Calpine Bethlehem LLC
Bethlehem SPS Scheme

System Operations Subcommittee
March 26, 2014
Need for Temporary SPS Scheme

• Transmission outage of Blooming Grove - Bushkill 230 kV starting July 1, 2014 for construction of Susquehanna Roseland 500 kV

• Portland coal units to be retired as of June 1, 2014

• Due to lack of transmission and generation supply into this area, studies show potential transmission congestion on one Steel City – Quarry 230 kV line for loss of the other Steel City – Quarry 230 kV line

• A trip of Calpine’s Bethlehem Unit 8 for the outage of either Steel City – Quarry 230 kV circuit would relieve this potential congestion
Operation of the SPS at Bethlehem

- To Fox Hill
- To Portland
- To Siegfried
- To Morris Park

Martins Creek 230kV

Northwood 230kV

Quarry 230kV

Hosensack 500kV

Steel City 500kV

Steel City 230kV

Bethlehem Unit 8

SPS: Trip Bethlehem Unit 8 for loss of either Steel City - Quarry 230kV circuits
SPS Scheme Removal

• When the Susquehanna Roseland 500 kV circuit is in service and the Blooming Grove – Bushkill 203 kV is restored the Bethlehem Unit 8 SPS is no longer needed and will be removed.