

**IN THE UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT**

Nos. 13-4330 & 13-4501 (consolidated)

PPL ENERGYPLUS, LLC, *et al.*,

v.

LEE A. SOLOMON, in his official capacity as President of the New Jersey Board
of Public Utilities, *et al.*,

v.

CPV POWER DEVELOPMENT, INC.; HESS NEWARK, LLC

CPV POWER DEVELOPMENT, INC., Appellant in 13-4330,
HESS NEWARK, LLC, Intervenor/Appellant in 13-4330,
LEE A. SOLOMON, *et al.*, Appellants in 13-4501

On Appeal from Judgment of the United States District Court for
the District of New Jersey, No. 2:11-cv-00745-PGS,
(Hon. Peter G. Sheridan)

**BRIEF FOR THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
AS AMICUS CURIAE**

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INTEREST OF THE *AMICUS CURIAE*

The Pennsylvania Public Utility Commission (PAPUC) is the statutorily-authorized agency of the Commonwealth of Pennsylvania responsible for regulating the retail rates and service of electric utilities in the state. 66 Pa. C.S. §§ 501, 1301. The PAPUC is authorized to represent the interests of Pennsylvania ratepayers and advocate to ensure safe and reliable electric service in matters before the Federal Energy Regulatory Commission (FERC), federal courts, and PJM Interconnection, LLC (PJM), the regional transmission organization (RTO) serving Pennsylvania. 66 Pa. C.S. § 2805. In this role, the PAPUC vigorously represents the interests of its consumers in numerous federal regulatory proceedings where the wholesale electric markets and the pricing of electric capacity are impacted.

Pennsylvania is the largest constituent of the 13-state PJM region and it represents the largest load and the largest number of electric generation facilities in the PJM region. Pennsylvania is also one of a number of states that have abandoned direct “command and control” regulation of vertically integrated utility monopolies in favor of a market-based approach that relies on economic signals to inform potential investors when, where and how to build generation capacity. Governmental subsidies that intentionally target FERC wholesale markets could

materially injure those markets by impairing forward-looking generation investment signals and jeopardizing long-term resource adequacy.

As a retail choice state, Pennsylvania's retail market is dependent on a well-functioning and highly competitive wholesale electricity market. The PAPUC relies upon effective wholesale competition to properly administer the provisions of the 1996 law that opened up Pennsylvania retail generation to competition. *Electricity Generation Customer Choice and Competition Act*, 66 Pa. C.S. §§ 2801- 2812; P.L. 802, No. 138. Importantly, Pennsylvania has not had to resort to state-sponsored procurement programs or state-subsidized generation to meet the needs of its ratepayers.

As an *amicus curiae* in this proceeding, the PAPUC can provide valuable input based on the benefits received by its Pennsylvania ratepayers from participating in a fully-functioning, robust and stable wholesale capacity market. The PAPUC's policy-based perspective in support of non-subsidized energy markets is in limited support of Appellee PPL EnergyPlus LLC. The PAPUC does not endorse a specific party's position on the jurisdictional legal issues related to federal preemption or the Dormant Commerce Clause.

SUMMARY OF ARGUMENT

The PAPUC supports the concept of an efficient and robust wholesale competitive market. As a retail choice state, Pennsylvania's retail market is dependent on a well-functioning wholesale market to ensure that adequate generation capacity exists at prices that accurately reflect market conditions. PJM's capacity market, represented by the Reliability Pricing Model (RPM), is designed to procure the least cost, competitively-priced combination of resources necessary to meet the region's reliability objectives. Since its inception in 2007, the PJM capacity model has met and exceeded these objectives.

The PAPUC contends that state-subsidized generation programs, such as the New Jersey Long Term Capacity Agreement Pilot Program (LCAPP), are counterproductive and interfere with the proper operation of RPM. State-sponsored subsidy programs distort pricing signals which can lower capacity prices in the short-run. This market distortion may exclude more efficient resources in the long-term leading to higher capacity prices and generation shortages. The PAPUC is concerned that state-subsidized programs within the PJM footprint not only distort market prices but undermine investor confidence, potentially discouraging new generation investment, which will harm long-term reliability to the detriment of all PJM consumers.

As an alternative to state-subsidized resource procurement programs, the PAPUC suggests that New Jersey examine other options such as bilateral, long-term contracts, the formation of power authorities and/or utilization of tax incentives. All of these alternative options permit states to procure generation supply without adversely affecting the efficient operation of the competitive wholesale market.

The PAPUC requests the Court to consider its perspectives contained in this *Amicus* Brief in its resolution of these appeals.

ARGUMENT

I. Pennsylvania Supports The Concept Of An Efficient And Robust Wholesale Competitive Market

The Commonwealth of Pennsylvania is one of thirteen states served by PJM. PJM is the regional transmission organization that coordinates and manages the movement of electricity over the transmission grid.¹ Pennsylvania and many of the states within the PJM footprint have restructured their electricity industry. *See, e.g.,* 66 Pa. C.S. § 2801 *et seq.* Under this restructured approach, Pennsylvania no longer relies on vertically integrated monopolies for electricity service. Instead, energy and capacity are procured through competitive markets, including the markets operated by PJM, to satisfy the Commonwealth's needs.

The transition from vertical integration to competitive markets has resulted in significant benefits for Pennsylvania ratepayers by ensuring adequate generation supplies, reliable service and reasonable retail rates. Under the traditional structure of vertically integrated monopolies, utilities faced no competition and were guaranteed cost recovery from ratepayers. As a result, ratepayers were burdened with the risks associated with investments in new generating resources such as massive cost overruns, excess capacity and

¹ A map of the region served by PJM is available at <http://www.pjm.com/~media/about-pjm/pjm-zones.ashx>.

imprudent construction expenditures. Vertically integrated utilities, regulated on cost of service ratemaking, also lacked incentives to keep costs low by running their businesses more efficiently. The utilities could earn higher returns on their rate base when generation assets were over-built or over-priced. As a result, utilities had incentives to overbuild the system even if such improvements did not improve system reliability.

In comparison, competitive markets are designed to impose less risk on ratepayers while providing incentives for generating resources to operate efficiently. While the vertically-integrated structure rewards overbuilding, a competitive market rewards entities that can provide reliability at a lower cost. As FERC has explained, “a competitive market with a single, market-clearing price creates incentives for sellers to minimize their costs, because cost-reductions increase a seller’s profits.” *PJM Interconnection, L.L.C.*, 117 FERC ¶¶ 61,331, 62,678 (2006). This, in turn, leads to lower costs for ratepayers. With competitive markets, electricity customers also are no longer forced to foot the bill for overbuilding. Instead, investors and generators absorb the risk to build the right amount of generation capacity when and where it is needed.

II. PJM’s Reliability Pricing Model Has Achieved The Objective Of Encouraging New Capacity Development Throughout The PJM Region

The PAPUC contends that the current wholesale electric market does operate successfully and does not require the need for state intervention in promotion of subsidization of domestic generation. Pennsylvania is a restructured state and relies completely upon wholesale market forces to ensure that there will be sufficient capacity to serve Pennsylvania’s needs. *See* 66 Pa. C. S. §2801 *et seq.* PJM’s capacity market, represented by the RPM, is critical to ensuring adequate capacity is available.

The RPM is designed “to procure the least-cost, competitively-priced combination of resources necessary to meet the region’s reliability objectives on a three-year forward basis.” *PJM Interconnection, L.L.C.*, 137 FERC ¶¶ 61,145, 61,764 (2011). RPM’s goal is not to ensure that new generating facilities are built within each state in PJM, but rather to ensure that the *lowest cost mix* of capacity resources are utilized to ensure reliability. *Id.* This may mean that new generation facilities will be located in lower cost areas and connected to demand centers via transmission lines. Moreover, the lowest cost mix of resources will usually include capacity resources other than newly built power plants and may involve delaying retirement of a plant, upgrading facilities or the construction of peaking facilities such as combustion turbines. Lowest cost resources can also include

demand response resources² and renewable resource facilities such as wind, solar, waste to energy and other technologies. In short, RPM emphasizes that capacity can and should be provided from the most efficient mix of resources that can ensure reliability. Customers do not need to pay for new plants to be built if other capacity resources can ensure reliability at a lower cost.

Since the inception of RPM in 2007, there is substantial evidence to support its success. RPM is attracting new capacity, including new power plants. In the most recent Base Residual Auction for the 2016/2017 delivery year, a record amount of unforced capacity was made available to serve PJM.³ This amount of capacity included 4,282 MW of new generation, 1,181 of generation up-rates⁴ and 12,408 of demand response.

The most recent assessment of the effectiveness of RPM was performed by the Brattle Group, an independent third party engaged by PJM. The Brattle Group's analysis confirmed that "RPM is performing well. Despite concerns by some stakeholders, RPM has been successful in attracting and retaining cost-

² Demand response resources enter the market to provide additional capacity by decreasing energy consumption when called upon.

³ PJM Interconnection, LLC, *2016/2017 Base Residual Auction Results*, (May 18, 2013), available at <http://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2016-2017-base-residual-auction-report.ashx>.

⁴ *Id.*

effective capacity sufficient to meet resource adequacy requirements.”⁵ This thorough analysis examined all aspects of RPM performance since its inception.

The success of RPM was also noted by the PJM Independent Market Monitor (IMM) in his annual State of the Market Report.⁶ The IMM analyzed market structure, participant conduct and market performance in the PJM capacity market for the first nine months of 2013 and found the PJM capacity market to be generally competitive.⁷

The success of RPM can and does attract investment in new generation facilities without the need for state-sponsored subsidies. For example, Calpine Corporation recently began operating a new natural-gas fired power plant in Peach Bottom Township, York County, Pennsylvania.⁸ There are several other gas-fired plants in development in the state as well. PPL is spending more than \$400 million dollars to add substantial new capacity (including a new powerhouse) to

⁵ Johannes Pfeifenberger et al., *The Brattle Group Second Performance Assessment of PJM’s Reliability Pricing Model*, at i (Aug. 26, 2011), available at <http://www.energycollection.us/Energy-Capacity/Second-Performance-Assessment.pdf>.

⁶ The Independent Market Monitor is selected by PJM with approval of FERC. The IMM is responsible for reviewing and assessing the economic performance of the PJM capacity markets. See *PJM Interconnection, L.L.C.*, 129 FERC ¶ 61,250 (2009).

⁷ *State of the Market Report for PJM (2013)*, Monitoring Analytics LLC (November 14, 2013) at 137. See *PJM Interconnection, L.L.C.*, 129 FERC ¶ 61,250 (2009).

⁸ See <http://www.calpine.com/power/plant.asp?plant=269>.

its Holtwood facility, which straddles the border of Lancaster and York Counties.⁹ These plants and others are being developed without burdening Pennsylvania ratepayers with out-of-market, state-mandated subsidies.

III. State-Subsidized Programs Undermine Wholesale Competitive Markets

The PAPUC contends that state-sponsored subsidies such as New Jersey's LCAPP are counterproductive and interfere with the efficient operation of RPM. Under the RPM mechanism, capacity prices respond to market conditions, increasing when and where capacity is scarce and decreasing when and where capacity is plentiful. When RPM's capacity prices are high, it indicates that there is demand for additional capacity and new capacity resources should be provided. When RPM's capacity prices are low, it indicates that there is no need for new capacity to enter the market and higher-cost capacity resources should be retired. These pricing signals help to ensure that there is sufficient capacity available to meet reliability requirements.

State-sponsored subsidy programs like the LCAPP program distort these pricing signals and interfere with the proper functioning of the market. When state subsidies incent generators to enter the market below their true economic

⁹ See <http://www.pplweb.com/ppl-generation/ppl-holtwood/expansion-project.aspx>.

costs, capacity prices fall in the short term. This price decline affects not only the state where the subsidized generator is located but significantly impacts market operations across the PJM region and discourages capacity investment at cost-based prices. Although this reduction in prices of capacity investment may seem positive, the actual costs of distorting the market's pricing signals greatly outweigh perceived short term "benefits" resulting from lower capacity prices. Lower capacity prices reduce the incentive for new capacity to enter the market even if that new capacity would be more efficient than the subsidized generators and even if that new capacity is needed to ensure reliability. Because more efficient resources are excluded from the market by the subsidized participants, state subsidy programs result in higher prices in the long-term.

PJM has attempted to mitigate the ill effects of these subsidy programs by implementing changes to what is known as the "Minimum Offer Price Rule" (MOPR). The rule is intended to prevent a new entrant to the PJM capacity market from making a bid that is below its costs. The theory behind MOPR is that if a subsidized new entrant can successfully sell its capacity when forced to bid in an amount at least equal to its actual costs, then the new entrant could succeed in the market even without the state subsidy. FERC recently approved changes to the MOPR rule proposed by PJM that limit the ability of state-subsidized generation

to participate in RPM capacity auctions. *PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,090 (2013).

The PAPUC is concerned that state-subsidized projects not only distort market prices but can undermine investor confidence in the efficient functioning of the wholesale electric market. Investors will be reluctant to invest in new generation in this kind of an environment out of concern that their competitive position will be undercut if new subsidized plants enter the market.

State-sponsored generation projects can also give favorable treatment to new generation, at the expense of existing plants. A key element of RPM's market design is that generation resources should receive the same price regardless of their age. Such neutral treatment ensures that the market will select the most efficient, least-cost group of suppliers, regardless of age of the facility. From the standpoint of economic efficiency, it makes no sense to prefer a capacity generated by a new plant over capacity that can be generated more cheaply by an existing facility.

State-sponsored programs will not only lead to higher prices but will also undermine the market's ability to ensure reliability. Current participants in the market may retire earlier than they otherwise would due to the market distortions caused by subsidized entry. The RPM mechanism cannot ensure that capacity is

available when and where it is needed if investment decisions are distorted by the threat of future subsidies.

IV. Alternatives Exist To Permit States To Promote Domestic Generation

To the extent states may be dissatisfied with PJM's capacity procurement process, a number of options exist that would not threaten the operation of PJM's capacity market. If a state is dissatisfied with how the competitive procurement process functions, the state utility that sells electricity to end-use consumers can choose *not* to participate in the RPM and participate in an alternative mechanism known as the Fixed Resource Requirement (FRR).¹⁰ The FRR mechanism is employed by PJM and allows the state utility to satisfy its capacity obligations through bilateral, long-term contracts with a state-sponsored generation resource instead of participating in the RPM process. Capacity resources that participate in the FRR process do not receive the capacity resource clearing prices that generators which participate in the RPM capacity auctions typically receive. These bilateral purchase arrangements exist independently of the traditional capacity markets and do not affect the results of the PJM capacity auctions.

¹⁰ A more detailed explanation of the FRR option appears at <http://pjm.com/~media/committees-groups/committees/mrc/20110630/20110630-frr-education.ashx>.

A second option for states is the formation of a power authority. Power authorities are quasi-governmental agencies established pursuant to state legislation. Power authorities have the ability to conduct competitive procurement programs to obtain electric supply resources for the needs of state consumers. State authorities operate in a structurally insulated, independent and transparent fashion. Both New York and Illinois have fully functioning power authorities.¹¹

A third option for states entails utilization of tax incentives and/or other economic development policies to induce investors to locate their facilities in the particular state. In this manner, taxpayers not the competitive market or state ratepayers bear the risk associated with construction of the generation resource.

¹¹ See descriptions of the NY and IL power authorities at: <http://www.nypa.gov/> and <http://www2.illinois.gov/ipa/Pages/default.aspx>.

CONCLUSION

For the foregoing reasons, the Pennsylvania Public Utility Commission respectfully requests that the Court consider the positions expressed in this *Amicus* Brief in its resolution of these appeals.

Respectfully submitted,

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COMBINED CERTIFICATIONS

1. Bar Membership. I certify that the attorneys whose signatures appear on this brief are members of the Bar of this Court or have filed an application for admission pursuant to 3d Cir. L.A.R. 46.1.

2. Word Count. This brief was prepared in Times New Roman, 14 point font, a proportional typeface. Pursuant to F.R.A.P. 32(a)(7)(C), I certify, based on the word-counting function of my word processing system (Microsoft Word 2010) that this brief complies with the type-volume limitations of F.R.A.P. 32(a)(7)(B) and F.R.A.P. 29(d), in that the brief contains 2,535 words, including footnotes, but excluding the parts of the brief exempted by F.R.A.P. 32(a)(7)(B)(iii).

3. Electronic Filing. I certify pursuant to Third Circuit Local Rule 31.1(c) that the text of the electronically-filed version of this brief is identical to the text in the paper copies of this brief as filed with the Clerk. A virus check of the electronic PDF version of this Brief was performed using McAfee Virus Scan Enterprise 8.8.0 and according to that program, it is free of viruses.

Dated: February 25, 2014

/s/ James P. Melia
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CERTIFICATION OF SERVICE

Pursuant to F. R. A. P. 25, 3d Cir. L.A.R. 27.2 and 3d Cir. L. A. R. Misc. 113.4, I hereby certify that, on February 25, 2014, I served a copy of the Brief of the Pennsylvania Public Utility Commission *Amicus Curiae* in Case Nos. 13-4330 and 13-4501 on all counsel in these consolidated cases that are “Filing Users” of this Court’s electronic filing system, and such counsel were served, pursuant to 3d Cir. L.A.R. Misc. 113.4, when this brief was filed through the Court’s electronic filing system, by the Notice of Docket Activity generated by the Court’s electronic filing system.

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