



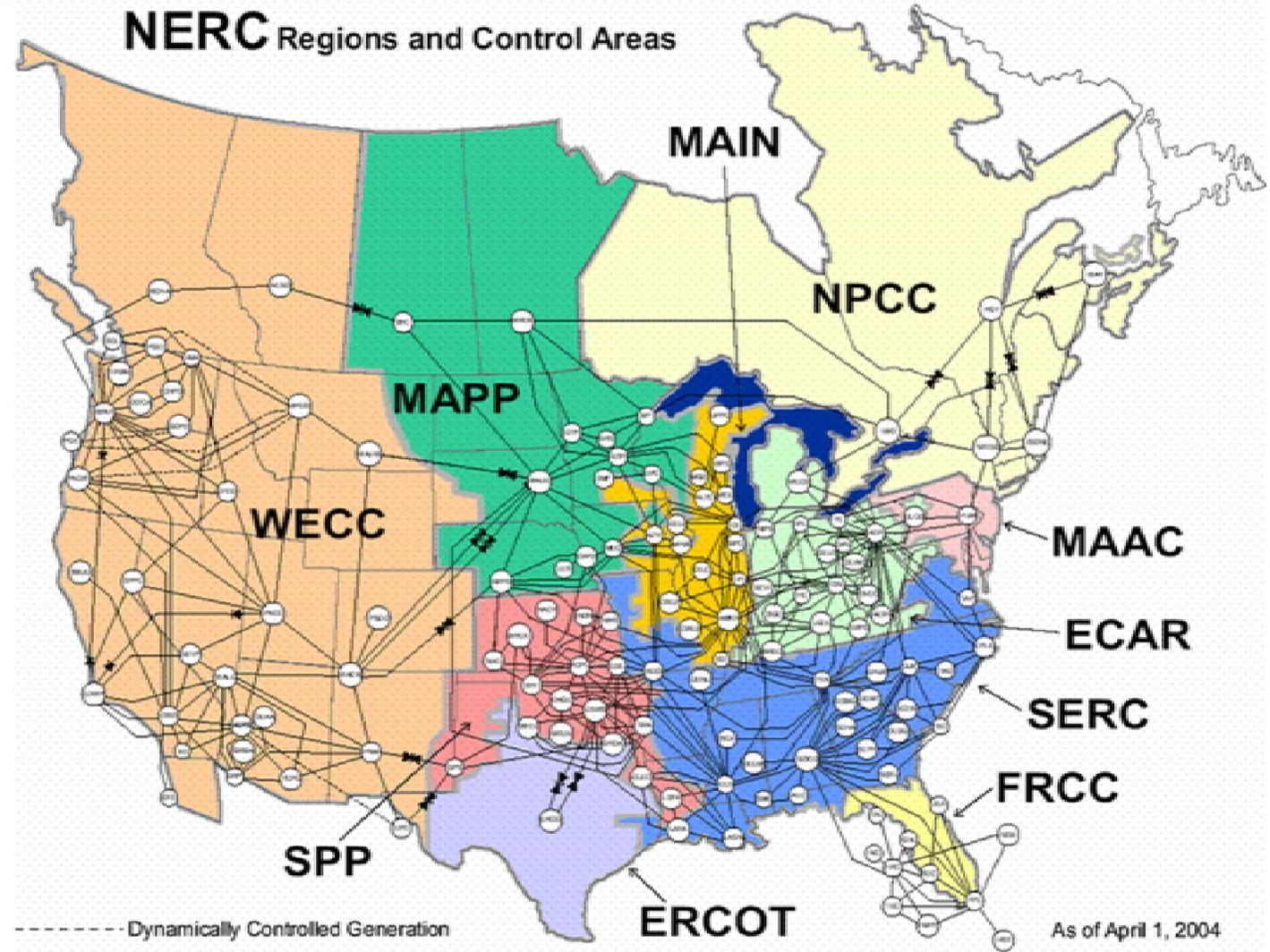
# Congestion Resolution Through the PJM Regional Transmission Planning Process

## Identifying Transmission Bottlenecks

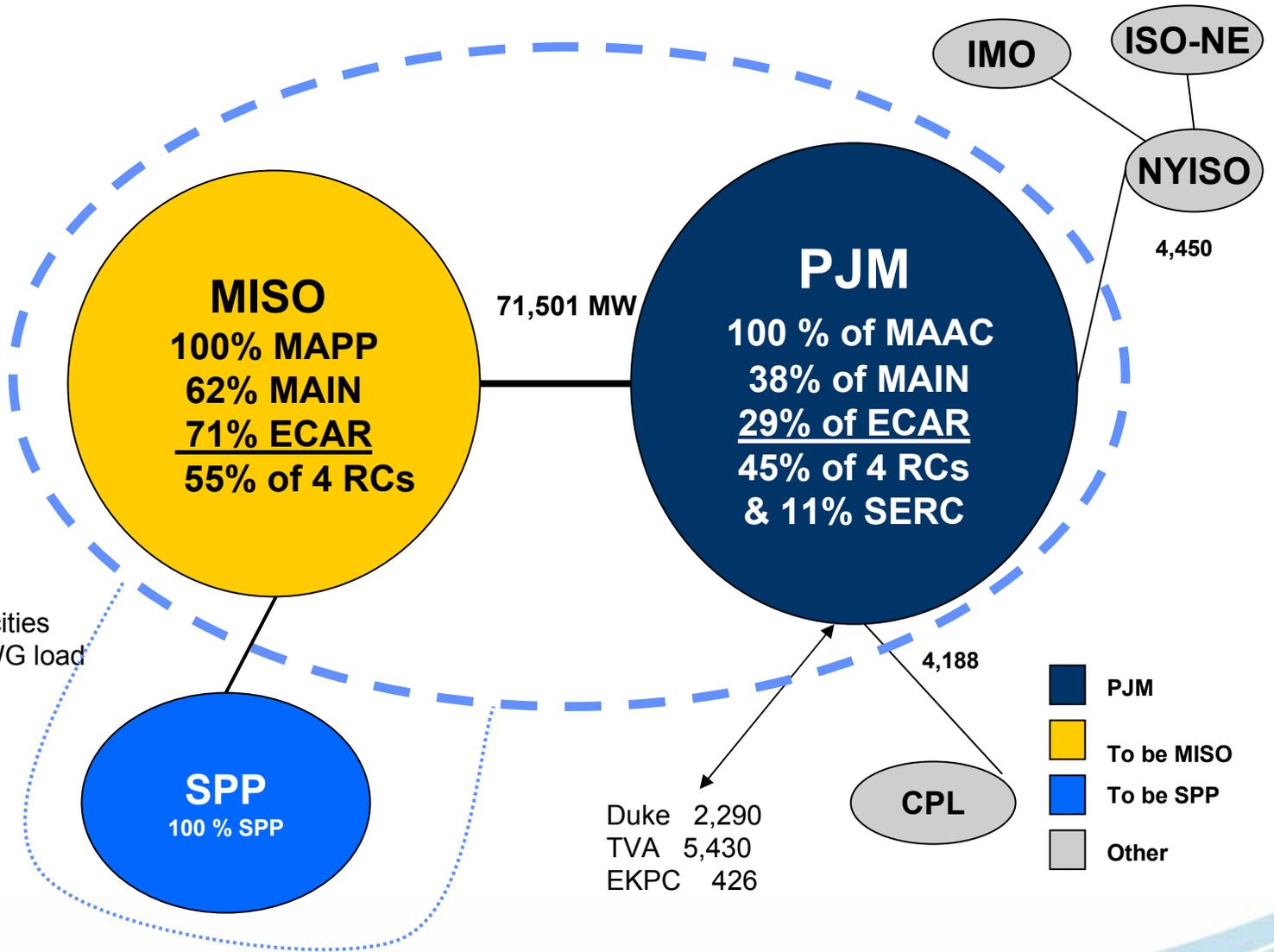
DOE Workshop on Designation of National Interest  
Electric Transmission Bottlenecks  
Salt Lake City, Utah  
July 14, 2004

- Reliability Assessments
- Operational Performance Assessments
- Economic Performance (Congestion) Assessments
  
- Long Term Firm Transmission Service Requests
- Generation Interconnection Requests
- Merchant Transmission Projects
- Transmission Owner Projects
  
- Transmission Expansion Advisory Committee (TEAC) Input (Stakeholder Input)
  
- Inter-regional Coordination (MISO, NY, South)

# NERC Regions and Control Areas



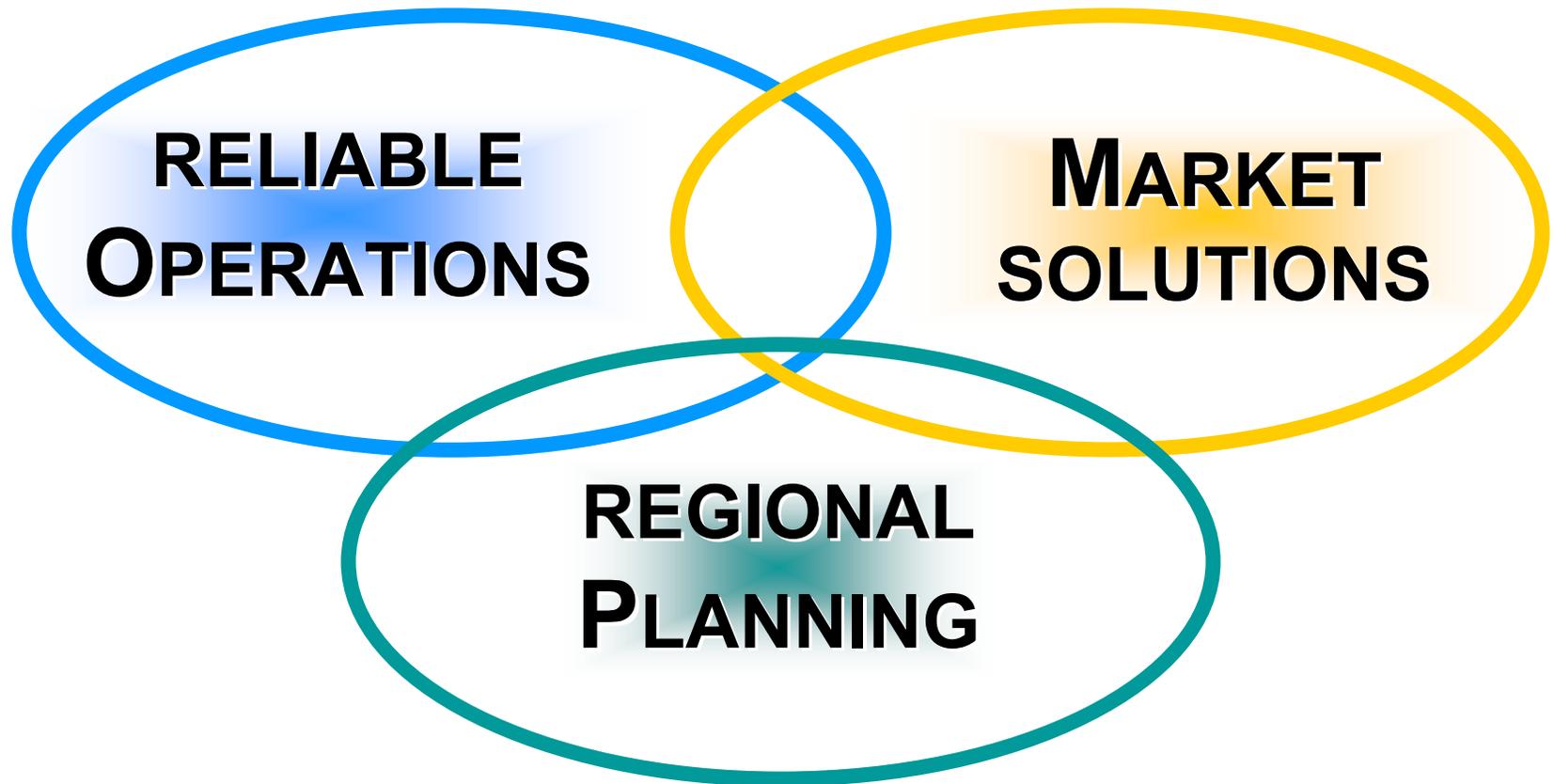




- Market Needs vs. Customer Exposure to Congestion
- Demand Response Programs
- Distributed Resource Technologies
- Incentives for Investment in Transmission Infrastructure
- Incentives for Investment in Generation Infrastructure
- Limit Exercise of Market Power

- Initial Threshold captured events comprising 96% of gross congestion over period August 2003 – March 2004
- Market Threshold captured events comprising 99% of unhedgeable congestion during the same period
- Transmission upgrade solutions and cost-benefit analyses are under development
- A number of parties have expressed interest regarding merchant solutions – one proposal submitted

- Planning Process Needs to Include Drivers for Reliability, Operability, and Economic Performance
- Planning Process Must be Fully Integrated With Markets and Operations
- Planning Within Large RTOs With Markets Provides for Identification of Transmission Bottlenecks
- Coordination Agreements Among RTOs Ensure Ability to Identify Bottlenecks at Seams or Related to Longer Distance Transfers



Planning Process Must be Fully Integrated  
With Markets and Operations