

Research Initiatives Task Team (RITT)

October 16, 2008

Accomplishments

- > Developed a high-level NASPI Research Roadmap
- > Developed a website for Research Repository
- > Researcher Test Data Sets Requirements
- > Glossary of Terms has been developed
- > Calendar of Events on NASPI website
- > Helped to facilitate following seminars
 - 6/17/2008 - Calibration and Live Demo of Converted DFR to Phasor Measurement Unit
 - 8/1/2008 - Performing Small Signal Stability Analysis (SSSA) on PMU Data using RTDMS
 - 9/10/2008 - Connecting SEL Relays with PMU functionality to the NASPI Data Concentrator
- > Helped facilitate brainstorming session

Brainstorming Session

Operations

PMU data measurements, quality & validation	18H, 2M, 0L
State measurer vs State Estimator	9H, 11M, 0L
Voltage stability monitoring	10H, 6M, 0L
Hierarchical voltage operation	1H, 3M, 10L
Closed loop control to optimize switching	1H, 7M, 9L
Automatic control vs operator	0H, 9M, 10L
Voltage margin vs sensitivity analysis	9H, 7M, 1L
Meaningful alarms	17H, 4M, 0L
Equivalent models	6H, 8M, 2L
New information from phasors (Q)	0H, 5M, 5L
Real time control	1H, 9M, 4L
SPS	1H, 9M, 4L
Operator interface	18H, 1M, 0L
Restoration – resynchronization using phasors	2H, 9M, 8L
Congestion management	3H, 5M, 6L

High, Medium, Low in terms of priorities

Brainstorming Session

Planning

Secure System Space	7H, 5M, 0L
Modeling Issues	12H, 4M, 0L
Next Generation Measurement Devices	3H, 2M, 9L
Visualization tools (incl. for planners)	2H, 7M, 5L
Decision Making tools	14H, 3M, 0L
Fast Restoration	2H, 6M, 6L
Adaptive Protection/control	7H, 9M, 2L
Coherency Analysis/least cost oscillation damping	5H, 5M, 4L

High, Medium, Low in terms of priorities

RITT

Plans for Next 6 Months

Finalize Researcher Test Data Sets Requirements

Continued to help populate research website and repository

Explore opportunities for collective funding of top priority research projects identified by RITT

Establish closer links with IEEE, CIGRE, CERTS, PSERC, and other research organizations

Provide a summary of research and development activities conducted by leading vendors and countries

Submit a paper to a leading industrial journal disseminating RITT activities

Start publishing a once in 6 month digest of projects submitted to the Research Repository.

Continue to develop test data sets available for all researchers/vendors