use patterns in the large PJM footprint; not all areas peak at the same time of the year.

As a result, resources in one area of the system are available to help serve other areas at peak times, and a smaller reserve is required.

In addition, the large and varied resource fleet across the entire PJM region spreads the generator outage risk across a larger collection of generators, improving reliability.

PJM's Reliability Pricing Model capacity market promotes competition between traditional generation and alternative supply resources such as demand response. With more cost-effective alternatives to maintain adequate power supplies, less investment is needed in new generation. *This results in savings of \$1.2–1.8 billion.*

\$1.2–1.8 B
SAVINGS

Integrating More Efficient Resources

More efficient units demonstrate a savings of \$1.1–1.3 billion a year

Replacement of Less Efficient Resources

PJM's efficient generation interconnection process, combined with the competitive RPM capacity market, has enabled less efficient generation resources to retire and to be replaced with more efficient, less costly, plants.

From the annual RPM auction from 2011 through 2018, nearly 30,000 megawatts of new, increasingly efficient natural gas combined-cycle generation either has already commenced operation or is committed to be built through the RPM auctions.

These resources operate more efficiently, with lower heat rates and in most cases lower fuel costs, than the older, less efficient resources they have replaced through retirement.

Simulations of the increased cost that would be associated with continuing to operate the retired resources instead of the new, more efficient units demonstrate a *savings of \$1.1–1.3 billion a year*.

\$1.1–1.3 B
SAVINGS

Energy Production Costs

Operating the larger market creates production cost savings of \$600 million a year

Expanded Dispatch Area

PJM's dispatch process enables energy to be exchanged economically and automatically when less expensive resources in one area can be used to meet consumer electricity demand in another area.

Prior to the expansion of the PJM footprint more than a decade ago, energy usually was exchanged between areas only when energy sales transactions were scheduled between two suppliers.

Without the operation of the centralized market structure that exists today, economic energy exchanges occurred much less frequently and efficiently.

Simulations of the economic dispatch and energy exchange before and after the PJM market expansion show that operating the larger market creates production cost *savings of \$600 million a year*.

\$600 M
SAVINGS

Emissions Savings

Annual average reduction of more than 10 million fewer tons of CO₂ emissions

PJM contributes to climate policy goals while maintaining reliability through the efficient operation of the wholesale power markets.

Competition in organized markets results in greater energy efficiency. Efficient plants burn less fuel and produce fewer emissions. Since 2005, PJM has seen an overall reduction in emissions of approximately 30 percent as a result of an increase in wind generation, other renewables and the inexpensive shale gas boom in the PJM region. This translates to an *annual average reduction of more than 10 million fewer tons of CO₂ emissions.*

+10 M
Fewer Tons
of Emissions
(annual avg.)

Additional Benefits

PJM is a source of neutral, independent data, analysis, knowledge and expertise for the industry, lawmakers and regulators. In this role, PJM facilitates information sharing and informs decisions that help strengthen the grid and drive the power industry forward.

Training

PJM is dedicated to continuing education and providing training for industry professionals.

- PJM offers more than 160 training days a year, attended by 7,000 trainees, including 1,000 member company operators
- PJM awards 45,000 NERC continuing education hours annually
- 17,000 of the continuing education hours are simulation training, which prepares trainees for real-world experiences in system and market operations





Compliance Audits

As a regional transmission organization, PJM is audited periodically (every three years) by ReliabilityFirst, NERC and SERC Reliability Corporation. These audits review PJM's compliance with Critical Infrastructure Protection standards, operations and planning standards. The approximate cost for PJM to complete an audit is \$2 million. Because PJM is registered as the transmission operator and is audited by ReliabilityFirst, NERC and SERC, individual transmission owners do not have to participate in the audits on their own. The cost for an audit for a transmission owner would vary but could total more than \$2 million for one individual transmission owner alone.



Innovation

PJM provides opportunities and a marketplace for innovators – such as PJM member organizations, research and academic institutions, and industry experts – to strengthen and enhance the power grid. PJM also conducts in-depth research and produces detailed white papers on various topics to promote information and knowledge sharing.

PJM supports and facilitates emerging technology programs to integrate batteries, electric vehicles and other power storage into PJM's markets, as well as ongoing initiatives to explore how the burgeoning development of distributed energy resources can be integrated more effectively with grid operations.



Working to Perfect the Flow of Energy

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