

PEC Reliability/Resource Supply Option
2011 Summer

2011 Summer Branches with MVA flow > 90.0 % of nominal rating				Base TRM (3600MW) Import				Base TRM + 600MW/1200MW Import					DK 600MW + TRM Import		SCEG 600MW + TRM Import		SCPSA 600MW + TRM Import		VAP 600MW + TRM Import		SOCO 600MW + TRM Import		TVA 600MW + TRM Import		AEP 600MW + TRM Import		AEP/AEP 1200 MW + TRM Import		AEP/VAP 1200 MW + TRM Import						
Line	From bus / To bus / CKT				Base HR DN	Base BR1 DN	Base Solution Yr	Base Solution	Max %	% Impact	Source(s)	Earliest Need	Rating (MVA)	HR DN	BR1 DN	HR DN	BR1 DN	HR DN	BR1 DN	HR DN	BR1 DN	HR DN	BR1 DN	HR DN	BR1 DN	HR DN	BR1 DN	HR DN	BR1 DN	HR DN	BR1 DN	Contingency		Import Comment	
Richmond-Newport 500 kV	20377 RICHMOND	500	337 8NEWPORT	500 1	108.1	109.6	2007	*	118.5	8.9	Duke/SOCO	2004	1350.0	117.1	118.5	114.3	115.8	112.3	113.7	112.4	113.8	117.0	118.5	116.7	118.2	115.2	116.7					PHSH1-ANSON230_&_PHSH2-ANSON230	Phase angle DeltaP		
Marion - Weatherspoon 115kV	20654 DILLON T	115	20632 MARION	115 1	84.5	94.9		OpProc6	117.4	22.5	SC	2004	97.0	91.4	100.6	103.5	112.7	108.3	117.4		99.1	96.5	105.7	94.7	103.9	92.1	101.3	91.8	101.0	<90	98.8	20663 LATTA	230 20682 DILLMP T	230 1	Operating Procedure
Wake 500/230 kV Bank 1 / 2	B\$0024	1.00	20183 WAKE	500 1 / 2	97.6	93.4	2016	Beyond /Follow	110.0	12.4	AEP/VAP	2011	1000.0	106.7	102.4	106.9	102.7	106.8	102.5	108.8	104.6	107.4	103.2	107.6	103.5	108.1	104.0	109.3	105.2	110.0	105.8	3Wnd: OPEN B\$0045	2 / 1	New project (upgrade/ add bank)	
Sutton-Castle Hayne 230kV	20039 SUT 3 F	230	20554 9THORG T	230 1	106.1	101.7		OpProc2	107.3	1.2	SCEG/SC	2008	590.0	106.6	102.3	107.3	102.8	107.3	103.0	105.8	101.7	106.9	102.5	106.7	102.4	106.4	102.2	106.1	101.9	105.6	101.5	BR1-BARCK230_&_BR2-BARCRK230	Local /Follow		
Biscoe-Asheboro East 115 kV	20303 SEAGROVE	115	20304 E14-ULAH	115 1	100.3	84.9		OpProc1	107.1	6.8	SCEG	2008	148.0	106.4	90.6	107.1	91.2	106.9	91.1	103.2		106.4	90.6	105.9	90.1	104.8		103.0	<90	101.4	<90	20309 BISCOE W	230 20332 ASHEB	230 1	New project (uprate)
Falls 230/115	20185 FALLS	115	20182 FALLS	230 1	104.7	104.1	2013	Add Bank	106.7	2.0	Duke	2012	300.0	106.7	106.2	106.1	105.5	106.0	105.4	105.6	105.1	106.2	105.6	106.3	105.7	106.3	105.7	106.1	105.5	105.4	104.9	HNDRSN-FRNKLNTN115_&_HNDRSN-E18_KITT115	Project good for horizon		
Fay-Fay Ft. Bragg Woodruff230 kV	20388 P3-FAYRR	230	20387 P1-FAY 0	230 1	97.4	73.9	2012	Replace Equip	105.9	8.5	SC	2009	637.0	101.7		105.1		105.9		100.5		103.6		102.9		101.8		100.9	<90	99.7	<90	20387 P1-FAY 0	230 20389 P2-FAY E	230 1	Project good for horizon
Rockingham-West End 230 kV Line	20638 WDSB T	230	20348 RKH	230 1	100.0	87.2		OpProc5	105.8	5.8	SCEG/SC	2009	539.0	103.6	90.5	105.7	92.6	105.8	92.7	102.1		104.8	91.7	104.3	91.2	103.3	90.2	102.2	<90	101.0	<90	20348 RKH	230 20361 WEST END	230 1	New project (rebuild/ recond)
Tilley-Biscoe 115 kV	20004 TIL 1-4H	115	20302 E14-TROY	115 1	96.5	83.1		OpProc1	105.6	9.1	Duke	2009	269.0	105.6	91.6	104.4	90.1	103.7		100.4		104.3		103.9		102.6		100.1	<90	97.9	<90	20347 ABRDN RD	230 20348 RKH	230 1	Operating Procedure
Laurinburb 230/115 Bank 1 / 2	20421 LAURINBG	115	20424 LAURINBG	230 1 / 2	98.6	96.8	2012	Replace	103.8	5.2	SC	2009	200.0	100.3	98.5	102.8	101.0	103.8	102.0	99.7	97.9	101.3	99.6	100.9	99.2	100.3	98.5	100.0	98.2	99.4	97.6	20421 LAURINBG	115 20424 LAURINBG	230 2 / 1	Project good for horizon
Fay-Fay East 230 kV	20387 P1-FAY 0	230	20389 P2-FAY E	230 1	93.4	69.1	2014	Replace Equip	103.6	10.2	SC	2010	637.0	99.0		102.7		103.6		97.6		101.1		100.4	103.4	99.0		98.0	<90	96.6	<90	20387 P1-FAY 0	230 20388 P3-FAYRR	230 1	Project good for horizon
Fay 230/115 kV Bank 1/2	20387 P1-FAY 0	230	20392 FAY	115 1 / 2	91.4	95.4	2012	Replace Banks	103.6	8.2	SCEG	2010	200.0	99.4	103.4	99.5	103.6	99.4	103.5	98.3	102.3	99.4	103.4	99.3		99.0	103.0	98.3	102.3	97.6	101.6	20387 P1-FAY 0	230 20392 FAY	115 2 / 1	Project good for horizon
Rockingham - Anson 230 kV Blk	20350 PH SH 1B	230	20985 ANSON	230 1	92.4	93.4		OpProc5	103.4	10.0	Duke	2010	398.0	102.8	103.4	98.3	98.8	95.9	96.6	96.7	97.6	101.0	101.1	100.9	101.5	99.7	100.3	95.5	96.3	92.7	93.6	337 8NEWPORT	500 20377 RICHMOND	500 1	New project
Rockingham - Anson 230 kV Wht	20349 PH SH 2W	230	20985 ANSON	230 1	92.2	93.2		OpProc5	103.2	10.0	Duke	2010	398.0	102.6	103.2	98.1	98.7	95.7	96.4	96.6	97.4	100.8	101.3	100.7	101.3	99.5	100.1	95.3	96.1	92.5	93.5	337 8NEWPORT	500 20377 RICHMOND	500 1	New Project
Durham-Cary Reg Pk 230	20091 BRIERCK	230	10117 DURHAM	230 1	93.2	74.9		OpProc3	102.8	9.6	Duke	2010	539.0	102.8		99.3	99.3		99.3	100.2		100.3		100.6		101.0		100.1	<90	99.3	<90	METHOD-PRISONF230_&_METHOD-BLUERDG230		New project	
Tilley-Biscoe 115 kV	20683 BURNETTE	115	20302 E14-TROY	115 1	93.5	80.2		OpProc1	102.6	9.1	Duke	2010	269.0	102.6		101.4		100.7		97.4		101.3		100.9		99.6		97.1	<90	95.0	<90	20347 ABRDN RD	230 20348 RKH	230 1	Operating Procedure
Sutton-Delco 230 kV	20039 SUT 3 F	230	20582 DELCO	230 1	88.5	68.1		OpProc2	102.0	13.5	SCEG/SC	2010	478.0	98.9		102.0		102.0	90.3	96.7		100.6		99.9		98.6		97.7	<90	95.8	<90	BR1-BARCK230_&_BR2-BARCRK230		Operating Procedure	
Camden-Camden Junction 115 kV	20725 CAMDEN	115	20716 CAMCTY02	115 1	85.3	82.9	2017	Beyond /Follow	98.6	13.3	SCEG	2012	108.0			98.6	96.1	98.6	96.2													20725 CAMDEN	115 20731 I-DUP CA	115 1	New project (uprate)
Biscoe-Asheboro East 115 kV	20290 I-OLVRRB	115	20304 E14-ULAH	115 1	91.8	76.0		OpProc1	98.6	6.8	SCEG	2012	138.0	97.9		98.6		98.4		94.6		97.9		97.4		96.2		94.4	<90	92.8	<90	20309 BISCOE W	230 20332 ASHEB	230 1	New project (uprate)
Camden-Camden Junction 115 kV	20725 CAMDEN	115	20731 I-DUP CA	115 1	83.3	80.2	2018	Beyond /Follow	98.4	15.1	SC	2012	108.0			98.0	94.7	98.4	95.2													20716 CAMCTY02	115 20725 CAMDEN	115 1	New project (uprate)
Durham-Cary Reg Pk 230	20091 BRIERCK	230	10159 RTP 23KV	230 1	88.7	70.5		OpProc3	98.3	9.6	Duke	2012	539.0	98.3		94.8		94.8		95.7		95.8		96.1		96.5		95.6	<90	94.9	<90	METHOD-PRISONF230_&_METHOD-BLUERDG230		New project	
Tilley-Biscoe 115 kV	20683 BURNETTE	115	20301 TROY	115 1	89.1	75.8		OpProc1	98.0	8.9	Duke	2012	269.0	98.0		96.8		96.1		92.9		96.7		96.3		95.0		92.5	<90	90.4	<90	20347 ABRDN RD	230 20348 RKH	230 1	Operating Procedure
Rockingham-West End 230 kV Line	20638 WDSB T	230	20360 ELLERBE	230 1	91.8	78.2		OpProc5	97.7	5.9	SC	2012	507.0	95.4		97.5		97.7		93.8		96.6		96.1		95.1		93.9	<90	92.7	<90	20348 RKH	230 20361 WEST END	230 1	New project (uprate)
Fall-Franklinton 115kV	20185 FALLS	115	20111 E18-WK F	115 1	92.0	94.7		OpProc4	97.6	2.9	Duke	2012	170.0	94.7	97.6	94.2	97.1	94.0	97.0	92.															