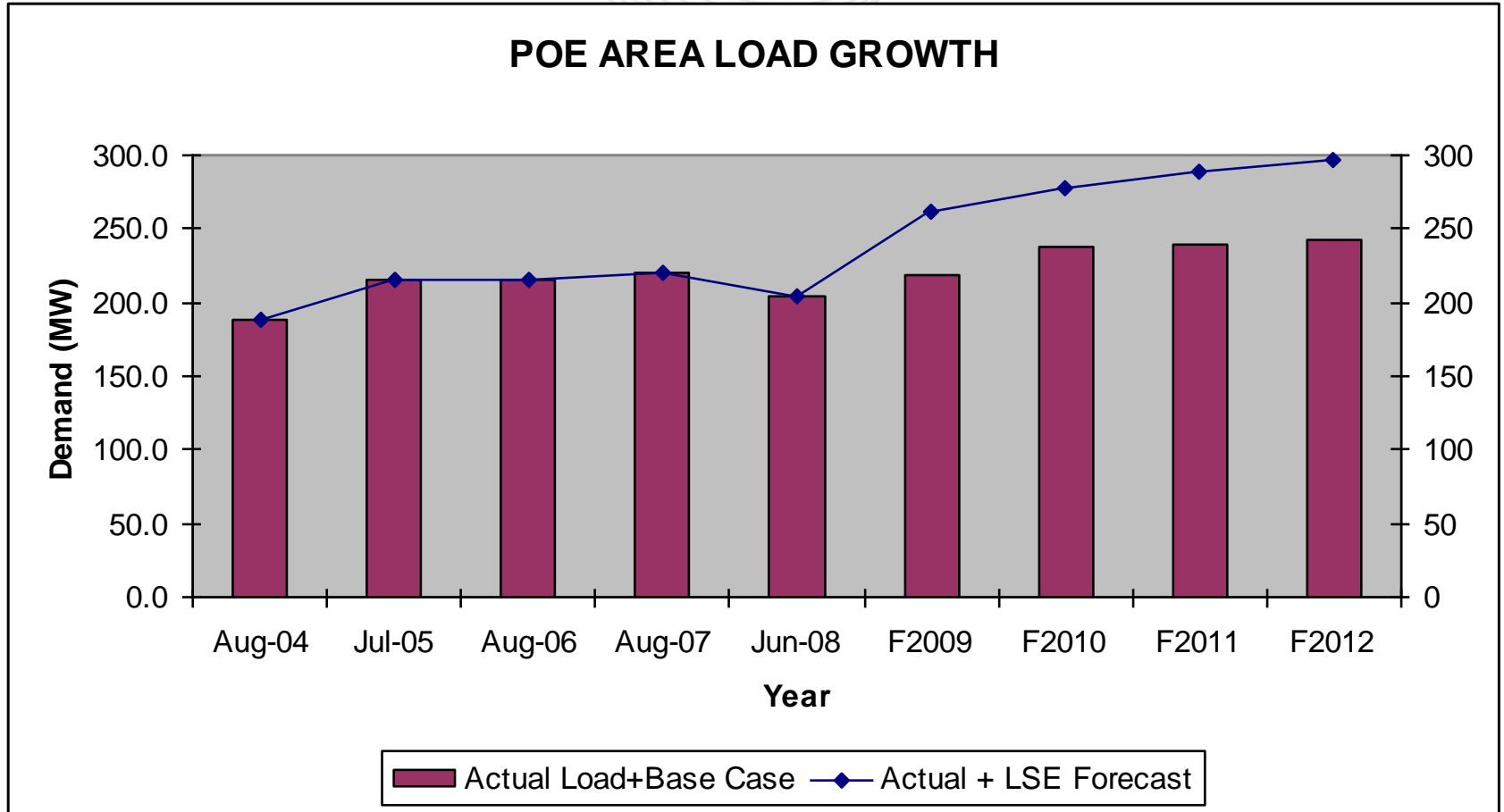


Poe Area Load Growth

Southern Subregional RTEP
March 26, 2009

- BRAC consolidation at Ft Lee
 - New facilities at Ft. Lee
 - Load Growth external to Ft Lee
 - Prince George DP
- New economic development in Area
 - Rolls Royce Plant



	Line #162 (Harvell – Locks)	Poe Tx (230 – 115 kV)	Line #97 (Harvell – Temple)	Wakefield (voltage pu)
Current Loadings				
Tower Line (2002 & 2003)	114%	21%	94%	0.92
N-2 (Poe Tx & Line #162)	NA	107%	20%	0.97
N-2 (Poe Tx & Poe Tx)	82%	NA	62%	0.95
LSE Projections				
Tower Line (2002 & 2003)	141%	27%	121%	0.90
N-2 (Poe Tx & Line #162)	NA	131%	20%	0.96
N-2 (Poe Tx & Poe Tx)	100%	NA	80%	0.93
LSE Projections +PGDP				
Tower Line (2002 & 2003)	152%	25%	132%	0.89
N-2 (Poe Tx & Line #162)	NA	142%	20%	0.96
N-2 (Poe Tx & Poe Tx)	110%	NA	90%	0.93

- Option A
 - Rebuild 4.6 miles of abandoned 115 kV Line for 230 kV (Hopewell – Defense Tap)
 - Install 230-115 kV Tx at Defense Tap plus 115 kV Breakers
 - Estimated cost \$ 15 million
- Option B
 - Build 2 miles of new UG 115 kV Line from Locks to Harvell
 - Rebuild 7 miles of Line #97 from Harvell to Ft Lee
 - Estimated cost \$ 40 million
- Option C
 - Rebuild Line # 162 (Locks – Harvell) and Line #97 (Harvell - Ft Lee)
 - Install 3rd 230-115 kV Tx at Poe Substation
 - Estimated cost \$ 20 million
- Option D
 - Rebuild the 50 mile 115 kV corridor between Poe and Suffolk
 - Estimated cost \$ 150 million

- Winfall and Elizabeth City area voltage and thermal issues
 - Loss of Shawboro – Elizabeth City 230 kV followed by the loss of Winfall – Suffolk 230 kV results in low voltage in the area
 - Potential solution being considered is a second Shawboro – Elizabeth City 230 kV line
- Dupont – Waynesboro 115 kV cap (b0782) may need to be advanced due to industrial customer behind the meter generation retirement

- Determine how the load changes around Poe should be incorporated into the planning models
- Validate the issues identified by Dominion staff
- Review results with the SRRTEP and develop upgrades as required