

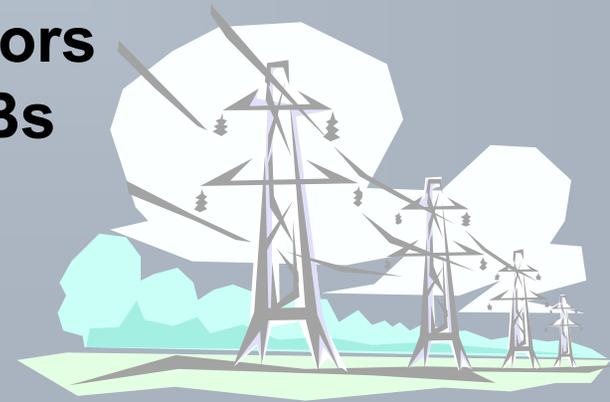
# ***Workshop on Designation of National Interest Electric Transmission Bottlenecks***

**U.S. Department of Energy  
July 14, 2004**

**Shaping the NIETB Process to Add Value**

**Reliability Related Indicators  
for Designation of NIETBs**

**George R. Bartlett**



# Identification of National Interest Electric Transmission Reliability Bottlenecks

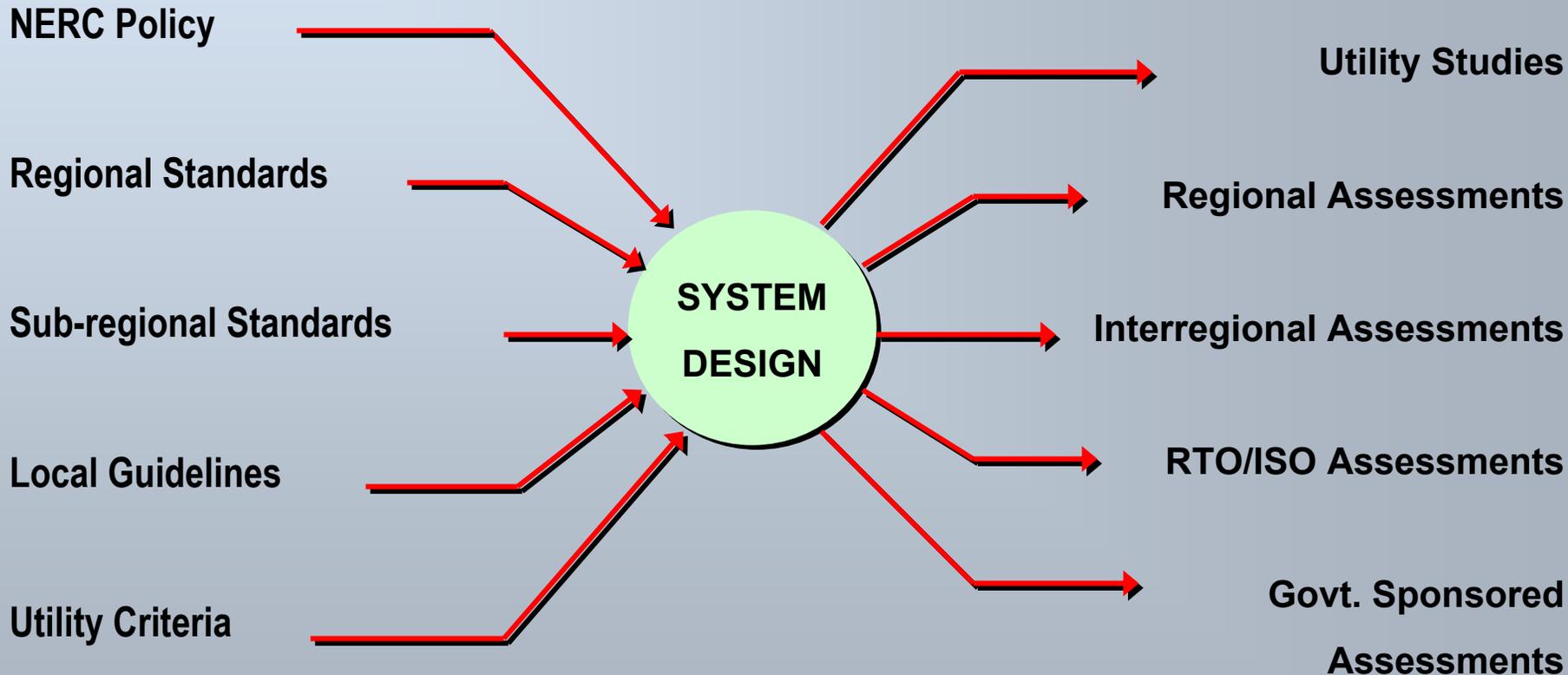
- **Criteria**

- ◆ **Scope of Area Affected**
- ◆ **Nature of Load Impacted**

- **Methods**

- ◆ **Go to the reliability experts**
  - **Who is most knowledgeable about reliability bottlenecks?**
  - **Does sufficient knowledge exist to identify all bottlenecks?**
- ◆ **Juxtaposition of Economic and Reliability Bottlenecks**

# Present Planning Practices are Designed to Preclude Reliability Bottlenecks



# Changing Definition of Reliability

Lighting,  
Railways, &  
Ice Houses

Regional  
Dependency

888/889

Interregional  
Dependency

Local/Regional  
Expansion

NERC  
Age

Open  
Access

?

1879

1965

1996

2003

Defining Moments in History

# Developing Criteria to Accommodate Interregional Dependency

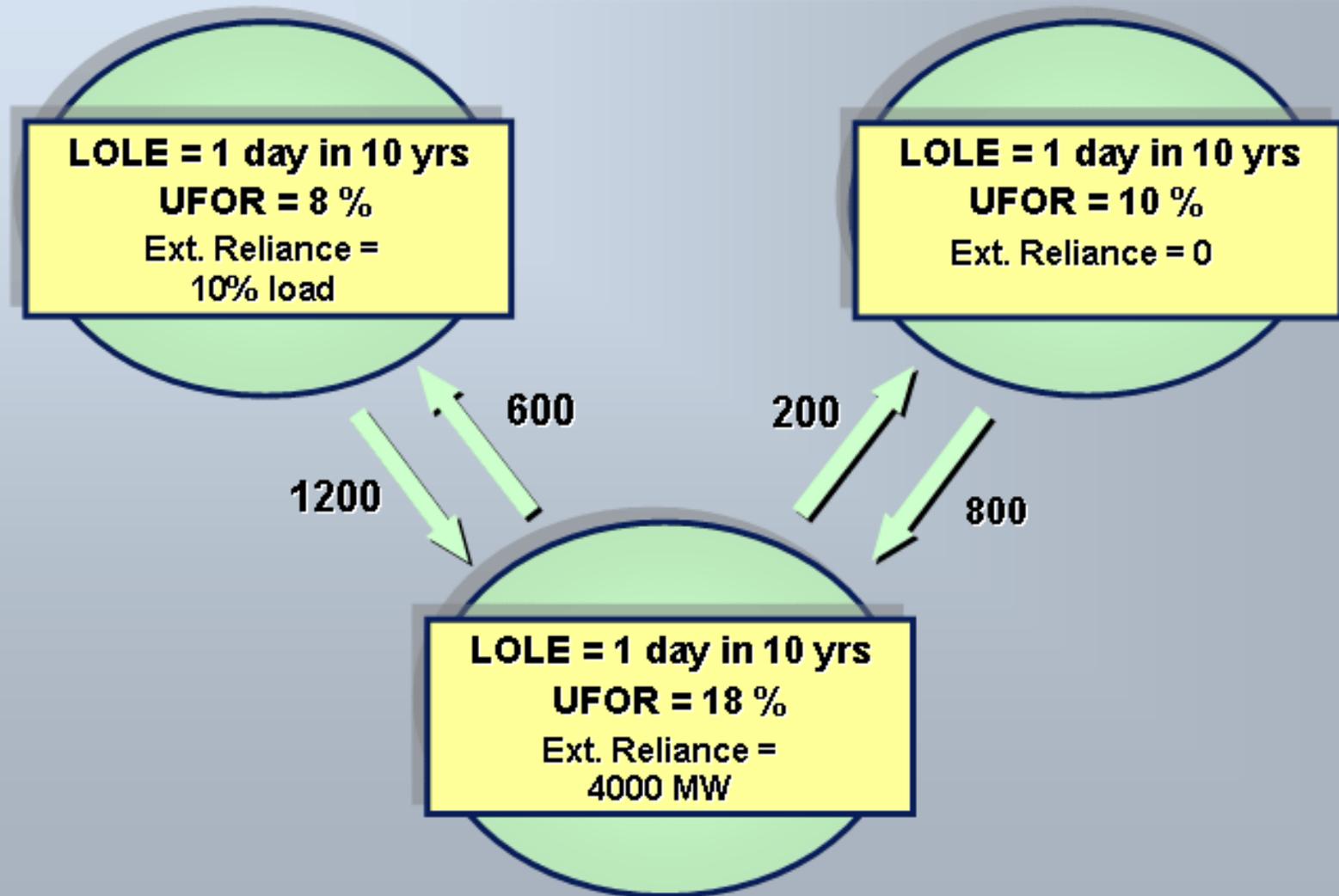
- ***Regional Criteria***

- ◆ Fixed percentage of generation reserves
- ◆ Voltage support
- ◆ Line loading limits

- ***Interregional Dependency***

- ◆ Generation reserves give way to Loss of Load Expectation (LOLE)
- ◆ Concerns change
  - External Resources
  - Transfer Capability

# Calculations are the key



# **NERC actions should provide accurate representation of reliability bottlenecks**

- **Enhancement of interregional assessments**
  - ◆ **Improve coordination and efficiency**
- **Assure deliverability of energy to loads**
- **Assure import capability assumptions**
- **Encourage greater regulatory and stakeholder participation**