155 FERC ¶ 61,068
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;
Cheryl A. LaFleur, Tony Clark,
and Colette D. Honorable.

Occidental Chemical Corporation — Docket No. EL13-41-000

v.

The Midwest Independent System Operator, Inc.

ORDER DENYING COMPLAINT

(Issued April 21, 2016)

1. On January 17, 2013, Occidental Chemical Corporation (Occidental) filed a complaint and petition for declaratory order (Complaint) against the Midwest Independent Transmission System Operator, Inc. (MISO).[1] Occidental requests that the Commission find that MISO's treatment of qualifying facilities (QF) in the Entergy[2]

[1] Effective April 26, 2013, MISO changed its name from "Midwest Independent Transmission System Operator, Inc." to "Midcontinent Independent System Operator, Inc."

[2] The Entergy Operating Companies are Entergy Arkansas, Inc., Entergy Gulf States Louisiana, L.L.C., Entergy Louisiana, LLC, Entergy Mississippi, Inc., Entergy New Orleans, Inc., and Entergy Texas, Inc. Below, we will refer to the Entergy Operating Companies collectively and also Entergy Services, Inc. (which has submitted filings in this proceeding on behalf of the Entergy Operating Companies) as "Entergy," unless necessary to distinguish between them. Entergy Gulf States, Louisiana, L.L.C. and its affiliate, Entergy Louisiana, LLC, concluded a transaction in which they combined substantially all of their respective assets and liabilities into a single successor public utility operating company, Entergy Louisiana Power, LLC, which subsequently was renamed Entergy Louisiana, LLC. The Commission authorized the transaction in *Entergy Gulf States Louisiana, L.L.C.*, 151 FERC ¶ 62,018 (2015), and Entergy Services, Inc. (Entergy Services) filed a notice of consummation in Docket

(continued ...)

service territories violates sections 205 and 206 of the Federal Power Act (FPA), the Public Utility Regulatory Policies Act of 1978 (PURPA),[3] and the Commission's regulations, and improperly conditions QFs' registration for and participation in MISO's markets upon QFs foregoing their rights under PURPA and the Commission's regulations implementing PURPA. Occidental requests that the Commission find MISO's treatment of QFs in the Entergy service territory is improper, and require that MISO file revisions to its Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff) with the Commission pursuant to section 205 of the FPA and obtain Commission approval before it may impose registration requirements on the QFs.

2. In this order, we deny Occidental's Complaint, as discussed below. We find that MISO's treatment of QFs in the Entergy service territory does not violate PURPA or sections 205 or 206 of the FPA. As discussed below, we find that QFs operating as market participants may participate in the MISO market while continuing to exercise their rights pursuant to PURPA, and that MISO does not need to modify its Tariff.[4]

I. <u>Background</u>

3. In anticipation of Entergy's December 18, 2013 integration into MISO, MISO held informational meetings with QFs located within the Entergy service territory concerning the QFs' registration in MISO and the QFs' participation in MISO's organized markets. As a part of this process, MISO distributed a document titled "Qualifying Facilities ('QF') Generator Readiness for MISO Reliability Coordination and Market Integration" (MISO QF Integration Plan),[5] which includes an associated "Qualifying Facilities FAQ" (FAQ).[6] (MISO has not filed the contents of the MISO QF Integration Plan or FAQ as proposed tariff revisions.)

No. EC15-47-000 on October 9, 2015. For purposes of this application, we will continue to refer to Entergy Gulf States.

[3] 16 U.S.C. § 824a-3(m) (2012).

[4] In related Docket No. EL14-28-000, Occidental filed a petition requesting that the Commission initiate an enforcement action pursuant to section 210(h)(2) of PURPA against the Louisiana Public Service Commission (Louisiana Commission). Concurrently with this order, the Commission is issuing a notice of intent not to act in, Docket No. EL14-28-000. *Occidental Chemical Corporation*, 155 FERC 61,067 (2016).

[5] Complaint, Attachment A.

[6] Complaint, Attachment B.

4. The MISO QF Integration Plan provides two options for QFs across the entire MISO footprint to sell their output, the “Behind-the-Meter” option and the “Hybrid” option, and prohibits QFs from participating in both options simultaneously. A QF may choose between the Hybrid option and the Behind-the-Meter option, but cannot change more than once per quarter.[7] MISO’s QF Integration Plan also discusses MISO’s right to dispatch down (i.e., curtail) QFs to manage congestion and constraints, and identifies options available to QFs to avoid being curtailed.

A. <u>Behind-the-Meter Option</u>

5. The Behind-the-Meter option allows a QF to maintain its right to “put” unscheduled, as-available energy to the QF’s host utility pursuant to that utility’s tariff.[8] The Behind-the-Meter option prohibits a QF, however, from participating in the MISO market simultaneously. MISO will model a QF choosing the Behind-the-Meter option as behind-the-meter generation whose net injection would be placed into a commercial pricing node that is owned by the particular Entergy Operating Company host utility and MISO will settle with each Entergy Operating Company utility according to the MISO Tariff.[9]

B. <u>Hybrid Option</u>

6. The Hybrid option allows a QF to become a market participant subsequent to Entergy’s integration into MISO. A QF, under the Hybrid option, may sell its excess energy into the MISO market.[10] The Hybrid option allows a QF generator participating in the market (Hybrid QF) to submit offers or self-schedule in both Day-Ahead and Real-Time MISO markets up to that QF generator’s maximum capacity (minus expected host load). If this QF generator will not serve host load, then the QF may submit or self-schedule all of its maximum generation capacity.[11]

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[7] *See* MISO QF Integration Plan at 19 (“Changes to Commercial model arrangements can be made on a quarterly basis per MISO modeling practices.”).

[8] *Id*. at 12.

[9] *Id.*

[10] *Id.*

[11] *Id.* at 12-13.

7. Under the Hybrid option, in order "to ensure that net injection of QF energy is consistent with market dispatch," MISO prohibits a Hybrid QF from "'put[ting]' energy to the incumbent Entergy Operating Company," but allows the QF "to deliver unscheduled energy into the MISO real-time market subject to the rules that apply within that market."[12] According to MISO, there are multiple strategies available to Hybrid QFs to enable each resource to meet its contract obligations and maintain its PURPA rights, including using financial schedules to essentially accomplish a PURPA "put."[13]

C. Financial Schedules

8. Financial schedules are bilateral financial arrangements to transfer the financial responsibility for energy between a buyer and seller within and across the MISO footprint.[14] Each financial schedule is a "financial arrangement between two Market Participants designating a Source Point, Sink Point, and Delivery Point establishing the obligations of the buyer and seller for the payment of Cost of Congestion and Cost of Losses."[15] Financial Schedules can be used in both the Day-Ahead and Real-time market.[16] The price for the "Cost of Congestion" is the difference between the Marginal Congestion Component of the Day-Ahead or Hourly Real-time Ex Post LMP at the Point of Delivery and the Marginal Congestion Component of the Day-Ahead or Hourly Real-time Ex Post LMP at the Point of Receipt.[17] The price for the "Cost of Losses" is the difference between the Marginal Losses Component of the Day-Ahead or Hourly Real-time Ex Post LMP at the Point of Delivery and the Marginal Losses Component of the Day-Ahead or Hourly Real-time Ex Post LMP at the Point of Receipt.[18]

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[12] *Id.* at 13.

[13] FAQ at 4.

[14] *See* MISO Energy and Operating Reserve Markets Business Practice Manual BPM-002-r14 § 4.1.2.

[15] MISO, FERC Electric Tariff § 1.F (36.0.0) (defining "financial schedule").

[16] *Id.* § 39.1.3 (32.0.0).

[17] *See* MISO Energy and Operating Reserve Markets Business Practice Manual BPM-002-r14 § 4.1.2.3.

[18] *See id.* § 4.1.2.4.

9. A financial schedule may be submitted and approved prior to 12:00 EST of the sixth day after the Operating Day.[19] A financial schedule must include: (1) identification of the market participants included in the transaction; (2) "the Commercial Pricing Nodes identified as the Source Point, the Sink Point and the Delivery Point;" (3) "the Energy and Operating Reserve Market in which the Financial Schedule will be settled, using either the Day-Ahead Ex Post LMPs or Hourly Ex Post LMPs;" and (4) the scheduled volume in MWh for each hour of the financial schedule.[20] Entergy's rate schedules approved by the Louisiana Public Service Commission (Louisiana Commission) require Entergy to agree to any financial schedule with QFs that are set at each QF's state-determined avoided cost rate pursuant to PURPA and that meet certain criteria.[21]

D. <u>Curtailment</u>

10. As part of MISO's Day-Ahead and Real-Time Energy and Operating Reserves Markets, MISO's Security Constrained Economic Dispatch system redispatches resources to alleviate congestion on transmission elements. The MISO QF Integration Plan states that, where there is congestion on MISO's system, MISO may dispatch a QF down in order "to mitigate the constraint."[22] The MISO QF Integration Plan states that, if

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[19] MISO, FERC Electric Tariff § 40.2.8A (32.0.0).

[20] *Id*.

[21] Supplement to Petition for Declaratory Order and Complaint of Occidental (April 7, 2014), Attachment C at 9 (citing Entergy Services, Inc., Motion to Intervene and Protest, Docket No. EL14-28-000 at 9 (filed Feb. 26, 2014)). These rate schedules bind Entergy to accept sales from QFs via financial schedules as long as:

> (a) the source, sink, and delivery point are all set equal to the Hybrid QF generator node, (b) the financial schedule is used to transfer ownership of energy in the real-time market, [and] (c) the amount does not exceed the difference between the Hybrid QF's actual injection measured by MISO and its day ahead schedule . . . .

Id., Attachment A, (Entergy Gulf States, Inc., Electric Service Louisiana, Schedule LQF-PO, Rate for Purchases from Post-PURPA Qualifying Facilities Larger than 100 kW), § V (effective Dec. 19, 2013); *Id.*, (Entergy Louisiana, LLC, Electric Service Schedule PPS-1, Purchased Power Service Rate Schedule), § VI.

[22] MISO QF Integration Plan at 24.

a Hybrid QF offers dispatch flexibility, MISO's security constrained economic dispatch algorithm "instructs QF net injection into the grid to change as may be necessary to balance load and/generation, to manage transmission congestion, and the hybrid QF is expected to follow dispatch instructions."[23] But if a QF "needs to continue to inject power to the grid (e.g., based on physical reasons associated with [the QF's] processes), [the QF] can reflect this in [its] offers by making the economic minimums and maximums the same or by offering their resource as 'Must Run.'"[24] MISO expects "[t]he amount the QF is paid for real-time unscheduled energy . . . to be the same whether they inject via a Put to Entergy [behind Entergy's meter] or via the MISO Market [under the Hybrid option]."[25] MISO also reserves the ability to manually curtail resources on a non-discriminatory basis to preserve system reliability.[26]

II. Occidental's Complaint

11. Occidental asks the Commission to find that the MISO QF Integration Plan and FAQ violate sections 205 and 206 of the FPA because these documents are unduly discriminatory against QFs and have not been filed with the Commission for approval prior to their implementation under MISO's Tariff.[27] Occidental also asks the Commission to find that these documents violate PURPA because they infringe on the rights of QFs both to sell any energy to Entergy and to have access to the MISO markets as market participants.[28] Occidental asks the Commission to direct MISO to allow for registration and participation of QFs in the MISO organized market, without relinquishment of these QFs' rights under PURPA.[29]

12. Occidental states that the Hybrid option of the MISO QF Integration Plan is unduly discriminatory because the Hybrid option precludes QFs that register as market participants from maintaining their rights under PURPA to sell as-available energy to

[23] FAQ at 4.

[24] *Id.* at 5.

[25] *Id.*

[26] MISO, FERC Electric Tariff, §§ 33.7 (30.0.0), 33.8.1 (30.0.0).

[27] Complaint at 2.

[28] *Id.* at 2-3.

[29] *Id.* at 2.

Entergy and to decide how much of that energy to sell, thus unlawfully forcing QFs to surrender their PURPA rights.[30] Occidental argues that maintaining the integrity of MISO's security constrained economic dispatch algorithm, which is a reason given for the choice between PURPA rights and market participation, is an invalid reason for forcing a QF to abandon its PURPA rights. Occidental maintains that MISO's security constrained economic dispatch algorithm must take into account sales from QFs under PURPA.[31] Occidental describes the MISO QF Integration Plan as violating the procedures for terminating mandatory purchase obligations pursuant to section 210(m) of PURPA because, according to Occidental, the Hybrid option forces QFs with existing purchase obligations to forego those contracts (and thus relinquish their PURPA rights) by becoming registered market participants without first requiring Entergy to seek approval from this Commission.[32] Occidental points to statements by Entergy in the Louisiana Commission avoided cost rate proceeding as demonstrating Entergy's intent that the MISO QF Integration Plan will effectively force QFs out of existing mandatory purchase obligations, thus relieving Entergy of its mandatory purchase obligation without this Commission's permission.[33]

13. Occidental states that the Behind-the-Meter option of the MISO QF Integration Plan is unduly discriminatory because it forces QFs who maintain their PURPA rights to sell only to Entergy by barring these QFs from MISO's markets. Occidental alleges that the MISO QF Integration Plan allows Entergy to register such QF generation as an asset of Entergy, which denies these QFs access to competitive markets and denies other market participants access to energy and capacity produced by these QFs. Occidental

[30] *Id.* at 15-18, 20-21.

[31] *Id.* at 19, 26.

[32] *Id.* at 22-23.

[33] *Id.* at 24 & n.95 (quoting Occidental's January 17, 2013 Complaint, Attachment C (Joint Application of Entergy Gulf States Louisiana, L.L.C. and Entergy Louisiana, LLC for Approval of the Modification of the Current Methodology for Calculating Avoided Cost), Docket No. U-32628 at 12 (filed with Louisiana Commission Nov. 30, 2012) ("this means that QFs that currently have limited- or long-term PPAs with [Entergy Gulf States Louisiana] must plan to register their generators with MISO . . . under the Hybrid Option so that the capacity that is being purchased by [Entergy Gulf States Louisiana] will qualify as capacity in the MISO market.")).

states that this perpetuates Entergy's historical denial of access to its balancing authority area market.[34]

14. Occidental also argues the QF Integration Plan improperly strips QFs of their curtailment priority ensured by 18 C.F.R. § 292.307(b).[35] Occidental states that system congestion is not the type of "system emergency" that would permit MISO to curtail QF sales pursuant to PURPA.[36]

15. Occidental maintains that the "market offers, financial schedules and physical schedules," which MISO's FAQ promotes as approximate equivalents of PURPA "puts," violate QFs' PURPA rights because QFs should not have to rely on such mechanisms to exercise PURPA rights. For example, Occidental maintains that using such market mechanisms does not preserve a QF's curtailment priority.[37]

16. Occidental argues that the substance of the MISO QF Integration Plan and FAQ does not appear in MISO's Tariff and that these documents significantly affect the terms and conditions of service in MISO. Occidental describes the MISO QF Integration Plan as similar to scenarios such as a regional transmission organization (RTO) excluding entire categories of generation from participating in a market or an RTO's operating procedures affecting the compensation a generator may receive. In these instances, the Commission held that the RTO must propose tariff language to the Commission for review before these practices may become effective. Therefore, Occidental argues that these documents violate the Commission's prior notice requirements because they should have been filed with the Commission before they were implemented, as mandated by section 205 of the FPA.[38]

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[34] *Id.* at 24-25.

[35] *Id.* at 21-22.

[36] *Id.* at 21-22.

[37] *Id.* at 26-27 & n.107.

[38] *Id.* at 27-29 (citing *inter alia Energy Spectrum, Inc. v. N.Y. Indep. Sys. Operator, Inc.*, 141 FERC ¶ 61,197, at P 51 (2012); *ANP Funding 1, LLC v. ISO New England Inc.*, 110 FERC ¶ 61,040, at PP 22-23 (2005)).

III. <u>Notice of Filing and Responsive Pleadings</u>

17. Notice of Occidental's filing was published in the *Federal Register*, 78 Fed. Reg. 5794 (2013), with interventions and protests due on or before February 14, 2013. Calpine Corporation (Calpine), Sabine Cogen, L.P. (Sabine), and Dow Chemical Company (Dow) filed timely motions to intervene and comments in support of Occidental's Complaint. MISO filed a timely motion to intervene, protest, and answer. Entergy filed a timely motion to intervene and protest.

18. The Texas Public Utility Commission and Arkansas Public Service Commission filed notices of intervention. The Louisiana Commission filed a notice of intervention and protest. Exelon Corporation (Exelon), Consumers Energy Company, and ExxonMobil Entities[39] filed motions to intervene.

19. On February 20, 2013, the Arkansas Electric Cooperative Corporation filed an out-of-time motion to intervene.

20. On February 28, 2013, and March 28, 2013, Occidental moved for leave to file answers and answers. On March 7, 2013, Exelon moved for leave to file an answer and answer. On March 15, 2013, Entergy moved for leave to file an answer and answer.

21. On March 6, 2014, Commission staff requested data from Occidental to supplement its Complaint. On April 7, 2014, Occidental filed data to supplement the record and Dow filed supplemental comments.

22. On April 11, 2014, as supplemented April 28, 2014, the Mississippi Public Service Commission (Mississippi Commission) moved for leave to intervene out-of-time. On April 25, 2014, Occidental filed a motion opposing the Mississippi Commission's intervention because the Mississippi Commission does not regulate Occidental and the Mississippi Commission filed its motion to intervene long after the initial comment date in this proceeding.

23. On April 28, 2014, and June 26, 2014, MISO filed motions for leave to answer and answers. On May 21, 2014, Dow filed a motion for leave to answer and answer. On June 5, 2014, Entergy filed a motion for leave to answer and answer.

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[39] The ExxonMobil Entities are the ExxonMobil Baton Rouge Complex and the ExxonMobil Beaumont Complex.

A. Calpine, Sabine, and Dow Comments

24. Calpine, Sabine, and Dow urge the Commission to grant Occidental's Complaint. Calpine and Sabine argue that the MISO QF Integration Plan "would force QFs to sacrifice their statutory rights under PURPA in order to participate in the MISO markets, and indeed, MISO has made clear that 'QFs cannot offer excess generation to the MISO and also have the option to put power to Entergy simultaneously.'"[40] Calpine and Sabine view "market offers, financial schedules and physical schedules" as insufficient proxies for PURPA sales because the MISO QF Integration Plan lacks a guarantee that market participant offers would be accepted in the MISO market. Even if a market participant's offer is accepted, Calpine and Sabine state that the MISO QF Integration Plan violates 18 C.F.R. § 292.304 because it does not guarantee a QF would be paid the equivalent of an avoided cost rate for such a sale. Calpine and Sabine reason that advanced registration effectively caps the amount of power QFs may "put" to Entergy and sell to host utilities on an as-available basis pursuant to 18 C.F.R. § 292.304(d).[41] Calpine and Sabine argue that the MISO QF Integration Plan improperly terminates Entergy's mandatory obligation to purchase from QFs participating in MISO's market. Calpine and Sabine assert that the MISO QF Integration Plan violates sections 205 and 206 of the FPA because the MISO QF Integration Plan has not been filed with the Commission for review. Calpine and Sabine contend that the MISO QF Integration Plan discriminatorily and arbitrarily excludes QFs exercising their PURPA rights from participating in MISO markets.[42]

25. Dow argues that QFs that elect to make authorized bilateral sales to third parties cannot be forced to forfeit their right to also make avoided cost sales to Entergy. According to Dow, the fact that such third party sales may in the future be made into MISO's energy markets or scheduled through MISO is immaterial and irrelevant for PURPA compliance purposes.[43] Dow also argues that the MISO QF Integration Plan and FAQ are the equivalent to other market access criteria, such as creditworthiness

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[40] Supporting Comments of Calpine Corporation and Sabine Cogen, L.P. at 3 (Feb. 14, 2013).

[41] *Id.* at 4.

[42] *Id.* at 5.

[43] Motion of the Dow Chemical Company for Leave to Intervene and Comments in Support at 3-4 & n.2 (Feb. 14, 2013).

requirements, which ordinarily appear in an RTO's tariff and which must be subject to protest and Commission review under section 205 of the FPA.[44]

B. MISO, Entergy, and Louisiana Commission Protests

26. MISO, Entergy, and the Louisiana Commission urge the Commission to reject Occidental's Complaint.

1. MISO

27. In commenting on Occidental's Complaint that Behind-the-Meter QFs are treated as assets of Entergy and therefore unable to bilaterally contract with load serving entities other than Entergy, MISO states that the only reason QFs are listed as Entergy assets under the Behind-the-Meter option is because such QFs have no interaction with MISO and cannot register their assets in MISO's markets.[45] MISO explains that Behind-the-Meter generation, therefore, cannot be offered into the Energy and Operating Reserve Markets as a dispatchable Generation Resource and will not be explicitly settled by the Market Settlements system, but rather nets against load.[46] MISO states that its tariff requires every load serving entity to register Behind-the-Meter generation as part of the asset registration process. MISO regards such generation sold to a host utility as coming from that utility, or "behind the meter," which, when netting against load and included in MISO's Network Model for reliability purposes, "must be identified as a commercial Load Zone in MISO's commercial model to represent the net flow of energy into and out of the behind-the-meter facilities."[47]

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[44] *Id.* at 4-5.

[45] MISO concedes that the MISO QF Integration Plan and FAQ contain confusing statements regarding the availability of QF "puts" from generation resources, which MISO had mentioned "to convey the fact that QFs participating in MISO's markets could not be physically carved-out from MISO's dispatch in order to address potential reliability concerns." MISO Motion to Intervene, Protest and Answer to Occidental Complaint at 7 (Feb. 14, 2013) (MISO February 14, 2013 Protest). MISO states that it expects to post revised versions of these documents consistent with its protest. *Id.* at 7 n.17.

[46] *Id.* at 8, 9 (citing MISO Network and Commercial Models Business Practices Manual, BPM-010-r4 at § 4.2.1.2).

[47] *Id.*

28. As for QFs deciding to become market participants under the Hybrid option, MISO states that QFs need not waive any PURPA rights as a condition to their registration as market participants because MISO considers these QFs bound by the same market rules as other market participants when offering generation into the Day-Ahead and Real-Time market; qualifying as capacity in the MISO market; and having an opportunity to purchase capacity and energy in MISO's markets—all of which MISO regards as MISO market activities, not PURPA transactions.[48] MISO insists that its requirement to register market participants ahead of time in order to preserve the integrity of security constrained economic dispatch, instead of providing a carve-out for QF generation from MISO's markets, is consistent with Commission precedent. According to MISO, that precedent dictates that "a physical carve-out of generation from scheduling and dispatch protocols of MISO's Tariff might not be compatible with reliability and should be excluded from consideration" and that "a physical carve-out of generation from actual dispatch is not possible."[49] MISO denies that its MISO QF Integration Plan negates QF curtailment priority. Instead, MISO suggests that a QF, like any other market participant, may offer its generation as flexibly as the QF wishes and MISO "will only dispatch a QF . . . up or down to the extent that [the QF] has provided dispatch flexibility through its offer or operating parameters."[50] But MISO cautions that a QF participating in the market is subject to the same non-discriminatory generator curtailment as any other market participant during a system emergency.[51]

29. MISO states that a QF market participant, like any other market participant, may enter into a bilateral agreement outside of the MISO settlement process through tools, such as financial schedules, that may be set at any amount and that could thus effectively mimic a PURPA avoided cost rate or PURPA legally enforceable obligation. According

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[48] *Id.* at 8, 10.

[49] *Id.* at 11 (citing *Midwest Indep. Trans. Sys. Operator, Inc. Pub. Utils. with Grandfathered Agreements in the Midwest ISO Region*, 108 FERC ¶ 61,236, at P 32 (2004) (*GFA Order*)).

[50] *Id.* at 12.

[51] *Id.* at 12-13 (citing MISO, FERC Electric Tariff § 13.6 (3.0.0)). MISO raises a concern that "unscheduled deliveries of energy from QFs may drive the system to emergency conditions based upon an assertion of the QF curtailment priority. Should this occur, MISO would recommend that the Commission revisit its concerns . . . regarding potential market manipulation or gaming where it required [MISO's independent market monitor] to monitor a certain subset of Market Participants for gaming behavior and report to FERC." *Id.* at 13 (citing *GFA Order*, 108 FERC ¶ 61,236 at PP 36-37).

to MISO, its Tariff and the MISO QF Integration Plan allow a QF to provide as much energy to the market or to a utility under PURPA in real time or after-the-fact as a QF wishes.[52]

30. MISO states that its MISO QF Integration Plan does not terminate a QF's rights in violation of PURPA section 210(m) because, under the MISO QF Integration Plan, a new or existing QF retains the right to sell pursuant to PURPA until the Commission grants any application filed pursuant to section 210(m) of PURPA.[53] MISO states that its MISO QF Integration Plan and FAQ highlight options for QF market participation under MISO's existing Tariff and Business Practice Manuals. MISO reasons that the MISO QF Integration Plan and FAQ do not modify existing market rules and that, therefore, no tariff revision is necessary.[54]

2. <u>Entergy</u>

31. Entergy contends that the MISO QF Integration Plan is not unduly discriminatory because QF generators are treated like other generators, whether they become market participants under the Hybrid option or "put" energy to Entergy under the Behind-the-Meter option. According to Entergy, once a QF chooses one of these two options, the MISO commercial settlement model allows a generator to adopt only one of these options "if there is only one meter at a QF that measures energy flows onto the grid," and MISO lacks a settlement process for treating a generator under the Hybrid and Behind-the-Meter options simultaneously.[55] Regardless of which option a QF chooses, Entergy states that MISO is not attempting to impose a permanent decision regarding a QF's choice between the Hybrid option and the Behind-the-Meter option, because a QF may change between these options once per quarter, until such time as Entergy's mandatory purchase obligations may be terminated pursuant to section 210(m) of PURPA.[56]

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[52] *Id.* at 13-15 (citing MISO, FERC Electric Tariff §§ 39.1.3 (32.0.0), 39.3.3 (30.0.0), 40.2.8A (32.0.0), 40.3.3 (40.0.0)).

[53] *Id.* at 15.

[54] *Id.* at 15-16.

[55] Motion to Intervene and Protest of Entergy Services, Inc. at 4-5, 12-13 (Feb. 14, 2013) (Entergy February 14, 2013 Protest).

[56] *Id.* at 5; *see also id.* at 17.

32. Entergy maintains that a QF choosing the Hybrid option may receive an avoided cost rate for energy "put" to a utility in real time if the QF chooses to settle outside of the market price using an asset-sourced financial schedule. According to Entergy, using an asset-sourced financial schedule allows a QF to sell all of its excess energy to a utility outside of the MISO settlement process. Entergy contends that a QF selling all its excess energy to a utility outside of the MISO settlement process is equivalent to how a QF would be compensated if it sold to a utility under the current PURPA avoided cost rate regime because the price for such energy could be set at a state-determined avoided cost rate. In its pleading, Entergy commits to accepting energy sold by QFs using asset-sourced financial schedules and to compensate QFs at state-determined avoided cost rates.[57] Entergy represents that it would supplement its avoided cost rate proposal before the Louisiana Commission in order to determine compensation for asset-sourced financial schedules from QFs using the Hybrid option. Entergy asserts that it will be necessary to ensure that, like before implementation of the MISO QF Integration Plan, "a QF can only 'put' energy the QF actually produces above the amounts required for the QF's host load and any bilateral sales made by the QF." Entergy asserts that it will also be necessary "to ensure that a QF makes the election of whether to implement a [financial schedule] prior to or near real-time operations," just as it had to do before implementation of the MISO QF Integration Plan.

33. Entergy states that, under the MISO QF Integration Plan, MISO will curtail QFs only during system emergencies under both Behind-the-Meter and Hybrid options, and that this is consistent with PURPA.[58] Entergy represents the MISO QF Integration Plan as outlining options for QF accommodation under MISO's Tariff, and thus argues that MISO need not propose new tariff language outlining its QF Integration Plan pursuant to section 205 of the FPA.[59]

3. Louisiana Commission

34. The Louisiana Commission views the Hybrid option of the MISO QF Integration Plan as enhancing options for QFs, rather than limiting them, "through access to far more potential purchasers via non-discriminatory bulk transmission access."[60] According to

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[57] *Id.* at 5-7, 14-16.

[58] *Id.* at 16-17.

[59] *Id.* at 21.

[60] Notice of Intervention and Protest on Behalf of the Louisiana Public Service Commission at 8 (Feb. 14, 2013).

the Louisiana Commission, a QF operating under the Behind-the-Meter option may "put" as much energy to Entergy as the QF wishes, which will represent a reduction in load to Entergy for later settlement with the QF. The Louisiana Commission states that a Behind-the-Meter QF is registered as an Entergy asset and the associated energy sale is registered as a reduction to the load on Entergy's system because a Behind-the-Meter QF has no interaction with the MISO market.[61] The Louisiana Commission believes that QFs under the MISO QF Integration Plan will continue to operate as they have before Entergy's integration into MISO "in numerous ways," with the exception of avoided cost rates, whose methodologies have been subject to adjustment by the Louisiana Commission under PURPA before and after Entergy's integration into MISO.[62]

C. Occidental February 28, 2013 Answer

35. Occidental responds that, despite common traits shared by financial schedules and PURPA transactions, financial schedules are not substitutes for physical as-available PURPA sales, which are "by definition not scheduled."[63] Instead, according to Occidental, financial schedules necessarily entail a sale scheduled at a specific time for a specific amount of energy and an agreed-upon bilateral contract, which Entergy has agreed to accept only if a QF decides whether to implement a financial schedule prior to or near Real-Time operations. Occidental maintains that a QF, when exercising rights to make "unscheduled" as-available sales of energy under PURPA, should be free to make sales beyond these limited terms dictated by Entergy.[64] Even if Entergy promises in its protest to compensate QFs pursuant to financial schedules set at avoided cost rates, Occidental states that nothing binds that commitment, no other utility in MISO is bound by that commitment, and only vague details exist regarding the conditions under which Entergy would accept QF sales using financial schedules. Occidental argues that its right to sell should not be dependent on Entergy's proposed use of financial schedules before the Louisiana Commission.[65] Occidental states that, contrary to a QF's right to sell all of its energy to Entergy, the Hybrid option restricts the amount of energy a QF may sell by

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[61] *Id.* at 6-7.

[62] *Id.* at 5, 8.

[63] Motion for Leave to Answer and Answer of Occidental Chemical Corporation at 4 (Feb. 28, 2013) (Occidental February 28, 2013 Answer).

[64] *Id.* at 5-6.

[65] *Id.* at 6-9.

permitting a QF to offer into MISO markets only the net of a QF's onsite load.[66] Occidental asserts that because of a QF's special status under PURPA, the MISO QF Integration Plan's treatment of QFs under the Hybrid option like other generators serves to negate that status.[67]

36. Where a QF elects to use the Behind-the-Meter option, Occidental maintains that a QF is denied its ability to sell to non-host utilities because such a QF's generation is treated as belonging to the QF's host utility.[68]

37. Occidental regards Entergy's and MISO's promises of curtailment priority only during system emergencies as non-existent in MISO's Tariff and the MISO QF Integration Plan due to the FAQ's statement that QFs would be curtailed during congestion like any other generator. Occidental also regards Entergy's and MISO's promises of curtailment priority during system emergencies as meaningless due to MISO's view that the Hybrid option is "not a PURPA transaction."[69]

38. Occidental points to statements by the Louisiana Commission in Docket No. EL13-43-000 to show that the majority of stated "trade benefits" from Entergy's integration into MISO come from terminating Entergy's obligation to accept "puts" from QFs and that both the Hybrid and Behind-the-Meter options impermissibly relieve Entergy of its PURPA mandatory purchase obligations.[70]

39. Occidental states that it is not in a position to know whether changes to MISO's security constrained economic dispatch algorithm are needed to allow QFs curtailment priority without driving the system to emergency conditions. Occidental denies that it is seeking a physical carve-out for QF generation, which Occidental maintains is impermissible for various grandfathered transmission service agreements under

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[66] *Id.* at 10.

[67] *Id.* at 11-12.

[68] *Id.* at 12-14.

[69] *Id.* at 14-15 (citing *inter alia* MISO February 14, 2013 Protest at 12-13; FAQ at 9).

[70] *Id.* at 16-17 (citing Comments of the Louisiana Public Service Commission in Support of Petition for a Declaratory Order, Docket No. EL13-43-000 at 3 (Feb. 21, 2013)).

Commission precedent but not impermissible for QFs.[71] Occidental states that its contention that MISO should file a tariff revision is bolstered by MISO's acknowledgement that the MISO QF Integration Plan and FAQ warrant clarification and by Entergy's statement that MISO lacked the amount of QF generation located in Entergy's area before Entergy's integration into MISO.[72]

D. Exelon March 7, 2013 Answer

40. Exelon is concerned that pricing and volatility in MISO's markets could be seriously disrupted if QFs are permitted to switch back and forth (for example, as often as every five minutes) between selling directly into the MISO markets and to the host utility under PURPA.[73] Exelon reasons that "the potential influx of several thousand megawatts ('MW') of unscheduled QF energy that may be either injected on the MISO system or pulled out of the MISO market could significantly disrupt operation and pricing of the MISO markets."[74] To address these adverse market impacts, Exelon requests that the Commission direct MISO and/or Entergy to require QFs to provide such "advanced notice at least by the time that offers into MISO's day-ahead energy market are due."[75] Exelon asserts that advance notice will be needed "to prevent the undue disruption of pricing and operations in Commission-jurisdictional markets" and "would allow MISO to more effectively manage its system for the benefit of market participants," thus ensuring that prices within MISO remain just and reasonable.[76]

E. Entergy March 15, 2013 Answer

41. Entergy represents that it filed a proposal with the Louisiana Commission to clarify how it plans to operate financial schedules for Hybrid QFs. In particular, Entergy's proposed treatment of Hybrid QFs requires these QFs "either to (a) declare the

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[71] *Id.* at 19-20 & nn.89, 90.

[72] *Id.* at 20-21 (citing MISO February 14, 2013 Protest at 7; Entergy February 14, 2013 Protest at 8).

[73] Motion for Leave to Answer and Answer of Exelon Corporation at 3 (Mar. 7, 2013) (Exelon March 7, 2013 Answer).

[74] *Id.* at 3, 6.

[75] *Id.*

[76] *Id.* at 3, 6-7.

amount of energy that is put to a company within one hour *after* the operating hour in which the energy is put or (b) on a day-ahead basis, notify the applicable company that the QF plans to put its entire eligible output to the company in each hour of the day – but not the quantity of energy it will put – in which case the QF would have the full period allocated under the MISO Tariff to effectuate the [financial schedule].”[77] Entergy states that this notification requirement only serves to tell Entergy that a QF will be selling excess energy to Entergy, and denies that this choice requires QFs to operate under a fixed schedule or to specify quantity of energy sold before the QF delivers its output.[78]

42. Entergy asserts that it is not refusing to enter into legally enforceable obligations with QFs—it is only proposing to the Louisiana Commission the terms and conditions under which Entergy may enter into those obligations, which become binding if accepted by the Louisiana Commission.[79] Entergy argues that its proposal to require QFs to enter into financial schedules prior to or near Real-Time operations, compared to non-QF financial schedules that may be entered into up to six days after the operating day, does not discriminate against QFs because financial schedules are bilateral contracts.[80]

43. Entergy represents that Occidental has not indicated a desire to sell energy beyond the net of its host load to Entergy by purchasing energy through a retail tariff, and points to several QFs’ refusal to install metering necessary to make such retail purchases due to confidentiality concerns. Should Occidental or any other QF desire to make such retail purchases and thus sell beyond the net of their host loads, Entergy promises to meet with them to make necessary arrangements. Entergy therefore reasons that Occidental has no support to show that Entergy or MISO have denied Occidental the right to sell energy beyond the net of Occidental’s host load.[81] Entergy asserts that, under the MISO QF Integration Plan, QFs are not denied the right to sell to non-Entergy utilities because QFs are permitted to sell to non-Entergy utilities via financial schedules incorporating appropriate transmission costs and that, should a utility with a PURPA mandatory

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[77] Motion for Leave to Answer and Answer of Entergy Services, Inc. at 3-4 (Mar. 15, 2013) (Entergy March 15, 2013 Answer).

[78] *Id.* at 4.

[79] *Id.* at 6-7.

[80] *Id.* at 8.

[81] *Id.* at 8-9.

purchase obligation refuse to accept the QF's power, the QF may seek relief from the appropriate state regulatory authority.[82]

F. Occidental March 28, 2013 Answer

44. Occidental responds that Entergy's proposals regarding financial schedules (which were then pending before the Louisiana Commission) did not address Occidental's Complaint regarding the deficiencies in the MISO QF Integration Plan itself.[83] Occidental argues that financial schedules are insufficient to protect QFs' rights to sell energy as-available or pursuant to a legally enforceable obligation because Commission precedent instructs that QFs should not have to reach a bilateral agreement with a utility before selling pursuant to PURPA.[84] Occidental states that Entergy's promise to accept financial schedules from QFs does not bind any other utility and thus does not guarantee that QFs will be able to sell to these utilities.[85] Similarly, Occidental describes the Behind-the-Meter option's restriction of sales only to a QF's host utility as limiting a QF's rights to sell to non-host utilities.[86]

45. Occidental states that Entergy's agreement to purchase "eligible output" via financial schedules restricts a QF "to sell all its available capacity after station power, host load and 'declared third party sales' which violates a QF's ability to decide the amount of energy available for PURPA sales."[87] Occidental argues that requiring QFs to adhere to MISO's real time set points in order to avoid RTO charges and penalties for uninstructed deviations limits the QF's ability to decide how much energy to sell pursuant to PURPA.[88] Occidental states that it is irrelevant whether Occidental currently sells net of its onsite load; Occidental should be permitted to sell all of its energy and the MISO QF Integration Plan only allows QFs to sell net of onsite load, regardless of

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[82] *Id.* at 9-10.

[83] Motion for Leave to Answer and Answer of Occidental Chemical Corporation at 2-3 (Mar. 28, 2013) (Occidental March 28, 2013 Answer).

[84] *Id.* at 4-6.

[85] *Id.* at 5 n.20.

[86] *Id.* at 9.

[87] *Id.* at 5-6 n.23.

[88] *Id.* at 6-7.

whether Entergy agrees to make separate arrangements with QFs.[89] Occidental states that the MISO QF Integration Plan prohibits a QF from selling different parts of its output simultaneously to a utility under PURPA and into MISO's markets, which Occidental asserts should not be characterized as "gaming."[90] Occidental states that Entergy's proposed advanced notice period[91] limits a QF's right to sell as-available energy and is not merely an information collection; rather, according to Occidental, information collection as a predicate to making a PURPA sale constitutes a scheduling requirement, which may not be imposed on QFs under Commission precedent.[92]

G. Commission Letter Order Requesting Information

46. On March 6, 2014, the Commission requested the following information from Occidental in light of Entergy's joining MISO and MISO providing service on the Entergy system under MISO's Tariff on December 19, 2013:

> (a) Whether Occidental has registered as a market participant in MISO and, if so, how Occidental has participated as a market participant; and
>
> (b) Updates to Occidental's Complaint to reflect experience regarding the treatment of its QF under MISO Tariff, along with any supporting documents.[93]

1. Occidental April 7, 2014 Supplement to Complaint

47. Occidental represents that on May 24, 2013, it registered its 835 MW qualifying cogeneration facility at its Hahnville, Louisiana chemical plant site (Taft QF), as a MISO market participant, subject to Occidental's claims and remedies relating to Entergy's integration into MISO, including those in connection with its Complaint in this docket.[94] Occidental represents that before its registration as a market participant, Occidental used

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[89] *Id.* at 7-8.

[90] *Id.* at 10-11.

[91] *Id*. at 11.

[92] *Id.* at 11-12 (citing *Sw. Power Pool, Inc.*, 125 FERC ¶ 61,314, at P 36 (2008)).

[93] *Occidental Chemical Corp. v. Midwest Indep. Transmission Sys. Operator, Inc.*, 146 FERC ¶ 61,160 (2014).

[94] Response to Request to Supplement the Record of Occidental at 1 & n.4 (Apr. 7, 2014) (Occidental April 7, 2014 Supplement to Record).

its Taft QF "to simultaneously (1) serve on-site load; (2) make energy and capacity sales at negotiated rates under long-term bilateral contracts, including its contract with [Entergy] that is described in the Complaint; and (3) make as-available sales to [Entergy], at [Entergy's] avoided cost, pursuant to PURPA and the Commission's implementing regulations."[95] Occidental states that it was forced to register as a market participant in order to continue selling pursuant to its long-term bilateral contract with Entergy and thus has been unable to make as-available sales under the Behind-the-Meter option. Were Occidental to switch to the Behind-the-Meter option to make as-available energy sales, Occidental asserts that it would be precluded from selling into MISO's market.[96]

48. Occidental asserts that its QF rights are not sufficiently protected under MISO's Tariff because the terms "QF," "Hybrid," "Behind-the-Meter QF" and "BTM QF" that are at the heart of MISO's QF Integration Plan do not appear in either the MISO Tariff or the MISO Business Practice Manuals.[97] Occidental asserts that MISO is insufficiently respectful of QF rights because, in Docket No. ER14-136-000,[98] MISO stated that a QF may be subjected to market monitoring and mitigation measures when registering as a market participant.[99] Occidental represents that MISO has unlawfully imposed other market charges on Hybrid QFs using financial schedules, including Schedule 17 administration charges and Schedule 24 load balancing authority charges. Occidental states that these charges "are separate from, and additive to, the market charges that are deducted from LMP under the [Louisiana Commission's] avoided cost methodology."[100]

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[95] *Id.* at 2.

[96] *Id.*

[97] *Id.* at 3.

[98] In Docket No. ER14-136-000, at the recommendation of MISO's Independent Market Monitor, MISO proposed to designate two new Narrow Constrained Areas, which the Commission accepted. *Midcontinent Indep. Sys. Operator, Inc.*, 145 FERC ¶ 61,248 (2013).

[99] Occidental April 7, 2014 Supplement to Record at P 43.

[100] *Id.* at 4-5 & n.27 (citing, *inter alia*, Occidental April 7, 2014 Supplement to Record, Attachment D, (MISO Business Practice Manual on Market Settlements, BPM-005-r11)) (BPM-005-r11). According to BPM-005-r11, MISO uses Schedule 17 administration charges to recover costs associated with providing, in part, the following services:

(continued ...)

2. Dow April 7, 2014 Supplemental Comments

49. Dow states that it and its subsidiary Union Carbide reversed their original plans to sell energy under the Behind-the-Meter option because Entergy's avoided cost rate methodology approved by the Louisiana Commission links avoided costs to nodal prices in the MISO market, "which are too low to enable Dow and Union Carbide to recover the variable costs associated with their electric generation."[101] Dow represents that these nodal prices have been negative, thus forcing Dow and Union Carbide to have to pay to sell their excess energy. According to Dow, had Dow and Union Carbide not registered as market participants under the Hybrid option, "they would not have access to the market data needed to determine when nodal prices are too low to permit the recovery of variable costs," which would render Dow and Union Carbide "unable to respond to such

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> (1) Market modeling and scheduling functions; (2) Market bidding support; (3) LMP/[market clearing price] support; (4) Market settlements and billing; (5) Market monitoring functions; and (6) Enabling the co-optimized least-cost, security-constrained commitment and dispatch of Resources to serve Load and Operating Reserve requirements in the MISO [balancing authority] while also establishing a spot Energy and Operating Reserve Market.

BPM-005-r11 at 86. Schedule 24 load balancing authority charges entail costs incurred from implementing and operating in the Energy and Operating Reserve Market, including:

> daily operation and maintenance costs, administrative and general costs, capital costs, costs for systems-in-place, training of personnel, and any costs that result from the performance of obligations imposed by the Tariff on [load balancing authorities]; provided, however, that all costs to be recovered under this Schedule must be related to [load balancing authority] actions in performing obligations under the Tariff, and shall not include any costs reimbursed by MISO to [load balancing authorities] or costs otherwise already recovered under the Tariff.

Id. at 89.

[101] Supplemental Comments of the Dow Chemical Company at 3 (Apr. 7, 2014) (Dow April 7, 2014 Supplemental Comments).

price signals by reducing generation output during such periods."[102] Dow states that its and Union Carbide's need to run their QFs for industrial purposes has precluded Dow and Union Carbide from halting grid deliveries when nodal prices are negative or too low to recover their variable costs. Despite its market participant status, Dow states that it has been unable to forecast when nodal prices would be low because of "frequent transmission congestion and outages on the Entergy system" and that Dow has incurred $1.2 million in costs due to paying to sell its energy when MISO nodal prices were negative.[103] Dow states that MISO has ordered Dow and Union Carbide to curtail their QFs' output to a level below that needed for their intended industrial operations, which has forced Dow and Union Carbide to scale back those industrial operations.[104]

50. Dow states that MISO's failure to propose Tariff language or detail Business Practice Manual language enshrining the MISO QF Integration Plan has caused uncertainty. Dow represents that it has been unable to confer and to coordinate with MISO and Entergy regarding transmission outages on Entergy's system in order "to forecast and respond to low and negative nodal prices caused by the outages."[105] When Dow has inquired about transmission outages, Dow represents that Entergy referred Dow to MISO and MISO stated its inability to offer such information because of restrictions found in its Tariff. If such restrictions exist, Dow insists that they must be reviewed in order "to ensure that they do not conflict with applicable reliability standards that require coordination between the owners and operators of transmission and generation resources."[106] Dow argues that MISO's dispatch rules to generators, as applied to QFs, infringe on QFs' rights to determine how much as-available energy to sell and could be unjust and unreasonable by infringing on Dow's and Union Carbide's industrial operations.[107]

[102] *Id.* at 3-4.

[103] *Id.* at 4 & n.4.

[104] *Id.* at 4-5.

[105] *Id.* at 6.

[106] *Id.*at 6-7.

[107] *Id.* at 7.

3. **MISO April 28, 2014 Response**

51. MISO argues that it provides market instruments to Occidental that permit Occidental to make sales of energy as-available and pursuant to a legally enforceable obligation, namely financial schedules. Instead of settling the energy associated with a financial schedule through MISO's market settlement system, MISO states that it is indifferent to the price and underlying terms of the financial schedule and that a QF market participant settles the energy portion of that transaction with the counter party to the financial schedule. MISO describes its Real-Time energy market as constituted to allow as-available sales for any amount a QF chooses.[108]

52. MISO states that the Commission held in Docket No. ER14-136-000 that QF energy sales to host utilities pursuant to both the Hybrid and Behind-the-Meter options at agreed-upon or avoided cost rates would not be subject to energy offer mitigation.[109] Despite Occidental's lower amount of as-available energy sales to Entergy since Entergy's integration into MISO, MISO describes Occidental as ignoring the fact that QFs may make as-available sales under MISO's Tariff. MISO describes the Schedules 17 and 24 charges as approved as just and reasonable by the Commission and suggests that Occidental may challenge these charges' incorporation into a state-approved avoided cost rate methodology in the appropriate state avoided cost proceeding.[110]

53. In response to Dow's concerns that MISO's dispatch practices restrict a QF's right to sell energy as-available, MISO states that, under its Tariff, QFs may designate no dispatch flexibility for their entire output, dispatch flexibility for some of their output and inflexibility for the rest of their output, or state that their entire output is dispatchable. MISO argues that "[t]he provision of dispatch flexibility is a function of participation in MISO's markets, not a PURPA transaction" and that, therefore, "a QF that indicates to MISO that it is dispatchable should not be allowed to claim MISO is impermissibly curtailing its transactions to the extent that MISO's dispatch instructions are within the dispatch range provided by the QF."[111]

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[108] Response of the Midcontinent Independent System Operator, Inc. to Occidental Chemical Corporation's Response to Request to Supplement the Record and Supplemental Comments of the Dow Chemical Corporation at 3-4 (Apr. 28, 2014).

[109] *Id.* at 6 (referencing *Midcontinent Indep. Sys. Operator, Inc.*, 145 FERC ¶ 61,248 at P 45).

[110] *Id.* at 6-7.

[111] *Id.* at 9.

4. Dow May 21, 2014 Answer

54. Dow represents that in January 2014, it offered generation into the MISO Day-Ahead market on a non-dispatchable basis. Although Day-Ahead prices were too low for Dow to recover its variable costs at the time and were occasionally negative (even though prices in the Real-Time market were much higher and positive), Dow states that it chose to make its generation non-dispatchable in order to provide electricity and steam needed for its industrial operations. Even with Dow's non-dispatchable offers, Dow states that MISO instructed Dow on the operating day to "reduce generation output for reliability reasons" and "Dow was specifically instructed to reduce real-time generation output to a level needed to ensure that nodal prices were positive."[112]

55. Dow contends that this structure punishes Dow twice: first, by selling into the Day-Ahead market at a price that precludes Dow from recovering its variable costs, and second, by forcing Dow to purchase power at substantially higher positive prices in the Real-Time market. According to Dow, this left Dow with insufficient steam for industrial operations and thus forced Dow to curtail those operations. Even if Dow were to designate its generation as dispatchable, Dow suggests that MISO's Tariff would dispatch Dow's generation in a way that would be at odds with Dow's industrial operation needs at its QF site. Dow states that the Hybrid option therefore "creates a 'Catch 22' situation where a QF is only able to meet its host load service obligations if it is willing to accept exposure to MISO market prices, and a QF is only able to avoid such cost exposure if it is willing to have its host load service obligations compromised."[113]

5. Entergy June 5, 2014 Answer

56. Entergy states that a QF such as Dow, like all other market participants, has three options for participating in MISO's Day-Ahead market. First, a QF may specify an amount it is willing to offer for a particular price, which MISO would only commit and dispatch if the offer is economic. Second, a QF may self-schedule through designating a minimum dispatch level at which the generator would be a price taker in the market if dispatched by MISO. Third, a QF could designate itself as "Must Run," "which requires

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[112] Motion of the Dow Chemical Company for Leave to Answer and Answer at 2-3 & n.7 (May 21, 2014) (Dow May 21, 2014 Answer). Dow references filings in Docket Nos. ER14-1348-001 and ER14-1349-001, wherein Dow and Union Carbide calculated that their under-recovery for sales made in the MISO market between December 19, 2013, and February 21, 2014, were over $10 million and almost $2 million, respectively. *Id.* at 3 n.6.

[113] *Id.* at 3-4 & n.7.

MISO to commit and dispatch the unit at the level of the self-commitment."[114] Entergy also suggests that a QF may use a combination of these approaches for different parts of its generation, all subject to compliance with reliability standards.[115]

57. In MISO's Real-Time market, Entergy suggests that a QF may self-schedule in the Real-Time market at a level that matches the QF's Day-Ahead schedule. Alternatively, Entergy states that a QF may indicate its willingness to curtail its generating unit when the price dips below a specified level. If MISO dispatches the QF down pursuant to the QF's bid, the QF is obligated to purchase in the Real-Time market the amount of energy that was dispatched down in relation to its Day-Ahead schedule but will still be paid the Day-Ahead price. Therefore, according to Entergy, where the Real-Time offer is less than the Day-Ahead price, the QF would receive positive net revenues for the amount of energy that was curtailed. Entergy states, however, that a QF not receiving net revenues could be eligible for a Day-Ahead Margin Payment, which is an uplift or make-whole payment guaranteeing that a generator MISO dispatches down for reliability reasons is not forced to run at a loss in comparison to its Day-Ahead schedule.[116]

58. Entergy asserts that, just as a QF selling as-available energy before Entergy's integration into MISO would not know the as-available energy price before deciding to sell, QFs after Entergy's integration into MISO are also subject to making business decisions that do not always recover the QFs' variable costs. But, like other MISO market participants, Entergy states that Dow could have been eligible for Day-Ahead Margin Payments, as long as it met certain technical qualifications. Entergy suggests that Dow either was ineligible for this compensation or does not acknowledge that it received this form of make-whole payment. Entergy suggests that Dow could have been curtailed in order to alleviate a reliability concern, such as excess supply in the market that could have yielded a negative nodal price. Entergy posits that dispatching down can also yield positive nodal prices by reducing supply in the market. But Entergy understands that MISO issues dispatch down instructions "to remedy the underlying reliability concern, not to address a negative nodal price."[117]

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[114] Motion for Leave to Answer and Answer of Entergy Services, Inc. at 2 (June 5, 2014) (Entergy June 5, 2014 Answer).

[115] *Id.* at 3.

[116] *Id.* at 3-5.

[117] *Id.* at 4-6.

6. MISO June 26, 2014 Answer

59. MISO agrees with Entergy that Dow cannot argue that MISO is forbidden from curtailing Dow's generation output in order to maintain system reliability and that QFs were subject to curtailment before Entergy's integration into MISO.[118] MISO represents that it has reviewed Dow's activity during January 2014 to verify the accuracy of Dow's statements and to see whether Dow received Day-Ahead Margin Assurance Payments, as suggested by Entergy.[119] MISO rejects Dow's contention that it was penalized twice. Instead, MISO represents that

> In instances in which Dow was dispatched below its Day-Ahead cleared volumes it received a credit – not a charge – for buying back its position at a negative LMP. For example, [i]f Dow had a Day-Ahead cleared volume of 460 MW in an hour and was dispatched below its Day-Ahead cleared volume in the Real-Time market to 400 MW at a negative $100 LMP, Dow would have received a credit – not a charge – of $6000 (*i.e.*, 60 MW x $100) for the hour in which they were dispatched below their Day-Ahead cleared volume of 460 MW.[120]

60. MISO represents that on January 13, 2014, Dow did not comply with MISO's Real-Time requests to reduce output below Dow's cleared Day-Ahead cleared volumes so that outages on the transmission system could be managed reliably. Rather, according to MISO, Dow raised its economic minimum, which subjected Dow to "the economic consequences of its actions given its impact on constraints in the real-time market."[121] While Dow is unsatisfied with offering its output as dispatchable or non-dispatchable due to the "financial impacts of these decisions within MISO's markets," MISO suggests that the Behind-the-Meter option offers Dow a way to continue to operate the way it did before Entergy's integration into MISO.[122]

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[118] Motion for Leave to Answer and Answer of Midcontinent Independent System Operator, Inc. at 2 (June 26, 2014) (MISO June 26, 2014 Answer).

[119] *Id.*

[120] *Id.* at 2-3.

[121] *Id.* at 3.

[122] *Id.*

7. Motion to Lodge

61. On February 18, 2016, Entergy and the Louisiana Commission filed a motion to lodge the decision of the United States Court of Appeals for the Fifth Circuit[123] and the amended stay order of the federal district.[124] Entergy and the Louisiana Commission state that these decisions afford the Commission a "deadline" of July 19, 2016 to act, and note that the Commission previously determined that the matters raised in Docket No. EL13-41-000 and in Docket No. EL14-28-000 "raise largely the same issues and should be decided at the same time."[125] They therefore request that the Commission issue a decision in this docket prior to July 19, 2016. On March 4, 2016 Occidental filed an answer to the Motion to Lodge.

IV. Discussion

A. Procedural Matters

62. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2015), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

63. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2015), the Commission will grant Arkansas Electric Cooperative Corporation's and the Mississippi Commission's late-filed motions to intervene given their interests in the proceeding, the early stage of the proceeding, and the absence of any undue prejudice or delay. Notwithstanding Occidental's objection, we find that the Mississippi Commission has articulated an interest in this proceeding that warrants its intervention as a party given that it regulates the retail rates and services of an Entergy

[123] Entergy and Louisiana Commission February 18, 2016 Motion, Attachment A (*Occidental Chem. Corp. v. Louisiana Pub. Svc. Comm'n*, No. 15-30100 (5th Cir. Jan. 4, 2016)).

[124] *Id*., Attachment B (*Occidental Chem. Corp. v. Louisiana Pub. Svc. Comm'n,* No. 14-CV-234-SDD-SCR (M.D. La. Jan. 21, 2016)).

[125] *Id*. at 2 (citing *Occidental Chem. Corp*., 147 FERC ¶ 61,013 (2014)).

subsidiary, Entergy Mississippi, Inc., which may be affected by the outcome of this proceeding.[126]

64. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2015), prohibits an answer to a protest or an answer unless otherwise ordered by the decisional authority. We will accept Dow's, Entergy's, MISO's, and Occidental's answers because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

65. Occidental raises three primary lines of argument in its Complaint: (1) the Hybrid option prevents QFs from exercising their rights under PURPA to either sell as-available energy or to sell pursuant to a legally enforceable obligation; (2) dispatching a QF down (using MISO's security constrained economic dispatch) to mitigate congestion violates the QF's curtailment priority under PURPA; (3) MISO should be required to file its MISO QF Integration Plan for Commission approval pursuant to section 205 of the FPA. Additionally, Occidental argues that MISO has unlawfully imposed Schedule 17 administration charges and Schedule 24 load balancing authority charges on Hybrid QFs using financial schedules. We find these arguments unpersuasive and therefore deny the Complaint.

1. Financial Schedules allow QFs to exercise their PURPA rights under the Hybrid Options

66. The Commission has previously held that an RTO may not condition a QF's registration as a market participant on the QF's relinquishing the QF's PURPA rights.[127]

[126] *Cf. generally Midcontinent Indep. Sys. Operator, Inc.*, 148 FERC ¶ 61,158, at P 7 (2014) (allowing late intervention); *PJM Interconnection, L.L.C.*, 137 FERC ¶ 61,251, at PP 21-24 (2011) (same).

[127] *See W. Sys. Power Pool*, 66 FERC ¶ 61,201, at 61,459 (1994); *see also Sw. Power Pool, Inc.*, 126 FERC ¶ 61,314, at PP 38-39 (2008) ("SPP may not compel participation in the Energy Imbalance Market by, or otherwise trigger deviation charges for, QFs exercising their PURPA rights to deliver power to their host utilities. Furthermore, we grant Covanta's request for clarification that SPP's registration requirement does not preclude behind-the-meter QF sales to purchasing utilities while registration is being pursued. As indicated above, nothing in SPP's tariff filing can supersede the rights of QFs under PURPA to make sales to host utilities.").

(continued ...)

But, in this instance, registration under the Hybrid option allows QFs to participate in the MISO market, while continuing to exercise their rights pursuant to PURPA. Based on the explanations provided by Entergy and MISO, we agree that, as a matter of mechanics, financial schedules can compensate a Hybrid QF outside of the MISO energy market to effectuate as-available sales or sales pursuant to a legally enforceable obligation under PURPA. To effect this type of transaction, a Hybrid QF can offer all of its available energy into the market and then be compensated at the appropriate avoided cost rate using a financial schedule that was executed with Entergy for the amount of energy provided during the hour.[128]

67. While we find that the use of financial schedules in conjunction with the Hybrid option preserves a QF's right to provide as-available energy, it hinges on Entergy executing every financial schedule in accordance with each state's PURPA implementation and the Commission's regulations implementing PURPA. For example, Entergy's rate schedules approved by the Louisiana Commission require Entergy's Louisiana subsidiaries to agree to any financial schedules with QFs that are set at each QF's state-determined avoided cost rate pursuant to PURPA and that meet certain criteria. Because Entergy both agrees to accept and is obligated to accept financial schedules with Hybrid QFs selling under PURPA (i.e., for those QFs for which it has not received termination of its mandatory purchase obligation), Hybrid QFs' rights to make as available sales pursuant to PURPA are protected. Moreover, we find that Entergy is obligated to accept financial schedules for PURPA sales in accordance with the Louisiana Commission's avoided cost methodology, unless Entergy has been granted termination of

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The Commission's regulations implementing PURPA require each electric utility to purchase any energy and capacity made available from a QF. 18 C.F.R. § 292.303(a) (2014). A QF has the choice "(1) [t]o provide energy *as the qualifying facility determines such energy to be available*," also known as "as-available energy," or "(2) [t]o provide energy or capacity pursuant to a legally enforceable obligation for the delivery of energy or capacity over a specified term." *Id.* § 292.304(d)(1)-(2) (emphasis added); *see also Idaho Wind Partners 1, LLC*, 140 FERC ¶ 61,219, at P 35 (2012), *order on reh'g*, 143 FERC ¶ 61,248 (2013).

[128] If an executed financial schedule is equal to the amount of energy injected into the real-time market, this results in a net payment of zero from MISO and all compensation to the QF is accomplished on a bilateral basis through the financial schedule. By entering the source and sink at the same commercial pricing node, the congestion and losses associated with the financial schedule will be zero. With congestion and losses equal to zero, all credits or charges from the financial schedule will be based on the agreed upon price, which can be set to avoided cost.

its mandatory purchase obligation with respect to those QFs. Notably, on January 21, 2016, the Commission issued an order granting in part Entergy's application to terminate the requirement that it enter into new obligations or contracts with QFs with net capacity in excess of 20 MW, and denying in part Entergy's application with respect to Dow Chemical Company and Union Carbide Corporation's over-20 MW Plaquemine QF.[129]

68. In addition to facilitating bilateral PURPA sales to Entergy, financial schedules can also be used to contract on a bilateral basis with other entities in MISO and therefore provide nondiscriminatory access to QFs to sell to other market participants in MISO on a bilateral basis.

69. Together, these options preserve a QF's ability both to sell to Entergy at Entergy's state-approved avoided cost rates and to sell as market participants in MISO. Occidental responds that Entergy's notification requirements for making sales using financial schedules prevent QFs from making as-available sales. Specifically, Entergy requires a Hybrid QF either to (a) declare the amount of energy that is "put" to a company within one hour after the operating hour in which the energy is "put" or (b) on a Day-Ahead basis, notify the applicable company that the QF plans to "put" its entire eligible output.[130] We find, however, that these notifications are reasonable so that Entergy is able to track the amount of energy sold by the QF.[131] Moreover, given that the notifications do not require a QF to make a financially binding decision ahead of time as to the amount of energy that it will put to the host utility, we see no merit in Occidental's suggestion that these notification requirements remove a QF's ability to decide whether and how much energy to sell as-available.[132]

[129] *Entergy Services, Inc.*, 154 FERC ¶ 61,035, *order on reh'g*, 155 FERC ¶ 61,069 (2016). The Commission also reiterated that granting Entergy's Application does not relieve Entergy of its obligation to abide by its existing agreements. *Id*. P 76.

[130] Entergy March 15, 2014 Answer at 3-4.

[131] Exelon's request that QFs in MISO should be required to provide advance notice by the deadline for submitting offers into MISO's day-ahead energy market is beyond the scope of Occidental's complaint.

[132] *Compare* Entergy March 15, 2014 Answer at 4 ("Regardless of whether a QF declares an intent to put its excess energy ahead of time, or declares a QF put within one hour after the operating hour, there is no requirement that it operate to a fixed schedule. With regard to the day-ahead election described above, such an election is not a schedule. The election is simply a notification by the Hybrid QF that it will be putting its excess energy to Entergy. The QF does not have to specify quantity until after the actual output

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70. Occidental argues that denying Behind-the-Meter QFs the ability to make bilateral sales using asset-sourced financial schedules denies the PURPA rights of such QFs to sell to electric utilities other than Entergy.[133] However, QFs wanting to make bilateral sales using asset-sourced financial schedules are able to do so by choosing the Hybrid option. As we discuss above, registration under the Hybrid option allows QFs to participate in the MISO market, while continuing to exercise their rights pursuant to PURPA.

71. Occidental argues that requiring a Behind-the-Meter QF to be reflected in MISO's commercial model as an Entergy asset for purposes of MISO market participation allows Entergy to unduly discriminate in favor of its own generation.[134] Based on the record in this proceeding we find no merit in Occidental's claim. Requiring a Behind-the-Meter QF to register as an asset by the host utility is consistent with MISO's registration requirement for load serving entities with Behind-the-Meter generation. The requirement enables MISO to measure energy flows into and out of its system and therefore does not unduly discriminate against other generation resources.[135] Moreover, merely reflecting a Behind-the-Meter QF as an Entergy asset in the MISO model does not provide Entergy with functional control of the resource or otherwise allow Entergy to favor its own generation over the QF.

72. Additionally, Occidental argues that it should be allowed to switch between the Hybrid and Behind-the-Meter options more than once per quarter so it is able to sell into either the MISO market or behind the meter at will. As discussed above, we find that MISO's current practices allow QFs to sell both as-available energy and pursuant to long-term contracts, consistent with PURPA. Therefore, we find that limiting switching

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has been delivered.") *with* Occidental February 28, 2013 Answer at 6 ("[O]nce a seller enters into a Financial Schedule, it must meet the stated fixed volumes in each schedule, either by generating energy itself or, if it under-generates to the schedule, by "purchasing from the Market" or tying the Financial Schedule to other schedules.").

[133] *See* 18 C.F.R. § 292.303(a)(2), (d) (2015) (requiring indirectly connected utilities to purchase from QFs); *Delta-Montrose Elec. Ass'n*, 151 FERC ¶ 61,238, at PP 53-54, *order on reh'g*, 153 FERC ¶ 61,028 (2015); *Pub. Serv. Co. of N.H. v. N.H. Elec. Coop., Inc.*, 88 FERC ¶ 61,110, at 61,259 (1999); *Pub. Serv. Co. of N.H. v. N.H. Elec. Coop., Inc.*, 83 FERC ¶ 61,224, at 61,999-62,000 (1998).

[134] Complaint at 6.

[135] *See* MISO February 14, 2013 Protest at 8-9 (citing MISO Network and Commercial Models Business Practices Manual, BPM-010-r4 at Section 4.2.1.2).

between the Hybrid and Behind-the-Meter options to once per quarter, which is also consistent with MISO's business practices and its treatment of other resources, does not limit a QF's PURPA rights.

2. **Hybrid QFs can maintain their PURPA rights with respect to curtailment priority**

73. The Commission's PURPA regulations only permit curtailment of QF energy sales under limited circumstances, such as system emergencies.[136] A system emergency is a condition on a utility's system which is likely to result in imminent significant disruption of service to customers or is imminently likely to endanger life or property.[137] Section 292.307(b) provides that a utility may, during a system emergency, discontinue purchases from a QF if such purchases would contribute to such an emergency. Accordingly, in *SPP*, the Commission allowed curtailment of QF generation during transmission loading relief level TLR-5, as defined by NERC, because TLR-5 events are akin to system emergencies triggering curtailment of QF generation under 18 C.F.R. § 292.307(b).[138] Occidental contends that, under the Hybrid option, QFs would lose their PURPA protection against curtailment when selling pursuant to PURPA. Here, in answer to Occidental, MISO has explained that there are steps that QFs can take to prevent their facilities from being dispatched down (i.e., effectively curtailed), except in the event of a system emergency. According to MISO, any generator may through its offer or operational characteristics designate its unit as nondispatchable. MISO states that it will not dispatch down any unit that is designated as nondispatchable. Additionally, we note, a Hybrid QF could self-schedule in MISO's Real-Time market. Self-scheduling would result in the QF being able to provide whatever level of energy it chooses and the QF would only be curtailed by manual action of MISO's system operators during a system emergency, on a nondiscriminatory basis.[139]

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[136] 18 C.F.R. § 292.307(b) (2015). Section 292.307(b) of the Commission's regulations provides that a utility may, during a system emergency, discontinue purchases from a QF if such purchases would contribute to such an emergency. Section 292.101(b)(4) of the Commission's regulations defines "system emergency" as a "condition on a utility's system which is likely to result in imminent significant disruption of service to customers or is imminently likely to endanger life or property." *Id.* § 292.101(b)(4).

[137] 18 C.F.R. § 292.101(b)(4) (2015).

[138] *Sw. Power Pool, Inc.*, 140 FERC ¶ 61,225, at P 51 (2012) (*SPP*).

[139] MISO, FERC Electric Tariff, §§ 33.7 (30.0.0), 33.8.1 (30.0.0). Additionally, a

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74. The Commission, therefore, finds that Hybrid QFs are able to maintain their PURPA rights with respect to curtailment priority when selling under PURPA.

3. MISO is not required to file the QF Integration Plan in its Tariff

75. According to Commission precedent, "[p]ractices that significantly affect rates, terms and conditions of service must be included in a Commission-approved tariff rather than in other documents."[140] That is, practices, policies and operating procedures of public utilities that "significantly affect rates and services" must be filed under section 205 of the FPA.[141] Contrary to the arguments advanced by protesters, we find that the material contained in the MISO QF Integration Plan and FAQ does not "significantly affect rates, terms and conditions of service."

76. Similar to MISO's Business Practice Manuals, the MISO QF Integration Plan and FAQ provide implementation details which guide internal operations and inform market participants of how MISO conducts operations under its Tariff.[142] Specifically, the MISO QF Integration Plan and FAQ provide additional detail for market participants regarding how existing Tariff mechanisms (e.g., financial schedules) apply to QFs. We find that additional tariff revisions are not necessary merely because these existing mechanisms are also used to facilitate sales pursuant to PURPA. Accordingly, we find that MISO should not be required to include the QF Integration Plan or FAQ in its Tariff.

4. MISO Imposition of Other Market Charges on Hybrid QFs

77. Occidental argues that MISO has unlawfully imposed Schedule 17 administration charges and Schedule 24 load balancing authority charges on Hybrid QFs using financial schedules. Specifically, Occidental argues that allowing MISO to directly assess Schedule 17 and Schedule 24 charges to Hybrid QFs is duplicative and additive to Other Market Charges already included in the avoided cost methodology adopted by the

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QF can self-commit its unit by designating the unit as "Must Run," which requires MISO to commit and dispatch the unit at the level of the self-commitment. Entergy June 5, 2014 Answer at 2-3; *See* MISO, FERC Electric Tariff § 39.2.5 (35.0.0).

[140] *Energy Spectrum, Inc. v. N.Y. Indep. Sys. Operator, Inc.*, 141 FERC ¶ 61,197 at P 51 & n.25.

[141] *Id.*

[142] *See Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,271, at P 16 (2008).

Louisiana Commission, or that MISO's assessing Other Market Charges directly to Hybrid QFs otherwise violates their PURPA rights. We disagree.

78. The avoided cost methodology adopted by the Louisiana Commission includes Other Market Charges that are deducted from LMP.[143] For Behind-the-Meter QF PURPA puts, Entergy pays the QF the real time LMP at the applicable load zone after deducting Other Market Charges (i.e., including, but not limited to, Schedule 17 and Schedule 24 charges) related to the QF output that MISO assesses to Entergy. However, for Hybrid QF PURPA puts made to a utility using financial schedules, Entergy pays the Hybrid QF the LMP at the QF's generator bus and MISO would directly assess the QF the Other Market Charges associated with the QF output, the same as it would any other market participant.[144] In the end, the QF is financially in the same place for PURPA sales under the Hybrid option and for sales under the Behind-the-Meter option. Thus, unlike in *SPP* where the Commission found that Southwest Power Pool could not assess market charges because it would reduce the avoided cost received by QFs, here the record demonstrates that the avoided cost methodology approved by the Louisiana Commission deducts Other Market Charges as part of the formula.[145] MISO's assessment of Other Market Charges directly to Hybrid QFs thus does not reduce the avoided cost received by QFs.

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[143] *In re: Joint Application of Entergy Gulf States Louisiana, L.L.C. and Entergy Louisiana, LLC for Approval of the Modification of the Current Methodology for Calculating Avoided Cost*, Order No. U-32628-A (Louisiana Commission, issued Jan 9, 2014) at 7-8.

[144] *See* Occidental March 28, 2013 Answer, Attachment 1 (November 2012 Direct Testimony of John P. Hurstell, Errata No. 1 to LPSC Docket No. U-32628) at 29, lines 3-7 ("Any penalties charged by MISO based on puts from a Hybrid QF will be assessed directly to the generator, not the Companies. Hybrid QFs, however, can limit any such penalties by adhering to MISO's real time set points and putting the resulting energy.").

[145] *Id*.

<u>The Commission orders</u>:

The Commission hereby denies Occidental's Complaint.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.