Exhibit No. 300

Document Accession #: 20230519-5185 Filed Date: 05/19/2023

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Invenergy Transmission LLC	)	
	)	
Complainant,	)	
v.	)	**Docket No. EL22-83-000**
	)	
Midcontinent Independent System Operator, Inc.	)	
	)	
Respondent	)	

ANSWER OF THE MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC. TO MOTION TO FILE SUPPLEMENTAL INFORMATION AND SUPPLEMENTAL INFORMATION OF INVENERGY TRANSMISSION LLC

Pursuant to Rule 213 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("FERC" or "Commission"),[1] and the Commission's Notice of Extension of Time issued in this docket on April 21, 2023,[2] the Midcontinent Independent System Operator, Inc. ("MISO") submits this Answer to the Motion to File Supplemental Information and Supplemental Information on Invenergy Transmission, LLC ("Invenergy").[3] MISO requests that the Commission reject Invenergy's Supplemental Information as procedurally improper, irrelevant and/or substantively deficient. MISO further requests that the Commission expeditiously deny Invenergy's Complaint that initiated this proceeding.[4] The Complaint has been pending since

1 18 C.F.R. § 385.213.

2 *See* Notice of Extension of Time, Docket No. EL22-83-000 (Apr. 21, 2023).

3 *See* Motion to File Supplemental Information and Supplemental Information of Invenergy Transmission LLC, Docket No. EL22-83-000 (Apr. 3, 2023) ("Supplemental Information").

4 *See* Complaint Requesting Fast Track Processing to Fix MISO Transmission Expansion Planning Processes, Docket No. EL22-83-000 (Aug. 8, 2022) ("Complaint").

August 2022, and the uncertainty that it has created, which is compounded by Invenergy's piecemeal filings, undermines MISO's Long Range Transmission Planning ("LRTP") efforts to move forward with the approved LRTP Tranche 1.[5]

I. INTRODUCTION

Invenergy initiated this Complaint proceeding in an attempt to change MISO's existing Tariff[6] requirements for incorporation of merchant transmission projects in the base case planning analysis conducted as part of the MISO Transmission Expansion Plan ("MTEP") process.[7] As relevant here, these procedures require external Merchant High Voltage Direct Current ("MHVDC") projects to either have a connection agreement with MISO or be included in an integrated resource plan ("IRP"), or a preferred plan, by a MISO Load Serving Entity ("LSE") or MISO State before such projects can be included in MISO's planning models.[8] The purpose of the requirement is to ensure that only advanced MHVDC proposals that have certainty are included in MISO's models to avoid distorting the MTEP analyses.[9]

The Complaint attacked this Tariff requirement as unjust and unreasonable because, in Invenergy's view, it unfairly penalizes "advanced-stage" MHVDC projects. As an example of such allegedly unfair treatment, Invenergy has repeatedly referenced its proposed Grain Belt

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5 LRTP Tranche 1 includes 18 high-voltage transmission projects approved by the MISO Board of Directors ("MISO Board") in July 2022. *See* Tab A, Affidavit of Jeremiah Doner ("Doner Affidavit") at 9.

6 When capitalized, the term "Tariff" or "MISO Tariff" refers to MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff. Unless otherwise specified herein, all capitalized terms shall have the meaning as set forth in the Tariff.

7 The MTEP is prepared on an annual basis in accordance with the MISO Transmission Expansion Planning Protocol, which is set forth in Attachment FF of the Tariff. The most recent MTEP is known as "MTEP21" and was approved in December 2021, as amended in July 2022.

8 *See* Answer of Midcontinent Independent System Operator, Inc., Docket No. EL22-83-000, at 5 (Sep. 7, 2022) ("MISO Answer").

9 *Id.* at 29-30.

Express LLC Line merchant transmission project ("GBX Line").[10] As described in the Supplemental Submission, Phase 1 of the GBX Line includes an approximately 800 mile, ±600 kV high-voltage direct current ("HVDC") transmission line to move power from Southwest Kansas in the Southwest Power Pool, Inc. ("SPP") region to eastern Missouri in the MISO and Associated Electric Cooperative Incorporated ("AECI") systems.[11] MISO currently has pending applications for 1.5 gigawatt ("GW") transmission connection and Injection Rights for the GBX Line project, with the TCA negotiation process expected to be concluded by July 2023.[12]

Invenergy also has used its GBX Line proposal to attack MISO's LRTP process. In July 2022, the MISO Board approved the first tranche of LRTP projects, *i.e.*, Tranche 1.[13] Despite the fact that Invenergy had no TCA for the GBX Line at the time (and it still doesn't), the Complaint sought to re-open MISO's Tranche 1 studies "to assess the impact of the GBX Line."[14] The Complaint further requested that the Commission direct MISO to "include the GBX Line in its base case that is used to evaluate the Tranche 2 projects, or at the very least undertake a sensitivity that considers the GBX Line."[15]

Objecting to these demands, MISO explained that Invenergy not only failed to meet the applicable Tariff requirements but also neglected to timely participate in the Tranche 1 process to bring its concerns to MISO's attention.[16] The MTEP process, including as used for LRTP Tranches, is not a rolling review of proposed transmission projects with ever changing

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10 The GBX Line is being developed by Invenergy's subsidiary Grain Belt Express LLC ("GBX").

11 *See* Supplemental Information, Affidavit of Himali Parmar ("Parmar Affidavit) at ¶ 18.

12 *See* Doner Affidavit at 6-7.

13 *Id.* at 9.

14 Complaint at 42.

15 *Id.* LRTP Tranche 2 currently is being considered in the MTEP process. *See* Doner Affidavit at 9-10.

16 *See* MISO Answer at 21-24.

assumptions. Once the MISO Board approves a MTEP, no adjustments, except as permitted by the Tariff, are possible. As discussed in MISO's pleadings in this docket, any reopening of the LRTP Tranche 1, including additional "sensitivity" or other studies, would violate the filed rate doctrine and the rule against retroactive ratemaking.[17]

Notwithstanding these well-established legal principles and Tariff requirements, Invenergy has attempted to get a second bite at the apple with its Supplemental Information, eight months after the filing of the Complaint. Almost exclusively, the Supplemental Information is designed to provide cover for Invenergy's unlawful demands for retroactive sensitivity testing of LRTP Tranche 1 and the inclusion of the GBX Line in the base case for LRTP Tranche 2. Because such retroactive relief is prohibited under the Federal Power Act ("FPA"),[18] the Commission should reject the Supplemental Submission on procedural grounds alone. Rejecting the Supplemental Information also would be consistent with the Commission's rule requiring complainants to include all supporting evidence with their complaints,[19] rather than eight months down the road.

Nonetheless, to the extent the Commission decides to review the Supplemental Information on the merits, MISO is enclosing an affidavit by Mr. Jeremiah Doner, MISO's Director of Cost Allocation and Competitive Transmission, to rebut Invenergy's claims. As Mr. Doner explains, Invenergy's evidence, the Parmar Affidavit,[20] does not show any material adjusted production cost ("APC") impacts from the proposed GBX Line on the results of MISO's Tranche 1 analysis.[21]

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17 *Id.* at 31.

18 *See* 16 U.S.C. § 824e; *Old Dominion Elec. Coop., Inc. v. FERC*, 892 F.3d 1223, 1230 (D.C. Cir. 2018) ("[t]he filed rate doctrine and the rule against retroactive ratemaking leave the Commission no discretion to waive the operation of a filed rate or to retroactively change or adjust a rate for good cause or for any other equitable considerations."); *Ark. La. Gas Co. v. Hall*, 453 U.S. 571, 578 (1981)(finding that "the Commission itself has no power to alter a rate retroactively").

19 *See* 18 C.F.R. § 385.206(b)(8).

20 Ms. Himali Parmar is a Vice President at ICF International, Inc., and Invenergy's retained consultant.

21 Doner Affidavit at 12-14.

Likewise, the reliability impacts discussion in the Parmar Affidavit is not on point because it ignores the scope of LRTP studies, contains errors, and relies on unsupported assumptions.[22] The same conclusions apply to Ms. Parmer's extrapolations with respect to LRTP Tranche 2, but MISO previously committed to run a sensitivity study of the GBX Line on Tranche 2 prior to Invenergy filing its Complaint, and that commitment will be honored.[23] Because the Supplemental Information does not add anything material to this proceeding, it should be accorded no weight.

MISO urges the Commission to expeditiously conclude this proceeding and deny Invenergy's Complaint. If the Commission believes that there are valid general issues associated with how merchant transmission facilities are treated in the planning processes of regional transmission organizations ("RTOs") and other transmission providers, there are pending inquiries (some of which initiated by Invenergy)[24] where those issues could be addressed. In this docket, however, Invenergy has not met its required burden to demonstrate that MISO's current merchant transmission practices are not just and reasonable.[25] Finally, the Commission should protect the integrity of the MTEP and the LRTP process and clearly state that the reopening of LRTP Tranche 1 studies demanded by Invenergy is not permitted.

II. ANSWER

A. The Commission Should Deny Invenergy's Motion To Submit Supplemental Information.

Recognizing that its Supplemental Information is eight months late and fails to conform to the Commission's complaint requirements, Invenergy claims that "the time that has elapsed has

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22 *Id.* at 15-20.

23 *Id.* at 10-11.

24 *See, e.g., Interregional High Voltage Direct Current Merchant Transmission*, Docket No. AD22-13-000.

25 *See* 16 U.S.C. § 824e(b) ("In any proceeding under this section, the burden of proof to show that any rate, charge, classification, rule, regulation, practice, or contract is unjust, unreasonable, unduly discriminatory, or preferential shall be upon the Commission or the complainant.")

been necessary to gain the quantitative modeling results" included in the Supplemental Information.[26] The Commission should not accept this excuse. Invenergy had full control over when and how to file its Complaint and develop appropriate supporting evidence. Allowing Invenergy to submit purported evidence that could have been easily developed at the time the Complaint was filed months ago violates the Commission's rules and subverts due process.

The Commission's rules required Invenergy to include in its Complaint "all documents that support the facts in the [C]omplaint in possession of, or otherwise attainable by, the complainant, including, but not limited to, contracts and affidavits."[27] Modeling used for the LRTP Tranche 1 planning study concluded by mid-2021, and all information needed for Invenergy to develop its analyses was available. Invenergy argues that it took MISO "at least18 months to render its LRTP Tranche 1 modeling analysis" while it took only 6 months for Invenergy's consultant to develop its simulations,[28] but the comparison is off base. MISO developed its models, defined an 18-project portfolio, tested alternatives, and defined the reliability and economic benefits of the resulting transmission through a protracted stakeholder review and coordination process, while Invenergy's consultants simply modified these models to perform derivative work at their own pace on the benefits of a single line. In addition, nothing prevented Invenergy from engaging its consultants earlier, if time was of the essence.

Invenergy's piecemeal evidentiary submissions have delayed this proceeding and affected MISO's due process rights. The allegations included in the Supplemental Information also have created uncertainty over the LRTP Tranche 1 modeling and continue to impact the LRTP process. As the Commission has long recognized, one of the purposes of its "complaint procedures is to

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[26] *See* Supplemental Information at 8.

[27] 18 C.F.R. § 385.206(b)(8).

[28] *See* Supplemental Information at 8.

ensure that as much information as possible is available to the Commission and the parties to the proceeding *as early as possible.*"[29] The requirement set forth in Rule 206(b)(8)[30] serves to achieve this important purpose and the Commission should not allow Invenergy to get around it without a good cause.

Further, it is concerning that Invenergy is using the Supplemental Information to justify the reopening of the LRTP Tranche 1 modeling process in violation of the filed rate doctrine and the rule against retroactive ratemaking. In particular, Invenergy recycles its prior claim that MISO "must run a sensitivity analysis to confirm that its LRTP Tranche 1 results are still valid."[31] Invenergy fails to provide any Tariff basis for this demand. MISO's modeling for Tranche 1 was completed by mid-2021 and the MISO Board approved the Tranche 1 Portfolio in July 2022.[32] Invenergy's filing of its Complaint on August 8, 2022, precludes any modifications to the LRTP Tranche 1, whether in the guise of a "sensitivity study" or otherwise. Such retroactive relief would violate FPA Section 206,[33] the filed rate doctrine, and the rule against retroactive ratemaking.[34] While Invenergy previously invoked the Commission's remedial authority under FPA section 309,[35] the courts have held the remedial authority cannot be used to circumvent the express limits established by the FPA.[36] These legal requirements further support denying Invenergy's motion.

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29 *Complaint Procedures*, Order No. 602, 1996-2000 FERC Stats. & Regs., Regs. Preambles ¶ 31,071, at 30,764 (1999). (Emphasis added).

30 18 C.F.R. § 385.206(b)(8).

31 Supplemental Information at 16.

32 *See* Doner Affidavit at 9.

33 *See* 16 U.S.C. § 824e(b).

34 *See* n.18, *supra.*

35 *See* Complaint at 41-42.

36 *See, e.g., TNA Merch. Projects, Inc. v. Fed. Energy Regulatory Comm'n,* 857 F.3d 354, 359 (D.C. Cir. 2017) ("[A]ny actions that FERC takes under § 309 must 'conform[] with the purposes and policies of Congress' and cannot 'contravene any terms of the [FPA].' Thus, § 309 cannot be used to supersede specific statutory strictures . . .")

B. Even if the Commission Decides to Consider the Supplemental Information, It Still Should Be Accorded No Weight.

1. The Existing Tariff Requirements Properly Address Merchant Transmission.

Invenergy claims that the modeling results included in the Parmar Affidavit demonstrate that "MISO must change its practice and include advanced-stage merchant transmission in the base case that it uses for its annual MTEP assessment."[37] Despite Invenergy's claims, the Tariff already requires MISO's long-term planning models (*i.e.*, 5 years or longer) to include generation facilities that are: "(i) existing and expected to be in existence in the planning horizon; (ii) not existing but with executed interconnection agreements; and (iii) additional generation as determined with stakeholder input."[38] As MISO explained in its Answer,[39] applying these requirements to the GBX Line is reasonable because Invenergy requested Injection Rights for its injections from the GBX Line. Under the Tariff, Injection Rights are converted into MISO's external Network Resource Interconnection Service ("E-NRIS") by generators connected to a proposed MHVDC Transmission Line,[40] such as the GBX Line.

Contrary to Invenergy's assertions, the current requirements are reasonable precisely because they ensure that only "advanced-stage" MHVDC projects that have a sufficient degree of certainty can be included in MISO's models. The GBX Line, however, was *not* an "advanced merchant transmission" project during the Tranche 1 modeling process.[41] Additionally, Invenergy

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37 Supplemental Information at 12.

38 Tariff, Attach. FF § I.C.8.c.

39 *See* MISO Answer at 18.

40 *Id.*, *see also* Tariff, Attachment X § 16.2.

41 *See* MISO Answer at 10-12, 26-27; *see also* Protest of MISO Transmission Owners, Docket No. EL22-83-000, at 9-11 (Sep. 7, 2022); Comments of Norman Fishel, Docket No. EL22-83-000, at 5-12 (Sep. 6, 2022).

failed to properly participate in the Tranche 1 stakeholder process.[42] Removing or relaxing the connection agreement requirement (or its IRP/preferred plan alternative) would expose MISO customers to shifting assumptions associated with early stage MHVDC proposals. Accordingly, these requirements appropriately protect MISO customers from unjust and unreasonable rates that could result from the incorporation of premature or incorrect assumptions about future projects without sufficient certainty. The GBX Line proposal, which has gone through multiple modifications, is a prime example of such risks. Nothing in the Supplemental Submission constructively addresses these concerns or indicates that they are invalid.

Instead, Invenergy relies on its sensational estimate that the GBX Line "will provide $1.9 billion of incremental APC savings to ratepayers in MISO."[43] Whether this estimate is true or not, the Parmar Affidavit does not show that the claimed APC or other benefits of the GBX Line would have a material impact on the LRTP Tranche 1 analysis; in fact, the Parmar Affidavit validates the APC benefits for Tranche 1.[44] The Parmar Affidavit uses the "Tranche 1+GBX" scenario to measure the impact of the GBX Line project in combination with Tranche 1. This scenario yields "delta savings," through comparing the benefits of Tranche 1, Tranche 1+GBX, and GBX alone, in the amount of only $540 million.[45] As Mr. Doner explains, the alleged delta of $540 million in savings represents the incremental benefit possible from the GBX line, not a direct decrease in LRTP Tranche 1 benefits.[46] Additionally, even if this decrease was attributed to Tranche 1, it is

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42 *Id.* at 21-24.

43 Supplemental Information at 12.

44 *See* Doner Affidavit at 13.

45 *See* Parmar Affidavit at ¶ 44.

46 *See* Doner Affidavit at 12-13.

"too insignificant" (*i.e.*, less than 3 percent) to call into question MISO's study assumptions showing $20 billion in APC savings for the LRTP Tranche 1 Portfolio.[47]

The Supplemental Information also glosses over the issue of who the beneficiaries of the GBX Line will be if the project goes into service under the current assumptions, and who may bear the costs of incremental upgrades associated with this line. It is clear that the economic beneficiaries will be concentrated primarily in one Local Resource Zone ("LRZ"); namely, LRZ 5, which includes Missouri.[48] In fact, both the material beneficiaries of the GBX Line based on the distribution of APC benefits and any constraints associated with increased congestion resulting from the GBX Line are located in LRZ 5.[49] Further, if the injection associated with the GBX Line is included in the base case for LRTP analysis, additional constraints that may be caused by such an injection could require mitigation by Network Upgrades, the cost of which would be paid by MISO's ratepayers. As Mr. Doner explains, it is more appropriate to address such impacts as part of the MHVDC connection process, with the cost of such upgrades being borne by the MHVDC Connection Customer rather than being shared broadly across the Midwest Subregion.[50]

The Supplemental Information emphasizes that the GBX Line is expected to be in service before the LRTP Tranche 1 Portfolio will be operational.[51] But the comparison is apples-to-oranges and, in any event, provides no support for changing the current Tariff requirements. The MTEP is "developed to facilitate the timely and orderly expansion of and/or modification to the [MISO] Transmission System to maintain reliability, promote efficiency in bulk power markets

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47 *Id.* at 12.

48 *See* Parmar Affidavit, Fig. 11 and 12; Doner Affidavit at 13-14.

49 *See* Doner Affidavit at 14.

50 *Id.* at 14.

51 *See* Supplemental Information at 3.

and facilitate compliance with applicable Federal and state laws, regulatory mandates and regulatory obligations."[52] Consistent with this requirement, the LRTP Tranche 1 projects were studied for the inclusion in the MTEP, subject to rigorous studies and intensive stakeholder process, and were certified to address identified transmission needs of MISO load throughout the Midwest. The GBX Line, in contrast, is an external facility that has not been studied by MISO in response to any identified need and was not subject to any stakeholder input.[53]

Under the Tariff, MISO's MHVDC Connection Procedures are focused on the safe and reliable connection of MHVDC Transmission Lines to the MISO Transmission System.[54] Accordingly, the existing MHVDC methodology only studies the technical aspects of the interconnection and determines what upgrades are needed to reliably interconnect the proposed MHVDC Transmission Line to the MISO Transmission System. When an MHVDC Connection Customer, such as GBX, submits a Connection Request, it is not required to submit any information regarding the broader project that the Connection Request may be associated with, and MISO does not investigate the viability of that underlying project.

The MISO procedures reflect the fundamental fact that MHVDC transmission projects, such as the GBX Line, are *not* subject to the rigorous benefits vetting required for LRTP projects under the MTEP. Instead, Invenergy and other MHVDC developers enjoy the freedom to structure their projects as they deem fit, based solely on their own risk and benefit analysis. It is, therefore, inappropriate to compare such local project-specific benefits with the broad, stakeholder-vetted benefits of LRTP Portfolios.[55]

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[52] Tariff, Attachment FF §§ C.

[53] *See* Doner Affidavit at 6.

[54] *Id.*

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

The benefits of the GBX Line will accrue primarily to the customers that choose to subscribe for its capacity. This makes Invenergy's claims of broad ratepayer benefits inapposite and beside the point. The current Tariff requirements provide a reasonable time point for including MHVDC Transmission Lines in MISO's models (*i.e*, at TCA execution or IRP/preferred plan inclusion), and the Parmar Affidavit does not show that this point is not just and reasonable. Invenergy may prefer the GBX Line to be in the base model as early as possible for its own commercial reasons,[56] but that does not mean it would be beneficial for MISO customers.

2. The Parmar Affidavit Does Not Support A Sensitivity Analysis For Tranche 1.

As previously noted, any revisiting of the Tranche 1 analysis is barred under the FPA. Separate and apart from this legal bar, the Parmar Affidavit provides no grounds for a sensitivity study confirmation. As Mr. Doner explains, the APC benefits estimates provided in the Parmar Affidavit do not support a sensitivity study for Tranche 1. The alleged $540 million savings delta, even if this delta is attributed to Tranche 1 and accepted as true, is too insignificant to modify materially MISO's LRTP Tranche 1 outcomes.[57] Further, the claimed delta neither would have affected MISO's benefits analysis for Tranche 1 nor would have impacted the Tranche 1 projects selected.[58] Similarly, the Parmar Affidavit fails to call into question, let alone refute, the economic

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[56] For example, Invenergy suggested in the Complaint that a proposed MHVDC project should be deemed "advance stage" as early as it has regulatory approval from at least one MISO State. *See* Complaint at 38. The GBX Line obtained a CCN from Kansas in 2013, but its MHVDC Connection Requests to MISO were submitted in 2019. Under Invenergy's desired framework, MISO would have been required to include Invenergy's 2019 MHVDC applications in its MTEP base case. At the time the model build for MTEP 2020 was completed in early March, 2020, there were no completed system impact studies for the projects and injection levels of 1,000 MW at the H104 Point of Connection and 1,000 MW at the H105 Point of Connection. This proposed injection would have created overloads and/or violations of the NERC Reliability Standards that MISO would have been required to solve through Network Upgrades. These Network Upgrades would have been categorized as Baseline Reliability Projects and would have been paid for by rate-payers instead of Invenergy. While it may be convenient for Invenergy, it is hardly just and reasonable to MISO's rate-payers.

[57] Doner Affidavit at 12.

[58] *Id.* at 13.

benefits from Tranche 1 to any LRZ in the Midwest Subregion.[59] In fact, the economic benefits of Tranche 1, even with the GBX Line considered, "are far in excess of the benefit-to-cost ("b/c") ratio required under the MISO Tariff for MVPs, which is 1.0 or above."[60]

With respect to reliability impacts, Ms. Parmar states that she "did not model the GBX Project's reliability impacts on the Reference Case, *i.e.*, the changes to the reliability analysis from the Reference Case to the GBX Case."[61] Instead, the Parmar Affidavit suggests that there may be overloads on lower voltage transmission that would be caused or, alternatively, mitigated by the GBX Line.[62] The argument overlooks that the LRTP Tranche 1 was intended to create a regional backbone to facilitate a reliable and efficient resource transition for the Midwest Subregion, focusing on a combination of policy drivers, reliability, and economic benefits.[63] In contrast, lower-voltage transmission projects can be tied to the location of individual new generators that are forecasted and included in the LRTP models; such generation specific upgrades are best accomplished through the generator interconnection process (or MHVDC Connection Procedures).[64] Put simply, LRTP Tranche 1 was not intended to address all reliability issues on the lower voltage systems and, accordingly, identifying upgrades on the lower voltage system was not within scope for LRTP. Additionally, to the extent the GBX Line would add to the need for reliability upgrades, such upgrades will be addressed through different processes in accordance with the Tariff and their costs should be allocated through those processes accordingly (and not socialized to MISO Midwest load and ratepayers).

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59 *Id.* at 14-15.

60 *Id.* at 13. *See also* Tariff, Attachment FF § II.C.2.b.

61 Parmar Affidavit at ¶ 57.

62 *Id.* at ¶¶ 58-61 and 66-68.

63 Doner Affidavit at 15.

64 *Id.*

Mitigating impacts on the lower voltage system as part of the LRTP process would unreasonably increase the costs to ratepayers.[65] When MISO develops the Futures, potential future generation is sited at specific points of interconnection on the MISO Transmission System to represent the resource mix in MISO members' IRPs and to meet future load requirements. Such sites are not intended to mandate future resource locations; instead, they represent a reasonable approximation of future possible interconnection points. Given that MISO is not responsible for resource planning or resource siting, actual future siting decisions are determined by the interconnection customers, and transmission should not be identified through the LRTP process for local constraints resulting from such siting.[66]

If MISO had sought to remedy these constraints in the LRTP process, MISO's ratepayers would be paying for these Network Upgrades rather than the Interconnection Customers as required by the GIP and the Commission's "but-for" cost causation requirements. The same logic applies to constraints on the lower-voltage system that may be caused by the connection of an MHVDC Transmission Line, such as the GBX Line. They should be mitigated through the MHVDC connection process and not considered in LRTP studies.[67]

Finally, the Parmar Affidavit includes a number of errors and unsupported assumptions that further undermine its conclusions. First, Ms. Parmar's claim of several thousand of uncounted for contingencies in MISO's Tranche 1 analysis[68] is a misnomer. As Mr. Doner explains, there

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

[66] *Id.* at 16.

[67] *Id.* at 17.

[68] Parmar Affidavit at ¶ 38.

were no missed contingencies and Ms. Parmar's statements are based on a misunderstanding of how MISO's analytical software works.[69]

Second, the Parmar Affidavit purports to analyze the change in benefits introduced by adding the GBX Line to the models, but it does not take the next step to include associated GBX Line Network Upgrade costs into the calculation of benefits. Ms. Parmar's analysis introduces reliability constraints and assumes that Tranche 1 should mitigate them without discussing who would be responsible for the resulting costs while criticizing the LRTP Tranche 1 study for not taking into account the potential economic benefits to the GBX Line.[70] This skews the conclusion in favor of amplifying the impact of the GBX Line while implying that the upgrades needed "but for" the GBX Line should be paid by the load within the Midwest Subregion.[71]

Third, there is insufficient detail to fully understand the modeling of the 2.5 GW injection to support the validity of the APC savings identified. For example, the Parmar Affidavit neither explains the assumed hourly output profiles of the resources located in Kansas that will be supplying the injection nor provides their associated production costs, including any potential production or investment tax credits.[72] As Mr. Doner notes, these are material considerations because intermittent renewable resources do not produce a constant flow of energy. In addition, the GBX Line, as a merchant facility, would need to be fully subscribed to support the 2.5 GW injection assumption and associated benefits.[73] Such information may not be available or reliable before the TCA is signed or the project is included in an IRP or a preferred plan. If the 2.5 GW

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69 Doner Affidavit at 18-19.

70 *Id.* at 20.

71 *Id.*

72 *Id.*

73 *Id.*

injection assumption proves to be exaggerated based on actual customer subscriptions, then even the minimal "delta savings" identified in the Parmar Affidavit would be further reduced.[74]

To conclude, the simulations included in the Parmar Affidavit do not demonstrate any material impact from the GBX Line project, as currently proposed, on LRTP Tranche 1. Invenergy's assertions notwithstanding, there is no need to "re-confirm" LRTP Tranche 1 studies.

3. MISO Has Committed To Performing A "No Harm" Sensitivity Study on Tranche 2.

Given the flaws of Ms. Parmar's Tranche 1 analysis, there is no basis to assume any Tranche 2 impacts would be material. Nonetheless, MISO recognizes that it previously committed to developing an avenue for considering the GBX Line project in a sensitivity study in the LRTP Tranche 2 process.[75] While MISO has not finalized yet the scope of the sensitivity study for the Tranche 2 process (and such finalization cannot be completed until there is definition around the LRTP Tranche 2 proposals). MISO's current expectation is that it will include a "no-harm" analysis with the proposed Tranche 2 projects and the GBX Line.[76] This sensitivity study and the underlying modeling data of the study will be publicly available in the same manner to stakeholders that MISO's other LRTP models and studies are available.[77]

4. Invenergy's Claims of Impacts on the Generator Interconnection Queue are Baseless.

Invenergy claims that the Parmar Affidavit demonstrates unjust impacts on the generator interconnection queue from MISO's decision not to include the GBX Line in LRTP Tranche 1

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[74] *Id.*

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

[76] *Id.* The analysis will focus on ensuring there are no unintended issues created with both Tranche 2 and the GBX Line in-service, which is consistent with similar studies that may be performed with MISO's seams neighbors (*e.g.*, AECI) and for the yet to be approved Joint Targeted Interconnection Queue ("JTIQ") projects. *Id.*

[77] *Id.* at 11.

studies.[78] This assertion is devoid of merit. As Mr. Doner explains, the current process is just and reasonable because it ensures comparability between MHVDC transmission and generation.[79] GBX's request for 1.5 GW of Injection Rights underscores the need for comparable treatment. As is the case with generation projects, MISO cannot assume that the injection associated with the GBX Line will exist in future models until Invenergy agrees to fund these upgrades and build the GBX Line by signing a TCA. Relaxing the existing requirements for MHVDC projects, as demanded by Invenergy, would result in undue discrimination and preferential terms and conditions of service.

III. CONCLUSION

WHEREFORE, MISO respectfully requests that the Commission: (1) deny Invenergy's Motion to Submit Supplemental Information or, alternatively, accord the Supplemental Information no weight; and (2) dismiss the Complaint or deny all relief sought therein.

Respectfully submitted,

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Dated: May 19, 2023

[78] Supplemental Information at 22-23.

[79] Doner Affidavit at 17-18.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Carmel, Indiana this 19th day of May, 2023.

/s/ Dawn Kaminski
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TAB A

Tab A

AFFIDAVIT OF JEREMIAH DONER

Document Accession #: 20230519-5185 Filed Date: 05/19/2023

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Invenergy Transmission LLC	)	
	)	
Complainant	)	
	)	
v.	)	**Docket No. EL22-83-000**
	)	
Midcontinent Independent System Operator, Inc.	)	
	)	
Respondent	)	

AFFIDAVIT OF JEREMIAH DONER

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND RELATIONSHIP TO THE MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC. ("MISO").

A. My name is Jeremiah Doner. My business address is 720 City Center Drive, Carmel, Indiana 46032. I am the Director of Cost Allocation and Competitive Transmission for MISO.

Q. WHAT ARE YOUR DUTIES WITH MISO?

A. I have held my current position since April 2022. I am responsible for directing the teams focused on multiple areas of transmission planning including: Long Range Transmission Planning ("LRTP") business case development, including for the first tranche of LRTP projects ("Tranche 1" or "LRTP Tranche 1"); all parts of MISO's competitive transmission process and the Variance Analysis process for regionally cost shared transmission projects;

and MISO's regional and interregional transmission cost allocation. I also serve as the MISO staff liaison to the stakeholder committee charged with improving and developing MISO's set of regional and interregional cost allocation methods, the Regional Expansion Criteria and Benefits Working Group.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I hold a Bachelor of Science and Master of Science in Economics from Illinois State University. Prior to my current position, I have performed various roles since joining MISO in 2007 in different parts of the organization, including operations, strategy, business development, external affairs, and, most recently, economic and policy planning. As part of my prior role as Director of Economic and Policy Planning starting in January 2021, I was a key member of the leadership team overseeing multiple aspects of the LRTP Tranche 1 study, including Futures development, economic planning, and business case.

Q. HAVE YOU SPONSORED TESTIMONY BEFORE REGULATORY AGENCIES?

A. Yes. I have provided written testimony in proceedings before the Federal Energy Regulatory Commission ("FERC" or "Commission"). Specifically, I submitted prepared testimony in Docket Nos. ER22-995-000 and ER22-1955-000 relating to MISO's LRTP initiative and various associated transmission planning, competitive process, and cost allocation issues.

II. PURPOSE OF THIS AFFIDAVIT

Q. WHAT IS THE PURPOSE OF YOUR AFFIDAVIT?

A. The purpose of my affidavit is to respond to the "Supplemental Information" filing made by Invenergy Transmission LLC ("Invenergy") in the above-captioned docket on

April 3, 2023.[1] Invenergy initiated this proceeding in August 2022 by filing a complaint against MISO,[2] claiming that MISO fails to account properly for "advanced-stage" merchant transmission projects in its planning models and the MISO Transmission Expansion Plan ("MTEP"). The Supplemental Information expands on Invenergy's initial allegations and includes an affidavit by Ms. Himali Parmar ("Parmar Affidavit"), Invenergy's outside consultant, as well as certain technical materials. As relevant here, Ms. Parmar asserts that MISO did not properly account in its LRTP studies and models for Invenergy's proposed Grain Belt Express LLC Line merchant transmission project ("GBX Line") and that this alleged failure has affected the reliability and credibility of MISO's LRTP Tranche 1 analysis. My affidavit refutes these allegations. I also explain that the study that Invenergy produced confirms the strength of the LRTP Tranche 1 business case, as it provides robust benefits with or without the GBX Line. In addition, I explain that, contrary to Ms. Parmar's claims, the MISO Tariff[3] and the MTEP process properly account for merchant transmission projects, such as the GBX Line.

Q. ARE YOU SUBMITTING THIS AFFIDAVIT ON BEHALF OF MISO?

A. Yes.

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1 Motion to File Supplemental Information and Supplemental Information of Invenergy Transmission LLC, Docket No. EL22-83-000 (Apr. 3, 2023) ("Supplemental Information").

2 Complaint Requesting Fast Track Processing to Fix MISO's Transmission Expansion Planning Processes, Docket No. EL22-83-000 (Aug. 8, 2022) ("Complaint").

3 The terms "Tariff" or "MISO Tariff" refer to MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff. Unless otherwise indicated, all capitalized terms used in my affidavit have the same meaning as in the Tariff.

III. RELEVANT BACKGROUND

A. Invenergy's Complaint and the GBX Line Project

Q. PLEASE BRIEFLY SUMMARIZE INVENERGY'S COMPLAINT IN THIS DOCKET.

A. Under the MISO Tariff and Business Practice Manuals ("BPM"), MISO includes merchant transmission projects in its MTEP analyses and planning models, including LRTP Futures, after such projects execute a transmission connection agreement ("TCA") with MISO or are included in an integrated resource plan ("IRP"), or a preferred plan if no IRP is used, by a MISO Load Serving Entity ("LSE") or a MISO State. The Complaint asserts that this long-standing Tariff and BPM requirement is not just and reasonable because it allegedly penalizes "advanced-stage" merchant transmission projects. Throughout this proceeding (including in its Supplemental Information filing), Invenergy has held out its GBX Line project as an illustration of such supposedly unfair treatment of "advanced-stage" merchant transmission projects by MISO. In particular, Invenergy has asserted that the GBX Line project was incorrectly excluded from MISO's base case assumptions for LRTP Tranche 1, which was approved by the MISO Board of Directors ("MISO Board") in July 2022.

Q. WHAT WAS MISO'S REACTION TO INVENERGY'S CLAIMS?

A. In its Answer and other pleadings,[4] MISO refuted Invenergy's allegations. MISO explained that its actions with respect to the GBX Line were consistent with applicable Tariff requirements and that the current Tariff regime properly ensures that merchant transmission proposals are sufficiently advanced before they can be considered in MISO's

[4] *See* Answer of Midcontinent Independent System Operator, Inc., Docket No. EL22-83-000 (Sep. 7, 2022); Motion for Leave to Answer and Answer Midcontinent Independent System Operator, Inc., Docket No. EL22-83-000 (Oct. 19, 2022).

MTEP models. MISO also explained that adopting Invenergy's proposals would reduce the precision of MISO's planning models, would result in undue discrimination *vis-à-vis* generator interconnections, and could inappropriately assign costs attributable to MHVDC Transmission Lines to MISO load. Finally, MISO explained that there is no basis for reopening the LRTP Tranche 1 analyses.

Q. PLEASE DESCRIBE THE GBX LINE PROJECT.

A. As described in the Parmar Affidavit, the GBX Line project includes an approximately 800 mile, ±600 kV HVDC transmission line to move power from Southwest Kansas in the Southwest Power Pool, Inc. ("SPP") region to eastern Missouri in the MISO and Associated Electric Cooperative Incorporated ("AECI") systems. The Parmar Affidavit states that Phase 1 of the GBX Project will inject 1.5 gigawatt ("GW") of energy at the Burns substation in MISO (Missouri) and 1.0 GW of energy at the McCredie substation on the AECI system. *See* Parmar Aff. ¶ 18. The Parmar Affidavit further states that Phase 2 of the GBX Line will continue through Illinois and terminate over the Illinois/Indiana border where it will interconnect with the American Electric Power's facilities. Ms. Parmar's analyses focus solely on Phase 1. *See* Parmar Aff. ¶ 19.

Q. DOES THE MISO TARIFF HAVE A PROCESS FOR CONNECTING MHVDC TRANSMISSION FACILITIES, SUCH AS THE GBX LINE, TO THE MISO TRANSMISSION SYSTEM?

A. Yes. The connection procedures for external MHVDC Transmission Lines are set forth in Attachment GGG of the Tariff. Injection Rights, which is an optional product available to MHVDC Connection Customers, are processed separately under Attachment X of the Tariff, which contains MISO's Generator Interconnection Procedures ("GIP").

Q. DOES MISO ASSESS THE NEED FOR, OR THE BENEFITS OF, EXTERNAL MHVDC TRANSMISSION LINES PROPOSED TO BE CONNECTED TO THE MISO TRANSMISSION SYSTEM?

A. No. Under the Attachment GGG process, MISO does not assess the need for, or the benefits of, proposed external MHVDC Transmission Lines. Instead, MISO's MHVDC Connection Procedures are focused on ensuring a reliable connection of such external MHVDC Transmission Lines to the MISO Transmission System, allowing customers to schedule power transactions consistent with the MISO Tariff. Also, an external MHVDC Transmission Line is not included in the MTEP for the purposes of cost allocation and is not subject to the stakeholder proceedings in the manner that projects developed through the LRTP processes are.

Q. HAS INVENERGY INITIATED THE CONNECTION PROCESS WITH MISO FOR THE GBX LINE?

A. Yes. Invenergy's subsidiary that will own and operate the GBX Line project, Grain Belt Express LLC ("GBX"), filed requests for transmission connection and Injection Rights with MISO in April 2019. Under the Tariff, separate applications are required for: (1) physical connection of external MHVDC facilities per Attachment GGG of the Tariff, and (2) Injection Rights per Attachment X of the Tariff. GBX submitted both types of applications, as well as various amendments and modifications to the initial requests.

Q. PLEASE SUMMARIZE THE CURRENT STATUS OF THESE APPLICATIONS.

A. GBX has two pending MHVDC Connection Requests, which share a Point of Connection with the MISO Transmission System and have a combined 1.5 GW of Injection Rights under study with MISO. These MHVDC Connection Requests are associated with the

proposed GBX Line and are currently in the TCA negotiation process, subject to the waiver described below. The Interconnection Requests that seek Injection Rights associated with the GBX Line have completed their Final System Impact Studies and are currently in the Facilities Study process under Attachment X of the Tariff. MISO anticipates that a draft Facilities Study associated with those Interconnection Requests will be completed by or near the end of the second quarter of 2023. There is an additional pending MHVDC Connection Request, H107, submitted by Invenergy which is not expressly associated with the GBX Line as described in the Parmar Affidavit.

Q. HAS GBX EXECUTED A TCA WITH MISO AS A RESULT OF ANY OF THESE REQUESTS?

A. No. In Docket No. ER23-403-000, GBX requested to delay the TCA negotiation process and sought a waiver of certain Tariff deadlines pertaining to the TCA negotiation process, which was granted by the Commission.[5]

B. MISO's LRTP Initiative and MTEP Process

Q. PLEASE DESCRIBE THE LRTP INITIATIVE.

A. MISO's LRTP initiative is driven by significant resource changes and electrification that are expected to occur in the MISO footprint in the future. It is one of the core components of MISO's response to what is known as "the Reliability Imperative"—*i.e.*, ensuring that MISO can successfully meet the reliability challenges posed by industry trends that are driving MISO members to make significant changes to their portfolios, including

[5] *See Grain Belt Express LLC*, 181 FERC ¶ 61,254 (2022).

retirements of aging units and integration of increased levels of renewables.[6] The LRTP initiative is integrated into MISO's annual transmission planning process and all LRTP tranches and projects are added into an MTEP report. The starting point for the LRTP initiative was MISO's Renewable Integration Impact Assessment ("RIIA"), which identified both new and changing risks and system needs as renewable generators are added and conventional generators retire, such as: (1) new stability risks; (2) shifting periods of grid stress; (3) shifting periods of energy shortage risk; (4) shifting flexibility risk; (5) insufficient transmission capacity; and (6) a sharp increase in integration complexity after 30 percent renewable penetration.

Q. HOW DOES THE LRTP INITIATIVE RESPOND TO THESE CHALLENGES?

A. As informed by the RIIA and other similar analyses, the LRTP initiative is a multi-year transmission planning effort undertaken by MISO to identify long-term grid needs based upon long-term forecasts known as "Futures." The Futures establish different ranges of economic, policy, and technological possibilities – such as load growth, electrification, carbon policy, generator retirements, renewable energy levels, natural gas price, and generation capital cost – over a twenty-year period. Drivers assessed in the Futures include: the IRPs of MISO's neighbors; the progress of the generator interconnection queue; assumed age-based wind replacements at the same point of interconnection (*i.e.*, "repowering"); assumptions of the economic resource expansion process, which includes a renewable energy and carbon emission trajectory; economic costs to construct and operate new resources (including tax implications such as the investment tax credit and

[6] *See* MISO's Response to the Reliability Imperative, available at: https://cdn.misoenergy.org/MISO%20Response%20to%20the%20Reliability%20Imperative%20FINAL_updated%204-29-2021504018.pdf

production tax credit for renewable resources); and the ability of new resources to meet the load and planning reserve margin. The Futures also incorporate regional assumptions, such as de-carbonization, renewable energy penetration, and electrification. MISO's work to identify the projects in the LRTP effort is built upon three identified Futures scenarios.

Q. PLEASE DESCRIBE LRTP TRANCHE 1.

A. MISO identified Tranche 1 as its first LRTP Portfolio as an addendum to the MTEP 21 cycle. The LRTP Tranche 1 planning study started in 2020 with development of the Futures and continued throughout 2021 with economic and reliability model building, issues identification, solution evaluation and identification, and concluded in 2022 with the final portfolio and the business case. Tranche 1 consists of 18 transmission projects totaling approximately $10.3 billion, spread throughout the MISO Midwest MVP Cost Allocation Subregion ("Midwest Subregion"). The Tranche 1 Portfolio was approved by the MISO Board at its July 25, 2022 meeting and is urgently needed to address many of the challenges identified in MISO's Futures. As approved, the Tranche 1 Portfolio met the Tariff criteria for Multi-Value Projects ("MVPs"),[7] as set forth in the Tariff.

Q. WHAT IS THE STATUS OF THE TRANCHE 2 PORTFOLIO?

A. Like Tranche 1, LRTP Tranche 2 is focused on the Midwest Subregion. The Tranche 2 effort commenced during the fourth quarter of 2022 and is expected to be finalized with a request for MISO Board approval during the first half of 2024. As with the Tranche 1, LRTP Tranche 2 will follow a stakeholder review process leading up to the MISO Board approval, with workshops held throughout the planning process to facilitate technical discussions and provide a forum for stakeholders to share ideas and feedback. Additional

[7] *See* MTEP21 Addendum - Draft LRTP Tranche 1 Portfolio Report624003.pdf (misoenergy.org) at 14.

review will be solicited through the MISO Planning Advisory Committee ("PAC") prior to recommendation to the MISO Board. With MISO Board approval targeted for the first half of 2024, stakeholders may have a draft portfolio for review in early 2024.

Q. HOW WILL THE GBX LINE BE REFLECTED IN TRANCHE 2 MODELS?

A. As I stated previously, MISO includes merchant transmission projects in its MTEP analyses and planning models, including LRTP Futures, after such projects execute a transmission connection agreement ("TCA") with MISO or are included in an IRP or a preferred plan. GBX had not executed its TCA by the Fall 2022 deadline for MHVDC projects or new generators to be included in the base case. However, 35 megawatts ("MW") of GBX Line output was included in the Columbia (Missouri) Water & Light Department's IRP; and this amount has been included in the Tranche 2 model.

Q. WILL MISO CONSIDER THE IMPACTS OF THE GBX LINE ON TRANCHE 2 IN OUR ANALYSIS?

A. As previously indicated in the LRTP stakeholder process,[8] MISO is committed to developing an avenue for considering the GBX Line project in a sensitivity study in the LRTP Tranche 2 process. MISO has not yet finalized the scope of the sensitivity study for the Tranche 2 process, which can only occur after there is more definition around the projects being considered for the Tranche 2 portfolio. MISO plans to include a "no-harm" analysis of the proposed Tranche 2 projects and the GBX Line. MISO expects that a similar "no-harm" analysis could be performed with MISO's seams neighbors (*e.g.*, AECI) and

[8] MTEP 21 LRTP Addendum Appendix F Stakeholder Feedback - 20220527 PAC Item 02a MTEP21 Addendum Appendix F - LRTP Tranche 1 Substantive Comments624805.pdf (misoenergy.org) at 26.

for key projects progressing through MISO's other study processes, such as the yet to be approved Joint Targeted Interconnection Queue ("JTIQ") projects.

Q. WILL THE SENSITIVITY STUDY BE PUBLICLY AVAILABLE?

A. Yes. The results of the sensitivity study and the underlying modeling data of the study will be publicly available in the same manner to stakeholders that MISO's other LRTP models and studies are available.

IV. PARMAR AFFIDAVIT

Q. PLEASE BRIEFLY SUMMARIZE THE PARMAR AFFIDAVIT.

A. The Parmar Affidavit assumes a hypothetical 2.5 GW injection of energy by Phase 1 of the GBX Line into the MISO Transmission System and the nearby AECI transmission system. Based on simulations reflecting the underlying 2.5 GW injection assumption, Ms. Parmar concludes that "without taking the impact of the GBX Project into account, MISO cannot provide an accurate analysis of the transmission system's needs and how to best address those needs." Parmar Aff. ¶ 14. In particular, Ms. Parmar states, based on her underlying assumption of a 2.5 GW injection, that the GBX Line "both (1) mitigates pre-existing overloads after the addition of the Tranche 1 Portfolio and (2) overloads segments that are already heavily loaded in the Tranche 1 models." Parmar Aff. ¶ 15. Ms. Parmar further states that these alleged impacts "require MISO, stakeholders and State regulatory authorities to reassess whether specific Tranche 1 transmission projects continue to deliver the same benefits as originally described and if not, whether any transmission project should be redesigned to ensure ratepayer benefit." Parmar Aff. ¶ 15. Lastly, Ms. Parmar speculates that the alleged impacts will compound in MISO's LRTP Tranche 2 analysis

and will result in an inaccurate MTEP base case and have negative impacts on MISO's generation interconnection queue. *See* Parmar Aff. ¶ 16.

Q. DO YOU AGREE WITH MS. PARMAR'S ASSESSMENT?

A. No, I do not agree. Ms. Parmar's analysis does not show broad-based benefits from the GBX Line across the Midwest Subregion similar to LRTP Tranche 1. As I explain below, Ms. Parmar's analysis indicates that the value of the Tranche 1 portfolio does not decrease with the inclusion of the GBX line. Also, the alleged potential savings resulting from the GBX Line, when compared to the incremental benefits of GBX without Tranche 1, are less than 3 percent of the LRTP Tranche 1 benefits value, which is too insignificant to have an impact on the Tranche 1 benefits analysis. While MISO does not dispute that the GBX Line could provide some value to customers that choose to subscribe for some or all of its available capacity, Ms. Parmar's simulations do not show that the inclusion of the GBX Line in the LRTP Tranche 1 models would have necessitated a change to the Portfolio or would have materially changed the Tranche 1 business case.

Q. DOES THE PARMAR AFFIDAVIT DEMONSTRATE THAT NOT INCLUDING THE GBX LINE IN THE LRTP TRANCHE 1 STUDIES HAD MATERIAL IMPACTS ON MISO'S LRTP TRANCHE 1 ECONOMIC BENEFITS?

A. No, it does not. The Parmar Affidavit did replicate MISO's adjusted production cost ("APC") savings value, which confirms the significant benefits provided by the Tranche 1 Portfolio that are broadly spread across the Midwest Subregion. *See* Parmer Aff., Fig. 12. The potential value reduction shown in the Parmar Affidavit is related to the incremental benefit assumed from the GBX Line, which ranges from $1.92 billion of APC savings in the GBX Line only scenario to $1.38 billion of APC savings in the Tranche 1 + GBX Line

scenario. *See* Parmar Aff., Fig. 11 and 12. This change in GBX related benefits does not result in less benefits from Tranche 1 for the customers paying for the LRTP portfolio; it could impact GBX Line customers.

Q. IF MS. PARMAR'S STUDY HAD BEEN PRODUCED DURING THE STAKEHOLDER PROCESS FOR LRTP TRANCHE 1, WOULD IT HAVE CHANGED MISO'S STAFF RECOMMENDATION TO THE MISO BOARD?

A. No. As noted above, the alleged reduction in APC savings would not have affected MISO's benefits analysis for Tranche 1. Likewise, inclusion of the GBX Line, as described in the Parmar Affidavit, does not materially impact the Tranche 1 projects selected. In fact, Mr. Parmar's study only confirms the business case for Tranche 1 as being robust under system changes, such as the inclusion of the GBX line. Ms. Parmar's study also confirms that the Tranche 1 Portfolio provides high system-wide benefits under a range of future scenarios. As referenced previously, the benefit changes from the inclusion of the GBX Line have a small percentage impact on the overall benefits, and the total benefits in all scenarios equaled or exceeded the benefits in the original LRTP Tranche 1 analysis. These benefits, even with the GBX Line considered, are far in excess of the benefit-to-cost ("b/c") ratio required under the MISO Tariff for MVPs, which is 1.0 or above. *See* Tariff, Attachment FF § II.C.2.b.

Q. DOES THE PARMAR AFFIDAVIT SHOW THAT THE BENEFITS OF THE GBX LINE ARE LOCALIZED TO PRIMARILY LOCAL RESOURCE ZONE ("LRZ") 5 (I.E., MISSOURI)?

A. Yes, it does. Ms. Parmar's analysis shows that, under the "GBX Line only" APC savings scenario, the claimed benefits are highly localized to LRZ 5, with essentially all of the APC

savings going to Missouri. *See* Parmar Aff., Fig. 11. This showing of highly localized benefits continues under the "Tranche 1+GBX" scenario, which indicates that approximately $1.17B of $1.38B or 85 percent of the claimed APC savings associated with the GBX Line are also localized to LRZ 5 (*i.e.*, Missouri). *See* Parmar Aff., Fig. 12.

Q. WHAT IS THE SIGNIFICANCE OF THE PARMAR AFFIDAVIT SHOWING THAT THE ALLEGED ECONOMIC BENEFITS OF THE GBX LINE, AND ITS ASSOCIATED CONSTRAINTS, ARE HIGHLY LOCALIZED IN LRZ 5?

A. As noted previously, Figure 11 of the Parmar Affidavit shows that only customers located in LRZ 5 (*i.e.*, Missouri) are material beneficiaries of the GBX Line based on the distribution of APC benefits. Likewise, Figure 15 of the Parmar Affidavit shows that constraints with increased congestion with the GBX Line are all located in LRZ 5 and not regionally distributed. It is more appropriate, therefore, to address these issues as part of the MHVDC connection process, which focuses on the local impacts of the new MHVDC line, and not through the LRTP study which has a regional focus and cost allocation. Having GBX customers fund those upgrades is consistent with new resources funding upgrades identified through the interconnection process; their costs should not be allocated to load across the Midwest.

Q: DOES THE PARMAR AFFIDAVIT REFUTE THE SHOWING OF ECONOMIC BENEFITS FROM TRANCHE 1 FOR ANY ZONE WITHIN MISO?

No, it does not. The Parmar Affidavit did not show any reduction in benefits for the customers paying for the LRTP portfolio. Even if the identified reduction in APC savings under the "Tranche 1+GBX" case shown for LRZ 1 (*i.e.*, portions of Montana, North Dakota, South Dakota, Minnesota, and Wisconsin) and LRZ 3 (*i.e.*, portions of Minnesota,

Iowa, and Illinois) was applied to the LRZ 1 and LRZ 3 load, such a reduction would only very minimally reduce the Tranche 1 b/c ratios for these zones – *i.e.*, from 2.9 to 2.8 for LRZ 1 and from 3.3 to 3.1 for LRZ 3. *See* Parmar Aff., Fig. 9. The b/c ratios for LRZ 1 and LRZ 3 both remain at or above 3.0, continuing to show the overwhelming value of the Tranche 1 Portfolio to the entire region, regardless of the GBX Line's impacts.

Q. AS PART OF ITS RELIABILITY MODELING DISCUSSION, THE PARMAR AFFIDAVIT ASSERTS THAT MISO DID NOT CONSIDER THE IMPACTS ON LOWER VOLTAGE SYSTEMS. IS THIS CRITICISM VALID?

A. This criticism is invalid. LRTP Tranche 1 was intentionally focused on high voltage regional upgrades. More specifically, LRTP is focused on the creation of a regional backbone to ensure a reliable and efficient resource transition for the MISO Midwest region, focusing on a combination of policy drivers, reliability, and economic benefits. In contrast, lower voltage projects are generally tied to the location of individual new generators included in the study models, such as those that are forecasted due to utility or state IRP. MISO believes these generation specific upgrades are best accomplished through the generator interconnection process. In fact, had MISO considered the impacts on the lower voltage system, there would have been an increased cost to ratepayers across the Midwest Subregion.

Q. CAN YOU EXPLAIN WHY MITIGATING ALL IMPACTS ON THE LOWER VOLTAGE SYSTEM WOULD INCREASE COSTS TO RATE PAYERS?

A. When MISO develops the Futures, defining the generation portfolio that is then included in the LRTP economic and reliability base models, MISO must site potential future generation at specific points of interconnection on the MISO Transmission System to

represent the resource mix in our members' IRPs and to meet future load requirements. These specific sites are not intended to mandate future resource locations; instead they represent a reasonable approximation of future possible interconnection points. MISO is not responsible for resource planning or resource siting, actual future siting decisions will be determined by the interconnection customers, and transmission should not be identified through the LRTP process for local constraints from such siting. The constraints referenced by the Parmar Affidavit on the lower voltage system were created by the siting of this future generation and were not intended to be solved through the LRTP process. Instead, these upgrades would be resolved in individual generator interconnection requests, which may or may not conform to the locations in MISO's LRTP models. Adding the GBX Line to the overloads analysis, as Ms. Parmar does, makes no change to these underlying considerations.

If MISO had sought to remedy such constraints in the LRTP process, then ratepayers would be paying for these Network Upgrades rather than the Interconnection Customers through the Generator Interconnection studies. Further, while MISO has a high degree of confidence that regardless of the exact location where future generation interconnects, the backbone upgrades identified in LRTP Tranche 1 will provide broad regional benefits to the Transmission System, the same cannot be said for localized upgrades on the lower voltage system. For example, if the LRTP Futures site solar generation in a specific location and then the actual generation interconnects a few miles away, any upgrades made to or around the Point of Interconnection on the low voltage system where that Futures solar generation was sited might not be used and useful, resulting in inefficiencies and additional costs to customers.

Q. ARE THERE ANY COMPARABLE CONCERNS REGARDING INCLUDING AN MHVDC TRANSMISSION LINE IN THE MODEL BEFORE IT HAS COMPLETED ITS STUDIES AND HAS A TCA?

A. Yes, the same cost shift and inefficient upgrade concerns described above would also be present if an MHVDC Transmission Line was included in the models prior to having a TCA. Under the MTEP process, and as replicated in LRTP, when an MHVDC is added into the model after it executes the TCA, the upgrades contained in that agreement that are funded by the MHVDC Connection Customer are also added to the model at the same time. However, if the MHVDC project was added to the model without such upgrades, the injection could cause reliability concerns on the system. Although lower voltage constraints, as noted previously, are not the focus of the LRTP analysis, when the injection is sufficiently large, as with GBX, such reliability concerns can extend to impact high voltage facilities and then cause mitigation to be included in either the MTEP or the LRTP portfolio and funded by ratepayers (load). In addition, if those upgrades are planned for or built, but the project ultimately withdraws, then the Transmission System would be planned in an inefficient manner and those upgrades may be not used and useful.

Q. THE PARMAR AFFIDAVIT CLAIMS THAT NOT CONSIDERING MHVDC TRANSMISSION PROJECTS IN MISO'S MODELS PRIOR TO THEIR EXECUTION OF A TCA DISTORTS MISO'S GENERATOR INTERCONNECTION QUEUE. DO YOU AGREE?

A. No, I do not agree. As I explained above, the same rules are used for generator interconnection projects and MHVDC transmission projects, such as the GBX Line, which has sought Injection Rights (*i.e.*, aggregate generation injection) through MISO's

interconnection process. Consistent with MISO's current practice to not include new resources until they have a signed generator interconnection agreement, MISO will not include the GBX Line and the associated transmission upgrades that GBX will be responsible to fund until they sign a TCA that captures the Necessary Upgrades identified through the studies associated with GBX's MHVDC Connection Request and the Network Upgrades identified through the generator interconnection studies associated with their request for Injection Rights. Similar to generation projects, MISO cannot assume that injection associated with the GBX Line will exist in future models until Invenergy agrees to fund these upgrades and build the GBX Line by signing a TCA. In fact, the interconnection process would be distorted if the current Tariff requirements were removed and Invenergy's proposals were adopted.

Q. THE PARMAR AFFIDAVIT CLAIMS THAT MISO's LRTP TRANCHE 1 MODELS MISSED SEVERAL THOUSAND CONTINGENCIES, WHAT IS YOUR RESPONSE TO THAT?

A. MISO has reviewed Ms. Parmar's statements with respect to the alleged "missed contingencies." We can confirm that there were no such "missed" contingencies in the LRTP models.

Q. PLEASE EXPLAIN.

A. To better understand what type of contingencies were alleged to be missing, MISO broke the alleged "missed" contingencies into two groups: single events and paired events. Single events are essentially one outage on the system at a time, such as a line out of service. Paired events are pairs or groupings of single events, *i.e.*, taking two events in parallel. MISO's review revealed that approximately 7 percent of the alleged "missing"

contingencies were specific to single events while the remaining 93 percent were paired events. In the LRTP Tranche 1 analysis, MISO used automation techniques available in industry accepted PowerGEM TARA to simulate the paired events, based on the single events that exist in the input files. Our assessment reviewed over 9,000 single events, and it used these events to create paired events. Upon our review we were able to identify that 70 percent of the alleged "missed" contingencies were contained in the available LRTP contingency file. The remaining 30 percent of the "missed" contingencies were automatically created based on commands within our contingency files and applied in analysis. Only 21 (of more than 9,000) contingencies were actually not analyzed, but these contingencies were out of scope for LRTP analysis. For further clarity, in order to understand how MISO sets up its reliability modeling in PowerGem TARA to automate the pairing of contingency events from single contingency event lists a screen shot is included. *See* Ex., 1, Fig. 1. An additional PowerGem TARA screenshot is provided to enable the reporting out of paired contingency events (*i.e.*, N-1-1). *See* Ex. 1, Fig. 2.

Q. PLEASE EXPLAIN WHY THE 21 CONTINGENCIES YOU REFERENCE ABOVE WERE "OUT OF SCOPE FOR LRTP ANALYSIS."

A. The referenced 21 contingencies were outside of MISO's footprint, and more specifically, beyond one bus onto a neighboring system. These contingencies on neighboring systems were not included in the LRTP analysis, due to the focus on the study on larger backbone upgrades within MISO. Instead, ongoing MTEP cycles provide additional coordination opportunities to monitor and address impacts on third party systems.

Q. DO YOU HAVE ANY OTHER CRITICISMS OF THE STUDY AS DESCRIBED IN PARMAR AFFIDAVIT?

A. Yes. The Parmar Affidavit purports to analyze the change in benefits introduced by adding the GBX Line to the models, but it does not take the next step to include associated costs into the calculation of benefits. As such, the Parmar Affidavit introduces reliability constraints and assumes that LRTP analysis should mitigate them without discussing who would be responsible for the resulting costs, then criticizes the study for not taking into account the potential economic benefits to the GBX Line. This skews the conclusion in favor of amplifying the impact of the GBX Line, and it implies that the upgrades needed but-for GBX should be paid for by the load within the MISO Midwest.

Also, in reviewing Ms. Parmar's analysis, I note that there is insufficient detail to fully understand the modeling of the 2.5 GW injection to support the validity of the APC savings identified. For example, the Parmar Affidavit neither explains the assumed hourly output profiles of the resources located in Kansas that will be supplying the injection nor provides their associated production costs, including any potential production or investment tax credits. These are material considerations, however, because intermittent renewable resources do not produce a constant flow of energy.

Finally, the GBX Line, as a merchant facility, would need to be fully subscribed to support the 2.5 GW injection assumption and associated benefits. This information simply may not be available or reliable before the TCA is signed or the project is included in an IRP or a preferred plan. If the 2.5 GW injection assumption proves to be optimistic based on actual customer subscriptions, then even the minimal "delta savings" identified in the Parmar Affidavit would be further reduced.

Q. WHAT WILL HAPPEN ONCE GBX HAS AN ENFORCEABLE TCA FOR THE GBX LINE?

A. Once GBX has an enforceable TCA, it will be eligible for inclusion in the base case that feeds into the MTEP planning process. Specifically, both the injection associated with GBX and the Necessary Upgrades identified in the TCA will be added into the base case. Provided that GBX has an enforceable TCA by September 2023, GBX should be included in the MTEP 2024 planning processes. The base case forms the foundation for future LRTP models as well; while noting that the model build for LRTP Tranche 2 has already concluded. GBX would be included in the model for subsequent LRTP Tranches if it has an enforceable TCA in 2023.

V. CONCLUSION

Q. DOES INVENERGY'S SUPPLEMENTAL SUBMISSION CHANGE ANY ARGUMENTS OR CONCLUSIONS MISO PROVIDED IN ITS ANSWER AND OTHER PLEADINGS IN THIS PROCEEDING?

A. No. The Parmar Affidavit fails to establish that current MISO Tariff requirements, including the requirement to have an executed TCA as a precondition for MHVDC Transmission Lines to be included in MTEP models, are not just and reasonable. Likewise, the simulations included in the Parmar Affidavit do not demonstrate any material impact from the GBX Line, as currently proposed, on LRTP Tranche 1. Accordingly, no basis exists for requiring MISO to "re-confirm" LRTP Tranche 1 studies.

Q. DOES THIS CONCLUDE YOUR AFFIDAVIT?

A. Yes, it does.

Document Accession #: 20230519-5185 Filed Date: 05/19/2023

Affidavit of Jeremiah Doner

COUNTY OF HAMILTON)

)

STATE OF INDIANA)

Jeremiah Doner, being duly sworn, deposes and states that he prepared the Prepared Direct Testimony of Jeremiah Doner, and the statements contained therein are true and correct to the best of his knowledge and belief.

/s/ Jeremiah Doner

Jeremiah Doner

SUBSCRIBED AND SWORN BEFORE ME, this 19th day of May, 2023.

Reid V. Gunderson
Notary Public - Seal
State of Indiana
Hamilton County
My Commission Expires 03/26/2031
Commission No. NP0747820

Reid V. Gunderson

My Commission Expires: 03/26/2031

My County of Residence: Hamilton

Exhibit 1

Figure 1: TARA screenshot to automate the pairing of contingency events

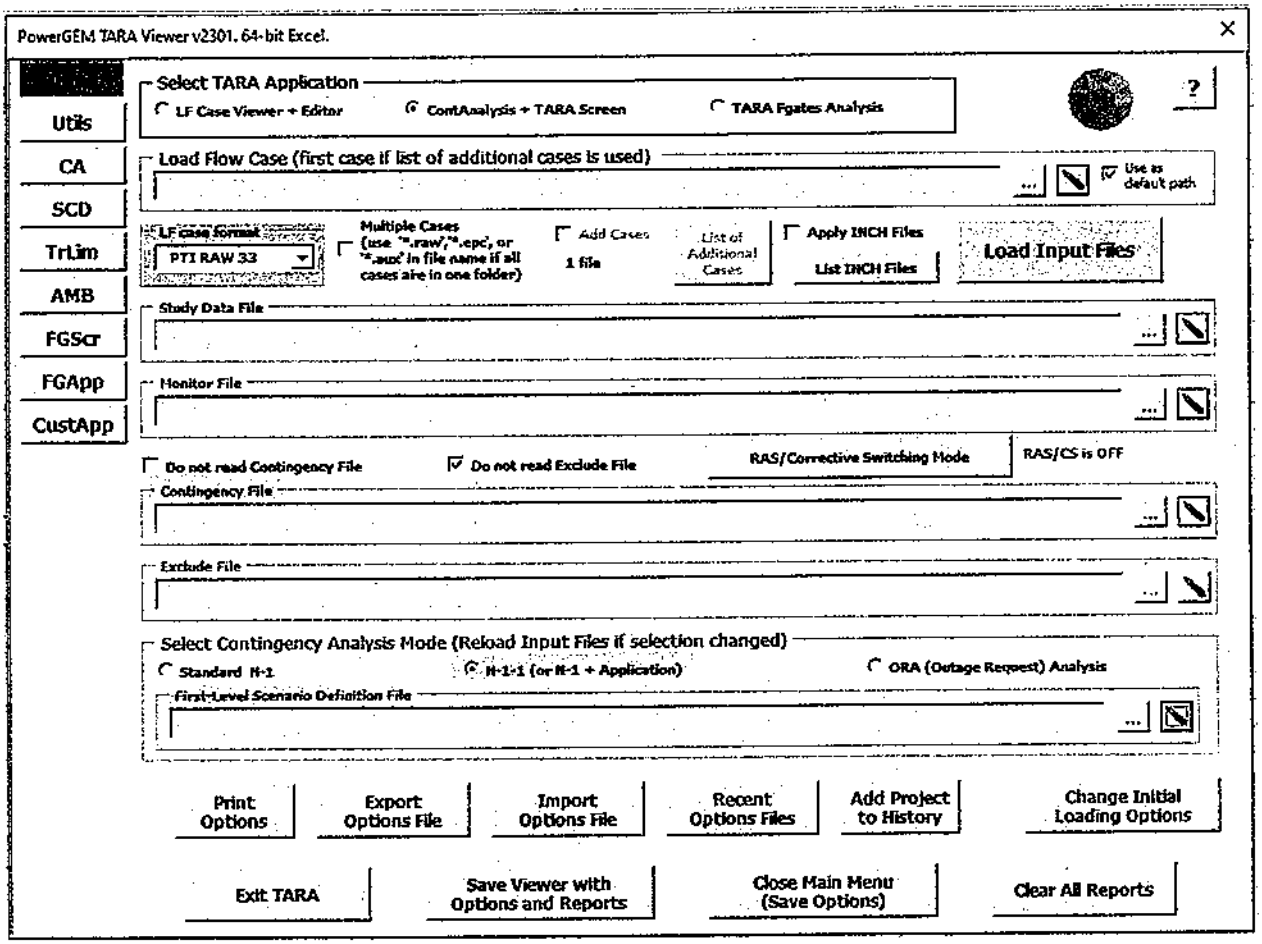
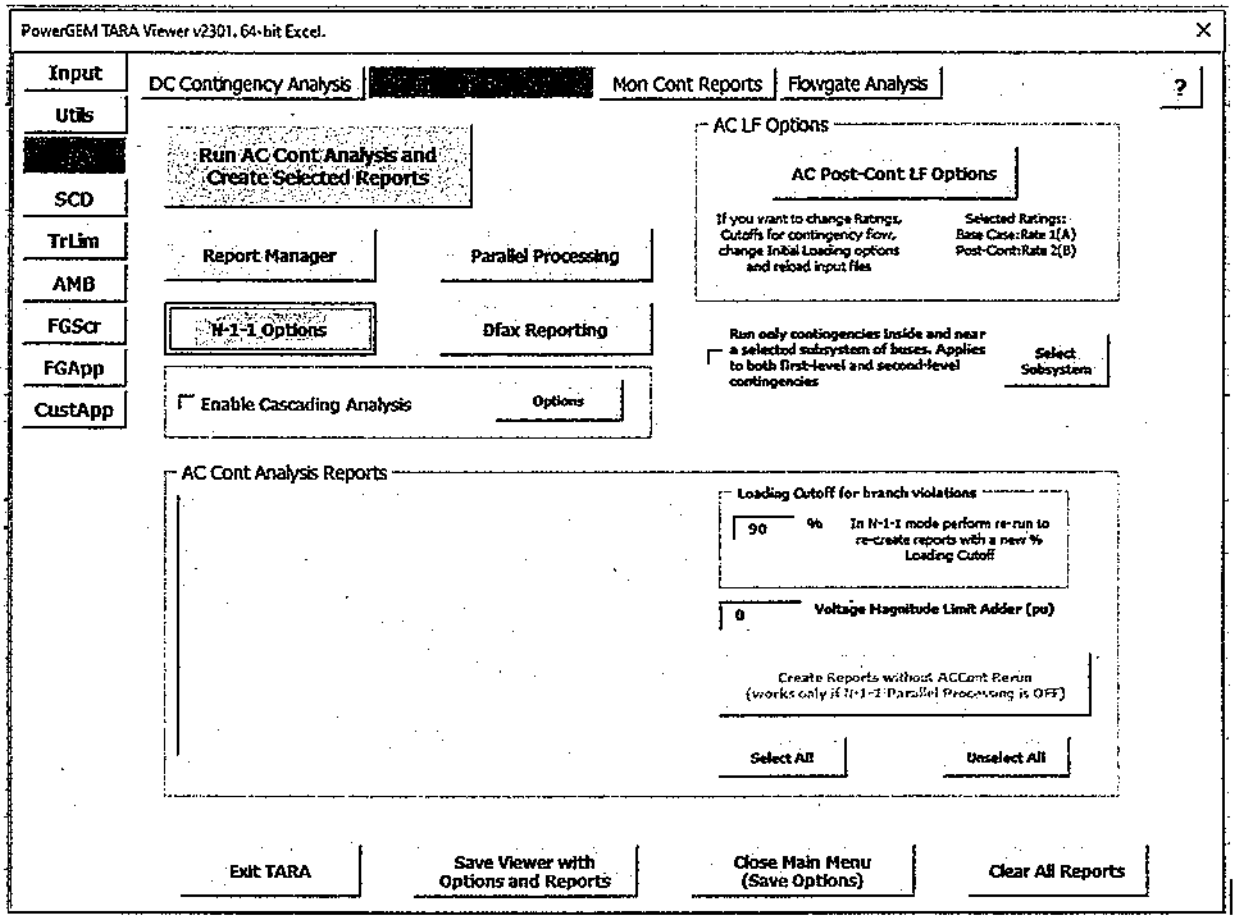


Figure 2: TARA Screenshot to Enable N-1-1 Mode



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