UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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

COMMENTS OF THE TRANSMISSION ACCESS POLICY STUDY GROUP

The Transmission Access Policy Study Group ("TAPS") appreciates the opportunity to comment on the December 15, 2016 Notice of Proposed Rulemaking[1] to require each regional transmission organization and independent system operator (collectively referred to as "RTO") to revise its market rules to include the amortized commitment and no-load costs of on-line fast-start resources in the locational marginal price ("LMP"). The NOPR's stated objective is to produce prices that more transparently reflect the marginal cost of serving load, thereby reducing uplift and improving price signals. While the NOPR would impose criteria defining when offline resources capable of meeting the RTO's needs may be considered in setting LMPs, it would not require RTOs to include such resources in its pricing, thus allowing LMPs to be inflated by unnecessary reliance on administrative shortage pricing or other less economic measures.

TAPS questions the need for generic action on fast-start resource pricing. Nevertheless, TAPS recognizes the efficiencies of allowing prices to transparently reflect the marginal cost of serving load. However, any fast-start pricing reforms undertaken must be designed to achieve that goal. A one-sided rule that requires fast-start pricing for

---

[1] *Fast-Start Pricing in Mkts. Operated by Reg'l Transmission Orgs. & Indep. Sys. Operators*, 81 Fed. Reg. 96,391 (proposed Dec. 30, 2016), FERC Stats. & Regs. ¶ 32,720 (2016) ("NOPR").

online resources (where the reform would tend to increase LMPs), but does not also require inclusion of offline resources available to economically address a transmission constraint violation or energy or ancillary service shortage conditions (where the reform would tend to decrease LMPs, by avoiding unnecessary administrative shortage pricing or other less economic measures), would not achieve that goal. Rather, it will saddle consumers and businesses with unjust and unreasonable charges in excess of the actual marginal cost of serving load. In addition, unjust and unreasonable rates could result from a failure to address the enhanced opportunity and incentive to exercise market power associated with the proposed pricing reform.

Thus, if the Commission promulgates a final rule in this proceeding, it should be modified to require inclusion in LMPs of qualified offline resources, as well as to provide for additional market mitigation measures to ensure market power cannot be exercised.

INTEREST OF TAPS

TAPS is an association of transmission-dependent utilities ("TDUs") in more than 35 states, promoting open and non-discriminatory transmission access.[2] Because TAPS members rely on transmission facilities owned and controlled by others, TAPS supports open and non-discriminatory transmission access, and has supported the Commission's initiative to form independent RTOs fostering efficient transmission and generation investment and robust wholesale competition. TAPS has a strong interest in ensuring that RTO energy markets work well and enable its members to affordably and reliably meet their load obligations.

---

[2] Dave Geschwind, Southern Minnesota Municipal Power Agency, chairs the TAPS Board. Jane Cirrincione, Northern California Power Agency, is the TAPS Vice Chair. John Twitty is the TAPS Executive Director.

Communications regarding these proceedings should be directed to:

John Twitty
Executive Director
TRANSMISSION ACCESS POLICY STUDY GROUP
4203 E. Woodland St.
Springfield, MO 65809
Tel: (417) 838-8576
Email: 835consulting@gmail.com

Cynthia S. Bogorad
William S. Huang
SPIEGEL & MCDIARMID LLP
1875 Eye Street, NW, Suite 700
Washington, DC 20006
Tel: (202) 879-4000
Email: cynthia.bogorad@spiegelmcd.com
william.huang@spiegelmcd.com

COMMENTS

I. IF A FAST-START PRICING RULE IS TRULY NEEDED, IT MUST BE DESIGNED TO CONSISTENTLY REFLECT THE MARGINAL COST OF SERVING LOAD

From TAPS' perspective, energy markets are working well. We therefore question the need for a generic rule to standardize the pricing of fast-start resources. If, however, the Commission proceeds to issue a final rule, to comport with the Federal Power Act (the "Act") it must be designed to consistently produce prices that better reflect the marginal cost of serving load.

Unfortunately, the NOPR proposes to require modifications in the pricing of fast-start resources only for online resources, where doing so would likely increase LMPs. It would allow RTOs to ignore offline resources that are available to economically address transmission constraint violations or energy or ancillary service shortage conditions. As a result, it would produce unnecessarily elevated LMPs that reflect avoidable administrative shortage pricing or other less economic measures.

By requiring reforms that increase LMPs, but not those that would reduce them, the NOPR would produce unjust and unreasonable prices that do *not* better reflect the marginal cost of serving load. To achieve the Commission's goals and pass muster under

the Act, this one-sided, distorting impact on prices must be removed by requiring inclusion in pricing of qualifying offline resources. In addition, to prevent unjust and unreasonable rates, the final rule should provide for mitigation of market power and reflect TAPS other comments.

A. Fast-Start Resource Definitions and Resource Eligibility

The NOPR would make eligible for fast-start pricing online resources (whether dispatchable or block-loaded) meeting its fast-start performance requirements, i.e.: (1) are able to start up within ten minutes or less; (2) have a minimum run time of one hour or less; and (3) submit economic energy offers to the market, i.e., not self-scheduling energy. NOPR, P 36. The NOPR seeks comments on whether to include resources with a longer start-up time, longer minimum run time, or other characteristics, and whether to allow regional variation. *Id.* P 48.

The NOPR's proposed definition of resources eligible for fast-start pricing is consistent with that used in MISO's Extended LMP mechanism. *See id.* P 14. Allowing longer start times or longer minimum run times could entail tradeoffs and system changes that each RTO and its stakeholders should be able to consider.

For that reason, if the Commission adopts a final rule requiring fast-start pricing, it should allow for regional variation in expanding the eligibility criteria beyond those set forth in the NOPR. However, the final rule should specify that any RTO seeking to augment those qualification parameters would be required to demonstrate that such variation achieves the NOPR's objectives in a manner that is just and reasonable—i.e., producing prices more reflective of the marginal cost to serve load.

B. Inclusion of Start-up and No-load Costs in Prices

The NOPR (PP 49-50) proposes to require that, in the pricing run, each RTO determine prices by calculating an enhanced energy offer for each qualifying fast-start resource that includes: (1) the incremental energy offer; (2) the amortized start-up cost (i.e., its start-up cost divided by the product of its economic maximum operating limit and minimum run time); and (3) an amortized portion of the no-load cost (i.e., the no-load cost divided by the resource's economic maximum operating limit), without altering the varying ways RTOs determine start-up and no-load costs. As proposed, the enhanced energy offer may be used to set prices only during the resource's minimum run time. (After the minimum run time is completed, the RTO's commitment algorithm may decommit the fast-start resource if it is no longer economic.) The NOPR seeks comments on this proposal. *Id.* P 53.

As discussed generally above and in more detail below, TAPS would not object to a fast-start pricing rule along the lines outlined in the NOPR if the final rule *also required* offline fast-start resources to be included in pricing (*see* Part D below) and provided protection against exercise of market power (*see* Part F below). *If* the final rule did so, then it would be appropriate to include in LMPs start-up and no-load costs (divided by the resource's economic maximum operating limit) of qualifying online fast-start resources during the resource's minimum run time.

C. Relaxation of Economic Operating Limit

The NOPR (P 54) proposes to require RTOs to relax to zero each fast-start resource's economic minimum operating limit, thereby treating the resource as fully dispatchable by the market software during the pricing run and able to set the LMP if it is

the marginal unit. The NOPR also proposes that each RTO ensure that physical dispatch instructions to resources do not result in over-generation and address the potential for over-generation due to deviations from dispatch instructions. The RTO's compliance filing could demonstrate that its current practices (e.g., penalties and/or opportunity cost payments to ensure that resources adhere to dispatch instructions) address over-generation, or propose tariff changes. The NOPR invites comments on over-generation management. *Id.* P 55.

Proper implementation of reforms designed to treat a fast-start resource as fully dispatchable by the RTO's market software during the pricing run, and therefore able to set the LMP if it is the marginal unit, should affect only the RTO's pricing mechanism, not its dispatch. The NOPR's over-generation concerns seem to arise from some generators (e.g., those asked to back down to accommodate dispatch of a fast-start resource) having an incentive to produce energy in excess of their dispatch target to capture the higher prices set by the fast-start resources.[3] If failure to follow dispatch instructions (either under- or over-generation) is a problem, it needs to be addressed. As the NOPR observes (P 54 & n.109), RTOs use penalties and/or opportunity cost payments to ensure that resources adhere to dispatch instructions.

D. Offline Fast-Start Resources

The NOPR (P 56) expressly recognizes that "[a]llowing offline fast-start resources to set prices can better reflect the cost of providing energy at a given location or of meeting reserve requirements." It goes on to explain (*id*. (footnote omitted)):

---

[3] *See* NOPR, P 9, P 12 n.14. The NOPR also notes as a potential cause of over-generation the RTO's use of relaxed economic minimum operating limits in its scheduling run (*not* its pricing run) where generation would not be required to be equal to load. *Id.* P 12 n.14. But that would be a misapplication of the proposed pricing reform.

> For instance, if the real-time dispatch algorithm optimizes spinning reserve supply among online resources and these online resources are not sufficient to meet the RTO's/ISO's spinning reserve requirements, the dispatch algorithm will determine there is a shortage of spinning reserve and implement the appropriate shortage pricing. However, in such circumstances, while online resources may not be sufficient to meet spinning reserve requirements, there may be offline fast-start resources that can quickly provide energy in the same time frame as spinning reserve. If RTOs/ISOs do not adequately consider all resources that are available to meet system needs, including fast-start resources that are offline, this may result in the use of administrative pricing or other measures (*e.g.*, committing additional resources) that are less economically efficient because they do not reflect the availability of less expensive fast-start resources that could resolve the issue and thus result in higher overall system costs.

Thus, including offline fast-start resources would seem essential to accomplishment of the NOPR's objective (P 3) to "ensure that prices accurately reflect the marginal cost of serving load."

While concluding that "allowing offline fast-start resources to set prices can be beneficial" (*id.* P 56), the NOPR fails to require inclusion of qualifying offline resources in pricing. Instead, it proposes to establish requirements that must be satisfied by RTOs that *elect* to do so. The NOPR proposes restrictions to ensure that the any offline resource included in pricing is actually feasible and economic for the purpose intended. *Id.* P 57. An offline fast-start resource may only set prices: (1) during a transmission constraint violation (i.e., where a transmission constraint is exceeded because the cost of redispatching resources to resolve the constraint is greater than the penalty factor associated with that constraint); or (2) if energy or ancillary service shortage conditions exist (i.e., where prices for energy or ancillary services are calculated using administrative prices as defined in the RTO's tariff). In addition, to be feasible, an

offline fast-start resource must: (1) have a start-up time of ten minutes or less; (2) have a generation shift factor of no less than five percent on the applicable transmission constraint that is being exceeded; and (3) not have any operational constraints that would prevent the resource from starting and providing energy. *Id.* P 58.[4]

TAPS does not object to the proposed restrictions on when offline fast-start resources can be considered for purposes of setting LMP. We agree that such resources should be included in prices set by the RTO only when they are feasible and economic for the purpose intended. ***However, TAPS strongly objects to the NOPR's proposal not to require RTOs to include offline resources in LMPs in such instances.***

Failure to require inclusion of offline fast-start resources would result in a lopsided rule that undermines the Commission's objectives of having LMPs more accurately reflect the marginal cost of serving load. Requiring implementation of fast-start resource pricing only with respect to online resources that tend to increase LMPs, while allowing RTOs not to consider offline resources that tend to lower LMPs by more accurately reflecting the cost of addressing a transmission constraint violation or energy or ancillary shortage, would produce excessive charges that are not just and reasonable. Therefore, if the Commission adopts a final rule requiring fast-start pricing for online resources, it must also require RTOs to include offline fast-start resources in LMPs where they are economic and feasible (i.e., where the requirements of Paragraph 58 are satisfied).

As quoted above, the NOPR (P 56) expressly recognizes that failure to consider offline fast-start resources available to meet system needs could result in excessive rates:

---

[4] *See also* Proposed § 35.38(g)(10)(v).

failure to do so "may result in the use of administrative pricing or other measures (*e.g.*, committing additional resources) that are less economically efficient because they do not reflect the availability of less expensive fast-start resources that could resolve the issue and thus result in higher overall system costs." Indeed, the Commission relied on the inclusion of offline fast-start resources when it rejected protestors' arguments[5] that MISO's Extended LMP would not benefit consumers, given the higher prices (including for infra-marginal resources) that will result from the upward adjustment of offers associated with fast-start online resources that set the LMP. Specifically, the Commission focused on the consumer benefits from including offline resources:[6]

> Contrary to the assertions of [protestors], we believe that consumers should benefit from the Extended LMP methodology. Clearing prices calculated through the Extended LMP algorithm should provide better price signals during periods when the SCED algorithm indicates a shortage or transmission constraint violation but off-line Fast Start Resources or Emergency Demand Resources are available for commitment to alleviate the shortage or violation. This is because Extended LMP pricing would allow the available off-line resource to set the price whereas the SCED algorithm would not. In the near term, MISO's proposal should result in prices that better capture the costs considered in committing and dispatching resources. In the long term, it should also send more effective signals about the need for additional resources in the region. By producing a clearing price that better reflects the most expensive action taken to satisfy demand in the region, the Extended LMP algorithm should promote more efficient development of supply and demand resources in the future.

Stripped of this consumer-protective element of including qualifying offline resources, the fast-start pricing required by the NOPR would result in prices greater than

---

[5] *Midwest Indep. Transmission Sys. Operator, Inc*., 140 FERC ¶ 61,067, P 30 (2012).

[6] *Id.* P 39.

the "most expensive action taken to satisfy demand in the region."[7] A final rule that required fast-start pricing for online resources, but allowed RTOs to trigger administrative shortage pricing or other high cost measures, while ignoring the availability of feasible, more economic fast-start resources that could address energy or ancillary service shortage conditions or a transmission constraint violation, would be inconsistent with the Federal Power Act's "lowest reasonable cost" mandate.[8] That goal is fully applicable to RTOs. Order 2000 sought "to promote efficiency in wholesale electricity markets and to ensure that electricity consumers pay the lowest price possible for reliable service."[9]

Thus, to be consistent with the Act's consumer protection mandate, if the Commission adopts a final rule requiring fast-start pricing, it must do more than merely

---

[7] *Id.*

[8] *See Atl. Ref. Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 388 (1959) (noting it was Congress's intent in drafting the Natural Gas Act that natural gas "shall be sold in interstate commerce . . . at the lowest possible reasonable rate consistent with the maintenance of adequate service in the public interest."); *id.* at 389 (stating that Congress's "overriding intent" was "to give full protective coverage to the consumer as to price"); *Nat'l Fuel Gas Supply Ass'n v. FERC*, 900 F.2d 340, 346 (D.C. Cir. 1990) (discussing a natural gas pipeline's duty to "minimize its overall costs to achieve the lowest reasonable rates consistent with the maintenance of adequate long term service."); *Columbia Gas Transmission Corp.*, 26 FERC ¶ 61,034, at 61,100 (1984) (enforcing a pipeline's "fundamental duty to provide service at the lowest, reasonable rate consistent with maintenance of adequate service"), *aff'd in part sub nom. Office of Consumers' Counsel v. FERC*, 783 F.2d 206 (1986); *Louisville Gas & Elec. Co*., 62 FERC ¶ 61,016, at 61,143 (1993) ("One of the Commission's primary regulatory goals is to ensure the lowest, reasonable cost energy to consumers, consistent with reliable service."). There should be no question that Natural Gas Act precedent is equally applicable in the context of the Federal Power Act. *TAPS v. FERC*, 225 F.3d 667, 686 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002) (noting that the Natural Gas Act and Federal Power Act should be interpreted consistently).

[9] *Promoting Transmission Inv. Through Pricing Reform*, Order No. 679-A, 72 Fed. Reg. 1,152, 1,166 (Jan. 10, 2007), FERC Stats. & Regs. ¶ 31,236, P 86 n.141, *clarified*, 119 FERC ¶ 61,062 (2007) (quoting Order No. 2000, FERC Stats. & Reg. ¶ 31,089, at 31,024). *See also ISO New England Inc*., 118 FERC ¶ 61,105, P 21 (2007) (finding that "ISO-NE . . . seeks only to provide reliable service at the lowest reasonable cost."), *reh'g denied*, 120 FERC ¶ 61,122 (2007); *PJM Interconnection L.L.C.*, 119 FERC ¶ 61,063, P 6 (2007) (As an RTO, PJM assumed responsibility to plan the regional transmission grid to meet the needs of the region as a whole, with emphasis on achieving reliable supply at the lowest reasonable cost), *reh'g denied*, 122 FERC ¶ 61,082 (2008), *appeal denied sub nom. Ill. Commerce Comm'n v. FERC*, 576 F.3d 470 (2009).

allow RTOs to include in LMPs qualifying offline fast-start resources. Rather, the Commission must *require* RTOs to include such offline resources in its pricing to ensure that consumers are not charged administrative shortage prices or other measures when offline generation can feasibly and economically address energy or ancillary service shortage conditions or a transmission constraint violation. A final fast-start pricing rule that leaves inclusion of offline resources to RTO discretion would result in rates that are unjust and unreasonable, in violation of the Act.

E. Day-Ahead and Real-Time Market Consistency

The NOPR (P 60) proposes to require fast-start pricing in both day-ahead and real-time markets. It seems logical to have consistency between day-ahead and real-time markets, to facilitate price convergence, as the NOPR recognizes (P 62). As also acknowledged by the NOPR (*id*.), however, the benefits of application to day-ahead markets will be smaller. Thus, it is appropriate to leave to the decision as to whether to apply fast-start pricing to day-ahead markets to individual RTOs and their stakeholders, while requiring each RTO to explain and justify its choice in its compliance filing.

F. Market Power Mitigation Should be Included in any Fast-Start Pricing Rule

The NOPR seeks comments on whether allowing fast-start resources to set prices could result in the exercise of market power, noting that concentrated ownership of fast-start resources could raise market power concerns that are not addressed in existing RTO market power mitigation procedures. *Id.* P 64 & n.116.

The NOPR correctly recognizes that given the potential for concentration of ownership of fast-start resources, allowing fast-start resources to set prices could create opportunities for market power exercise that have not been fully addressed by RTOs'

current mitigation procedures. Such opportunities can occur during peak periods where alternatives may be limited. In addition, this potential for market power exercise is heightened where fast-start resources are dispatched to address localized transmission constraint violations or energy or ancillary service shortage. And the incentive for such exercise is elevated by fast-start pricing, especially if the market participant owning the bulk of the fast-start resources in an area also has infra-marginal units that could benefit from the increased LMPs.[10]

Market power mitigation measures vary among RTOs, and may not fully address the market power exercise opportunities created or enhanced by fast-start pricing. Thus, if the final rule requires fast-start pricing, then it should also require RTOs to submit additional measures sufficient to mitigate market power in this context, or demonstrate that such potential for market power exercise is fully covered by existing market power mitigation.

Requiring RTOs to address market power mitigation associated with implementation of fast-start pricing reforms would be consistent with the Commission's approach in instituting other pricing reforms in Order 719.[11] When the Commission mandated that RTOs implement shortage pricing reforms, it required each RTO to "[e]nsure market power is mitigated and gaming behavior is deterred during periods of

---

[10] Indeed, as the NOPR observes (*e.g.*, *id*. P 9), application of fast-start pricing can increase a generator's incentive to over-generate to take advantage of the elevated clearing prices.

[11] *Wholesale Competition in Regions with Organized Elec. Mkts.*, Order No. 719, 73 Fed. Reg. 64,100 (Oct. 28, 2008), FERC Stats. & Regs. ¶ 31,281 (2008), *corrected*, 126 FERC ¶ 61,261 (2010), *on reh'g*, Order No. 719-A, 74 Fed. Reg. 37,776 (July 29, 2009), FERC Stats. & Regs. ¶ 31,292 (2009), *on reh'g*, Order No. 719-B, 129 FERC ¶ 61,252 (2009).

operating reserve shortages."[12] Thus, it is necessary and appropriate for any final rule instituting fast-start pricing reforms to similarly require the demonstration of the sufficiency of existing market power mitigation, and if needed to address market power exercise in light of the new reforms, submission of enhanced mitigation measures.

CONCLUSION

Any final rule issued in this proceeding should consider and reflect TAPS comments as set forth above.

Respectfully submitted,

/s/ Cynthia S. Bogorad

Cynthia S. Bogorad
William Huang

Attorneys for the
Transmission Access Policy Study Group

Law Offices of:
Spiegel & McDiarmid LLP
1875 Eye Street, NW
Suite 700
Washington, DC 20006
(202) 879-4000

February 28, 2017

[12] Order 719, P 247. *See also id*. P 249 (the required analysis of market power includes the protection of consumers from the exercise of market power).