



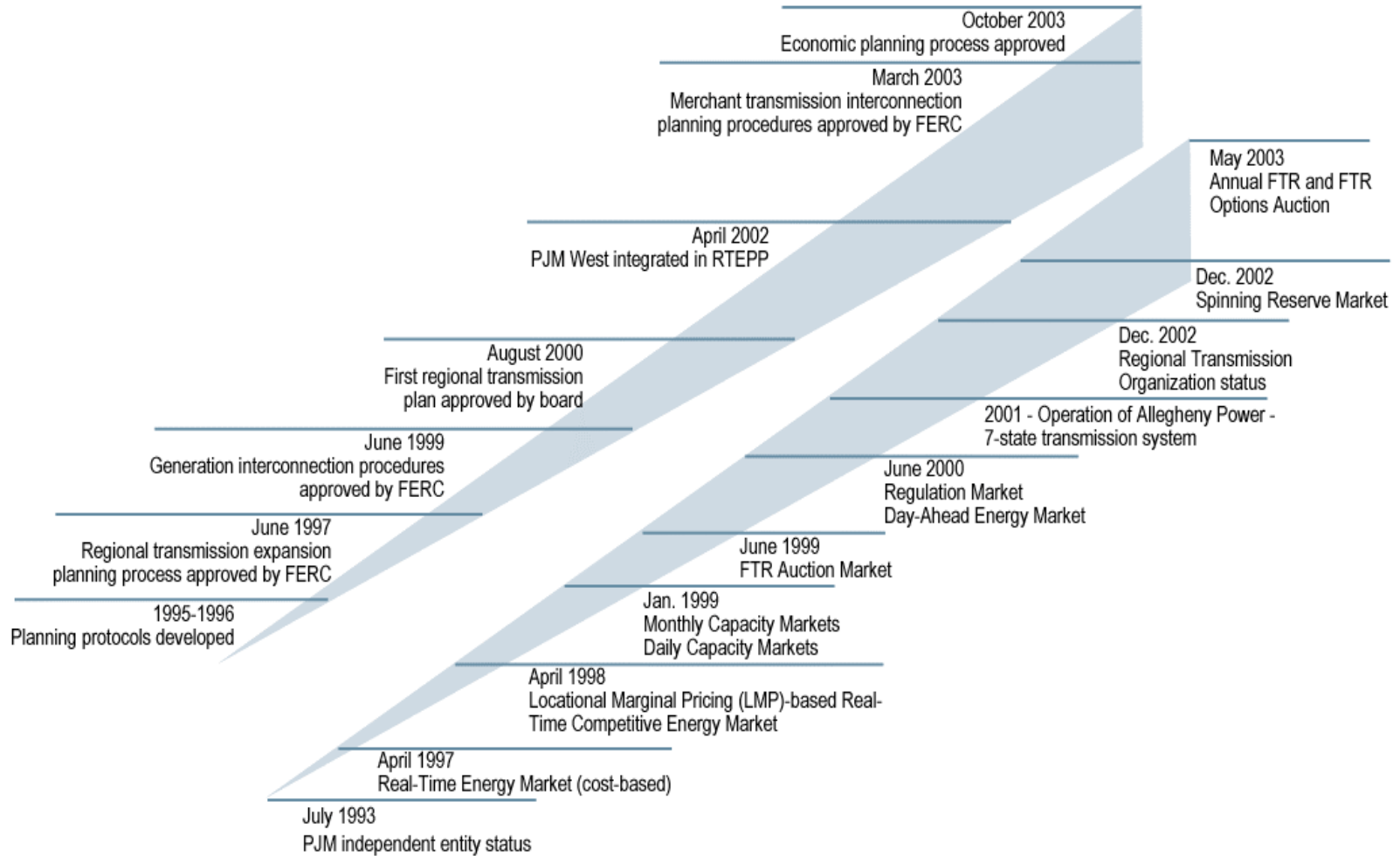
PJM Regional Transmission Planning Process

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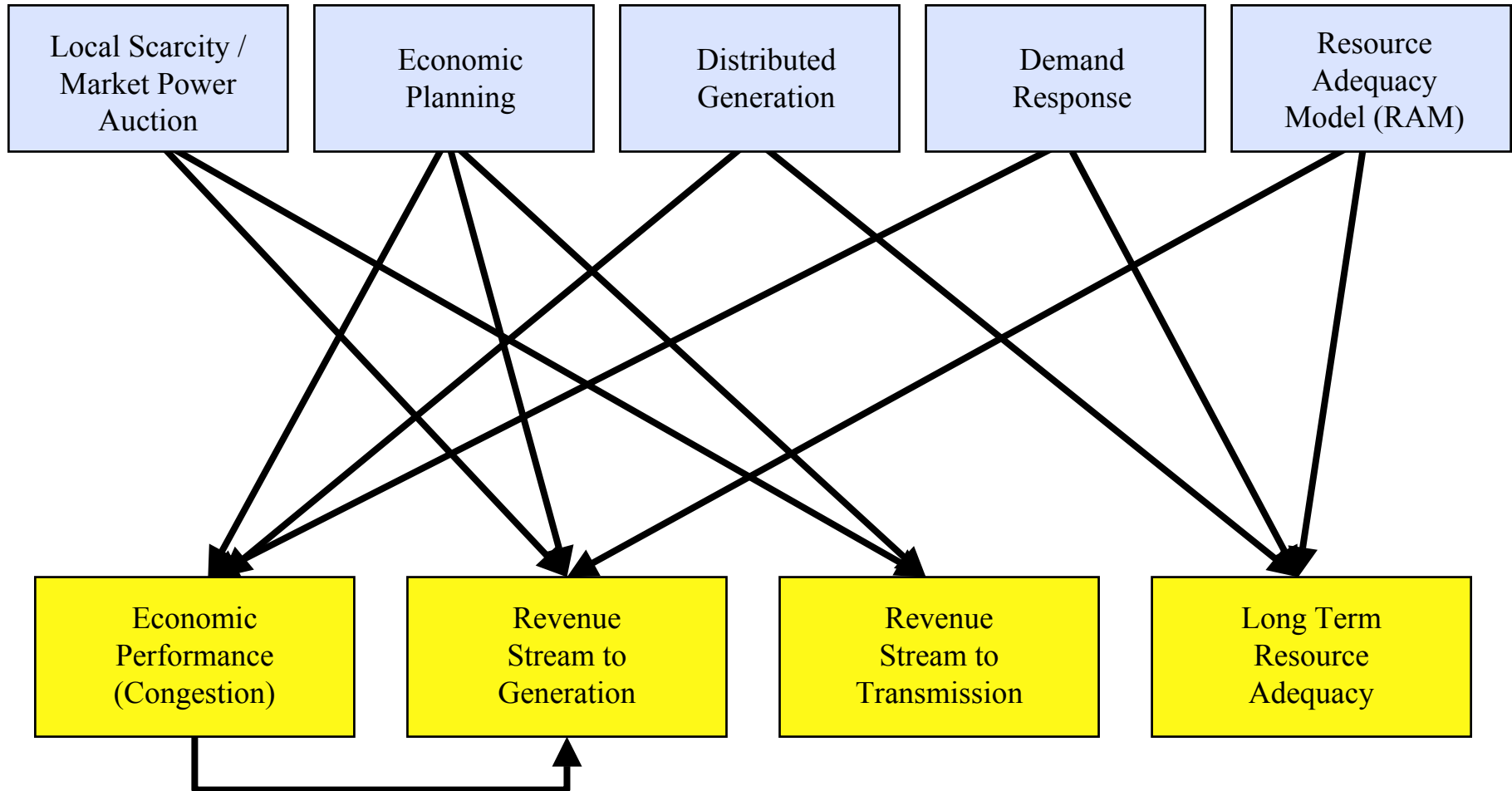
- Allow for Open Process with Input from All Interested Parties
- Coordinate Expansion Plans Across Multiple Transmission Owner Systems
- Coordinate Expansion Plans Based on All Needs Identified Through Regional Planning Process
- Identify Most Effective and Efficient Expansion Plan for the Region

Evolution of the Planning Process



- 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

- Centrally Planned Solutions
 - Baseline Transmission Upgrades (Reliability)
 - Economically-Based Transmission Upgrades
- Market Solutions
 - Strategically Sited Generation Projects
 - Merchant Transmission
 - Active Load Management/Demand Response Resources
 - Distributed Resources



- **Transmission Investment**
 - **Merchant Transmission Developers**
 - Financial Rights – FTRs, ATC, Deliverability
 - **Generation Developers**
 - Capacity Rights – Deliverability
 - Economic Delivery
 - **Load Customers**
 - Limit Exposure to Congestion – FTRs

- **Reliability**
 - **Must Build for Reliability**
 - Socialization of Costs
 - Question of Allocation – Secondary Benefits
- **Economics**
 - **Limit Exposure to Congestion**
 - Critical Issue for Customers, States
 - Allocation of Costs – Who Benefits? Free Riders?
 - **Undercuts Market Decisions**
 - Impact to Revenue Streams to Merchant Transmission and Generation Developers

- Long-Term Adequacy Requires Generation and Transmission
- Market-Based Solution Providers Can Benefit From Volatility That Drives Need for Regulated Solutions
- Cost Allocation for Regulated Solutions Will Drive Market Behaviors
- Impact of Regulated Solutions May Result in Gaming to Prevent Regulated Solutions

- Regulated Solutions for Reliability, Alone, Does not Appear to be Enough
 - i.e., Letting Markets Handle Everything Else Doesn't Look Like it's Going to Work
- Planning Process Must be Fully Integrated With Markets and Operations
- Must Get Demand-Side and Distributed Resources Integrated into Planning, Markets, and Operations
- All Revenue Streams Have to Work Together as a Package
- No Escaping Need for Market Monitoring