



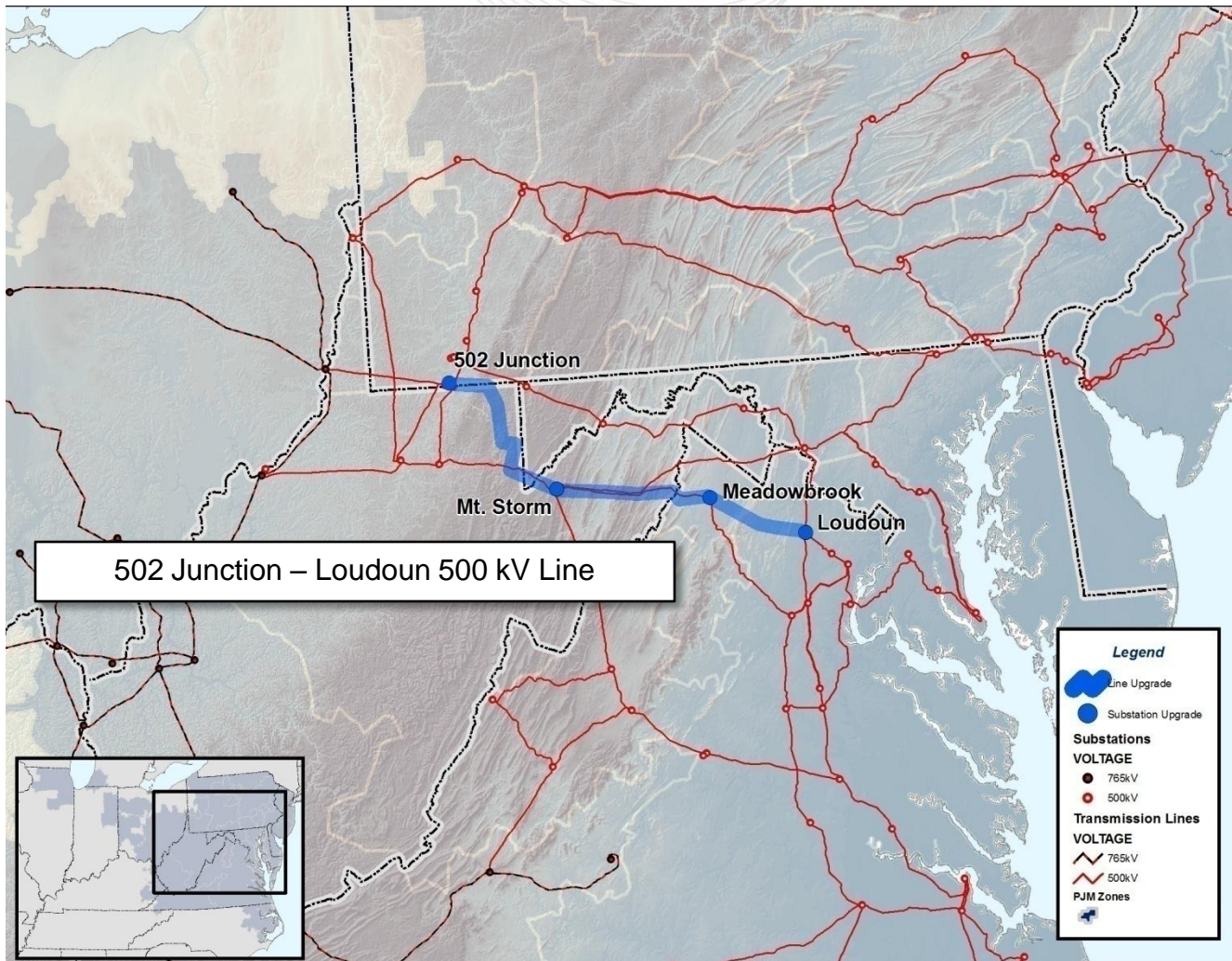
PJM Regional Transmission Expansion Plan (RTEP) “Bright Line” Criteria

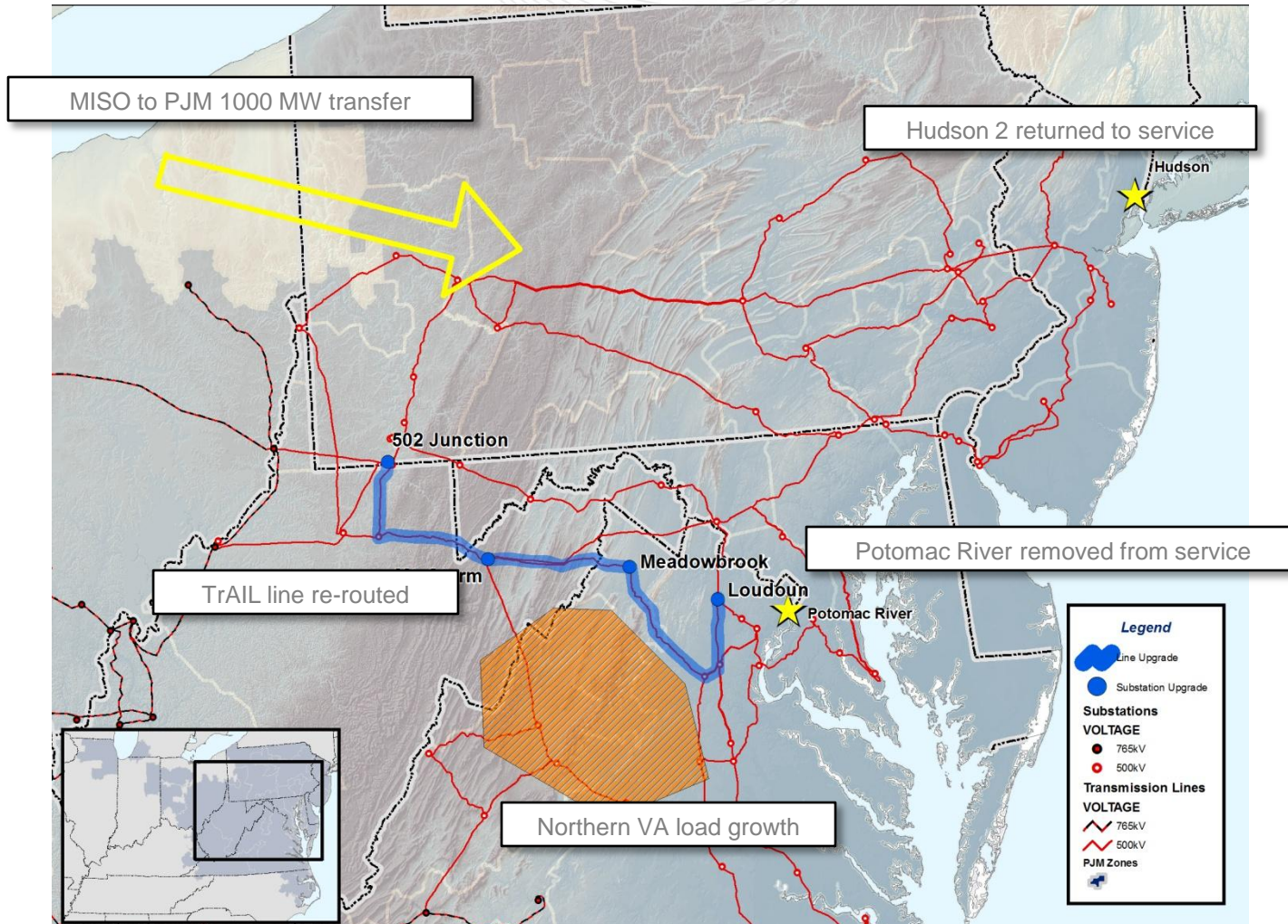
April 1, 2010
Steven R. Herling

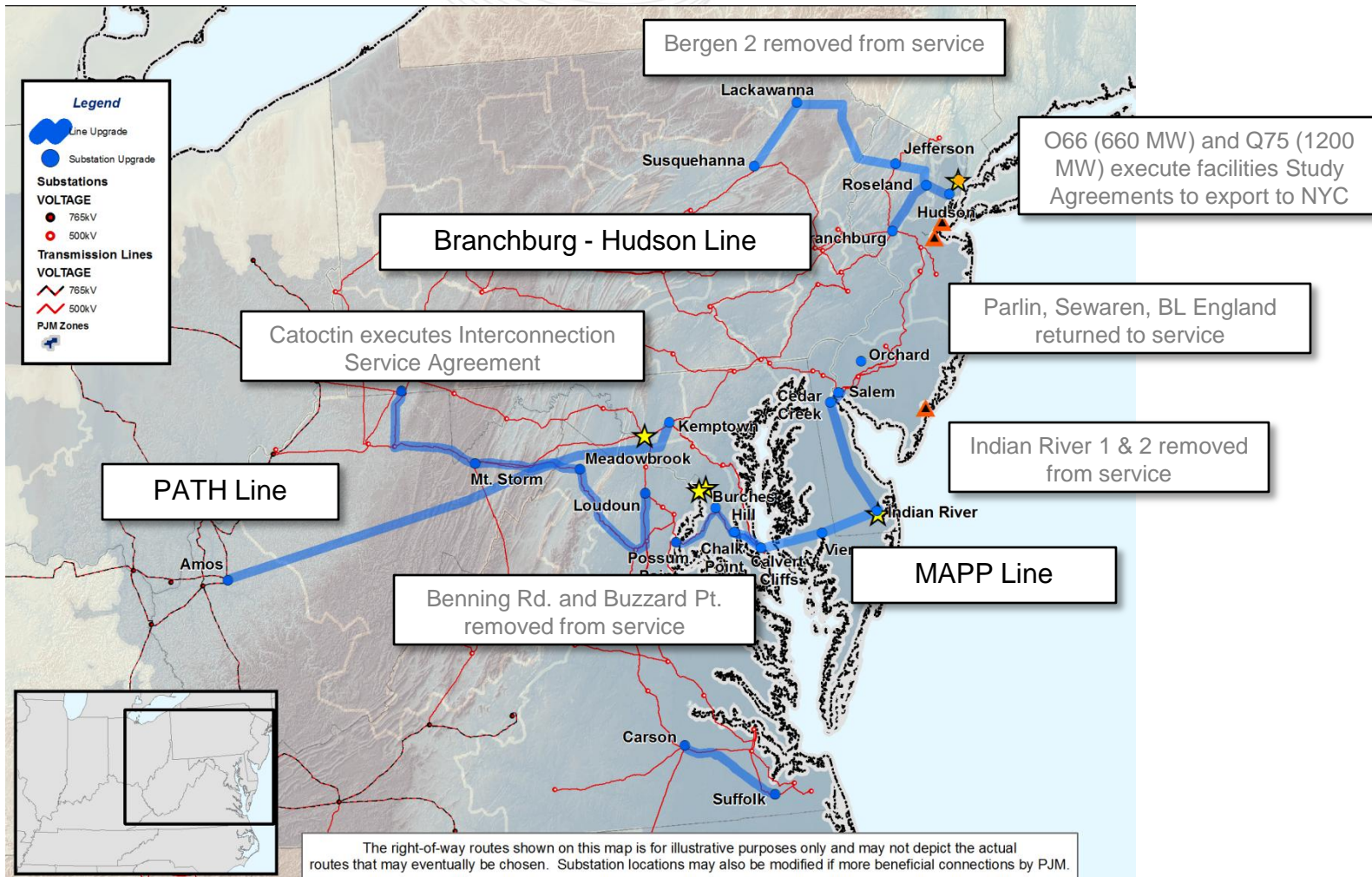
- Original RTEP protocol was very general
 - RTEP shall conform to applicable reliability criteria
 - RTEP shall consolidate transmission needs... on the bases of maintaining reliability... in an economic and environmentally acceptable manner
- Cost allocation was negotiated among transmission owners with a recommendation provided by PJM
 - A backstop allocation was defined in the event that negotiations were not successful

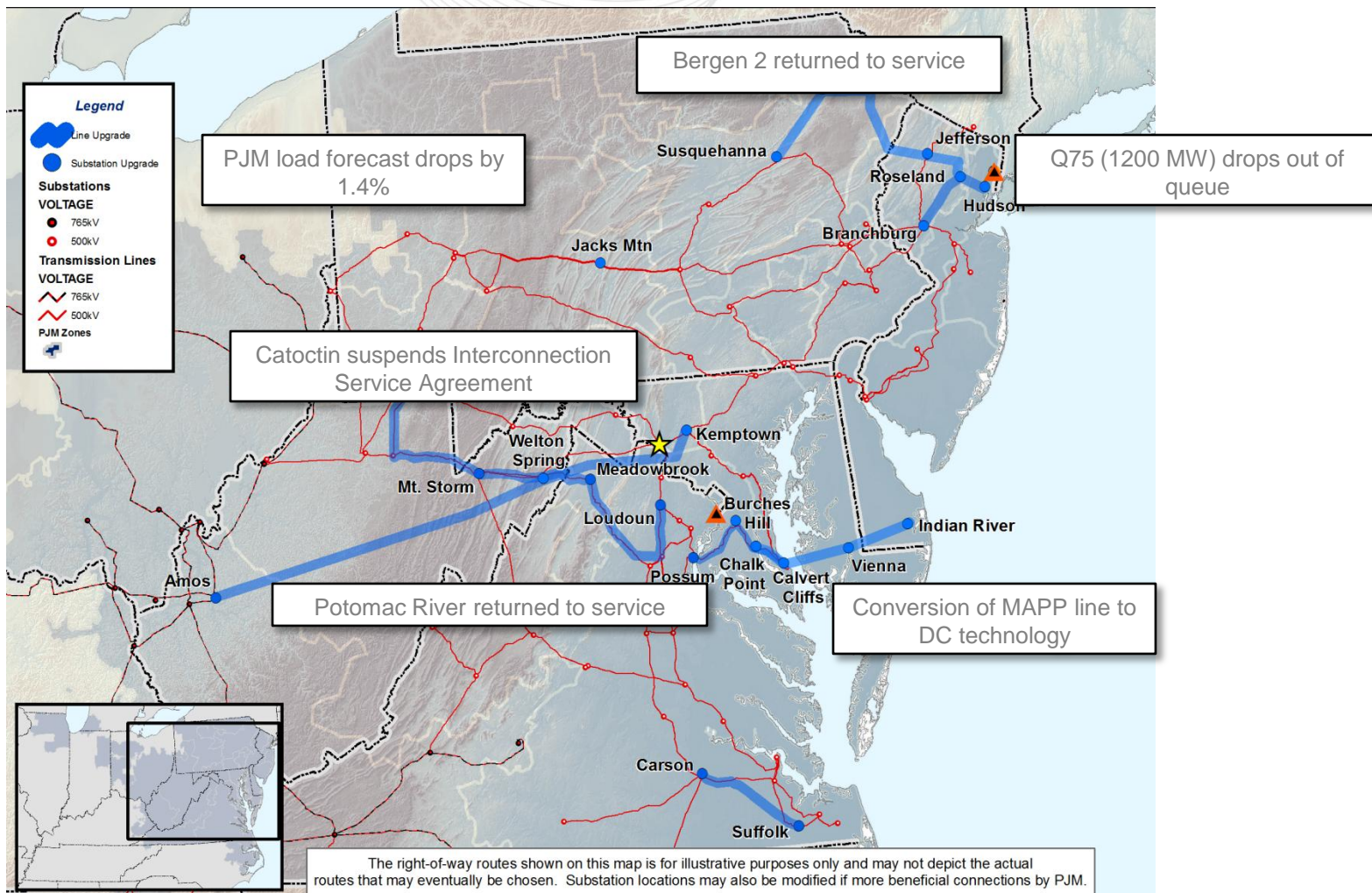
- “Bright Line” concept was formulated in 1999 as a result of the development of the generation interconnection process
- PJM tests compliance with all NERC and transmission owner criteria
 - When a facility reaches 100% of the applicable limit under test conditions a violation exists – at 99.9% there is no violation
 - All model assumptions are explicitly defined in the PJM Manuals, including PJM load levels, what generators are operating and at what level of output, and transfer levels with neighboring systems

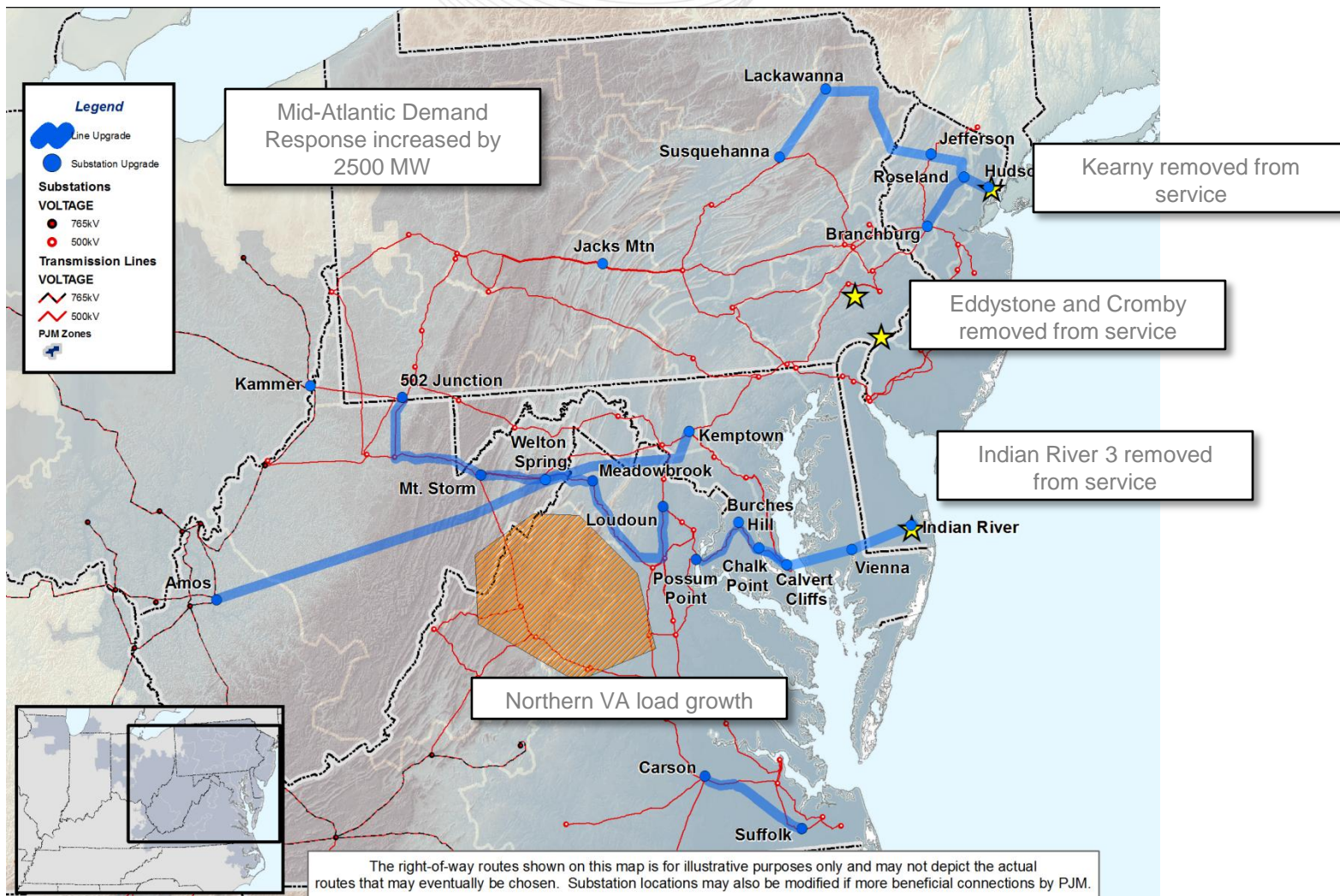
- Generation interconnection process required the ability to allocate costs among interconnecting generators and between generators and existing network load
- The bright line test provided for a clean “baseline” upon which to evaluate generators
 - If there is no violation in the baseline and a violation exists when a generator is added, the upgrade to resolve the violation would not have been needed “but for” the addition of the generator











- **PATH line**
 - Delay to 2015 or later
 - Consider alternative upgrades
- **MAPP line**
 - Delay to 2015 or later
 - Consider alternative upgrades
- **Branchburg – Roseland – Hudson line**
 - Delay to 2014 or later
 - Consider alternative upgrades

- **Status Quo**

- Major projects will continue to be “whip-sawed” with respect to in-service date or even removal from RTEP
- May not be prepared if carbon legislation forces retirement of large amounts of older coal generation
- May not be prepared to address other categories of at-risk generation related to changing revenue streams
- Will not facilitate renewable integration
 - Wind projects receiving larger and larger estimates for integration costs
 - States commenting on inability of RTEP to accommodate renewables and requesting integration studies

- Board Decisions Based on Sensitivity Analyses and Preponderance of Evidence
 - Significant disagreement among stakeholders as to basis for sensitivities
 - Elimination of “bright line” would require fundamental changes to interconnection process
 - Would likely require fundamental change to RTEP cycle
 - Evaluate backbone system on a two or three year cycle
 - Concept was rejected by FERC in PJM Market Efficiency filing

- Add Specific Planning Criteria Related to Environmental Policy (Renewables and Carbon)
 - Likely disagreement among stakeholders as to basis for new rules regarding environmental policy
 - Once rules are established they would create a new bright line
 - Cost allocation may need to be modified based on nature of new policy rules
 - Would likely require fundamental changes to interconnection process to avoid favoring one type of generation over another