

161 FERC ¶ 61,296
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Kevin J. McIntyre, Chairman;
Cheryl A. LaFleur, Neil Chatterjee,
Robert F. Powelson, and Richard Glick.

Southwest Power Pool, Inc.

Docket No. EL18-35-000

ORDER INSTITUTING SECTION 206 PROCEEDING AND COMMENCING PAPER
HEARING PROCEDURES AND ESTABLISHING REFUND EFFECTIVE DATE

(Issued December 21, 2017)

1. In this order, we find that Southwest Power Pool, Inc.'s (SPP) practices regarding the pricing of quick-start resources¹ may be unjust and unreasonable because the practices do not allow prices to reflect the marginal cost of serving load. Accordingly, pursuant to section 206 of the Federal Power Act (FPA),² we institute an investigation in Docket No. EL18-35-000 to examine SPP's Open Access Transmission Tariff (Tariff) and practices to determine whether SPP should be required to revise its Tariff to: (1) modify SPP's dispatch process to respect physical parameters of resources while minimizing production costs; (2) modify pricing logic to allow quick-start resources' commitment costs³ to be reflected in prices; (3) modify the definition of quick-start resources to require that they have a minimum run time of one hour or less; (4) allow

¹ SPP refers to resources that are able to start up within ten minutes or less and choose to register with SPP for inclusion in its quick-start logic as quick-start resources. SPP, OATT, Sixth Revised Volume No. 1, Attachment AE, § 1.1 Q (0.0.0). Resources that are able to start quickly to address system needs have different names in other regional transmission organizations (RTO) and independent system operators (ISO), and the Commission has generically referred to such resources as fast-start resources.

² 16 U.S.C. § 824e (2012).

³ Commitment costs are a resource's start-up and no-load costs.

all quick-start resources, including block-loaded quick-start resources,⁴ to set prices; and (5) consider all eligible resources for purposes of quick-start pricing, including unregistered quick-start resources.

I. Background

2. In June 2014, the Commission began evaluating issues related to price formation in the energy and ancillary services markets operated by RTOs/ISOs.⁵ As part of that effort, the Commission set forth a set of price formation goals, and directed each RTO/ISO to file a report on several price formation topics, including fast-start pricing.⁶ Fast-start pricing allows an RTO's/ISO's software algorithms to incorporate the offers of fast-start resources into the market prices for energy and ancillary services. Fast-start resources are resources that are able to start quickly and are often dispatched to their inflexible economic minimum or maximum operating limits, and are thus not eligible to set prices absent this special RTO/ISO fast-start pricing logic.

3. On December 15, 2016, the Commission issued a notice of proposed rulemaking (NOPR) that preliminarily found that some existing RTO/ISO fast-start pricing practices, or lack of fast-start pricing practices, may not result in rates that are just and reasonable.⁷ As a result, the Commission proposed establishing several requirements regarding the pricing of fast-start resources and sought comment on the need for reform discussed in

⁴ Block-loaded means the resource's economic minimum operating limit equals its economic maximum operating limit. The economic minimum and maximum operating limits are the minimum amount of electric power that a resource must be allowed to produce, and the highest level a resource can produce, while under economic dispatch, respectively.

⁵ See *Price Formation in Energy and Ancillary Services Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice, Docket No. AD14-14-000 (June 19, 2014).

⁶ See *Price Formation in Energy and Ancillary Services Markets Operated by Regional Transmission Organizations and Independent System Operators*, 153 FERC ¶ 61,221, at P 1 (2015) (Order Directing Reports). SPP filed its price formation report on March 7, 2016. SPP, Report on Price Formation Issues, Docket No. AD14-14-000 (SPP Report).

⁷ *Fast-Start Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 81 Fed. Reg. 96,391 (Dec. 30, 2016), FERC Stats. & Regs. ¶ 32,720, at PP 3, 36-37 (2016) (NOPR).

the NOPR and the proposed requirements.⁸ Based on comments received, the Commission, in an order being issued concurrently with this order, is withdrawing the NOPR.⁹ In that order, the Commission states, among other things, that it continues to believe that improved fast-start pricing practices have the potential to achieve the goals outlined in the NOPR but has been persuaded to not require a uniform set of fast-start pricing requirements that would apply to all RTOs/ISOs. Instead, the Commission is pursuing the goals of the NOPR through targeted section 206 actions focusing on specific concerns with each RTO's/ISO's implementation of fast-start pricing.¹⁰

4. SPP currently has a set of practices in the real-time balancing market specific to quick-start resources. SPP first executes a “screening run” that identifies a set of resources that are to be excluded from the binding solution.¹¹ The screening run market optimization pass identifies an economic dispatch solution under the assumption that quick-start resources may be dispatched below their economic minimum operating limit. Then, any resources that are dispatched below their economic minimum operating limit in the screening run are treated as “off” and excluded from consideration in the binding pricing and scheduling run.¹² This means quick-start resources are only considered for dispatch in the pricing and scheduling run if they are dispatched to at least their economic minimum operating limit in the screening run. After the screening run, a second optimization pass (pricing and scheduling run) is used to determine both the binding resource dispatch levels and energy and operating reserve prices.

5. Two additional rules distinguish the treatment of quick-start resources in SPP from fast-start pricing practices in other RTOs/ISOs. First, SPP provides an option for quick-start resources to submit an enhanced energy offer that includes commitment costs (i.e., start-up and no-load costs) as part of the incremental cost curve to be used both in the screening run and in the pricing and scheduling run of the real-time balancing

⁸ *Id.* PP 3, 44.

⁹ *Fast-Start Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 161 FERC ¶ 61,293 (2017).

¹⁰ *Id.* P 4.

¹¹ The binding solution provides dispatch instructions and energy and operating reserve prices as inputs to the settlement process, as opposed to the screening run solution output, which is only used to guide further processes.

¹² *See* SPP Report at 2-4.

market.¹³ Second, SPP does not have any minimum run time requirement for eligibility as a quick-start resource.¹⁴

II. Discussion

6. The Commission preliminarily finds that some of SPP's practices related to the pricing of quick-start resources are unjust and unreasonable. These practices involve: (A) having an approach to committing quick-start resources that may be inconsistent with minimizing production costs; (B) not allowing the commitments costs of quick-start resources to be reflected in prices; (C) not requiring quick-start resources to have a minimum run time; (D) precluding quick-start resources from setting prices when they are block-loaded or otherwise dispatched at their economic minimum operating limits; and (E) not including unregistered quick-start resources in quick-start pricing.

7. The Commission's preliminary finding that SPP's quick-start pricing practices are unjust and unreasonable is consistent with the goals of price formation.¹⁵ As the Commission noted in the fast-start pricing NOPR,¹⁶ the accurate pricing of quick-start resources advances those goals by transparently reflecting the marginal cost of serving load and the value quick-start resources provide in meeting system needs, which will reduce uplift costs and improve price signals to support efficient investments in facilities and equipment.

¹³ SPP Integrated Marketplace Protocols, Appendix G, § 6.4.

¹⁴ SPP, OATT, Sixth Revised Volume No. 1, Attachment AE, § 1.1 Q (0.0.0); SPP Report at 7.

¹⁵ The Commission has stated that the goals of price formation are to: (1) maximize market surplus for consumers and suppliers; (2) provide correct incentives for market participants to follow commitment and dispatch instructions, make efficient investments in facilities and equipment, and maintain reliability; (3) provide transparency so that market participants understand how prices reflect the actual marginal cost of serving load and the operational constraints of reliably operating the system; and (4) ensure that all suppliers have an opportunity to recover their costs. *See, e.g.*, Order Directing Reports, 153 FERC ¶ 61,221 at P 2; Price Formation in Energy and Ancillary Services Markets Operated by Regional Transmission Organizations and Independent System Operators, Notice Inviting Post-Technical Workshop Comments, Post-Technical Conference Questions for Comment, Docket No. AD14-14-000, at 1 (Jan. 16, 2015).

¹⁶ NOPR, FERC Stats. & Regs. ¶ 32,720 at P 35.

8. A number of commenters expressed general support for the NOPR proposals.¹⁷ Several commenters stated that, consistent with the goals of the NOPR, the inclusion of fast-start resources' costs in prices will produce more transparent prices, which would more accurately reflect the marginal cost of serving load.¹⁸ Multiple commenters suggested that the Commission allow for implementation flexibility due to regional differences and the different types of resources operating in the RTOs/ISOs.¹⁹

9. After consideration of the record, the Commission has opted not to take generic action on fast-start pricing; however, we continue to believe that improved fast-start pricing practices have the potential to achieve the goals outlined in the NOPR. We remain concerned that SPP may not meet these goals because its existing quick-start

¹⁷ American Petroleum Institute NOPR Comments at 2; Basin Electric Power Cooperative (Basin Electric) NOPR Comments at 2; Electric Power Supply Association, Independent Power Producers of New York, New England Power Generators Association, Inc., PJM Power Providers, and Western Power Trading Forum (Competitive Suppliers) NOPR Comments at 4-6; Environmental Defense Fund NOPR Comments at 4; Edison Electric Institute (EEI) NOPR Comments at 2; Exelon Corporation (Exelon) NOPR Comments at 3; IMG Midstream LLC (IMG Midstream) NOPR Comments at 1; Microgrid Resources Coalition NOPR Comments at 3; Nuclear Energy Institute (NEI) NOPR Comments at 2; PJM NOPR Comments at 2; Potomac Economics, Ltd. (Potomac Economics) NOPR Comments at 1-2; Powerex Corp. NOPR Comments at 7-8; Sunflower Electric Power Corporation and Mid-Kansas Electric Company, LLC (Sunflower and Mid-Kansas) NOPR Comments at 2; Westar Energy, Inc. (Westar) NOPR Comments at 2-3. Other commenters, however, disagreed with the NOPR proposals. *See* Department of Market Monitoring for the California Independent System Operator (CAISO Market Monitor) NOPR Comments at 1, 3; Electricity Consumers Resource Council (ELCON) NOPR Comments at 2-5; Monitoring Analytics, LLC (PJM Market Monitor) NOPR Comments at 2-3.

¹⁸ Competitive Suppliers NOPR Comments at 2; R Street Institute NOPR Comments at 2; Westar NOPR Comments at 3.

¹⁹ American Public Power Association and National Rural Electric Cooperative Association NOPR Comments at 5-7; California Independent System Operator Corporation (CAISO) NOPR Comments at 4; EEI NOPR Comments at 3; Exelon NOPR Comments at 4; ISO New England, Inc. (ISO-NE) NOPR Comments at 1; ISO/RTO Council NOPR Comments at 1-3; New England Power Pool Participants Committee NOPR Comments at 4-5; New York Independent System Operator, Inc. (NYISO) NOPR Comments at 19-20; Pacific Gas and Electric Company NOPR Comments at 2-3; Southern California Edison Company (SCE) NOPR Comments at 3-4.

pricing practices may result in market prices that fail to accurately reflect the marginal cost of serving load and fail to reflect the value of quick-start resources.

10. In addition, because SPP's quick-start pricing rules and practices significantly affect rates, terms, and conditions of service, we preliminarily find that SPP must file them as part of the Tariff.²⁰

A. SPP Approach to Committing Quick-Start Resources

11. SPP's approach to committing and dispatching quick-start resources in real-time may be inconsistent with the objective of minimizing system production costs. An efficient dispatch can only be reliably determined by modeling the actual system costs and actual system constraints within a market run that minimizes production costs. That is, quick-start pricing logic would ideally not change the dispatch of resources away from the cost-minimizing dispatch, but would only alter the manner by which prices are established. SPP does not appear to develop dispatch instructions in this way.

12. First, SPP solves a screening run that determines whether a quick-start resource would be dispatched above its economic minimum operating limit if its economic minimum operating limit was fully relaxed to zero. Any quick-start resources dispatched below their economic minimum operating limit are "screened out" and not considered available for dispatch in the following pricing and scheduling run. This means that the dispatch schedules calculated by the pricing and scheduling run are based on a set of available resources that is not reflective of actual available resources. By not accurately reflecting resources that are available for dispatch, the pricing and scheduling run may produce an inefficient dispatch that does not minimize production costs. Furthermore, this practice may result in dispatch solutions that underestimate actual energy production because it inappropriately assumes that some quick-start resources are offline (because of the screening run) when such resources are physically incapable of turning off due to minimum run time constraints.²¹ Ignoring the physical limitations of resources in this manner may cause a system power imbalance that must be managed through the use of frequency regulation resources.

²⁰ See *infra* section II.F.

²¹ Golden Spread Electric Cooperative, Inc. (Golden Spread) raised this as a concern in its comments on the NOPR. Golden Spread NOPR Comments at 12.

13. In addition, the pricing and scheduling run that follows the screening run may further contribute to inefficient dispatch solutions because the market optimization may incorporate enhanced energy offers,²² which include amortized commitment costs, in the incremental cost curves of quick-start resources. Including commitment costs in the process for determining dispatch instructions may lead to an inefficient dispatch that is inconsistent with the least-cost solution, and the resulting dispatch may fail to accurately reflect optimal energy production of quick-start resources.

14. Accordingly, we preliminarily find that SPP's method of committing and dispatching quick-start resources is inconsistent with the objective of minimizing system production costs, and therefore may produce rates that are unjust and unreasonable.²³

B. SPP Practice Regarding Commitment Costs

15. SPP's locational marginal pricing rules do not account for quick-start resources' commitment costs in its pricing logic, except in instances where a registered quick-start resource opts to include commitment costs through adders to its incremental energy offers.²⁴ We preliminarily find that not including commitment costs for all quick-start resource offers, including unregistered quick-start resources, may be unjust and unreasonable, as discussed below.

16. The SPP Tariff provides registered quick-start resources an option to include commitment costs through adders in their incremental energy offers. Under this option, start-up and no-load offers are set to zero, and the adders are calculated by amortizing start-up costs over the resource's previous year's average energy output during the

²² See *supra* P 5.

²³ SPP's approach to considering quick-start resources when determining commitment and dispatch instructions may also be inconsistent with other portions of the SPP Tariff. See SPP, OATT, Sixth Revised Volume No. 1, Attachment AE, § 6.2 (1.0.0) ("The Transmission Provider will clear the [real-time balancing market] by determining the security-constrained dispatch that is the least costly means of balancing generation and load while meeting Operating Reserve requirements within the SPP Balancing Authority Area.").

²⁴ SPP, OATT, Sixth Revised Volume No. 1, Attachment AF, § 3.2 (E.3) (4.1.0) (referencing Appendix G of the market protocols).

minimum run time and amortizing no-load costs over the resource's previous year's average hourly output during a security-constrained economic dispatch deployment.²⁵ To the degree that such a resource is marginal, the resulting prices would include the resource's amortized commitment-related costs. Similarly, quick-start resources set prices solely on the basis of their incremental energy curve. SPP does not apply this same process to unregistered quick-start resources. Therefore, SPP's pricing logic may not accurately reflect the cost of production in periods when unregistered quick-start resources are the marginal resource.

17. The fast-start pricing NOPR proposed to require each RTO/ISO to incorporate a resource's commitment costs (i.e., start-up and no-load costs) in energy and operating reserve prices when the RTO/ISO commits a fast-start resource.²⁶ In response to the NOPR, many commenters supported the proposal to allow fast-start resources' commitment costs (i.e., start-up and no-load costs) to be reflected in energy market prices.²⁷ Some commenters further stated that excluding these costs would result in inaccurate locational marginal prices, risks to system reliability, and improper valuation of the services that fast-start resources provide.²⁸ Additionally, due to the differences in market design, some commenters supported giving RTOs/ISOs the flexibility to assess

²⁵ SPP Integrated Marketplace Protocols, Appendix G, § 6.4. Technically, the mitigated energy offer curve is adjusted as described. Since the resource's offers are compared to the mitigated offers before triggering mitigation, this effectively allows the resource's energy offer to reflect commitment-related costs.

²⁶ NOPR, FERC Stats. & Regs. ¶ 32,720 at P 49.

²⁷ AES Companies NOPR Comments at 6; American Wind Energy Association NOPR Comments at 1; Competitive Suppliers NOPR Comments at 8; Exelon NOPR Comments at 5; Golden Spread NOPR Comments at 9; IMG Midstream NOPR Comments at 4; Midcontinent Independent System Operator, Inc. (MISO) NOPR Comments at 8; NEI NOPR Comments at 4; Potomac Economics NOPR Comments at 10.

²⁸ Exelon NOPR Comments at 5; IMG Midstream NOPR Comments at 4; MISO NOPR Comments at 8-9; R Street Institute NOPR Comments at 4-5.

the need to include commitment costs and the appropriate method for doing so.²⁹ On the other hand, some of the RTOs/ISOs and market monitors expressed concern about the proposed requirement.³⁰

18. We remain concerned that not including commitment costs for quick-start resources does not accurately represent the marginal cost of serving load. Because of their operating characteristics, quick-start resources, whether registered or unregistered, are uniquely situated to respond to unforeseen real-time system needs that are short-term in nature. When such resources are committed in real-time, it is often at short notice to meet some system condition or market need over a short time period. The costs of these commitment decisions are incurred to serve system needs in a similar way that marginal costs are incurred to serve system needs for a specific time period. Specifically, incorporating commitment costs of quick-start resources in prices more accurately represents the marginal cost of production, which will help inform investment decisions and reduce reliance on uplift payments. For these reasons, the Commission preliminarily finds that commitment costs of registered and unregistered quick-start resources in SPP should be considered as marginal for purposes of setting prices in SPP. Thus, SPP's practice of not including commitment costs in the price-setting logic used for registered and unregistered quick-start resources may result in prices that do not reflect the marginal cost of serving load. Therefore, we preliminarily find that SPP's practice may produce rates that are unjust and unreasonable.

C. Minimum Run Time Requirement

19. The fast-start pricing NOPR proposed to require each RTO/ISO to limit fast-start pricing logic to resources with a minimum run time of one hour or less.³¹ In response to the NOPR, some commenters supported the proposed requirement that fast-start resources have a minimum run time of one hour or less.³² These commenters stated

²⁹ NYISO NOPR Comments at 10, 14; SCE NOPR Comments at 3.

³⁰ CAISO NOPR Comments at 10; CAISO Market Monitor NOPR Comments at 1-2; NYISO NOPR Comments at 9; PJM NOPR Comments at 8; PJM Market Monitor NOPR Comments at 6.

³¹ NOPR, FERC Stats. & Regs. ¶ 32,720 at P 46.

³² Basin Electric NOPR Comments at 3; Golden Spread NOPR Comments at 7-8; IMG Midstream NOPR Comments at 3; MISO NOPR Comments at 6; NYISO NOPR Comments at 4, 8.

that the minimum run time requirement would help ensure that fast-start resources are flexible, would send more accurate price signals by reflecting a more complete value for using the resources to address transient issues, and would encourage and reward resources that can provide optionality.³³ Other commenters supported including resources with longer minimum run times in fast-start pricing. They stated, for example, that imposing a minimum run time requirement of one hour or less could preclude otherwise applicable resources from full market integration and limit the benefits of price formation reform, and that longer minimum run times would not lead to pricing inaccuracies.³⁴

20. SPP's Tariff does not include a minimum run time requirement for a resource to receive quick-start pricing treatment. Quick-start pricing treatment allows market prices to reflect the value quick-start resources provide the system, particularly the ability of quick-start resources to meet real-time system needs. We remain concerned that resources with minimum run times in excess of an hour may lack the flexibility to operate in a manner consistent with transient real-time needs. As a result, commitment and dispatch of resources with a minimum run time in excess of an hour does not appear analogous to a marginal decision so applying fast-start pricing logic to such units could result in prices failing to reflect the marginal cost of serving load. Therefore, we preliminarily find that it may be unjust and unreasonable for resources with a minimum run time of greater than one hour to receive quick-start pricing treatment.

D. SPP Practice Regarding Relaxation of Economic Minimum Operating Limits

21. The fast-start pricing NOPR proposed to require each RTO/ISO to modify its fast-start pricing rules to relax the economic minimum operating limit of fast-start resources and treat them as dispatchable from zero to the economic maximum operating limit for the purpose of calculating prices.³⁵ In response to the NOPR, many commenters generally supported the proposal to relax the economic minimum operating limit of fast-start resources and treat them as dispatchable from zero to the economic maximum

³³ Basin Electric NOPR Comments at 3; IMG Midstream NOPR Comments at 3.

³⁴ Potomac Economics NOPR Comments at 7-8; R Street Institute NOPR Comments at 4.

³⁵ NOPR, FERC Stats. & Regs. ¶ 32,720 at P 54.

operating limit for the purpose of calculating prices.³⁶ Potomac Economics stated that this proposal is required in any feasible fast-start pricing approach because it is the minimum output constraint that prevents resources from being able to set prices.³⁷ Other commenters disagreed with the proposal and argued that, among other disadvantages, it would create a disconnect between dispatch signals and prices³⁸ and could create an energy imbalance by producing physically infeasible results.³⁹

22. SPP's current practice of not allowing for the relaxation of the economic minimum operating limit for block-loaded quick-start resources or other quick-start resources at their economic minimum operating limit for the purposes of setting prices may produce prices that do not reflect the marginal cost of serving load. Prices are set by the next dispatchable megawatt, which may come from a lower cost resource that was dispatched down to maintain power balance upon the need for the quick-start resource. In this case, the price will not reflect the cost of quickly responding to unforeseen system needs. Additionally, due to the irregularity of the real-time optimization (i.e., screening run results informing the pricing and scheduling run), the set of quick-start resources available for the purpose of setting prices may not reflect actual conditions or allow quick-start resources to set prices. We preliminarily find that these practices fail to reflect the cost of quick-start resources in market prices, which may lead to rates that are unjust and unreasonable. While some commenters raise concerns about the potential consequences of relaxing the economic minimum operating limit of quick-start resources, we note that there are methods to address these concerns that can and should be considered, as discussed later in this order.⁴⁰

³⁶ AES Companies NOPR Comments at 7; Competitive Suppliers NOPR Comments at 9; EEI NOPR Comments at 4; Exelon NOPR Comments at 7; Golden Spread NOPR Comments at 4, 10-11; IMG Midstream NOPR Comments at 5; ISO-NE NOPR Comments at 8-9; MISO NOPR Comments at 1-2, 11; NEI NOPR Comments at 4; NYISO NOPR Comments at 10; New York Transmission Owners NOPR Comments at 7; Sunflower and Mid-Kansas NOPR Comments at 6; Westar NOPR Comments at 9.

³⁷ Potomac Economics NOPR Comments at 12.

³⁸ ELCON NOPR Comments at 3.

³⁹ CAISO NOPR Comments at 8.

⁴⁰ See *infra* P 26.

E. SPP Practice Regarding Unregistered Quick-Start Resources

23. SPP does not currently apply its quick-start pricing logic to all resources that meet the physical requirements of quick-start resources; rather, SPP allows market participants the option of whether to register such resources as a quick-start resource. Because unregistered quick-start resources have the same physical characteristics as registered quick-start resources, we preliminarily find that the same concerns discussed above with regard to how quick-start resources are considered for dispatch and whether quick-start resources are eligible to set price and include commitment costs⁴¹ apply to unregistered quick-start resources as well. Therefore, we preliminarily find that by distinguishing between registered and unregistered quick-start resources for purposes of setting price and including commitment costs, SPP's quick-start pricing logic may result in rates that are unjust and unreasonable.

F. SPP Tariff Language

24. The FPA requires all practices that significantly affect rates, terms, and conditions of service to be on file with the Commission, and these practices must be included in a Commission-accepted tariff.⁴² The SPP practices mentioned above are not described in SPP's Tariff. For example, the Tariff does not describe the process by which quick-start resources are screened out within the screening run from participating in dispatch, which appears to have a material effect on electric power rates.⁴³ Therefore, our preliminary review indicates that SPP's practices related to quick-start pricing significantly affect the rates, terms, and conditions of service and as such, must be filed with the Commission as part of the SPP Tariff.

G. Institution of Section 206 Proceeding

25. Accordingly, we institute a proceeding in Docket No. EL18-35-000, pursuant to FPA section 206, to examine SPP's Tariff and practices. Upon initial review, we believe

⁴¹ See *supra* sections II.B and II.D.

⁴² 16 U.S.C. § 824d(c) (2012); *Demand Response Coalition v. PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,061, at P 17 (2013); *Cargill Power Markets, LLC v. Public Service Company of New Mexico*, 141 FERC ¶ 61,141, at P 14 (2012); see generally *Prior Notice and Filing Requirements under Part II of the FPA*, 64 FERC ¶ 61,139 (1993) (explaining Commission jurisdiction with respect to all rates and charges that are “for or connected with” and all agreements that “affect or relate to” jurisdictional activities).

⁴³ See SPP, OATT, Sixth Revised Volume No. 1, Attachment AE, § 6.2.2(6).

that implementing the following changes to SPP's Tariff would result in rates that are just and reasonable:

- A) Commit and dispatch quick-start resources in real-time consistent with minimizing production costs, subject to appropriate operational and reliability constraints; and remove the option for enhanced energy offers for quick-start resources that incorporate commitment costs in the incremental energy curve;⁴⁴
- B) Modify pricing logic to allow the commitment costs of quick-start resources (including all such resources even if they have not registered as quick-start resources) to be reflected in prices;⁴⁵
- C) Include in the definition of quick-start resources a requirement that those resources have a minimum run time of one hour or less;⁴⁶
- D) Allow for relaxation of all quick-start resources' economic minimum operating limits by up to 100 percent, such that the resources are considered dispatchable from zero to their economic maximum operating limit for the purposes of setting prices;⁴⁷
- E) Consider both registered and unregistered quick-start resources in quick-start pricing to ensure prices reflect the cost of the marginal resource;⁴⁸ and
- F) Set forth its rules and practices regarding the pricing of quick-start resources.⁴⁹

⁴⁴ See *supra* section II.A.

⁴⁵ See *supra* section II.B.

⁴⁶ See *supra* section II.C. As noted above, SPP's definition of quick-start resources already includes a requirement that such resources be able to start up within ten minutes or less. See *supra* P 1 n.1. This proceeding does not address SPP's start-up time requirement for quick-start resources.

⁴⁷ See *supra* section II.D.

⁴⁸ See *supra* section II.E.

⁴⁹ See *supra* section II.F.

We expect that the proposed modifications will remedy SPP's current quick-start pricing practices that potentially lead to unjust and unreasonable rates. For instance, the identified modifications are intended to more accurately reflect the marginal cost of serving load in periods when a quick-start resource is the marginal resource and provide price signals that better inform investment decisions, including where and when quick-start resources should be built or maintained. The identified modifications will also provide more accurate and transparent price signals that better reflect the actual marginal cost of serving load, minimize production costs, and reduce uplift. We also expect that allowing the market software to relax the economic minimum operating limit of all quick-start resources would allow these resources to set prices under a broader range of dispatch conditions and therefore result in prices that more accurately reflect the marginal cost of serving load.

26. To the extent that SPP finds over-generation from price-chasing resources to be a potential problem after considering the identified modifications, we encourage SPP to develop any necessary changes or additions to address this issue and include those changes in its compliance filing to ensure that its quick-start pricing logic does not cause over-generation nor lead to incentives for resources to deviate from SPP's dispatch instructions. SPP may consider approaches such as penalizing uninstructed deviations, settling over-generated MWh at only standard locational marginal price (not at the higher prices determined through quick-start pricing), or providing for lost opportunity cost payments.⁵⁰ By implementing a mechanism to discourage over-generation, power imbalances and adverse effects on the regulation market can be avoided.

27. We find that a paper hearing, as ordered below, is the appropriate procedure to resolve this matter. As ordered below, any person desiring to participate in the paper hearing must file a notice of intervention or timely motion to intervene, as appropriate, in accordance with Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017).

28. We will require SPP and other interested parties to file initial briefs no later than 45 days after the publication of notice in the *Federal Register* of the Commission's initiation of this section 206 proceeding in Docket No. EL18-35-000. Parties also may file reply briefs in response to parties' initial briefs due within 30 days after the due date of initial briefs.

⁵⁰ See, e.g., MISO NOPR Comments at 11; ISO-NE NOPR Comments at 11.

29. In cases where, as here, the Commission institutes a proceeding under FPA section 206, the Commission must establish a refund effective date that is no earlier than publication of notice of the Commission's initiation of the proceeding in the *Federal Register*, and no later than five months subsequent to that date.⁵¹ Consistent with Commission precedent,⁵² we will establish a refund effective date at the earliest date allowed, i.e., the date the notice of the initiation of the proceeding in Docket No. EL18-35-000 is published in the *Federal Register*. The Commission is also required by section 206 to indicate when it expects to issue a final order. We expect to issue a final order in this proceeding within six months of receiving reply briefs, or September 30, 2018.

The Commission orders:

(A) Pursuant to the authority contained in and subject to the jurisdiction conferred upon the Commission by section 402(a) of the Department of Energy Organization Act and by the FPA, particularly section 206 thereof, and pursuant to the Commission's Rules of Practice and Procedure and the regulations under the FPA (18 C.F.R. Chapter I), the Commission hereby institutes a proceeding in Docket No. EL18-35-000, as discussed in the body of this order.

(B) SPP and other interested parties may file initial briefs no later than 45 days after the publication of notice in the *Federal Register* of the Commission's initiation of the section 206 proceeding in Docket No. EL18-35-000. Reply briefs may be filed no later than 30 days thereafter.

(C) Any interested person desiring to be heard in Docket No. EL18-35-000 must file a notice of intervention or motion to intervene, as appropriate, with the Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426, in accordance with Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017), within 21 days of the date of issuance of this order.

(D) The Secretary shall promptly publish in the *Federal Register* a notice of the Commission's initiation under FPA section 206 of the proceeding in Docket No. EL18-35-000.

⁵¹ 16 U.S.C. § 824e(b) (2012).

⁵² See, e.g., *PJM Interconnection, L.L.C.*, 90 FERC ¶ 61,137 (2000); *Cambridge Elec. Light Co.*, 75 FERC ¶ 61,177, *clarified*, 76 FERC ¶ 61,020 (1996); *Canal Elec. Co.*, 46 FERC ¶ 61,153, *reh'g denied*, 47 FERC ¶ 61,275 (1989).

(E) The refund effective date in Docket No. EL18-35-000 established pursuant to section 206 of the FPA shall be the date of publication in the *Federal Register* of the notice discussed in Ordering Paragraph (D) above.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.