165 FERC ¶ 61,067
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur and Richard Glick.

Midcontinent Independent System Operator, Inc. Docket No. ER18-2363-000

ORDER ACCEPTING TARIFF FILING

(Issued October 31, 2018)

1. On August 31, 2018, pursuant to section 205 of the Federal Power Act (FPA),[1] Midcontinent Independent System Operator, Inc. (MISO) filed revisions to its Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff) to enhance the locational aspects of its resource adequacy construct (Filing). As discussed below, we accept MISO's Filing effective November 1, 2018, as requested.

I. Background

A. MISO's Resource Adequacy Construct

2. Pursuant to Module E-1 of its Tariff, MISO establishes annual resource adequacy requirements to ensure that Load Serving Entities (LSE) in its footprint have access to deliverable, reliable, and adequate Planning Resources.[2] For the purpose of ensuring resource adequacy, MISO divides its footprint into ten Local Resource Zones (Local Zones) and two Sub-Region Resource Zones (Sub-Regions): Local Zones 1-7 are located in the North Sub-Region (MISO North) and Local Zones 8-10 are located in the South Sub-Region (MISO South).[3]

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[1] 16 U.S.C. § 824d (2012).

[2] MISO, FERC Electric Tariff, Module E-1, § 68A (30.0.0). Capitalized terms not otherwise defined herein have the meanings ascribed to them in the Tariff.

[3] *Id.*, Attachment VV (36.0.0). MISO determines a Capacity Import Limit and Capacity Export Limit for each Local Zone, as well as a Sub-Regional Import Limit and Sub-Regional Export Limit for each Sub-Region. *Id.*, Module E-1, §§ 68A.3.1 (33.0.0),

3. Each year, MISO establishes a Planning Reserve Margin Requirement (Reserve Requirement) for each LSE in each Local Zone. An LSE's Reserve Requirement equals the total amount of Unforced Capacity that the LSE must procure for the entire Planning Year.[4] An LSE can satisfy its Reserve Requirement in one or more of the following four ways: (1) purchase capacity through the Planning Resource Auction (Auction); (2) submit a Fixed Resource Adequacy Plan to demonstrate that it has designated capacity to meet all or a portion of its Reserve Requirement, (3) self-schedule capacity and bid it into the Auction at a price of zero, and/or (4) pay the Capacity Deficiency Charge.[5]

4. MISO also establishes a Local Reliability Requirement for each Local Zone for the Planning Year. A Local Zone's Local Reliability Requirement is based on the aggregate Local Zone Peak Demand of all the LSEs in that Local Zone. A Local Zone's Local Reliability Requirement reflects the quantity of Unforced Capacity to meet the one-in-ten Loss of Load Expectation (LOLE) without consideration of the benefit of the Local Zone's Capacity Import Limit.[6] MISO also calculates a Local Clearing Requirement for each Local Zone by reducing that Local Zone's Local Reliability Requirement by the sum of the Local Zone's Capacity Import Limit and the amount of non-pseudo-tied capacity exports from that Local Zone to neighboring regions (e.g., PJM Interconnection, L.L.C. (PJM)).[7]

5. LSEs in each Local Zone must collectively procure sufficient Unforced Capacity from Planning Resources within the Local Zone, in one or more of the four manners described above, to collectively meet their Local Zone's Local Clearing Requirement.[8] However, as MISO explains in its Filing, an External Resource that clears the Auction (or is included in a Fixed Resource Adequacy Plan) is currently given capacity credit in the Local Zone in which its firm transmission service crosses the MISO border. As a result,

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68A.4 (35.0.0).

[4] MISO's Planning Year begins on June 1 and ends on May 31 of the following calendar year. *Id.*, Module A, § 1.P (38.0.0).

[5] *Id.*, Module E-1, § 69A (32.0.0). The Capacity Deficiency Charge equals 2.748 times Cost of New Entry times the number of MW that the LSE is deficient. *Id.*, Module E-1, § 69A.10 (30.0.0).

[6] *Id.*, Module E-1, § 68A.5 (33.0.0).

[7] *Id.*, Module E-1, § 68A.6 (33.0.0).

[8] *Id.*, Module E-1, § 69A.7.1 (39.0.0).

MISO allows the Unforced Capacity from an External Resource to contribute towards satisfying the Local Clearing Requirement of that Local Zone.[9]

6. MISO conducts its Auction each year during the first ten business days of April and posts the results approximately six weeks prior to the Planning Year.[10] MISO, in its annual Auction, selects the least-cost set of Planning Resources needed to meet each Local Zone's aggregate Reserve Requirements (less any quantity associated with a Capacity Deficiency Charge), while respecting local and sub-regional deliverability constraints, and each Local Zone's Local Clearing Requirements. The Auction Clearing Price for each Local Zone equals the price of the marginal MW of Unforced Capacity needed to satisfy the Local Zone's aggregate Reserve Requirement and the Local Zone's Local Clearing Requirement.[11]

7. Price separation in the Auction occurs when at least one market parameter binds. For instance, in the 2016/17 Auction, the Sub-Regional Export Constraint from MISO South to MISO North prevented lower-cost Planning Resources in MISO South from clearing, resulting in higher capacity prices in MISO North.[12] Similarly, in the 2017/18 and 2018/19 Auctions, the Capacity Export Limit for Local Zone 1 prevented lower-cost Planning Resources in Local Zone 1 from clearing, resulting in higher capacity prices in the remaining Local Zones.[13]

8. An LSE that elects to submit a Fixed Resource Adequacy Plan, rather than participating in the Auction, may be subject to a Zonal Deliverability Charge (ZDC) if

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[9] MISO Filing at 3; *see also* MISO, FERC Electric Tariff, Module E-1, § 69A.7.1 (39.0.0) ("External Resources will be treated for [Auction] purposes as if they are located in the [Local Zone] where their firm transmission sinks at the border of the [MISO] region.").

[10] MISO, FERC Electric Tariff, Module E-1, § 69A.7 (31.0.0).

[11] *Id.*, Module E-1, § 69A.7.1 (38.0.0).

[12] *See* MISO, *2016/2017 [Auction] Results* (Apr. 2016), https://cdn.misoenergy.org/2016-2017%20PRA%20Results87167.pdf.

[13] *See* MISO, *2017/2018 [Auction] Results* (Apr. 2017), https://cdn.misoenergy.org/2017-2018%20Planning%20Resource%20Adequacy%20Results87196.pdf; MISO, *2018/2019 [Auction] Results* (Apr. 2018), https://cdn.misoenergy.org/2018-19%20PRA%20Results173180.pdf.

price separation occurs in the Auction.[14] The ZDC applies in instances where an LSE designates resources in a lower-priced Local Zone to serve demand in a higher-price Local Zone.[15] The ZDC represents a Fixed Resource Adequacy Plan's contribution to congestion between Local Zones.[16] Currently, an LSE can avoid payment of a ZDC if it qualifies for a Grandmother Agreement or a ZDC Hedge.[17]

B. August 2018 Order

9. On August 2, 2018, the Commission rejected, without prejudice, MISO's March 26, 2018 filing (March 2018 Filing) in which it proposed Tariff revisions intending, as proposed in this filing, to enhance the locational aspects of its resource adequacy construct.[18] The Commission found two elements of the March 2018 Filing to be unjust and unreasonable: (1) allowing market participants with Capacity Resources that border multiple Local Zones to choose the Local Zone in which they will receive capacity credit; and (2) applying Historic Unit Considerations (HUC) to evergreen contract extensions.[19] With respect to Capacity Resources that border multiple Local Zones, the Commission provided guidance to MISO by providing two alternative approaches: (1) dividing such Capacity Resources' capacity credit among the Local Zones they border based on historic or forecasted flows on the system, and/or (2) proposing criteria that MISO will utilize to determine how to assign capacity credit to

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[14] MISO, FERC Electric Tariff, Module E-1, § 69A.9 (33.0.0).

[15] *Id.*, Module E-1, § 69A.7.6 (32.0.0).

[16] *Id.*, Module A, § 1.Z (30.0.0).

[17] A Grandmother Agreement is the "[o]wnership of, or executed rights to Planning Resources . . . that are in place prior to July 20, 2011 and maintain annual firm transmission service from such Resources to load in a different [Local Zone]." *Id.*, Module A, § 1.G (37.0.0). An LSE with a valid Grandmother Agreement is made whole for any price separation between the Local Zone where its load is located and the Local Zone where its Planning Resource is located. *Id.*, Module E-1, § 69A.7.7(a) (31.0.0). An LSE may qualify for a ZDC Hedge if it funds certain Transmission System upgrades that result in an increase in the Capacity Import Limit of the Local Zone in which its load is located. *Id.*, Module E-1, § 69A.7.7(b) (30.0.0).

[18] *Midcontinent Indep. Sys. Operator, Inc.*, 164 FERC ¶ 61,081, at P 1 (2018) (August 2018 Order).

[19] *Id*. P 28.

such Capacity Resources.[20] With respect to HUCs, the Commission found that (1) allowing future evergreen contract extensions to qualify for HUCs would embed inefficiencies into MISO's resource adequacy construct because LSEs with evergreen contract extensions could extend them indefinitely to avoid locational price signals, and (2) the unforeseen risks that MISO's HUCs proposal intends to address do not apply to an LSE that elects to extend a contractual arrangement with full knowledge of the associated risks.[21]

II. MISO's Filing

10. As discussed in more detail below, the proposed revisions in MISO's Filing are focused on three areas: (1) modeling and pricing External Resources in newly proposed External Resource Zones (External Zones); (2) changing how MISO allocates excess Auction revenues through the introduction of HUCs; and (3) refining the calculations of existing locational market parameters (i.e., Capacity Import Limits, Capacity Export Limits, and Local Clearing Requirements).[22] With the exception of the two aspects that the Commission found in the August 2018 Order to be unjust and unreasonable, MISO states that its Filing contains the same proposal and justification for the proposal as in its March 2018 Filing.[23]

11. MISO states that its proposed Tariff revisions "were created as a complete and balanced package based on discussions and adjustments made during the stakeholder process."[24] MISO explains that its proposed Tariff revisions are "an integrated set of elements to improve MISO's existing resource adequacy construct and should not be viewed in isolation."[25] In support of its proposed Tariff revisions, MISO's Filing includes testimony from Laura Rauch, its Director of Resource Adequacy, and an

[20] *Id.* PP 29-32.

[21] *Id.* PP 33-34.

[22] MISO Filing at 1-3.

[23] *Id.*

[24] *Id.* at 3.

[25] *Id.*

affidavit by Dr. David B. Patton, the president of Potomac Economics, Ltd. (Potomac Economics).[26]

12. MISO requests an effective date of November 1, 2018. As discussed in more detail below, MISO also requests a one-month waiver of certain Tariff requirements.[27] MISO witness Rauch explains that MISO's requested effective date, along with its requested waiver, will allow for implementation prior to the upcoming 2019/20 Auction.[28]

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

13. Notice of MISO's Filing was published in the *Federal Register*, 83 Fed. Reg. 45,440 (2018), with interventions and protests due on or before September 21, 2018.

14. The entities that filed notices of intervention, motions to intervene, comments, protests, and answers are listed in the Appendix to this order. The entity abbreviations listed in the Appendix will be used throughout this order.

IV. <u>Discussion</u>

A. <u>Procedural Matters</u>

15. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2018), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2018), we grant the late-filed motion to intervene of the Organization of MISO States given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay. Rule 213(a)(2) of the Commission's Rule of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2018), prohibits an answer to a protest or answer unless otherwise ordered by the decisional authority. We accept the answers because they have provided information that assisted us in our decision-making process.

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[26] *See* MISO Filing, Tab C (Testimony of Laura Rauch) (Rauch Test.) and Tab D (Affidavit of Dr. David B. Patton) (Patton Aff.). Potomac Economics is MISO's Independent Market Monitor.

[27] MISO Filing at 10-11.

[28] Rauch Test. at 4.

B. Substantive Matters

1. Treatment of External Resources

a. MISO's Filing

16. MISO explains that, although an internal resource that clears the Auction is given capacity credit in the Local Zone in which it is physically located, an External Resource that clears the Auction is currently given capacity credit in the Local Zone in which its firm transmission service crosses into the MISO footprint. MISO states that this treatment of External Resources creates potential reliability concerns because it could result in External Resources displacing local resources such that the amount of cleared resources located within a Local Zone could be less than the Local Clearing Requirement. MISO also states that External Resources are currently granted the same Auction Clearing Price as local resources, which MISO argues creates price inequity when comparing the reliability benefit that an External Resource provides to a Local Zone with the reliability benefit that an internal resource provides to a Local Zone.[29]

17. MISO witness Rauch states that deliverability through Network Resource Interconnection Service (NRIS), External NRIS, or firm transmission service does not determine whether a resource is capable of servicing the reliability needs of load in a particular Local Zone or the price that a resource should be paid. MISO witness Rauch states that the reliability and use of internal resources is validated through transfer limits (i.e., Capacity Import Limits and Capacity Export Limits) as well as through Local Clearing Requirements. MISO witness Rauch explains that External Resources are currently exempt from this reliability validation and are currently not recognized within the Auction clearing mechanism as imports into Local Zones.[30]

18. MISO states that, in order to address these reliability and inequity concerns, it proposes to model and price External Resources in newly proposed External Zones.[31]

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[29] MISO Filing at 3; *see also* Rauch Test. at 7-8, 12-15. Dr. Patton states that External Resources do not provide the same local benefit as internal resources located in a Local Zone because such internal resources generally relieve transmission constraints caused by imports into the Local Zone. Patton Aff. at 4-5.

[30] Rauch Test. at 8-9.

[31] MISO Filing at 3-4. MISO witness Rauch explains that External Zones are comprised of existing external Balancing Authorities, as defined by North American Electric Reliability Corporation (NERC), and thus do not need to be defined in the Tariff. Rauch Test. at 16.

MISO explains that, unless an External Resource meets one of two exceptions, each External Resource will be placed in an External Zone that aligns with the external Balancing Authority in which it is physically located. MISO states that External Resources in External Zones will count towards satisfying MISO's region-wide Reserve Requirement but will not count towards satisfying the Local Clearing Requirement for any MISO Local Zone.[32] MISO witness Rauch states that MISO's proposal appropriately reflects the location of External Resources and enables states and LSEs within those states to have an accurate accounting of their local resource needs and their capabilities to utilize resources from outside their Local Zone.[33]

19. Dr. Patton states in his affidavit that MISO's proposal to create External Zones will benefit the real-time operation of the system. According to Dr. Patton, by creating an External Zone for PJM, for example, MISO's capacity market will better reflect how MISO imports and exports in real-time operations. Dr. Patton explains that, if MISO imports power from PJM in real-time, it reduces its output by the import quantity as PJM increases its output by the same amount. Dr. Patton states that the incremental power from PJM is determined dynamically by PJM's dispatch model, and could originate from different locations within PJM. Dr. Patton asserts that it is important that capacity be procured in a comparable manner—in this example from PJM as a whole—in order to best prepare MISO to operate the system reliably.[34]

20. MISO explains that External Resources in External Zones will be priced based upon the External Zones' connection to the MISO footprint. MISO states that External Zones that only interconnect with one Sub-Region (i.e., MISO North or MISO South) will be paid the unconstrained price of that Sub-Region, and that External Zones that interconnect with both Sub-Regions will be paid a blended price based upon the weighted average of the unconstrained prices of those Sub-Regions based on a ratio of historic real-time energy flows into each Sub-Region.[35]

21. MISO witness Rauch states that MISO's proposal will also change how External Resources will impact the transfer limit between MISO South and MISO North. MISO witness Rauch provides two examples of how MISO currently considers the impact of External Resources on the transfer limit: (1) a Southwest Power Pool, Inc. (SPP) resource from Arkansas is assumed to directly increase flows in the South-to-North

[32] MISO Filing at 4.

[33] Rauch Test. at 9.

[34] Patton Aff. at 8.

[35] MISO Filing at 4-5; *see also* Rauch Test. at 25-26.

direction; and (2) an SPP resource from North Dakota is assumed to directly increase flows in the North-to-South direction. MISO witness Rauch explains that, under MISO's proposal, all SPP External Resources will be assumed to flow across the transfer limit based on the real-time energy flows from SPP into MISO.[36]

22. Dr. Patton explains that real-time energy transfers between MISO South and MISO North are limited by a settlement agreement among MISO, SPP, and other parties.[37] Dr. Patton states than an External Zone that ties to both MISO South and MISO North does not fully load or unload the constraint as internal resources do, but rather has a blended effect. Dr. Patton explains that the settlement agreement also establishes how to calculate these transfers. According to Dr. Patton, MISO's proposal models the effects of External Zones on the transfer limit in the same way that it is done in real-time per the settlement agreement.[38]

23. MISO proposes to treat two subcategories of External Resources—Border External Resources and a Coordinating Owner's External Resources—differently than all other External Resources by instead treating them similarly to internal resources. MISO supports such treatment for Border External Resources and a Coordinating Owner's External Resources by explaining that, unlike all other External Resources and like internal resources, they meet both physical and operational criteria (i.e., resources should be given credit where they are located, and should be able to be relied upon by MISO during capacity emergencies with unit-specific dispatch to ensure local support) to obtain local credit in Local Zones.[39]

24. MISO explains that Border External Resources have a point of interconnection at a substation that contains the terminal of a transmission line under MISO's functional control. MISO states that, in order to qualify as a Border External Resource, a resource

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[36] Rauch Test. at 28-29.

[37] Patton Aff. at 5 (citing SPP, Offer of Settlement, Docket No. EL14-21-000, *et al.* (filed Oct. 13, 2015)).

[38] *Id.* at 6.

[39] MISO Filing at 5 & n.17; *see also* Rauch Test. at 17. MISO witness Rauch states that External Resources may be distant from the MISO footprint, thereby increasing the likelihood of congestion between their interconnection facilities and the Local Zone. MISO witness Rauch also states that the capacity scheduled from an external Balancing Authority may not necessarily come from the designated External Resource and therefore may be less able to support local load serving needs. Rauch Test. at 23-24.

must also respond to recall requirements in a unit-specific manner from such substation (as opposed to a slice-of-system method). MISO argues that a Border External Resource meets these physical and operational criteria and, therefore, should qualify for local treatment within the Local Zone it borders.[40] MISO witness Rauch states that Border External Resources are electrically and contractually equivalent to internal MISO resources.[41]

25. MISO explains that a Border External Resource that borders multiple Local Zones will be given credit in the Local Zone with which it has the greatest electrical connection.[42] MISO witness Rauch states that electrical connectivity will be measured by the resource's impact on tie lines, transmission facilities, and constraints that have historically defined Capacity Import Limits and Capacity Export Limits.[43] Dr. Patton explains that MISO's proposed criteria for determining which Local Zone has the greatest electrical connection is based on generator shift factors.[44] MISO states that an internal resource that borders multiple Local Zones will be given credit in the Local Zone that contains the resource's Local Balancing Authority.[45]

26. MISO explains that a Coordinating Owner's External Resources are physically located in an external region where MISO is the reliability coordinator. MISO states that a Coordinating Owner's External Resources meet MISO's operational criteria because they are supported by seams operating agreements that dictate what coordination will occur during both normal and emergency operations.[46] MISO states that a Coordinating Owner's External Resources meet the physical criteria because the Coordinating Owner

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[40] MISO Filing at 5.

[41] Rauch Test. at 17; *see also id* at 39. MISO witness Rauch explains, however, that MISO proposes to limit Border External Resource qualification to those resources that have MISO facilities to their interconnection substation that are rated to at least the resources' full Unforced Capacity offer into the Auction. *Id.* at 21.

[42] MISO Filing at 5-6.

[43] Rauch Test. at 18.

[44] Patton Aff. at 7.

[45] MISO Filing at 6; *see also* Rauch Test. at 18.

[46] MISO Filing at 6 & n.24 (citing Seams Operating Agreement between MISO and Manitoba Hydro and Coordination Agreement By and Between MISO and Manitoba Hydro).

has strong, direct ties to MISO without an intervening transmission system and without strong ties to other regions.[47]

27. MISO Witness Rauch clarifies that Manitoba Hydro is currently the only entity that qualifies as a Coordinating Owner. She explains, however, that there are three instances in which a hypothetical Coordinating Owner's External Resource would not qualify for local treatment (i.e., count towards satisfying the Local Clearing Requirement of the Local Zone in which their transmission service crosses into the MISO system): (1) the Coordinating Owner does not physically border the MISO footprint; (2) there are substantial transmission ties to non-MISO regions; and (3) the operating agreements do not provide MISO with operational certainty regarding the dispatch of resources and the location of those resources being dispatched.[48]

b. <u>Comments and Protests</u>

i. <u>General Support</u>

28. Consumers Energy supports MISO's proposal to create External Zones for External Resource accreditation and pricing. Consumers Energy cautions that, absent MISO's proposal, External Resources from PJM or the Independent Electricity System Operator of Ontario could displace enough resources in a Local Zone to the point where a significant portion, if not the majority, of the Auction-cleared resources are outside of the Local Zone. Consumers Energy argues that it is not desirable from a reliability or price formation perspective for External Resources to influence and receive the Auction Clearing Price of a Local Zone. Consumers Energy asserts that, except when a Local Zone is directly interconnected with a Coordinating Owner, External Resources should not count towards the Local Clearing Requirement of a Local Zone.[49]

29. DTE Electric supports the Filing. DTE Electric states that MISO's current resource adequacy construct incorrectly treats External Resources as if they were physically located within MISO and, therefore, poses a threat to local and system

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[47] MISO Filing at 6; *see also* Rauch Test. at 21-22. A Coordinating Owner is an "entity that is not subject to the jurisdiction of the Commission but participat[es] in [MISO] through the execution of a coordination agreement which includes reciprocity provisions with regard to the transmission pricing . . . and as such shall be considered to be within the [MISO] Region for the purposes of determining applicable system-average rates." MISO, FERC Electric Tariff, Module A, § 1.C (58.0.0).

[48] Rauch Test. at 21-22.

[49] Consumers Energy Comments at 3-4.

reliability. DTE Electric argues that resources that are not physically local are less reliable in meeting local system demands, and allowing External Resources to be counted as local opposes the very purpose of the locational resource adequacy construct, which is to maintain adequate resources to meet local electrical requirements. DTE Electric also contends that allowing External Resources to be treated as though they were physically located within a Local Zone prevents proper resource planning by obscuring accurate and efficient market pricing signals.[50]

30. DTE Electric states that MISO's proposal to create External Zones will allow appropriate treatment in the Auction by pricing resources in accordance with their contributions to reliability. According to DTE Electric, its concerns regarding reliability, price formation, and equity under the current construct are addressed through MISO's proposed treatment of External Resources and creation of External Zones. DTE Electric adds that MISO's proposal to assign local credit to a resource bordering multiple Local Zones addresses the Commission's concerns in its August 2018 Order by removing any decision-making ability from the resource owner or market participant.[51]

31. MidAmerican supports MISO's proposal for Border External Resources, stating that it is necessary to achieve reasonable price formation and properly model resources at their physical locations.[52] MidAmerican states that, by creating provisions for Border External Resources, MISO properly recognizes the specific physical locations and reliability characteristics of resources on the MISO border as distinct from those of resources hundreds of miles from the MISO footprint.[53]

32. Power Producers support MISO's External Resource proposal, stating that it will resolve a long-standing and significant reliability problem in a just and reasonable manner. Power Producers state that MISO's current practices improperly treat External Resources and internal resources as functional equivalents even though their physical location and operational attributes differ. Power Producers argue that, with the exception of Border External Resources and a Coordinating Owner's External Resources, External Resources cannot provide local services and should not be compensated by MISO for services they cannot provide. Power Producers agree that it is appropriate for External

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[50] DTE Electric Comments at 3-6.

[51] *Id*. at 5-7.

[52] MidAmerican Comments at 4.

[53] *Id.* at 8.

Resources in External Zones to participate in the Auction and count towards MISO's system-wide Reserve Requirement.[54]

33. WEC Energy supports MISO's proposed creation of External Zones. WEC Energy states that, under the current Tariff, External Resources are treated preferably to internal MISO resources because External Resources are not at risk of price separation in the Auction and are not subject to ZDCs. WEC Energy states that MISO's proposal would address this inconsistency by treating External Resources comparably to internal resources that are used to provide capacity to a different Local Zone, and would avoid potential reliability issues that could be caused by allowing External Resources to count towards a Local Zone's Local Clearing Requirement without any recognition of their physical location.[55]

34. WEC Energy also supports MISO's proposed exception for a Coordinating Owner's External Resources, which continues to recognize such resources as local to the Local Zone with which they are interconnected. WEC Energy states that, unlike other External Resources, Coordinating Owners have entered Seams Operating Agreements with MISO and enable MISO to dynamically dispatch a schedule using their resources. WEC Energy adds that Manitoba Hydro is especially well suited for this treatment because the Seams Operating Agreement between MISO and Manitoba Hydro enables MISO to dynamically dispatch Manitoba Hydro's resources in the day-ahead and real-time markets.[56]

35. Great River filed comments supporting MISO's Filing in general.[57]

ii. Alleged Undue Discrimination

(a) General Arguments

36. Municipal Agencies protest MISO's proposed creation of External Zones, asserting that MISO failed to demonstrate that the proposed changes to the treatment of External Resources are just and reasonable and not unduly discriminatory or

[54] Power Producers Comments at 9-13.

[55] WEC Energy Comments at 3.

[56] *Id.* at 4.

[57] Great River Comments at 1-2.

preferential.[58] Municipal Agencies argue that the Commission should require MISO to treat all External Resources in the manner that MISO proposes for Border External Resources and Manitoba Hydro's External Resources. Municipal Agencies argue that rejection of this aspect of MISO's Filing is appropriate to fully ensure that MISO LSEs can rely on their long-term External Resources to meet applicable resource adequacy requirements.[59]

37. Municipal Agencies argue that MISO's External Resource proposal creates, rather than remedies, equity issues. Municipal Agencies disagree with the claims that the existing treatment creates pricing inequity compared to internal resources located in other MISO Local Zones. Municipal Agencies argue that External Resources do not presently get an advantage over internal resources. Municipal Agencies explain that each External Resource, like each internal resource, has one Local Zone in which it is considered local, and therefore qualifies to meet the Local Clearing Requirement and receive that Local Zone's Auction Clearing Price. Municipal Agencies argue that neither internal resources nor External Resources are subject to the risk of price separation in the Auction if they serve load in the Local Zone in which they are considered local.[60]

38. Municipal Agencies contend that MISO's equity claims are undermined by the unduly discriminatory solutions that MISO proposes. Municipal Agencies argue that MISO's proposal to treat Border External Resources and Manitoba Hydro's External Resources differently than all other External Resources creates far more inequity than it purports to cure.[61] Municipal Agencies argue that MISO's proposal to treat Border External Resources and Manitoba Hydro's External Resources differently than other External Resources is unduly discriminatory and illuminates the fallacies of MISO's arguments.[62]

39. Municipal Agencies argue that External Resources offer significant additional reliability benefits compared to a single internal resource. Municipal Agencies assert that the interregional scope, and the associated diversity of resources, loads, and system

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[58] Municipal Agencies Protest at 1-2, 65-67. Municipal Agencies argue that the Commission cannot properly accept MISO's proposal to create External Zones without an evidentiary hearing. *Id.* at 65.

[59] *Id.*

[60] *Id.* at 39-41.

[61] *Id.* at 43.

[62] *Id.* at 45.

conditions, provide additional reliability to the first-touch Local Zone and enhance resilience. Municipal Agencies argue that MISO wrongly assumes that resources outside of MISO cannot have a significant impact on constraints into a MISO Local Zone.[63]

40. Duke Indiana states that the geographical line drawn by MISO to exclude certain resources from continued historical treatment is overly restrictive and lacks due consideration. Duke Indiana alleges that the exceptions that MISO proposes for Border External Resources and a Coordinating Owner's External Resources are arbitrary, unduly discriminatory, and prohibit the qualification of External Resources that can meet MISO's capacity needs during an emergency.[64]

(b) Border External Resources

41. Municipal Agencies argue that Border External Resources' direct connection to MISO does not meaningfully differentiate them from other External Resources. Municipal Agencies assert that, because transmission service from External Resources to their first-touch Local Zones is specifically studied and reliably firm, there is no concern about their deliverability that would justify exiling disfavored External Resources to External Zones.[65]

42. Municipal Agencies also explain that Border External Resources and other External Resources are comparably available to MISO. Municipal Agencies argue that all External Resources located in the PJM Balancing Authority are subject to the same emergency-related Tariff obligations and operating procedures.[66] Municipal Agencies explain that all External Resources in PJM, regardless of their location, reach MISO through an export schedule.[67] Municipal Agencies explain that for energy associated with an External Resource in an external Balancing Authority to be delivered to MISO, the External Resource must have an export schedule from its host Balancing Authority.[68]

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[63] *Id.* at 42-43.

[64] Duke Indiana Protest at 4. Duke Indiana states that it is unaware of any current External Resource that is causing reliability issues. *Id.* at 7.

[65] Municipal Agencies Protest at 41-42.

[66] *Id.* at 51.

[67] *Id.* at 47.

[68] *Id.* at 50.

43. Municipal Agencies argue that the significant reliability value of External Resources is neither caused by nor correlated with their proximity to MISO. Municipal Agencies argue that MISO fails to recognize that, in congested circumstances, an External Resource may provide more value than a local resource or a Border External Resource.[69] Municipal Agencies assert that, given that the output of Border External Resources and other External Resources flows over a network in ways that change moment-to-moment as dictated by physics, knowing the location of a favored External Resource does not equate to knowing the path its output will take to reach MISO. Municipal Agencies argue that MISO's proposal is based on an incorrect premise that the source and path of energy are knowable.[70]

44. Municipal Agencies also argue that, because firm export schedules are sourced from the entire PJM system, the Border External Resource's location near the MISO border is of no consequence in terms of actual deliveries scheduled from PJM to MISO. Municipal Agencies assert that whether a firm export schedule is subject to pro rata curtailment does not depend on the identified External Resource's distance from the MISO border.[71] Municipal Agencies assert that imposing a must-run requirement on a Border External Resource could be counterproductive, potentially detrimental to reliability, and possibly leading to transmission congestion that would not otherwise have existed.[72]

(c) <u>Coordinating Owner's External Resources</u>

45. Municipal Agencies argue that MISO has failed to justify changing the treatment of certain External Resources while maintaining the existing treatment of Manitoba Hydro's External Resources. Municipal Agencies argue that MISO's claim that there is

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[69] *Id.* at 53-54. Municipal Agencies claim that WPPI Energy's Nelson Plant (Nelson) is positioned to be particularly effective in alleviating the major constraint affecting imports into Local Zone 2. *Id.* (citing MISO, *Planning Year 2018-2019 Loss of Load Expectation Study Report*, https://cdn.misoenergy.org/2018%20LOLE%20Study%20Report89286.pdf) (MISO LOLE Study).

[70] *Id.* at 54-55 (citing Att. A (Affidavit of Rao Konidena) at 4 (Konidena Aff.)).

[71] *Id.* at 55. Municipal Agencies note that WPPI Energy's firm export schedules from PJM, which Municipal Agencies state WPPI Energy has relied on beginning in 2002, have never been curtailed due to transmission constraints. *Id.*

[72] *Id.* at 56-57.

no intervening system between Manitoba Hydro and the MISO Local Zone where it will be treated as internal fails to consider Manitoba Hydro itself as an intervening system.[73]

46. Municipal Agencies assert that, while MISO is Manitoba Hydro's Reliability Coordinator, Manitoba Hydro is neither within the MISO transmission system nor within the MISO Balancing Authority. Municipal Agencies argue that, thus, if the criterion to be applied is physical location within a Local Zone, Manitoba Hydro's External Resources do not satisfy that criterion.[74] Municipal Agencies contend that the Manitoba Hydro transmission system is governed by very different rules than the MISO transmission system. Municipal Agencies explain, for example, that Manitoba Hydro's External Resources are delivered to the MISO border using non-market, physical rights/contract path transmission service. Municipal Agencies argue that it is hard to conceive that this provides greater assurance of deliverability to the Local Zones to which this firm transmission service sinks than do other External Resources that rely on firm transmission service.[75] Municipal Agencies state that Manitoba Hydro's system uses the NERC Transmission Loading Relief system for congestion management. Municipal Agencies note that MISO has stressed that a Transmission Loading Relief curtailment regimen is inferior to the market-to-market coordination achieved through its joint operating agreements with other regional transmission organizations (RTO).[76]

(d) <u>Specific External Resources</u>

47. Municipal Agencies compare Exelon's Quad Cities Nuclear Plant (Quad Cities), which would qualify as a Border External Resource under MISO's proposal, with WPPI Energy's Nelson resource, which would not qualify as a Border External Resource. Municipal Agencies note that both of these facilities are located within PJM, both are subject to PJM's commitment and dispatch, both rely on PJM firm transmission service, and both are obligated to respond on a unit-specific basis to a MISO recall in an emergency. Municipal Agencies assert that, because both Quad Cities and Nelson, for example, are unit-specific capacity resources with unit-specific registrations, dedicated for capacity market purposes to MISO rather than PJM, both resources are highly reliable. Municipal Agencies state that standard engineering analysis shows that Quad Cities' output flows in part through the same substation that interconnects Nelson.

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[73] *Id.* at 57-58.

[74] *Id.* at 59.

[75] *Id.* at 59-60.

[76] *Id.* at 61 (citations omitted).

Municipal Agencies argue that treating Quad Cities differently than Nelson is evidence of undue discrimination among External Resources.[77]

48. Duke Indiana states that MISO failed to demonstrate why resources such as its Madison plant, located 20 miles from a MISO interconnection, do not meet the substance of the operational and physical criteria necessary to be exempted from the new rules. Duke Indiana states that the Joint Operating Agreement between MISO and PJM includes a non-recallability provision for pseudo-tied resources, such as the Madison plant. Duke Indiana also explains that the Madison plant has been included as a network resource with firm delivery rights to Duke Indiana's load, and Duke Indiana has continued to receive Auction Revenue Rights designations and allocations since the Madison plant was moved to PJM. Duke Indiana argues that MISO's proposed treatment of External Resources does not maintain equitable treatment of Madison's historical rights to the transmission system, to Auction Revenue Rights, and to the capacity market.[78]

49. Big Rivers protests the proposed definition of Border External Resource, which Big Rivers argues is too narrowly drawn. Big Rivers states that its contract with Southeastern Power Administration does not meet the strict language of MISO's proposed Border External Resource definition because the contract provides for supply from a diverse set of resources, only some of which are directly connected to MISO. Big Rivers argues that these types of resources are capable of providing comparable levels of reliable service as resources located within the Local Zone and thus the disparate treatment proposed by MISO is unduly discriminatory.[79]

50. Municipal Agencies assert that MISO's proposed treatment of Manitoba Hydro's External Resources creates inequity when compared to how MISO will treat power directly injected into Local Zone 5 over the proposed Grain Belt Express Line.[80] Municipal Agencies witness Konidena states that, even though power delivered over the Grain Belt Express Line does not face congestion risk, it remains unclear how MISO will treat an External Resource delivered over the proposed direct current line.[81]

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[77] *Id.* at 46-55.

[78] Duke Indiana Protest at 5-6.

[79] Big Rivers Protest at 3-5.

[80] Municipal Agencies Protest at 37.

[81] Konidena Aff. at 8.

iii. MISO's Reliability Concerns

51. Municipal Agencies argue that MISO has not demonstrated that its proposed change to the pricing and local treatment of External Resources is needed for reliability. Municipal Agencies assert that MISO neither acknowledges its prior sworn testimony that existing External Resources do not pose a reliability problem nor explains how conditions have changed since that prior testimony such that it is no longer correct. Municipal Agencies argue that, given the small quantity of anticipated new External Resources, MISO's concern about such resources' treatment is speculative and can be addressed by effective modeling.[82] Further, Municipal Agencies argue that it is within MISO's control to model and assess whether proposed new External Resources can reliably be counted on to be deliverable to their first-touch Local Zones.[83]

52. Municipal Agencies assert that MISO's rationale that intervening transmission lines impede its ability to rely on External Resources is incompatible with the decades of dependable reliance on firm transmission service reservations from external systems. Municipal Agencies argue that nothing in the Filing suggests that External Resources would not be deliverable to their respective first-touch Local Zones. Municipal Agencies argue that the Filing provides no reason that External Resources will not be delivered to MISO to help resolve emergencies in their first-touch Local Zones. Municipal Agencies assert that External Resources located in a neighboring RTO provide an extremely high degree of assurance that MISO will receive the energy associated with that capacity obligation in an emergency.[84] Municipal Agencies assert that, given their superior deliverability assurance, it is unduly discriminatory and unreasonable for MISO's

[82] Municipal Agencies Protest at 23-25. Municipal Agencies state that, since the transmission service agreement associated with Exelon's Byron Nuclear Facility has been terminated, Municipal Agencies expect only 302 MW of new External Resources, 94 percent of which belong to Manitoba Hydro. Municipal Agencies note that only 2.3 percent of the cleared resources for the 2018/19 Planning Year were External Resources. *Id.* at 24-26.

[83] *Id.* at 26.

[84] *Id.* at 31-34. Municipal Agencies argue that the potential for resources in PJM or SPP to be used to meet resource adequacy in MISO confers significant reliability benefits. *Id*. at 35.

proposal to relegate External Resources located in neighboring RTOs to second-class status.[85]

iv. Requests and Alternative Proposals

53. Big Rivers requests that the Commission direct MISO to delete two words (i.e., "direct" and "solely") from MISO's proposed definition of Border External Resource. Big Rivers states that its requested changes to the definition would not sacrifice MISO's intent and would enable Big Rivers' contract with Southeastern Power Administration (as well as similar contracts) to qualify as a Border External Resource.[86]

54. Power Producers argue that an internal resource that is pseudo-tied from one Local Zone to another should be deemed to be physically located in the Local Zone into which it is pseudo-tied. Power Producers note that several internal resources owned by Ameren Missouri are physically located in Local Zone 4, but are rate-based assets paid for by Ameren Missouri's retail ratepayers in Local Zone 5. According to Power Producers, these resources inappropriately count towards the Local Clearing Requirement of Local Zone 4 and should instead be given proper accreditation in Local Zone 5.[87]

55. Municipal Agencies argue that, rather than creating External Zones, MISO should include all External Resources in the initial base interchange used in setting the Capacity Import Limit, Capacity Export Limit, and Local Clearing Requirement.[88]

56. Power Producers state that MISO should be required to inform the owner of a Border External Resource that borders multiple Local Zones of its assignment of local credit well in advance of the Auction.[89]

v. Other

57. Municipal Agencies argue that, by exiling disfavored External Resources to External Zones, disqualifying them from meeting first-touch Local Zones' Local Clearing

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[85] *Id.* at 63. Municipal Agencies argue that Manitoba Hydro's External Resources do not have greater assurance of deliverability to the Local Zone they border than do External Resources in neighboring RTOs. *Id.* at 62-63.

[86] Big Rivers Protest at 6-7.

[87] Power Producers Comments at 17-19.

[88] Municipal Agencies Protest at 28, 31 & n.114.

[89] Power Producers Comments at 14.

Requirements, and subjecting them to price separation, MISO's proposal discourages its LSEs from bringing such resources to the MISO region. Municipal Agencies assert that MISO's External Resource proposal would similarly discourage construction of transmission that facilitates interregional capacity delivery and that, by leveraging supply and demand diversity, thereby enhances MISO reliability and resilience.[90]

c. Answers to Comments and Protests

i. Alleged Undue Discrimination

58. MISO argues that concerns regarding the treatment of the Grain Belt Express Line are not ripe for discussion and are outside the scope of this proceeding. MISO states that additional discussions and analysis, as well as specific details on the interconnected resources, would be required prior to MISO determining a position on the matter and implementing changes to the resource adequacy construct.[91]

59. Municipal Agencies argue that, contrary to arguments made by DTE Electric, WEC Energy, and Power Producers, External Resources do not currently get preferential treatment over internal resources. Municipal Agencies state that, like internal resources, each External Resource may count as local to one Local Zone.[92] Municipal Agencies further state that, contrary to WEC Energy's statement that External Resources are not at risk for price separation, External Resources do risk price separation in the Auction if they are not represented in the same Local Zone as the load. Municipal Agencies state that MISO's proposal to represent certain External Resources in External Zones, rather than in their first-touch Local Zones, creates inequity because certain External Resources would not be permitted to count towards any Local Zone's Local Clearing Requirement, which Municipal Agencies argue is unduly discriminatory.[93]

60. Municipal Agencies reiterate their arguments that MISO's proposal is unduly discriminatory by treating Border External Resources and Manitoba Hydro's External Resources favorably to all other External Resources. Municipal Agencies state that Big Rivers' requested modification to the definition of Border External Resources to

[90] Municipal Agencies Protest at 36-37.

[91] MISO First Answer at 18.

[92] Municipal Agencies First Answer at 6-7.

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

accommodate its contract with Southeastern Power Administration highlights the problems with favoring Border External Resources over other External Resources.[94]

61. Municipal Agencies contend that DTE Electric, Power Producers, Great River, Consumers Energy, MidAmerican, WEC Energy, and Big Rivers all fail to address the deficiencies that Municipal Agencies identified in their protest.[95] In response to DTE Electric's assertion that MISO's current treatment of External Resources contradicts the very purpose of the locational resource adequacy construct, Municipal Agencies explain that the Commission previously found that it was unreasonable for MISO to exclude External Resources from participating in the Auction.[96]

ii. MISO's Reliability Concerns

62. MISO states that its reliability concerns cannot be resolved through existing processes or through modifications to Capacity Import Limits, Capacity Export Limits, or Local Clearing Requirements. MISO acknowledges that it considered potential new External Resources as a reason to institute External Zones, including Exelon's Byron Nuclear Facility. MISO argues, however, regardless of the termination of the Byron Nuclear Facility's External NRIS, its reliability and equity concerns remain.[97]

63. MISO states that, although all resources that participate in the Auction must be deliverable to MISO load, such deliverability does not determine whether a resource is capable of serving the local reliability needs of a particular Local Zone. MISO explains that the reliability and use of internal resources are verified through Capacity Import Limits, Capacity Export Limits, and Local Clearing Requirements. MISO states that External Resources are currently exempt from this reliability validation and are currently not recognized in the Auction as imports into a Local Zone. MISO contends that the current treatment of External Resources could lead to curtailment of imports from internal resources located outside of a Local Zone without applying similar curtailment to External Resources.[98]

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[94] *Id.* at 10-14.

[95] *Id.* at 1-3.

[96] *Id.* at 4 (citing *Midwest Indep. Transmission Sys. Operator*, *Inc.*, 137 FERC ¶ 61,213, at P 117 (2011)).

[97] MISO First Answer at 8-9.

[98] *Id.* at 10.

64. MISO explains that the amount of generation importing into, or exporting from, a Local Zone can cause congestion and price separation. MISO states that, when this congestion occurs, it is caused by all flows on the system (including from External Resources). MISO argues that, therefore, an External Resource should not be exempt from price separation between the physical location of the External Resource and the load it is serving. MISO asserts that its proposal correctly recognizes the value that External Resources may provide to the region, and that, in certain congested circumstances, an External Resource may provide less value to a LSE than would an internal resource in the LSE's Local Zone.[99]

65. MISO states that it is committed to allowing External Resources to participate in the Auction. MISO states that it has carefully worked with seams partners to develop agreements that codify how to jointly operate the system, and explains that these agreements allow External Resources to clear the Auction. MISO argues, however, that such agreements neither exempt External Resources from Auction rules nor require particular pricing of External Resources.[100]

66. Municipal Agencies state that parties fail to support the claim that MISO's current treatment of External Resources creates reliability issues. Municipal Agencies reiterate that MISO should implement its proposed changes to the Capacity Import Limit, Capacity Export Limit, and Local Clearing Requirement calculations without establishing External Zones.[101] According to Municipal Agencies, parties ignore the additional reliability benefits of External Resources. Municipal Agencies allege that the lines that MISO draws are arbitrary, and they claim that MISO's own studies show that External Resources such as Nelson can alleviate a constraint more effectively than internal resources.[102]

iii. Requests and Alternative Proposals

67. MISO disagrees with requests to expand the definition of Border External Resources to include External Resources that are close to the border or those with slice-of-system contracts. According to MISO, the External Resources identified by parties in

[99] *Id.* at 13-14.

[100] *Id.* at 14-15.

[101] Municipal Agencies First Answer at 8-9.

[102] *Id.* at 9-10. As they argue in their protest, Municipal Agencies claim in their answer that the MISO LOLE Study shows that Nelson would be particularly effective in alleviating the constraint affecting imports into Local Zone 2. *Id.* at 10 n.46.

their comments and protests do not meet the required physical and operational characteristics. MISO states that an External Resource located within the MISO Balancing Authority differs from one that is physically removed, such as Duke Indiana's Madison plant. MISO argues that it could be considered arbitrary or unduly discriminatory to treat External Resources a few miles from the MISO border differently than those that are further away from the MISO border.[103]

68. MISO and Industrial Customers disagree with Power Producers' requested change in treatment of internal resources that are pseudo-tied from one Local Zone to another.[104] MISO states that, under its proposal, all resources are priced based on their physical location and not based on an electrical representation or pseudo-tied modeling. MISO explains, for example, that a pseudo-tied resource in Indiana would be no more capable of supporting local reliability needs in Illinois than a non-pseudo-tied resource. MISO also argues that Power Producers' requested change is outside the scope of this proceeding and should be rejected.[105] Industrial Customers state that, as discussed by MISO witness Rauch, a resource may reduce or satisfy a Local Zone's Local Clearing Requirement provided that it is physically located within that Local Zone and able to be committed and dispatched by MISO during a capacity emergency.[106] Industrial Customers explain that the commitment and dispatch of internal resources that are pseudo-tied from one Local Zone to another remain under the full control of MISO, and therefore such a resource should be allowed to reduce or satisfy the Local Clearing Requirement of the Local Zone in which it is interconnected.[107]

69. MISO acknowledges that Capacity Import Limits, Capacity Export Limits, and Local Clearing Requirements could be modified based on assumptions about which

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[103] MISO First Answer at 4-6.

[104] *Id.* at 17; Industrial Customers Answer at 2.

[105] MISO First Answer at 17.

[106] Industrial Customers Answer at 2-4 (citing Rauch Test. at 41-42). Industrial Customers state that, under MISO's proposal, a pseudo-tied export to PJM can reduce the Local Clearing Requirement of the Local Zone in which it is physically located provided that it has suitable operating agreements in place. *Id.* at 4.

[107] *Id.* Industrial Customers add that the Ameren Missouri resources physically interconnected in Local Zone 4 can only provide local reliability support to Local Zone 4, and therefore are appropriately counted towards satisfying the Local Clearing Requirement of Local Zone 4.

External Resources may clear the Auction.[108] MISO asserts, however, that such modifications could grant preferential treatment to External Resources in import constrained cases. MISO explains that, when a transmission violation is identified by the Simultaneous Feasibility Test performed during the Auction, the Simultaneous Feasibility Test would reduce the Capacity Import Limit for the constrained Local Zone. MISO asserts, however, that the reduced Capacity Import Limit would not apply to External Resources and therefore would not address the concerns MISO raised in its Filing.[109]

70. In response to Power Producers, MISO states that it has a defined process to determine to which Local Zone an External Resource that borders multiple Local Zones will be assigned. MISO explains that its process will include notification to the market participant based on established procedures, including varying registration dates for new and existing resources. MISO asserts that modifications to these procedures are outside the scope of this proceeding.[110]

iv. Other

71. Municipal Agencies state that parties fail to show how MISO's proposal is necessary for proper price formation. According to Municipal Agencies, MISO's proposal would raise capacity costs and create economic inefficiency by pushing LSEs into arrangements with costlier internal resources.[111]

72. MidAmerican states that Municipal Agencies' protest includes errors of fact with respect to Quad Cities. MidAmerican explains that it owns a 25 percent share in Quad Cities, which is located in the PJM Balancing Authority and connected to a substation that borders the MISO Balancing Authority.[112] MidAmerican states that its schedules to

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[108] MISO First Answer at 11. MISO also explains that MISO may not have sufficient insight into the offer behavior of External Resources and thus may not be able to predict and incorporate them into the Capacity Import Limit, Capacity Export Limit, and Local Clearing Requirement values posted in November each year. *Id.* at 11-12. MISO states, however, that the location and sufficiency of Border External Resources and Manitoba Hydro's External Resources have been sufficiently documented and thus can be included as local resources in the LOLE analysis. *Id.* at 12-13.

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

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

[111] Municipal Agencies First Answer at 14-15.

[112] MidAmerican Answer at 3-4.

MISO from Quad Cities are not fulfilled by resources of PJM's choosing or derived by PJM's security-constrained economic dispatch, but rather its schedules match the actual output of Quad Cities.[113]

d. Answer to Answers

i. Alleged Undue Discrimination

73. Municipal Agencies argue that MISO ignores evidence and fails to explain how the External Resources on which Municipal Agencies have relied for years can no longer provide the same reliability value to MISO as Border External Resources and Manitoba Hydro's External Resources. Municipal Agencies repeat numerous arguments made in their protest and first answer, including those related to Quad Cities and Nelson, the proposed Grain Belt Express Clean Line, and Manitoba Hydro.[114]

74. MISO argues that Border External Resources are uniquely situated to provide reliability benefits that resources electrically removed from the MISO region, such as the Municipal Agencies' resources, cannot provide.[115] MISO asserts that it is entirely appropriate to ensure equity and reliability, and it is just and reasonable, to treat resources that are not local to a Local Zone as not local.[116] MISO reiterates that concerns regarding the treatment of the Grain Belt Express Line are outside the scope of this proceeding. MISO states that it will address the issue with stakeholders, as appropriate.[117]

ii. MISO's Reliability Concerns

75. Municipal Agencies maintain that (1) MISO has no current reliability concerns, (2) any potential reliability concerns are unfounded, and (3) MISO is well positioned to address any reliability concern associated with future resources.[118]

76. MISO maintains that its Filing addresses reliability and equity concerns and need not be delayed until MISO faces an immediate reliability issue. MISO argues that the

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[113] *Id*. at 6.

[114] Municipal Agencies Second Answer at 5-8.

[115] MISO Second answer at 3-4.

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

[117] *Id.* at 5 & n.12.

[118] Municipal Agencies Second Answer at 2-4.

lack of immediate reliability concerns does not mitigate MISO's overall concern that its current Tariff provisions allow for External Resources to receive local credit where they are not physically located and, further, to choose the Local Zone in which they receive local credit. MISO contends that it is taking a proactive approach to maintain reliability.[119]

iii. Requests and Alternative Proposals

77. Municipal Agencies disagree with MISO's concerns with Municipal Agencies' alternative proposal, which would have MISO include all External Resources in the initial base interchange used in setting Capacity Import Limits, Capacity Export Limits, and Local Clearing Requirements. Municipal Agencies argue that (1) changes in offer behavior would not result in changes to these parameters before the Auction; (2) it is not inequitable for External Resources to be treated as internal to their first-touch Local Zones; and (3) inefficient outcomes caused by inevitable modeling imprecisions fail to justify MISO's External Resource proposal.[120]

78. Power Producers maintain that there is a lack of consistency between MISO's proposed treatment of Border External Resources and a Coordinating Owner's External Resources versus the current treatment of internal resources pseudo-tied between Local Zones.[121] Specifically, as they argue in their protest, Power Producers contend that Ameren Missouri's resources, which are physically located in Local Zone 4 but pseudo-tied into Local Zone 5, should be given local credit in Local Zone 5. Power Producers state that these resources are included for network modeling and dispatch purposes as being electronically transferred to the Ameren Missouri Local Balancing Authority in Local Zone 5.[122] According to Power Producers, these resources meet or exceed the criteria for a Coordinating Owner's External Resources (and potentially for Border External Resources) to satisfy the Local Clearing Requirement for Local Zone 5.[123]

[119] MISO Second Answer at 3.

[120] Municipal Agencies Second Answer at 9-10.

[121] Power Producers Answer at 3-4.

[122] *Id.* at 4-5. Power Producers state, however, that the LOLE analysis should continue to model the Ameren Missouri resources in downstate Illinois (i.e., Local Zone 4). *Id.* at 5.

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

e. Commission Determination

i. General

79. We find it just and reasonable, as MISO proposes, for MISO to no longer count all External Resources, regardless of electrical distance and dispatch control, towards satisfying the Local Clearing Requirements for MISO's Local Zones. Continuing to do so would undermine the purpose of the Local Clearing Requirement, which is to ensure that a sufficient amount of Unforced Capacity is located within each Local Zone so that each Local Zone can meet its LOLE during its Local Zone Peak Demand when it is import constrained. As discussed in more detail below, we find that MISO's proposed treatment of External Resources is just and reasonable. Moreover, with respect to arguments that the current treatment of External Resources has not caused reliability issues, a transmission operator need not wait until there is a reliability event before proposing tariff revisions to prevent one.[124]

80. We agree with MISO witness Rauch that "Border External Resources are electrically equivalent" to internal resources and we therefore find that they warrant comparable treatment.[125] This is because, like internal resources, Border External Resources must be directly connected to the MISO transmission system and are obligated to be dispatched if called upon by MISO during a declared energy emergency.[126] Accordingly, like internal resources, MISO can rely on Border External Resources to be dispatched and to effectively relieve local constraints on the MISO transmission system. We agree with MISO that an External Resource that fails to meet either the physical or operational criteria to qualify as a Border External Resource is less effective in relieving a specific local constraint on the MISO transmission system. For instance, an External Resource that is not connected to and thus electrically distant from the MISO footprint may be less effective in relieving a MISO constraint when dispatched.[127] Similarly, an External Resource that is directly connected to the MISO transmission system but cannot be dispatched by MISO in an emergency is less effective in relieving a local MISO

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[124] *See, e.g.*, *Midwest Indep. Transmission Sys. Operator, Inc.*, 108 FERC ¶ 61,163, at PP 370, 372, *reh'g denied*, 109 FERC ¶ 61,157 (2004) (determining, among other things, that MISO's proposed System Supply Resource (SSR) tariff provisions were "a reasonable backstop measure to assure reliability in the markets to be operated by [MISO]" and that the "SSR program is a prudent measure for protecting reliability.").

[125] *See* Rauch Test. at 39.

[126] *See* MISO Filing, Tab B (proposed Tariff section 1.B).

[127] *See* Patton Aff. at 4-5; *see also* Rauch Test. at 23.

constraint.[128] Accordingly, an External Resource that does not meet the physical and operational criteria proposed by MISO provides less local value to MISO than an internal resource or a Border External Resource and, therefore, MISO's proposal to treat such an External Resource differently than internal resources or Border External Resources is warranted and not unduly discriminatory or preferential.

81. We similarly find that a Coordinating Owner's External Resources are "electrically equivalent" to internal resources and therefore warrant comparable treatment.[129] Although, unlike Border External Resources, a Coordinating Owner's External Resources are not directly connected to the MISO transmission system, MISO's proposed Tariff language limits local treatment to resources located within a Coordinating Owner that borders the MISO region, whose external ties are predominately to MISO, and that has Seams Operating Agreements with MISO that allow for coordinated operations.[130] Although parties argue that the Coordinating Owner's transmission system is an intervening transmission system and therefore a Coordinating Owner's External Resources do not meet the physical criteria applied to Border External Resources, a Coordinating Owner's External Resources must be located within a Coordinating Owner that borders MISO and that has external ties that are predominately to MISO. As Municipal Agencies witness Konidena points out, External Resources that are not directly connected to MISO flow over an intervening network before reaching the MISO footprint and thus it is difficult to know the path that their output will take.[131] However, if the ties from a Coordinating Owner that borders MISO are predominately to MISO, as they are for Manitoba Hydro, that situation is much different than for External Resources in, for example, PJM because the PJM transmission system's external ties are not predominately to MISO and include connections to several Balancing Authorities.

82. As for the requirement to have a Seams Operating Agreement that allows for coordinated operations, MISO is the reliability coordinator for Manitoba Hydro, meaning that MISO has full visibility into Manitoba Hydro's system and is responsible for managing the interchange with Manitoba Hydro and Manitoba Hydro's constraints. In addition, MISO states that through its contingency reserve sharing and emergency procedures MISO has "certainty over the commitment and dispatch" of Manitoba Hydro's External Resources, giving it equivalent visibility into any congestion between

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[128] *See* Rauch Test. at 23-24.

[129] *See id.* at 39.

[130] *See* MISO Filing, Tab B (proposed Tariff section 69A.7.1).

[131] *See* Municipal Agencies Protest at 54-55 (citing Konidena Aff. at 4).

Manitoba Hydro and MISO as it would within any Local Zone.[132] Accordingly, we agree with MISO witness Rauch that a Coordinating Owner's External Resources that meet both the physical and operational criteria for local treatment in a Local Zone are "electrically equivalent" to an internal resource and thus we find that they warrant comparable treatment.[133] In addition, even assuming other External Resources meet the operational criteria discussed above, they are not located within a Coordinating Owner that borders the MISO region with external ties that are predominantly to MISO and therefore—for the limited purpose of satisfying Local Clearing Requirements—a Coordinating Owner's External Resource are superior to other External Resources and warrant comparable treatment to internal resources.

83. We find just and reasonable MISO's proposed criteria with respect to determining how to treat internal resources and Border External Resources that border multiple Local Zones. With respect to internal resources, it is just and reasonable for those resources to receive local credit in the Local Zone in which they are physically located. With respect to Border External Resources, we find MISO's proposal to assign local credit based on the greatest electrical connection is just and reasonable and addresses the Commission's concerns with MISO's March 2018 Filing expressed in the August 2018 Order.[134]

84. We find MISO's proposal to model and price External Resources in External Zones to be just and reasonable. As Dr. Patton states in his affidavit, MISO's proposal to create an External Zone for each external Balancing Authority with an External Resource that participates in MISO's capacity market will better reflect MISO's real-time operations, thereby providing benefits to the real-time operation of the system.[135] We also find reasonable MISO's proposal to model and price each External Zone based on the unconstrained price of the MISO Sub-Region(s) with which it interconnects. As MISO witness Rauch and Dr. Patton explain, MISO's proposal improves MISO's modeling of External Resources' impact on the transfer limit between MISO South and MISO North by considering actual real-time flows between each external Balancing Authority, which will be represented by an External Zone, and MISO.[136] It follows that pricing External Zones, and thus the External Resources in those External Zones, in a consistent manner is also just and reasonable. For instance, an External Zone that interconnects solely to MISO South would increase flows in the MISO South to MISO

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[132] *See* Rauch Test. at 21-22.

[133] *See id.* at 39.

[134] *See supra* P 9.

[135] *See* Patton Aff. at 8.

[136] *See* Rauch Test. at 25-26; Patton Aff. at 5-6.

North direction. If the Sub-Regional Export Constraint for MISO South binds, MISO South will clear the Auction at a lower Auction Clearing Price than MISO North. Given that the External Zone can only contribute to resource adequacy in MISO South and thus cannot increase flows in the MISO North to MISO South direction in order to relieve the transfer constraint, it is just and reasonable for that External Zone to be paid the lower Auction Clearing Price for the unconstrained MISO South Sub-Region. Conversely, if the same Sub-Regional Export Constraint for MISO South binds, an External Zone that interconnects solely to MISO North would increase flows in the MISO North to MISO South direction. Accordingly, that External Zone warrants the higher Auction Clearing Price for the unconstrained MISO North Sub-Region. Finally, it follows that an External Zone that interconnects to both MISO Sub-Regions can provide resource adequacy benefits to both Sub-Regions and thus it is reasonable for such an External Zone to be paid a blended price.

ii. Alleged Undue Discrimination

85. Municipal Agencies, Duke Indiana, and Big Rivers each make specific arguments as to why their respective External Resources are equivalent to internal resources, Border External Resources, and/or a Coordinating Owner's External Resources. Municipal Agencies argue that WPPI Energy's Nelson resource is equivalent to Exelon's Quad Cities nuclear plant; however, Quad Cities is directly connected to the MISO transmission system while Nelson requires intervening transmission to reach the MISO transmission system. Accordingly, regardless of Nelson's firm transmission reservations, its output flows over an intervening network to reach MISO and not necessarily over a predictable path.[137] In addition, we do not find convincing Municipal Agencies' claims that Nelson is particularly effective in alleviating a major import constraint into Local Zone 2.[138] Municipal Agencies fail to provide any support for that claim beyond citing to a MISO LOLE Study that does not even mention Nelson and thus provides no support for the contention that Nelson would be particularly effective in alleviating the constraint affecting imports into Local Zone 2.[139] Even if Nelson's output were to flow into Local Zone 2, there may be other constraints local in nature, such as voltage constraints, that are more effectively managed using local resources. With a Border External Resource, the direct connection to a MISO transmission line in a specific Local Zone provides MISO with much greater certainty that the flows from that Border External Resources will

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[137] *See* Municipal Agencies Protest at 54-55 (citing Konidena Aff. at 4).

[138] *See id.* at 53-54; *see also* Municipal Agencies First Answer at 10 n.46.

[139] The Stoneman to Nelson Dewey 161 kV line, which appears to be in or around Cassville, Wisconsin, is listed as the monitored element for Local Zone 2. MISO LOLE Study at 2, 16.

affect local constraints in that Local Zone. The same arguments apply to Duke Indiana and its Madison plant as well as to Big Rivers and its pooled purchase from Southeastern Power Administration. Accordingly, we disagree with Municipal Agencies, Duke Indiana, and Big Rivers, and find that MISO reasonably demonstrated that Border External Resources warrant different treatment than their External Resources for the limited purpose of satisfying Local Clearing Requirements.[140]

86. With respect to Municipal Agencies' concern regarding an External Resource delivered over the proposed Grain Belt Express Clean Line, we agree with MISO that a determination of whether it also merits treatment comparable to an internal resource is premature because no such External Resource exists at this time.

iii. Requests and Alternative Proposals

87. For the reasons discussed above, we also disagree with Big Rivers' proposed modifications to the definition of Border External Resources.[141] An External Resource should not qualify as a Border External Resource if it does not have a direct interconnection to a substation that directly ties to the MISO transmission system. It is unclear what, if anything, deleting the words "direct" and "solely" from MISO's proposed definition would accomplish other than to blur MISO's proposed bright line tests. Based on Big Rivers' assertions that some of the resources included in its pooled purchase from Southeastern Power Administration are not connected to a substation that contains the terminal of a MISO transmission line, it does not appear that they would qualify even if we were to agree with their proposed changes to the definition of a Border External Resource. Moreover, it appears that, in a declared Energy Emergency, MISO has no control over which resources Southeastern Power Administration will dispatch. Thus, it appears that Southeastern Power Administration could dispatch resources that rely on intervening transmission to reach the MISO transmission system. Therefore, that a single External Resource included in Big Rivers' pooled purchase from Southeastern

[140] This finding does not determine whether any External Resource qualifies as a Border External Resource under MISO's proposed criteria. Rather, it accepts these parties' assertions that their own External Resources do not qualify as Border External Resources.

[141] MISO proposes to define a Border External Resource as an External Resource that (i) has direct interconnection facilities to a substation that contains the terminal of a transmission line under MISO's functional control; (ii) will schedule in response to notification by MISO during a declared Energy Emergency solely from unit(s) connected to such substation; and, (iii) whose Unforced Capacity offered into MISO may be accommodated on those transmission line(s) under MISO's functional control. *See* MISO Filing, Tab B (proposed Tariff section 1.B).

Power Administration may meet the proposed definition of Border External Resource should not require MISO to extend such treatment to External Resources included in that purchase that do not qualify as Border External Resources.

88. We disagree with Power Producers' argument that internal resources pseudo-tied from one Local Zone to another should be given capacity credit in the Local Zone into which it is pseudo-tied. Regardless of whether it is pseudo-tied to another Local Zone, an internal resource would generally best address the reliability needs of the Local Zone where it is physically located.[142] This is because, in either case, an internal resource is dispatched by MISO and its output will be injected into the MISO transmission system where it is physically located. Further, MISO's treatment of internal resources that are pseudo-tied from one Local Zone to another is consistent with MISO's broader proposal, which prices all resources based upon their physical location.[143] For instance, under MISO's proposal, an External Resource that does not border the MISO footprint would not be awarded capacity credit in a Local Zone if it is pseudo-tied into that Local Zone. Indeed, that External Resource would fail to qualify as a Border External Resource because it does not have a direct interconnection to a substation that directly ties to the MISO transmission system and would therefore be modeled and priced in the External Zone where it is physically located.

89. Finally, we agree with Power Producers that MISO should inform the owner of a Border External Resource that borders multiple Local Zones of the Local Zone to which it is assigned well in advance of the Auction. MISO states that it will provide such notification to market participants based on established procedures.[144] We find that MISO's commitment to provide such notification is sufficient, in part because there only appears to be one Border External Resource that borders multiple Local Zones,[145] and because MISO will not reassign such a Border External Resource unless significant changes occur.[146]

[142] *See, e.g.*, Patton Aff. at 5 ("local generation would generally relieve transmission constraints caused by imports into the [Local Zone].")

[143] *See* MISO Filing at 17.

[144] *See* MISO First Answer at 17.

[145] *See* August 2018 Order, 164 FERC ¶ 61,081 at P 15.

[146] *See* MISO Filing, Tab B (proposed Tariff section 69A.7.1.a).

iv. Other

90. We agree with Municipal Agencies that, as a general matter, External Resources from external Balancing Authorities enhance system reliability.[147] For example, although an External Resource under PJM's dispatch control cannot be relied upon by MISO to relieve a transmission constraint in a specific Local Zone, that External Resource is particularly useful in ensuring MISO has sufficient energy in real-time to match demand in emergency conditions. That is because, like many other external Balancing Authorities, PJM has a pool of resources to dispatch in order to meet its export commitment to MISO. Indeed, although MISO typically lacks control of which resources are dispatched, the pool of PJM resources provides additional certainty that MISO's system-wide energy needs will be met. Accordingly, it is appropriate that all External Resources will continue to satisfy the Reserve Requirements for MISO LSEs.

91. We disagree with Municipal Agencies' various arguments that MISO's proposal discourages External Resources from selling capacity to MISO LSEs. Such arguments are analogous to claims that a locational capacity construct would discourage capacity sales between Local Zones. MISO LSEs can still rely on External Resources, as well as internal resources in other Local Zones, to satisfy their Reserve Requirements. However, just as LSEs must do when considering capacity purchases from resources located in other Local Zones, LSEs must consider the risk that their respective Local Zones may become import constrained and experience price separation in the Auction. If an LSE recognizes that there are sufficient local resources in its Local Zone, the potential for price separation in the Auction is limited. On the other hand, if an LSE recognizes that there are not sufficient local resources in its Local Zone, the potential for price separation in the Auction serves as a price signal for that LSE as well as others in that Local Zone that there is a need for additional capacity inside the Local Zone. Moreover, market participants are not obligated to sell External Resources bilaterally prior to the Auction; rather, they can offer their External Resources in the Auction and receive the Auction Clearing Price for their respective External Zones if they clear.

2. Historic Unit Considerations

a. MISO's Filing

92. MISO states that, given the proposed changes to its treatment of External Resources, it is necessary and equitable to introduce HUCs, a new methodology to allocate excess Auction revenue. MISO explains that, under its HUCs proposal, if capacity prices in the Auction separate, MISO will allocate the resulting excess Auction revenue to LSEs with historic arrangements that could not have foreseen MISO's zonal

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[147] *See* Municipal Agencies Protest at 31-35.

construct or changes, such as Grandfathered Agreements, pre-zonal capacity contracts (i.e., arrangements that predate July 20, 2011), or pre-March 26, 2018 (i.e., the date of the March 2018 Filing) contracts with External Resources.[148] MISO witness Rauch explains that market participants were put on "constructive notice" of MISO's proposal on March 26, 2018.[149] MISO witness Rauch explains that each HUC will be defined with a source Local Zone or External Zone, a sink Local Zone, as well as a MW quantity of capacity.[150]

93. MISO witness Rauch explains that the value of each MW of HUC is calculated to be the Auction Clearing Price of the sink Local Zones less the Auction Clearing Price of the source Local Zone or External Zone.[151] MISO states that LSEs with HUCs will not be fully hedged against price separation and will only receive a MW-weighted portion of the excess revenue when that excess does not fully fund eligible HUCs. MISO explains, however, that it reviewed past Auctions and determined that there is minimal risk of there being insufficient revenue for all HUCs. MISO states that the revenue needed for HUCs is a small portion of the excess revenue currently allocated as Zonal Deliverability Benefits.[152] MISO witness Rauch explains that HUCs will not replace any existing allocation of excess Auction revenue, but rather HUCs will be prioritized ahead of Zonal Deliverability Benefit allocations.[153]

94. MISO states that it proposes to replace Grandmother Agreements with HUCs.[154] MISO witness Rauch explains that HUCs differ from Grandmother Agreements for the

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[148] MISO Filing at 6-7; *see also* Rauch Test. at 32-33. MISO witness Rauch explains that, although its proposal focuses on historic arrangements, MISO is committed to discussing a more comprehensive capacity hedge for a potential future filing. Rauch Test. at 30-31.

[149] Rauch Test. at 33.

[150] *Id.* at 36. MISO witness Rauch clarifies that HUCs can only be granted in amounts less than or equal to the LSE's Reserve Requirement. *Id*. at 35.

[151] Rauch Test. at 36.

[152] MISO Filing at 7. MISO states that, after allocating excess revenue to LSEs with HUCs, any remaining excess revenue will be allocated as Zonal Deliverability Benefits. *Id.*

[153] Rauch Test. at 34.

[154] MISO Filing at 6.

following reasons: (1) they will not cause uplift, as a pro rata allocation will be utilized in the unlikely event that excess Auction revenue is insufficient to fund HUCs; (2) they will not result in waiver of transmission constraints, as HUCs will not affect Capacity Import Limit and Capacity Export Limit calculations or change how Capacity Import Limits, Capacity Export Limits, or Local Clearing Requirements bind in the Auction; and (3) they apply to a small set, no more than five percent, of cleared resources.[155]

95. MISO explains that qualified arrangements will be eligible for HUCs until the end of the original term of the agreement or for two years, whichever is longer. MISO states that such an arrangement that has already been extended through evergreen provisions will be eligible for HUCs for two years. MISO states that the two year period will give LSEs a transitional period to enter into new capacity arrangements if they choose to do so in order to avoid price separation risk.[156]

b. <u>Comments and Protests</u>

96. Midwest TDUs argue that MISO's HUCs proposal is just and reasonable, and should be accepted regardless of action taken on any other aspect of MISO's Filing.[157] Midwest TDUs explain that the pre-July 20, 2011 arrangements that would qualify for HUCs predate changes to MISO's locational resource adequacy construct, and in some cases, predate MISO itself. Midwest TDUs explain that those construct changes have subsequently subjected LSEs to price separation risk when their resource, and the LSE's load that is served by that resource, are located in different Local Zones. Midwest TDUs agree with MISO that an LSE relying on a resource that is now separated from its load by a Local Zone border "could not have foreseen risks associated with a capacity construct that was created after their contracts were negotiated."[158] Midwest TDUs assert that the same considerations apply to LSEs that made commitments to External Resources before MISO's proposal to change the treatment of such resources under its locational construct. Midwest TDUs assert that HUCs are necessary to protect these investments from price separation risk that was unforeseeable at the time the commitments were made.[159]

[155] Rauch Test. at 31-32.

[156] MISO Filing at 7; *see also* Rauch Test. at 33-34.

[157] Midwest TDUs Comments at 2, 4.

[158] *Id.* at 5-6 (quoting MISO Filing, Rauch Test. at 10).

[159] *Id.* at 6.

97. Midwest TDUs assert that MISO's HUCs proposal is readily distinguished from MISO's previously proposed Grandmother Agreements and should be implemented as MISO requests to honor the commitments LSEs have made to meet their obligations.[160] Midwest TDUs note that the Commission previously objected to Grandmother Agreements because they had the result of "exempting most resources from the [ZDC]."[161] Midwest TDUs assert that HUCs do not suffer from this perceived infirmity. In addition, Midwest TDUs state that an LSE with a Grandmother Agreement would be financially made whole for price separation in the Auction, and assert that HUCs explicitly do not serve this function.[162] Midwest TDUs further note that accepting MISO's HUCs proposal would be consistent with FPA section 217.[163]

98. Midwest TDUs argue that the Commission should act on MISO's HUCs proposal regardless of any action taken on the rest of MISO's Filing.[164] Midwest TDUs assert that, despite other interpretations, *NRG Power Marketing, LLC v. FERC* clarifies procedural requirements for due notice and subsequent process, but imposes no substantive limitation on the extent to which, following due notice and process, the Commission may modify utility filings.[165] Midwest TDUs assert that the Commission may accept one part of a utility's filing while rejecting or greatly modifying another part.[166] Midwest TDUs assert that MISO's characterization of its filing as an "integrated set of elements" does not defeat the Commission's authority to approve MISO's HUCs proposal while modifying other aspects of MISO's Filing.[167]

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[160] *Id.* at 8.

[161] *Id.* at 7 (quoting *Midwest Indep. Transmission Sys. Operator, Inc.*, 139 FERC ¶ 61,199, at P 113 (2012), *order on reh'g*, 153 FERC ¶ 61,229 (2015)).

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

[163] *Id.* at 9 (referencing 16 U.S.C. § 824q (2012)).

[164] *Id.* at 10.

[165] *Id.* at 10-11 (citing *NRG Power Marketing, LLC v. FERC*, 862 F.3d 108 (D.C. Cir. 2017) (NRG)).

[166] *Id.* at 12-13, 15 (citing *Old Dominion*, Opinion No. 553-A, 162 FERC ¶ 61,262, at PP 41, 46 (2018)).

[167] *Id.* at 17-18.

99. MidAmerican supports MISO's proposal to create HUCs as a reasonable financial hedge to manage congestion risk. MidAmerican likens HUCs in the MISO resource adequacy construct to Financial Transmission Rights in the MISO energy market.[168] MidAmerican argues that HUCs are compatible with Auction Clearing Prices and would not inhibit the ability to account for location in making investment decisions.[169] MidAmerican further argues that, because HUCs would only be available to existing resources, there is no concern regarding price signals for new resources with respect to transmission constraints. MidAmerican states that, absent the HUCs proposal, MISO's Filing would impose new and unjustified charges on LSEs that have made long-term investments in response to historic price signals.[170]

100. Consumers Energy states that, although it does not plan to engage in resource adequacy transactions between Local Zones or with resources in External Zones, many market participants do engage in this market behavior. Consumers Energy, therefore, supports MISO's proposed Tariff changes to provide HUCs to LSEs with historic power purchase agreements to mitigate against Auction Clearing Price separation.[171] Consumers Energy and Power Producers support MISO's proposal, made in response to the August 2018 Order, to limit eligibility for HUCs, rather than allowing contracts with evergreen provisions to qualify for HUC treatment in perpetuity.[172]

101. Municipal Agencies strongly support MISO's HUCs proposal.[173] Municipal Agencies argue that in no event should the Commission accept MISO's proposal to create External Zones without also accepting MISO's HUCs proposal.[174] Municipal Agencies assert that HUCs are essential to mitigate the risk of price separation for existing, long-term capacity commitments. Municipal Agencies argue, however, that HUCs do not fully protect utilities' ability to continue to use External Resources to meet all resource

[168] MidAmerican Comments at 10.

[169] *Id.* at 11.

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

[171] Consumers Energy Comments at 4.

[172] *Id.*; Power Producers Comments at 16-17.

[173] Municipal Agencies Protest at 66.

[174] *Id.* at 3, 9, 66.

adequacy requirements.[175] Municipal Agencies contend that it remains inequitable to expose LSEs to the newly imposed and unforeseeable risk of loss of accreditation on their existing long-term External Resource commitments for satisfying Local Clearing Requirements.[176]

102. DTE Electric states that MISO's HUCs proposal will ensure that suppliers who entered long-term agreements with External Resources prior to the proposed rule changes are held financially harmless if price separation occurs. DTE Electric argues, however, that 2014 or June 2016, when MISO first identified the issue or the beginning of the current effort to reform the locational aspects of MISO's resource adequacy construct, are more appropriate deadlines for HUCs qualification. DTE states that agreements entered after 2014 were made with full knowledge of the forthcoming effort.[177]

103. Industrial Customers state that they do not oppose MISO's updated HUCs proposal because it has a definite sunset date, despite unnecessarily allocating HUCs to existing internal resource arrangements. Additionally, Industrial Customers strongly support the development of Capacity Transfer Rights that would be available to all market participants to hedge the risk of price separation in the Auction.[178]

104. Duke Indiana states that it does not believe that MISO's HUCs proposal sufficiently represents Duke Indiana's historical use and that there is no certainty that Duke Indiana's customers will be made whole. Duke Indiana argues that HUCs rely on funding from excess Auction revenue, which may in fact not exist. Duke Indiana asserts that the proposal may result in the potential for higher costs to Duke Indiana's customers.[179]

105. Illinois Commission states that the Commission should reject MISO's HUCs proposal, arguing that it is unduly discriminatory and preferential. According to Illinois Commission, MISO's HUCs proposal would effectively give a select minority of LSEs priority access to valuable constrained transmission capability in the form of a hedge, which Illinois Commission argues will mute the intended locational price signal and will

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[175] *Id.* at 9.

[176] *Id.* at 5.

[177] DTE Electric Comments at 7-8.

[178] Industrial Customers Comments at 5-8.

[179] Duke Indiana Protest at 7-8.

unduly discriminate against all other LSEs.[180] Illinois Commission states that MISO should instead retain the status quo and continue to allocate excess Auction revenue to LSEs that fund transmission upgrades into the constrained Local Zone and then to all LSEs in that Local Zone on a pro-rata basis.[181] Illinois Commission argues that HUCs will erode the value of existing ZDC Hedges given to LSEs that fund transmission upgrades. Illinois Commission explains that ZDC Hedges are the first to receive excess Auction revenue, but MISO's proposal would allocate excess Auction revenue to ZDC Hedges and HUCs together.[182]

106. Illinois Commission argues that MISO's HUCs proposal is not meaningfully different from its prior Grandmother Agreements proposal. Illinois Commission asserts that HUCs will likely always be hedged at the expense of other LSEs in the Local Zone and that HUCs could have a significant impact on Zonal Delivery Benefits.[183] Illinois Commission asserts that, given the attention that transmission constraints and resource deliverability have received in past Commission orders, External Resource owners and impacted LSEs should have known the risk that External Resources would be exposed to Auction price separation. Illinois Commission argues that the Commission already addressed the issue of price separation risk for internal resources by requiring Grandmother Agreements to be terminated after two years.[184]

c. <u>Answers to Comments and Protests</u>

107. MISO reiterates that HUCs will be allocated to External Resources with historic contracts that could not have foreseen the risks created by its Filing. MISO states that internal resources with similar historic contracts and lack of foresight should be accorded

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[180] Illinois Commission Protest at 5-7. Illinois Commission states that MISO's HUCs proposal is particularly discriminatory in Local Zones with retail competition because alternative retail suppliers are less likely to rely on historical, long-term contracts than traditional LSEs. *Id.* at 6.

[181] *Id.* at 5.

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

[183] *Id.* at 7-10. Illinois Commission also argues that the HUCs are not better than Grandmother Agreements because MISO is simultaneously proposing modifications to Capacity Import Limits and Capacity Export Limits. *Id.* at 9.

[184] *Id.* at 10-11. Illinois Commission argues that, if the Commission finds merit in MISO's statements regarding unforeseen risk, the Commission should only provide a short adjustment period for External Resources. *Id.* at 13.

comparable treatment; otherwise, External Resources with HUCs would receive disparate, preferential treatment.[185] Midwest TDUs argue that, contrary to Illinois Commission's arguments, HUCs represent a balanced approach to addressing the fact that a locational construct was superimposed on a region where many LSEs have relied on long-term contracts that predate the creation of Local Zones and in some cases predate the creation of MISO.[186] Midwest TDUs state that the portion of total cleared Capacity Resources that will receive HUCs can be expected to be well under five percent. Midwest TDUs explain that MISO's five percent estimate assumes price separation between each and every Local Zone and External Zone. Midwest TDUs note that in the prior Auctions, the majority of Local Zones in the majority of years cleared at the unconstrained price.[187]

108. MISO acknowledges that some LSEs do not have long-term arrangements, but asserts that this fact does not cause the HUCs proposal to be unjust and unreasonable. MISO notes that HUCs are a mechanism to address the price risk associated with contracts, and argues that LSEs without qualifying contracts have no such risk.[188] Midwest TDUs disagrees with Illinois Commission's assertion that MISO's HUCs proposal results in undue discrimination.[189] Midwest TDUs assert that MISO's proposal to distinguish between internal resources that have historical, ongoing arrangements and those that do not have such arrangements is not undue discrimination. Midwest TDUs state that the long-term arrangements that would qualify for HUCs represent investments made before MISO proposed a locational resource adequacy construct.[190]

109. Midwest TDUs disagree with Illinois Commission's concern about the impact of MISO's HUCs proposal in areas with retail competition.[191] Midwest TDUs assert that capacity congestion hedges can be harmonized with retail choice. Midwest TDUs argue however that, given the predominantly traditionally-regulated makeup of MISO's

[185] MISO First Answer at 6.

[186] Midwest TDUs Answer at 3.

[187] *Id.* at 13.

[188] MISO First Answer at 7.

[189] Midwest TDUs Answer at 4.

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

[191] *Id.* at 10 (citing Illinois Commission Protest at 6-7).

footprint, MISO's resource adequacy construct should be designed primarily to fit traditionally-regulated states.[192]

110. MISO disagrees with any suggestion that HUCs are the equivalent of Grandmother Agreements.[193] Midwest TDUs similarly assert that HUCs are distinct from Grandmother Agreements. Midwest TDUs note that there is no guarantee of full funding for HUCs and that HUCs will not impact the inputs to the Auction or how constraints bind in the Auction.[194]

111. Midwest TDUs disagree with Illinois Commission's argument that excess Auction revenue should be allocated first to LSEs that fund transmission upgrades that increase import capability into the constrained Local Zone and then to LSEs in that Local Zone on a pro-rata basis.[195] Midwest TDUs assert that historic commitments should be protected from unforeseeable changes that result in additional charges, and argue that Illinois Commission failed to demonstrate that MISO's proposal to provide greater protection is unreasonable.[196] Midwest TDUs also argue that HUCs do not represent free hedges. Midwest TDUs state that LSEs that have entered into long-term capacity arrangements are committed to these resources regardless of new exposure to the risk of price separation.[197]

112. Midwest TDUs acknowledge Illinois Commission's concern that funding HUCs could result in reduced Zonal Deliverability Benefits. Midwest TDUs agree with MISO, however, that, given the impacts of MISO's proposed changes to its resource adequacy construct, the proposed change in the prioritization of distributions of excess Auction

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

[193] MISO First Answer at 7-8 (citing Rauch Test. at 31-32).

[194] Midwest TDUs Answer at 11-13. Midwest TDUs explain that resources that would be eligible for HUCs were not subject to Auction price separation *de facto* until the end of Grandmother Agreements on May 31, 2015, and were not subject to Auction price separation *de jure* until March 1, 2018, the effective date of the locational resource adequacy construct. *Id.* at 5-6 (citing *Midcontinent Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,176 (2018)).

[195] *Id.* at 7 (citing Illinois Commission Protest at 5, 14).

[196] *Id.* at 8.

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

revenue is rational.[198] Midwest TDUs contend that by reducing Zonal Deliverability Benefits, HUCs may facilitate solving transmission constraints, to the aggregate benefit of all MISO LSEs.[199]

113. Midwest TDUs note that DTE Electric disagrees with the starting date for HUCs associated with External Resources.[200] Midwest TDUs argue that DTE Electric does not provide support for deviating from the typical practice of looking to the filing date as the cutoff for execution of covered agreements. Midwest TDUs assert that the filing date provides a bright line, when all affected entities are on actual or constructive notice.[201]

114. MISO argues that Capacity Transfer Rights are outside the scope of this Filing. MISO states that it considered alternatives to its HUCs proposal but ultimately determined that the reasonable approach would be to focus solely on the allocation of excess Auction revenue to historic arrangements (i.e., its HUCs proposal).[202]

d. Commission Determination

115. We find MISO's HUCs proposal, which intends to help LSEs transition to MISO's new locational market design for resource adequacy, to be just and reasonable. Existing arrangements that have not been previously extended through an evergreen contract provision will remain eligible for HUCs for the current term of the contract or two years, whichever is longer. Thus, the amount of existing arrangements that are eligible for HUCs will decrease over time and eventually no HUCs will remain. Due to the transitional nature of MISO's HUCs proposal, LSEs will not be able to permanently avoid the locational price signal that MISO's resource adequacy construct was designed to provide. In addition, because HUCs apply only to existing arrangements and will not affect the market parameters used in clearing the Auction, MISO's HUCs proposal will not affect Auction Clearing Prices and therefore will not impugn locational price signals that will continue to inform future resource adequacy decisions.[203] Accordingly, we find

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[198] *Id.* at 9 (citing Rauch Test. at 34-35).

[199] *Id.* at 10.

[200] *Id.* at 14.

[201] *Id.*

[202] MISO First Answer at 17.

[203] *See* Rauch Test. at 31-32 (distinguishing HUCs from Grandmother Agreements).

that the HUCs proposal is a just and reasonable solution that will not embed inefficiencies in MISO's resource adequacy construct.

116. We also find it reasonable for MISO's proposal to limit HUC eligibility for existing arrangements that have already been extended through evergreen provisions to two years. This two-year limitation addresses the Commission's prior concern expressed in the August 2018 Order that MISO's March 2018 Filing could have allowed LSEs with evergreen contract extensions to extend them indefinitely to extend their HUC eligibility in order to avoid locational price signals.[204]

117. We agree with MISO that arrangements with External Resources should only qualify for HUCs if they predate March 26, 2018, the date of MISO's March 2018 Filing. Given that the instant Filing is substantively similar to MISO's March 2018 Filing, we agree with MISO witness Rauch that market participants were on notice of MISO's proposed changes in this proceeding when MISO filed its March 2018 Filing.[205]

118. We also agree with MISO that similarly situated internal capacity arrangements should qualify for HUCs. As MISO points out, capacity arrangements between Local Zones that existed prior to MISO's 2011 filing of its locational resource adequacy construct were similarly unaware of the potential for price separation risk. Given that some of those capacity arrangements still exist, we find that it is just and reasonable for such internal capacity arrangements to also qualify for HUCs to ensure comparable treatment between External Resources and similarly situated internal resources.

119. In addition, we find that MISO's HUCs proposal is not unduly discriminatory or preferential. LSEs that qualify for HUCs are not similarly situated to LSEs without qualifying existing capacity arrangements. It is not unduly discriminatory or preferential for MISO to provide temporary relief in the form of HUCs to only those LSEs with existing capacity arrangements that are directly affected by changes to MISO's resource adequacy construct. We, therefore, disagree with Illinois Commission's claim that MISO's HUCs proposal discriminates against alternative retail suppliers in Local Zones with retail choice. If alternative retail suppliers have not engaged in capacity arrangements outside of their respective Local Zones, then they are not similarly impacted by MISO's changes to its locational resource adequacy construct.

120. Although there is no certainty that HUCs will be fully funded and thus there is a chance that LSEs will not be made whole, we note that MISO reviewed past Auctions

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[204] *See supra* P 9.

[205] *See* Rauch Test. at 33.

and determined that this scenario is unlikely.[206] We agree with MISO, noting that HUCs will only need funding when price separation occurs in the Auction. Therefore, because HUCs are funded by excess Auction revenue caused by the very same Auction price separation, it is unlikely that HUCs will not be fully funded in a given Auction. MISO's HUCs proposal provides a substantial, albeit imperfect, hedge to Auction price separation without compromising reliability by waiving transmission constraints or requiring other LSEs to provide additional funding for supplemental make-whole payments. We find this MISO proposal to be a just and reasonable approach to providing affected LSEs a hedge against price separation directly caused by changes to MISO's resource adequacy construct.

121. We agree with Illinois Commission that MISO's HUCs proposal may reduce the amount of excess Auction revenue that will be available for ZDC Hedges. However, we are not aware of any LSEs that have funded transmission upgrades, qualified for ZDC Hedges, and received excess Auction revenue. In addition, the Commission has not approved resource adequacy provisions assuring ZDC Hedges first access to excess Auction revenue. For example, Grandmother Agreements, which MISO proposes to replace with HUCs, are currently prioritized over ZDC Hedges.[207] For these reasons, we are not persuaded that HUCs are unjust and unreasonable because their existence may reduce funding for ZDC Hedges. Similarly, HUCs may reduce the amount of excess Auction revenue that will be available for Zonal Deliverability Benefits. While HUCs serve to protect LSEs from price separation risk that did not exist when they entered into their existing contractual arrangements, Zonal Deliverability Benefits are intended to return any unused excess Auction revenue to the LSEs from which that excess Auction revenue was collected. Accordingly, under the current Tariff and MISO's HUCs proposal, Zonal Deliverability Benefits are given the lowest priority with respect to allocation of excess Auction revenue. We are not persuaded that HUCs are unjust and unreasonable because they are funded by excess Auction revenue and thus may reduce the amount of unused excess Auction revenue that MISO distributes to LSEs as Zonal Deliverability Benefits. Although, ideally all excess Auction revenue would flow back to holders on ZDC Hedges or to LSEs through Zonal Deliverability Benefits, upon weighing the facts of this proceeding, we find it appropriate that some excess Auction revenue be used, temporarily, to provide a hedge against price separation to LSEs that could be adversely affected by unforeseen changes to MISO's resource adequacy construct.

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[206] *See* MISO Filing at 7; Rauch Test. at 31-32.

[207] MISO, FERC Electric Tariff, Module E-1, § 69A.7.7(c) (33.0.0).

3. Market Parameters

a. MISO's Filing

122. MISO proposes to further align its locational market parameters, such as Capacity Import Limits, Capacity Export Limits, and Local Clearing Requirements, with Auction assumptions and visibility. MISO states that the output from all resources in its LOLE studies will be aligned with the Local Zone or External Zone in which they are accredited in the Auction. MISO states that its proposal creates two new parameters, Zonal Import Ability and Zonal Export Ability, which will be used to calculate Capacity Import Limits, Capacity Export Limits, and Local Clearing Requirements.[208]

123. MISO proposes to calculate a Local Zone's Capacity Import Limit by adding its Zonal Import Ability and the counter-flow of exports to external areas (e.g., PJM or SPP), and a Local Zone's Capacity Export Limit by taking the difference between its Zonal Export Ability and the exports to external areas.[209] According to MISO witness Rauch, MISO proposes two modifications to its Capacity Import Limits and Capacity Export Limits calculations: (1) locate all External Resources in the External Zones or Local Zones in which they are accredited; and (2) make adjustments to both for exporting internal resources. MISO witness Rauch states that the first modification will modify the initial base interchange of each Local Zone, which will result in an increase in the export ability and a decrease in the import ability for Local Zones with Border External Resources and a Coordinating Owner's External Resources. MISO witness Rauch states that the second modification will reduce Capacity Export Limits to account for exports to non-MISO load and Capacity Import Limits will correspondingly increase to reflect the counter-flow from these exporting internal resources. MISO witness Rauch states that these modifications will align the resources considered in the base interchange with their proposed Auction treatment.[210]

124. MISO also proposes to revise the calculation of the Local Clearing Requirements for each Local Zone to equal the Local Reliability Requirement less the sum of the Zonal Import Ability and controllable exports. MISO explains that its proposed use of Zonal Import Ability (i.e., replacing Capacity Import Limits in the calculation of Local Clearing Requirements) is necessary given its proposed changes to its Capacity Import Limits.

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[208] MISO Filing at 7-8. MISO states that Zonal Import Ability and Zonal Export Ability represent a Local Zone's base interchange plus the Local Zone's incremental ability to import and export generation, respectively *Id.* at 8.

[209] *Id.*

[210] Rauch Test. at 39-40.

MISO explains that its proposed use of controllable exports (i.e., replacing non-pseudo-tied exports in the calculation of Local Clearing Requirements) would allow MISO to recognize the ability of pseudo-tied resources with suitable operating agreements.[211]

b. <u>Comments and Protests</u>

125. DTE Electric states that MISO's proposed changes to various Auction input parameters represent necessary improvements over the current resource adequacy construct.[212] Consumers Energy and WEC Energy support MISO's proposal to refine its calculations of Capacity Import Limits and Capacity Export Limits.[213] Industrial Customers strongly support MISO's proposal to change its Local Clearing Requirement calculation to deduct all controllable exports, not just non-pseudo-tied exports. Industrial Customers state, however, this is only a first step and that MISO must secure emergency commitment and dispatch control of pseudo-tied exports.[214]

126. Municipal Agencies argue that MISO's proposed changes to its Capacity Import Limit, Capacity Export Limit, and Local Clearing Requirement calculations address any potential reliability concerns and should be implemented without establishing External Zones.[215] Municipal Agencies argue that MISO's proposed Capacity Import Limit, Capacity Export Limit, and Local Clearing Requirement calculation changes are functionally independent of the proposed changes to the treatment of External Resources. Municipal Agencies assert that MISO's proposed reliability validation will ensure that deliveries from the finalized set of cleared resources will support local resource adequacy without violating transmission constraints.[216]

c. <u>Answers to Comments and Protests</u>

127. MISO notes that no parties oppose MISO's proposed changes to Capacity Import Limits, Capacity Export Limits, and Local Clearing Requirements.[217]

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[211] MISO Filing at 8; *see also* Rauch Test. at 41.

[212] DTE Electric Comments at 8.

[213] Consumers Energy Comments at 5; WEC Energy Comments at 4.

[214] Industrial Customers Comments at 8-12.

[215] Municipal Agencies Protest at 27.

[216] *Id.* at 30.

[217] MISO First Answer at 4.

d. **Commission Determination**

128. We accept MISO's proposal to further align its locational market parameters, such as Capacity Import Limits, Capacity Export Limits, and Local Clearing Requirements, with Auction assumptions and visibility. MISO is proposing to treat Border External Resources and a Coordinating Owner's External Resources as local to their respective Local Zones, and it is therefore reasonable that MISO also propose to include those External Resources in the base interchange of those Local Zones for the purpose of calculated Capacity Import Limits and Capacity Export Limits. Accordingly, given MISO's proposed treatment of all other External Resources, we find that it is just and reasonable to preclude them from the base interchange of Local Zones.

129. MISO's proposal also adjusts Capacity Import Limits and Capacity Export Limits for exporting internal resources. As the Commission previously stated, capacity exports from a Local Zone create counter-flow that should result in an increase to that Local Zone's Capacity Import Limit.[218] Similarly, we agree with MISO that such capacity exports should correspondingly reduce that Local Zone's Capacity Export Limit. For these reasons, we find MISO's proposed modifications to its Capacity Import Limit and Capacity Export Limit calculations to be just and reasonable.

130. We also find MISO's proposed changes to Local Clearing Requirements to be just and reasonable.[219] As discussed above, MISO proposes to consider the counter-flow from capacity exports in its Capacity Import Limit calculations. However, MISO's proposed formula for calculating Local Clearing Requirements also includes a reduction for controllable exports. Thus, by replacing Capacity Import Limits with Zonal Import Ability in the calculation for Local Clearing Requirements, MISO avoids double-counting the effect of capacity exports on the calculation of Local Clearing Requirements. MISO also proposes to replace non-pseudo-tied exports with controllable exports in the same Local Clearing Requirements calculation. MISO explains that this would allow MISO to recognize exports that are pseudo-tied, but with which MISO has obtained suitable operating agreements to be dispatched during emergency conditions. This MISO proposal is just and reasonable, as well as consistent with MISO's operational

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[218] *See Public Citizen, Inc. v. Midcontinent Indep. Sys. Operator, Inc.*, 153 FERC ¶ 61,385, at P 145 (2015), *order on reh'g and compliance*, 154 FERC ¶ 61,224, *order on compliance*, 156 FERC ¶ 61,075 (2016).

[219] MISO proposes the following changes to its calculation of Local Clearing Requirements: Local Clearing Requirement = Local Reliability Requirement – ~~Capacity Import Limit~~ Zonal Import Ability – ~~non-pseudo-tied exports~~ controllable exports. MISO Filing, Tab B (proposed Tariff section 68A.6).

criteria for Border External Resources to count towards satisfying the Local Clearing Requirement of the Local Zone it borders.

4. Requests for Waiver

a. MISO's Filing

131. MISO requests waiver of certain Tariff provisions related to the Filing. If the Commission accepts the Filing, MISO requests waiver of the proposed November 1, 2018 deadline for LSEs to submit information to MISO to qualify for HUCs.[220] Alternatively, if the Commission rejects the Filing, MISO requests waiver of the current November 1, 2018 deadline for MISO to post preliminary Capacity Import Limits, preliminary Capacity Export Limits, and Local Reliability Requirements.[221]

b. Commission Determination

132. The Commission has granted waiver of tariff provisions where: (1) the applicant acted in good faith; (2) the waiver is of limited scope; (3) the waiver addresses a concrete problem; and (4) the waiver does not have undesirable consequences, such as harming third parties.[222] As discussed below, we find that the MISO's request for waiver satisfies these conditions.

133. First, we find that MISO acted in good faith. MISO requested waiver more than two months prior to the November 1, 2018 deadline for LSEs to submit information to MISO. Second, we find that the requested waiver is of limited scope, as it amounts to a one-time extension of a newly-established deadline. Further, we find that the one-month extension will provide sufficient time for LSEs to prepare and submit the necessary information to MISO. Third, we find that the requested waiver addresses the concrete problem that some market participants may not otherwise have sufficient time to, for the first time, prepare and submit information to MISO. Fourth, we find that the requested waiver will not have undesirable consequences, such as harming third parties. The requested waiver benefits third parties by providing LSEs sufficient time to prepare and submit information to MISO. For these reasons, we grant MISO's requested waiver.

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[220] MISO Filing at 10, *see also id.*, Tab B (proposed Tariff section 69A.7.7(a)).

[221] MISO Filing at 10; *see also* MISO, FERC Electric Tariff, Module E-1, §§ 68A.4 (37.0.0), 68A.5 (33.0.0).

[222] *See, e.g.*, *Midcontinent Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,023, at P 9 (2018); *Calpine Energy Servs., L.P.*, 154 FERC ¶ 61,082, at P 12 (2016); *New York Power Auth.*, 152 FERC ¶ 61,058, at P 22 (2015).

<u>The Commission orders</u>:

(A) MISO's proposed Tariff revisions are hereby accepted, effective November 1, 2018, as discussed in the body of this order.

(B) MISO's request for waiver is hereby granted, as discussed in the body of this order.

By the Commission. Commissioner McIntyre is not voting on this order.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix

Responsive Pleadings to MISO's Filing

Notices of Intervention

Michigan Public Service Commission

Mississippi Public Service Commission

Public Utility Commission of Texas

Notice of Intervention and Out-of-Time Comments

Illinois Commerce Commission (Illinois Commission)

Motions to Intervene

Alliant Energy Corporate Services, Inc.

American Municipal Power, Inc.

Ameren Services Company, on behalf of Ameren Illinois Company, Ameren Transmission Company of Illinois, and Union Electric Company

American Public Power Association

Coalition of MISO Transmission Customers

Cooperative Energy

Duke Energy Corporation, on behalf of Duke Energy Indiana, LLC (Duke Indiana); Duke Energy Carolinas, LLC; Duke Energy Progress, LLC; and Duke Energy Business Services, LLC

Exelon Corporation

Illinois Municipal Electric Agency

Louisiana Energy Users Group

Michigan Agency for Energy

NRG Power Marketing LLC

Motions to Intervene and Comments and/or Protests

Big Rivers Electric Corporation (Big Rivers)

Coalition of Midwest Power Producers, Inc. (Power Producers)

Consumers Energy Company (Consumers Energy)

DTE Electric Company (DTE Electric)

Great River Energy (Great River)

Illinois Industrial Energy Consumers and Association of Businesses Advocating Tariff Equity (Industrial Customers)

Madison Gas and Electric Company, Midwest Municipal Transmission Group, Missouri Joint Municipal Electric Utilities Commission, Missouri River Energy Services, Southern Minnesota Municipal Power Agency, and WPPI Energy (Midwest TDUs)

MidAmerican Energy Company (MidAmerican)

WEC Energy Group, Inc. (WEC Energy), on behalf of Wisconsin Electric Power Company and Wisconsin Public Service Corporation

Out-of-Time Motion to Intervene

Organization of MISO States

Protests

Duke Indiana

Missouri Joint Municipal Electric Utilities Commission, Missouri River Energy Services, and WPPI Energy (Municipal Agencies)

Answers

Industrial Customers

MidAmerican

Midwest TDUs

MISO[223]

Municipal Agencies[224]

Power Producers

[223] MISO filed an answer on October 9, 2018 (MISO First Answer) and on October 23, 2018 (MISO Second Answer).

[224] Municipal Agencies filed an answer on October 9, 2018 (Municipal Agencies First Answer) and on October 17, 2018 (Municipal Agencies Second Answer).