Challenge Problems

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What is a challenge problem?

- ▶ A significant technical concern to the power industry in the next five years
- ▶ Spans data acquisition and management, modeling, simulation or analytics, and decision support
- ▶ Has well defined metrics of success/progress

Your charge

▶ To the panel
- a brief outline of a candidate challenge problem before the break outs
- a brief report-out of break out work

▶ To the workshop: a fleshed out definition that includes
- Candidate workflow of an operational solution
- Key sub-problems associated with that workflow or key integration problems in delivering the workflow
- Metrics for workflow and sub-problems : how do we measure success
- Technology assessment: what is in use, what is in research, what is a gap, where are the risks

Session will have note-takers and we will capture the discussion and the output

Logistics

- ▶ Short panel discussion
- ▶ Self-organize into first break-out session

(short break)

- ▶ Self-reorganize into second break out session

(short break)

- ▶ Report out problem leads

Break-out Assignment

Room	Topic	Scribes
Here	Anjan Bose, WSU: wide-area control and protection	Katherine Wolf
Here	Anjan Bose, WSU: wide-area control and protection	Yousu Chen
210	David Sun, Alstom-Grid : management and use of distributed energy resources	Paul Whitney
210	David Sun, Alstom-Grid : management and use of distributed energy resources	Poorva Sharma
216	Henry Huang, PNNL: grid operation with emerging dynamics and uncertainties	Bruce Palmer
216	Henry Huang, PNNL: grid operation with emerging dynamics and uncertainties	George Chin