Loop Flow Study Phase II Joint and Common Market Initiative

Joint Stakeholder Meeting February 1, 2008





- Enhanced Situational Awareness Will provide Reliability Coordinators with real-time information on the sources of loop flow over a wider area.
- Enhanced Reliability Will enable a more reliable approach to managing transmission congestion than is possible with the current TLR approach.
- Enhanced Economics Will not only ensure a solution to resolve congestion is always achieved but will also ensure that the most economical solution is also achieved.



Loop Flow Study Phase I – Follow-up

- Phase I Study Follow-Up
 - Additional written comments were received from IESO on January 2, 2008. These comments have been posted on the JCM Website at <u>http://www.jointandcommon.com/documents/documents.html</u> under the heading Loop Flow Report Comments and Dissenting Opinions.
 - No comments have been received from NYISO and TVA on the Phase I Report.
 - Met with FERC staff on September 5, 2007, to provide them an overview of the Loop Flow Study Phase I report.
 - Develop appropriate action items based on recommendations from the Loop Flow Phase I Study report. These action items will be tracked and progress will be reported to the JCM Stakeholders. No additional action items have been identified at this time.



February 1, 2008



Phase I Recommendations

Recommendation

- Commissioning of the Michigan-Ontario PARs as soon as possible to mitigate the loop flows around Lake Erie.
 - PJM/NYISO and NYISO/IESO commit to review NY/PJM and St. Lawrence PAR operations to assess contributions to Lake Erie Loop Flow.
 - The four parties will develop a comprehensive plan on the operation of the Michigan-Ontario and NYISO/PJM PARS to control loop flows around Lake Erie.

≻Status

February 1, 2008

- Facilities Agreement has been signed by transmission owners.
- Midwest ISO and IESO are developing Standard Operating Procedures for the PARs.
- > Target is to have PARS Operational by June 1, 2008.





Recommendation

IESO and NYISO should adopt a Congestion Management Process whereby they report their market flows to the IDC and participate with Midwest ISO and PJM to manage circulation flows around Lake Erie when congestion occurs.

≻Status

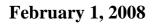
- IESO has stated they want to have the Michigan Ontario PARs Operational to determine if that will resolve loop flow on the interface before any further consideration of implementing a Congestion Management Process.
- PJM and NYISO staff have discussed the potential implementation of a market-to-market coordination process.





Recommendation

- Create an Energy Schedule Tag Archive that contains tag impacts, market flow impacts, and generation-to-load impacts for flowgates in the IDC.
- Status
 - RTOs submitted whitepaper to NAESB which discusses this recommendation which has been included as a supporting documentation for line item in NAESB's 2008 Wholesale Electric Quadrant's Annual Plan.
 - A request to the IDC Working Group for additional tag information is currently under development.







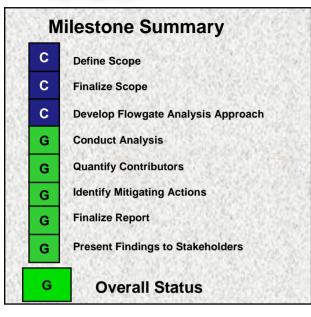
Loop Flow Study Phase II Summary

- The purpose of the Phase II Study is to develop mechanism to identify and a deeper understanding of loop flows on key flowgates as a result of:
 - Transmission Tags
 - Market Flows
 - Generation-to-Load Flows
- Flowgates included have a history of:
 - Significant Transmission Congestion
 - Significant Market-to-Market flows
 - > High number and/or duration of TLR implementation
- Midwest ISO and PJM are performing the study in coordination with other Reliability Coordinators and Transmission Owners impacted by loop flows.
 - Study efforts are currently on track for completion and presentation in June
- Develop additional mitigation strategies to better manage loop flows in realtime operations.
 - > Develop the ability to predict loop flows based on system conditions



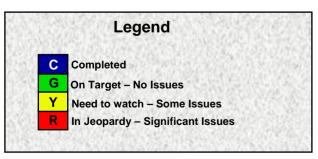


Loop Flow Study Phase II



JCM Lead

- Midwest ISO: T. Mallinger
- PJM: S. Williams



KEY ACCOMPLISHMENTS

- Midwest ISO and PJM identified list of 35 flowgates to be included in study.
- Reviewing use of internal EMS model for loop flow study.
- Investigating the use of PROBE Software to conduct this analysis.
- Identifying time frames to conduct analysis.

UPCOMING ACTIVITIES

• Review data access requirements to obtain tag data, NNL data, and market flows.

ISSUES & CONCERNS

• None at this time.





