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**VIA ELECTRONIC FILING**

January 6, 2014

Kimberly D. Bose, Secretary  
Nathaniel J. Davis, Sr., Deputy Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

Re: NRG Energy Holdings, Inc., Edison Mission Energy, Docket No. EC14-14-000

Dear Secretary Bose:

Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM ("Market Monitor"), here submits corrections to the filing by the Market Monitor of comments and an attached report in the above referenced proceeding on January 2, 2014. The corrections are non substantive, and are provided to ensure clarity and to ensure consistency between the comments and the attached report. A clean version of the corrected comments and attached report is included as Attachment A, and a redline version of pages with revisions (only) is included as Attachment B.

The Market Monitor respectfully requests that the Commission include these corrections in the record for this proceeding.

Sincerely,

Jeffrey W. Mayes, General Counsel

# **Attachment A**

# **Attachment B**

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

NRG Energy Holdings, Inc., Edison Mission Energy )  
Energy ) Docket No. EC14-14-000

**COMMENTS OF  
THE INDEPENDENT MARKET MONITOR FOR PJM**

Pursuant to Rule 211 of the Commission’s Rules and Regulations,<sup>1</sup> Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM (“Market Monitor”),<sup>2</sup> submits these comments on the joint application of NRG Energy Holdings Inc. (“NRG”) and Edison Mission Energy (“EME”) for approval of a transaction whereby NRG would acquire substantially all of the assets of EME, as amended by applicants response dated December 16, 2013, to the Commission notice of deficiency issued December 5, 2013. In its pleading dated December 9, 2013, the Market Monitor provided an alternative analysis and comments in a report (“December 9<sup>th</sup> Report”). The Market Monitor attaches to this pleading, as an Attachment, an updated report (“January 2<sup>nd</sup> Report”), which, among other things, conforms some of the analysis to be consistent with the information requested by the Commission in its December 5<sup>th</sup> notice.

The most significant issues identified in both the December 9<sup>th</sup> Report and the January 2<sup>nd</sup> Report relevant to the standards of review applicable to a merger under Section 203 of the Federal Power Act are: is the increase in market power in the PJM Regulation Market that will result from combining the assets of the two companies; and the dominant

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<sup>1</sup> 18 CFR § 385.211 (2011).

<sup>2</sup> Capitalized terms used herein (including the attached report) and not otherwise defined have the meaning used in the PJM Open Access Transmission Tariff (“OATT”).

position in a specific local energy market that NRG would gain as a result of the merger. The Market Monitor believes that these issues can be addressed by conditioning approval of the merger on the applicants' adoption of mitigation in the form of behavioral rules applicable to applicants' participation in the PJM Regulation Market and a requirement that the Market Monitor report to the Commission after 12 months on any changes in behavior in the identified local energy market.

## I. COMMENTS

### A. Updated Report.

The Market Monitor's January 2<sup>nd</sup> Report~~report~~ provides an assessment of the impact of the proposed merger between NRG and EME on PJM wholesale electricity markets including the Energy Market, the Capacity Market and the Regulation Market. In conducting this analysis the Market Monitor has made use of actual dispatch, offer and availability data to define the relevant markets and to examine the effects of the proposed merger on those markets using concentration ratios and pivotal supplier indices. The Commission has accepted and considered similar analyses when evaluating proposed mergers in PJM.<sup>3</sup>

The analysis presented in this report covers the impact of the proposed merger on the structure of the PJM markets, using current data. The analysis examines market structure metrics in order to quantify the expected impact of the proposed merger on the market structure of constraint defined markets within PJM. The analysis concludes that the proposed merger would significantly increase concentration in a specific, highly concentrated locational energy market, would increase concentration and reduce TPS scores

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<sup>3</sup> See 138 FERC ¶ 61,167; see also *Analysis of Horizontal Market Power under the Federal Power Act*, 138 FERC ¶ 61,109 (2012) ("We reiterate, however, that the Commission may consider arguments that a proposed transaction raises competitive concerns that have not been captured by the Competitive Analysis Screen. Likewise, while applicants must continue to provide a Competitive Analysis Screen, we will also consider any alternative methods or factors, if adequately supported.").

in the capacity market although the effect is not large and would significantly increase concentration in the market for regulation.

**B. Behavioral Mitigation Is Needed to Address Market Power Issues in the PJM Regulation Market and in a Specific Locational Energy Market.**

In both the December 9<sup>th</sup> Report and the January 2<sup>nd</sup> Report, the Market Monitor identified an increase in concentration levels in the PJM Regulation Market that would result from combining the assets of NRG and EME. This means that the proposed merger would significantly increase concentration in a specific, highly concentrated locational energy market, would increase concentration and reduce TPS scores in the capacity market although the effect is not large, and would significantly increase concentration in the market for regulation. In its December 9<sup>th</sup> Report, the Market Monitor recommended that the Commission consider behavioral mitigation, in the form of requirements to engage in competitive offer behavior in each PJM market, to resolve the issues identified.

The proposed merger would have a limited impact on the overall competitiveness of PJM markets, but would have a significant impact on one local energy market and a significant impact on the regulation market. The IMM recommends that the Commission require behavioral mitigation measures to address the issues identified in this report. Appropriate mitigation could resolve the identified concerns about competitive impacts. The IMM recommends that, if the merger is approved, the Commission require the merged company to make cost-based offers in the regulation market and that the Commission require the IMM to report after 12 months on any changes in behavior in the identified local energy market.

The Market Monitor also recommends that the merged company be required to continue to offer the same units and quantities historically offered into these regulation markets because participation is voluntary and one way to exercise market power is simply not to offer.

The proposed conditions are proportionally limited in scope and scale to the issues identified in the Market Monitor's analysis. The substance of this condition merely requires

that the applicants behave competitively in the PJM Regulation Market, consistent with fundamental Commission regulatory policy. Accordingly, a requirement that the applicants adhere to the proposed behavioral requirements should be made a condition for any approval of the application for merger.

## II. CONCLUSION

The Market Monitor respectfully requests that the Commission afford due consideration to these comments as the Commission resolves the issues raised in this proceeding.

Respectfully submitted,



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Dated: January 2, 2014

**CERTIFICATE OF SERVICE**

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

Dated at Eagleville, Pennsylvania,  
this 2<sup>nd</sup> day of January, 2014.



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# **Attachment**

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The proposed merger would have a limited impact on the overall competitiveness of PJM markets, but would have a significant impact on one local energy market and a significant impact on the regulation market. The IMM recommends that the Commission require behavioral mitigation measures to address the issues identified in this report. Appropriate mitigation could resolve the identified concerns about competitive impacts. The IMM recommends that, if the merger is approved, the Commission require the merged company to make cost-based offers in the regulation market and that the Commission require the IMM to report after 12 months on any changes in behavior in the identified local energy market. The Market Monitor also recommends that the merged company be required to continue to offer the same units and quantities historically offered into the regulation market because participation is voluntary and one way to exercise market power is simply not to offer.

## **Methods of Analysis**

In analyzing whether a proposed merger is consistent with the public interest, the FERC considers the “effect of the transaction on competition, rates, and regulation of the applicant by the Commission and state commissions with jurisdiction over any party to the transaction.”<sup>2</sup> In this report, the IMM focuses on the first factor, the effect on competition, measured by the impact on the structure of relevant markets based on actual market data. The IMM evaluates the impact of the merger using concentration thresholds, including those defined in FERC’s Competitive Analysis Screen,<sup>3</sup> and pivotal supplier analysis.

Any analysis of market structure depends on an accurate definition of the relevant markets. Market definitions depend on properly identifying and evaluating potential substitutes for a given product. Within organized markets data are available, and should be used, to define markets based on how the units are evaluated and dispatched to meet demand, based on networked relationships between resources and load, relative costs, availability and operational parameters. Such an approach provides definitions of the

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<sup>2</sup> 18 CFR § 33.2(g) (2011).

<sup>3</sup> 18 CFR § 33.3; *see also Revised Filing Requirements Under Part 33 of the Commission’s Regulations*, Order No. 642, FERC Stats. & Regs. ¶ 31,111 (2000) (“Order No. 642”); *Transactions Subject to FPA Section 203*, Order No. 669, FERC Stats. & Regs. ¶ 31,200 (2005) (“Order No. 669”), *order on reh’g*, Order No. 669-A, FERC Stats. & Regs. ¶ 31,214 (“Order No. 669-A”), *order on reh’g*, Order No. 669-B, FERC Stats. & Regs. ¶31,225 (2006) (“Order No. 669-B”); *Inquiry Concerning the Commission’s Merger Policy Under the Federal Power Act: Policy Statement*, Order No. 592, 77 FERC ¶61,263 (*mimeo*), FERC Stats. & Regs. ¶ 31,044 (1996), *reconsideration denied*, Order No. 592-A, 79 FERC ¶61,321 (1997) (“Merger Policy Statement”); *FPA Section 203 Supplemental Policy Statement*, FERC Stats. & Regs. ¶ 31,253 (2007).

relevant markets based on actual operational data related to the participants and the markets in which they operate. Evaluated in this manner, the substitutability or lack of substitutability among supply options in a market is made transparent, along with the relevant market(s), and the relative importance of the merging firms within the market(s). It is on this basis that the use of prescribed formulas regarding market shares, residual suppliers and concentration ratios, as well as other metrics, can be useful tools for evaluating the effects of a proposed merger.

In the IMM analysis, the definition of the relevant market is based on the actual substitutability among available, relevant resources which in turn is based on the physical facts of the system and how the PJM markets defined the substitutability among available resources in the relevant markets over the analysis period. Rather than limit its analysis to a predefined range of load and price levels, the IMM has analyzed every actual relevant market defined by a constraint and the system software. The relevant energy markets in this analysis are those local energy markets created by transmission constraints within the broader PJM market that occurred for one hundred or more hours in the 2012-2013 planning year. The relevant ancillary services markets are those defined by the actual operation of PJM markets over the October 1, 2012 through September 30, 2013 ~~period~~planning year. The relevant capacity markets are those that resulted from the actual operation of the markets for the 2015/2016 and 2016/2017 delivery years.

The IMM analysis of the relevant markets reflects the information available based on the actual operation of the PJM wholesale power markets, rather than approximations of seasonal geographic markets that ignore local transmission constraints, distribution factors and relative dispatch costs. The information used to prepare the analysis included in this report is highly confidential and market sensitive as it relates to specific market participants.<sup>4</sup>

The IMM analysis relies on what FERC terms economic capacity, or total capacity without netting of load obligations, also termed gross position. Net positions would be calculated by subtracting the load obligation from the supply of the relevant product for all participants that have both an obligation to purchase a product or to sell a product at a defined price and the ability to supply a product. Such participants, in this analysis, would be primarily integrated utility companies that have not yet been exposed to significant retail competition and that therefore retain most of their native load. A net position analysis would show the market results when the integrated utility companies retain their dominant position in the market. A complete net position analysis would also have to account for all financial positions of the respective companies which affect

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<sup>4</sup> See OATT Attachment M–Appendix § I.

When RPM clears as a single market, total RTO supply and demand determine the clearing price and all resources receive the clearing price. The market definition is clear. When an LDA within the RTO clears as a separate market, the incremental locational supply available to meet the locational demand determines the clearing price for the LDA. All capacity resources in the LDA receive the clearing price, regardless of whether the capacity resources are incremental.

When there are multiple LDAs that clear as separate markets and the LDAs are not overlapping, the logic is exactly the same for each LDA separately and its relationship to the rest of RTO. When the LDAs are nested, one within another, the analysis becomes more complex. For example, EMAAC is entirely within MAAC, which is entirely within the RTO. The EMAAC locational price is determined by the incremental locational supply available to meet the locational demand within EMAAC. The MAAC price in this case is analogous to the RTO price in the case of a single LDA. The MAAC price is determined by all the MAAC incremental supply (defined with respect to the RTO market) that is not incremental in EMAAC. Even though MAAC includes more capacity resources than EMAAC, the MAAC clearing price may result from fewer MW of incremental supply than the EMAAC price and may apply to fewer MW of rest of MAAC supply than the EMAAC price. The MAAC clearing price in this case could also be referred to as the rest of MAAC price, analogous to the rest of RTO price. The rest of RTO clearing price in this case is determined by all the supply that is not incremental in MAAC, including EMAAC.

## **Total Market Analysis**

### ***HHI Analysis***

Table 0-7 shows pre and post merger HHIs for the 2015/2016 and 2016/2017 RPM Base Residual Auctions, including all constrained LDAs for each BRA.<sup>38</sup> The HHIs in Table 0-7 measure concentration of ownership for all capacity in the identified LDAs. This metric measures the incentive to exercise market power rather than the ability to exercise market power in the constrained LDAs. Table 0-7 also shows the change in HHI and whether the change was between 50 and 100 points, 100 to 200 points, 200 to 300 points or exceeded 300 points. As a result of the location of the capacity resources of the two companies there was a change in HHI only for the RTO market and that increase was less than 50 points.

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<sup>38</sup> For the HHI analysis the sell offers were adjusted to include the withdrawn deactivations of Avon Lake 7, Avon Lake 9, New Castle 3, New Castle 4, New Castle 5, New Castle Diesel and Gilbert 8 units; to reflect the fact that EME no longer owns the Homer City plant; and to remove sell offers for resources that are no longer capacity resources as of December 2013.

**Table 0-8 Pre and post merger TPS analysis**

RPM Auction	RPM Market	Pre Merger RSI <sub>3</sub>	Post Merger RSI <sub>3</sub>	Change in RSI <sub>3</sub>	Percent Change
2015/2016 Base Residual Auction	RTO	0.546	0.529	(0.016)	(2.9%)
	MAAC	0.668	0.668	0.000	0.0%
	ATSI	0.000	0.000	0.000	0.0%
2016/2017 Base Residual Auction	RTO	0.597	0.577	(0.021)	(3.5%)
	MAAC	0.380	0.380	0.000	0.0%
	PSEG	0.000	0.000	0.000	0.0%
	ATSI	0.000	0.000	0.000	0.0%

**Table 0-9 Pre and post merger TPS scores by cleared LDA by RPM Base Residual Auction: NRG, Edison Mission Energy and Combined**

RPM Auction	RPM Market	Pre Merger RSI <sub>3</sub>		Post Merger RSI <sub>3</sub>
		NRG	Edison Mission	Merged Company
2015/2016 Base Residual Auction	RTO	0.553	0.602	0.529
	MAAC	0.668		0.668
	ATSI			
2016/2017 Base Residual Auction	RTO	0.597	0.649	0.577
	MAAC	0.405		0.405
	PSEG			
	ATSI			

## **Regulation Market Results**

The analysis of the impact of the merger on the Regulation Market examines the Regulation Market hours when either Edison Mission Energy or NRG supplied and cleared regulation MW in the period from October 1, 2012 through September 30, 2013.<sup>40</sup> These are the relevant regulation markets. A market hour exists each time that PJM dispatch software runs and clears the regulation market. The IMM’s calculated HHI levels on a pre merger and a post merger basis for each market hour. The analysis indicated that the proposed merger raises significant market power concerns in the regulation market.

Table 0-10 shows pre and post merger HHIs for the relevant regulation market for October 2012 through September 2013. The table shows that, overall, the regulation market affected by NRG and Edison Mission Energy resources is highly concentrated. Pre-merger terms, 53.1 percent of the market hours affected by NRG and Edison Mission Energy resources had an HHI of 1800 or more, 37.6 percent had an HHI of 2000 or more and 12.9 percent of the market hours had an HHI of 2500 or more. Post merger, 55.6

<sup>40</sup> This period was chosen to align with the significant changes to the Regulation Market which were implemented on October 1, 2012.