

Nos. 14-614, 14-623

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**In the Supreme Court of the United States**

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W. KEVIN HUGHES, *et al.*,  
*Petitioners,*

v.

TALEN ENERGY MARKETING, LLC  
(F/K/A PPL ENERGYPLUS, LLC), *et al.*,  
*Respondents.*

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CPV MARYLAND, LLC,  
*Petitioner,*

v.

TALEN ENERGY MARKETING, LLC  
(F/K/A PPL ENERGYPLUS, LLC), *et al.*,  
*Respondents.*

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*On Writs of Certiorari to the United States  
Court of Appeals for the Fourth Circuit*

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**BRIEF OF AMICUS CURIAE MONITORING ANALYTICS,  
LLC, ACTING IN ITS CAPACITY AS THE INDEPENDENT  
MARKET MONITOR FOR PJM, IN SUPPORT OF RESPONDENTS**

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**QUESTION PRESENTED**

Whether the United States Court of Appeals for the Fourth Circuit properly affirmed a district court holding that a Maryland program to subsidize the participation of a new power plant in the federal wholesale energy market was preempted by the Federal Power Act.

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**INTEREST OF AMICUS CURIAE<sup>1</sup>**

Monitoring Analytics, LLC, serves as the Independent Market Monitor for PJM (“Market Monitor”), and appears here solely in its capacity as the Market Monitor.<sup>2</sup> Consistent with its unique role, the Market Monitor here seeks to protect and promote the public interest in and federal policy for competition-based regulation. The organized wholesale electricity market at issue in this case is operated by PJM Interconnection, L.L.C., which has been approved as a Regional Transmission Organization (“RTO”) by the FERC.<sup>3</sup> Consistent with its competition-based regulatory initiative, FERC requires an RTO to operate a centralized wholesale electricity market independently from market participants. FERC requires RTOs to have a market monitor that is

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<sup>1</sup> In accordance with U.S. Sup. Ct. Rule 37.2(a), 28 U.S.C.A., all parties have provided blanket consent to the filing of amicus curiae briefs, which the Clerk of the Court has noted on the docket. Pursuant to U.S. Sup. Ct. Rule 37.6, 28 U.S.C.A., Monitoring Analytics, LLC states the following: (1) Monitoring Analytics, LLC counsel authored this brief; (2) no counsel for a party to the decision below, or other entity, authored this brief in whole or in part; and (3) no person or entity other than Monitoring Analytics, LLC made a financial contribution to the preparation or submission of this brief.

<sup>2</sup> Monitoring Analytics, LLC, is solely owned by Dr. Joseph E. Bowring. Dr. Bowring is the President of Monitoring Analytics and the Independent Market Monitor for PJM.

<sup>3</sup> See *PJM Interconnection, L.L.C., et al.*, 96 FERC § 61,061 (2001).

independent from market participants and from the RTO.<sup>4</sup>

The core functions of the Market Monitor are to evaluate and review proposed market rules, tariff provisions and market design elements; review and report on the performance of the wholesale markets; and identify and notify the FERC of participant or RTO behavior that requires investigation.<sup>5</sup>

The Market Monitor is charged to protect the public interest in competitive wholesale electricity markets.<sup>6</sup> The Market Monitor's purpose is to promote efficient wholesale markets and to help realize the FERC's goal to regulate electricity markets through competition.<sup>7</sup> A priority concern of the Market Monitor is to detect, deter and prevent the exercise of market power in PJM markets.<sup>8</sup>

The Market Monitor is subject to a strict code of ethics prohibiting conflicts of interests or engagements with market participants and others that could

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<sup>4</sup> See 18 C.F.R. § 35.34(k)(6).

<sup>5</sup> See 18 C.F.R. § 35.28(g)(3)(ii).

<sup>6</sup> See PJM Open Access Transmission Tariff ("OATT") Attachment M (14-614 Pet. App. 78a); *see also*, 18 C.F.R. § 35.28(g).

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

interfere with the Market Monitor's independence and objectivity.<sup>9</sup>

### SUMMARY OF ARGUMENT

By design, the Maryland Public Service Commission's Generation Order procures new capacity resources outside of the centralized wholesale capacity market operated by PJM in the region including Maryland.<sup>10</sup> By requiring that such resources be offered into the PJM market so as to guarantee that they clear the centralized markets, the RFP operates to suppress prices below levels needed to sustain competitive investment by other generation owners and below levels that are just and reasonable under the prevailing federal wholesale regulatory scheme.<sup>11</sup> The RFP thus interferes with and undermines federal policies intended to establish competitive wholesale electricity markets and the FERC's reliance on such markets to regulate prices under the Federal Power Act.<sup>12</sup> Accordingly, the RFP is field and conflicts preempted.<sup>13</sup>

Maryland could have achieved its objectives concerning supply adequacy, which are not preempted,

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<sup>9</sup> See OATT Attachment M § XI; see also, 18 C.F.R. § 35.28(g)(3)(vi).

<sup>10</sup> See 14-614 Pet. App. 14a.

<sup>11</sup> See 14-614 Pet. App. 12a.

<sup>12</sup> *Id.*

<sup>13</sup> See 14-614 Pet. App. 19a, 25a.

under available alternative approaches, including an alternative included in the PJM market rules.

### **ARGUMENT**

Congress, with the Energy Policy Act of 1992, and the FERC, with the issuance of Order No. 888, launched an ambitious effort to restructure the electric industry and to reform the regulation of that industry based on competition principles in place of the traditional cost-of-service ratemaking model.<sup>14</sup> A market permits competition from new entrants that are not regulated public utilities and creates an incentive for lower costs and technical innovation. Actual costs of generation have been reduced as a result and technical innovation has occurred as a result. The rationale for a competition-based regulatory approach holds that just and reasonable prices can be obtained from markets that do not have structural market power or that employ rules to mitigate market power.<sup>15</sup>

As the lower court observes, “the federal scheme ... represents a comprehensive program of regulation that is quite sensitive to external tampering.”<sup>16</sup> Market participants, including both suppliers and buyers, are deprived of the benefits of competition if suppliers are permitted to exercise market power and raise prices above competitive levels or if buyers are permitted to

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<sup>14</sup> See 14-614 73a–74a.

<sup>15</sup> See 14-614 Pet. App. 158a.

<sup>16</sup> See 14-614 Pet. App. 13a.



exercise market power and reduce prices below competitive levels.

The PJM markets include an energy market and a capacity market. Both operate with a single clearing price, subject to local transmission constraints. In equilibrium, the capacity market provides the difference in revenues between the annual total costs of a new unit and the net revenues such a new unit earns in the energy market. The demand for capacity is defined by the reliability needs of the PJM system. The supply of capacity is defined by competitive offers from suppliers of capacity, the owners of generating units.

An increase of zero price capacity supply shifts the supply curve of capacity to the right resulting in a lower clearing price for all capacity. The supply curve of capacity is quite steep at the point of intersection meaning that a relatively small increase in zero price capacity can have a significant impact on the clearing price for all capacity.

There are at least two broad paradigms on which PJM markets and wholesale electricity markets like it can rely to address the price suppressing effect of mandatory over supply and to ensure reliability.

The market paradigm includes a full set of markets, most importantly the energy market and capacity market, which together ensure that there are adequate revenues to incent new generation when and where it is needed and to incent retirement of units when appropriate. The market paradigm will result in long term reliability at the lowest possible cost. The market

paradigm also fits well with Maryland's competitive approach to the provision of retail electric service.

The quasi-market paradigm includes an energy market but addresses the need for investment incentives via the long-term contract model or the cost-of-service ratemaking model. In the quasi-market paradigm, competition to build capacity is limited. In the quasi-market paradigm, customers absorb the risks associated with new investment through guaranteed payments under either guaranteed long term contracts or the traditional cost-of-service ratemaking approach. In the quasi-market paradigm there is no market clearing pricing to incent investment in existing units. In the quasi-market paradigm there is no open competition to provide lower cost capacity or technically superior capacity or to operate at maximum efficiency. The quasi-market paradigm substitutes regulation for the energy and capacity markets.

The PJM capacity market (known as the Reliability Pricing Model or RPM) exists to provide a market mechanism for the provision and pricing of reliability.<sup>17</sup> PJM also procures a limited amount of capacity (less than ten percent in the 2017/2018 base auction) under an optional program (Fixed Resource Requirement Alternative or FRR) that allows load-serving entities to develop reliability plans including a portfolio of identified capacity resources under contract.<sup>18</sup> No part

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<sup>17</sup> See OATT Attachment DD.

<sup>18</sup> See RAA Schedule 8.1.

of Maryland participates in this alternative program.<sup>19</sup> The price paid per megawatt of capacity can differ depending on location. The aim of federal policy in the market paradigm is not to establish a single uniform price for every unit of capacity, but rather to ensure that prices paid reflect competition and not market power.<sup>20</sup>

The Generation Order provides for the procurement of certain new generation resources and requires Maryland electric distribution companies to enter into mandatory and non-bypassable long term contracts for differences with selected resources.<sup>21</sup> The Generation Order determined that it was not reasonable “to entrust the reliability of our State’s electricity supply entirely to the operation of a capacity market that, by design, seeks to incent long-term assets solely through short-term price signals.”<sup>22</sup>

The Generation Order did not, however, order the construction of new resources to supplement the capacity procured in PJM capacity market auctions. The effect of the Generation Order is to procure new capacity at substantially in excess of the market price and, with all the risks imposed on customers, include it in the PJM capacity market when there was no need for additional new entry. The effect on the PJM capacity market occurs because the Generation Order

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<sup>19</sup> See Md. Code. Pub. Utils. §§ 7-501, *et seq.*, 7-510 (c)(4)(ii).

<sup>20</sup> See 14-614 Pet. App. 154a.

<sup>21</sup> See 14-614 Pet. App. 14a.

<sup>22</sup> See 14-614 Pet. App. 53a.

process selects only capacity from a new entrant and requires that new entrant to offer and clear in the PJM capacity market.<sup>23</sup> Because resources selected under the Generation Order receive out-of-market payments and are indifferent to RPM prices, their only incentive is to offer at a level low enough to guarantee that they clear, i.e. at a price of zero. As a result of such subsidized offers, PJM procures the same amount of capacity at a suppressed and inefficient price. The arrangement in the Generation Order does not increase the levels of capacity procured in RPM capacity auctions.

There is no evidence that there is or was a reliability issue in Maryland at the time of the Generation Order. PJM has successfully maintained reliability in Maryland and throughout the PJM footprint since the beginning of the markets in 1999 at competitive prices. The price of capacity has been below the cost of new entry for much of this period.

Nonetheless, if the Maryland Public Service Commission had determined that it believed that additional capacity was required in order to provide additional reliability in Maryland, the Maryland Public Service Commission could have proposed an arrangement that procured additional capacity, charged ratepayers for 100 percent of that capacity and not required that the capacity be offered in the market. In that case, the additional capacity would have supplemented rather than displaced capacity procured in the PJM capacity market. Such an approach would be a way to increase reliability in Maryland with new

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<sup>23</sup> See 14-614 Pet. App. 33a.

generation without impacting the PJM capacity market and the federal regulatory scheme.

The arrangement actually adopted in the Generation Order is rational from the state's perspective only if a reduction of market prices sufficient to offset the costs to procure the Generation Order resources occurs. The overall result would be that a subsidized resource receives above market prices for its capacity while competitive resources receive below market prices. Such price discrimination would prevent the market from establishing prices that are competitive and efficient and have a corresponding negative impact on other market participants in Maryland and in other states. In a competition-based wholesale regulatory scheme, a price below the competitive and efficient level is not just and reasonable under the Federal Power Act.<sup>24</sup> Competition-based rates must reflect competition and not the exercise of market power.

The Generation Order approach is not consistent with the operation of a competitive capacity market. Offering capacity purchased through this Generation Order process into the PJM capacity market at prices less than cost artificially suppresses prices in the PJM capacity market. Suppressed prices negatively affect the incentives to build new generation and, if extended, would result in a situation where only subsidized units would ever be built.<sup>25</sup> This result contradicts a fundamental policy goal that investors build resources

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<sup>24</sup> See 14-614 Pet. App. 158a.

<sup>25</sup> See 14-614 Pet. App. 36a.

at their own risk and not at the risk of ratepayers. Ironically, the resultant price suppression would have negatively affected incentives for competitive generation to build in Maryland as well as other PJM areas.

If allowed to persist, the Generation Order approach would eventually replace the market approach with a quasi-market approach in PJM. The effects are not limited to Maryland but extend to the entire PJM market. The market approach created under federal policy cannot coexist with a quasi-market approach under state policy.

The Market Monitor prepared and submitted to the Maryland Public Service Commission a report containing a detailed analysis supporting the conclusion that offers from Generation Order-selected resources would suppress capacity market prices below competitive levels.<sup>26</sup> Specifically, the Market Monitor's analysis indicated that "adding 1,800 MW of installed capacity in the Pepco zone in Maryland, paying it through an out of market subsidy, and requiring it to offer at zero would result in a reduction in capacity market revenues to PJM suppliers of more than one billion dollars per year, including about 92 million dollars in Pepco."

Moreover, the Generation Order approach also interferes with the establishment of just and

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<sup>26</sup> See Comments of the Independent Market Monitor for PJM, Maryland PSC Case No. 9214 (Jan. 28, 2011) at 4, which can be accessed at: <[http://webapp.psc.state.md.us/Intranet/Casenum/NewIndex3\\_VOpenFile.cfm?ServerFilePath=C:\Casenum\9200-9299\9214\63.pdf](http://webapp.psc.state.md.us/Intranet/Casenum/NewIndex3_VOpenFile.cfm?ServerFilePath=C:\Casenum\9200-9299\9214\63.pdf)>.

reasonable rates under the Federal Power Act because it is unduly discriminatory. The Generation Order approach renders a selected investment immune to market results in a manner that confiscates a portion of the market value of existing investment not similarly immune and creates a disincentive to new entry from competitive suppliers.

Even though the particular Generation Order approach adopted by Maryland is an overreach, this does not mean that there are no valid approaches through which Maryland could have met its statutory duties.<sup>27</sup> As the lower courts have recognized, Maryland has the right and the obligation to address its own reliability needs if it does not think they are being adequately addressed through the PJM wholesale markets and if it can do so without interfering with FERC's jurisdiction over the wholesale power market.<sup>28</sup>

The most direct option would be for Maryland to require that Maryland load-serving entities opt out of the PJM capacity market (RPM) and participate in the FRR.<sup>29</sup> FRR is designed for load-serving entities in state jurisdictions participating in PJM that, unlike Maryland, do not have a competitive approach to the provision of retail electric service. FRR allows for investment by vertically integrated utilities operating at the wholesale level and at the state/retail level

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<sup>27</sup> See 14-614 Pet. App. 54a.

<sup>28</sup> See 14-614 Pet. App. 22a–24a.

<sup>29</sup> See 14-614 Pet. App. 91a.

under the traditional cost-of-service ratemaking approach, but insulates the competitive centralized capacity market operated by PJM from the effects of incompatible investment by requiring that all state load be met by FRR generation and sharply limiting the excess generation that can be sold into the competitive market. FRR is imperfect; it is a compromise. FRR avoids interference with the PJM capacity market, and, therefore, avoids preemption. Under FRR, Maryland's procurement choices would not have an impact on other participants outside Maryland in RPM markets. Under FRR, Maryland could make its own decisions about how best to reach required reliability levels. The selection of the FRR option in Maryland would put the entire responsibility for reliability and the associated costs on the customers of Maryland. Maryland instead chose to improperly attempt to have the best of both worlds, with low capacity market prices made lower by the Maryland subsidy, and a subsidized unit.

New entrants have a discriminatory opportunity to offer at above competitive levels in the Generation Order process. If capacity procured under the Generation Order is built and offered into the PJM capacity market (as the Generation Order requires), the Generation Order provides a requirement to offer and an overwhelming incentive to offer it below competitive levels. The owners of capacity built under the Generation Order, unlike owners of capacity financed in the market, have an assured revenue stream, courtesy of captive Maryland ratepayers, and they are indifferent to the capacity market clearing price.



The incentive to offer at below competitive levels is why, considered in the overall regulatory and market structure, the offer that the Generation Order is designed to elicit is a potential exercise of monopsony power. Such an exercise of market power is not consistent with the federal policy of competition-based regulation that underpins the market rules in the PJM tariff, nor is it consistent with Section 205 of the Federal Power Act, which the FERC is responsible to administer. As a matter of economics, the Generation Order clearly intrudes upon and interferes with the federal wholesale market design. As matter of law, such intrusion and interference by a state is preempted.<sup>30</sup>

In finding preemption, the lower courts focused on the fact that, as a result of the contract for differences awarded under the Generation Order, the new entrant received a price for participation in the capacity market different than it would have received in the capacity market without the contract.

The intrusion on federal policy also includes the impact on the market prices paid to other market participants in the wholesale power market. The impact of the Generation Order is the suppression of the market clearing price paid to other participants in the PJM capacity market below competitive levels. Not only does the Generation Order establish a different rate than the intended federal wholesale rate, it increases the difference between the contract rate and the market rate by interfering with the market mechanism relied upon to ensure a lawful rate.

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<sup>30</sup> See 14-614 Pet. App. 19a, 25a.

The FERC approved a market design intended to establish a just and reasonable market clearing price. The Generation Order by its terms worked to establish a different and unlawful price. Both field and conflicts preemption preclude that result.

**CONCLUSION**

Accordingly, the Market Monitor respectfully urges that the holding of the United States Court of Appeals for the Fourth Circuit be upheld.

Respectfully submitted,

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