New Remedial Action Scheme

North Hampton RAS

Presentation to PJM
- PJM System Operations Subcommittee
- PJM Relay Subcommittee
- PJM Planning Committee
- PJM Operating Committee
- PJM Market Implementation Committee
- PJM Markets and Reliability Committee
Yorktown Generation

- Environmental regulations make continued operations impractical
- Yorktown 1&2 coal-fired generators will retire April 2017
North Hampton Roads Area Problems

– Under certain conditions
  • Voltage collapse in the Peninsula area
  • Significant overloads

– Long list of N-1-1 contingencies that result in voltage collapse and thermal overloads
Surry to Skiffes Creek 500kV Line

- PJM project b1905 establishes a new 500kV line across the James River.
  - PJM’s board approved in May 2012
  - Virginia State Corporation Commission (SCC) approved on 11/26/2013 and granted a CPCN

- Army Corps of Engineers permit submitted
  - Approval of Army Corps permit is still pending

- Line cannot be built in time to cover Yorktown retirement
Temporary North Hampton RAS

- RAS is armed at PJM’s discretion
- Detects loss of certain facilities
- Trips remaining feeds to Yorktown area
  - Drops about 150,000 customers
  - Prevents Voltage Collapse
- Rotating outages will follow until facilities are repaired
North Hampton RAS

Area of load shed
Not a substitute for Surry-Skiffes Creek Project

- RAS is only a stopgap measure
  - Does not provide a long term solution
  - Drops too much load
  - Repair time could be lengthy
  - Per PJM Manual 07, new RASs should be temporary