National Grid’s DA Pilot

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Pilot Description

- To test different automatic restoration schemes
  - Distributed Intelligence
  - Centralized Intelligence
- Volt/VAR control being investigated
- Communications mediums being investigated
Circuit Selection

- Subtransmission lines selected on greatest CMI over a 5-year period
- Distribution circuits with poor performance, no existing reclosers and available ties selected.
Automatic Restoration

- Pilot’s underway on both Subtransmission and Distribution
- Two Sub-T circuits
  - Distributed Intelligence
  - 1 - 23kV line & 1 - 34.5kV line
- Nine Distribution circuits
  - 5 with Distributed Intelligence
  - 4 with Centralized Intelligence
Sub-T lines

- 6 switches on the 34.5 kV line
- 3 switches on the 23 kV line
- Switch installation is complete
- 34.5 kV line programmed the week of 6/24/08
- 23 kV line programmed the week of 7/16/08
- Currently working on EMS issues
Distribution Circuits

- **Distributed Intelligence pilot is well under way**
  - Reclosers and switches have been installed in the field
  - Controllers are currently being programmed in the lab
  - Field testing started today!
- **Centralized Intelligence pilot**
  - Still determining which vendors logic to utilize
  - This is due in part to a switch in recloser vendor
Distributed Intelligence circuits

- Covers 5 (6) circuits on the east side of Syracuse
  - 2 additional circuits utilized as alternate feeds
- 13 switches and 10 reclosers are part of this pilot
  - 4 reclosers were existing (installed within the past 2 years)
- Using EMS connections at different substations due to EMS/Communication requirements
Additional Steps

- Programming of the Distribution devices began today
- Verify communications with EMS
- Train control room personnel
- GO LIVE!