

Organization of MISO States Transmission Planning & Siting Workgroup and Pricing Workgroup

Comments on the Midwest ISO's White Paper (8/8/07 version 3.0) Proposing an "Open Season" Generation Interconnection Process

Disclaimer: These comments reflect the thoughts of the OMS Transmission Planning & Siting Workgroup and Pricing Workgroup and do not necessarily represent the position of the OMS Board, individual state commissions, or associate member of the OMS.

General Comments

The OMS Transmission Planning & Siting Workgroup and Pricing Workgroup (herein OMS workgroups) appreciate the Midwest ISO's efforts to begin to identify and propose solutions to issues related to the Midwest ISO's generation interconnection queue. Although problems with the queue process may be more extreme in certain areas of the Midwest ISO (i.e., western portions where large quantities of wind generators are seeking to interconnect), the OMS workgroups recognize that problems exist in other areas as well. Specifically, the OMS workgroups acknowledge the Midwest ISO's conclusion that:

The first-mover pays treatment incentivizes interconnection customers to move their projects into the queue, and then withdraw awaiting either the next generator or the local utility to step up and fund the upgrades. This phenomenon has stalled progress on the Midwest ISO interconnection queue due to the need for repeated processing of interconnection requests. Together, the incremental approach to planning these facilities and the repeated processing of the interconnection requests uses up valuable resources and time which could be better spent focusing on the future needs of the system.¹

The OMS workgroup members have not reached a consensus position on the white paper. There is some general support for and belief that this policy, with appropriate modifications, would reduce barriers to transmission investment, facilitate access to the wholesale electricity market by renewable and other remote resources, and complement state renewable portfolio requirements. However, some OMS workgroup members believe:

1. The white paper does not adequately explain how the various elements of the Midwest ISO's proposal constitute solutions to the various elements of the problem perceived by the Midwest ISO to exist with generator interconnection

¹ Midwest ISO Open Season Proposal White Paper, Version 3.0 (August 9, 2007). Unless otherwise noted, references to the white paper refer to Version 3 and not earlier versions.

policy. Such linkages between the problems and the Midwest ISO's proposed solutions should be explicit in the white paper. Nor does the White Paper evaluate alternative solutions to the problems that MISO perceives, including the potential use of renewable energy credits for complying with state RPS requirements. Before the solution proposed in the white paper can be properly judged, the alternatives should be assessed.

2. The barriers referenced in the white paper are really not unlike the "barriers" that any other generator faces in acquiring the factors of production for its business. Transmission owners are not blocking generators from getting on the system—any generator can interconnect by funding the needed network upgrades. This is a cost of business, albeit a significant cost in some instances.

3. Even assuming that there are unique barriers to the development of transmission for location-constrained resources, the Midwest ISO has not made a compelling case that a generator interconnection problem exists that cannot be fixed by the Midwest ISO properly implementing a long-term, forward-looking, comprehensive RECB I and RECB II planning process. The white paper fails to explain why the Midwest ISO does not focus on implementing its current planning process rather than trying to develop something different based on the California ISO approach. If the Midwest ISO had a workable, overall planning process in place, then the system would get expanded for reliability and economic reasons and there would be no need for a new policy to address concerns about "chasing the needs of the system."

In addition, in light of the FERC's recent approval of tariff changes to reimburse generators interconnecting to the transmission systems of ITC *Transmission*, Michigan Electric Transmission Company, and American Transmission Company for 100% of network upgrade costs, some workgroup members questions the need and appropriateness of applying the open season approach to these areas at this time. This new cost allocation policy changes the economics and regulatory framework for interconnections in these areas and, therefore, the problems identified by MISO to support the need for the open season approach may no longer apply. If the open season approach were applied, additional coordination and equity issues would need to be addressed.

Although the workgroup members have not reached consensus, the following comments are offered. We have included recommendations on particular aspects of white paper policy, as well as clarifying questions. Our comments focus on the generator subscription and commitment requirements, planning issues, and cost allocation. Before commenting on the specifics of the white paper, the OMS workgroups offer recommendations that the Midwest ISO's policy on changes to the generation interconnection queue process should:

- Strike a reasonable balance that addresses barriers to the development of location-constrained resources and includes adequate ratepayer

protections. As the Midwest ISO works out the details of an approach for addressing queue backlogs, it should keep in mind that the white paper proposal would shift risk to ratepayers and, therefore, specific ratepayer protections would be needed related to the subscription level, form of commitment, cost allocations, and consideration of a rate impact cap as discussed below.

- Ensure proposed solutions are designed to address the fundamental problems. For example, if the problem is that the cost of upgrades is too significant for small generators, making the facilities larger (and more costly) to serve a group of these generators without adequate mechanisms to mitigate the investment risk for participating generators may not lead to faster development of transmission facilities. Mitigating this risk should not simply shift the risk to ratepayers.
- Carefully consider and account for potential implementation issues in advance to avoid future controversies. A pilot project may be useful to identify and work through issues prior to full-scale implementation.
- Make a concerted effort to identify and implement other process improvements, including possible changes to the study procedures and methods, queue design, and communication protocols. The OMS workgroups appreciate that the Midwest ISO has initiated a special stakeholder task force to identify such improvements.

Specific Comments on White Paper Issues

Subscription Level – Page 13 of the white paper states that a commitment from generators representing “more than 50%, but less than 100%, of the overall capacity of the project” would be required to proceed with the project.² On page 15, however, the white paper states “a minimum threshold is expected to be 50%, with a maximum threshold somewhere less than 90%.”

To the extent the Midwest ISO’s position is the latter, the OMS workgroups question whether a minimum subscription requirement of 50% is high enough to proceed with construction. The potential for stranded investments appears too high under a 50% subscription level and the OMS workgroups are concerned that ratepayers will ultimately bear these costs through the rates of transmission owners, project sponsors who are load serving entities, or both. Even with participating generators paying one-half of the annual revenue requirement, if there is only a 50% initial subscription and the project does not become fully subscribed in the near future, the impact on transmission rates could be quite extreme because of the cost of the larger sized facilities and less-than-planned-for usage. This is especially a concern because rate base additions are not reviewed prior to inclusion in the formula rates of transmission owners and, in

² It is not clear in the white paper what is meant by “proceed with the project.”

some cases, flow through directly to retail customers. Even if these costs were not allowed to be automatically passed through the formula rates, FERC's abandoned plant policy allows utilities to seek recovery of 100% of costs associated with abandoned transmission projects if such abandonment is "outside the control of management."³ The Midwest ISO should keep in mind the ratemaking and transmission certification policies of many states in the OMS when addressing the minimum subscription requirement.

On page 15, the white paper states: "The goal of setting this [subscription] threshold will be to balance risk mitigation for the current participants, while maintaining a view of the need for future additional transmission in the same location." The Midwest ISO should make risk mitigation for ratepayers explicit in this goal. An appropriate subscription requirement is critical to ensure that ratepayers are not disproportionately bearing the risk of the Midwest ISO's proposal. With respect to the need for future additional transmission, a lower subscription level to accommodate additional capacity in the future may be warranted in certain cases where it is clearly demonstrated that the capacity of the Regionally Planned Generation Interconnection Project (RPGIP) is cost-effective and will accommodate specific legal or regulatory requirements. But the Midwest ISO has not proposed criteria in the white paper to determine the cost-effectiveness of such transmission expansions. When planning for future capacity, the Midwest ISO should also be mindful of technology changes in the coming years (e.g., batteries, plug-in vehicles, distributed generation, pumped storage, etc.) that could reduce the need for and cost-effectiveness of certain large-scale transmission expansions.

There is a significant amount of generation in the queue. If only a fraction of these developers are serious about following through with their proposed projects, it should not be difficult to reach a higher initial subscription level. That is, the demand for subscribing to a RPGIP should be sufficient to reach a relatively high initial subscription level. A high subscription level should be in the collective interests of the generators by distributing the generator share of costs among a larger pool and thereby lowering the costs for individual developers. Moreover, the OMS workgroups are not aware of barriers that would prevent subscription contracts from being transferred or sold to other entities willing and able to take over that commitment. The transferability of the subscription, coupled with appropriate "out clauses" contemplated in the white paper,⁴ would further mitigate risks to the initial pool of generators subscribing to the project and support having a higher initial subscription requirement than 50%.

Form and Timing of Generator Commitment – The white paper should clarify the form and timing of commitment by generators after additional stakeholder discussion. Page 15 states that "one possibility is posting credit for a certain

³ 116 FERC ¶ 61,057, FERC Order No. 679 at ¶¶ 163-165 (July 20, 2006).

⁴ See e.g., pp. 16-17, which discuss out-clause for changes in generator costs.

percentage of their share of the expected project cost.” We are not taking a position at this time whether posting credit is sufficient. It appears, however, that a contractual, binding commitment is appropriate given the magnitude and cost of the transmission projects contemplated in the white paper (at least 345 kV). Under the current generator interconnection cost allocation policy, generators have up-front “skin in the game” in the form of upfront financing of needed network transmission facilities. Given that the white paper proposal would remove that up-front financing, it is essential that the commitment by generators be binding and have financial consequences. Without a binding commitment, the risk may be inappropriately shifted to the transmission owner, project sponsor (if different than transmission owner), other generators and, ultimately, ratepayers.

Out-Clause for Generators – As the OMS workgroups understand it, the out-clauses discussed in the white paper would allow a potential generator that subscribed to the RPGIP to “opt-out” of the subscription and walk away from the project. It is not clear, however, whether the out clause could be triggered based on a change in the *total* project costs or the *portion* of costs for which an individual generator is assigned. The process overview sequence on page 14 suggests the subscription would be “binding with provisions to exit based on overall project cost” and page 15 states opt-out clauses are expected based on the “change in the level of generator costs beyond what was preliminarily indicated.” Also, what is the basis, timing, and process related to the cost estimate that is “preliminarily indicated”? Is this the same cost estimate that is referenced on p. 16 (i.e., based on the initial project capacity estimate developed through MTEP 08)?

Is there any penalty for opting out?

Given the near certainty that transmission project cost estimates will change, particularly as the project is refined, it may be preferable to have an out clause based on a threshold percentage change in the estimate.

Planning and Identification of Areas, Demand Assessments, and Projects – The white paper states that the transmission project will be evaluated through a “prudent grid planning process” and references the MTEP 08 futures planning process several times. Specifically, the white paper states that “RPGIPs will be evaluated under the process defined for MTEP 08, which includes scenario analysis of various futures, incorporates information about the current queue, and assesses value of transmission projects including economic and reliability measures” (p. 13). Further, the white paper states that “the MTEP 08 process, incorporating information about the current queue as well as scenarios around future supply and demand requirements, will produce an initial estimate of required project capacity” (p. 15).

Projects should be evaluated through a prudent planning process as acknowledged by the Midwest ISO. However, the Midwest ISO needs a more

targeted planning effort in which efficient levels of investment in specific areas can be agreed upon by stakeholders before initiating a RPGIP. Such a planning effort could be incorporated into the MTEP 08 process, but it would require substantial refinement, prioritization, and additional analyses such as deliverability and operational impact studies. The white paper may be overselling MTEP 08 and its direct usefulness in identifying specific RPGIP projects at least based on the experience with MTEP 08 to date.⁵

Although additional details will need to be addressed as this process evolves, the white paper is too vague with respect to the methods by which the size/demand and location of the RPGIP facilities will be determined either through MTEP 08 or a supplemental planning process.

Moreover, any prudent planning process should strive to meet renewable mandates and other planning goals in the most cost-effective manner, taking into account not only the renewable generation potential but also the transmission upgrade costs and operational impacts associated with different alternatives, and taking into account the potential availability of renewable energy credits for complying with state RPS requirements. Without such a planning effort, the OMS workgroups question the validity of the white paper's claim that the Midwest ISO's proposed approach "benefits electricity consumers by facilitating the *most* economic development of renewable generating resources through which the policies reflected in the RPS can be advanced" (p. 14, emphasis added).

The white paper states that the existing interconnection policy "creates a barrier to entry for generators that *must* be sited in remote areas due to the nature of their energy resource." (p. 12, emphasis added). While there are constraints on the ability of location-constrained resources to select sites to minimize transmission costs, generators have choices on where to locate and the transmission upgrade costs associated with these choices could vary significantly. Therefore, it is the duty of prudent grid planners to identify and propose least-cost solutions.

Eligibility Based on Existing Queue - Section 6 (page 11) explains that the current queue process is problematic in instances where the "optimally sized expansion, based on expectations of future market entry in the region, exceeds the capacity needed to support the known projects that have applied for Interconnection." This statement and others⁶ seem to conflict with Section 6.4 (page 15), which states that, "The Midwest ISO will utilize the generator requests currently in the queue to identify those projects eligible for participation in the initial phase of the RPGIP process." MISO is not being consistent on how it is

⁵ See e.g., p. 7, 11-12.

⁶ Section 4.2 appears to criticize the current policy because it allegedly identifies only upgrades needed to reliably interconnect "only the queued generator or generators."

going to use the queued projects and other projections of new generation in its project eligibility or selection criteria and subscription requirements.

Group Study Process - Section 5 of the white paper (p. 9), which describes the group study process, states:

Although this process has been effective in reducing study costs and in improving the ability to predict upgrade needs, it is not capable of realizing the most efficient interconnection driven upgrade plans for the grid on a long-term basis. Additionally, this process does not address the withdrawal of projects from the queue.

The white paper does not explain why it reached this conclusion. Is the Midwest ISO suggesting that the “efficient level” for purposes of this (real) example would have been to develop upgrades to accommodate all 604 MW or some other amount between 604 MW and the amount actually moving forward with the interconnection process (194 MW)?

In this example, was the problem with the up-front financing, the total upgrade cost, or some combination? This type of analysis could help the Midwest ISO more clearly define the problem and ensure an appropriately targeted solution.

Rate Impact Cap – In its location-constrained resource proposal filed with FERC, the California ISO proposed a rate impact cap.⁷ The cap provided that the total investment in the interconnection facilities included in transmission revenue requirement and the Transmission Access Charge (TAC) cannot exceed 15% of the sum total of the net high-voltage transmission plant of all participating transmission owners, as reflected in their transmission revenue requirements and in the TAC. In its declaratory order granting the California ISO’s petition, the FERC declined to rule on the rate impact cap and cited certain parties’ recommendations that the overall requirements be finalized through stakeholder process.⁸

A rate impact or other form of cap may be warranted under the Midwest ISO’s proposal as a way to mitigate risk to ratepayers, at least until the Midwest ISO has gained experience implementing the proposal. The need for the cap may depend, in part, on the minimum subscription requirement (i.e., the higher the subscription requirement the less need for a cap). The need for the cap may also depend on the potential rate impact on local areas (under a RECB I methodology) or MISO subregions (under a RECB II methodology). A cap should not be so restrictive that it defeats the fundamental purpose of the

⁷ *California Independent System Operator Corporation*, Docket EL07-33, Order Granting Petition for Declaratory Order, 119 FERC ¶ 61,061 (Apr. 19, 2007).

⁸ *Id.* ¶ 89.

RPGIP—i.e., to develop optimally sized transmission facilities to accommodate location-constrained resources. One option would be to have higher subscription requirements or require specific approval prior to including projects in rate base for projects that exceed the cap. The OMS workgroups do not have a specific proposed cap in mind and welcomes stakeholder discussion on this issue prior to any FERC tariff filing.

Cost Allocation Methods – The white paper appears to leave open the question of cost allocation for additional discussion and options. The document states that “Midwest ISO has proposed cost recovery consistent with the principles of RECB I” where half of the project costs would be assigned to generators and half would be rolled into transmission owner rates (p. 13). Under this approach, the portion allocated to transmission owner rates would be allocated using the LODF methodology (or 20% postage stamp, remainder LODF for ≥ 345 kV). The white paper also references other alternatives such as replacing the LODF portion of the allocation methodology with a methodology based on the principles of RECB II (economic benefits calculated using a weighted 70% production cost reduction and 30% LMP reduction).

Based in part on the LODF calculations performed to date to implement RECB I, the LODF methodology may disproportionately allocate costs to the local area where large amounts of wind resources interconnect and other local areas in close proximity to the RPGIP. Given the relatively remote location and small load of some of these areas, this may not be an equitable or reasonable outcome, so alternatives should be explored.

Section I of the white paper (beginning of page 5) claims that the proposed policy would not change the current cost allocation policy. While this may end up being true, the proposal changes the risk allocation policy by shifting it to ratepayers. This is done by removing the upfront financing by generators and making ratepayers ultimately at risk for stranded investment. None of the cost allocations discussed would ameliorate the risk shifting effect. This is why it is critical to build in the proper protections to mitigate this risk through the generator subscription and commitment requirements and an appropriately designed rate impact cap.

Transmission Revenue Balancing Account – The Transmission Revenue Balancing Account discussed in Section 6.3 (page 14) refers to costs flowing through to ratepayers. We would appreciate further explanation and examples of how this account would work.

Withdrawal Statistics – We found useful the additional information presented in the white paper on the withdrawal statistics since 1998, including the percentages of projects that are withdrawn at the various stages in the interconnection study process. However, it is necessary for a proper solution to have a breakdown of withdrawn projects by fuel type, size, location and by year.

This may help show the percentage of location-constrained resources withdrawn from the queue (by the various study phases) compared to other resources such as natural gas.

Section 5, Figure 5 (page 9) shows that 53% of projects drop out of the queue before any study was conducted. Additional clarification and discussion is warranted because this figure seems to demonstrate that the white paper policy would not have an effect on 53% of queued projects.

Treatment of Non-Renewable Generation – The white paper should clarify the definition of location-constrained resources and whether other generation sited in the area of the RPGIP is eligible to participate initially in the project or after the transmission facilities are constructed. The white paper states that “it is conceivable that other generation that is sited in these remote regions could connect to the RPGIP and would be eligible for the alternative rate treatment” (p. 12). The FERC declaratory order addressing the California ISO’s proposal found that once facilities are constructed, any generator is entitled to interconnect if not fully subscribed.⁹

Additional Clarifications / Questions

1. Section 1, paragraph 1 (page 1): Uses the word “regions” several times. That word should be changed to “locations” or something along those lines.
2. Footnote 2 on page 1 states that “Many Midwest ISO Load-Serving Entities, including municipally owned electric systems, are required to meet challenging RPS goals such as acquiring 25% of their electricity production from renewable resources by 2020. Although the reference to “many Midwest ISO LSEs” is preferable to the prior version of the white paper, which said “most Midwest ISO LSEs,” this statement is still misleading. This could be resolved by removing the “such as” portion or making it a different sentence that begins with “For example, some LSEs are required to acquire 25% of”
3. Section 1, Table on page 4: This table is somewhat misleading. It summarizes only generation interconnection policy, but would present a fuller picture if it summarized both RECB I and RECB II policy. In the third row, the Table refers to “generators operating.” It should say “generators planned for.” In the third row, the Table refers to “location constrained area.” The white paper needs to define this term and establish that as a requirement for the proposed policy treatment. This could be done as part of the criteria in Section 6.2.2. In the third row, the Table refers to “future capacity requirements.” The white paper needs to specify how long of a

⁹ *Id.* footnote 37.

- future the policy will feature (page 4 just says “over a long period of time”) and needs to specify how “capacity requirements” will be established.
4. Page 5 states that the Midwest ISO plans to include a description of its proposal in its Order 890 compliance filing in October 2007. The OMS workgroups wanted to confirm whether this date has been moved back to December 2007 (as part of Appendix K filing).
 5. Page 5 of the white paper states: “That input will be used to finalize a set of principles for the alternative treatment of certain transmission facilities that, if approved by the Midwest ISO Board, would be included in the Midwest ISO Transmission Expansion Plan.” The white paper should clarify that any such principles for the alternative treatment of transmission facilities would also require FERC approval prior to inclusion in the MTEP.
 6. To avoid confusion, Section 4.3.2 on page 7 should reference the alternative way for a generator to qualify for 50% reimbursement under the Midwest ISO’s tariff (i.e., generator has power contract to serve network load in the Midwest ISO for at least one year). In addition, the subsection uses the term “participating transmission owners,” which is not defined and appears to be in error as used in this context. Transmission owners that are allocated network upgrade costs under RECB I are not necessarily “participating.”
 7. Section 5 on Page 8 – What is meant by interconnection requests being “absorbed” by the Midwest ISO? Does this refer to interconnection requests that are assigned to the Midwest ISO by transmission owners following the formation of the Midwest ISO or does it include requests for interconnection requests on coordinated facilities (e.g., distribution-level interconnections that may impact transmission system)?
 8. Sections 6.1 and 6.2 on page 11 - These two sections of the white paper appear to provide two related but different definitions of RPGIP and should be reconciled.

Section 6.1 definition – A RPGIP is defined “as a Network Upgrade consisting of one or more transmission facilities that are needed to interconnect large concentrations of location-constrained resources, and that are sized to accommodate interconnections that will be using the upgrades based on current queued requests, long-term portfolio standard requirements, and assessment of other drivers of future capacity needs.”

Section 6.2 definition – This distinct category of transmission (referred to as “location-constrained generator supply transmission lines”) is defined as “high-voltage transmission facilities necessary

to interconnect large concentrations of location-constrained resources that are designed to overcome obstacles to the construction of transmission and achieve economies of scale for the development of a variety of resources.”

10. In addition, Section 4, paragraph 1 uses the term “location-constrained generation resources,” but there is no definition of this term.
11. Section 4, paragraph 1 (page 6) refers to a “potential alternative approach under which Generator Interconnection Projects that reliably integrate multiple Generators would receive initial financial support from an alternate source, the Project Sponsor.” This sentence should refer to multiple potential prospective generators, rather than “multiple generators.”
12. Page 17 states that the Midwest ISO will use the generator requests currently in the queue to identify those projects eligible for participation in the initial phase of the RPGIP process. If there is unsubscribed capacity, would generators not currently in the queue be eligible?
13. With regard to timing of the commitment, page 15 of the white paper states that “in the first round of the RPGIP, Generators will also nominate, indicating a commitment to participate in the project.” It is not clear what is meant by “first round.” This discussion on p. 15 should be tied to the process overview sequence (fig. 9), which has generator nominations starting at the same time as the sponsor nomination.
14. Would the flows of revenue under the Transmission Revenue Balancing Account discussed on p. 15 work the same if the project sponsor is a transmission owner as compared to a non-transmission owner?
15. On p. 16, the white paper states:

As additional generation resources are developed in the area and connected to the transmission facilities, cost recovery would be received from those generation owners through the TRBA. Upon interconnection, generators would begin to pay their pro-rata going-forward share of the costs over the life of the facility.

The OMS workgroups recommend clarifying the level of commitment that is required for these additional generation resources to reserve the capacity in the line until they are physically interconnected. Given that additional generators will not pay until they are interconnected, there should be a mechanism in place to bump a generator if they are not making reasonable progress toward interconnection and, therefore, not contributing toward the going-forward costs. Without such a mechanism,

- it would not be fair for the generators already connected to (and paying for) the line or other generators seeking to use the capacity.
16. The first paragraph on page 17, which refers to later generators facing steeper annual revenue requirements, seems out of place. It does not seem to correspond to the tables or examples on page 16-17. Both of these tables reflect the allocation to generators solely on the MW use in the line and the generator's interconnection date.
 17. Section 6.5 (p. 17) states that generation projects that do not obtain a power purchase agreement (PPA) will be able to follow the current generation interconnection process. It is not clear from this statement whether a PPA is required to participate in the RPGIP. In the process overview on page 14 (figure 9), PPAs are to be signed after the project starts.
 18. Existing Queue Processing and Alternatives – In Section 5 (page 8), the Midwest ISO seems to suggest that the current interconnection process takes too long, “up to 658 days.” Has the Midwest ISO explored alternatives to speed up the process? Are the studies too complicated? Could the process move faster if all parties involved wanted it to? Please explain.
 19. In addition, Section 5 (page 8) states “The alternative to starting the studies in parallel would be to wait until the prior study is at least in the facilities phase.” We question what other alternative policies may be available?