



## Digital I&C Research: Strengthening Regulatory Decisions

Russell B. Sydnor, Chief  
Digital Instrumentation & Controls Branch  
Division of Engineering  
Office of Nuclear Regulatory Research  
March 8, 2011

1



### General Information

- **Audio Recording of Session**
  - All sessions will be recorded.
  - Audio recordings will be available on the RIC website after the conclusion of the conference.
- **Unanswered Questions** – Questions that are not answered during the conference sessions will be posted along with the answers on RIC website after the conclusion of the conference.

2



### General Information (continued)

- **Presentation Materials** – All electronic presentation materials will be posted on RIC website after the conclusion of the conference.
- **Evaluations** – Your feedback is valuable to us. Please provide your comments via the Session Evaluation Form or e-mail them directly to RICHelpDesk@nrc.gov.

3



### Housekeeping Notes

- **Badges and Identification**
  - Visibly display your name badge throughout the conference.
  - Do not lend or give your badge to anyone.
  - At the conclusion of the conference, place your badge in the badge deposit boxes located at the exits.

4



### Housekeeping Notes (continued)

- **Cell Phones, PDA's and Electronic Devices** – Turn off or silence cell phones, PDA's and electronic devices before the session begins.
- **Exiting During a Session** – If you need to leave the room during a session, wait for a break between speakers, if possible.
- **Exiting at the End of a Session** – For everyone's safety, conference participants are encouraged to leave the meeting room promptly so that room turns, equipment changes and testing can be performed so the next session can begin on time.

5



### Presentations

- "Conformance with NRC Regulations and Guidance: Redundancy and Independence for Digital Data Communications" - Deanna Zhang, Electronics Engineer, Division of Engineering, NRC/NRO
- "Perspectives in Plant-Wide Data Systems: Protection, Control, and Monitoring in Nuclear Power Plants" - Paul Rebstock, Senior Instrumentation & Controls Engineer, Division of Engineering, NRC/RES

6



### **Presentations (continued)**

- "How Do Safety Systems with Software Fail?" - Sushil Birla, Senior Level Advisor, Division of Engineering, NRC/RES
- "Certification of Safety-Critical Software" - Alan Wassing, Director, McMaster Centre for Software Certification, McMaster University