<table>
<thead>
<tr>
<th></th>
<th>Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2</td>
<td>2010 Metrics and Goals</td>
</tr>
<tr>
<td>3</td>
<td>NASPI Mission Statement</td>
</tr>
<tr>
<td>4</td>
<td>Research Repository</td>
</tr>
<tr>
<td>5</td>
<td>Success Stories</td>
</tr>
<tr>
<td>6</td>
<td>Researcher NDA</td>
</tr>
<tr>
<td>7</td>
<td>Research Presentations</td>
</tr>
<tr>
<td></td>
<td>a. J. Ma/Y. Makarov (10 min)</td>
</tr>
<tr>
<td></td>
<td>b. A. Chakrabortty (10 min)</td>
</tr>
<tr>
<td>8</td>
<td>Brainstorming session</td>
</tr>
<tr>
<td>9</td>
<td>Action Items</td>
</tr>
</tbody>
</table>
## RITT 2010 Goals and Metrics

<table>
<thead>
<tr>
<th>Goal #</th>
<th>Goal</th>
<th>Metric</th>
<th>Deliverable</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Revise Mission statement</td>
<td></td>
<td>June '10 (NASPI Vancouver meeting)</td>
<td>Lisa Beard, Joe Chow</td>
</tr>
<tr>
<td>2</td>
<td>Populating research repository</td>
<td>Add at least 50 more entries; update the Wikipedia entries; write paper to publicize repository</td>
<td>December '10</td>
<td>Luigi Vanfretti, Yuri Makarov</td>
</tr>
<tr>
<td>3</td>
<td>Researcher NDA</td>
<td>5 research groups signing document</td>
<td>December '10</td>
<td>Alison Silverstein</td>
</tr>
<tr>
<td>4</td>
<td>Research PMU database of historical events</td>
<td>Determine what information will be available in data sets; 5 data sets (disturbance, blue sky) made available</td>
<td>December '10</td>
<td>Alison Silverstein, Lisa Beard (EI), Farrokh Habibiashrafi (WECC)</td>
</tr>
<tr>
<td>5</td>
<td>PMU siting guidelines</td>
<td>White paper</td>
<td>June '10 (by NASPI Vancouver meeting)</td>
<td>Dejan Sobajic, Lisa Beard, Joe Chow, Luigi Vanfretti</td>
</tr>
<tr>
<td>6</td>
<td>Success stories</td>
<td>5 stories written up and posted</td>
<td>December '10</td>
<td>Zeb Tate, Krishnanjan Dubba Ravikumar, Teresa Carlon</td>
</tr>
<tr>
<td>7</td>
<td>Rearch topics and priorities</td>
<td>Evolving and up-to-date list</td>
<td>Ongoing</td>
<td>Joe Chow, Lisa Beard</td>
</tr>
</tbody>
</table>
NASPI Mission Statement

NASPI Vision and Mission Statements

Our Vision...

- The vision of the North American SynchroPhasor Initiative is to improve power system reliability through wide-area measurement, monitoring and control.

Our Mission...

- The Work Group’s mission is to support the creation a robust, widely available and secure synchronized data measurement infrastructure for the interconnected North American electric power system with associated analysis and monitoring tools for better planning and operation, and improved reliability.
2010 NASPI Roadmap for Synchrophasor Applications

- PMU Placement Strategies
- Angle/ Frequency/Voltage/Flow Monitoring, Trending & Alarming
- Mode Meter and Mode Shape Identification
- Steady-state System Baselining (e.g., based on angle separation)
- Applications for Renewables &DG
- Event & Performance Analysis
- Phasor Data Network & Storage
- System Dynamic Model Validation
- Smart Grid Applications
- Voltage Stability Monitoring
- Frequency Response Monitoring
- Dynamic Nomograms
- Improved State Estimation

- Advanced Remedial Action Schemes
- Dynamic State Estimation
- Planned Power System Separation
- System Inertia Monitoring
- Adaptive Protection
- Real Time Transient Stability Margin
- Wind Site Voltage Control
- Power System Restoration
- Congestion Management

- Transient Stability Control
- Voltage Stability Control
- Oscillations Damping
- Linear State Measurement
- Interconnection Wide Dynamic State Estimation
- Wide Area PSS Stabilization
- Wide Area Frequency Response

- Deployment Challenge
- LOW
- MED
- HI

- Necessary and Critical
- Critical with Added Benefits
- Moderate Need, Added Benefits
- Requires More Investigation

- 1 to 3 Years
- 3 to 5 Years
- > 5 Years
NASPI Roadmap

• Develop two roadmaps
  – Technology Roadmap
  – Research Roadmap
A team led by Yuri Makarov plans to develop a paper on the Repository.

Suggestions:
- Repository should also contain reports such as the RAPIR report and information on the SGIG PMU-related projects.
- Organize keywords so that NASPI website or Repository can appear prominently in searches (general website improvement)

Comments are sought for Makarov’s paper, ideas on improving the Repository, and additions to the Repository
Success Stories

• A two-page template has been developed to make it easy to post success stories.
• Only success story posted is the Entergy Hurricane Gustav restoration.
• Some suggestions:
  – EPG working to develop on CAISO event
  – TVA generator unit oscillation monitoring
  – Revisit some earlier success story EIPP and NASPI presentations.
• Develop a few new success stories in the next few months
The plan is to provide researchers with 10 PMU of “big” disturbances and clear-sky data sets.

Gather input on usefulness on a PMU-only datasets for researcher.

It is planned to revisit the write-up on research data set, developed several years ago.
Action Items

Publish Draft White Paper on PMU Placement
• Purpose: Guide to PMU users with no or little background on synchrophasor applications
• Many placement documents referenced
• Consider optimal PMU placement to satisfy multiple criteria
• A draft version by will be released in October

Join RITT

Publish abstracts to Research Repository