

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

Fast-Start Pricing in Markets Operated by)	Docket No. RM17-3-000
Regional Transmission Organizations and)	
Independent System Operators)	

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

Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM (“Market Monitor”), submits these reply comments on the NOPR’s proposal to require that each regional transmission organization (RTO) and independent system operator (ISO) incorporate market rules that modify the treatment of fast-start resources in setting market prices.¹ Specifically, the Market Monitor responds to comments filed by PJM Interconnection, L.L.C. (“PJM”) and other RTOs/ISOs, the California ISO Department of Market Monitoring (“DMM”), and various generators on February 28, 2017.

The Commission declares the intent of fast start pricing to be investment incentives and uplift reduction.² But the NOPR will not accomplish either objective. The NOPR would provide disincentives for flexible fast start resources and incentives for inflexible fast start resources. The NOPR will have at best a de minimis impact on uplift and could result in an increase in uplift.

¹ See *Fast-Start Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice of Proposed Rulemaking (“NOPR”), 157 FERC ¶ 61,213 (2016).

² See NOPR at P3.

The NOPR proposes to direct RTOs to implement average cost pricing in place of marginal cost pricing.³ Average cost pricing of fast start resources does not result in a more efficient market outcome. The goal of the NOPR should be efficient, cost minimizing, marginal cost pricing. There is no reason to modify the current marginal cost pricing approach for fast start resources.

In evaluating the comments from generators, the Commission must consider the generators' goal of higher energy prices and higher revenues. The NOPR suggests market design changes that increase the cost of serving load with no added efficiency in market commitment and dispatch.

I. REPLY COMMENTS

A. Fast Start Pricing Will Not Increase Efficiency and Will Increase the Total Cost of Energy.

The proposed approach to fast start pricing would not increase market efficiency and would increase the cost of energy. The intent of the inclusion of fast start resource commitment costs in Locational Marginal Prices is to reduce uplift by shifting commitment costs to LMP instead of uplift payments to block loaded, inflexible fast start resources. The higher price, would be paid to the marginal fast start unit along with all other operating generators. The resulting total cost of energy, paid by load, would be greater than the reduction in uplift. In addition, load would pay new uplift costs to generators when the RTO directs them to ignore the higher and inefficient price and follow the efficient and lower dispatch signal.

As the DMM states "requiring such an approach for locational marginal pricing would contradict a basic principle of economic theory that has been accepted for over 70 years: a two-part [or three part] pricing system is efficient when discrete costs cause average

³ See NOPR at P 43. The average commitment cost of a resource is an average cost. It is not the marginal cost of the next available MWh of energy required to serve load.

costs to decrease as a function of output.”⁴ The LMP is efficient by design. Nonconvexity of costs does not change that.

The proposed approach to fast start pricing would represent a dramatic break with LMP. The NOPR suggests average cost pricing for fast start units. Average cost pricing is a tool of regulatory price setting for natural monopolies. The Commission has adopted regulation through market competition, not rate of return regulation. Average cost pricing and short run marginal cost pricing are incompatible. Short run marginal cost pricing combined with a competitive uplift payment is efficient.⁵

B. Reduction of Uplift Does Not Justify Increasing Costs to Ratepayers.

High uplift costs in some RTO markets, including PJM, have created pressure on the RTOs and the Commission to reduce uplift. While the reduction of unnecessary uplift is an appropriate goal, an emphasis on uplift reduction over efficient market outcomes is misguided. It is well understood that efficient market design in the presence of nonconvex costs requires uplift.

The uplift at issue with fast start resources is generally de minimis. The uplift at issue is not consistent with a need for a significant change in the LMP model. The RTOs note in their comments that fast start resources do not significantly contribute to uplift.⁶ The Market Monitor calculates that a total of only \$0.8 million in make whole payments to fast start resources in PJM in 2016 could have been affected by the proposed rule change. The total PJM energy uplift charges in 2016 were \$137.4 million, so the maximum impact of the NOPR on PJM uplift is less than 0.6 percent.⁷

⁴ See DMM at 4.

⁵ See DMM at 8; IMM Comments at 2.

⁶ See CAISO at 2; PJM at 5.

⁷ PJM’s reported \$1.8 million in uplift to fast start resources in 2016 includes uplift that would not be affected by the proposed rule change. The Market Monitor includes 58 resources in its uplift totals,

The comments from the RTOs also generally fail to address whether there could be a net increase in uplift resulting from the requirement to pay other resources opportunity cost payments to reduce output when the price from the fast start unit provides a signal to produce more output than needed. Those opportunity costs are uplift payments.

PJM recognizes that the impact on uplift in PJM would be very small. As a result, despite the concerns PJM expressed about the market efficiency impacts of the NOPR, PJM now suggests broadening the set of resources subject to average cost pricing in order to achieve larger reductions in uplift, although the broader set of resources are not fast start resources.^{8 9} This illustrates the problem of making uplift the issue rather than market efficiency. The reduction of uplift should not be an end in itself. Efficient competitive markets should be the means to achieve reductions in the total cost to reliably serve load, uplift included. The facilitation of competition through efficient and transparent markets is a better means to achieve substantial reductions in uplift.¹⁰

C. All Generators Benefit from Higher Prices.

The comments demonstrate broad support for the proposed approach to fast start pricing by generators. All generators would benefit from the higher prices that would result from average cost pricing, regardless of whether they own fast start resources. Competition and efficient pricing in RTO markets have succeeded in bringing new flexible and efficient generating technology to the market, reducing prices. Competition has meant pressure on

compared to PJM's 48 resources. The Market Monitor includes ten units that offer start times less than ten minutes at times, but not all the time.

⁸ See PJM Interconnection, L.L.C., Report on Price Formation Issues, Docket No. AD14-14-000, at 10–11 (February 17, 2016) (“PJM Report”).

⁹ See PJM at 5.

¹⁰ See *Uplift Cost Allocation and Transparency in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice of Proposed Rulemaking, 158 FERC ¶ 61,047 (2017) at P3.

generation owners especially given the low price of natural gas. This first step towards average cost pricing and away from marginal cost pricing could presage a much larger change. In fact, Exelon suggests a full abandonment of LMP and full adoption of average cost pricing in stating that “start-up and no-load costs should be included as elements of marginal costs for *all* resources.”¹¹

The result of the NOPR would not be to provide appropriate incentives for flexible fast start units. The proposed approach to fast start pricing would reward inflexible resources by pretending that block loaded units have a dispatchable capacity range. This accommodation would remove any incentive for such units to invest in technology to become flexible and would not provide the incentives for new, flexible units to enter the market. Flexible fast start generators are state of the art technology. Their flexibility would be devalued by the proposed accommodation of inflexible units. As the Southwest Power Pool (“SPP”) notes, the NOPR proposes creating incentives for the inflexible, less valuable technology.¹² A technology neutral approach would use the same pricing logic for all resources. The RTOs can achieve the efficiency gains offered by flexible fast start resources by matching the flexibility of their dispatch and commitment processes to the flexibility of these resources. Special pricing is not necessary. Picking specific technologies is not necessary.

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.

¹¹ Comments of Exelon Corporation, Docket No. RM17-3-000 (February 28, 2017) (“Exelon”) at 3.

¹² Comments of Southwest Power Pool, Inc., Docket No. RM17-3-000 (February 28, 2017) (“SPP”) at 3.

Respectfully submitted,



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