UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Midcontinent Independent System Operator, Inc.	**)**	**Docket No. ER17-284-000**

PROTEST OF THE NRG 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] respectfully submit this protest to filing by the Midcontinent Independent System Operator, Inc. ("MISO") of its so-called Competitive Choice Resource Adequacy Proposal ("MISO Proposal").

I. INTRODUCTION

The forward capacity market design proposed by MISO is highly unlikely to achieve its main goal of ensuring long-term resource adequacy in the retail choice areas of Illinois and Michigan. Indeed, as explained in the attached affidavit from economist Marc Montalvo, the MISO Proposal is so problematic that MISO's existing resource adequacy rules, as flawed as they are, are preferable to implementing the MISO Proposal.

The MISO Proposal has four major flaws. *First*, Mr. Montalvo explains that the Commission has had a decade of experimentation to determine what works – and what doesn't work – in capacity markets. As Mr. Montalvo notes, the MISO proposal is missing basic elements that are necessary elements of a functional capacity market, including buyer-side market power protections, the requirement that load either fully participate in the auction or completely self-supply for a period of years, as well as allowing ratepayer-backed generation to

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[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.

participate without mitigation. As a result of these flaws, the MISO market design has no reasonable expectation of being able to attract new generation capacity when needed in order to reliably serve retail choice customers. Notably, the Commission's acceptance of MISO's current capacity market design, which does not include many of these protective elements, was premised on MISO's largely vertically integrated structure. However, MISO's Proposal here pertains solely to the retail choice areas of MISO, and must be evaluated against the criteria of a fully competitive market.

Second, the MISO Proposal is fatally unclear as to how MISO will calculate the sub-regional constraint. The calculation and application of the constraints will dictate whether resources physically located outside the retail zones can meaningfully participate in the Forward Resource Auction ("FRA"). Left unclear are substantial questions like (i) if a non-retail zone clears MWs in the Planning Resource Auction ("PRA") to cover the sub-regional constraint, is there any available transfer capability across that constraint for the FRA, or because MWs cleared over the constraint in the PRA is there zero transfer capability available for the PRA; (ii) are resources required to clear in the PRA in order to participate in the FRA; and (iii) how will MISO clear the resources in the non-retail zones bidding in the FRA (i.e., what are the tie-breaking mechanics). The lack of Tariff provisions and guidance on this crucial issue – whether and how resources located outside of the competitive retail zones can compete in the FRA - at a minimum, requires a deficiency letter to allow MISO to clarify the process.

The *third* major flaw is that MISO seeks to overlay its three-year forward FRA auction on top of results that occur in the prompt-year PRA auction. This application will create artificial barriers to entry for the FRA. As Mr. Montalvo testifies, the impact of clearing the forward auction *after* the prompt auction results in increased competition from external resources

in the PRA and effectively restricts competition in the FRA.[3] This strange framework means that prices in the FRA are likely to be higher than competitive outcomes would warrant, and prices in the PRA would decrease below their already suppressed levels.

Fourth, the NRG Companies have firm transmission over this tie and merchant generating assets in the South that would like to compete to provide extremely competitively priced capacity into the FRA. Despite our firm transmission across the interface, the MISO rules effectively prohibit the NRG Companies from competing to serve Zone 4. (Ironically, had Entergy never joined MISO, NRG would have been able to utilize its firm transmission to sell its capacity in the MISO FRA more easily.)

For these reasons, the NRG Companies respectfully request that the Commission reject the MISO Proposal as unjust and unreasonable. At a minimum, the NRG Companies request that the Commission issue a deficiency notice and require MISO to explain (and include controlling tariff language) how external resources can compete to supply capacity in the retail choice states and cross the North-South constraint.

II. BACKGROUND

In October 2015, MISO released an Issue Statement on "Resource Adequacy in Restructured Competitive Retail Markets" which determined MISO's current PRA may lack efficiencies and inability to produce price signals needed to incentivize investment in new resources for long term resource planning in competitive retail areas of MISO. MISO's Proposal in this docket is intended to address the potential reliability shortfall in its competitive retail areas. MISO is comprised of states that are traditionally regulated with jurisdiction over vertically integrated electric utilities that have an obligation to ensure resource adequacy, but

[3] Montalvo Affidavit at 27-29.

Illinois and Michigan are competitive retail states and portions of those states are included in the MISO footprint. The Proposal set forth in this docket addresses the lack of a means of assuring resource adequacy in those competitive retail areas.

The traditionally regulated utilities in MISO do not rely on economic signals in the wholesale market for investment in new planning resources and generation development needed to meet planning requirements and retail load obligations. The PRA, MISO's current capacity market construct, is designed to deliver price signals in the short term that reflect the traditionally regulated utilities excess supply. For this reason, MISO found that the PRA "may suffer from both the potential for substantial year-to-year volatility and the inability to efficiently recognize the marginal reliability value of incremental capacity resources."[4]

In its November 1, 2016 Proposal, MISO developed a back-stop mechanism, known as the "Competitive Retail Solution" ("CRS") designed to meet the long-term planning needs of the portions of Illinois and Michigan located in MISO (Zones 4 and 7, respectively). Under the Proposal, MISO creates a three-year forward market construct that includes a downward sloping demand curve in the retail choice regions of MISO and continues to utilize a prompt year auction for the remainder of the MISO footprint.

As part of the Proposal, MISO asserts that resources external to MISO can participate in the PRA, but the filing offers little information on the mechanics surrounding how much of an opportunity generators located within MISO, but outside the retail zones, will have to meaningfully participate in the FRA. The MISO Tariff states that the sub-regional import and

[4] *See Issues Statement - Resource Adequacy in Restructured Competitive Retail Markets*, Midcontinent Independent System Operator, Inc., at p.2, October 27, 2015.

export constraints between MISO zones will be modeled based on the most recent PRA results and FRA offers.[5] On this point, Mr. Bladen's testimony offers the following:[6]

> Further, non-retail choice demand and associated cleared capacity that occurred in the most recent PRA will be modeled in the SFT to reflect the remainder of the system that is not participating in the FRA. By formulating the SFT in this fashion, MISO can iterate between the FRA clearing process and the SFT to determine which capacity can clear to meet Competitive Retail Demand's capacity needs while ensuring that the solution is feasible when taking into account the flows of non-Competitive Retail Demand and supply.

As background on the sub-regional constraint, since Entergy's integration to MISO in December 2013, the North/South sub-regional transmission constraint has led to much litigation and has prevented MISO from acting as one cohesive RTO. There is a constant North/South split and MISO's Proposal highlights the challenges created by MISO continually functioning as two separate systems. MISO initially proposed to connect approximately 50,000 MW of generation and 30,000 MW of load in MISO South to the rest of MISO via a 1,000 MW contract path between MISO North and MISO South.[7] After lengthy litigation between MISO, Southwest Power Pool, and other adjoining transmission owners, the resulting MISO-SPP Settlement increased the regional directional transfer limit from MISO South to MISO North to 2,500 MW. In other words, under the Settlement, MISO agreed to cap its flows of power from MISO South to MISO North to 2,500 MW. Because transmission capacity is limited, energy cannot flow between South MISO and North MISO above the Contract Path without MISO incurring additional costs. Because it is not functioning as a truly single market, MISO faces inefficiencies and market participants and customers are subject to greater costs and several of the deficiencies

[5] Tariff § 69A.12.8.1.c.iii.

[6] Bladen Testimony at P 37, lines 15-20.

[7] *See* MISO Website, "South Region Integration", *available at:* https://www.misoenergy.org/WhatWeDo/StrategicInitiatives/SouthernRegionIntegration/Pages/SouthernRegionIntegration.aspx

in MISO's proposed Tariff language stem from lack of clarity as to how the North-South constraint should be modeled.

III. PROTEST

A. Providing Retail Choice States a Three-Year Forward Market, While Denying the Reliability and Competitive Benefits to Non-Retail Choice States is Unduly Discriminatory and Not Just and Reasonable.

MISO has elected to create a mandatory three-year forward auction structure with a downward sloping demand curve in the retail choice regions of MISO, but has continued to utilize a prompt year auction for the remainder of the MISO footprint. Thus, some regions within MISO get the myriad benefits of a forward market, such as higher levels of reliability and the price benefits of increased competition, while other regions of MISO are denied these benefits. Generators in the retail choice states get the benefits of a competitive market, while generators physically located outside of the retail choice states are effectively shut out of the market opportunity to compete to serve retail choice load (as discussed in detail below). The Commission has never approved such fundamentally different market structures for various parts of an ISO footprint before, which goes far beyond the differences necessary to accommodate the interests of integrated versus restructured states.[8] Thus, as a threshold matter, the Commission should reject the MISO bifurcated market structure as unduly discriminatory between retail choice and non-retail choice states, as well as fundamentally harmful to both load and generation. The MISO Proposal unduly discriminates both against merchant generation in the

[8] For example, The Brattle Group explained in its 2014 Whitepaper on MISO market design, there is nothing inherently incompatible between a three-year forward market structure and vertical integration. *Enhancing the Efficiency of Resource Adequacy Planning and Procurements in the Midcontinent ISO Footprint: Options for MISO, Utilities, and States*, (available at: http://www.brattle.com/system/publications/pdfs/000/005/221/original/Enhancing_the_Efficiency_of_Resource_Adequacy_Planning_and_Procurements_in_the_MISO_Footprint_Newell_Spees_1115.pdf?1448034421).

retail choice states, and unduly discriminates against retail customers, and we address each in turn.

1. Discrimination Against Merchant Generators Based on State of Origin Violates the Protections of the Federal Power Act.

The MISO Proposal unduly discriminates between merchant generators within MISO, based on where they are physically located. Clearly, it would be due discrimination to differentiate between generators based, say, on which side of an *electrical* constraint a generation resource is located. However, here, MISO creates a fundamentally different market structure based on whether the merchant generator is *physically* located inside or outside of the retail choice states. The MISO Proposal thus clearly violates the prohibition of Section 205 of the FPA, which in part prohibits "any unreasonable difference in rates, charges, service, facilities . . . either as between localities or as between classes of service."[9]

The difference in market structures for merchant resources located within the retail choice states or in the vertically integrated states is more than academic. MISO itself has noted that the current capacity market structure is ineffective at retaining generation sufficient to meet system reliability needs. In particular, the combination of a vertical demand curve, the prompt-year structure, and the fact that the market is voluntary for load, makes it extremely difficult for merchant generators to make investment decisions, which are often amortized over many years, and has resulted in prices far below the going-forward costs of operating a generator.[10] MISO

[9] 16 U.S.C. § 824d(b) (2014).

[10] As the NRG Companies explained in their brief in *Madison Gas and Electric Co., et al. v. FERC*, which is currently pending before the D.C. Circuit Court of Appeals in Case Nos. 16-1019 and 16-1027 (consolidated) at page 24, *et seq*., the promise of receiving compensatory revenues through the bilateral market has been rendered illusory by the requirement that wholesale merchant generators sell their capacity into the PRA. Because of this requirement, load has little or no incentive to bilaterally contract with merchant generation, since they can scoop it up in the PRA at a lower price.

recognizes these challenges with respect to the retail choice states, and proposes a market structure that it argues will fix those problems. (While the NRG Companies disagree as to whether MISO's proposed structure will actually meet its goal of creating an attractive investment climate for merchant generation, in the retail choice states, those concerns are discussed separately below).

Providing merchant generators in retail choice states the benefits of a forward price signal (which makes investment decisions easier) and the benefits of a downward sloping demand curve (which means that MISO will provide compensation for capacity that is excess to the reserve margin), which would get paid nothing if there were a vertical demand curve, provides merchants in the retail choice areas a significant competitive advantage. This only worsens the plight of generators physically located in vertically integrated service territories, because of the downward pressure that the FRA will put on PRA prices (the mechanics of which are explained later in this document and in Mr. Montalvo's testimony). Further, as also discussed below, even merchant generation that is electrically deliverable into the retail choice states, (and thus comparably situated to generation internal to the retail choice states), it is effectively barred from meaningfully competing to serve retail choice load.

The NRG Companies are aware of no ISO or RTO in the country that has given such a valuable option to some generators, based on their state of origin, but not extended the same option to all electrically similarly situated generators. For example, there are several integrated states in PJM, including Virginia and Kentucky. Yet merchant generators located in these areas are afforded a reasonable opportunity to participate in the capacity market on the same forward basis as all other resources in PJM.

At a minimum, if the Commission does not reject the MISO Proposal outright, the NRG Companies urge the Commission to remedy this undue discrimination by directing MISO to require a three-year forward resource adequacy proposal that covers the entire footprint within the next 12 months.

2. The MISO Proposal Unduly Discriminates between Retail Customers Based on Location.

The MISO Proposal also discriminates against load located outside the retail zones by denying customers in those zones the reliability benefits of a forward market with a downward sloping demand curve, as well as the price benefits of a forward market. The differences in the reliability procured on behalf of customers in the retail choice states and those outside of the retail choice states are stark. The very nature of a downward sloping demand curve means that MISO will procure capacity in excess of the installed reserve margin (*i.e.*, MISO will procure capacity in excess of the baseline one-year-in-ten reliability standard). The installation of a downward sloping demand curve and the procurement of additional capacity thus results in MISO guaranteeing retail choice states a *greater* amount of reliability than in non-retail choice states.

Further, as discussed in more detail below, the MISO Proposal gives load in the non-retail choice portions of the footprint primary access to excess generation capacity from MISO South. All other factors being equal, this will tend to raise prices in the retail choice areas and depress prices in the remainder of the footprint. Prices will likely increase above economically efficient levels in the FRA states because the market design proposed by MISO primarily allocates available transmission capacity to the PRA process. As discussed in more detail below, once the available transmission capacity is used up in the PRA, MISO proposes to make it unavailable in the FRA. This means that customers in the retail choice states are likely to have

no ability to access the benefits of low-cost generation located in MISO-South, and are thus denied the pricing benefits of a competitive market. The benefits of trade must be made available to participants in MISO on a non-discriminatory basis. Otherwise, the Proposal runs afoul of the requirements of Section 205(b), which prohibit undue discrimination.

B. MISO's Proposal Ignores Capacity Market Best Practices.

Three elements of MISO's Proposal are particularly problematic. *First*, it proposes to require sellers to participate in the auction while letting buyers "opt out" at will through a Fixed Resource Adequacy Plan ("FRAP") or a Forward Fixed Adequacy Plan ("FFRAP"). *Second*, MISO refused to entertain proposals to restrain buyers from unfairly suppressing prices in the auction by subsidizing uneconomic new generation, which would make MISO's the only capacity market in the Nation serving retail choice customers with no such protections. *Third*, MISO proposes to allow integrated utilities to dump their excess generation into the retail choice states, undermining the price formation process. Merchant generators will only commit capital to the retail choice states if they are able to recover a significant risk premium to account for the financial risks inherent in such an unstable market structure. The end result, therefore, is that the market will either fail entirely or ratepayers will pay significantly more for reliability than necessary – neither of which are just and reasonable outcomes.

As the underlying basis for its proposal, MISO points to the differences between retail choice states and non-retail choice states and notes that the retail choice states need a robust, PJM-style, capacity market to ensure resource adequacy. However, while MISO makes the argument, it then proposes a capacity market design for the retail choice areas that is so deeply

flawed that it is likely to fail. As Mr. Montalvo concludes, "It is unlikely that the proposed CRS design will select the resources that most cost-effectively deliver reliability to zones 4 and 7."[11]

1. Longstanding Commission Precedent is that Load Must Apply a Fixed Resource Adequacy Plan for Multiple Years.

The MISO Proposal creates a dramatic imbalance in MISO's capacity market in the retail choice states by making the annual auction mandatory for sellers, but optional for buyers. Specifically, MISO proposes that LSEs be allowed to "opt out" of any given auction, for all or part of their capacity needs, by submitting a FRAP showing that they have satisfied the opted-out portion of their capacity needs outside the auction. The Commission should reject MISO's proposal to allow load within the retail choice states to enter or leave the market as they please. As the Commission has recognized, there is a necessary trade off when a load serving entity is allowed to select its own bilateral resources, which are that (1) the LSE must satisfy 100% of its capacity needs (plus reserve margin) outside of the auction and (2) the LSE must continue to satisfy its load outside of the auction for a period of years.

A load-serving entity's opting to satisfy some of its capacity needs outside the auction has exactly the same impact on auction prices as if the entity subsidized the same amount of uneconomic new entry. Thus, a market that allows LSEs to enter or leave the market with no consequences will fail to ensure resource adequacy at a just and reasonable price. The consequences of allowing load to FRAP their way in and out of the auction is that load will simply self-build or enter into bilateral contracts when prices are high, and participate in the auction when prices are low. Merchant generators, relying on the auction for the entirety of their fixed cost recovery will have no reasonable expectation of recovering their costs from such a market, and would likely not invest, causing long-term reliability of the system to suffer.

[11] Montalvo Affidavit at 49.

In the 2012 MISO capacity market proceeding, the Commission refused to "restrict the ability of parties to fulfill a portion of their capacity obligation through the opt-out and fulfill the remainder through the market" or to "opt[] out some years and participat[e] in the auction in others."[12] While acknowledging arguments that "such activities could enable gaming strategies that use buyer-market power but evade mitigation," the Commission stated, in line with its position on buyer-side mitigation, that it did "not believe . . . that such gaming is likely since utilities own the vast majority of capacity within MISO and therefore they would not benefit from lower prices in the voluntary capacity auctions."[13]

The Commission's rationalization for accepting MISO's proposal to allow load to enter or leave the auction on a yearly basis, namely, that most utilities participating are vertically integrated and thus do not present a threat to game the system, completely falls apart in the context of MISO's Proposal for the retail choice states, where little of the load is vertically integrated.

The Commission has made its position on FRAP-type proposals clear in other markets. For example, in PJM, the Commission stated:[14]

> By choosing the RPM market rather than the FRR option, load serving entities elect to participate in a three-year forward wholesale capacity market that relies on competition between existing resources (including self-supply) and competitive new entry to secure needed resources at a least cost rate. The FRR option is the alternative for load serving entities that wish to secure their own capacity resources outside of a competitive market, whether as directed by state-authorized integrated resource plans, or pursuant to other considerations. To protect the integrity of PJM's wholesale capacity markets under RPM and to

[12] *Midwest Indep. Transmission Sys. Operator, Inc.*, Order on Resource Adequacy Proposal, Docket No. EL11-4081-000, 139 FERC ¶ 61,199 at P 42 (2012) ("Capacity Order"); *Order on Reh'g*, Docket No. EL11-4081-000, 153 FERC ¶ 61,229 (2015) ("Reh'g Order").

[13] *Id*., *see also* Reh'g Order at P 127 (reiterating that "market manipulation was unlikely").

[14] PJM Interconnection, L.L.C., 135 FERC ¶ 61,022 at P 192 (2011) order on reh'g, 138 FERC ¶ 61,194 (2012).

> permit new self-supply, however, new self-supply seeking to participate in the RPM market must compete with other planned generation on the same competitive basis.

Thus, the Commission's prior findings that a FRAP is inconsistent with a competitive market structure requires rejection of the MISO Proposal, since the same deficiencies the Commission identified in the PJM context exist with respect to the retail choice areas as well.

2. MISO Errs in Allowing Generation Affiliated with Integrated Utilities to Undermine Price Formation in the Retail Choice States.

MISO proposes to allow any generation from outside of MISO to compete to supply retail choice state capacity. However, it does not distinguish between resources that are recovering their fixed costs from captive retail customers and those that are reliant on markets. As the Commission has recognized previously, allowing generation affiliated with integrated utilities to compete with merchant generation is a recipe for market failure. In a similarly important stage in the development of PJM's Reliability Pricing Model, the Commission held that:[15]

> …permitting 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.

Thus, the Commission has clearly recognized that a market structure will not invite new capital into a market if it does not protect against subsidized generation entering the market. Mr.

[15] *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 at P 195 (2011) order on reh'g, 138 FERC ¶ 61,194 (2012).

Montalvo likewise reaches the same conclusion in the context of the MISO market. He identifies the same pernicious impacts that the Commission identified in the PJM case:[16]

> Regulated utility resources can submit near zero-price bids in the FRA because of the regulated revenues they receive, making them more likely to clear in the capacity auction. These resources may not be the most reliable, or cost effective means of meeting the zonal requirements going forward. Rather, all that can be said is that they are able to submit low offers, because they have guaranteed cost recovery. On the other hand, competitive suppliers – and not ratepayers – in the retail competition zones bear the risk and the rewards associated with their investments.
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> In this way, the proposal is not resource neutral. This proposal does not allow regulated utility and competitive resources to compete on an equal footing. The goal of a single capacity market price signal that selects for a reliable, cost-effective resource portfolio that includes both rate regulated and competitive supply, is undermined to the extent that the available resources are not all exposed to the same opportunity set, and required to submit comparable bids.

Mr. Montalvo further notes, at Paragraph 44 of his testimony, that "[f]or the prices in Zones 4 and 7 to be meaningful, they must reflect the marginal cost of adding competitive supply to the zone. As discussed, such offers must reflect the going forward costs of the resources in question." He then notes that "the important and fundamental difference in the offers made by regulated utilities versus competitive suppliers into the capacity market is that the regulated utilities are making no investment, retirement, or capital improvement decisions on the basis of the forward price. . . . In this case, it would be appropriate to require the regulated utilities offering forward to construct offers that essentially reflect the going-forward costs of the assets assuming no regulated rate recovery. This would at least put the offers from all resources into the market on a common footing."[17]

The problems highlighted by Mr. Montalvo are not solved by MISO's proposal to require load serving entities to commit excess generation on a multi-year basis. Load is decreasing

[16] Montalvo Testimony at 45 &46.

[17] *Id.*

across many utilities in MISO, so these LSEs are highly likely to have excess capacity available to commit to retail choice load. Further, if the retail choice portions of MISO are serious about relying on a competitive capacity market to meet their reliability needs, then the price of the capacity auction must, over time, provide a reasonable opportunity for generators to compete to earn the cost of new entry. This is impossible if merchants are competing with spare capacity from outside of the retail choice states. Likewise, as Mr. Montalvo notes, the mere threat that vertically integrated utilities will sell excess generation into the retail choice market has a chilling effect on merchant investment.

Further, MISO's focus on whether integrated utilities from outside the retail choice states have an incentive to suppress prices in the capacity auction is fundamentally misguided and does not affect Mr. Montalvo's conclusion that these resources must be mitigated in order for the capacity market to function properly in the retail choice areas. As the Commission recognized elsewhere, "an artificially low offer price can unreasonably suppress market prices *regardless of the seller's intent*."[18] That acknowledgment was consistent with Commission precedent making clear that well-intentioned but uneconomic investment is just as dangerous as uneconomic investment that is intended to suppress prices.[19]

If unjust and unreasonable price suppression can occur without the *intent* to suppress prices, then it can occur without the *incentive* to suppress prices—and the need for mitigation measures cannot depend solely on integrated utility-sellers' perceived incentives. After all, an LSE who is long generation has neither the incentive nor the intent to suppress prices in the retail choice states may, nonetheless, make uneconomic investments for other reasons. For example,

[18] 2012 MISO Capacity Market Order at P 69 (emphasis added).

[19] *See, e.g., ISO New Eng.*, 135 FERC ¶ 61,029 at P 170 (agreeing "that [out-of-market] capacity suppresses prices regardless of intent").

the buyer might be pursuing public policy goals unrelated to price suppression.[20] As just one example, the Entergy footprint has sought (and received) authorization to build several thousand new megawatts of generation, potentially creating excess generation in MISO-South. Indeed, one of the benefits of a well-functioning capacity market is precisely that it can provide market participants with appropriate price signals to help them avoid making uneconomic investments. Regardless of intent—and thus, regardless of incentives—integrated utilities selling capacity into Zone 4 and 7 will tend to suppress capacity prices. It is just and reasonable for a system operator like MISO to adopt prophylactic rules to mitigate such artificial price suppression and ensure that retail choice states maintain resource adequacy.

3. Lack of a Minimum Offer Price Rules has Proven Fatal in Every Market Where it has been Left Out.

All of the other organized capacity markets (*i.e.*, those in New England, the PJM region, and New York) have rules aimed at preventing buyers from exercising market power to artificially suppress prices in capacity auctions. One common way for a buyer to suppress prices is by subsidizing the construction of an "uneconomic" new generating resource, that is, a resource that would not be able to charge enough in a competitive market to recover its startup costs. The new resource's capacity is then offered into the auction at a low price that does not reflect the resource's true costs, thereby driving down the auction-clearing price and reducing the prices paid to all sellers who participate in the auction.

The concern that buyers may artificially suppress prices is a well-recognized one. As the Commission explained in an earlier order:[21]

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[20] *See id.* at P 170 & n.116.

[21] *ISO New England, Inc.*, 135 FERC ¶ 61,029 at P 158 (2011).

> 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.

Mr. Montalvo reaches the same conclusion in his testimony, noting that "experience in ISO-NE, PJM, NYISO, all provide clear evidence that via many means, whether intentional or not, large net buyers and local governments in pursuit of their economic self-interest and policy objectives do enter into arrangements that have the effect of suppressing capacity prices below otherwise competitive levels."[22] Indeed, the Commission has seen first-hand the harm that occurs when a capacity market lacks a Minimum Offer Price Rule. The Forward Capacity Market in New England effectively failed after several thousand megawatts of generation entered the market supported by state contracts.[23] The New York City and PJM capacity markets have had to have intense Commission intervention to prevent price suppression associated with the Maryland and New Jersey plants in PJM, and the Astoria Energy II plant in New York City, all of which were supported by out-of-market contracts.[24]

In its 2012 Resource Adequacy Filing, MISO proposed to establish a Minimum Offer Price Rule to prevent buyers from artificially suppressing prices in the capacity auction.[25] The Commission declared that it was unnecessary for MISO to make any effort to prevent buyers

[22] Montalvo Testimony at 47.

[23] *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 at P 195 (2011) *order on reh'g*, 138 FERC ¶ 61,194 (2012).

[24] *See, e.g.*, *Astoria Generating Co. v. New York Independent System Operator, Inc.*, 153 FERC ¶ 61,274 (2015).

[25] *See* Capacity Order at PP 44–48.

from suppressing capacity-auction prices by subsidizing uneconomic entry because buyers in the MISO region were "generally unlikely to benefit" from lower prices in the capacity auction because "the vast majority of capacity within MISO" was owned by vertically integrated utilities.[26] In other words, the load-serving entities owned their own generating resources and could meet their capacity needs through "self-supply." 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."[27] It also acknowledged that many buyers in the MISO region met their capacity needs through bilateral contracts with independent generators (and not just through self-supply) and that suppressing auction prices could also suppress contract prices; but it concluded that even the prospect of suppressing both auction and contract prices would not sufficiently incentivize buyers to subsidize uneconomic entry.[28]

Again, the predicates for the Commission's rejection of a MOPR in the 2012 Resource Adequacy Filing depended largely on the vertical integration of the majority of the MISO footprint. Because MISO's Proposal addresses only the retail choice areas of MISO, the excuse the Commission utilized in the past for not requiring a MOPR simply do not apply. The danger of Illinois or Michigan requiring its utilities to enter into long-term generation contracts is hardly a hypothetical concern. For example, the State of Illinois recently entered into a multi-billion bailout of existing nuclear resources.[29] Moreover, the Commission recently found it "appropriate

[26] *Id.* at P 66.

[27] *Id.* at P 67.

[28] *See id.* at 107–08.

[29] Nobody would suggest not getting inoculated against the flu simply because MISO has not yet contracted a particularly vicious case of buyer-side market power. By their nature, prophylactic measures are often put in place to deal with circumstances, like the exercise of buyer-side market

for [ISO New England] to propose measures to correct the structural deficiencies of its market *regardless of the likelihood that market participants will exploit these deficiencies*."[30] Further, 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.[31]

If merchant generators are going to be asked to invest billions in new infrastructure in Illinois or Michigan, they will need to be assured that the value of their investments is not wiped out by subsequent regulatory actions by the respective states to artificially make the pool long and thus suppress prices below just and reasonable levels. A MOPR would prevent such an outcome and its absence renders the MISO Proposal not just and reasonable.

4. The Combination of Flaws in MISO's Proposed Capacity Market Design Render it Unjust and Unreasonable.

MISO ignores a decade of precedent that successful capacity markets have the following elements: a minimum offer price rule, that the auction is mandatory for load, a downward sloping demand curve, and a forward procurement period. The lack of these market design elements are well-understood to undermine price formation; yet MISO's Proposal persists in repeating these mistakes. The result of these combined flaws is that MISO's auction structure – even for generators located in Zones 4 and 7 – will be ineffective at ensuring the long-term reliability of the footprint, while raising prices for customers above economically efficient levels.

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power, that may be thought unlikely but that would have serious consequences if they came to pass.

[30] *ISO New Eng. Inc.*, 155 FERC ¶ 61,029 at P 32 (2016) (emphasis added); *see also id.* at P 31 (finding it "irrelevant" whether the targeted conduct had ever "previously [been] used . . . to exercise market power").

[31] *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.").

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.[32] 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."[33]

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.

C. The Proposal to Make the FRA Residual to the PRA Lacks Sufficient Detail, has Perverse Consequences and is not Just and Reasonable.

1. The Filing is Wholly Deficient and Fails to Explain the Calculation of the Sub-Regional Constraints That Will be Used in the FRA.

The almost 1,700 page MISO Proposal does not spill much ink, if any, on how MISO will calculate the sub-regional constraints between the various MISO zones when it clears the FRA. The manner in which the constraints are calculated will define whether assets outside the retail zones have the chance to bid and clear into the FRA. The filing is deficient at best and, to the extent our understanding of the MISO proposal is correct, fundamentally flawed.

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[32] *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).

[33] *Bridgeport Energy, LLC*, 113 FERC ¶ 61,311 at P 29 (2005); *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.").

The MISO Proposal asserts that resources external to MISO can participate in the FRA.[34] However, the mechanics surrounding how much of an opportunity generators located within MISO, but outside the retail zones will have to clear the FRA at a price above zero are undefined. In one sentence, with no further explanation, the MISO Tariff notes that for the FRA the constraints between internal MISO zones will be modeled based on the most recent PRA results and FRA offers.[35] The testimony offers a scant further explanation of this provision:[36]

> Further, non-retail choice demand and associated cleared capacity that occurred in the most recent PRA will be modeled in the SFT to reflect the remainder of the system that is not participating in the FRA. By formulating the SFT in this fashion, MISO can iterate between the FRA clearing process and the SFT to determine which capacity can clear to meet Competitive Retail Demand's capacity needs while ensuring that the solution is feasible when taking into account the flows of non-Competitive Retail Demand and supply.

While the full meaning of this language is unclear,[37] it appears that on a basic level, MISO's intention is for the cleared capacity in the PRA to be modeled in the FRA, despite the temporal and practical challenges.

As discussed by Mr. Montalvo, one interpretation of this language is that "the ability to deliver capacity across MISO inter-zonal interfaces in the FRA is established via a process that preloads the non-competitive retail capacity that clears the PRA prior to the FRA into the Simultaneous Feasibility Test."[38] Taken at face value, this language would suggest that there will be little inter-zonal transfer capability available in the FRA, if MISO discounts/excludes the transfer capability that is utilized in the PRA. Mr. Montalvo posits two questions: 1. If the

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[34] Tariff § 69A.12.2.

[35] Tariff § 69A.12.8.1.c.iii.

[36] Bladen Testimony at P 37, lines 15-20.

[37] Montalvo Affidavit at 26.

[38] *Id.*

available transfer capability between zones is utilized in the PRA, then is there any transfer capacity available for the FRA? 2. Or is there no transfer capability available in the FRA, because it was fully prescribed in the PRA?

The answers to these questions has a profound impact on how the FRA clears, but are entirely absent from the Tariff language and only obliquely discussed in the testimony. As a specific example, to calculate the transfer capability between MISO North and MISO South for the 2016/17 PRA Planning Year, MISO assumed 876 MW of capacity market import capability between MISO South and MISO North. Thus, if MISO South load was 30,000 MW, MISO would clear 30,876 MWs in the PRA. Based on the strict language included in the Proposal, because 876 MWs of the MISO North-South constraint cleared the PRA, there would be no available transfer capability open for the FRA. As a result, retail choice load would not see the salutary price impacts of less expensive imports in MISO South, because all of the available transmission transfer capability was used in the PRA.

Even though the Proposal does not include any language explaining this to be the case, in discussions with MISO, MISO has suggested that if there is 876 MW of inter-zonal transfer capability in the PRA and 876 MWs of capacity clears across that interface in the PRA, then there is 876 MW of transfer capability available for the FRA.

Under either interpretation described above, for the FRA MISO will determine the transfer capability between MISO zones based on PRA participation and clear the FRA on the results of the prior years' PRA. The practical implication of this requirement is that resources within MISO that are outside of the retail zones have no meaningful opportunity to participate in the FRA even though they may have lower priced capacity to offer. There are a number of fundamental flaws with this approach, which are set forth in below, but the biggest flaw is

MISO's failure to explain and justify the Proposal in its testimony or to address these issues in its proposed Tariff language.

In addition to the overarching open question described above as to whether capacity transfer capability across the zones that it utilized in the PRA will be available in the FRA, some of the primary questions that the Proposal leaves unanswered and unclear are below:

- Any requirement that resources internal to MISO but outside the retail zones have to bid *and clear* in the PRA in order to be eligible to participate in the FRA is not specified in the Tariff.

- The Proposal offers little guidance to generators external to the retail choice states as to how they should formulate bids. For example, due to all the open questions concerning the calculation of the sub-regional constraint, how would a generator located outside the retail zones know whether it is deliverable? How would such a generator begin to calculate its opportunity costs? The Tariff provides no guidance whatsoever on these essential questions.

- The Proposal does not describe how MISO will clear the FRA and what tie-breaking methods it will utilize. If multiple resources from the non-retail zone bid into the FRA and offer at the same price, the clearing mechanism is unknown. For example, if two resources located in MISO South both offer 1,000 MW at $50 MW-Day, but the S-N constraint was calculated to only have 876 MWs available, what are the criteria for clearing which resource?

- Section 69A.12.8.1(c) of the Tariff states that "All ZRCs offered at zero price will clear the FRA." If 5,000 MW of resources located in MISO South offer into the FRA at zero and the sub-regional constraint was calculated to be 876 MWs, does MISO really clear all 5,000 MW? At zero? If not, what does that Tariff language mean and how does MISO decide which resources clear.

- Because the calculation of the sub-regional constraint will occur three years prior to the actual delivery year for the FRA capacity, if during those three years a change is made to impact that calculation (i.e., transmission upgrades), will MISO re-calculate the constraint? If so, what is the trigger for such a re-calculation and how will it be done.

The mechanics surrounding the calculation of the sub-regional constraint for the FRA are scantly, if at all, explained in the filing. If the Commission is inclined to accept the Proposal, the Commission should minimally require MISO to submit information on the ability of MISO

resources outside of the retail zones to participate in the FRA. Such approach would be consistent with the Commission's recently affirmed recognition that, "[t]he Commission requires that matters that significantly affect rates and services, are readily susceptible of specification, and are not generally understood, must be in the tariff rather than business practice manuals."[39] Here, the calculation of the sub-regional constraint that MISO proposes to use for the FRA is not explained at all. In an Order issued earlier this month, the Commission already found that the calculation of the sub-regional constraint "materially affects rates, as demonstrated by the 2015/16 and 2016/17 Auction results, [and found] that it is no longer just and reasonable for the Sub-Regional Export Constraint calculation methodology to be omitted from the Tariff."[40] Although the manner in which MISO's FRA proposal is dependent upon the PRA to calculate transfer capability available for the FRA is unclear, because this Proposal builds on the calculation of the sub-regional constraint utilized by the PRA, for the same reasons set forth in the December Order, the Commission should require MISO to set forth the calculation of the FRA transfer capability in a Tariff filing.

2. MISO's Proposal to Clear the FRA Based on the Results of the Prior Year's PRA Creates Barriers to Entry and is Economically Unsound.

Despite the Proposal's deficiencies, if MISO calculates the sub-regional constraint for the FRA based on resources that clear in the PRA as described above, MISO's approach creates artificial barriers to entry and is economically unsound. There is no economic support for the current spot market prices of the PRA to constrain *future* prices for a delivery year that will occur three years in the future. Since the PRA and FRA share the same topology, if the FRA

[39] *Coalition of MISO Transmission Customers v. Midcontinent Independent System Operator, Inc.*, 157 FERC ¶ 61,182, at P 54 (2016) (citing *See City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985); *Midwest Indep. Transmission Sys. Operator, Inc.*, 140 FERC ¶ 61,171, at P 80 (2012)) ("December Order").

[40] *Id.*

relies upon the PRA clearing, then all the benefits of the inter-zonal interconnections will accrue to the PRA and merchant generation located outside the retail zones and load located within the retail zones would not have equal access to the transfer capability. As noted by Mr. Montalvo, the proposal suffers from three key flaws:[41]

- The design will tend to suppress prices in the PRA, particularly in areas outside the [Competitive Retail Areas], and to restrict competition in the [Competitive Retail Areas]. Moreover, the transmission allocation rule taxes trade by transferring costs from the PRA into the FRA, raising FRA prices and increasing costs to consumers in Zones 4 and 7.

- The FRA does not reflect the system topology, loads, and offered supply relevant to the three-year ahead planning year.

- The design effectively requires competitive suppliers to clear the current-year PRA at uneconomic zero-price bids in order to gain access to the FRA.

MISO attempts to explain its use of the PRA results to clear the FRA by suggesting that "current conditions" justify this approach. Specifically, Mr. Bladen's testimony states that:[42]

> Relatively slow demand growth and relatively stable flows year-over-year, irrespective of contractual relationship changes, coupled with the likelihood that new generation entry is likely to be sited near existing load and/or retiring assets, all demonstrate the reasonableness of the approximation.

MISO simply fails to justify that using a calculation of the sub-regional constraint based on the PRA results is *per se* unjust and unreasonable. A more economically sound approach would allow the FRA to occur in expectation of conditions on the system, without regard to PRA results, rather than to administratively constrain the market. As explained by Mr. Montalvo, "as described by MISO, the PRA and FRA are not linked. Logically, then, each market should be considered to operate independently from one another."[43]

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[41] Montalvo Affidavit at 26.

[42] Bladen Testimony at p. 38, lines 4-7.

[43] Montalvo Affidavit at 30.

a. MISO's Proposal to Make the FRA Residual to the PRA Will Artificially Increase Prices in Retail Choice States and Depress PRA Prices.

By artificially constraining the inter-zonal transfer capability used in the FRA, under the MISO Proposal, competition from resources external to the retail zones, but within MISO in the PRA will increase, but competition from such resources in the FRA will be curtailed. This administrative construct will lead to perverse results. The impact of the increased competition in the non-retail MISO zones could lower prices in these zones, while the constrained ability of generation within the non-retail MISO zones to compete will increase prices in the FRA zones. Simply put, by developing a mechanism that does not provide a reasonable opportunity for resources outside of the retail zones to compete for the available FRA capacity, the amount of generation that can compete for the load is vastly decreased, which could increase prices in the retail choice zones. As explained by Mr. Montalvo, "the proposed rule could restrict competition and raise prices above otherwise competitive levels in the FRA, increasing costs to consumers in Zones 4 and 7."[44]

The NRG Companies are very concerned that the Proposal effectively prohibits NRG from marketing its cost competitive merchant generation in the South from competing to serve the retail zones. Since Entergy joined MISO, capacity prices in MISO South have been lower than those in MISO North. Specifically, in the PRAs for Planning Years 2015/16 and 2016/17, Zone 9, which covers MISO South cleared at $3.29 MW-Day and $2.99 MW-Day, respectively, while Zone 4 capacity cleared at $150.00 MW-Day and $72.00 MW-Day, respectively.[45]

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[44] Montalvo Affidavit at 27.

[45] MISO clearing prices for the 2015/16 delivery year: https://www.misoenergy.org/AboutUs/MediaCenter/PressReleases/Pages/MISOClearsThirdAnnualCapacityAuction.aspx; MISO clearing prices for the 2016/17 delivery year: https://www.misoenergy.org/AboutUs/MediaCenter/PressReleases/Pages/MISOClearsFourthAnnualPlanningResourceAuction.aspx

Because under the MISO Proposal, the PRA takes priority to the FRA, generation located in non-retail choice zones wishing to participate in the FRA will be required to clear in the PRA first and thus, incented to bid into the PRA, which will add to an already long system. All of the available transfer capability from the non-retail choice zones will have been effectively allocated to serving load in the PRA states, which will leave little to no capacity outside the retail choice zones left over to participate in the FRA. By making the FRA residual to the PRA, gains attributable to the benefits of trade will accrue to the PRA states and MISO is effectively granting priority to the regulated utility load located in the non-retail zones of MISO.

b. MISO's Proposal Discriminates Against Merchant Generators Located Outside of the Retail Choice States and Load Located Within These Zones.

While the MISO Proposal seemingly advantages the regulated utilities within MISO, merchant generation throughout MISO located outside the retail zones, and retail load within the competitive retail zones, are left at a disadvantage. By not providing merchant generators located outside of the retail zones an equal opportunity to compete in the FRA, the Proposal raises prices in the competitive retail zones (all other factors held equal). As discussed above, merchant generation is not permitted to participate in the FRA as-of-right. Instead, a merchant generator must clear in the initial PRA, and then hope that it has the ability to participate in the FRA by offering a competitive bid that is above zero. MISO's approach in restricting such participation is unduly discriminatory.[46] Undue discrimination exists "when there is a difference

[46] *See, e.g., Sebring Utils. Comm'n v. FERC*, 591 F.2d 1003, 1009 n.24 (5th Cir. 1979) ("[T]hose who are similarly entitled must be treated equally regardless of their ability to survive otherwise"); *Transwestern Pipeline Co.*, Opinion No. 238-A, 36 FERC ¶ 61,175 at 61,433 (1986) ("Undue discrimination is in essence an unjustified difference in treatment of similarly situated customers."), *aff'd sub nom. Transwestern Pipeline Co. v. FERC*, 820 F.2d 733 (5th Cir. 1987).

in rates or services extended to similarly-situated customers that is not justified by a legitimate factor."[47] As explained by Mr. Montalvo, MISO's Proposal effectively restricts:[48]

> the transmission capacity available to competitive resources that might otherwise participate in the FRA to serve retail loads in Zones 4 and 7. These PRA cleared resources are not required to operate the FRA. The construct has the effect of uneconomically discriminating against both the consumers in Zones 4 and 7 who face a restricted set of potential suppliers and the competitive suppliers located south of the North-South interface that cannot access loads in Zones 4 and 7.

More specifically, generation affiliated with integrated utilities will have preferential access to the higher prices in the retail choice states because of their ability to clear in the PRA as price takers (since they are relying on captive ratepayers for cost recovery). Merchant generators, of course, bid in at a cost that represents their going-forward costs, so even when they are more efficient, they are still undercut by integrated utility-affiliated generation. The MISO Proposal simply does not give merchant generation located throughout MISO a fair opportunity to compete in the FRA and MISO fails to offer any justification for this discrimination.

3. Inter-Zonal Resources Should Be Able to Utilize Firm Transmission to Participate in the FRA.

Even if the Commission is inclined to accept MISO's Proposal, including the provision under which the FRA is residual to the PRA, the Commission should require MISO to modify its Proposal to allow those MISO market participants located outside of the retail choice zones with firm transmission to participate in the FRA just as if that resource was an External Resource to MISO. It fundamentally makes no sense, that as a holder of firm transmission in MISO South, the NRG Companies could have bid into the FRA as an External Resource prior to Entergy joining MISO, but now that Entergy is part of MISO, the NRG Companies do not have a

[47] *See Cal. Indep. Sys. Operator Corp.*, 132 FERC ¶ 61,148, at P 40 (2010).

[48] Montalvo Affidavit at 31.

reasonable opportunity to participate in the FRA. MISO's Proposal to instead of allocating rights across the N-S interface to those who have historically used the interface or those that have firm transmission, to allow all entities that cleared in the PRA to utilize the import capability across the N-S interface is fundamentally flawed. As described by Mr. Montalvo:[49]

> [F]ull participation seems improbable as scarce transmission is not allocated to suppliers either on the basis of held firm transmission rights (available through the OATT on a nondiscriminatory basis) or on the basis of economic rationing in the FRA as a function of competitive offers (i.e., offers that reflect the going forward costs of all offered supply). Given the proposed design, to put competitive suppliers on a common footing with regulated utilities, competitive suppliers should have the right of first refusal to the firm transmission rights that they already hold. Such an approach would allow competitive suppliers to secure a transmission allocation for use in the FRA without having to first submit clearly uneconomic zero-price bids into the PRA.

In order to remedy this flaw, the Commission should require MISO establish a mechanism under which MISO market participants with firm transmission to the MISO retail zones can utilize that transmission to participate in the FRA. Such participation greatly increase the efficiency of the MISO FRA, and would create a market based mechanism that would more efficiently allocate the use of MISO transmission.

IV. CONCLUSION

For the aforementioned reasons, the NRG Companies respectfully request that the Commission reject the MISO Proposal and consider the points raised herein.

[49] Montalvo Affidavit at 32.

December 14, 2016

Respectfully submitted,

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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 14th day of December, 2016.

/s/ *Maria DeLuca*