

Chuck and Adam,

A request was made at the July 15<sup>th</sup> 2015 MISO PJM IPSAC meeting for stakeholders to prioritize near term JOA Process and Metric issues starting from the feedback collected thus far. Very similar feedback to what is listed below was submitted to the RTOs in October 2014.

Some IPSAC participants believe it is unproductive to pursue an agreement on process and metrics between the RTOs for concepts like efficiency, reliability, and public policy, because they believe in the end regional differences or preferences will overrule. In contrast, **NIPSCO and others believe that it is unproductive to hide behind regional differences or preferences which has not and will not result in interregional projects.** The focus should be on common drivers for both RTOs and agreed upon JOA metrics and processes with no regional process or projects dependencies. We believe a process such as this will provide the best chance for effective interregional planning and true compliance with Order 1000.

If multiple benefit types could be measured and summed for interregional projects (reliability, efficiency, public policy, etc.) addressing interregional needs, that would accommodate any philosophical differences in regional project type definitions and would be independent of any identified regional needs or the existence regional projects. **NIPSCO believes there should be only one interregional test to become an approved interregional project and that any regional tests should be removed.**

To that end, NIPSCO would like to know what will become of these efforts to enhance MISO PJM JOA Metrics and Processes. Will the JOA be re-opened for changes after the Order 1000 interregional compliance filing? PJM and MISO need to provide deliverables, dates, work plans, etc. to facilitate the needed changes to IPSAC processes and metrics.

As far as achieving a blended single interregional metric for market efficiency projects, the split, APC to NLP, is not as important as the way in which APC and NLP are actually formulated. The current 70/30 split makes sense in that MISO uses 100% APC and PJM uses 100% NLP or 50/50 APC/NLP depending on the size of the project.

What is critical to a truly Order 1000 compliant process is proper metrics formulation. **There are critical metric formulation errors that need to be corrected as soon as possible.** And in this case, specifically the congestion hedging formulation built into the JOA benefit metrics. Currently the JOA APC waters down the measured savings by assuming all area to area exports/imports with an RTO are fully hedged. For the JOA NLP, the hedging assumption formulation can result in benefit measurements in opposition to reducing congestion costs. The focus for each metric APC or NLP should be to capture the additional savings to un-hedge-able congestion from a project. Stated another way, the estimated congestion exposure from infeasible ARRs/LTTRs and M2M payments should be taken into account. This additional savings from making un-hedge-able congestion hedge-able would then be simply added to classic measures such as total production cost and gross load cost savings to reformulate the JOA APC and NLP metrics. Furthermore the metrics should be in line with total congestion cost relief measures, more directly formulated as far as congestion hedging, and not prone to errors by being overly theoretical. Relieving congestion, after all, is the direct goal of the economic studies.

Specifically for the Net Load Payment formulation;

$$NLP = \sum(\text{Load MW} * \text{Load LMP}) - (\text{Load LMP} - \text{Gen LMP}) * \text{Min}(\text{RTO Gen}, \text{RTO Load})$$

allows the estimated value of an RTO's transmission rights below, as described in the JOA, to exceed the RTO demand congestion embedded in  $\sum(\text{Load MW} * \text{Load LMP})$ .

$$\begin{aligned} \text{Estimated value of an RTO's transmission rights} = \\ (\text{Load LMP} - \text{Gen LMP}) * \text{Min}(\text{RTO Gen}, \text{RTO Load}) \end{aligned}$$

This formulation error was observed in many of the IPSAC solutions, resulting in negative NLP savings for projects that reduced congestion and positive savings for projects that increased congestion.

For example if  $\sum(\text{Load MW} * \text{Load LMP}) = 100$  initially and congestion credits = 10 then NLP = 100 – 10 or 90 initially. Now with some project in service let's assume...

$$\sum(\text{Load MW} * \text{Load LMP}) = 95 \text{ and congestion credits} = 0$$

then NLP = 95 – 0 or 95. Which is a savings of negative 5 for a project that reduced congestion by 10 and saved 5 in gross load costs. This is a big problem.

### **Clarifications on the IPSAC Presentation**

Please add to the metrics Issues list (slide 37), "Alignment years of benefits to a minimum of 20 years with a maximum planning horizon of 25 years".

Also on slide 37 add NIPSCO to "Reduce/remove \$20M threshold".

On slide 38, remove NIPSCO from "Alignment of regional process metrics/processes" – we only want to align regional and interregional studies to the extent that interregional projects can be fed into regional approvals and not lag a planning cycle.

Comments on slide 40, RTO Thoughts – Initial Discussion and slide 41, RTO Thoughts - Longer Term Discussion

We are unclear what the numbers (3, 2, and 1) are behind the "Number of evaluations" of Current process (3), Regional only (2) and Interregional only (1). Clearly from the feedback four (4) stakeholders want "Evaluation only in the interregional process – remove regional processes". This should be an initial discussion item and not a long term discussion item.

### **JOA Metrics/Process Enhancement Priorities**

#### **Priority #1**

- There needs to be only one inter-regional metric for cross border Market Efficiency Projects instead of the current process with three tests (inter-regional + two individual regional tests). The regional processes are disconnected and measure opposing sets of benefits that don't align around constraint mitigation.
- The metrics need to be inclusive of upgrades 100kV and above, cost thresholds aligned at \$5M and no less than 20 years of benefit with a maximum planning horizon of 25 years.
- Align M2M determination criteria with eligible flowgate criteria (Add 25% of NMRTO market flow (to flowgate rating) to 5% GLDF
- The metrics need to capture both short term and long term costs including, but not limited to congestion relief, inter-RTO (M2M) payments, and value of firm entitlements hedging against further inter-RTO (M2M) payments.
- Models need to be benchmarked against results from real-time operations
- Consideration should be given to the impact pre-existing outages

#### **Priority #2**

- Eliminate or heavily reduce hedging assumptions inherent in the current approach to calculating NLP and APC. These hedging assumptions heavily discounts or even eliminates the benefits to relieving constraints on shared seams facilities utilized by both RTOs for their internal transactions (i.e., PJM generation to PJM load, MISO generation to MISO load). These facilities are the same ones that are chronic bottlenecks impacting the two markets independently, but also require market-to-market binding and re-dispatch to maintain the combined flow from the two RTOs within the physical limits of the facilities.

### Priority #3

- Siting of new generation beyond those with signed interconnection agreements in order to meet an RTO's planning Reserve Margin requirement can highly impact the study results. The location chosen for these theoretical generating units can help or hurt existing congestion and thus impact the benefits derived from a proposed project. Does it make sense to maintain the Planning Reserve Margin or would it be more appropriate for the RTOs to maintain an average experienced reserve margin (for example, a reserved margin based on capacity reserves historically available during summer peak)? NIPSCO believes use of the averaged experienced reserve margin ensures an approach more aligned with experience from operations, which would also reduce the need for hypothetical generation siting at uncertain locations

### Priority #4

- The generation retirement study process needs to be formalized as does the cost allocation methodology for upgrades identified during the study process.

### Priority #5

- Inter-regional planning cycle should be incorporated into the RTO planning cycles to ensure consistency in and coordination of data, modeling, and input assumptions.

### Priority #6

- There should be consistency between the MISO and PJM planning analyses in the application of reliability criteria and modeling assumptions. MISO and PJM planning analysis should be consistent in how they address:
- The generation interconnection process – specifically, there need to be alignment on proper generation dispatch assumptions.
- Reliability – the analyses must ensure that preferences contained in individual RTO processes are studied and that the RTO who employs reliability measures that may be stricter is able to fund upgrades needed to maintain its preference.