Operating An Electric System In An Open Market

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Regional Transmission Organizations: Effects on Electricity Markets,
Operational Reliability and Transmission Planning (Panel)

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R.T.O. Responsibility

• Short term reliability (System operation)
• Open Access to Transmission Facilities
• Transmission Planning
• Market / Reliability Interfaces (Innovation - Different Models)
Short Term Reliability

• Resource Adequacy
• System Operator
• Ancillary Services
• Sufficient Command & Control
• Compliance
Open Access to Transmission Facilities

• Congestion Management
• Interconnection Policy
• Cost Allocation
• Priorities
• Ownership
Transmission Planning

- Freeway System
- Distribution Utility Impact
- State Concerns
- Regional Look (WCA’s)
- Siting
- Construction
- Cost Allocation
Market Design / Reliability Interfaces

• Flexible & Open
• Coordinated Between Areas
• Consistent
• Equitable
• Enforceable
Moderate Price/Cost Markup in Real-Time Energy Market

- Average RT Energy Cost above Competitive Level (Incremental Dispatch)
- Average Competitive Baseline Cost
- % Above Competitive Baseline

Time Period


Average RT Energy Cost above Competitive Level (Incremental Dispatch)
Average Competitive Baseline Cost
% Above Competitive Baseline