UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Midcontinent Independent System Operator, Inc.	**)**	**Docket No. ER18-462-000**

PROTEST OF THE NRG COMPANIES AND THE DYNEGY COMPANIES

Pursuant to Rules 211 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (the "Commission"),[1] the NRG Companies[2] and the Dynegy Companies[3] respectfully submit this protest to the filing by the Midcontinent Independent System Operator, Inc. ("MISO") of its currently effective Resource Adequacy ("RA") construct ("MISO Filing") and ask the Commission to reject the filing.

I. INTRODUCTION

In June 2012, the Commission issued an order conditionally accepting MISO's proposed capacity market and directing MISO to implement a number of changes on compliance.[4] The results of that modified capacity market have been disastrous for merchant generators and consumers in MISO. As a result of that Order:

- Capacity market prices in MISO have toggled between near-zero and very high;[5]

[1] 18 C.F.R. § 385.211.

[2] For purposes of this filing, the NRG Companies are NRG Power Marketing LLC and GenOn Energy Management, LLC.

[3] For purposes of this filing, the Dynegy Companies are Dynegy Marketing and Trade, LLC and Illinois Power Marketing Company.

[4] *Midwest Indep. Transmission Sys. Operator, Inc.*, 139 FERC ¶ 61,199 (2012) (the "2012 Order"); *Reh'g Order*, 153 FERC ¶ 61,229 (2015) ("Reh'g Order").

[5] "2017/2018 Planning Resource Auction Results," Resource Adequacy Subcommittee https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/RASC/2017/20170510/20170510%20RASC%20Item%2002a%202017-18%20PRA%20Summary.pdf

https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/RASC/2016/20160504/20160504%20RASC%20Item%2003a%202016-17_PRA_Summary.pdf

- MISO has stated that it cannot ensure resource adequacy and called upon states to abandon the retail choice model in Illinois and Michigan;

- Orphaned capacity from MISO has streamed across the MISO-PJM border, which inevitably impacts capacity market prices in PJM; and

- Merchant generators in Illinois have given up on the wholesale market with one seeking a bailout from state regulators in lieu of a functioning capacity market and others imploring the state to create an Illinois-only competitive process as a proxy for such a market.

MISO itself has recognized the challenges of its capacity market since its implementation and even filed a fundamental revamp in 2016 in an effort to alleviate potential reliability shortfall issues.[6] Now in this docket, in light of a D.C. Circuit remand, MISO files to make permanent the same failed capacity market that has been in place over the last five years, without any changes to ensure that consumers receive the benefits of a functional competitive capacity market.[7]

Four aspects of MISO's proposal doom its capacity market to continue producing clearing prices near zero with potential price spikes along the way: (i) the lack of a Minimum Offer Price Rule ("MOPR"), which is necessary to ensure that excess capacity from vertically integrated regions of the MISO footprint does not eliminate any possibility that merchant generation can compete; (ii) the requirement that generators must sell capacity into the market without a corresponding requirement that buyers purchase capacity from the market; (iii) the use of a vertical, rather than downward sloping demand curve in the auction, which creates the toxic boom-bust pricing cycle that we have witnessed over the past few auctions; and (iv) a one year forward auction, rather than a multi-year forward auction.

By re-filing the constructed created by the 2012 Order, MISO is presumably trying to

[6] *Midcontinent Indep. System Operator, Inc.*, Docket No. ER17-284-000 at 2 (filed Nov. 1, 2016) ("FRA Filing").

[7] MISO Filing at 2; *Midwest Indep. Transmission Sys. Operator, Inc.*, Docket No. ER11-4081-000 (filed July 2011) ("MISO 2011 Filing").

rely on a six-year old finding by the Commission (which was on appeal) to satisfy its burden to demonstrate that its filing in *this* docket is just and reasonable, but MISO makes no showing that its proposal is just and reasonable. Market design does not happen in a vacuum; MISO must justify whether its current proposal is just and reasonable based on the facts *today*, not the Commission's decision of six years ago. Seemingly in an effort to establish the current filing as just and reasonable, MISO makes the blanket assertion that "MISO's experience operating under its existing [RA] construct for the past five Planning Years further supports that [the capacity market] and related provisions are just and reasonable," but in so doing MISO ignores the fact that during the past five years its markets have disintegrated.[8]

Further, the four capacity market design choices listed above – the presence or absence of a MOPR, the shape of the demand curve, whether the auction is mandatory for buyers and sellers and the forward delivery period – are absolutely critical to evaluating the justness and reasonableness of any capacity market. MISO does not even discuss three of these four critical items in its current filing. And while it discusses the opt-out mechanism for buyers, it does not even attempt to show that its approach of forcing generators to sell into a one-sided market is just and reasonable. As a result, the Commission should reject this filing.[9]

[8] MISO Filing at 6.

[9] If the Commission rejects MISO's current filing as unjustified, the proceeding on remand still exists. As discussed in Section III.C herein, the Commission could elect to accept the 2011 MISO Tariff Filing in ER11-4081-000 ("2011 MISO Filing"), which is still pending under the Commission's interpretation of *Mich. Gas Co. v. FERC*, 133 F.3d 34, 38 (D.C. Cir. 1998) and *Chesapeake & Ohio Ry. Co. v. United States*, 571 F.2d 1190, 1193 (D.C. Cir. 1977) as discussed in the *PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,252 at 40 (2017).

II. BACKGROUND

A. Procedural History

The Commission first conditionally approved MISO's proposed rules for implementing a resource adequacy construct in 2008.[10] When MISO established its RA rules it did "not propose to establish a centralized capacity market."[11] MISO ran a small, monthly capacity auction that was "voluntary for both buyers and sellers of capacity."[12] It expected load-serving entities to meet their RA obligations primarily through "ownership [of generation resources] or bilateral contracts for capacity" rather than through a central auction.[13] The clearing price in the monthly capacity auction "consistently remained close to zero, even in months with very little surplus capacity."[14]

In February 2009, the Commission directed MISO to develop a "more robust and permanent" solution to ensuring resource adequacy and encouraged MISO to look at other regions for guidance.[15] In response, in July 2011, MISO filed at the Commission to implement a new RA construct, including the establishment of a new, annual capacity auction.[16] As relevant to this Protest, in that filing, MISO proposed (i) a MOPR, which was intended to prevent buyers from exercising market power to artificially suppress prices in the annual auction; (ii) mandatory auction participation for most sellers but not for most buyers; (iii) a vertical, rather than sloped,

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[10] *See Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,283 ("March 2008 Order"), *reh'g granted in part and denied in part*, 125 FERC ¶ 61,061 (2008).

[11] March 2008 Order at P 365.

[12] *See Midwest Indep. Transmission Sys. Operator, Inc.*, 125 FERC ¶ 61,060 at P 18, 36 (2008).

[13] March 2008 Order at PP 376-77.

[14] Request for Reh'g of MISO's Indep. Mkt. Monitor, Docket No. ER11-4081-000 at 5.

[15] *See Midwest Indep. Transmission Sys. Operator, Inc.*, 126 FERC ¶ 61,144 at P 47 (2009).

[16] 2012 Order at P 6.

demand curve to set prices in the auction; and (iv) a one year forward auction, rather than a multi-year forward auction.[17]

In June 2012, the Commission issued an order conditionally accepting MISO's proposed capacity market filing and directed MISO to make a number of changes to that proposal on compliance. In regards to the four items discussed above, the Commission held as follows:

On the MOPR, the Commission ordered MISO not to adopt any mitigation measures.[18] The Commission found that it was unnecessary for MISO to make any effort to prevent buyers from suppressing capacity-auction prices by subsidizing new entry. Specifically, the Commission concluded that there was little "incentive to exercise buyer market power in MISO's capacity market" because "most [load-serving entities] in MISO [would] have little need to purchase capacity from MISO's capacity auction."[19]

As to the mandatory auction participation, the Commission similarly refused to adopt even the minor mandatory aspect of the auction for buyers that MISO proposed.[20] While MISO proposed making auction participation mandatory for all suppliers with more than 50 MW of capacity, it proposed that participation be mandatory only for those buyers that were "resource-deficient," *i.e.*, load-serving entities that failed to fulfill their capacity needs through self-supply or bilateral contracting.[21] For all other buyers, MISO proposed that they be allowed to "opt out" of any given auction, for all or part of their capacity needs, by submitting a "fixed resource adequacy plan" showing that they had satisfied the opted-out portion of their needs outside the

[17] *Id*.

[18] *Id.* at P 70.

[19] *Id.* at P 67.

[20] *Id.* at PP 36, 40-42, 260.

[21] *Id.* at PP 18-19.

auction.[22] While the Commission accepted MISO's proposal to make seller participation mandatory, it refused to adopt the limited corresponding requirement that MISO sought to impose on resource-deficient buyers.[23] The Commission found that MISO had "not justified the need for a mandatory auction."[24]

With respect to the slope of the demand curve, the Commission declined to order MISO to implement a sloped demand curve and allowed MISO to use the vertical demand curve, despite the fact that the Commission approved the use of downward sloping demand curves in other markets and previously recognized that sloped demand curves reduce price volatility and produce prices that more accurately reflect the real value of marginal capacity.[25] The Commission concluded that because "[load-serving entities] in MISO rely heavily on long-term power purchase agreements and owned resources for their capacity needs," a sloped demand curve was "not essential to ensure just and reasonable compensation" for independent generators."[26]

In regards to the tenor of the construct, MISO proposed to conduct an auction that would occur in March for a delivery year beginning in June 1.[27] While parties, including the NRG Companies and the Dynegy Companies, argued for a longer term multi-year auction structure, the Commission rejected these arguments and found that the one-year auction and two-month forward period were reasonable.[28]

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[22] *Id.*

[23] *Id.* at PP 36, 40-42, 260.

[24] *Id.* at P 40.

[25] *See PJM Interconnection LLC*, 119 FERC ¶ 61,318 at PP 76, 94, 99 (2007).

[26] *Id.* at P 158.

[27] 2012 Order at P 175.

[28] *Id.* at P 187.

After the Commission denied its rehearing request,[29] the NRG Companies appealed the decision to the D.C. Circuit arguing that the Commission acted arbitrarily, capriciously, or otherwise not in accordance with law by approving a structure for MISO's capacity market that would prevent independent generators from receiving just and reasonable rates, in particular by (i) rejecting MISO's proposed use of a MOPR; (ii) making participation in the auction mandatory for sellers of capacity but optional for buyers; and (iii) approving MISO's use of a vertical demand curve.[30]

While that case was pending at the D.C. Circuit, in July 2017, the D.C. Circuit ruled on another appeal of a Commission decision – *NRG Power Marketing, LLC v. FERC*.[31] In that case regarding PJM Interconnection, L.L.C.'s MOPR, the D.C. Circuit held that the Commission unilaterally imposed a new rate scheme under Section 205 of the Federal Power Act, which ran afoul of the Court's precedent in *City of Winnfield*[32] and *Western Resources.*[33]

Following that decision, in October 2017, the Commission requested, and the Court granted, remand of the D.C. Circuit case pending review of the 2012 Order regarding MISO's RA construct.

In response to that remand, MISO preemptively filed in this docket in an effort to "give certainty to all impacted parties regarding the rules governing participation in the upcoming

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[29] *Midwest Indep. Transmission Sys. Operator, Inc.*, Order on Reh'g, Docket No. EL11-4081-000, 153 FERC ¶ 61,229 (2015).

[30] *NRG Power Marketing, LLC v. FERC,* 862 F.3d 108 (D.C. Cir. 2017) ("*NRG PML*").

[31] *Id.*

[32] *City of Winnfield v. FERC*, 744 F.2d 871 (D.C. Cir. 1984) (finding that the Commission does not violate Section 205 when it suggests "a system of rates similar to that previously in effect, and the utility acquiesces.").

[33] *Western Resources, Inc. v. FERC*, 9 F.3d 1568 (D.C. Cir. 1993) (finding that the Commission may not go "beyond approval or rejection" of a proposal to "adoption of an entirely different rate design" than the proposal).

[capacity auction]."[34] In the MISO Filing, MISO submitted in its entirety, the currently effective Resource Adequacy construct of its Tariff. MISO attempts to support its filing by arguing that "[t]he Commission has previously found the MISO Resource Adequacy construct to be just and reasonable as revised over forty times since the original filing of Module E-1 [in the 2011 MISO Filing]."[35] However, MISO does not attempt to explain how the construct, lacking the elements of a functional capacity market as discussed herein, is just and reasonable.

B. Historical Review of MISO's Capacity Market

While the core tenets of the capacity market approved in the 2012 Order have been in place over the last 5 years, the capacity auctions have cleared at prices close to zero time and time again and in a few instances they have toggled from low to high. In that first auction (the 2013/14 Planning Resource Auction ("PRA")), the clearing price was $1.05/MW-day across all zones and in the most recent auction,[36] the 2017/18 PRA, the clearing price was $1.50/MW-day across all zones.[37] The 2014/15 auction saw $16/MW-day prices,[38] but the 2015/16 auction prices went back down to the $3.00/MW-day range across all zones, except for zone 4, which

[34] MISO Filing at 2.

[35] *Id.* at 4.

[36] "2013-2014 Plan Year Planning Resource Auction Results Update," Supply Adequacy Working Group. Available at: https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/SAWG/2013/20130502/20130502%20SAWG%20Item%2002%20PRA%20Update.pdf

[37] "2017/2018 Planning Resource Auction Results," Resource Adequacy Subcommittee. Available at: https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/RASC/2017/20170510/20170510%20RASC%20Item%2002a%202017-18%20PRA%20Summary.pdf

[38] "2014-2015 Planning Year Planning Resource Auction Results," Supply Adequacy Working Group. Available at: https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/SAWG/2014/20140501/20140501%20SAWG%20Item%2002%202014-2015%20PRA%20Summary.pdf

reached $150.00/MW-day.[39] The 2016/17 auction hit $72/MW-day in some zones, but the MISO South zones held at $2.99/MW-day.[40]

These prices are significantly lower than the clearing prices seen in the neighboring PJM region. Except for one auction, the last five PJM capacity auctions since the 2013/14 delivery year have cleared well above $100/MW-day, with the auction for the 2018/19 delivery year clearing at $164.77/MW-day as compared to MISO's $1.50/MW-day clearing price for the same delivery period.[41]

In addition to the abysmal clearing prices produced by the MISO capacity auction over the last few years, demand response year-over-year has accounted for a relatively small portion of supply (including both traditional demand response and demand response supported with back-up generation).[42] While MISO has implemented various changes to its tariff, operating agreement and business rules to foster better integration of demand response, demand response participation in the MISO wholesale markets continues to remain relatively flat.[43]

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[39] "2015/2016 Planning Resource Auction Results," Supply Adequacy Working Group. Available at: https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/SAWG/2015/20150430/20150430%20SAWG%20Item%2002%20ab%202015-16%20PRA%20Summary.pdf

[40] "2016/2017 Planning Resource Auction Results," Resource Adequacy Subcommittee. Available at: https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/RASC/2016/20160504/20160504%20RASC%20Item%2003a%202016-17_PRA_Summary.pdf

[41] *See* http://www.pjm.com/~/media/markets-ops/rpm/rpm-auction-info/2018-2019-base-residual-auction-report.ashx

[42] For example, MISO's 2016/2017 planning resource auction results reflect that demand response accounted for only 5,819 megawatts of capacity and 3,462 megawatts of behind-the-meter resources that are also used for demand response. *See* https://www.misoenergy.org/AboutUs/MediaCenter/PressReleases/Pages/MISOClearsFourthAnnualPlanningResourceAuction.aspx

[43] "*Does the Midwest Need Demand Response? Demand-side resources could help keep power prices low—if utilities allow it"* (April 18, 2016), available at

Further, MISO itself has recognized problems with its capacity market and in 2016 filed to create a new forward auction structure for the competitive retail zones in MISO. MISO argued in that filing that the new market design was necessary because the competitive retail areas in the MISO footprint "do not have a mechanism to address long-term resource adequacy."[44] In support of the filing, The Brattle Group concluded that "MISO's current capacity market design is unlikely to attract and retain sufficient merchant capacity to meet MISO's 1-in-10 reliability standard in the long-term."[45] MISO argued that survey results "show[ed] a strong potential for the 2018 reserve margin to fall well below MISO's current minimum reserve margin requirement. Failure to approve reforms that can be implemented in 2018 would imperil MISO's ability to avoid shedding firm load."[46] While in the FRA Filing MISO continuously argued that changes were necessary in response to a "significant risk of serious capacity shortfalls,"[47] MISO did not propose any further changes to its capacity market after the Commission rejected the proposal in a 2017 order.[48] Instead in this MISO Filing, MISO merely files the same capacity market that has been in place in MISO since 2012.

III. PROTEST

A. History has Shown that MISO's Capacity Market is not Just and Reasonable.

Five years of history shows that the MISO capacity market, as a whole, is not just and reasonable.

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https://www.greentechmedia.com/articles/read/does-the-midwest-need-demand-response#gs.rFjNuK8.

[44] *Midcontinent Indep. Sys. Operator, Inc.*, Docket No. ER17-284-000 at 2 (filed Nov. 1, 2016) ("FRA Filing").

[45] FRA Filing, Tab C at 4.

[46] *Id.* at 2.

[47] *Id.* at 2, 13-16.

[48] *Midcontinent Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,128 (2017).

First, the fundamental aspects of MISO's capacity market work together to create zero clearing prices with a few price spikes along the way. As discussed above, the most recent MISO capacity auction cleared at $1.50/MW-day across all zones.[49] Independent generators are entitled, as both a statutory and a constitutional matter, to just and reasonable compensation for their power. That means they must have a reasonable opportunity to recover their fixed costs and a fair rate of return on their investments.[50] Indeed, the Commission has acknowledged that "in a competitive market, [it] is responsible . . . for assuring that [generators are] provided the *opportunity* to recover [their] costs."[51]

Yet in the capacity market in place for the last five years and re-filed in this docket by MISO, MISO will deny independent generators in the MISO region a reasonable opportunity to recover their costs, much less a fair return on their investments. Each of the four tenets of the capacity market discussed herein is problematic on its own. Combined, they ensure that MISO's annual capacity auction, like its old monthly auctions, will produce "a long string of very low or zero auction prices, and no meaningful signals to the market."[52] Those results violate the Federal Power Act, as they deny independent generators like the NRG Companies and the Dynegy

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[49] *See supra* n.37.

[50] *See* 16 U.S.C. § 824d(a); *FPC v. Hope Nat. Gas Co.*, 320 U.S. 591, 603 (1944); *Bluefield Waterworks & Improvement Co. v. Pub. Serv. Comm'n of W. Va.*, 262 U.S. 679, 692–93 (1923).

[51] *Bridgeport Energy, LLC*, 113 FERC ¶ 61,311 at P 29 (2005); *see also, e.g.*, *Price Formation in Energy and Ancillary Servs. Mkts. Operated by Reg'l Transmission Orgs. & Indep. Sys. Operators*, 153 FERC ¶ 61,221 at P 2 (2015) (the "goals of proper price formation" include "ensur[ing] that all suppliers have an opportunity to recover their costs"); *Midwest Indep. Transmission Sys. Operator, Inc.*, 102 FERC ¶ 61,196 at P 49 (2003) ("[W]e believe that competitive prices over the long run should recover both the fixed and variable costs of efficient generating units[,] and we fear investors may decline to invest in needed generation . . . if they do not see a reasonable expectation of recovering their costs.").

[52] *Midwest Indep. Transmission Sys. Op., Inc.*, "Capacity Suppliers' Motion to Intervene and Protest," Aff. of Roy J. Shanker Ph.D. on Behalf of Capacity Suppliers at 5, Docket No. ER11-4081-000 (filed Sept. 15, 2011).

Companies any reasonable opportunity for cost recovery and thus deprive them of the just and reasonable rates required by section 205(a) of the Federal Power Act. A capacity auction that consistently clears at or near zero is also unduly discriminatory, in violation of section 205(b), because it denies just and reasonable rates only to independent generators and not to similarly situated generators that happen to be owned by vertically integrated utilities. The latter are guaranteed full cost recovery by their state regulators, so—unlike independent generators—they are not dependent on a fundamentally broken capacity auction.

Second, separate from the legal concerns with MISO's capacity market, there are practical ramifications as well. Entities trapped in the failing MISO capacity market are fleeing the market, and seeking to sink capacity into PJM. The greatest evidence of this dysfunction is that capacity in the MISO footprint is clearing at a tiny fraction of capacity next door in the PJM region. For the 2013/14 delivery year, capacity in MISO cleared at $1.05/MW-day, while capacity immediately across the border in PJM cleared at $27.73/MW-day (the RTO price).[53] Except for one auction, the five PJM capacity auctions subsequent to the auction for the 2013/14 delivery year have cleared well above $100/MW-day, with the auction for the 2017/18 delivery year clearing at $120.00/MW-day as compared to MISO's $1.50/MW-day clearing price for the same delivery period.[54] The supply and demand conditions between the two markets are not markedly different; rather the market design accounts for this 100-plus-fold difference in price. This vast difference in pricing of the same commodity product is resulting in a "flight to quality" where market participants in MISO are voting with their feet and moving capacity into the PJM market.

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[53] *See supra* n. 36; *see also* https://www.pjm.com/~/media/markets-ops/rpm/rpm-auction-info/2013-2014-base-residual-auction-report.ashx

[54] *See supra* n. 36; *see also* http://www.pjm.com/~/media/markets-ops/rpm/rpm-auction-info/2018-2019-base-residual-auction-report.ashx

Third, MISO itself has filed pleadings both before the Commission and the United States District Court for the Northern District of Illinois in the litigation over the Zero Emissions Credits adopted by the State of Illinois, recognizing that its capacity market is failing to perform the fundamental function of a resource adequacy construct – that is to ensure the availability of an adequate supply of generation to support safe and reliable operation of the power grid.[55] One example is in the FRA Filing in 2016, MISO argued that the revised capacity market was needed to ensure that sufficient capacity was retained in MISO. MISO explained that the competitive retail zones "do not have a mechanism to address long-term resource adequacy"[56] and MISO expressed concerns about "significant risk of serious capacity shortfalls."[57] As another example, MISO filed in support of the Illinois zero emission credit program in an amicus brief before the United States District Court for the Northern District of Illinois stating that "[m]aintaining supply resources that may have otherwise retired absent a state policy initiative benefits not just local resource adequacy needs, but also support regional reliability across all member state."[58] In that filing, MISO touted that '[t]he ZEC program creates the opportunity for approximately 1,100 megawatts (MW) of generation supply that can be used as a capacity resource in MISO's footprint."[59] Rather than out of market programs working to ensure resource adequacy, MISO's market should be structured in a way to retain generation needed for reliability. MISO's current

[55] *See Sacramento Mun. Util. Dist. v. FERC*, 616 F.3d 520, 526 (D.C. Cir. 2010) (defining resource adequacy).

[56] FRA Filing at 2.

[57] *Id.* at 2, 13-16.

[58] Brief for the Midcontinent Independent System Operator, Inc. as Amicus Curiae in support of Defs.' Mot. Dismiss, p. 9, *Village of Old Mill Creek, et al. v. Star, et al.*, 2017WL 3008289 (Decided July 14, 2017), *appeal docketed* No. 17-2433 (7th Cir. July 17, 2017).

[59] *Id.* at p. 7.

capacity construct re-filed in this docket simply does not fulfil the fundamental goal of a resource adequacy program and should be rejected.

B. MISO Failed to Show That the Core Tenets of its Capacity Market are Just and Reasonable and in Fact They are Not Justified.

The bedrock elements of MISO's capacity market – the ability to mitigate buyers' ability to suppress price, the voluntary nature of participation for buyers, the slope of the demand curve and the duration of the forward auction – are all fundamentally flawed and unsound. The substantial record in the ER11-4081-000 docket initiated by the 2011 MISO Filing shows the substantial flaws in these aspects of the capacity market. Yet in this refiling of its capacity market, MISO does not attempt to justify these components as just and reasonable, but merely argues that the Commission should endorse the existing tariff as a whole. In fact, the MISO Filing does not even discuss these elements of the capacity market, except for the mechanics of the opt-out mechanism for buyers. In the MISO Filing, MISO touts that the Commission has found its capacity market to be just and reasonable over 40 times since the 2011 MISO Filing and includes a list of those dockets.[60] However, most of those dockets touch upon discrete, and often minor, aspects of the capacity market and the fact remains that MISO has failed to show that the core aspects of its capacity market are just and reasonable.

1. The Lack of a Mitigation Mechanism is Not Just and Reasonable.

The Commission has recognized that mitigation of buyer-side market power is critical to developing a successful capacity market. In fact, buyer-side mitigation rules are a cornerstone of the capacity markets in ISO New England, NYISO, and PJM. Without such a rule, it becomes virtually impossible to ensure both an appropriate reserve margin and just and reasonable rates for merchant generators. There is no question that merchant investment in MISO is critical to

[60] MISO Filing at 4.

meeting the region's resource needs. Yet as experience has shown, merchant investment in market areas is difficult to justify if an integrated utility can simply build a far more expensive resource next door, transfer all the risk of that new facility on ratepayers, and eliminate the value of the merchant generator's investment. As the Commission has repeatedly found in the eastern markets, this scenario stifles investment and results in rates that are unjust and unreasonable.

The Commission explained the problem with net-buyers artificially decreasing capacity prices succinctly in its order directing ISO New England to put into place a minimum offer price for new resources:[61]

> Entities with buyer-side market power can artificially lower the capacity price, sometimes substantially, by subsidizing new investment that is then offered into the market at prices below its full entry costs. The result is that new resources enter the market even though the market clearing price is lower than their true cost of entry. The cost of the subsidized new resource is higher than the market price, which on first impression would seem to be financially harmful to buyers. But buyers as a whole may benefit from the subsidized resource because the lower market price may reduce the total bill for acquiring existing capacity, and this bill reduction may outweigh the net cost of the new resource.

The proper response, the Commission determined, was for ISO New England to adopt a minimum offer floor for new entrants seeking to participate in New England's Forward Capacity Market ("FCM"):[62]

> We find that applying offer-floor mitigation to the ISO-NE capacity market with values based on the proposed benchmarks from the July 1 Proposal would render the FCM just and reasonable. First, if the offer floor is set at a level that approximates the net cost of entry of a new resource, offer-floor mitigation would deter the exercise of buyer-side market power and the resulting suppression of capacity market prices associated with uneconomic entry. By preventing new resources from

[61] *ISO New England, Inc. and New England Power Pool Participants Committee*, 135 FERC ¶ 61,029 at P 158 (2011).

[62] *Id.* at P 166.

> offering at prices that are significantly below their true net cost of entry, new resources would not be able to lower the price of capacity significantly below competitive levels. As a result, there would be no financial reward for subsidizing new resources for the purpose of exercising buyer-side market power.

The same is true with respect to PJM where the Commission concluded that:[63]

> [P]ermitting new self supply investment to compete as a price-taker in RPM impermissibly shifts the investment costs of self-supply to competitive supply by suppressing market clearing prices, and will create an environment in which only such self supply investment will occur. Failure to subject new self-supply to the MOPR, that is, permitting new self-supply to participate in RPM as a price-taker, would significantly impede competition from all types of private investment and shift long-term investment risk from private investors to captive customers.

Notwithstanding the clear Commission directives and the proposal by MISO to include a MOPR in the 2011 MISO Filing, in the 2012 Order the Commission approved a MISO market design that does not incorporate any type of buyer-side mitigation rules, even for net buyers of capacity, who the Commission clearly recognized have an economic incentive to keep prices low. And MISO has simply re-filed that market design in this docket without justification.

The rationale set forth in the 2012 Order for rejecting the MOPR provisions does not support a conclusion that the lack of a MOPR is just and reasonable. The Commission rejected MISO's conclusion that buyer-side mitigation was appropriate simply because it believed such mitigation was unlikely to be needed. The Commission concluded that MISO's proposed MOPR was not "needed at this time" because the exercise of buyer-side market power was "unlikely" to be profitable in the MISO region.[64] By their nature, prophylactic measures are often put in place

[63] *PJM Interconnection LLC*, 135 FERC ¶61,022 at P 195 (2011).

[64] 2012 Order at P 106 (finding "that a MOPR is unnecessary"); *id.* at P 117 (finding that objecting parties had "not demonstrated that a MOPR is needed"); *id.* at P 118 ("[W]e find that it has not been demonstrated that a MOPR is needed in MISO.").

to deal with circumstances, like the exercise of buyer-side market power, that may be thought unlikely but that would have serious consequences if they came to pass.

The Commission's attempt in the 2012 Order to distinguish the MISO market from other regional energy markets that have adopted buyer-side mitigation measures on the basis of supposed regional differences also falls flat. The Commission stated that MISO is "largely [composed] of traditional obligation-to-serve utilities without restructured retail markets."[65] But the Commission has approved buyer-side market-power mitigation like that proposed by MISO for the PJM Interconnection market, which includes a number of states that have not restructured their retail markets.[66]

The lack of a MOPR in the pending filing is not just and reasonable, and the MISO Filing should be rejected.

2. The Voluntary Nature of the Auction for Buyers is Not Just and Reasonable.

The capacity market approved by the Commission in the 2012 Order and re-filed in the MISO Filing in this docket perpetuates a fundamental imbalance between buyers and sellers in the MISO market, by making the annual auction mandatory for sellers with over 50 MW of capacity, but optional for buyers. While the MISO Filing describes the opt-out mechanism for buyers, it fails to provide any reasons as to why such an opt out is just and reasonable.[67]

The unbalanced nature of the requirements is one aspect of the capacity market that contributes to capacity prices continuing to clear close to zero because it allows load serving

[65] 2012 Order at P 111.

[66] *See NRG Energy, Inc.*, 141 FERC ¶ 61,207 at P 65 n.115 (2012) ("[W]hile some states within PJM have implemented retail choice, Indiana, Kentucky, North Carolina, Tennessee, Virginia, and West Virginia have not.").

[67] See MISO Filing at 12, Harmon Testimony at 15.

entities to toggle between the lower of market and new entry pricing. When incremental capacity prices are low, load serving entities will participate and enjoy non-compensatory pricing from merchant generators forced to offer into the market at their variable (and mitigated) going-forward costs. When prices increase towards equilibrium levels, those same load serving entities will then leave the now voluntary market and self-build new resources. Because only the buyer side of the capacity market is voluntary, buyers can toggle back and forth but sellers of capacity owning more than 50 MW are required to offer into the market at a mitigated price that represents their going-forward costs.[68] This disjointed market design puts sellers in the unenviable position of having to sell their product, at cost, to a purchaser that has no incentive or requirement to buy. Text book economics dictates that such disparate bargaining power ensures that capacity prices will clear close to zero and denies sellers any hope of earning a just and reasonable return on their investments.

In the 2012 Order, the Commission perpetuated this lopsided construct after assuming that just and reasonable auction prices are not necessary to ensure that independent generators "remain viable" because, according to the Commission, those generators can always "sell [their] capacity as part of long-term bilateral contracts."[69] There is no basis for the Commission's apparent assumption that bilateral contracts at compensatory prices are available for the taking whenever an independent generator is not recovering its costs in the organized auction markets. To the contrary, it is precisely when an independent generator would most want such a bilateral contract—when auction prices are expected to be low—that buyers will be least likely to agree to one. A load-serving entity will have little or no incentive to enter into a bilateral contract at a

[68] 2012 Order at P 260.

[69] Reh'g Order at P 110; *see also* 2012 Order at P 46(concluding that "just and reasonable rates" would be assured by factors other than the structure of the auction, including "the terms of bilateral arrangements").

just and reasonable rate when auction prices are expected to be low and the load-serving entity knows that the generator will be required to offer its capacity into the auction. Consequently, the option to enter into bilateral contracts does nothing to relieve the Commission of its statutory duty to ensure that the auction produces just and reasonable rates.

3. A Vertical Demand Curve is not Just and Reasonable.

The current MISO Tariff includes a vertical demand curve, as opposed to a downward-sloping demand curve, and the MISO Filing does not even mention the slope of the demand curve, let alone begin to explain how the use of a vertical demand curve is just and reasonable. The Commission itself has recognized the importance of a sloped demand curve:[70]

> The sloping demand curve is designed to replicate a true market in which incremental amounts of capacity will have gradually declining, but positive, reliability benefits. The current vertical demand curve fails to reflect the value of incremental reliability. Moreover, the vertical demand curve results in extremely volatile pricing, because as long as supply exceeds the required amount, the price falls precipitously, while, when capacity is short, price will rise to the deficiency penalty level. Finally, the sloping demand curve reflects a reasonable trade-off between capacity and energy prices.

Despite its past precedent recognizing that sloped demand curves have clear advantages over vertical demand curves, including producing more accurate and less volatile price signals, in the 2012 Order the Commission accepted MISO's proposed vertical demand curve finding that it was "consistent with tariff provisions previously approved by the Commission" – notably ISO New England's demand curve, which at one time was vertical.[71]

The Commission has repeatedly recognized that a sloped demand curve "rests on a more rational economic basis than [a vertical] demand curve, as it more realistically reflects the

[70] *PJM Interconnection, L.L.C.*, 119 FERC ¶ 61,318 at P 99 (2007).

[71] 2012 Order at P 245.

economic value of capacity reserves."[72] "Under a vertical demand curve, capacity above the [minimum requirement] is deemed to have no value."[73] That is wrong, because additional capacity above that level "is likely to provide additional reliability benefits, albeit at a declining level. This value is reflected in the positive (but declining) prices in the sloped demand curve . . . but is not reflected in" prices set using a vertical demand curve.[74] Because a sloped demand curve "reflects the decreasing but still positive value of additional reserves (while [a] vertical demand curve does not)," it "is a substantial improvement over" a vertical curve.[75] The Commission has thus explained that "a downward-sloping demand curve provides a better indication of the incremental value of capacity at different capacity levels than [a] vertical demand curve."[76] In other words, a "sloping demand curve is designed to replicate a true market," whereas a "vertical demand curve fails to reflect the value of incremental reliability."[77]

Relatedly, the Commission has recognized that because a vertical demand curve incorrectly treats any capacity above the minimum amount required as worthless, it "results in extremely volatile pricing."[78] It causes capacity prices to "fluctuate widely,"[79] when the supply of capacity "varies only slightly between a slight deficit . . . and a slight surplus."[80] As

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[72] *N.Y. Indep. Sys. Operator, Inc.*, 103 FERC ¶ 61,201 at P 35 (2003) ("*NYISO I*").

[73] *PJM I* at P 76.

[74] *Id.; see also PJM II* at P 106 ("[T]he value of capacity does not plummet to zero simply when supply equals the [minimum requirement]. Capacity above [that level] still has value because it makes the system even more reliable . . . .").

[75] *NYISO I* at PP 35–36.

[76] *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 at P 76 (2006) ("*PJM I*"); *accord PJM Interconnection, L.L.C.*, 119 FERC ¶ 61,318 at P 94 (2007) ("*PJM II*").

[77] *PJM II* at P 99; *see also NYISO II* at P 35 (sloped demand curve "sends the right incentives to providers of " capacity).

[78] *PJM II* at P 99.

[79] *N.Y. Indep. Sys. Operator, Inc.*, 105 FERC ¶ 61,108 at P 28 (2003) ("*NYISO II*").

[80] *PJM I* at P 75.

discussed herein, the five years of history shows that while MISO clearing prices have approached zero, and have been consistently in the $1.00/MW-day and $3.00/MW-day range, there were spikes where prices hit $72/MW-day and in one instance $150/MW-day.[81] "Even if the market does not clear at zero," the Commission has explained, "the extreme volatility [caused by a vertical demand curve] does not provide the right incentives."[82] A sloped demand curve, on the other hand, "result[s] in less volatility" because "as supply varies over time, capacity prices under a sloping demand curve . . . change gradually, in contrast to the drastically changing prices that buyers must pay for varying amounts of capacity under" a vertical demand curve.[83]

The Commission has determined that the more accurate and stable prices produced by a sloped demand curve benefit both investors and consumers. It has explained that a "sloped demand curve will provide more stable and predictable capacity revenues to generators over time, which will encourage more capacity to be built at more favorable terms than under the vertical demand curve."[84] That, in turn, "will result in a more reliable system and at a lower customer cost than the vertical demand curve."[85]

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[81] *See supra* II.B.

[82] *NYISO I* at P 31.

[83] *PJM II* at P 102; *see also ISO New Eng. Inc.*, 146 FERC ¶ 61,038 at P 30 & n.41 (2014) ("*ISO New Eng. I*") (finding that sloped demand curve would "reduce price volatility and improve market efficiency"); *ISO New Eng. Inc.*, 147 FERC ¶ 61,173 at P 29 (2014) ("*ISO New Eng. II*") (finding sloped demand curve to be "an important improvement" that "will address some of the challenges presented by the use of a vertical demand curve," including "price volatility").

[84] *PJM I* at P 78.

[85] *Id.*; *see also id.* at P 75 ("The lower price volatility under the sloped demand curve would render capacity investments less risky, thereby encouraging greater investment and at a lower financing cost."); *NYISO I* at P 31 (a sloped demand curve "will help stabilize . . . prices and send better price signals to encourage the construction of generation before a shortage occurs," which will reduce the costs paid by customers and "help prevent future shortages").

Indeed, the Commission has felt so strongly about these clear benefits that it ordered ISO New England to speed up its planned switch from a vertical to a sloped demand curve.[86] The Commission's understanding of the advantages of a sloped demand curve was confirmed when in December 2015, just a month after denying rehearing in this case, it concluded that ISO New England's continued use of vertical demand curves within sub-regional zones violated the Federal Power Act.[87] It explained that "[w]hen vertical demand curves are used, even small increases or decreases in supply can result in large changes in price," whereas a sloped demand curve would "ensure that the market produces accurate price signals."[88] In light of "the general benefits of implementing zonal sloped demand curves,"[89] the Commission held that ISO New England's delay in doing so rendered its tariff unjust and unreasonable.[90] It thus ordered ISO New England to revise its tariff to provide for zonal sloped demand curves.[91]

In the FRA Filing, MISO itself also recognized the advantages of a downward sloping demand curve when it proposed the use of a downward sloping demand curve for its proposed FRA.[92] In that filing MISO concluded that "[t]he CRS [Competitive Retail Solution] design, i.e., a three-year forward market with a downward sloped demand curve, is one that has been recognized and accepted by the Commission as just and reasonable to meet the needs of customers and is already being implemented in other eastern RTO capacity markets."[93] Further,

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[86] *See ISO New Eng. I* at P 30.

[87] *ISO New Eng.*, 153 FERC ¶ 61,338 at P 15 (2015).

[88] *Id.* at P 12.

[89] *Id.* at P 14.

[90] *Id.* at P 15

[91] *Id.* at P 16.

[92] FRA Filing at 36-39.

[93] *Id.* at 49.

MISO argued that, "MISO's proposed downward-sloping curve has much better pricing characteristics. It is tuned to achieve reliability and self-sufficiency on behalf of competitive retail customers, with higher prices when supply is tight and lower prices otherwise. Price volatility would be slightly lower."[94] Nonetheless, in the present filing, MISO has proposed the vertical demand curve, without explanation.

4. The Single Year Auction Conducted on a Two Month Forward Basis is Not Just and Reasonable.

MISO's current capacity market is not sufficient to ensure reliability over the long-term, because the price signal provided by this short-term commitment may not be sufficient for generation developers to engage in the planning, financing and construction of needed generation. Under the current single year auction construct, the auction for the following planning year occurs a mere two months before the start of that delivery year. In order to ensure long-term resource adequacy, successful capacity markets must identify binding constraints more than a year ahead of time. The only way to achieve the goal of the initial 2011 MISO Filing "to encourage the development of Planning Resources in the locations where they are most needed" is to adopt an approach that projects capacity needs into the future.[95] Identifying binding constraints more than two months ahead of time is critical to complying with the Commission's directive to focus on planning to relieve constraints and resolve deliverability issues through a locational capacity requirement.[96]

There are several compelling justifications for a longer term auction structure. *First*, a longer-term commitment appropriately reflects the required lead time for building new

[94] FRA Filing at 38.

[95] 2011 MISO Filing at 7.

[96] *Midwest Indep. Transmission Sys, Operator, Inc.*, 126 FERC ¶ 61,144 at P 47 (2009).

generation, retrofitting existing generation to meet environmental regulations, developing non-generation solutions, or repowering an existing facility typically takes between three and five years. In the NRG Companies' experience, permitting and constructing a new combined cycle natural gas facility, a large solar farm, or installing back-end controls on large coal-fired power plant takes anywhere between two and five years, even under ideal circumstances. It is virtually impossible to accomplish any of these goals in the mere months allowed under the MISO capacity market.

Second, the two markets that have shorter-term resource adequacy constructs – New York and California – are very different markets from MISO. Both are single-state RTOs, and in California, new capacity procurement is largely driven by long-term contracts mandated by the California Public Utilities Commission. In New York, the short-term nature of the market has proved difficult to administer and has led to the wholesale introduction of state-sponsored new capacity builds, and a profound lack of merchant investment. While longer-term market constructs are not immune from market manipulation, they do provide merchant developers at least a chance to participate on a forward-looking basis. There is no question that generation investments are long-term investments and uniquely ill-suited to a one year development cycle. Simply put, without a longer term commitment, MISO's capacity market does not attract new entry and the expansion of existing generation plant where it is needed most.

In the 2012 Order, the Commission rejected the concerns of the NRG Companies and the Dynegy Companies that the proposed annual auction term would harm long-term reliability.[97] Since that time, MISO itself has filed at the Commission expressing its concerns about potential

[97] 2012 Order at 187.

shortfalls in MISO and proposed a three year forward construct for its competitive retail zones.[98] In describing the forward construct in the FRA Filing, MISO explained that "[t]hree-year-out forward procurement of capacity will promote long-term resource adequacy for competitive retail demand and improve market transparency through forward price signals that existing capacity resources and potential new generation and demand resources will rely upon when making investment decisions."[99] As noted, when the Commission rejected MISO's FRA filing, MISO made no filings at FERC to try to alleviate the concerns about potential capacity shortfalls. The instant MISO Filing to include a one year forward market construct without justification should be rejected.

C. The Commission Should Reject the MISO Filing and Issue an Order on the Construct Proposed Under the 2011 MISO Filing on Remand.

Because MISO has failed to show that the fundamental aspects of its capacity market are just and reasonable, the MISO Filing should be rejected. If the Commission rejects the MISO Filing as unjustified, the proceeding on remand in Docket No. ER11-4081-000 still exists. The Commission could find that the 2011 MISO Filing in Docket No. ER11-4081-000 is pending before the Commission. Such decision would be consistent with the Commission's recent order in the remand of the *NRG PML* decision.[101] In reviewing the pending 2011 MISO Filing, the Commission could elect to accept the filing. While the NRG Companies and the Dynegy Companies recognize that the 2011 MISO Filing only proposed changes to two of the four capacity market tenets discussed herein (*i.e.*, the implementation of a MOPR and a requirement

[98] MISO FRA Filing.

[99] *Id.* at 5.

[101] *PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,252 at P 40 (2017) ("We therefore disagree with PSEG Companies and NRG and find that the December 2012 filing is currently pending before the Commission.") (finding that under *Mich. Gas Co. v. FERC*, 133 F.3d 34, 38 (D.C. Cir. 1998) and *Chesapeake & Ohio Ry. Co. v. United States*, 571 F.2d 1190, 1193 (D.C. Cir. 1977) PJM's initial tariff filing that initiated the matter was still pending at the Commission).

for "resource-deficient" buyers to participant in the auction), as an interim solution such a change is a step in the right direction in establishing a just and reasonable capacity market in MISO.

D. The Commission Does Not Need to Rerun Prior Auctions and Can Waive Non-Compliance Over the Past Five Years.

If the Commission orders that consistent with prior precedent, in light of the D.C. Circuit mandate, the 2011 MISO Filing is in effect going forward, that does not mean any prior auctions—conducted under the invalidated tariff—must be redone. "FERC's discretion is 'at [its] zenith' " when it comes to "the fashioning of remedies."[102]

Here, that discretion strongly favors prospective application of the tariff, and weighs heavily against invalidating prior auctions. Where a tariff in a compliance filing is later overturned on appeal, the Commission's general policy is to remedy the "rate design *prospectively*."[103] The rationale for that policy applies with special force in cases like this one. MISO tariffs affect all market participants in MISO auctions. The Commission ordinarily seeks to avoid requiring market participants which did not themselves violate the Federal Power Act to provide refunds.[104] Here, invalidating auctions that took place long ago, and applying the 2011 MISO Tariff Filing to redo those past auctions, would put the Commission in the position of requiring parties who relied on the prior auctions, and violated no rules, to pay money to other participants.

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[102] *Laclede Gas Co. v. FERC*, 997 F.2d 936, 944 (D.C. Cir. 1993) (alteration in original); *cf. United Gas Imp. Co. v. Callery Prop., Inc.*, 382 U.S. 223, 228-29 (1965).

[103] *Ala. Power Co.*, 23 FERC ¶61,392, 61,833 (1983) (emphasis added).

[104] *Cf. San Diego Gas & Elec.*, 141 FERC ¶61,088, P 25 (2012) (declining to impose a market-wide remedy under § 206).

Such a remedy, moreover, could undermine confidence in auction results.[105] Maintaining market confidence is particularly important here. The whole point of MISO's capacity auctions is "to ensure an adequate long-term supply of electricity" by encouraging generators to *build or retire* plants in response to price signals.[106] If auctions must be rerun years later, however, a generator that has cleared an auction might hesitate to invest hundreds of millions of dollars to build a new plant needed by the market for fear the auction will be conducted anew; or it might include an enormous risk premium in its bids to address that risk. The Commission thus has ample reason to use its discretion to fashion a prospective remedy to "protect the availability" of capacity; preserve "system reliability"; and "promot[e] the orderly development of plentiful supplies of electricity."[107] If the Commission orders that the 2011 MISO Filing is in effect going forward, the Commission should waive refunds and any non-compliance over the last five years.

IV. CONCLUSION

For the aforementioned reasons, the NRG Companies and the Dynegy Companies respectfully request that the Commission reject the MISO Filing and issue an order on the 2011 MISO Filing on an interim basis until MISO files a just and reasonable capacity market.

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[105] *Cf. Alt. Power Source, Inc. v. ISO New Eng., Inc.*, 97 FERC ¶61,153, 61,671 (2001).

[106] *NRG PML*, 862 F.3d at 111; *see Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1293 (2016).

[107] *Consol. Edison Co. v. FERC*, 510 F.3d 333, 342 (D.C. Cir. 2007).

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Certificate Of Service

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

Dated at Princeton, New Jersey this 12th day of January, 2018.

/s/ *Maria DeLuca*