Local Market Power Mitigation

February 5, 2004

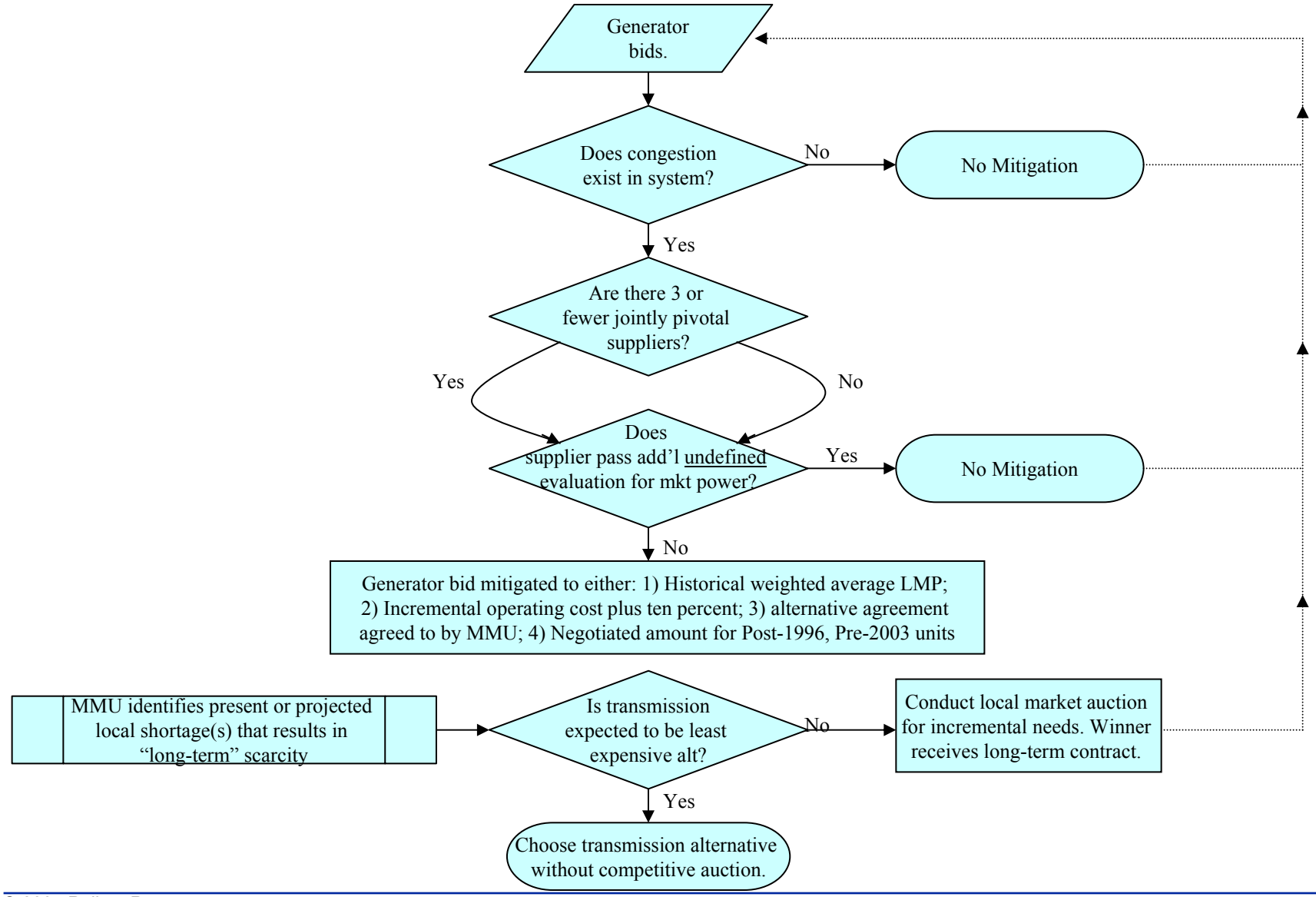
Policy Goals for Local Market Power Mitigation

- Protect Customers by Preventing the Exercise of Market Power
- Utilize Objective Standards that Define When Mitigation is Required
- Incent a Long-Term Market Solution to Solve the Constraints That Create the Potential for the Exercise of Market Power
  - Compensation to Generators Needed For Reliability Should be Consistent with a Competitive Outcome
  - Compensation to Generators Needed For Reliability Must Recognize that Such Units Provide a Unique and Valuable Service
- Provide an Exit Strategy to Units That, But For Reliability Concerns, Would be Retired

PJM's Proposal For Determining When Mitigation is Required

- PJM Proposes a Competitive Solution Test
  - Mitigation May Be Suspended if There are More Than Three "Jointly Pivotal" Suppliers in the Load Pocket
- Flaws Include:
  - Not Clear What Passes Test
    - » Do Three Pivotal Suppliers and One Non-Pivotal Supplier Pass?
    - » Do Four Jointly Pivotal Suppliers Pass?
  - Subjective Standard
  - Does Not Consider Whether Suppliers are Able to Relieve the Constraint
- Desired Outcome: Permit Reasonable Competitive Solutions via Clear Objective Rules

PJM's
Local Market Power Mitigation Proposal



When is Mitigation Appropriate?

- Reliant Supports Application of a Competitive Solution Test
  - Mitigation May Be Appropriate When There are Less Than Three Unaffiliated Resources That Can Solve the Constraint
  - Mitigation is Not Appropriate When There are Three or More Unaffiliated Resources That Can Solve the Constraint, and No One Bidder is Essential to Solving the Congestion: A Competitive Solution Exists
  - Mitigation is Also Not Appropriate When the Supplier's Bid is Consistent with a Competitive Outcome

PJM Compensation

- Tariff Provides Three Alternatives
  - Only One is Predominantly Used in PJM: Generator's Short Run Marginal Cost (*i.e.*, Fuel plus Variable O&M) Plus 10%
- Flaws Include:
  - Fails to Send Appropriate Price Signal
  - Fails to Recognize the Value of the Service Provided
  - Presumes Peaking Units Will Always Recover Fixed Costs During the Hours of Economic Dispatch
  - Inconsistent With Compensation Provided to Those with an Obligation to Serve
  - Fails to Provide Cost Recovery of "To Go" Costs for Limited Run Time Units

Reliant's Proposed Compensation – System Surrogate Unit Proposal

- System Surrogate Unit
  - The last unit expected to be dispatched in the ISO/RTO system in the forward year not otherwise subject to a Reliability Must Run agreement
  - Reflects a competitive benchmark that could solve congestion
- System Surrogate Threshold
  - The bid of a generator that fails the Competitive Solution Test will be compared to a Threshold as determined by the System Surrogate Unit
  - Bids at or below the Threshold will not be mitigated
  - Bids above the Threshold will be mitigated to the Threshold and the owner receives the higher of market or the System Surrogate Threshold

System Surrogate Threshold Calculation

[System Surrogate Heat Rate x (Fuel Index + Applicable Delivery Charges)]
+ $x.xx/MWh Variable O&M
+ (System Surrogate Emissions Rate x Emissions Allowance Price)
+ Start Up and No Load Costs (Where Applicable)

Where:

System Surrogate Heat Rate =	The heat rate (in MMBtu/MWh) of the unit with the highest expected power price in the ISO/RTO system that has not entered into an RMR contract.
Fuel Index =	Daily $/MMBtu of the closest deliverable fuel index (typically gas or fuel oil) to the System Surrogate Unit adjusted for any delivery charges.
Applicable Delivery Charge =	Any transport and LDC delivery charges to the System Surrogate Unit.
Variable O&M =	Based on previous FERC decisions, Reliant suggests the Variable O&M portion fall in a range between $6 - $10 per MWh. This range should cover non-fuel variable O&M costs, as well as imbalance and swing costs. This item will be determined on a system-wide basis, not a unit-specific basis.
System Surrogate Emissions Rate =	Applicable emission rate of the System Surrogate unit.
Emissions Allowance Price =	Allowance price based on recent transactions that accurately reflect the value of allowances or on values most recently published by a recognized allowance broker or brokers.
Start Up & No Load Costs =	Start Up and No Load costs of the System Surrogate Unit.

PJM's Local Market Auction

- PJM Proposes to Hold an Auction to Resolve "Long-Term" Scarcity that Creates a Reliability Problem
- The Auction Will Seek the Lowest Cost Option
  - Transmission
  - Generation
  - Load Response Alternatives
- Detailed Rules are Still Being Developed
- PJM Auction Should be Designed so That it:
  - Is Not Subjective
  - Does Not Give Preference to Transmission Solutions
  - Limits the Contracts of Winning Bidders to a Reasonable Period of Time

Reliant's Exit Strategy Process

- Some Units May Choose to Retire if the Market (including the System Surrogate Unit Methodology) Does Not Support the Economic Recovery of Unit Costs
- Generation Owners That Wish to Retire Uneconomic Units Should Follow This Process:
  - Notify The RTO/ISO of Intent to Retire the Unit
  - RTO/ISO has 60 Days to Determine if the Unit is Necessary for System Reliability
  - If Not Needed the Unit May Retire
  - If Needed The Generator and RTO/ISO Enter Negotiations for a One-Year RMR Contract.
  - RTO/ISO May Only Dispatch the Unit to Resolve Local Congestion or During System Emergencies

Reliant's Exit Strategy Process

- Exit Strategy
  - Within 90 Days of Designation as RMR, the RTO/ISO Must Conduct an Auction to Determine the Least Cost Solution to the Constraint
  - Any Resource Could Bid to Solve the Constraint—the Incumbent Generator, Other Generation, Load, Transmission
  - RMR Status Terminates Once New Resource is Online
- Compensation For RMR Units
  - "To Go" Costs of the RMR Unit Plus a Pro-Rated Portion of the Positive Difference Between the Levelized Revenue Requirement of the Replacement Resource and the "To Go" Costs of the RMR Unit
  - Pro-Ration Based on the Number of Years Until the Replacement Resource is in Service
  - Contract is Reasonable From a Customer's Perspective Because it Provides a Discount to the Value of Service Being Provided (I.e., Avoided Costs)

Summary

- Reliant Supports Application of an Objective Competitive Solution Test
  - Mitigation may be appropriate when there are less than three resources that can solve the constraint
  - Mitigation is not appropriate when there are three or more unaffiliated resources that can solve the constraint and no one bidder is essential to solving the congestion
- Reliant Supports Modernized and Market-Based Compensation Methods
  - Mitigation and compensation should reflect a competitive outcome
- Reliant Supports an Objective Competitive Auction
  - Provide an exit strategy and auction open to all potential resources (including generation, transmission, and demand response) when needed
  - Reflect value of premium service being provided
  - Auction eliminates the opportunity to exercise market power

System Surrogate Unit Methodology Flowchart