

NARUC Joint Meeting
Committee on Electricity and Consumer
Affairs Committee

“VALUING RELIABILITY RESOURCES”

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North American Electric Reliability Council

July 12, 2004



Reliability defined

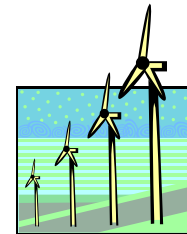
- Consumer: Do the lights come on when I flip the switch?



- Manufacturer: Does a momentary blip cause a loss in a manufacturing run?

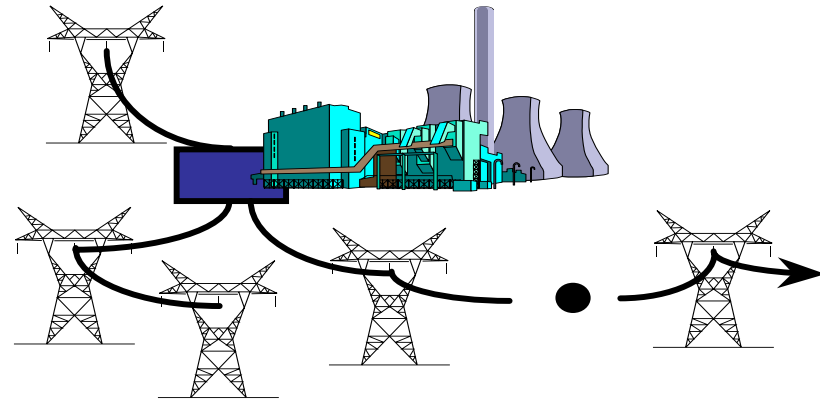


- Independent power producer:
Does my deal go through or does it get cut?



NERC's definition of reliability

- Bulk electric system



- Two basic functions –
 - Operating reliability (formerly “security”)
 - Adequacy



Operating reliability

The ability of the electric system to withstand unanticipated failure of system elements, such as transmission lines and generators.



Operating reliability

- Bulk electric system operating reliability is a public good
- It's either there for everybody, or it's not there at all – no customer choice!
- Outages on the bulk electric system are rare
- Costs are shared
- Utilities, regulators and customers decide how much to spend, based on experience
- Could build more redundancy to reduce risk, but not worth cost



August 14 – new experience

- Training
 - More staff and training facilities
- Trees
 - Regular, ongoing effort
- Tools
 - New programs and visualization aids
- \$\$



Adequacy

The ability of the electric system to supply the aggregate energy requirements of customers at all times, taking into account scheduled and reasonably expected unscheduled outages of system elements.



Adequacy

- Transmission adequacy – ability of interconnected systems to transfer electric power among their elements and from generation resources to customer demand centers
- Resource adequacy – having sufficient amount of generating capacity resources to meet customer demand, taking account of planned and unplanned outages




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Resource and Transmission Adequacy Recommendations



North American Electric Reliability Council

Prepared by the
Resource and Transmission Adequacy Task Force
of the
NERC Planning Committee

May 12, 2004

8.5 x 11 in 47 of 324

Role of state regulators

- Operating reliability
 - Being sure utilities are spending enough, not just focused on spending too much
 - Appropriate rate recovery
- Adequacy
 - Engage in policy debate on how much is enough
 - Set reserve requirements
 - Approach on regional basis




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- **Critical Infrastructure Protection**
- **Operating Policies & Planning Standards**
- **Readiness Audit Program**
- **Reliability Assessments**
- **Reliability Legislation**
- **Reliability Standards**
- **Press Room**


Welcome to the North American Electric Reliability Council (NERC). NERC's mission is to ensure that the bulk electric system in North America is reliable, adequate and secure. Since its formation in 1968, NERC has operated successfully as a voluntary organization, relying on reciprocity, peer pressure and the mutual self-interest of all those involved. Through this voluntary approach, NERC has helped to make the North American bulk electric system the most reliable in the world.

NERC Fast Links

- Select a Topic -

Bulletin Board

- ▶ 07/08/04 - [Nominations Sought for Compliance and Certification Committee](#)
- ▶ 07/08/04 - Version 0 of NERC planning standards is posted for comment
- ▶ 07/02/04 - [ECAR, FirstEnergy, MISO and PJM's Remedial Action Responses](#)
- ▶ 06/23/04 - Guidelines for Reporting and Disclosure approved by the NERC Board of Trustees June 15, 2004; effective July 1, 2004
- ▶ 06/22/04 - [Clarification of Zone 3 Relay Rating Requirements](#)



<http://www.nerc.com/~filez/rtatf.html>

