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MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, INC.

November 12, 2003

Matt Donnelly
Pacific Northwest National Laboratory

Sent via email: Matthew.Donnelly@pnl.gov

Dear Mr. Donnelly:

Ref: Organizing the EIPP Working group.

1. Name your company's representatives

William Philips, Vice President of Operations is the designated representative.
Dale Osborn, Reliability Studies Technical Manager is the alternate.

2. Recommendations on vision.
    a. Long term goals
        i. Establish tools that can be used to manage oscillations and the results of large area power transfer interruption
        ii. Enhance present tools with better data
        iii. Produce better models efficiently and accurately
    b. Objectives for the next twelve months
        i. Determination of the need for Governance requirements
        ii. Comprehensive demonstration of the concept and operations
        iii. Use the data obtained from EIPP for State Estimator state estimation on a limited basis
3. Suggestions for other key utility and ISOs who should participate.
    a. Ontario- IMO, HydroOne
    b. Manitoba Hydro
    c. Saskatchewan
    d. Western Area Power Administration, Upper Missouri Basin
    e. Mid America
    f. Nebraska Public Power District
    g. Omaha Public Power District
    h. SERC
4. Top 3 project priorities
    a. Determination early on whether this is a demonstration project or the start of a new generation of operational hardware and software. Is the initial system to be complete enough to have near term practical uses or is the project projected to be a very slow evolving process.
    b. Determination of the ability to share data, confidentiality, proprietary claims
    c. Determination of budget, time, resources requirements
5. Technical Teams that should be formed
    a. IT Teams-Project Manager

1. Communications
2. Server Hardware
3. PMU and Data Concentrator hardware
4. Application requirements

b. Reliability Coordination/Dispatch
   i. Oscillation detection and mitigation
   ii. Large phase angle detection and trends
   iii. NERC Type Bubble diagrams with all the transactions shown-large scale observability.

c. Market Operations
   i. Backup for State Estimators
   ii. Carry through for primary failures
d. Planning
   i. Data assembly for post mortem analysis and other studies
   ii. Model verification
   iii. Control monitoring for performance
e. Operations Engineering
   i. Data assembly for studies
   ii. Model verification
f. State Estimator
   i. Model verification
   ii. Possible AC state estimation
g. Protocol definition

Sincerely,

William C. Phillips
Vice-President, Operations