



ATC Planning & ATC Energy Collaborative – MI UP

Presented to: MI Consortium Meeting
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August 26, 2008

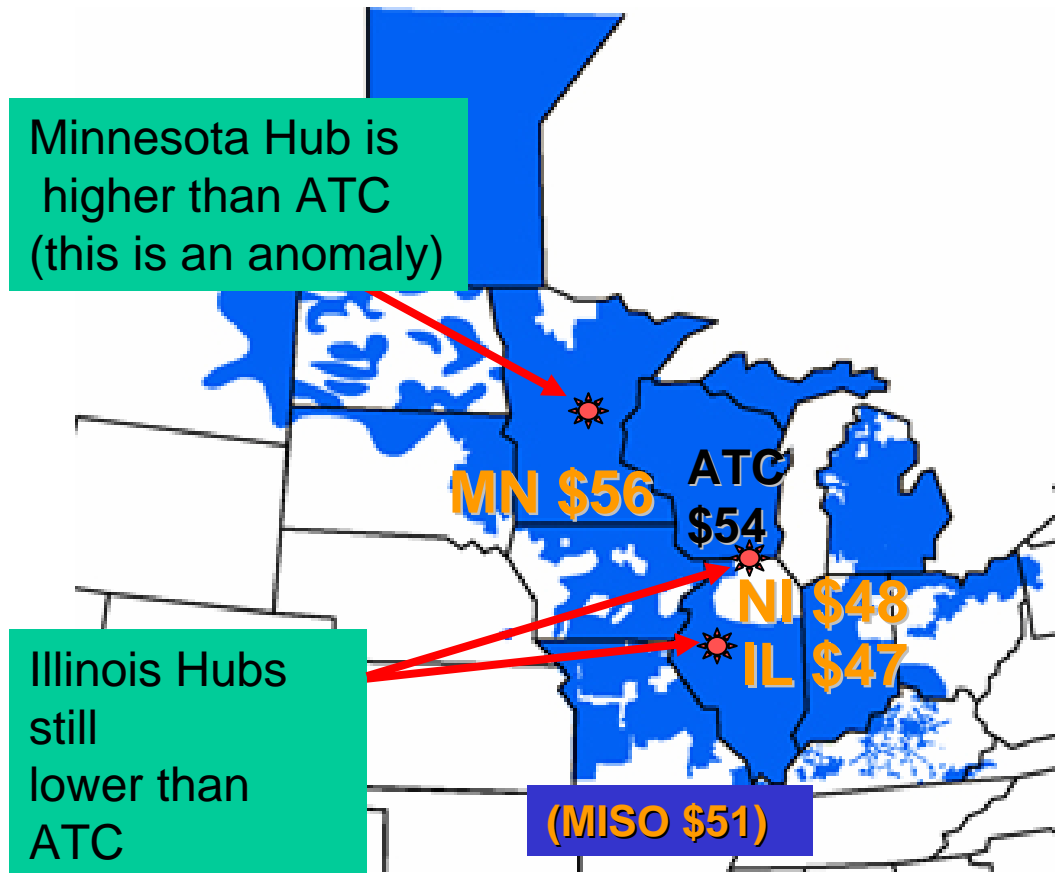
- ATC Planning Introduction
- ATC Energy Collaborative – MI
 - Objectives, Deliverables, Approach
 - Upper Peninsula
 - Strategic Flexibility Introduction
 - Overall Timeline
 - Next Steps

- Ensure that the future transmission grid can accommodate the needs of our customers in a reliable and cost-effective manner
- Three foundations of planning
 - Comprehensive analysis
 - Collaborative communications
 - Coordination with neighboring transmission owners and MISO

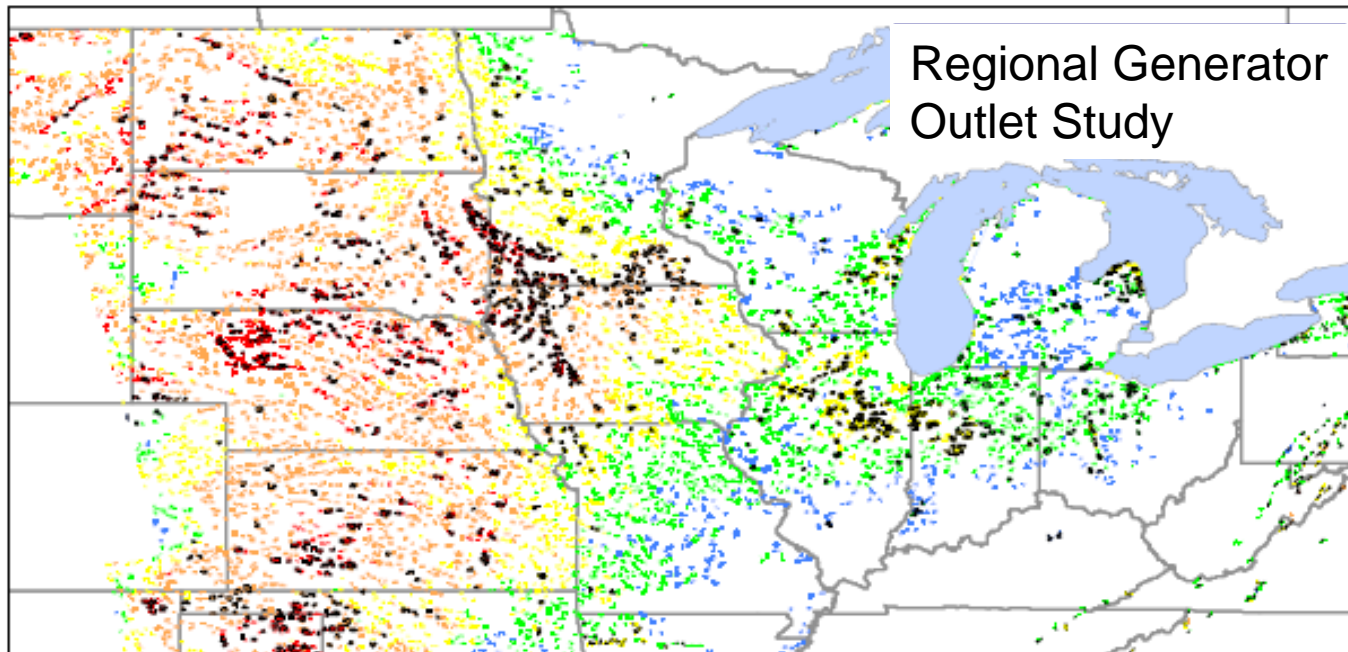
Reliability Planning



- Ten Year Assessment analysis and publication
 - \$2.8 billion investment needed
- Five Planning Zones
 - Identify what, where and when we need to build
- 2008 Assessment due out soon
- 2009 Assessment starting



- ATC is a “Narrowly Constrained Area”
- Objective: provide our customers access to lower cost sources of power in MISO footprint
- Work very closely with our stakeholders as we study possible projects



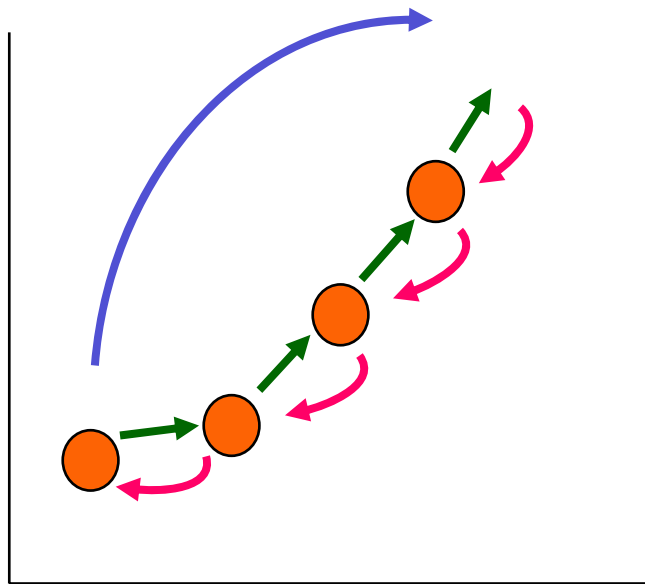
- Meets and plans with neighboring transmission owners
- Supports inclusion of ATC's projects in MISO's Midwest Transmission Expansion Plan (MTEP)
- Coordinates with MISO on ATC projects to obtain cost sharing
- Coordinates participation in regional study initiatives

- ATC works on routing and siting issues with stakeholders
- Open Houses
 - Gardner Park-Central Wisconsin- Morgan Werner West: 40 public open houses
 - 4,800 people attended at least one open house
 - 2,000 written comments received
 - Rockdale – West Middleton: 21 public open houses
 - 3,350 people attended at least one open house
 - 2,200 written comments received

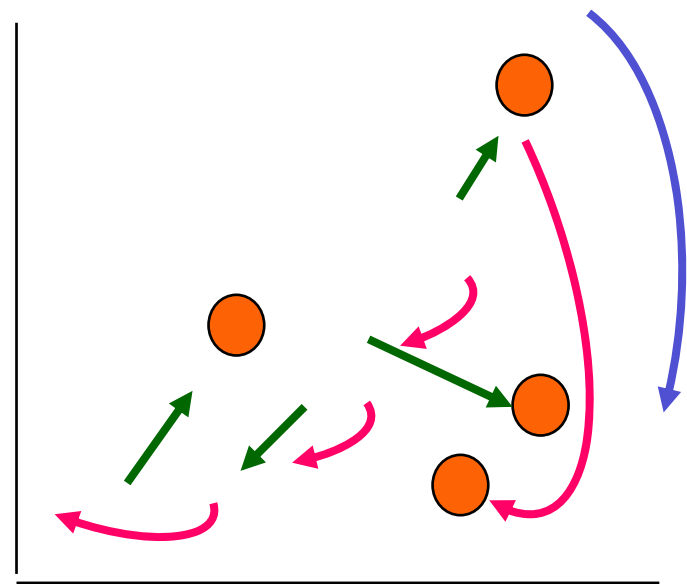
- Why
 - The success we have had has resulted from planning and interacting with stakeholders in the way that was ordered by FERC in Order 890
 - ATC’s business model is dependent on being able to explain the need for the project to numerous stakeholders and make the business case to our regulators
- How
 - Continue to be active participants and integrate fully with MISO on our plans and projects
 - All projects go through MISO’s review and analysis prior to being accepted in the MTEP
 - Continue to work actively with our stakeholders within and beyond our footprint

- Objective
 - To evaluate needs of Upper Peninsula using strategic flexibility approach and considering:
 - “Plausible Futures” in the Upper Peninsula
 - Range of alternative options available
 - Risks associated with options
- Deliverables
 - Plan for Upper Peninsula that meets the short and long term needs of the area
- Approach
 - Work closely with stakeholders to customize ATC corporate futures for UP and use a strategic flexibility approach

Traditional Planning Process



Traditional strategic planning depends on linkages between actions and outcomes



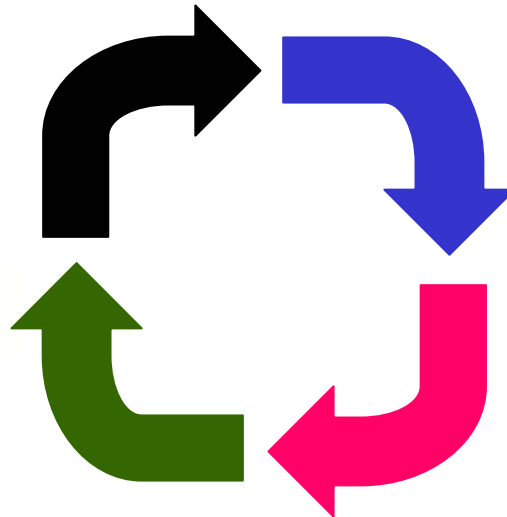
Unexpected events undermine the best strategic plan by corrupting assumed connections

Anticipate

- Identify drivers of change
- Define the range of possible futures
- “Scenario building”

Operate

- Implement the core strategy
- Monitor the environment
- Exercise or abandon options as appropriate



Formulate

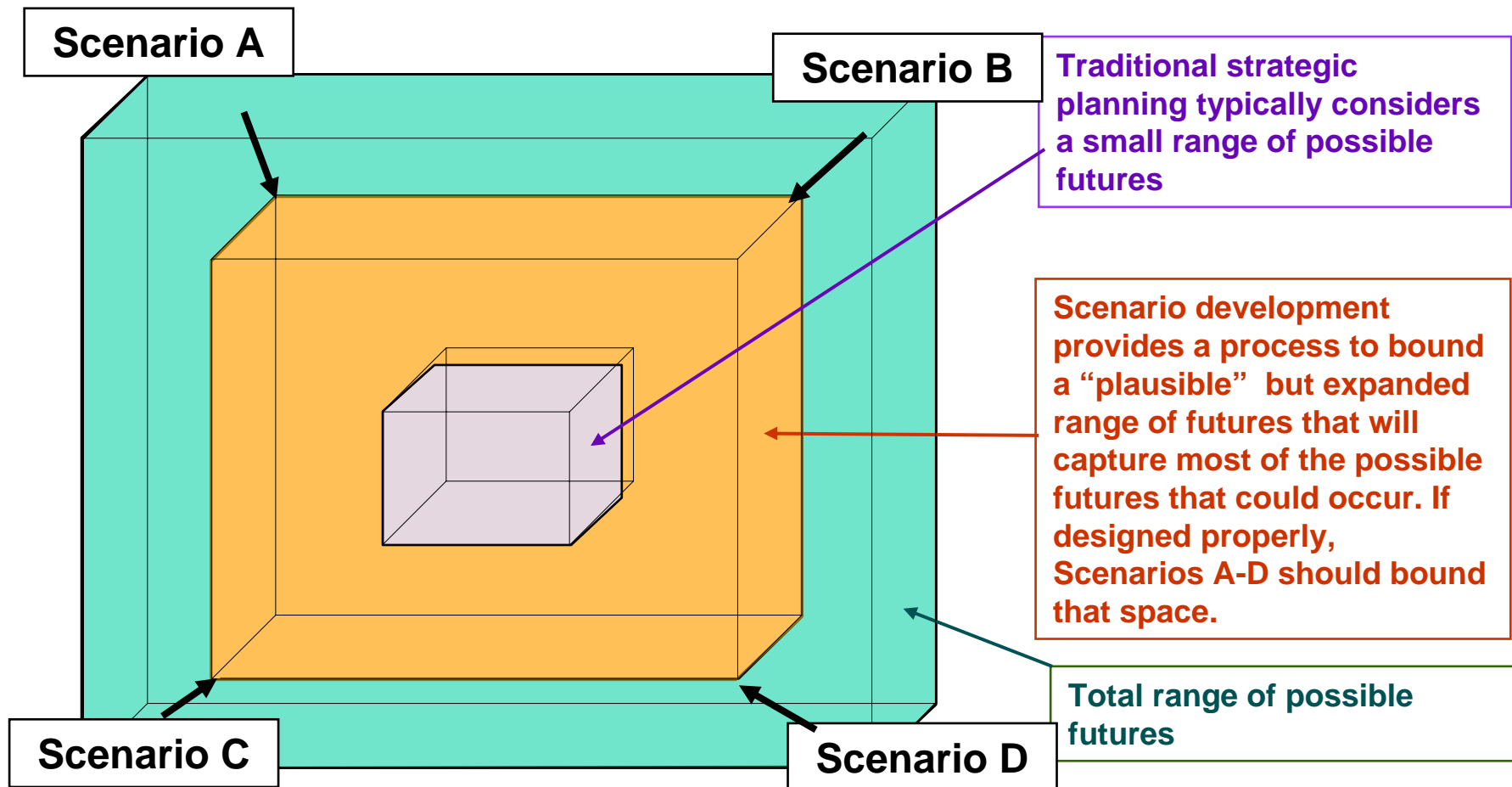
- Develop an optimal strategy for each scenario
- Compare optimal strategies to define “core” and “contingent” elements

Accumulate

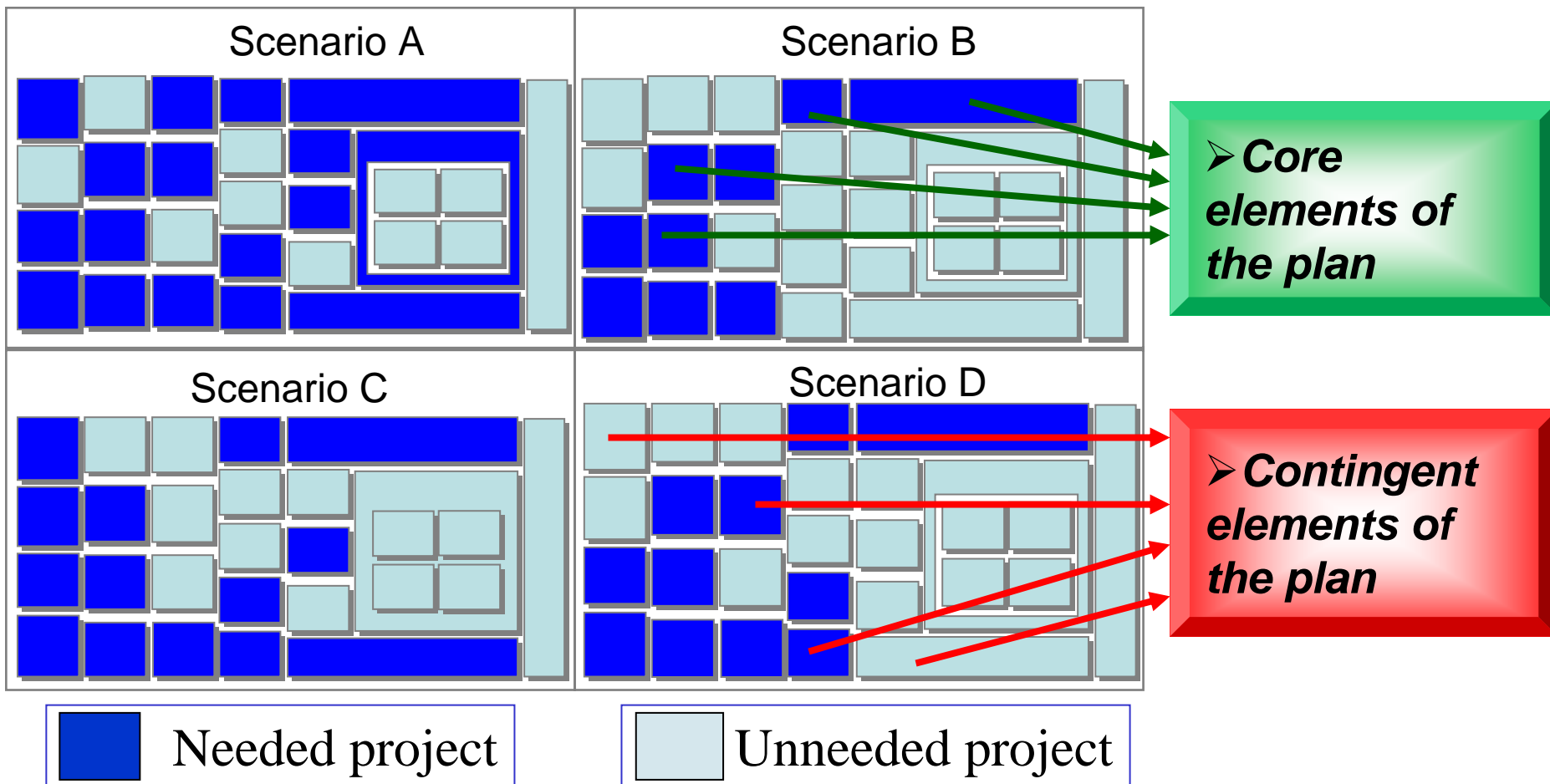
- Acquire those capabilities needed to implement the core strategy
- Take real options on capabilities needed for contingent strategies

Prepare for a future you cannot predict.

Ranges of Plausible Futures



Core and Contingent Options



Source: Deloitte Consulting

- Robust Economy – high economic growth coupled with high load growth, generation and fuel prices; medium environmental regulations
- Slow Growth – slow economic growth coupled with slow load growth, generation and lower fuel prices; low to medium environmental regulation
- High Retirements – significant levels of retirements due to more environmental regulations; middle to low load growth and fuel prices

- High Environmental – stringent environmental regulations including much higher renewable portfolio standard (RPS) drive higher natural gas prices, lower coal prices and lower energy demand
- DOE 20% Wind – increased RPS standards and mid-upper load growth drive lower generation within ATC and mid-low fuel prices
- Fuel and Regulatory Delays – fuel supply disruptions and regulatory delays for coal-fired power plants drive higher natural gas prices, lower energy demand and medium coal prices

- Question: How do the UP micro-drivers behave in each of the above futures?
- Load Assumptions
 - Demand and Energy Growth
 - Point Load Step Changes
- Generation Assumptions
 - Existing Local Generation Availability (Hydro)
 - New Additions
 - Retirements
- Outside Factors
 - Market Flows
 - External Generation

- UP Collaborative
 - Several months process
 - Meet with stakeholders – futures, alternatives, interim results and final results
 - Stakeholders include customers, environmental and municipal groups, regulators, MISO, neighboring transmission owners
- Not a one size fits all approach
 - Resource intensive approach used only when need to make expensive decisions in an uncertain world