

Reliability and the Market Place, Perfect Together.



**What Do We Have
to Do to Keep
the Lights On?**

**Energy Storage
Association**

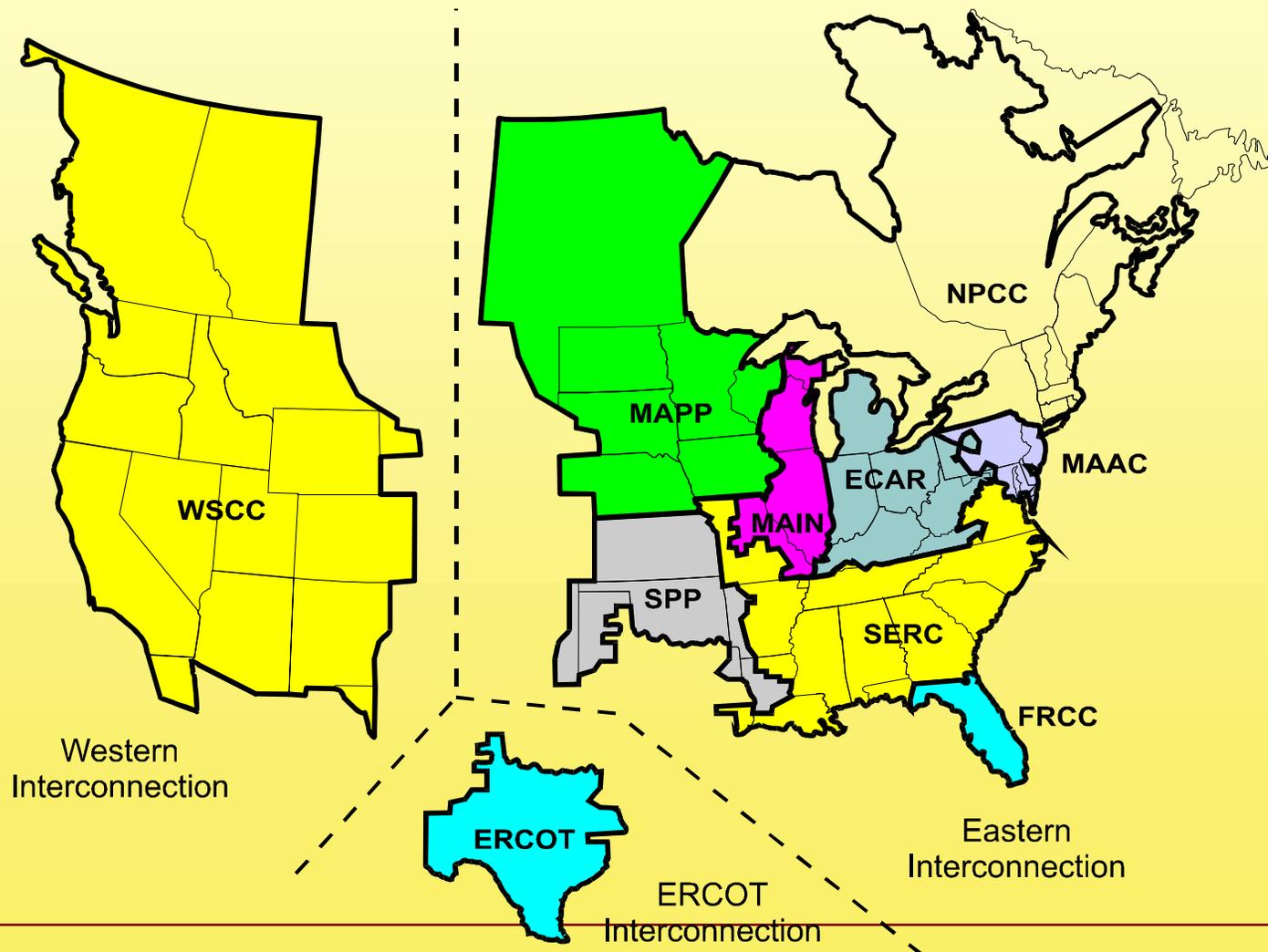
April 26, 2001

Chattanooga, TN

What We are going to cover.

- ◆ **What is NERC?**
- ◆ **Our Legacy.**
- ◆ **What Has Changed?**
- ◆ **Transforming from Voluntary to Mandatory Standards.**
- ◆ **NERC's Assessment for the Long Term**
- ◆ **Assessment for this Summer.**

Regional Councils



North American Legacy

- ◆ **Northeast Blackout November 9, 1965**
- ◆ **New York City Blackout of 1977**
- ◆ **Cold Wave Outages of 1994**
- ◆ **Western Blackouts July & August 1996**
- ◆ **Midwest Outages of 1998**
- ◆ **“Distribution” Outages of Summer 1999**
- ◆ **New Mexico Outage of March 2000**

What Has Changed?

- ◆ **Transactions, transactions, transactions**
- ◆ **Transmission lines everywhere are loaded**
- ◆ **Prices - \$5000/MWhr for electricity**
- ◆ **2001 Constraints vs. 2000 Constraints**
- ◆ **large ACEs are common, “leaning”**
- ◆ **TLRs are common**
- ◆ **Totally unacceptable behavior**
- ◆ **Operating in unstudied states**
- ◆ **IPPs and Natural Gas**

Electric Reliability Panel's Guiding Propositions

- ◆ **“A new electric oversight system is needed.”**
- ◆ **“Essential competencies should be preserved.”**

NAERO Concepts



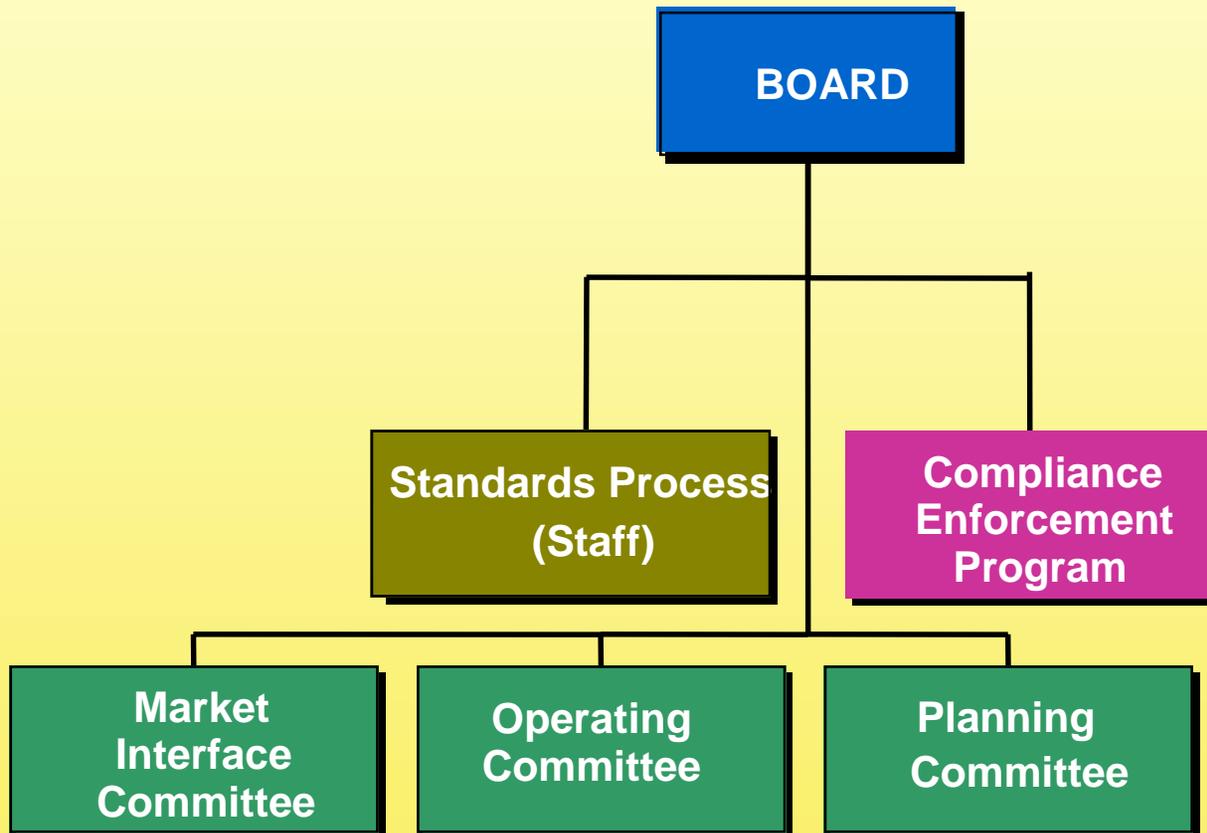
**Coordinated
Grant of Authority**

**Assure obligations
to government**

**Delegation of
authority to
implement**

**Participation by
stakeholders,
interested parties,
and the public**

NERC/NAERO Committees



Status of Transition

- ◆ **New Standards Process – Sept. '97**
- ◆ **MIC - approved; populated - Sept. '98**
- ◆ **Independent Board Members - Jan. '99**
- ◆ **Compliance - "Pilot Programs"- Feb. '99**
- ◆ **New Committees - May '99**
- ◆ **Director of Compliance – July '99**
- ◆ **Consensus Legislation - 1999**
- ◆ **New Funding in 2001 – Jan. 2000**

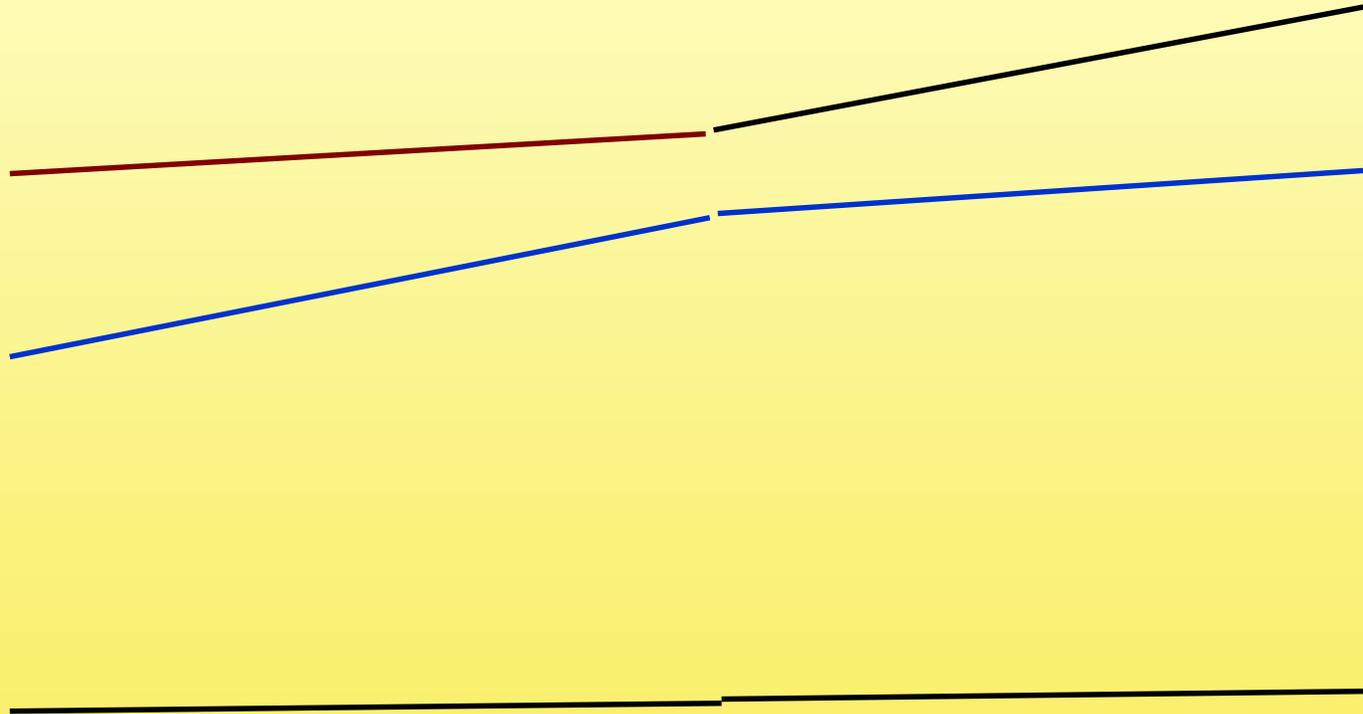
Status of Transition

- ◆ **Turned Governance Over to the Independent Trustees – March 2001.**
- ◆ **Stakeholder Committee – Members Committee – March 2001.**
- ◆ **“Compliance Agreement” enforcement by contract – March 2001.**
- ◆ **Coming Soon – in 2001**
 - **A new Operating Reliability Model**
 - **New Standards Process (ANSI approved)**

Status of Transition

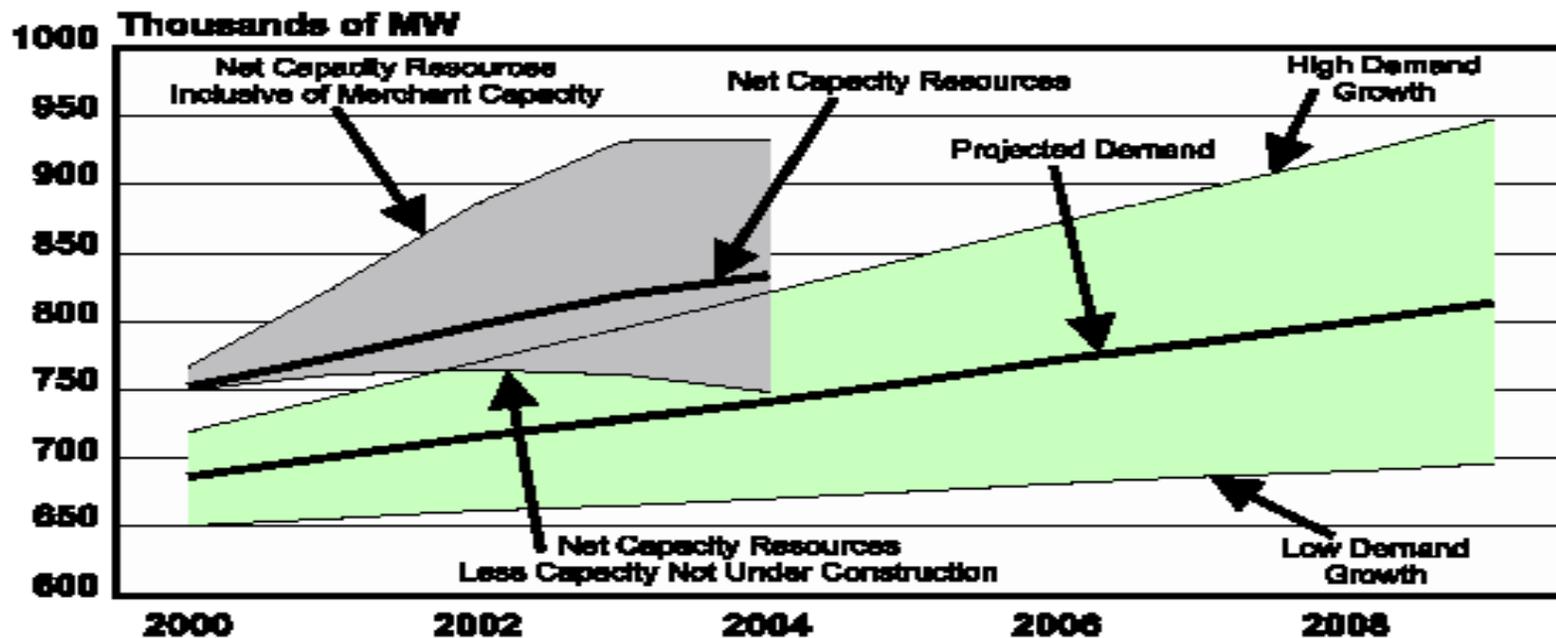
- ◆ **The Bottleneck: Federal U.S. legislation for the creation and oversight of an Industry Self-Regulatory Reliability Organization, NAERO.**
- ◆ **Consensus support: EEI, APPA, NRECA, EPSA, CEA, ENRON ...**
- ◆ **Will it take a blackout to get attention?**

"Long-Term" Assessment

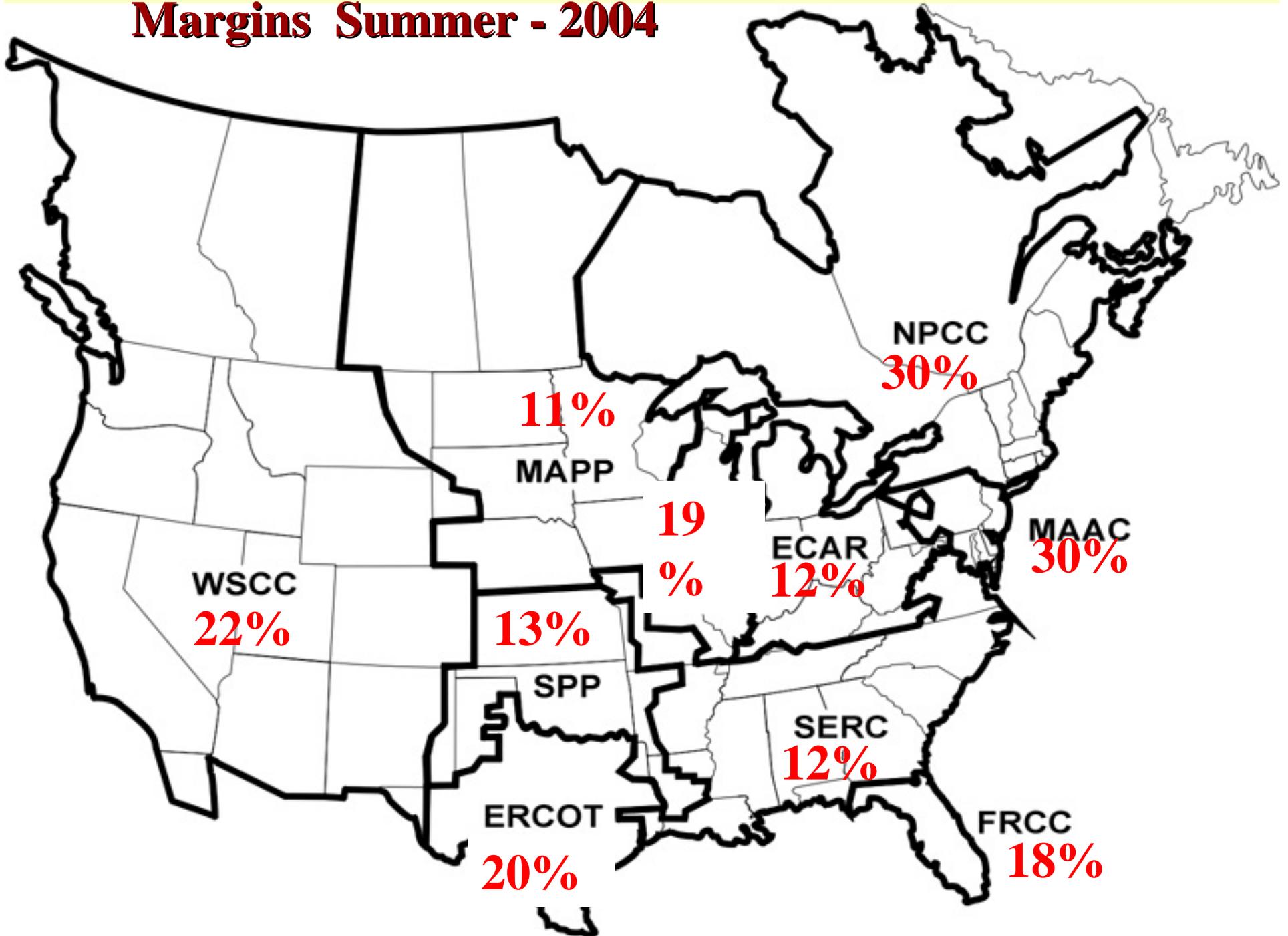


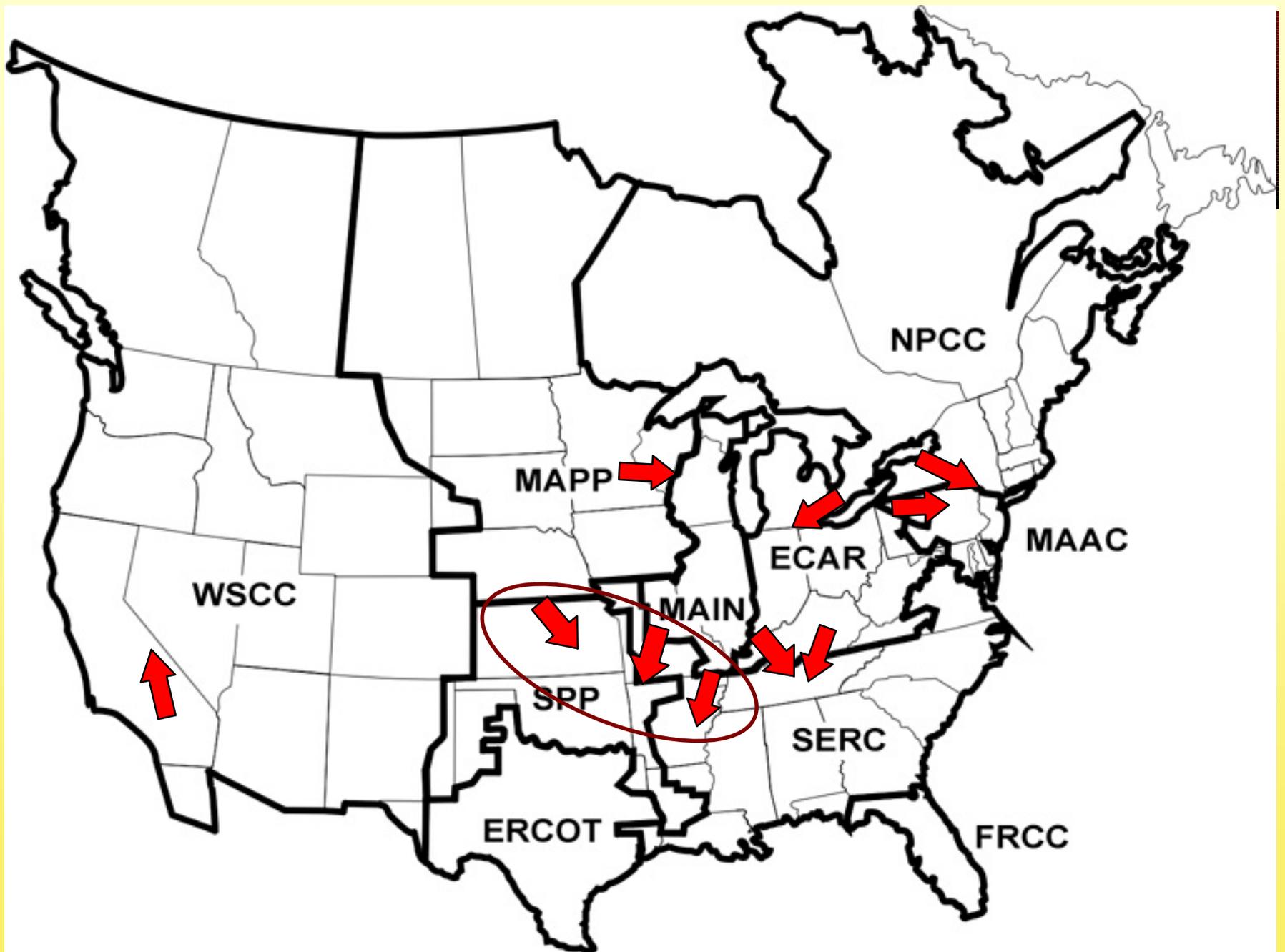
"Long-Term" Assessment

United States Capacity vs Demand – Summer

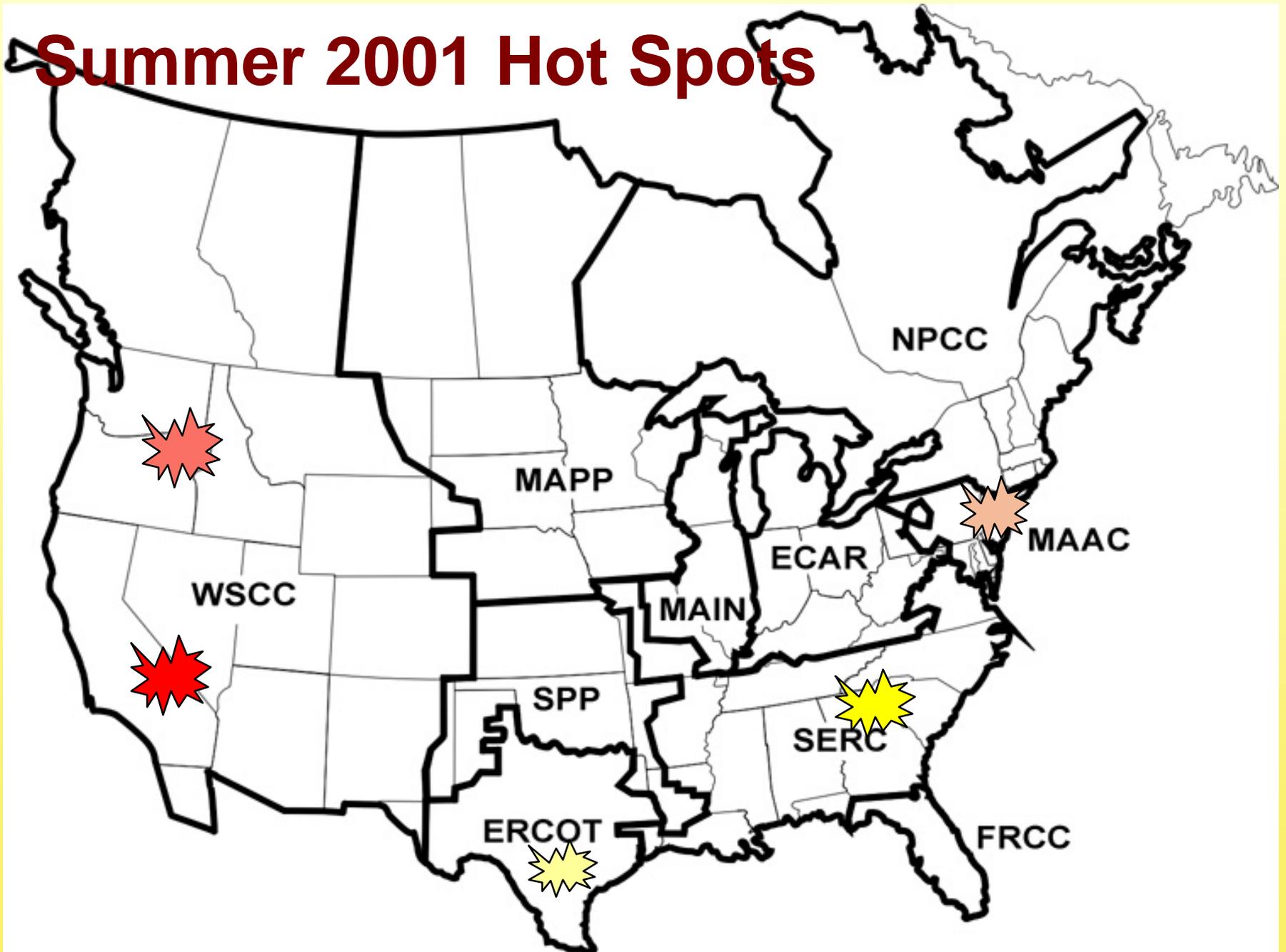


Margins Summer - 2004





Summer 2001 Hot Spots



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