

Trustworthy Cyber-Infrastructure for the Power Grid (TCIP)

Technology Evaluation Test-bed

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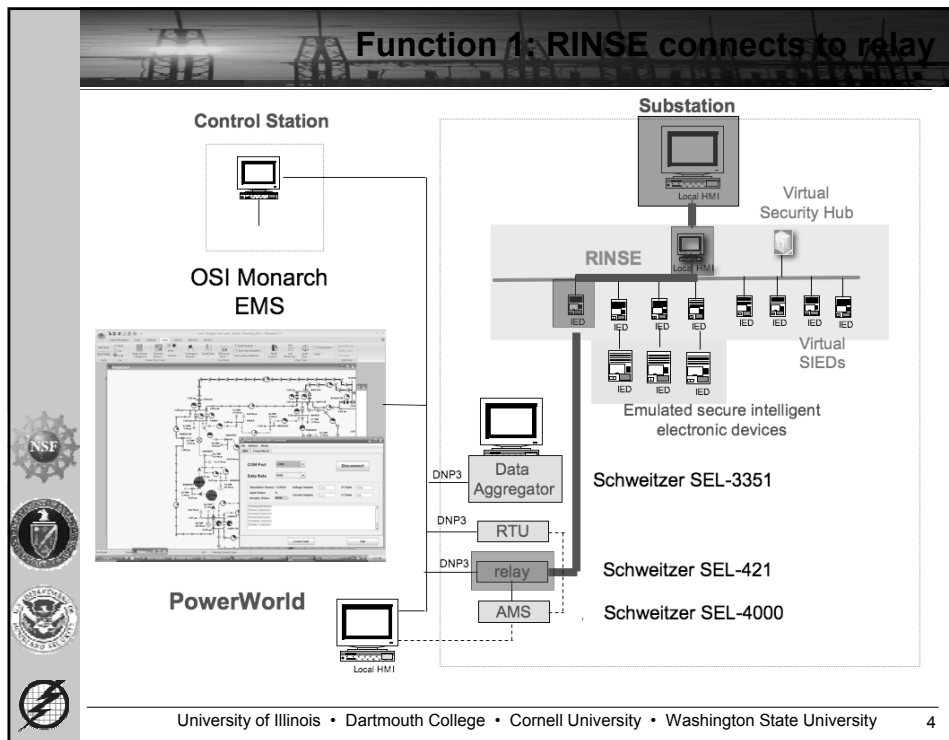
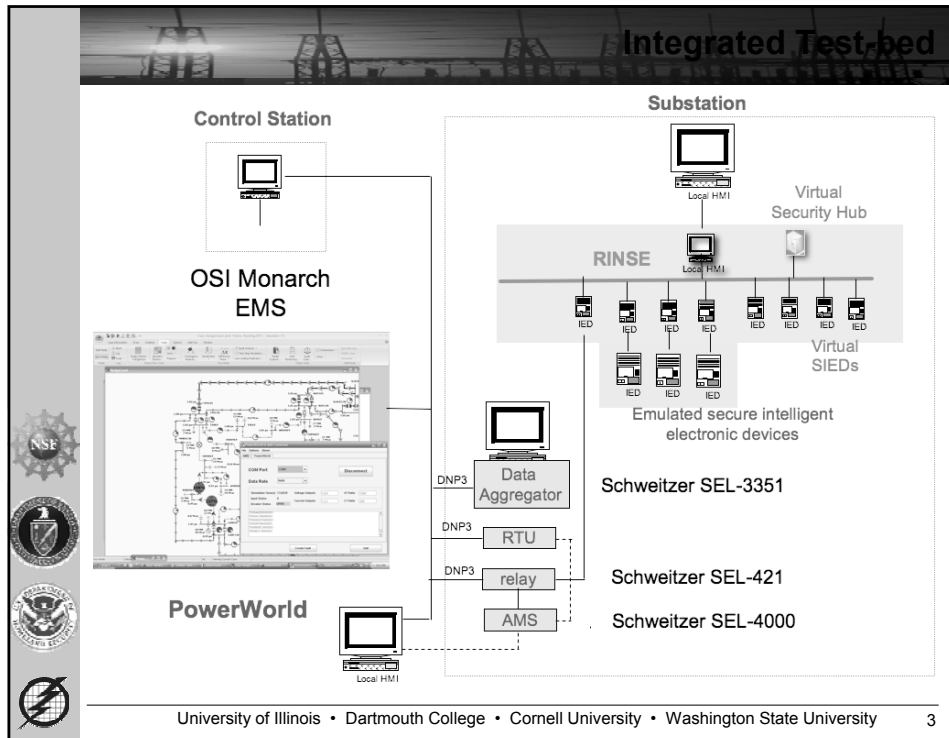


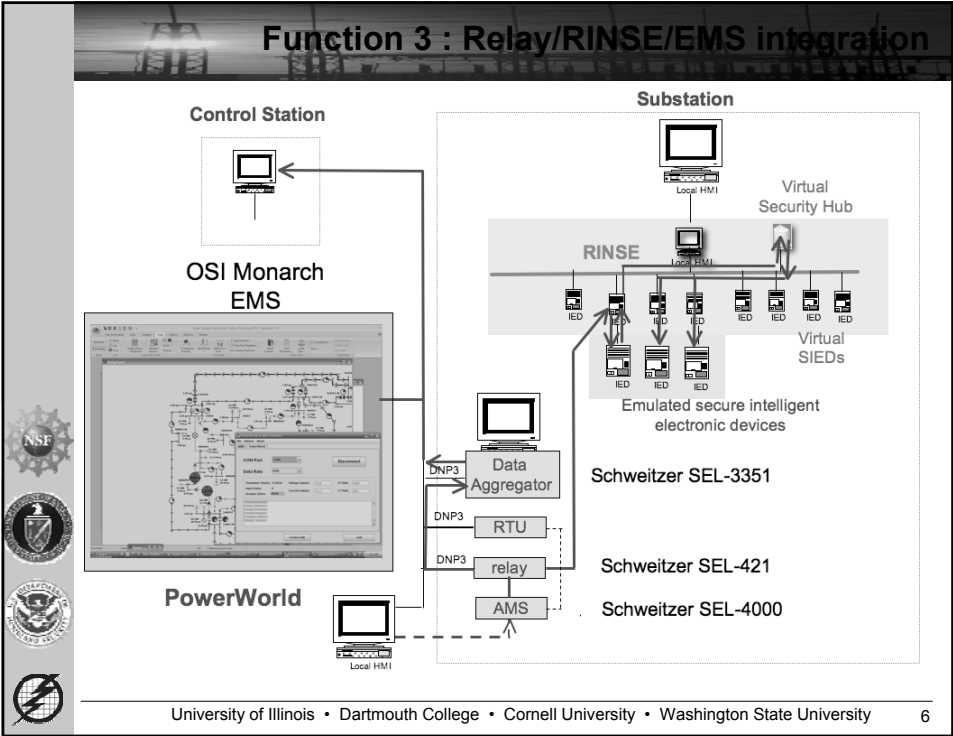
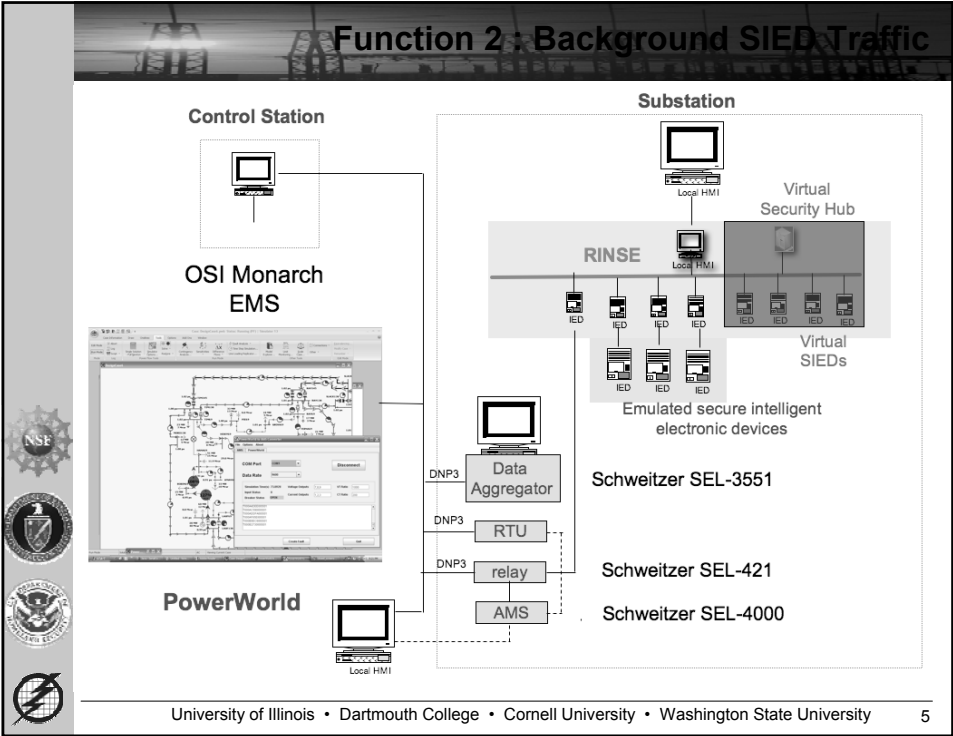
- NSF funded Cyber-trust Center
- Four universities
- Three funding sources
- Nineteen faculty, approximately 35 students and staff
- Focused on
 - Base technology
 - Protocols
 - Evaluation
- Test-bed being developed to evaluate effectiveness of security technologies in large-scale, realistic contexts
 - Unique capability to integrate real devices, real software, and virtual reality

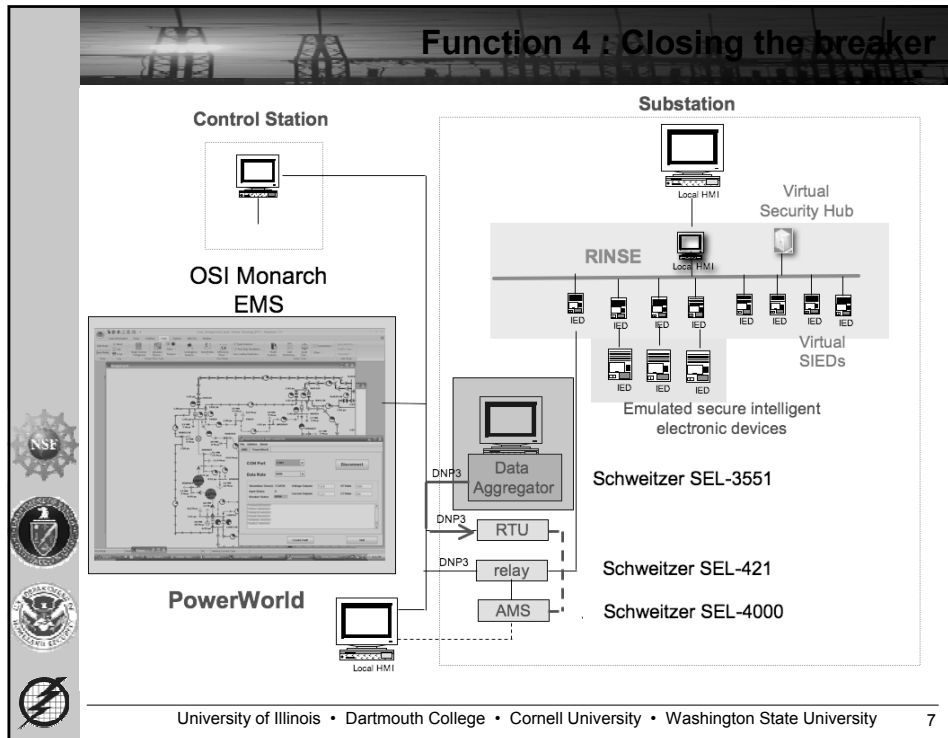


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Conclusions

We can integrate

- SCADA devices
- A high fidelity electrical power simulator
- A high fidelity communication simulator
- Security-oriented protocols and services running on physical computers

We know of no other similar capability, anywhere.

We will use this highly flexible testbed to evaluate TCIP developed hardware / software solutions, in realistic large-scale scenarios

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