Cost Allocation Education

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Agenda

- Background: Cost Allocation related to Generation Deactivation
- RTEP Transmission Project: Type, Driver, Cost Allocation
- Baseline Project: Cost Allocation Process
- Cost Allocation Methodology: Reliability, Economic, Public Policy
- Resources: Reference Materials

Cost Allocation - Generation Deactivation

Tariff
Schedule 12 (b)

- Identify reliability violations resulting from generation deactivation
- Require reliability project to mitigate reliability violations
- Project costs are allocated pursuant to cost allocation methodologies for reliability projects

Tariff
Part V
Section 120

- Required reliability project may not be completed by proposed deactivation date
- Generation Owners may elect to continue operating as RMR unit until necessary projects are completed
- RMR unit cost are allocated to the load in the zone(s) that will be assigned financial responsibility for the required reliability project

RTEP Transmission Project

Baseline

- **Need**: Ensure compliance with NERC, regional and local transmission owner planning criteria and address market efficiency congestion relief
- **Driver**: Reliability; Economic; Public Policy; Multi-Driver
- **Cost allocation**: Varies by project driver and voltage level of the involved facilities
- **RTEP inclusion**: Approved by PJM Board

Network

- **Need**: Address the needs for interconnection of Generating Facilities or Merchant Transmission Facilities
- **Driver**: New Service Request
- **Cost allocation**: 100% to the New Service Request
- **RTEP inclusion**: Approved by PJM Board

Supplemental

- **Need**: Address transmission owner local reliability needs
- **Driver:** Customer Service; Equipment Material Condition, Performance and Risk; Operational Flexibility and Efficiency; Infrastructure Resilience
- **Cost allocation**: 100% to the local zone
- **RTEP inclusion**: Presented to PJM Board for awareness before included in local plans

Baseline Cost Allocation Process

Cost Allocation Procedures

- **Federal Guidelines** (FERC Order No. 1000): Commensurate with benefits
- **PJM Transmission Owners' Role**: Developed detailed procedures
- **PJM Implementation**: PJM Open Access Transmission Tariff (OATT) and Planning Manuals outline detailed methodology

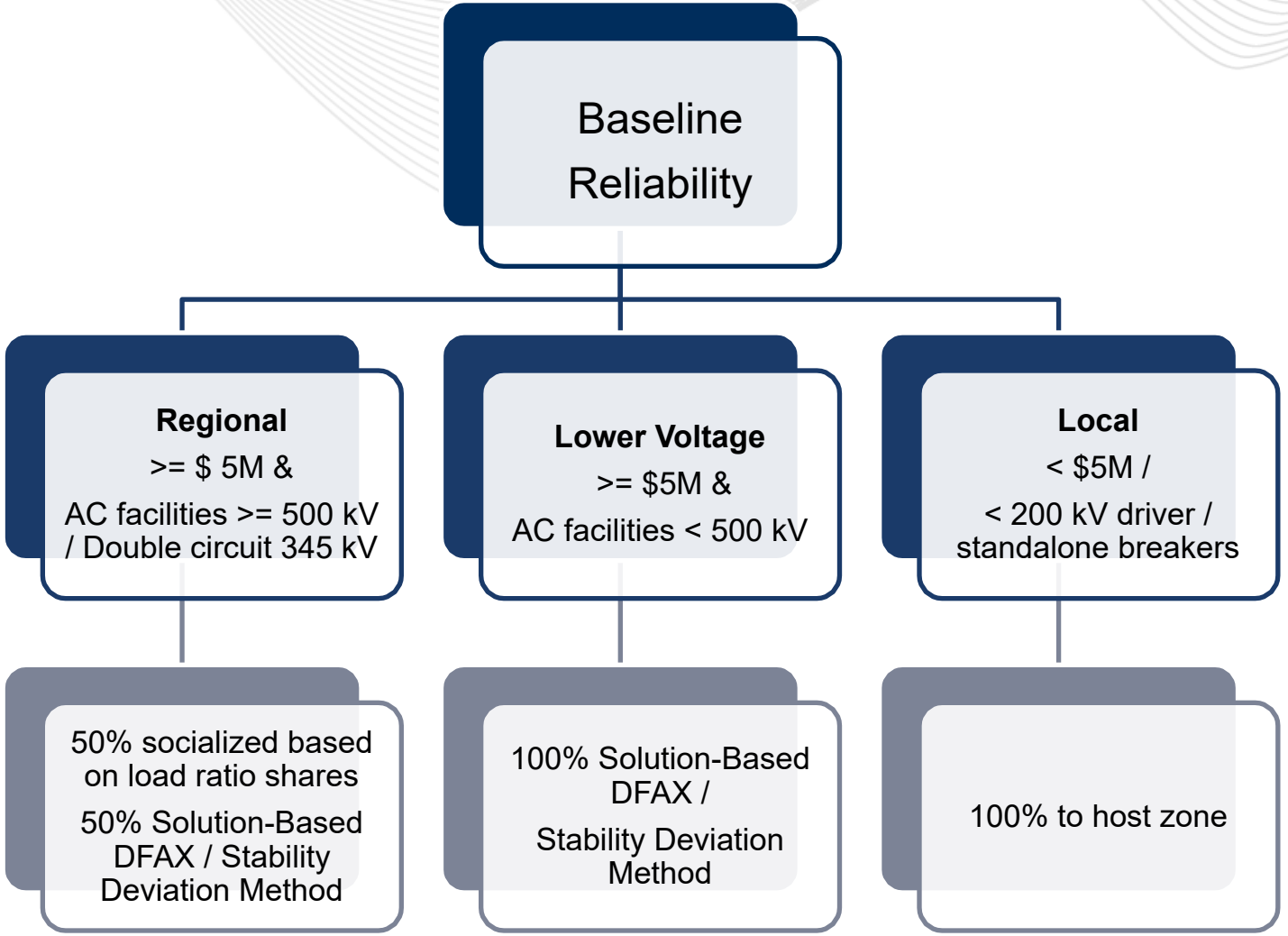
Cost Allocation Development and Approval

- **Development:** PJM staff develops allocations based on tariff and manual procedures
- **Approval:** The PJM Board of Managers reviews and approves the proposed allocations
- **FERC Filing**: For baseline upgrades, PJM files the board approved cost allocations with FERC

Baseline Project Driver

Driver	Description
Reliability	Ensure compliance with NERC standards and maintain system reliability
Economic	Relieve congestion and improve market efficiency
Public Policy	Support state or federal policy goals
Multi-Driver	Address a combination of the above drivers

Cost Allocation: Baseline Reliability



Cost Allocation: Baseline Reliability

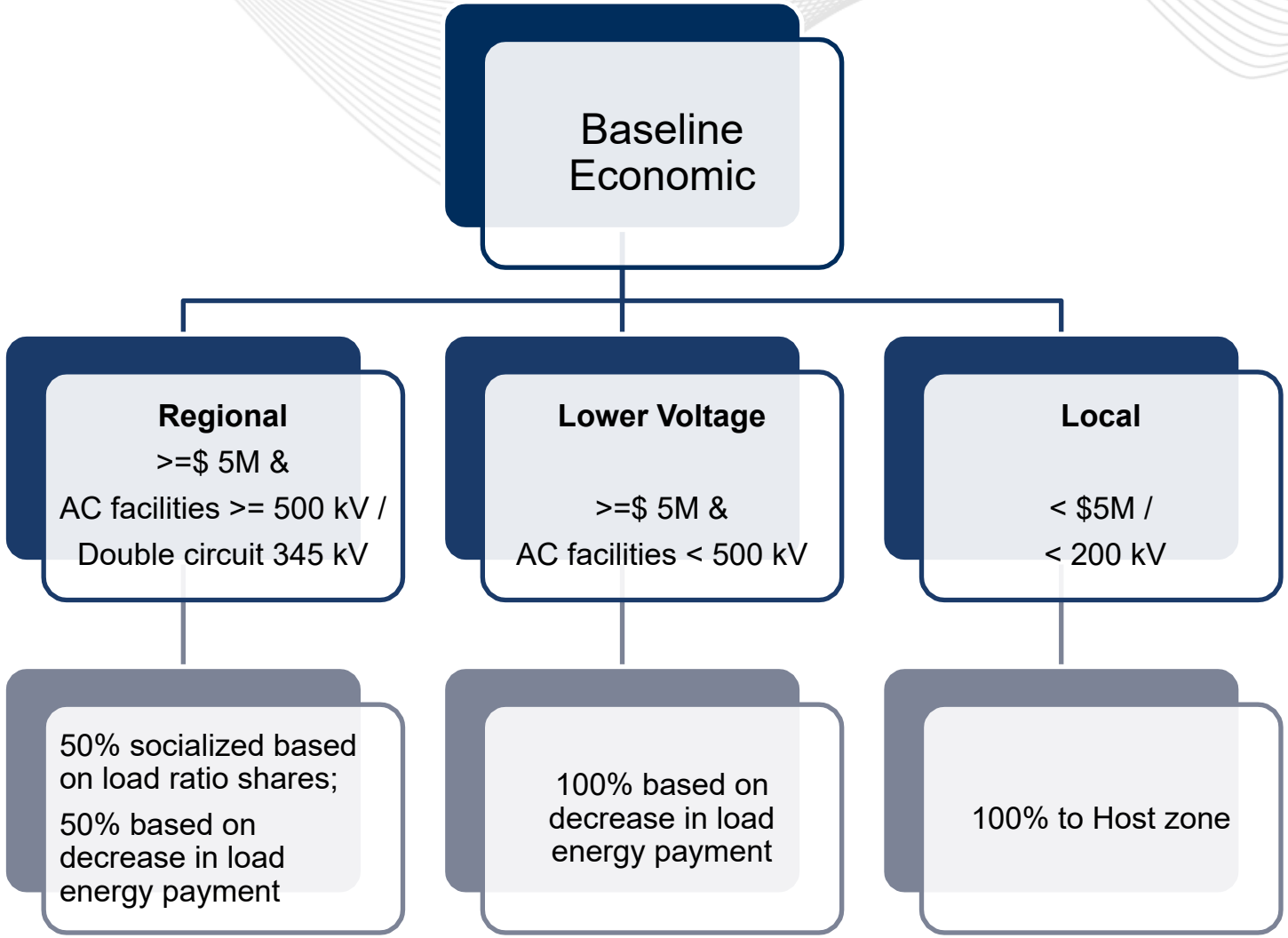
Solution-Based DFAX allocation

- **Applicability**: Regional & Lower Voltage facilities (except those driven by stability)
- **Methodology**: Based on each customer zone relative contribution to power flows on baseline upgrade
- **Threshold**: zones contributing less than 1% per MW are excluded, except local zone

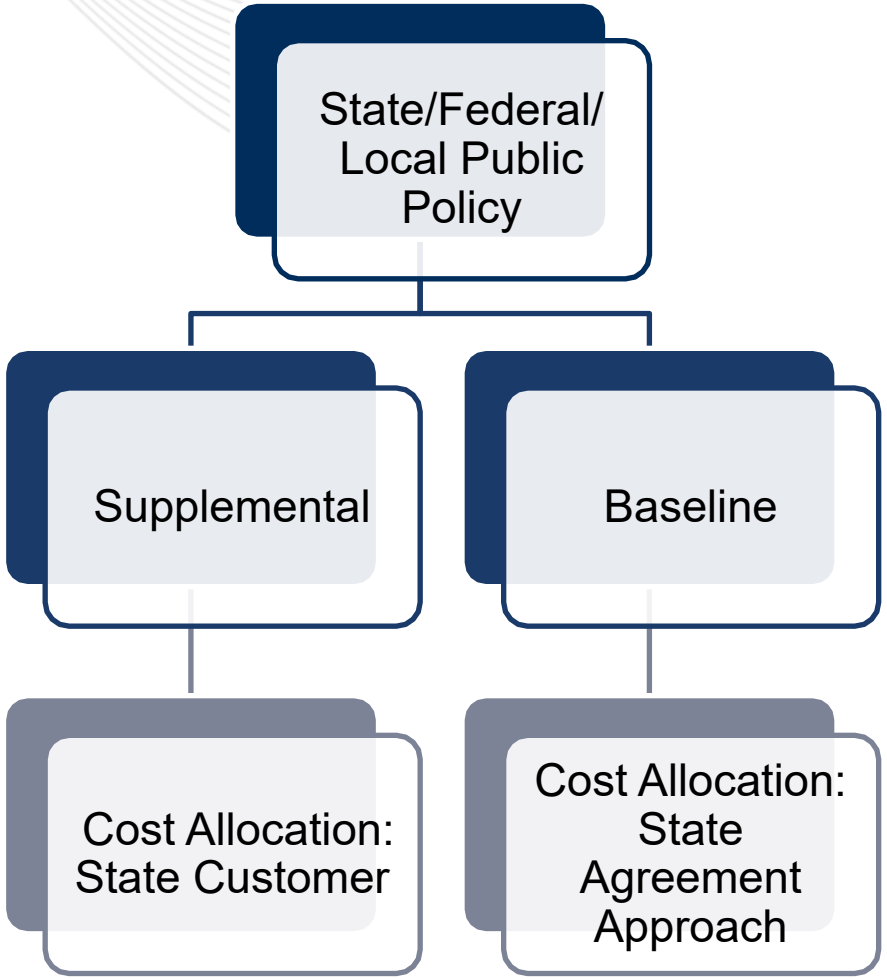
Stability Deviation Method allocation

- **Applicability**: Stability-driven Regional & Lower Voltage facilities
- **Methodology**: Based on each customer zone relative contribution to the transient voltage angle deviations at each load bus
- **Threshold**: Angle deviations < 25% of maximum deviation are excluded

Cost Allocation: Baseline Economic



Cost Allocation: Public Policy



Cost Allocation: Baseline - Multi-Driver

Multi-Driver Projects

- Driven by combination of reliability, economic, public policy

Proportional Multi-Driver Project

- **Concept**: Combines separate single driver solutions into one integrated project
- **Cost Allocation**: based on relative costs of the individual projects that would have been required to address each driver individually

Incremental Multi-Driver Project

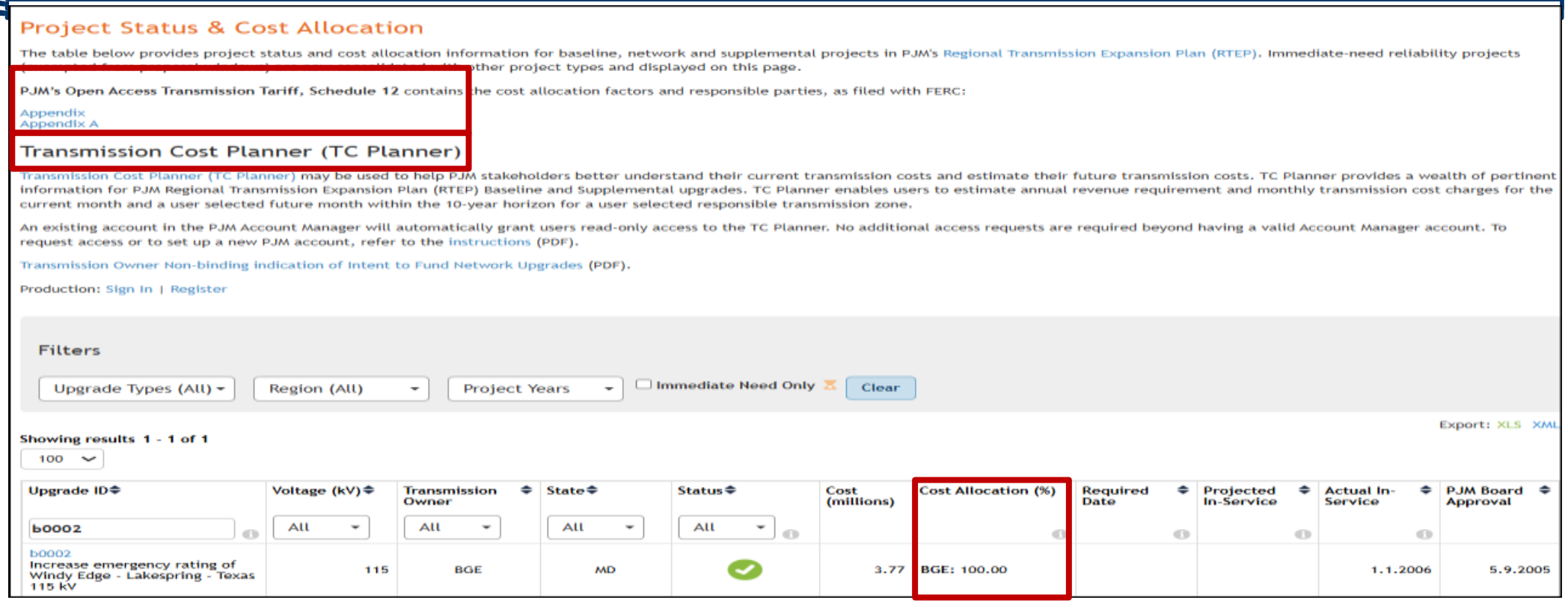
- **Concept**: Expand a single driver solution to address additional drivers
- **Cost Allocation**: Same as for proportional project but treat the estimated cost of modifying the original project as if it were the estimated cost of a separate project

Cost Allocation Information

PJM OATT: https://agreements.pjm.com/oatt/4424

Manual 14B: https://www.pjm.com/-/media/DotCom/documents/manuals/m14b.pdf

Web posting: https://www.pjm.com/planning/m/project-construction



Project Status & Cost Allocation

The table below provides project status and cost allocation information for baseline, network and supplemental projects in PJM's Regional Transmission Expansion Plan (RTEP). Immediate-need reliability projects ...ther project types and displayed on this page.

PJM's Open Access Transmission Tariff, Schedule 12 contains ...he cost allocation factors and responsible parties, as filed with FERC:

Appendix
Appendix A

Transmission Cost Planner (TC Planner)

Transmission Cost Planner (TC Planner) may be used to help PJM stakeholders better understand their current transmission costs and estimate their future transmission costs. TC Planner provides a wealth of pertinent information for PJM Regional Transmission Expansion Plan (RTEP) Baseline and Supplemental upgrades. TC Planner enables users to estimate annual revenue requirement and monthly transmission cost charges for the current month and a user selected future month within the 10-year horizon for a user selected responsible transmission zone.

An existing account in the PJM Account Manager will automatically grant users read-only access to the TC Planner. No additional access requests are required beyond having a valid Account Manager account. To request access or to set up a new PJM account, refer to the instructions (PDF).

Transmission Owner Non-binding indication of Intent to Fund Network Upgrades (PDF).

Production: Sign In | Register

Filters

Upgrade Types (All) | Region (All) | Project Years | Immediate Need Only | Clear

Export: XLS XML

Showing results 1 - 1 of 1

100

Upgrade ID	Voltage (kV)	Transmission Owner	State	Status	Cost (millions)	Cost Allocation (%)	Required Date	Projected In-Service	Actual In-Service	PJM Board Approval
b0002	All	All	All	All						
b0002 Increase emergency rating of Windy Edge - Lakespring - Texas 115 kV	115	BGE	MD	✓	3.77	BGE: 100.00			1.1.2006	5.9.2005

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