## **Grand Challenges**for Disaster Reduction

A Report of the Subcommittee on Disaster Reduction

### **Grand Challenge 4**

Recognize and Reduce Vulnerability of Interdependent Critical Infrastructure

Stu Nishenko
Pacific Gas and Electric Company

31st Annual Hazards Research and Applications Workshop July 11, 2006 Boulder CO

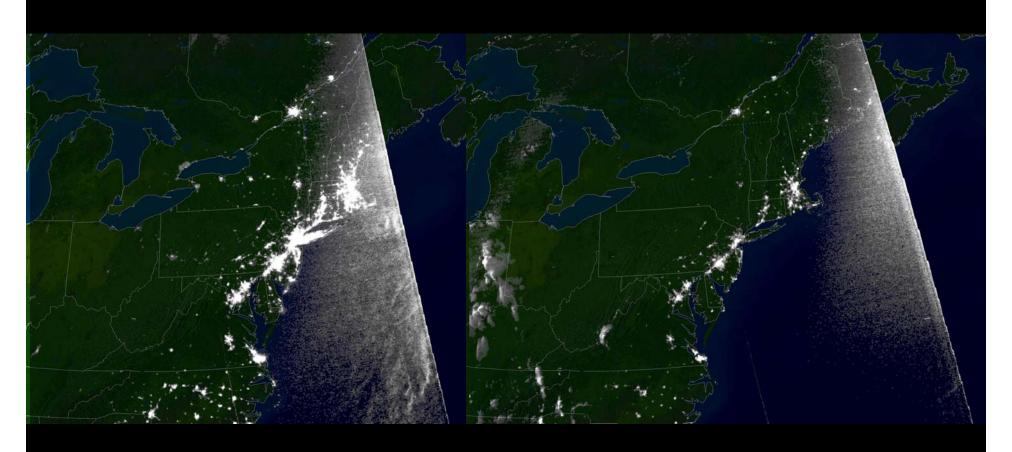


## National Infrastructure Protection Plan

2006



## 2003 Northeast Blackout



August 13, 2003

August 14, 2003

### **AmericanLifelines**Alliance

A public-private partnership to reduce risk to utility and transportation systems from natural hazards and manmade threats

Power Systems, Transportation and Communications Lifeline Interdependencies

March 2006





# "How can you learn from the past if you don't know what it was?"

#### **NIST Technical Note 1476**

### Performance of Physical Structures in Hurricane Katrina and Hurricane Rita: A Reconnaissance Report



### Natural Hazards Damage Data Collection

- Develop guidelines and protocols for systematic collection of perishable damage data
- Establish liaisons with public/private sector to assure implementation of guidelines and protocols
- Develop framework for archiving and accessing of post-event data
- Create a organizational structure for long-term administration of the data archive



## National Infrastructure Protection Plan

2006

