Comments of the Organization of MISO States on the Midwest ISO’s “Free Rider” Questions

August 14, 2007

1) Does OMS concur that the border utilities receive benefits from their neighboring RTO, but pay disproportionately less for them than the load of Transmission Owners in the RTO?

- Analysis is based on theory, not evidence
- Theoretical benefits must be quantified before charges can be proposed
- Five kinds of theoretical benefits are discussed in the Illinois staff analysis following this summary
  A. FERC Administrative Charge
  B. RTO Market Operation Charge
  C. Tariff Administration/Reliability Coordination Charge
  D. “Spill-Over” Effects of Regional Transmission Planning Transmission Upgrades
  E. Loop Flow

2) Does OMS believe the proposed introduction of tiered pricing would help mitigate the imbalance?

- Additional data is needed to show that proposed rates would match the nature and magnitude of the problem.
- Alternatives should be explored.
- The problem with the inequity in the allocation of the ferc administrative cost charge would best be taken up with ferc in a joint rto filing.
- The imbalance of benefits and costs of the midwest iso’s market administration charge and transmission tariff/reliability coordinator charges has a range of potential solutions discussed above and we urge the midwest iso to collect more data on the problem and develop more details on the potential solutions.
- The transmission planning spill-over issue may largely solve itself as transmission planning and development improves in neighboring systems.
- The loop flow problem should be further analyzed, taking into consideration the issues raised in the individual state discussions, attached.
3) Does OMS have an opinion on the proper basis for establishing the higher administration cost to be charged?

- Before developing a tiered charge proposal that would be susceptible to challenge on discriminatory grounds, the miso should better describe the alleged problem and explore the range of potential solutions. The miso should also be able to identify and quantify the level of benefits it provides to external market participants.

4) Does OMS have an opinion as to which stakeholder group under the Advisory Committee structure should review any tiered pricing proposal?

- No, although the transmission owners committee should be involved.

5) Does OMS believe that a vote on the merits of any tiered pricing proposal be taken by the Advisory Committee prior to its submission to the Federal Energy Regulatory Commission?

- Yes, but the miso should fully share its rationale and data analysis with the group soon enough to allow study before the vote.

**OMS members supporting these comments:**

Illinois Commerce Commission  
Indiana Utility Regulatory Commission  
Iowa Utilities Board  
Kentucky Public Service Commission  
Michigan Public Service Commission  
Minnesota Public Utilities Commission  
Missouri Public Service Commission  
Montana Public Service Commission  
Nebraska Power Review Board  
Public Utilities Commission of Ohio  
Wisconsin Public Service Commission

**OMS members not participating:**

Manitoba Public Utilities Board  
South Dakota Public Utilities Commission.

**OMS members abstaining:**

North Dakota Public Service Commission  
Pennsylvania Public Utility Commission
A. FERC Administrative Charge

We agree with the Midwest ISO that the allocation and recovery of the FERC administrative charge is inequitable as applied to load within an RTO. Outside of RTOs, the FERC administrative charge is levied only on FERC-jurisdictional wholesale transactions and unbundled retail transmission. Inside RTOs, the FERC administrative charge is levied on all load. This arrangement sets up disincentives for load serving utilities to join an RTO and incentives for load serving utilities to leave an RTO. We recommend that the Midwest ISO join with the other RTOs/ISOs and their load serving members in a Section 206 filing to FERC to change the current method for allocation and recovery of the FERC administrative charge. If the proper foundation were laid beforehand, it is likely that such a filing would receive extensive support from state commissions and consumer advocate organizations in RTO/ISO states.

B. RTO Market Operation Charge

With respect to market operation costs, it is true that any market participant that schedules in the Midwest ISO market pays the FERC-approved market administration charge in Schedule 17 of the Midwest ISO’s tariff. This is as true of market participants outside the Midwest ISO as it is of market participants inside the Midwest ISO. In order for the RTO market to operate efficiently, all of the load and generation of the market participants within the RTO is submitted to the RTO market and bears the RTO’s market administration charge. However, for market participants outside the RTO, their load is charged the RTO’s market administration charge only for the transactions entered into through the RTO market.

The fact that all load and generation that schedules in the RTO market pays the RTO administrative charge doesn’t answer the question of whether the benefits and costs of the Midwest ISO market are appropriately allocated among market participants inside and outside the Midwest ISO.

By coming together to form an RTO market, and by contributing the components that the RTO uses to make a market (transmission functional control and rights to generation dispatch) the market participants within an RTO enable the benefits of the RTO market to be created. By not joining the RTO and by not bringing valuable transmission and generation assets into the RTO market, the market participant outside the RTO obtain many of the same benefits of the RTO market by being able to sell and purchase energy on the margin. However, their contribution to the administrative costs is only made on the margin.

Four potential resolutions come to mind regarding the imbalanced relationship between market participants inside RTOs and market participants outside RTOs. First, FERC could require all transmission-owning utilities to be members of RTOs. Second, market participants outside of RTOs could be restricted from access to the RTO’s spot market price and could be limited to transacting with market participants inside RTOs only on a bilateral basis, rather than a market basis. Third, attempts could be made to assess the value that the existence of the RTO market creates for the market participant outside the RTO and an additional charge (above and beyond that currently charged) could be levied on those market participants to better align charges levied and benefits received. Fourth, RTO spot markets could be eliminated.

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* The Michigan Energy Markets staff supports this analysis. The Missouri PSC does not endorse this analysis.
FERC has already made a run at establishing standard market design and universal RTO participation. That didn’t go over well and there is no indication that this approach is any more capable of implementation now than it was then. The fourth approach would be like cutting off the proverbial nose to spite the proverbial face. While the RTO markets provide benefits to the market participants within the RTO, they also provide benefits to others outside the RTO who do not pay proportionately to the benefits they receive. Eliminating those benefits by eliminating the RTO markets would be counterproductive. That leaves options two and three.

Option two would appear to accord with FERC policy because, in Order 890, FERC established that open access transmission provided on the basis of bilateral transactions is a perfectly acceptable manner of providing transmission access. There does not appear to be any reason why RTOs should hold themselves to a higher standard by providing transmission access to market participants outside the RTO that is arguably of a higher quality (by enabling spot markets with locational marginal pricing) than the transmission-owning market participants outside the RTO provide to the market participants inside the RTO. Market participants inside RTOs who have joined together to create and support markets would get the benefit of their efforts, but market participants outside RTOs who have not made such contributions would receive the type of market access that they provide to others. The down side to this approach is that generators outside of the RTO may opt to not participate in the RTO markets and in effect, reduce the amount of generation made available in RTO markets.

Option three, which is the “tiered charge” approach suggested by the Midwest ISO, would appear more likely to elicit accusations of undue discrimination when compared to option two. Arguably, market participants outside the RTO should pay RTO market administration fees calculated on the basis of their entire load. However, the difficulty would lie in accurately assessing the value that the participation by those outside the market contributes to the benefits of the RTO. Without analysis that identifies and quantifies benefits from outside participation, the RTO will not know at what level to set the access charge. If it sets the charge too high, then outside entities will not participate in the market, and the market will lose the benefit of their participation and this approach reverts to option 2. If the RTO sets the charge too low, then market participants within the RTO will be cross subsidizing the participation of those outside the RTO, incurring costs that exceed the benefits received from outside participation.

C. Tariff Administration/Reliability Coordination Charge

RTOs have made unprecedented investments in system modeling software and communications equipment to perform their tariff administration and reliability coordination responsibilities as well as to operate real time and day-ahead markets that contribute to maintaining system reliability. These investments and the operations they support provide widespread benefits because the power grid in the Eastern Interconnection is tightly networked.

Load in areas bordering RTOs arguably benefit as much, or nearly as much, from these RTO investments and operations as does load within the RTO. Nevertheless, it is load within the RTO that bears the burden of these costs.

The potential solutions to this misalignment of costs and benefits include assessing a surcharge on the beneficiaries of the reliability services that the RTOs provide from their investments in such resources.
However, this solution may require the RTO to be able to quantify the reliability benefits it provides to balancing authorities outside its geographic scope. It also raises very difficult questions regarding the level of interconnection that the outside balancing authorities have with the RTO.

D. “Spill-Over” Effects of Regional Transmission Planning Transmission Upgrades

RTOs have put in place detailed and elaborate regional transmission planning processes that are continually undergoing further improvement. These RTO transmission planning processes generally cover a much broader geographic scope than do the planning processes of individual transmission utilities outside RTOs. The RTOs’ planning processes also attempt to serve a much broader range of stakeholder interests than do the traditional individual transmission utility planning processes.

To the extent that these regional RTO planning processes result in development of a more robust transmission network than would otherwise have been the case, then these regional RTO planning processes produce benefits that would not have otherwise been produced. Because the transmission grid is a network, the beneficiaries of the network upgrades resulting from the RTO’s regional transmission planning process are likely to be broadly distributed and may well include beneficiaries outside of the RTO.

Measuring these benefits of RTO transmission planning processes and transmission upgrades that flow outside the RTO may currently be difficult and uncertain. We support efforts to improve RTOs’ capability to measure such benefit flows across the seams of an RTO.

We also note the FERC’s efforts in Order 890 to improve the transmission planning processes in areas outside RTOs. If that effort is successful, the gap in quality between the transmission planning processes outside RTOs and inside RTOs should diminish over time. As the robustness of the transmission grid outside RTOs improves, the disparity in the flow of benefits between RTO regions and non-RTO regions should become more equalized.

E. Loop Flow

PJM’s testimony and comments in FERC Docket AD06-9 provide a detailed and informative discussion of the loop flow problems faced by RTOs.

Electricity does not flow according to contract paths, but, rather, obeys Ohm’s law and flows along the path of least resistance. Loop flow results from actual flow patterns that are significantly different from scheduled flows due to the physical reality of the transmission system. The power system could be operated more efficiently and reliably if all flows were properly accounted for based on the physical characteristics of the transmission grid.

System operators can only control loop flows through proper real-time dispatch, and the industry can only achieve a “solution” to the loop flow problem if it develops a system that provides for the most efficient available dispatch to control loop flows and allocates the associated costs for that service on the parties to the transaction to which the loop flow is attributed. There is currently a considerable disparity in the congestion management process by the RTO’s LMP-based market vis-à-vis what it receives in turn from the contract-path market. Continued use of the contract-path TLR method as the basis for addressing inter-control-area loop flows has meant that the LMP-based markets have been required to adapt to a method that meets the
minimal needs of contract-path markets but is unsuited to and inadequate for the needs of LMP-based markets. This disparity results in an unequal cost burden.

The Midwest ISO and PJM have developed a dynamic congestion management approach for flows between their systems as set forth in their Joint Operating Agreement. There does not appear to be a technical obstacle why neighboring systems could not also adopt such a joint congestion management approach. Such an approach would better account for actual interregional power flows and confer greater general benefits without requiring any alternations to the market designs in control areas that do not have organized markets.

We recommend that the Midwest ISO pursue the following approach for dealing with the loop flow issue: (1) advocate for the collection and sharing of data on power flows by transmission operators throughout the Eastern Interconnection; (2) urge the adoption of requirements for all transmission operators throughout the Eastern Interconnection to report the flow impacts of their control area generation dispatch to serve load as well as inter-control-area transactions with flow reporting entered into the NERC IDC for all impacted flowgates; (3) continue to emphasize to FERC and the state commissions the economic and reliability costs of not solving these loop flow problems; and (4) redouble efforts to reach seams agreements with neighboring transmission operators to adopt and implement interregional congestion management protocols based on the approach reflected in the Midwest ISO/PJM Joint Operating Agreement.
IOWA STAFF QUESTIONS FOR MISO†

The regulatory sector might ask MISO the following questions to provide more information:

1. What data and conceptual analysis do you have to justify the conclusion that border utilities do not pay their fair share?

2. Have you integrated into your analysis the benefit that MidAmerican Energy Company (See comments filed in March 29, 2007 technical conference, AD07-7) argues border utilities bring to MISO? If not, how would this alter your prior analysis?

3. Have you integrated into your analysis the costs and curtailments imposed on non-RTO-members by the RTO for which there is no compensation? If not, how would that alter your prior analysis?

4. While apparently agreeing with MISO that something should be done to make sure border utilities are paying their own way, PJM reasons that the RTO administrative fees aren't the real issue and more appropriate avenues of reform exist. What other mechanisms have you considered and what reasons (and analysis) exist to justify their rejection.

5. How might the tiered pricing regime, and non-RTO members’ likely responses thereto, affect reliability?

† The Iowa Office of Consumer Advocate joins in the submission of these questions.
OHIO PUC STAFF ADDITIONAL COMMENTS:‡

The term “free-rider” should not mean getting transmission service for free because all users pay for transmission service. The term better reflects the notion that some transmission owners and operators do not charge all users for the total impact they create on the interconnected system and therefore, are receiving “free” transmission service. This “free” service occurs because of the lack of information shared between interconnected owners and operators. The transmission service charged to a transmission user by one transmission owner or operator may not accurately reflect the effect all users have on their part of the system. Because individual owners and operators on the interconnected system do not share modeled impact data of their users, all share in the “free-rider” issue. PJM and MISO have taken steps to partially address this issue by sharing day-ahead and real-time dispatch and system model information that allows each RTO to model transmission service requests impact on each other. That sharing of information allows each RTO to see the effect of users outside their part of the system have on their piece of the system and allows each to charge each other appropriately. Re-dispatch in one RTO will affect the dispatch in the other RTO as well as other neighboring transmission owners and operators. MISO and PJM also have agreements with other neighboring transmission owners and operators that allow limited sharing of real time system modeling information as do other system operators. System operators constantly monitor and balance the effect users have on one part of the interconnected system with another parts of the system to keep the system reliable. This balancing act is dynamic and not accurately reflected in the transmission service charges which are based upon the cost of transmission plant and annual O&M costs of the owner or operator. RTOs administer their individual members transmission owner’s transmission service charge so there is no “free-rider” issue for service from one member to another within the RTO. All transmission user service among transmission owners within the RTOs are reflected and accounted for by the RTO. Individual transmission owner do not have “free-rider” issues within their piece of the system because there is no internal transmission service charge. The “free-rider” issue only occurs between parts of the interconnected system that are operated by different system operators.

Ohio PUC Staff recommends that MISO continue to develop day ahead and real time information sharing between neighboring system operators along with revenue quality metering of power flow into and out of their part of the interconnected transmission system. MISO should work towards developing a FERC approved cross border tariff that account for cross border energy flows not covered under the energy market tariffs. Current transmission service tariffs only charge those who request transmission service from the transmission owner or operator and do not capture real time energy flows that are not captured under energy market tariffs, bilateral contract obligations or point-to-point contracts.

‡ The Iowa Office of Consumer Advocate joins in the submission of these comments.