

Planning Advisory Committee
Summary of Review and Advice to Advisory Committee and Board of Directors
MISO Transmission Expansion Plan (MTEP16)
October 19, 2016

The Planning Advisory Committee, through its Sector representatives, has reviewed the draft MTEP16 report and provides the following summary advice to the Advisory Committee and the MISO Board of Directors with respect to the following aspects of the MTEP report.

This document contains a summary of all the substantive comments received by the MISO. Respondents were given the option of providing no comment, and/or providing written comments.

The comments generally address the following areas:

- Planning process
- Projects specific
- Report content and layout

This summary includes substantive comments from the following sectors and stakeholders

- Missouri River Energy Services (MRES)
- Illinois Commerce Commission (ICC)

In addition, editorial comments were received from stakeholders during the review process. These comments, where applicable, were incorporated into the draft report and sent to the Board of Directors.

The following stakeholders sent editorial comments:

- American Transmission Company (ATC)
- City Water and Light & Power
- Entergy
- NIPSCO
- Dairyland Power Cooperative
- Consumer Energy
- Minnesota Power
- ITC
- MidAmerican Energy Company
- Prairie Power Inc.
- Wisconsin Public Power Inc. (WPPI)

Written Comments and MISO Responses

MRES Comments

MRES provided several comments related to one set of projects proposed by Otter Tail Power Company (OTP). The projects in question are OTP proposed Project #10003 Rugby substation 41.6kV breaker addition and Project # 11743 Western ND 41.6kV breaker stations. Total cost of these projects is \$ 3.5 M. These two projects are Appendix G facilities meaning they are not transferred to be under MISO functional control but do constitute a part of the MISO Transmission System.

MISO understands MRES comments, in summary, to involve the following key concerns:

- 1) Whether MISO adequately reviewed and commented on these projects and whether the projects were adequately vetted in the stakeholder process.
- 2) Whether a need for the projects was adequately established to support inclusion of the projects in the MTEP regional plan (Appendix A).
- 3) Recovery of costs of these projects in the local Joint Pricing Zone in which MRES is a participant.
- 4) A comment that the Appendix A list of projects should be finalized before stakeholders are asked to provide written comments on the MTEP, and a desire that more time be allotted between the final sub-regional Planning Meeting and the stakeholder comments deadline.

MISO Response

MISO appreciates these comments and MRES participation in the MTEP 16 planning process including the numerous discussions during this process of the OTP proposed 41.6 kV facilities.

MISO disagrees with the MRES assertion that MISO did not review and comment on these projects throughout the process. MISO presented these projects along with all other proposed projects in the multiple MTEP 16 sub-regional planning meetings. In view of the fact that these lower voltage (less than 100 kV) transmission facilities are not under MISO functional control, MISO staff requested that OTP provide models of these systems for staff and stakeholder review, and a report of the system performance with these projects in service. MISO has reviewed this information and OTP has presented their findings of the local area system performance publicly to stakeholders. Because these projects are not proposed to resolve specific criteria to qualify as a MISO defined Baseline Reliability Project (BRP), nor as a regional Market Efficiency Project (MEP), and the Transmission Owner has performed and discussed publicly their analysis of system performance with the projects, MISO has classified these projects as “Other”. The determination of Other means that the projects meet local Transmission Owner needs, the projects are not cost shared on a regional basis outside of the local pricing zone, and the Transmission Owner may proceed with the projects based on their own determination of need. The treatment of these projects is consistent with that applied to the many hundreds of projects categorized as “other” in prior MTEP cycles, including those of MRES. In addition, when such projects are not under MISO functional control, as is the case with the OTP projects in question, the Transmission Owner Agreement provides that *planning of*

all Non-transferred Transmission Facilities remains the sole responsibility of the Transmission Owners.

With regard to the stakeholder review process, MISO appreciates these comments on how to improve that process. MISO attempts to have the MTEP Appendices up to date for stakeholder review. In some cases, however, because a few of the hundreds of new projects may still be in late discussion with stakeholders, not all updates make it to the Appendices by the PAC review date. In those instances MISO has been in dialogue with the stakeholders involved so that it should be clear what the status of those projects that are the subject of the extended discussions are. We believe it is important to devote additional discussion time to certain projects of interest to stakeholders even if this means that the final Appendix references to those projects must be updated after the formal request for stakeholder comments on the overall report.

In the case of the OTP projects that MRES expressed considerable interest in, MISO scheduled an additional West region Technical Studies Task Force (TSTF) meeting for September to further discuss these projects in response to MRES comments. At MISO's request, OTP conducted additional analysis to address stakeholder feedback, provided models and a study report, and presented that information at the September TSTF meeting. This additional stakeholder outreach caused the status of these projects to be delayed in Appendix A. These projects will be included in Appendix A as local area projects that the Transmission Owner has indicated will be moving forward and that constitute a part of the regional plan.

Illinois Commerce Commission (ICC) Comments

The Illinois Commerce Commission provided several comments related to one particular project: the Huntley to Wilmarth 345 kV transmission line project. Specifically, that project is the Huntley-Wilmarth 345 kV transmission line project which is proposed for southern Minnesota, with an estimated cost of \$80.9million and with a calculated weighted average benefit-to-cost ratio across the MTEP futures scenarios of 2.02. MISO is recommending this project be included in the regional plan as a Market Efficiency Project pursuant to the tariff defined criteria for such project classification. The tariff in addition provides that such projects will be recovered on a regional basis and that projects with regional cost allocation shall be eligible for competitive development unless such competitive development is precluded by applicable state or local law or regulation. As this project is wholly within the state of Minnesota which does have a state statute permitting a Right-of-First Refusal by the incumbent Transmission Owner, the MISO Tariff and FERC Order 1000 do not allow the project to proceed through MISO's competitive development process.

MISO staff understands the ICC comments, in summary, to involve the following key concerns:

- 1) Order 1000: Whether projects that are not open to competitive development due to state specific Right-of-First Refusal statutes should be cost allocated. As stated by the ICC in their comments "In cases such as the Huntley-Wilmarth project where MISO chooses not to employ its normal competitive selection process to ensure that the project is both efficient and cost effective, and where there is no alternative forum available to the state regulators in zones which will bear project costs under MISO's cost allocation rules to protect electric consumers in their zones from unjust and unreasonable project costs, then MISO should not regionally allocate the costs of that project. Rather, MISO should instead assign the project cost only to the local zone(s) where the project will be physically located because the state regulators for those zones are the only ones who have a forum to control project costs."

MISO Response

MISO is applying the provisions of its FERC-accepted Tariff. As noted, the project meets the criteria to be classified as a Market Efficiency Project, and such projects are eligible for regional cost allocation. Order 1000 recognized that states may preclude competitive development by state statute, and in such cases competitive development would not apply. Order 1000 does not establish that in such cases projects otherwise qualifying for regional cost allocation under the tariff should not be so allocated.

- 2) Project Cost Estimates: The validity of the MISO cost estimates used to determine the benefit-to-cost ratios applied to determine project eligibility for qualification as a Market Efficiency Project (and therefore eligible for regional cost allocation). The ICC staff states "MISO Staff is recommending that the MISO Board approve a transmission project, the costs of which are very uncertain (perhaps to the extent of swamping the 1.25 B/C ratio) and for which there is no MISO mechanism for obtaining a more reliable cost estimate and for which there is no MISO process for holding the project developers to that estimate."

MISO Response

MISO has developed a cost estimating mechanism for projects that may be eligible for competitive development, since competitive developer-provided cost estimates for such projects

are generally not available from prospective bidders at the time that a determination of costs is needed to compare to project benefits.

MISO's approach to develop transmission costs estimates has been utilized since MTEP15. Each project estimate that is developed by MISO is subject to stakeholder review throughout the planning study process. The cost estimation methodology used for the Huntley to Wilmarth 345 kV project is the same that was used to develop the estimate for the Duff-Coleman EHV 345 kV project in MTEP15.

MISO cost estimates consider actual costs of comparable project facilities from past projects constructed in similar types of conditions. MISO is transparent about the numbers and types of structures, wire lengths and other major components of transmission line and substation (number of breakers etc.) facilities considered in our estimates.

The project cost estimates developed by MISO for use in the benefit to cost ratio evaluation can be referred to as a scoping level estimate. A scoping level estimate is a more detailed cost estimate than a planning level cost estimate as the scoping level estimate considers additional detail such as the number of transmission structures needed, terrain challenges and potential obstructions along the various routing possibilities, and transmission line length which are aided by aerial images (e.g. Google Earth). MISO also recognizes that there are uncertainties in the estimating process and includes a 15 % contingency to account for that uncertainty.

This MISO scoping level transmission cost estimate is the best estimate available at the time based on the information available, and coupled with the margin by which the projects demonstrated benefits exceed the estimated costs over multiple future scenarios, MISO is confident that this project meets tariff criteria to move forward.

Further, there is a defined process in the MISO Tariff for holding developers of regionally cost-shared projects accountable to their cost estimate, as well as other factors such as schedule delays and an inability to complete construction of the facility. Section IX of Attachment FF defines the circumstances under which MISO is required to conduct a variance analysis and identifies the potential outcomes of that analysis. The variance analysis process, while required only for competitive projects under Order 1000, was expanded in the MISO Tariff to apply to all regionally cost-shared projects approved in the MTEP, whether they are subject to the competitive process or not. Section IX.C.1 specifically applies to cost increases and provides that a cost-shared non-competitive project is subject to variance analysis if the costs exceed 25% of the baseline cost estimate.

- 3) Policy of determining project Benefit-to-Cost based on Weighted Average of Futures:
The ICC staff expressed concerns that the project did not show a minimum benefit-to-cost in each of the established "futures". As stated by the commission staff "... the benefit/cost rationale for the Huntley-Wilmarth 345 kV project is not robust across all of the agreed-upon futures. It would not be unreasonable to require any prospective MEP to satisfy some stated B/C ratio in each studied scenario, in addition to meeting a 1.25 standard on average across the studied scenarios."

MISO Response

MISO has applied the tariff provisions for determining a project's resulting benefit-to-cost ratio across the multiple futures developed through the stakeholder process. The tariff states that we will weight each of the futures and determine the overall present value of benefits from those weighted futures, but does not prescribe a minimum benefit for a particular future. Section II.B.a states:

The Transmission Provider will apply a weighted futures, no loss (WFNL) metric to analyze the anticipated annual economic benefits of a proposed market efficiency project. The WFNL metric shall utilize the future scenarios determined and identified by the Transmission Provider through the planning process, with input from all stakeholders. The weights applied to the results of each future scenario shall also be determined by the Transmission Provider with input from all stakeholders. The benefit to cost ratio is then calculated using the present value of annual benefit and annual cost of the proposed market efficiency project.

On a going forward basis, MISO staff is open to discussing these tariff provisions further within the appropriate stakeholder forums. More specifically, the Market Efficiency Project cost allocation protocols are currently being discussed in the RECB Working Group and we encourage all stakeholder participation in those discussions.

Written Comments - Missouri River Energy Services

Missouri River Energy Services (MRES)	<p>MRES is concerned with the lack of review and comments by MISO staff for certain Transmission Owner proposed bottom-up projects. MISO has explained that it does not have any responsibility to review or comment on projects that would be included in Appendix G of the TOA, but rather it only has the responsibility to ensure that the projects do not negatively impact the BES transmission facilities. MRES believes MISO needs to ensure that all projects that impact the MISO transmission system (both Appendix G and H facilities) are needed and justified.</p> <p>Please see accompanying document for more details.</p>
Missouri River Energy Services (MRES)	<p>MRES believes all projects seeking approval through the MTEP process should be justified for need. If a need is not demonstrated, the facilities should not be allowed to recover costs through a joint pricing zone (even a single/local JPZ).</p> <p>Please see accompanying document for more details.</p>
Missouri River Energy Services (MRES)	<p>MRES opposes the recommendation to approve projects 10003 and 11743 in Appendix A. These two projects lack justification and incurred too many late-cycle changes and late cycle analysis to be able to be adequately vetted even if justification had been provided.</p> <p>Please see accompanying document for more details.</p>
Missouri River Energy Services (MRES)	<p>MRES has concerns that stakeholders are asked to review and comment on a draft version of a near-final MTEP report that is significantly incomplete. Specifically, the report appendices are out of date and are waiting on results and finalization. It is unclear how stakeholders are expected to review and comment on the report when it is not certain what projects are seeking approval in which Appendix when the Appendix detail is incomplete. Stakeholders should not have to sift through multiple presentations and materials posted in various locations to be able to understand the latest list of projects seeking approval.</p> <p>Specifically, there have been several late process changes by the addition and removal of projects from MTEP Appendix A. The currently posted draft of the report does not accurately reflect the current status of the projects and which appendix is being sought for approval. MISO needs to lock down the appendices sooner in the planning cycle so that the report can be finalized for stakeholders to be able to review and comment on the projects that are seeking approval in that year's cycle.</p> <p>MRES would also appreciate more time between when project details are posted, presented and discussed (for example the West TSTF meeting on 9/29/16) and when final comments are due on the MTEP report (10/3/16).</p> <p>Please see accompanying document for more details.</p>
Missouri River Energy Services (MRES)	<p>If MISO does not believe it needs to review and comment on lower voltage projects that will be included in Appendix G of the TOA, then those projects should not be included in the MTEP report appendices for approval.</p> <p>Please see accompanying document for more details.</p>

Written Comments - Illinois Commerce Commission (ICC)

<p>Illinois Commerce Commission</p>	<p>Comments on cost allocation for the Huntley-Wilmarth project.</p> <p>As of September 27, 2016, MISO has not yet posted the project cost allocation appendices for the draft MTEP 16 Report. But, in Section 5.3 of its September 19, 2016, draft MTEP 16 Report, MISO is recommending only one Market Efficiency Project (MEP) for the North/Central region. Specifically, that project is the Huntley-Wilmarth 345 kV project (I-2) which is proposed for southern Minnesota, at a cost of more than \$80 million and with a calculated weighted average benefit-cost ratio across the MTEP 15 futures scenarios (used in MISO's 2016 Market Congestion Planning Study) of 2.02.</p> <p>The ICC believes MISO should follow its competitive selection process for the Huntley-Wilmarth project. Otherwise the increased efficiencies and cost effectiveness of the competitive selection process could be lost, and result in higher costs and higher rates. Electricity consumers across MISO's North subregion should not be required by MISO to pay more for the Huntley-Wilmarth project than necessary. States with public policy preferences favoring incumbent utilities should bear the costs of those preferences rather than socializing those costs across the MISO region.</p> <p>If the MISO Board of Directors nevertheless adopts MISO Staff's recommendation and approves the Huntley-Wilmarth project without applying MISO's competitive developer selection process, the ICC lays out the following observations and recommendations with respect to the project.</p> <p>MISO states that the driver for the proposed Huntley-Wilmarth 345 kV project is congestion near the border of Iowa and Minnesota. MISO states that factors contributing to this congestion are: (1) "the large amount of wind capacity and low-cost coal generation in northern Iowa; (2) "increased wind capacity in Iowa that is assumed over the next 15 years"; and (3) "expected coal retirements near the Minneapolis/Saint Paul area" which would "tend to increase the need for power to flow from northern Iowa to the Twin Cities."¹</p> <p>In its July 11, 2016 "MTEP16 MCPS Update – North/Central Economic Planning Users Group" report, MISO explained that as a market efficiency project, the cost of the Huntley-Wilmarth project (if approved by the MISO Board) will be allocated as: (1) 20% allocated to each pricing zone based on MISO load ratio share; and (2) 80% allocated to pricing zones based on the distribution of positive adjusted production cost savings to the Local Resource Zones.</p> <p>MISO explained that, because of the South transition period provision, costs of the Huntley-Wilmarth project are not allocable to MISO South. In particular, projects approved during the Transition Period and terminating exclusively in the First Planning Area (MISO North/Central) are not allocable to the Second Planning Area (MISO South). But, with the exception of MISO South, all MISO zones will bear some cost for the Huntley-Wilmarth project.</p>
--	--

¹ September 19 draft MTEP 16 Report, at 99.

<p>Illinois Commerce Commission</p>	<p>In its July 11, 2016 (Updated on July 26, 2016 “MTEP16 MCPS Update – North/Central Economic Planning Users Group” report, MISO provided the following proposed cost allocation data for the Huntley-Wilmarth project:</p> <p>The ICC’s most practical and immediate concern is in regard to costs proposed to be allocated to Zone 4 utilities, principally Ameren Illinois. However, in addition, parts of Zones 1 and 3 also extend into Illinois. But, the ICC is also attentive to the equity principles of transmission cost allocation and wishes to call MISO’s attention to an inequity that it is perpetuating.</p> <p>In Order No. 1000, the Commission required public utility transmission providers such as MISO to establish “procedures to ensure that all projects are eligible to be considered for selection in the regional plan for the purposes of cost allocation” and that this mechanism could be, for example, “a non-discriminatory competitive bidding process.”² The Commission further stated, “In order for a facility to be eligible for the regional cost allocation methods, the region must select the transmission facility in the regional transmission plan for the purposes of cost allocation. As the Commission stated in Order No. 1000-A, “The concept is that there should not be a federally established monopoly over the development of an entirely new transmission facility that is selected in a regional transmission plan <u>for purposes of cost allocation to others</u>.”³ The Commission has properly recognized that the primary purpose of the MISO’s competitive selection process is to assist in identifying the developer(s) for the more efficient and cost effective project.</p> <p>The RTO’s competitive selection process is the primary mechanism (along with an open and transparent regional planning process) for protecting customers in zones in the RTO region (particularly those in zones where the transmission project is <u>not</u> proposed to be physically located) from unjust and unreasonable rates stemming from regionally shared costs of projects that may not be efficient or cost effective.⁴ In a recent Order in a PJM case, the Commission stated that transmission project costs may not be “allocated to more than one transmission owner zone unless the project or underlying need is subject to a proposal window.”⁵</p> <p>In its August 17, 2016 “Competitive Transmission Monthly Update” to the Planning Advisory Committee, MISO announced that the State of Minnesota (where the Huntley-Wilmarth project is proposed to be physically located) has a Statute (216B.246) which MISO considers to be a right of first refusal (ROFR) law as described in Attachment FF, Section VIII.A.1 of its tariff. In particular, that section states,</p>
--	---

² Order No.1000, at P 336

³ Order No. 1000-A, 139 FERC ¶ 61,132 at P 426, underlining added.

⁴ Order No. 1000-A, at P 529.

⁵ PJM Interconnection, L.L.C., 156 FERC ¶ 61,132 at P 33 (August 26, 2016). In PJM, the term “proposal window” refers to the competitive selection process.

<p>Illinois Commerce Commission</p>	<p>“State or Local Rights of First Refusal:</p> <p>The Transmission Provider shall comply with any Applicable Laws and Regulations granting a right of first refusal to a Transmission Owner. The Transmission Owner will be assigned any transmission project within the scope, and in accordance with the terms, of any Applicable Laws and Regulations granting such a right of first refusal. These Applicable Laws and Regulations include, but are not limited to, those granting a right of first refusal to the incumbent Transmission Owner(s) or governing the use of existing developed and undeveloped right of way held by an incumbent utility.”</p> <p>MISO stated that, because of the Minnesota state ROFR statute, MISO would not be applying its otherwise applicable competitive selection process to the Huntley-Wilmarth project. The result is that MISO will assign the opportunity and responsibility for developing the Huntley-Wilmarth project directly to the incumbent transmission owners in Minnesota, namely Northern States Power and International Transmission Company-Midwest. If MISO’s competitive selection process is not applied, there will be no FERC-approved process designed to ensure that the project is both efficient and cost-effective. This would not be fair to the electricity consumers in any North/Central zone outside Northern States Power and ITC Midwest.</p> <p>As shown in the table above, application of MISO’s normal MEP cost allocation method will result in over 60% of the costs of the Huntley-Wilmarth project being allocated to zones outside of Northern States Power and ITC Midwest. Under the current circumstances, Northern States Power and ITC Midwest will have dramatically muted incentives to adhere to adequate cost controls or to ensure that the project is the most efficient and cost effective project. This leaves open the question of whether there will be adequate control of the costs of the Huntley-Wilmarth project itself. Furthermore, MISO will automatically assign those costs to those zones to be borne by electricity customers in their states, potentially leaving consumers vulnerable to rates that are unjust and unreasonable.</p> <p>In cases such as the Huntley-Wilmarth project where MISO chooses not to employ its normal competitive selection process to ensure that the project is both efficient and cost effective, and where there is no alternative forum available to the state regulators in zones which will bear project costs under MISO’s cost allocation rules to protect electric consumers in their zones from unjust and unreasonable project costs, then MISO should not regionally allocate the costs of that project. Rather, MISO should instead assign the project cost only to the local zone(s) where the project will be physically located because the state regulators for those zones are the only ones who have a forum to control project costs.</p> <p>Assuming, despite the ICC’s argument and recommendation above, that the MISO Board of Directors, nevertheless, adopts MISO Staff’s recommendation and approves the Huntley-Wilmarth project without applying MISO’s competitive developer selection process, then the ICC advances the following observations and recommendations with respect to the Huntley-Wilmarth project.</p> <p><u>Project Cost Uncertainty</u></p>
--	---

**Illinois
Commerce
Commission**

Section 5.3 of the September 19 draft MTEP 16 Report contains a subsection titled “Project Candidate Identification” which has a paragraph titled “Project Benefit and Cost Analysis”. While that paragraph discusses the MEP benefit metric (adjusted production cost) and explains the MEP criteria (including minimum estimated cost and the 1.25 benefit/cost ratio requirement), the paragraph does not mention, let alone describe, how MISO calculates or obtains the cost used to assess whether a potential project satisfies the criteria. Figure 5.3-1 in Section 5.3 of the September 19 draft MTEP 16 Report shows a diagram with a box titled, “MISO Scoping Level Cost Estimation” under the category of “Robustness Testing.” MISO has posted a presentation titled “Scoping Level Cost Estimating Process” with the materials for the June 9, 2016 Economic Planning Users Group meeting. MISO’s presentation describes a very generic transmission line cost estimating process taking into account broad elements like span length, structure types and crossing major rivers. MISO’s presentation makes no representation regarding the reliability of such scoping cost estimate. But, apparently, in the planning and MTEP project selection process, MISO uses the cost estimates so produced in the denominator of its benefit/cost ratio. MISO’s August 22, 2016 presentation titled “MTEP16 MCPS Update – North/Central Economic Planning Users Group” states that the estimated cost of the Huntley-Wilmarth 345 kV project (I-2) is \$80,883,712 with the following breakdown:

Huntley to Wilmarth 345kV Single Circuit Transmission Line - 38.5miles
\$75,940,286

Huntley Substation Modification \$2,471,713

Wilmarth Substation Modification \$2,471,713

This cost, rounded to \$80.9 million, is listed for the Huntley-Wilmarth 345 kV project (I-2) in Table 5.3-1 in Section 5.3 of the draft MTEP 2016 Report. However, no explanation is provided for how these costs were calculated or obtained.

While MISO has used the Scoping Level Cost Estimating Process to produce the costs used in the calculated benefit/cost ratios for the Huntley-Wilmarth project, which underlie MISO Staff’s recommendation to the MISO Board regarding that project, MISO provides no representation regarding the accuracy of this estimate. Nor will there be, absent application of MISO’s competitive selection process, any established mechanism or process to obtain a reliable cost estimate for this project. In effect, MISO Staff is recommending that the MISO Board approve a transmission project, the costs of which are very uncertain (perhaps to the extent of swamping the 1.25 B/C ratio) and for which there is no MISO mechanism for obtaining a more reliable cost estimate and for which there is no MISO process for holding the project developers to that estimate.

Wind Sensitivity

In Section 5.3 of the draft MTEP 2016 Report, MISO provides summary benefit/cost

**Illinois
Commerce
Commission**

results for the Huntley-Wilmarth 345 kV project (I-2) base analysis (which includes the sited generation in each agreed-upon future scenario) as well as a sensitivity which replaces the wind units reflected in the five agreed-upon base futures scenarios (BAU, HD, LD, RCPP, and SRCPP) with 7,400 MW of wind units in Iowa and Minnesota. As MISO explained in its April 18, 2016 “Solution Screening and Preliminary Project Candidates– MN/IA Economic Planning Users Group” report, this so-called “queue wind” scenario is a higher amount than the future wind modeled in all MTEP16 base futures scenarios (except for 2030 SRCPP). The Appendix to MISO’s April 18, 2016 also shows that the majority of the “queue wind” is located in northern Iowa, whereas the “base” wind is more evenly spread between Iowa and Minnesota.

As MISO pointed out in the “Iowa/Minnesota” paragraph of Section 5.3 in the draft MTEP 2016 Report, assuming increased wind capacity in Iowa worsens the congestion near the border of Iowa and Minnesota, which the Huntley-Wilmarth 345 kV project is designed to solve. These wind sensitivity inputs are reflected in the benefit/cost results in Table 5.3-1 of the draft MTEP 2016 Report which show that, for each future, except the SRCPP, the queue wind sensitivity B/C ratio is higher than the “base” B/C ratio. This raises the weighted average B/C ratio by 22.8%.

ID	Transmission Solution	Model	Cost Estimate (2016 \$M)	Benefit-to-Cost Ratios						20-yr PV Benefit (\$M)
				BAU	HD	LD	RCPP	SRCPP	Weighted	
I-2	Huntley – Wilmarth 345 kV new circuit	Base	80.9	0.57	1.55	0.14	1.76	4.84	2.02	210
		Queue Wind Sensitivity		1.86	3.21	0.92	3.27	2.71	2.48	251

While MISO Staff should be applauded for conducting this wind sensitivity analysis, plausible scenarios exist wherein congestion near the border of Iowa and Minnesota would be lessened, thereby lowering the resulting Huntley-Wilmarth project B/C ratio.

Scenario B/C Ratios Less Than 1.25

**Illinois
Commerce
Commission**

Taking MISO’s cost estimate for the Huntley-Wilmarth 345 kV project and MISO’s queue wind sensitivity results (both analyzed above) at face value, Table 5.3-1 of the draft MTEP 2016 Report shows that, under the Business as Usual future using base assumptions as well as the LD future using both base assumptions and queue wind sensitivity assumptions, the required 1.25 benefit/cost ratio threshold is not met. In

short, the benefit/cost rationale for the Huntley-Wilmarth 345 kV project is not robust across all of the agreed-upon futures. It would not be unreasonable to require any prospective MEP to satisfy some stated B/C ratio in each studied scenario, in addition to meeting a 1.25 standard on average across the studied scenarios.

Project B/C Ratios are Sensitive to the Weightings Assigned to the Futures

The weightings assigned to the five MTEP 15 Future Scenarios used in MISO's MTEP16 MCPS study are:

Business as Usual (BAU): 19 percent

High Demand (HD): 10 percent

Low Demand (LD): 16 percent

Regional CPP (RCPP): 30 percent

Sub-Regional CPP (SRCPP): 25 percent

However, it is easy to come up with a plausible alternative weighting of the five futures scenarios which would produce a weighted average B/C ratio that does not meet the 1.25 requirement. Indeed, it is easy to come up with a plausible alternative weighting of the five futures scenarios which would produce a weighted average B/C ratio less than one. The following analysis illustrates the sensitivity of the calculated B/C ratio to the weights of the futures scenarios.

July 20 PAC Weights

BAU	0.19
HD	0.10
LD	0.16
RCPP	0.30
SRCPP	<u>0.25</u>
	1.000

<u>Project</u>		<u>BAU</u>	<u>HD</u>	<u>LD</u>	<u>RCPP</u>	<u>SRCPP</u>	<u>Weighted</u>
I2	Base	0.57	1.55	0.14	1.76	4.84	2.02
	Wind	1.86	3.21	0.92	3.27	2.71	2.48

Adjusted Weights**Delta**

BAU	0.365	36.5%	0.175
HD	0.100	10.0%	0.000
LD	0.335	33.5%	0.175
RCPP	0.125	12.5%	-0.175
SRCPP	<u>0.075</u>	<u>7.5%</u>	<u>-0.175</u>
	1.000	100%	0.000

<u>Project</u>		<u>BAU</u>	<u>HD</u>	<u>LD</u>	<u>RCPP</u>	<u>SRCPP</u>	<u>Weighted</u>
I2	Base	0.48	1.53	0.16	1.85	5.23	1.0053
	Wind	1.76	3.06	0.85	3.11	2.60	1.8169

In this example, the future scenario weights given to the RCPP and SRCPP scenarios are lowered by .175 and the weights for the BAU and LD scenarios are raised by .175. Given both the United States Supreme Court stay of the Clean Power Plan and what we now know about load growth and the other variables in the September, 2015 BAU and LD scenarios, this is not an unreasonable adjustment to consider. The results of this simple adjustment to the scenario weights reduces the weighted b/c ratio for this project from 2.13 to 1.005.



3724 West Avera Drive
PO Box 88920
Sioux Falls, SD 57109-8920
Telephone: 605.338.4042
Fax: 605.978.9360
www.mrenergy.com

October 3, 2016

Jeff Webb
Director of Planning
Midwest ISO

RE: MTEP 16 Report Feedback

Dear Mr. Webb;

Missouri River Energy Services (MRES) continues to have concerns related to two Otter Tail Power Company (OTP) projects that are seeking approval in Appendix A of Midwest ISO Transmission Expansion Plan (MTEP)16. MRES submits these comments as a supplement to the official MTEP16 Stakeholder Substantive Comments which seeks feedback on the MTEP16 report as drafted, and posted on the Midcontinent Independent System Operator, Inc. (MISO) website.

Our main concern is that MRES does not believe Transmission Owners (TO) should propose and build projects which have the main purpose of avoiding Federal Energy Regulatory Commission (FERC) Account 565 Charges (Transmission Service by Others), and then including those projects in the rates that they charge all customers in a multi-owner and multi-customer zone. FERC practice does not allow transmission customers to include costs for transmission service charges as a recoverable item in a given transmission revenue requirement in a transmission zone, and thus TOs should be prohibited from doing the same via the building of transmission facilities that are duplicative or are over-built in order to avoid those costs for wheeling their power and energy across another TO system. MRES also has concerns related to the timing, and transparency of these projects, and does not believe it is appropriate to consider them for approval in MTEP16.

MTEP #10003:

This project adds 41.6 Kilovolt (kV) breakers at the OTP Rugby Substation and re-terminates existing 41.6 kV lines from an existing Central Power Electric Cooperative owned substation in Southwest Power Pool (SPP) to the rebuilt OTP substation in MISO. This project was initially proposed in late 2015, and was listed in the MTEP database as having an alternative of "Avoid SPP transmission tariff by connecting OTP load to MISO source." OTP has failed to justify the need for this project from an economic, reliability, or stated local planning criteria perspective and only recently attempted to justify the project as generally improving reliability and operational flexibility, but they did not provide any objective evidence of such improvement.

MTEP #11743:

This project proposes to add two line breakers, and one three-breaker station to the 41.6 kV system in order to close three normally open 41.6 kV lines. This project was entered into the MTEP database in August 2016, and was first introduced at the August 22, 2016, West-SPM, though no detailed analysis was shared or discussed until the September 29, 2016, West-TSTF. OTP has failed to justify the need for this project from an economic, reliability, or stated local planning criteria perspective, and suggests the justification for the project as generally improving reliability, and operational flexibility but they did not provide any objective evidence of such improvement nor cite any operational data showing that conditions have worsened in recent years, which would necessitate the changes. Though not explicitly stated, MRES is concerned that a main driver for this project is to have normally closed paths back to MISO facilities for the avoidance of SPP transmission service.

OTP did not provide appropriate¹ study results for either project noted above to stakeholders until September 29, 2016, which is much too late in the MTEP 16 cycle considering comments on the draft MTEP16 report are due October 3, 2016. Two business days is not adequate for stakeholders to review, comment on study results, or fully consider drivers and alternatives for the proposed projects. It should also be noted that the draft MTEP16 report that is posted, makes no mention of projects 10003 or 11743 (in the main report or in the Appendix D; Appendix A simply lists 10003 at a high level). MISO and stakeholders have only been able to evaluate the study information provided by OTP, as no MISO study work has been produced relating to these projects considering they are 41.6 kV projects, that are not included in the base MTEP study models.

MRES does not believe that OTP has sufficiently justified the need for these projects and thus they should not be included as projects recommended for approval in Appendix A by the MISO Board. Also considering the late submission of MTEP #11743 and late analysis provided for both these projects, MRES does not believe it would be appropriate to include these projects in the MTEP16 approval. Being that OTP has not demonstrated a need², the timing of when these projects are approved, if at all, should not be a detriment to the system requiring the MISO Board to act at this point.

¹ OTP initially submitted a study report addressing MTEP Projects 10003, 9997, 10001, and 10903, to stakeholders on 5/31/2016, however the study was not based on a model that even included the 41.6 kV system for which the project was intending to modify, and it only included near-term scenarios. MTEP Projects 9997, 10001, and 10903 were switched from Target A to Target B late in the MTEP16 cycle.

² OTP has suggested that these projects fulfill an objective of "Grid Modernization", however these projects are the first and only projects that OTP has suggested to fit this objective. OTP does not have any local criteria that define what constitutes "Grid Modernization" or when it would be appropriate for others in the OTP JPZ to propose similar projects.

MISO Oversight of the Planning Process:

MRES also has concerns related to MISO's oversight of TO proposed bottom-up projects that are included in the MTEP process. At the June 3, 2016, West-SPM, MRES asked MISO what their role was in reviewing, and commenting on bottom-up projects, and MISO responded that MISO simply ensures that the project does not harm the Bulk Energy System (BES) facilities under MISO's functional control, and that it is up to the local TO to provide information to the affected stakeholders. After MISO posted the preliminary study³, MRES posed several questions⁴ to MISO related to the study itself as well as what MISO's role is in reviewing bottom-up projects considering specific references related to MISO's stated role per the MISO Tariff, Transmission Owners Agreement and BPM-020. Specifically:

Section IX of Appendix B of the TOA states *"Among its general responsibilities, the [MISO] Planning Staff shall: (i) review and comment on Owners' transmission plans; (ii) provide general oversight of all studies performed by Owners for MISO; (iii) identify alternatives for further study and review that could increase the efficient and economic use of the Transmission System;..."*

Section I.C.5 of Appendix FF of the Tariff states *"Planning Criteria: The Transmission Provider shall evaluate the system to address Transmission Issues in a manner consistent with the ISO Agreement and this Attachment FF. Projects included in the MTEP may be based upon any applicable planning criteria, including accepted NERC reliability standards and reliability standards adopted by Regional Entities, local planning reliability or economic planning criteria of the Transmission Owner, or required by State or local authorities, any economic or other planning criteria or metrics defined in this Attachment FF, and any Applicable Laws and Regulations."*

Section 2.3.1.1 of BMP-020-r13 states *"...In its role as the Planning Coordinator (PC), MISO will evaluate all bottom-up projects submitted by Transmission Owners and validate that the projects represent prudent solutions to one or more identified Transmission Issues..."*

Section 2.4 of the MTEP Study Report itself states *"Projects must go through a specific process to move into Appendix A. MISO staff must:*

- *Review the projects via an open stakeholder process at Subregional Planning Meetings*
- *Validate that the project addresses one or more transmission needs*
- *Consider and review alternatives*
- *Endorse the project..."*

(These references rely on the understanding that the Transmission System includes facilities listed in Appendix G & H of the TOA, and that a Transmission Issue is *"a reason to improve, expand or modify the Transmission System"* as defined in Module A of the Tariff.)

MISO staff responded to those questions on September 28, 2016, and reiterated that it has no formal obligation to Appendix G projects other to ensure those projects do not harm the BES facilities that are under MISO's control in Appendix H. Staff also stated that MISO simply provides the MTEP process to TOs to provide an open, and transparent planning process per FERC Order 890.

³ See note 1 above.

⁴ In an email dated 6/8/2016 to numerous MISO staff

MRES does not concur with MISO staff's interpretation of their role in the MTEP planning process, nor do we believe it is consistent with the above references. MRES asks MISO to clarify the meaning of each of these references and how it does or does not apply to Appendix G related projects. MRES also asks MISO to contrast the difference between MISO's process and the Pennsylvania-New Jersey-Maryland Interconnection's (PJM)'s process which is being evaluated by FERC in EL16-71. Given the references noted above, MISO clearly has a more formal process for open and transparent planning laid out than PJM, however it is our view MISO should have a more active role in the processes outlined by MISO's own procedures in the planning of projects whose costs are recovered through the rates MISO administers, and MISO should ensure that the Tariff and Business Practices are being followed. With all of the late-cycle changes related to the OTP projects (9997, 10001, 10003, 10903, 11743) and what MTEP Appendix they are moving into, late submission of study results, and vagueness of project need, and justification, MRES does not believe these projects have been planned in an open and transparent manner.

If in fact there is no responsibility for MISO to review or comment on the need and justification for Appendix G projects, then these Appendix G projects should not be included in the list of projects that are approved by the MISO Board. They should instead be listed in a separate category specifically noting that MISO has only evaluated that the projects do no harm to the transmission facilities under MISO's functional control, and MISO makes no judgement as to the need or justification for these projects. By having these projects in the MTEP Appendices approved by the Board, there is an implication that MISO concurs with the project's justification and need.

MRES Objection:

MRES objects to projects #10003 and #11743 being approved in Appendix A of MTEP16, resulting in costs from these projects being included in MISO transmission rates impacting all MISO Network Customers in the OTP Joint Pricing Zone (JPZ). For the reasons stated above (lack of justification, lateness in providing study details, and lack of review, and oversight by MISO staff, etc.) MRES requests the MISO Board not approve projects #10003 and #11743 in MTEP16. If the projects are approved by the MISO Board, and are ultimately or otherwise built, the costs for these projects should be directly assigned to OTP and not allowed to be recovered in the OTP JPZ.

MRES requests that these comments be shared with the MISO Board prior to their consideration of the MTEP16 projects if projects #10003 and #11743 are recommended to them for approval in MTEP16.

Respectfully Submitted,



Raymond J. Wahle, P.E.
Director, Power Supply and Operations
Missouri River Energy Services

ADDENDUM TO APPENDIX F:

THURSDAY, NOVEMBER 17, 2016

Via Electronic mail (aporter@misoenergy.org) and First Class mail

Mr. Andre T. Porter
 Vice President and General Counsel
 Midcontinent Independent System Operator, Inc.
 P.O. Box 4202
 Carmel, IN 46082-4202

Re: Huntley-Wilmarth 345kV

Dear Mr. Porter:

The undersigned qualified transmission developers in the Midcontinent Independent Transmission System Operator, Inc. ("MISO") region write regarding the prospective designation of the Huntley-Wilmarth 345kV project (the "Huntley-Wilmarth Project" or "Project") in MTEP 2016 as a market efficiency project (MEP). It is our understanding from participation in various MISO stakeholder meetings that MISO has indicated that it does not intend to subject the Huntley-Wilmarth Project, which is located in Minnesota, to competitive solicitation under MISO's Federal Energy Regulatory Commission ("FERC") mandated competitive selection process. In general, the undersigned qualified transmission developers support the efforts of the Federal Energy Regulatory Commission's Order No. 1000 to introduce competition among developers for constructing transmission projects that have costs allocated to customers regionally. In the specific case of the Huntley-Wilmarth Project, as discussed below, we believe legitimate questions remain as to whether the MISO tariff and the Minnesota state statute actually allow for the Project to be withdrawn from MISO's competitive developer selection process. The undersigned transmission developers would ask that MISO expeditiously address these questions prior to the Project being put forward for MISO Board approval in Appendix A of MTEP 16 and assigning it to be developed by the incumbent transmission owners.

Under Order No. 1000, FERC allowed MISO to exclude otherwise eligible regionally cost-shared projects from competition if the project was subject to a state right of first refusal and accepted tariff language allowing MISO to withhold a project from its competitive process if required by state law "in accordance with the terms, of any Applicable Laws and Regulations granting such a right of first refusal."¹ We understand that MISO has taken the position that Minnesota has a right of first refusal law that *mandates* that it assign the Huntley-Wilmarth Project to an incumbent transmission owner in Minnesota. However, as discussed below, determinations made by the Minnesota Department of Commerce ("Department of Commerce")

¹ MISO, FERC Electric Tariff, Attachment FF, § VIII.A.

with respect to Minnesota's right of first refusal law call into question whether the terms of the "Applicable Laws and Regulations" in Minnesota actually contain such a mandate.

In 2012 Minnesota passed Minnesota Statute 216B246,² a statute titled "Federally Approved Transmission Lines; Incumbent Transmission Lineowner Rights." The Minnesota Department of Commerce has indicated that 216B246 does not grant an incumbent transmission owner an unequivocal right to build an approved line and that competition for the right to build will occur, albeit, under its interpretation of the law, at the state level rather than as part of a MISO competitive process. Specifically, while the Minnesota Department of Commerce, Division of Energy Resources, in Consultation with the Minnesota Public Utilities Commission ("PUC") stated in a Report to the Minnesota Legislature dated January 15, 2014, that Minnesota Statute 216B246 "established Minnesota's state right of first refusal to incumbent utilities to build transmission lines . . . approved in the MISO process"³ the Department of Commerce went on to note that during proceedings before the Minnesota PUC regarding such project "other providers of transmission can bid in their proposals for building transmission lines [and] [i]f such bidders can meet Minnesota's requirements regarding cost and reliability, then they would qualify for a certificate of need."⁴ The Department of Commerce also specifically noted that 216B246 does not establish that only an incumbent transmission owner can build in Minnesota.⁵ The Report at Appendix C further outlines the asserted state level competitive process, arguing that "[a]s indicated by item 5 in this list and as shown in the highlighted portions Minnesota's certificate-of-need law below, Minnesota's right-of-first-refusal law does not state that 'only an incumbent can build in the state, period . . .'"⁶

The statements of the Minnesota Department of Commerce raise legitimate questions as to whether for purposes of implementing MISO's tariff the Minnesota statute grants incumbent transmission owners an unequivocal right to build the Huntley-Wilmarth Project such that it is appropriate for MISO to exclude the Huntley-Wilmarth Project from MISO's competitive developer selection process under its tariff and Order No. 1000. Indeed, there is an apparent incongruity between the Minnesota Department of Commerce Report indicating that Minnesota

² Minn Stat. § 216B.246 (2016).

³ *Minnesota's Electric System – Now and Into the Future* Minnesota Dep't of Commerce, Div. of Energy Resources (Jan. 15, 2014) at 9 ("Report") available at <https://www.leg.state.mn.us/docs/2014/mandated/140340.pdf>.

⁴ *Id.*

⁵ *Id.*

⁶ *Id.* at Appendix C, Section 5. To be clear, review of the Report demonstrates that the Minnesota Department of Commerce was concerned that without an assertion that other Minnesota statutes allow a state level competitive process for new transmission Minnesota Statute 216B246 standing alone could violate the Commerce Clause of the United States Constitution. Whether the Department of Commerce's assertion regarding the operation of 216B246 in conjunction with other statutes relieves 216B246 from a clear intent to affirmatively discriminate against interstate commerce is for courts to decide at the appropriate time.

will allow competition at the PUC to determine the developer to build the Project, and FERC's determination that MISO could not allow state utility commission's to select the developer of projects appropriate for competition. In addressing MISO's Order No. 1000 compliance proposal, FERC specifically required that MISO "eliminate provisions in its Tariff that allows a state to select the transmission developer of a transmission facility selected in the regional transmission plan for purposes of cost allocation."⁷

For these reasons, in light of the Minnesota Department of Commerce statements indicated above and FERC directives in Order No. 1000 and the MISO Order No. 1000 Compliance Order, MISO should revisit the issue of how to reconcile its tariff with the Minnesota Department of Commerce's interpretation that the state statute does not preclude competition as part of the certificate of need process. This should be done prior to the Huntley-Wilmarth Project being put forward for approval by the MISO Board for inclusion in Appendix A of MTEP 16, given that the outcome of this review should lead MISO to reconsider the issue of whether the Huntley-Wilmarth Project will be subject to MISO's competitive developer selection process to determine the developer eligible to use MISO's cost allocation methodology for the referenced project. We request by November 23, 2016, a written response that includes a reasoned and documented explanation of MISO's interpretation of the Minnesota law that supports MISO's decision, and the opportunity to meet with you and other MISO officials before the December 8, 2016 MISO Board meeting to discuss the above concerns. We also request that this letter also be submitted to the MISO Board as part of the publically available stakeholder feedback to the MTEP 16 report.

Sincerely,

AMERICAN TRANSMISSION COMPANY, LLC
DUKE-AMERICAN TRANSMISSION
COMPANY, LLC
EDISON TRANSMISSION, LLC
MIDCONTINENT MCN, LLC
REPUBLIC TRANSMISSION, LLC

CC:

Jennifer Curran, Vice President, Systems Planning, MISO
Clair Moeller, Executive Vice President, Operations, MISO
John Bear, President and Chief Executive Officer, MISO
Judy Walsh, MISO Board c/o MISO
Paul J. Bonavia, MISO Board c/o MISO
Michael J. Curran, MISO Board c/o MISO

⁷ Midwest Independent Transmission System Operator, Inc., 142 FERC ¶ 61,215 (2013)("Compliance Order") at P351.

Phyllis E. Currie, MISO Board c/o MISO
Baljit "Bal" Dail, MISO Board c/o MISO
J. Michael Evans, MISO Board c/o MISO
Paul J. Feldman, MISO Board c/o MISO
Mark S. Johnson, MISO Board c/o MISO



Eric Stephens
 Deputy General Counsel
 Legal Services
 Direct Dial: 317-249-5173
 E-mail: estephens@misoenergy.org

November 22, 2016

VIA ELECTRONIC MAIL

Michael Engleman
 Squire Patton Boggs LLP
 2550 M Street, NW
 Washington, DC 20037

Dear Mr. Engleman:

Thank you for your November 17, 2016 letter to Andre Porter, MISO Vice President and General Counsel, on behalf of American Transmission Company, LLC, Duke-American Transmission Company, LLC, Edison Transmission, LLC, Midcontinent MCN, LLC, and Republic Transmission, LLC, all of which are qualified transmission developers in the MISO region, regarding the proposed Huntley-Wilmarth 345kV transmission project. I appreciate the sense of urgency in your letter given the upcoming December 2016 vote by the MISO Board of Directors on the MTEP 2016 portfolio, which includes this project. I would like to address a few points raised in your letter.

The applicability of the Minnesota “Right of First Refusal” (or ROFR) statute¹ has been the subject of discussions both between the Minnesota Public Utilities Commission (PUC) staff and MISO, as well as between MISO and its stakeholders at the Planning Advisory Committee. According to the Minnesota PUC staff and counsel, the Minnesota ROFR statute grants the incumbent transmission owner an option to build. Any discretion as to who builds the project if the incumbent owner declines its option is left to the Minnesota PUC under the statute. I am including with this letter a copy of the minutes from the August 17, 2016 meeting of the Planning Advisory Committee where MISO staff discussed its understanding of the Minnesota PUC interpretation of the statute. As explained in the presentation and minutes, the Minnesota PUC staff and counsel have provided guidance that the ROFR statute would apply if the Huntley-Wilmarth 345kV transmission project were included in the MTEP 2016 portfolio.

While FERC declined to require state regulatory authorities to play a decisional role in the competitive transmission process, Order No. 1000 states that the federal government does not have the right to overrule state law on this issue.² Order No. 1000 and, as a result, the MISO Tariff require that deference be given to any state statute granting a right of first refusal to an incumbent transmission owner to construct and own a transmission project that otherwise would be open to competition. Your letter notes that the Minnesota Department of Commerce, acting in its role as a representative of the public interest, stated in its 2014 legislative report that while an eligible project approved in the MISO MTEP could be open to competition under the statute, any such competitive process would occur at the state level before the

¹ Minn. Stat. § 216B.246.


² See Order No. 1000 at P 227 and n.231.

Michael Engleman
November 22, 2016
Page 2

Minnesota PUC. As the state entity with jurisdiction over siting matters in Minnesota, the Minnesota PUC has, through its staff and counsel, made clear that the Minnesota ROFR statute grants the incumbent transmission owner the option to build the project. Nothing in the language cited in your letter conflicts with the guidance we have received from the Minnesota PUC. Moreover, the Department of Commerce does not have jurisdiction over siting matters, as the Minnesota PUC does. Accordingly, your letter does not change our view that MISO is following its Tariff by deferring to the guidance of the Minnesota PUC staff and counsel with respect to the Huntley-Wilmarth project. That project is not properly subject to MISO-facilitated competitive bidding as you suggest.

If your clients have further questions related to the Minnesota ROFR statute or the Minnesota PUC process for selecting a developer under the statute, I encourage you to reach out directly to the Minnesota PUC. Please let me know if I can be of any further assistance.

Sincerely,



Eric Stephens

CC: Andre Porter, Vice President and General Counsel, MISO
John Bear, President and Chief Executive Officer, MISO
Clair Moeller, Executive Vice President, Operations, MISO
Jennifer Curran, Vice President, Systems Planning, MISO
Priti Patel, Regional Executive, State & Customer Affairs, MISO

Link to August 17th, 2016 Planning Advisory Committee minutes referenced in this response letter:

<https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/PAC/2016/20160921/20160921%20PAC%20Item%2001c%20Minutes%2020160817.pdf>