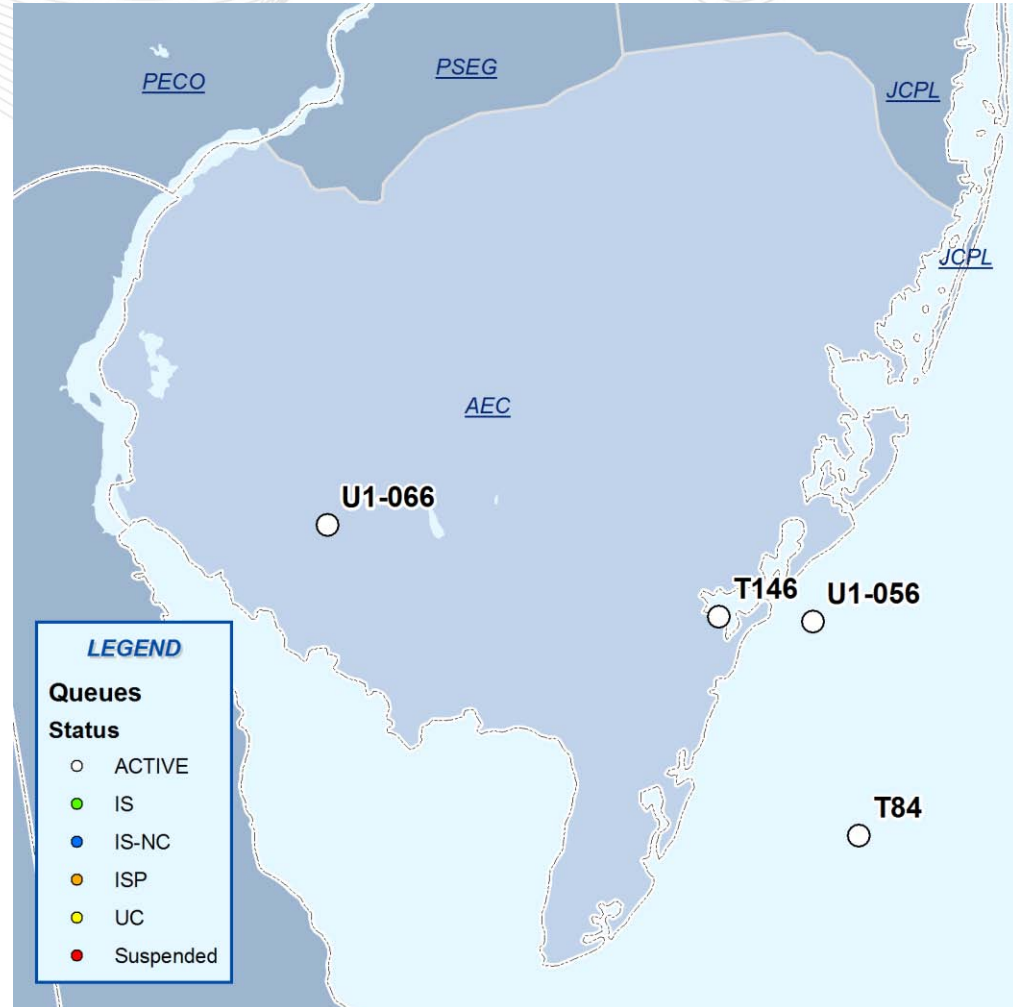




New Services Queue Network Upgrades

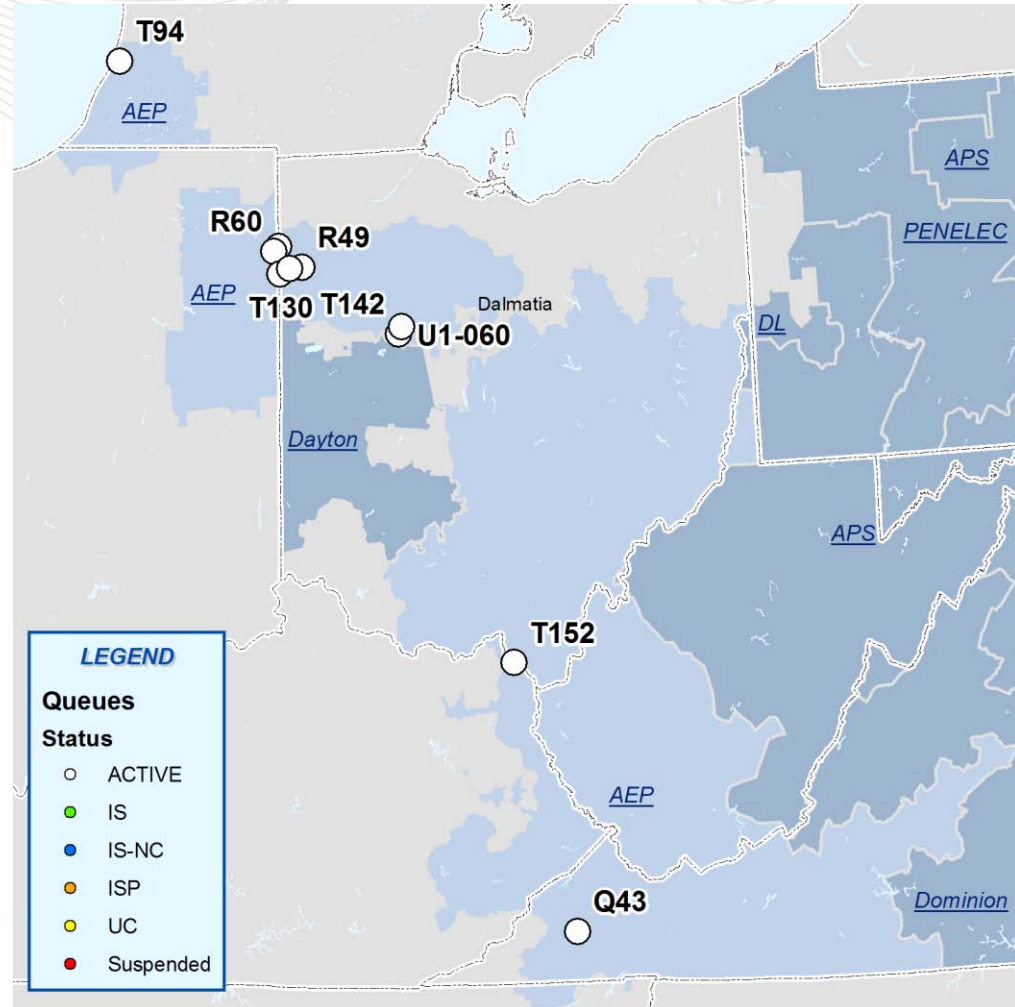
September 2009 TEAC

Queue Number	Project Name	MWC	MWE	Fuel Type
T84	Corson 138kV	70	350	Wind
T146	England	69.2	346	Wind
U1-056	Lewis 138kV	45.5	350	Wind
U1-066	Carlls Corner 69kV	18	18	Oil



Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1301	Dennis - Modify 230kV substation to provide a terminal position for T84	12/31/2012	2.7	T84
n1316	B.L. England - Modify 138kV substation to provide two terminal positions for T146	12/31/2012	4	T146
n1317	B.L. England - Mill - Reconductor #2 circuit with a conductor rated at least 1750A (emergency)	12/31/2012	4.2	T146
n1318	B. L. England - Mill - Lewis - Reconductor #1 circuit with a conductor rated at least 1750A (emergency)	12/31/2012	7	T146
n1319	Union - Lincoln - Reconductor the 138kV circuit a conductor rated at least 1650A (emergency)	12/31/2012	4	T146
n1342	Carlis Corner 2 - Sherman - Reconductor 7.9 miles of conductor with a conductor rated at lease 1300A	5/1/2009	5.5	U1-066
n1524	Lewis - Modify 138kV substation to provide for a single breaker position for U1-056	6/30/2014	1.8	U1-056

Queue Number	Project Name	MWC	MWE	Fuel Type
Q43	Clinch River 138kV	534	614	Coal
R49	Haviland - Milan 138kV	30	150	Wind
R60/S72	Convoy- East Lima 345kV	70	350	Wind
T94	Cook- Palesades 345kV	1035	1035	Natural Gas
T130	Convoy- East Lima 345kV	60	300	Wind
T131	Lincoln- Sterling 138kV	30	150	Wind
T142	Southwest Lima- Marysville 345kV	60	300	Wind
T152	North Haverhill 69kV	140	140	Coal
U1-060	East Lima- South Kenton 138kV	26.1	201	Wind



Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1253	Convoy - East Lima - Add 3 breaker 345kV ring bus interconnection station	6/30/2010	9.6	R60
n1254	Convoy - Replace line relaying with AEP standard package on East Lima terminal	6/30/2010	0.225	R60
n1255	Convoy - East Lima - Construct .25 miles of double circuit 345kV line facilities to loop in and out of the new switching station	6/30/2010	2.1	R60
n1271	Lincoln - Sterling & Haviland - Milan - Install five breaker ring bus station at the 138kV circuit for S73	10/30/2010	7.058	R49
n1272	North Delphos - Replace line relays and CCVT	10/30/2010	0.251	R49
n1273	Haviland - Replace "H" 138kV circuit breaker and associated equipment	10/30/2010	0.2	R49
n1299	East Lima - Add 3 breaker 345kV ring bus interconnection station R60/S72 Sub-East Lima Line	10/1/2010	9.6	T130
n1300	East Lima - Construct .25 miles of double circuit 345kV line facilities to loop in and out of the new switching station	10/1/2010	2.1	T130
n1432	Samis - Wylie Ridge - Reconductor No.240 6.9 miles with 1622 ACSS conductor to exceed 3000A, upgrade line trap with a 4000A rated trap and replace risers and connectors for 1622 ACSS	10/30/2010	3.226	T142

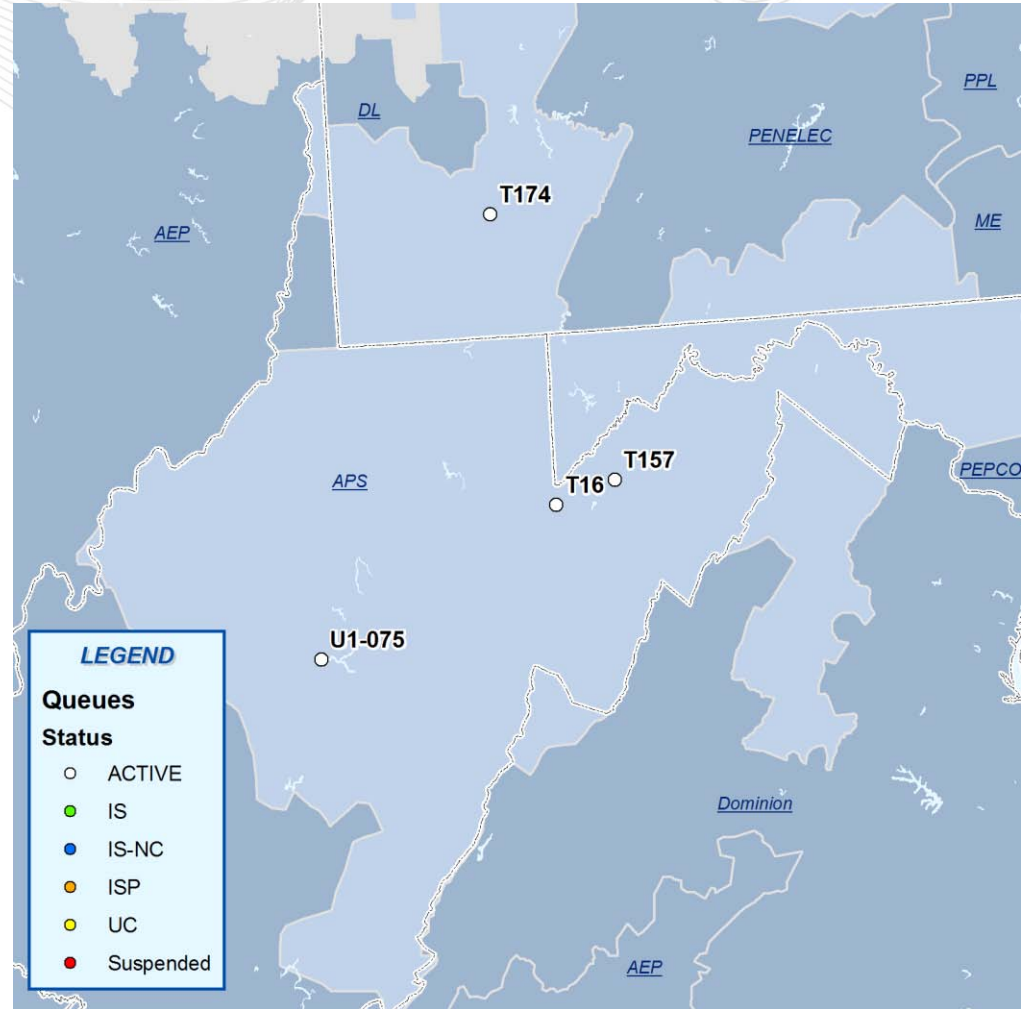
Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1433	Edgemoore 5 - Claymont - Install a second 765/500kV transformer at Belmont substation	10/30/2010	37.6	T142
n1464	North Delphos - Replace 138kV risers on the T131 line, replace the 138kV 600A switch on the eT131 line	10/30/2010	0.187	T131
n1465	Lincoln - replace 138kV riser on the S73 line	10/30/2010	0.007	T131
n1466	Haviland - Replace 138kV riser on the R49 line and replace the bus	10/30/2010	0.265	T131
n1467	Lincoln - Anthony - Rebuild approx. 17 miles of the 138kV line, reconductor and replace existing tower structures	10/30/2010	26	T131
n1468	Tillman - Replace 138kV risers on both the Tillman and Harper lines at Milan station, replace the 138kV 600A switch	10/30/2010	0.226	T131
n1469	Haviland - Paulding - Rebuild 10.72 of 69kV between stations	10/30/2010	3.87	T131
n1481	Southwest Lima - Marysville - Add 3 breaker ring bus to 345kV substation	10/31/2010	9.6	T142
n1482	Southwest Lima - Replace line relaying with AEP standard package on the Marysville terminal	10/31/2010	0.113	T142
n1483	Marysville - Replace line relaying with AEP standard package on the Southwest Lima terminal	10/31/2010	0.113	T142
n1484	Southwest Lima - Marysville - Construct .25 miles of double circuit 345kV line facilities to loop through the new switching station	10/31/2010	2.1	T142
n1485	East Lima - Reconductor 345kV line at approx. 12 miles	10/30/2010	18	T130

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1486	Convoy - Robison Park - Reconductor 345kV line at approx 34 miles	10/30/2010	51	T130
n1489	Cook - Palisades - Construct a 5 breaker 345kV ring bus at circuits	3/31/2012	10	T94
n1490	Cook - Replace line relaying with AEP standard package on the terminal of the Palisades line	3/31/2012	0.25	T94
n1491	Cook - Replace line relaying with AEP standard package on the terminal of Benton Harbor line	3/31/2012	0.25	T94
n1492	Benton Harbor - Riverside #2 - Replace the riser between the disconnect switch and line exit	3/31/2012	0.05	T94
n1493	Lincoln - Sterling - Construct a 3 breaker 138kV ring bus interconnection substation in the circuit between Project S73 and North Delphos	10/31/2010	5	T131
n1494	Lincoln - Serling - Cut in the circuit to the new station	10/31/2010	0.1	T131
n1495	Hanging Rock - Expand station adding 4 138kV circuit breakers in a ring bus arrangement, relays, metering, SCADA and associated equipment	1/1/2011	0.004	T152
n1496	Hanging Rock - Replace relaying and install CCVT's, trap and line tuner at East Wheelersburg 138kV station	1/1/2011	0.268	T152
n1497	Hanging Rock - String second circuit on the existing 4.3 mile long 138kV extension utilizing vacant side of existing towers	1/1/2011	0.867	T152
n1498	Hanging Rock - Install fiber extension to Dow Chemical station and install new relaying packages at stations	1/1/2011	0.88	T152

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1499	Benton Harbor - Riverside - Replace riser on Circuit #2 between disconnect switch and line exit at Riverside station	3/1/2010	0.05	T94
n1500	Convoy - West Lima - Reconductor the 345kV line for 22 miles	3/1/2010	33	T94
n1501	Haviland - Milan - Rebuild, reconductor and replace towers in the approx. 8 mile 138kV circuit	10/31/2010	12	T131
n1502	Milan - replace risers and a 600A 138kV disconnect switch on the Tillman terminal	10/31/2010	0.213	T131
n1503	Milan - Replace risers on the Harper terminal	10/31/2010	0.013	T131
n1504	Lincoln - North Delphos - Rebuild, reconductor and replace towers in the approx. 17 mile 138kV circuit	10/31/2010	26	T131
n1505	Haviland - Replace risers on the R49 terminal	10/31/2010	0.265	T131
n1516	Clinch River - Add 138kV circuit breaker G to alleviate stability concerns	3/31/2012	0.735	Q43
n1517	Fleming - Replace line relaying with AEP standard package on the Fleming terminal of the Clinch River line	3/31/2012	0.44	Q43
n1518	Dorton - Replace line relaying with AEP standard package on the Dorton terminal of the Clinch River line	3/31/2012	0.659	Q43
n1519	Hill - Replace line relaying with AEP standard package on the Hill terminal of the Clinch River line	3/31/2012	0.592	Q43
n1520	Meadow View - Replace line relaying with AEP standard package on the Hill terminal of the Clinch River line	3/31/2012	0.397	Q43

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1545	East Lima - Replace 138kV breaker E2 with a 3000 A, 63kA breaker	11/15/2009	0.278	R49
n1546	East Lima - Replace 138kV breaker C with a 3000 A, 63kA breaker	11/15/2009	0.278	R49
n1547	Sterling - Upgrade 138kV breaker G with a 40kA rated breaker	4/1/2011	0.264	U1-060
n1548	Sterling - Upgrade 138kV breaker H with a 40kA rated breaker	4/1/2011	0.264	U1-060
n1549	Sterling - Upgrade 138kV breaker J with a 40kA rated breaker	4/1/2011	0.264	U1-060

Queue Number	Project Name	MWC	MWE	Fuel Type
T16	Gorman – Snowy Creek 69kV	6	30	Wind
T157	New Creek Mountain 500kV	32	160	Wind
T174	Yukons – Browns Run 500kV	900	930	Natural Gas
U1-057	North Lebanon	900	950	Natural Gas



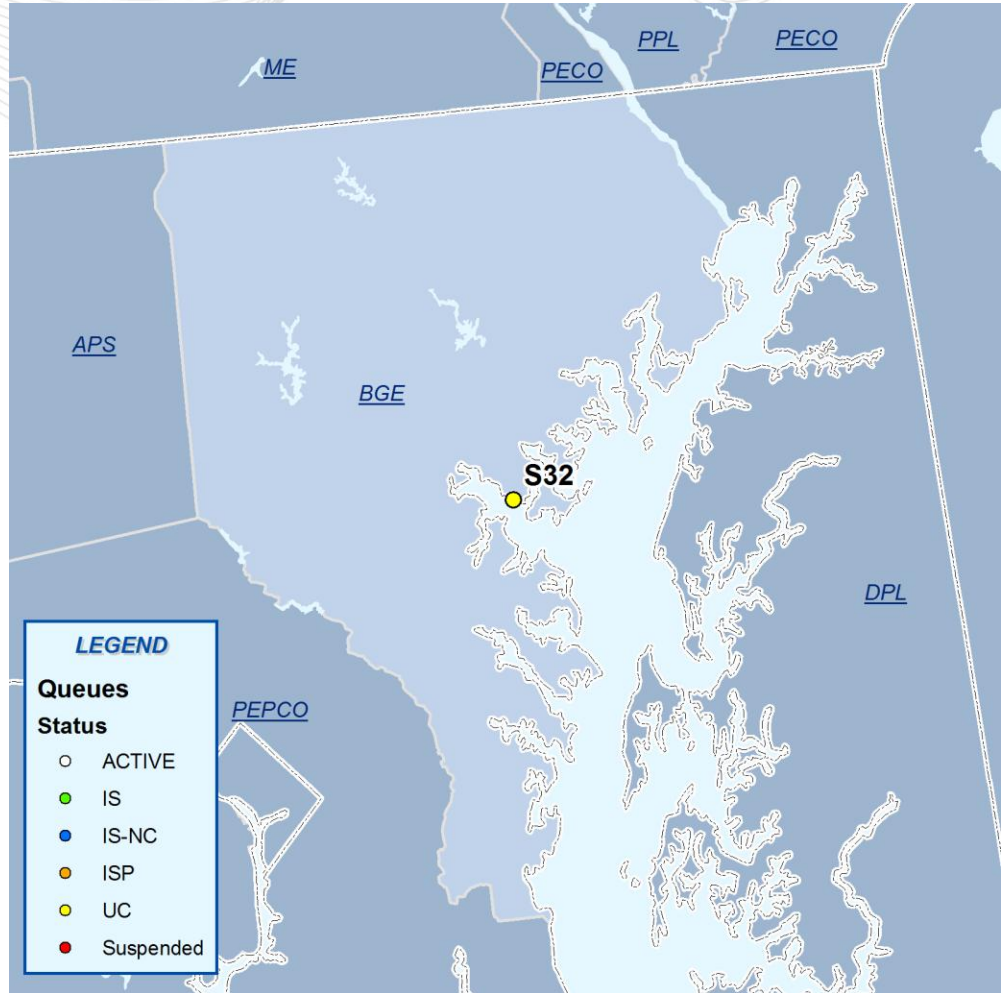
Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1323	Bismark - Construct the new Bismark 500kV substation in a three breaker ring bus design as a top of the Mt Storm - Doubs	12/31/2010	14.5	T157
n1324	Bismark - Construct one span 1272 ACSR steel pole 500kV loop line to the new 500kV substation	12/31/2010	0.96	T157
n1325	Doubs - Install redundant channel transfer trip carrier equipment on the Bismark (Mt. Storm) 500kV terminal	12/31/2010	0.202	T157
n1326	Mt. Storm - Install redundant channel transfer trip carrier equipment on the Bismark (Doubs) 500 kV line terminal	12/31/2010	0.25	T157
n1341	Kelso Gap - Expand 138kV substation to at 4 breaker ring bus design by adding 1 138kV breaker and 3 breaker disconnect switches and associated equipment	12/31/2011	0.675	T16
n1349	Sutton Dam - Construct new 138kV substation in a 3 breaker ring bus design as a tap of Sutton-Sutton Hill tip 138kV circuit	6/1/2015	3.7	U1-075
n1350	Sutton Dam - Construct .1 mile 138kV loop line from Sutton - Sutton Hill Tap	6/1/2015	0.266	U1-075
n1351	Powell Mountain - Install 138kV transfer trip facilities at substation	6/1/2015	0.158	U1-075
n1352	French Creek - Install 138kV transfer trip facilities at substation	6/1/2015	0.158	U1-075
n1360	Bays - Install 138kV transfer trip facilities at substation	6/1/2015	0.158	U1-075
n1361	Sutton - Install 138kV transfer trip facilities at substation	6/1/2015	0.158	U1-075

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1363	Yukon - Replace 138kV breaker Y-8 (Hunting) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1364	Yukon - Replace 138kV breaker Y-1 (Youngwd) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1365	Yukon - Replace 138kV breaker Y-3 (LYN-YNGD) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1366	Yukon - Replace 138kV breaker Y-2 (1B-BETHE) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1367	Yukon - Replace 138kV breaker Y-5 (LAYTON) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1368	Yukon - Replace 138kV breaker Y-19 (CHARL2) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1369	Yukon - Replace 138kV breaker Y-9 (SPRINGD) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1370	Yukon - Replace 138kV breaker Y-4 (4B-2BUS) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1371	Yukon - Replace 138kV breaker Y-11 (CHARL1) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1372	Yukon - Replace 138kV breaker Y-13 (BETHEL) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1373	Yukon - Replace 138kV breaker Y-7 (HTDN-HMF) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1374	Yukon - Replace 138kV breaker Y-18 (CHARL2) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174

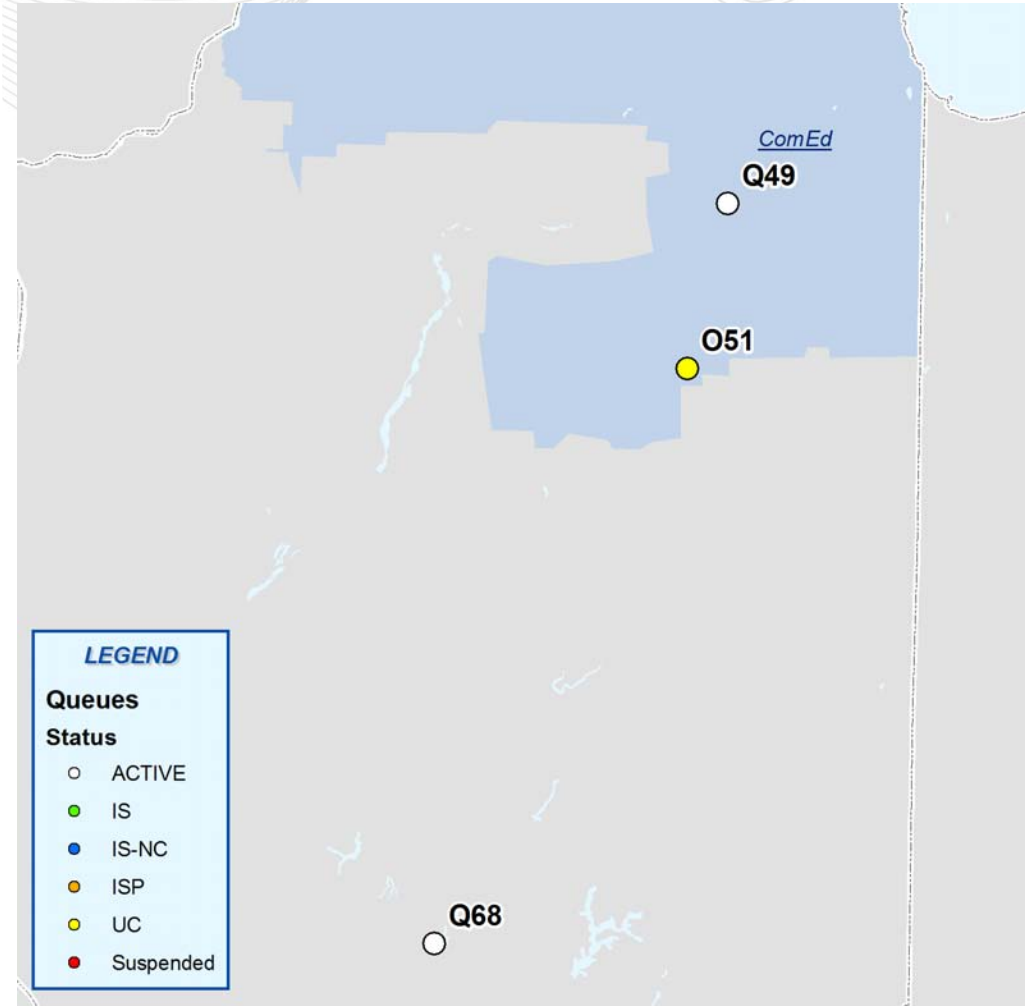
Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1375	Yukon - Replace 138kV breaker Y-10 (CHRL-SP) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1376	Yukon - Replace 138kV breaker Y-12 (1-1BUS) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1377	Yukon - Replace 138kV breaker Y-14 (4-1BUS) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1378	Yukon - Replace 138kV breaker Y-17 (2-2BUS) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1379	Yukon - Replace 138kV breaker Y-16 (3-1BUS) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1380	Yukon - Replace 138kV breaker cap with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1381	Yukon - Replace 138kV breaker Y-6 (HEMPFLD) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1382	Hatfield - Upgrade 500kV breaker HFL-5 to a 50kA Symmetrical Breaker	6/1/2011	0.404	T174
n1383	Hatfield - Upgrade 500kV breaker HFL-8 to a 50kA Symmetrical Breaker	6/1/2011	0.404	T174
n1384	Hatfield - Upgrade 500kV breaker HFL-2 to a 50kA Symmetrical Breaker	6/1/2011	0.404	T174
n1385	Ft. Martin - Upgrade 500kV breaker FL-1 to a 63kA Symmetrical Breaker	6/1/2011	0.21	T174
n1386	Ft. Martin - Upgrade 500kV breaker FL-2 to a 63kA Symmetrical Breaker	6/1/2011	0.21	T174

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1387	Ft. Martin - Upgrade 500kV breaker FL-4 to a 63kA Symmetrical Breaker	6/1/2011	0.21	T174
n1388	Ft. Martin - Upgrade 500kV breaker FL-5 to a 63kA Symmetrical Breaker	6/1/2011	0.21	T174
n1389	Ft. Martin - Replace 500kV breaker FL-7 to a 63kA Symmetrical Breaker	6/1/2011	0.49	T174
n1390	Ft. Martin - Replace 500kV breaker FL-9 with 63kA Symmetrical Breaker	6/1/2011	0.49	T174
n1391	Yukon - Replace 138kV breaker Y21 (SHEPJ) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1392	Yukon - Replace 138kV breaker Y22 (SHEPHJT) with 80kA Symmetrical Breaker	6/1/2011	0.404	T174
n1396	Rhodes Lane - Construct new 500kV substation in a 3 breaker ring bus design adjacent to the existing Yukon-Browns Run (Hatfield) 500kV EHV circuit	6/1/2011	14.8	T174
n1397	Rhodes Lane - Construct a one span 2-2032 ACSR 500kV loop line from the existing Yukon-Browns Run (Hatfield) line at approx 2.8 miles from substation to new switching station	6/1/2011	1.09	T174
n1398	Yukon - Upgrade the relaying for the Rhodes Lane terminal and install fiber optic cable from the 500kV line dead-end structure to the control building	6/1/2011	0.119	T174

Queue Number	Project Name	MWC	MWE	Fuel Type
S32	Perryman	230	256	Natural Gas

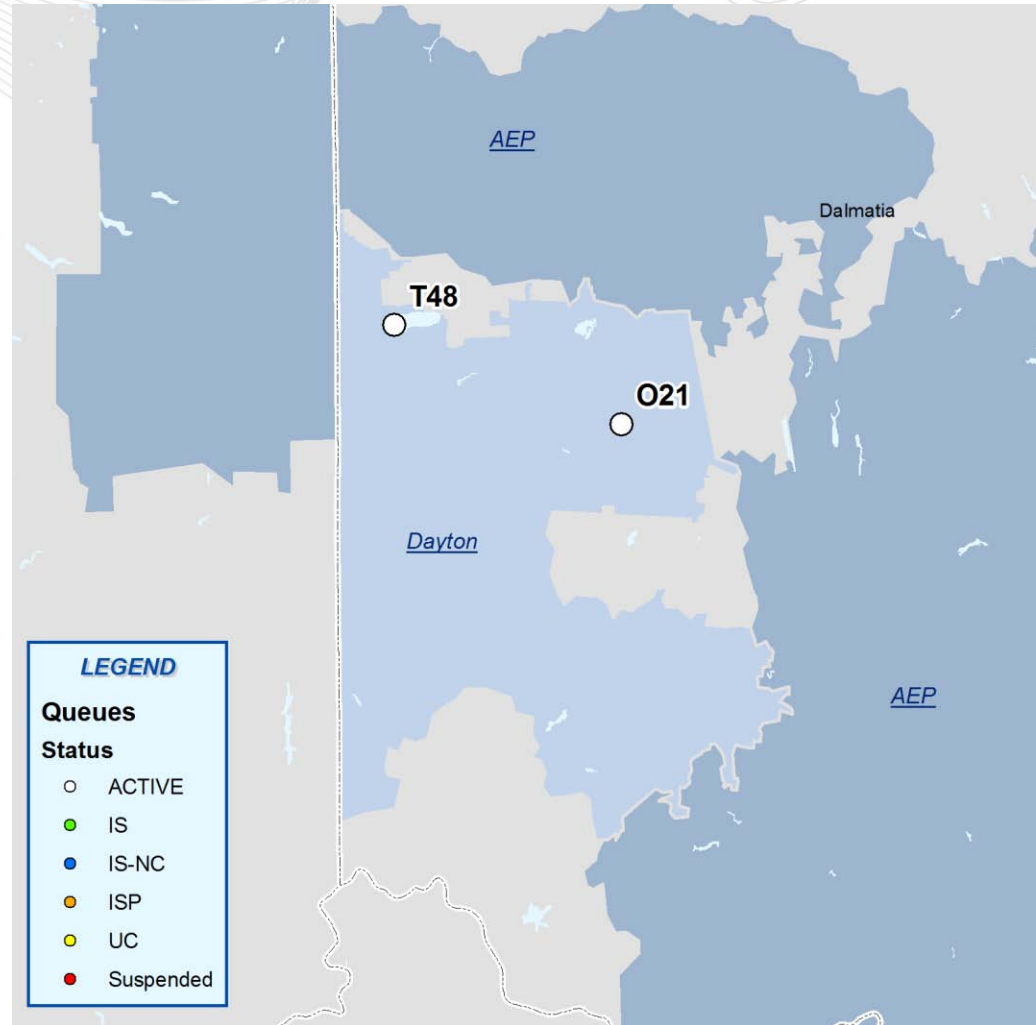


Queue Number	Project Name	MWC	MWE	Fuel Type
O51	Pontiac Midpoint – Wilton Center 345kV	60	300	Wind
Q49	Dresden 345kV	70	70	Nuclear
Q68	Kinkaid 345kV	726	726	Coal



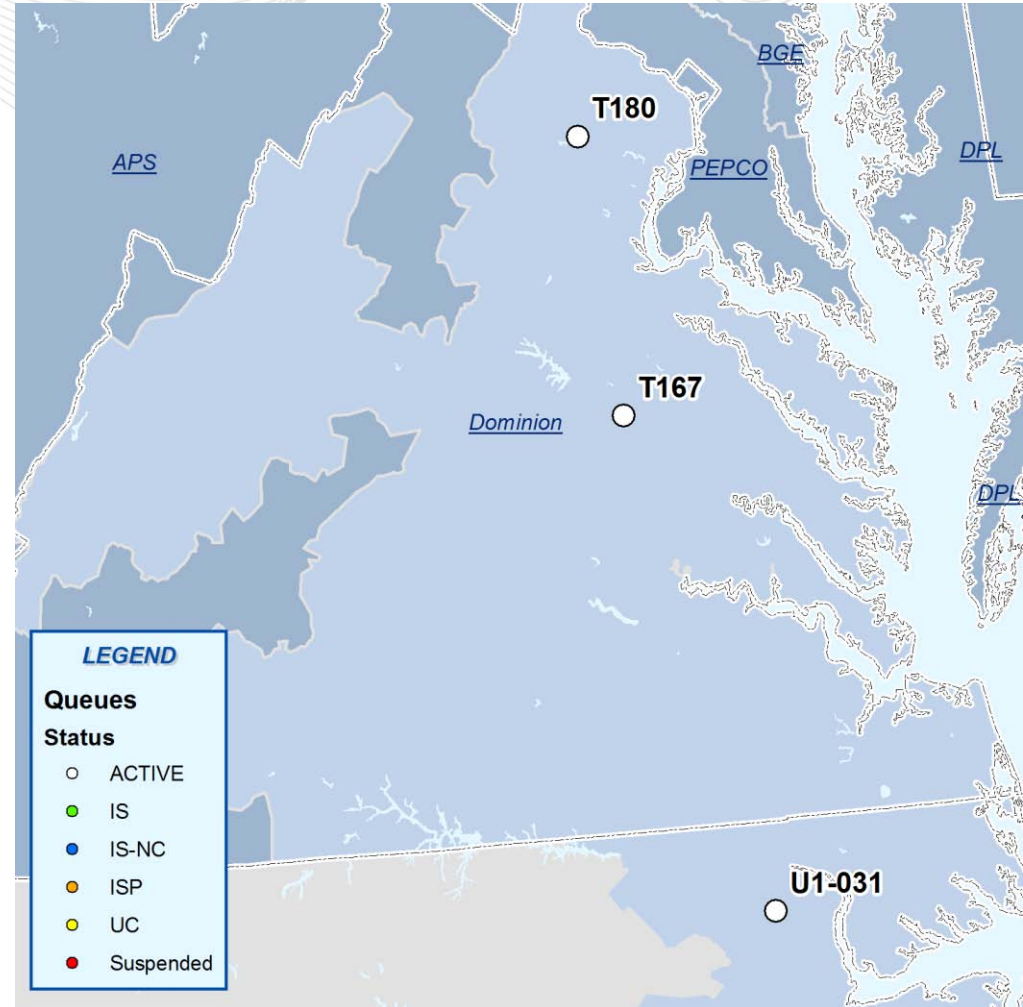
Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1089	Powerton - Sta3 Replace breaker 3 -4 with 2 cycle breaker	12/1/2007	1.223	O51
n1090	Powerton - Sta3 Replace breaker 4-6 with 2 cycle breaker	12/1/2007	1.223	O51
n1091	Powerton - Sta3 Replace breaker 4-8 with 2 cycle breaker	12/1/2007	1.223	O51
n1092	Cayuga Ridge South - Install digital microwave comm. for addition of new TSS 976 ring bus Northern ring link	12/1/2007	.693	O51
n1274	Dresden - Sta 12 Replace BT 1-2 Curent Transformer	10/31/2009	0.375	Q49
n1275	Dresden - Sta 12 Replace BT 4-8 Curent Transformer	10/31/2009	0.8	Q49
n1476	Kincaid - Replace breaker BT 1-3 at Station 21	12/31/2010	0.763	Q68
n1477	Kincaid - Replace breaker BT 3-5 at Station 21	12/31/2010	0.763	Q68
n1478	Kincaid - Replace breaker BT 5-7 at Station 21	12/31/2010	0.763	Q68
n1479	Kincaid - Remove sectionalizing scheme associated with 2102 line	12/31/2010	0.2	Q68
n1480	Kincaid - Install breaker BT 7-10 at station 21	12/31/2010	2.5	Q68

Queue Number	Project Name	MWC	MWE	Fuel Type
O21	Liberty 69kV	9.6	48	Wind
T48	Coldwater - Rossburg 69kV	10	50	Wind



Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1282	Coldwater - Loop line to deadend structure, construct and install equipment in a three breaker ring bus substation	12/31/2010	2	T48
n1334	Coldwater - Upgrade 69kV line section from the T48T tap to 795 ACSR giving new emergency rating of 110 MVA based on a 800A line tap	12/31/2010	1.12	T48
n1550	o21 - 69kV double circuit line connects the tap on circuit 6646 on Dayton Power & Light system to the new three breaker ring bus (n0674)	9/30/2007	0.266	O21

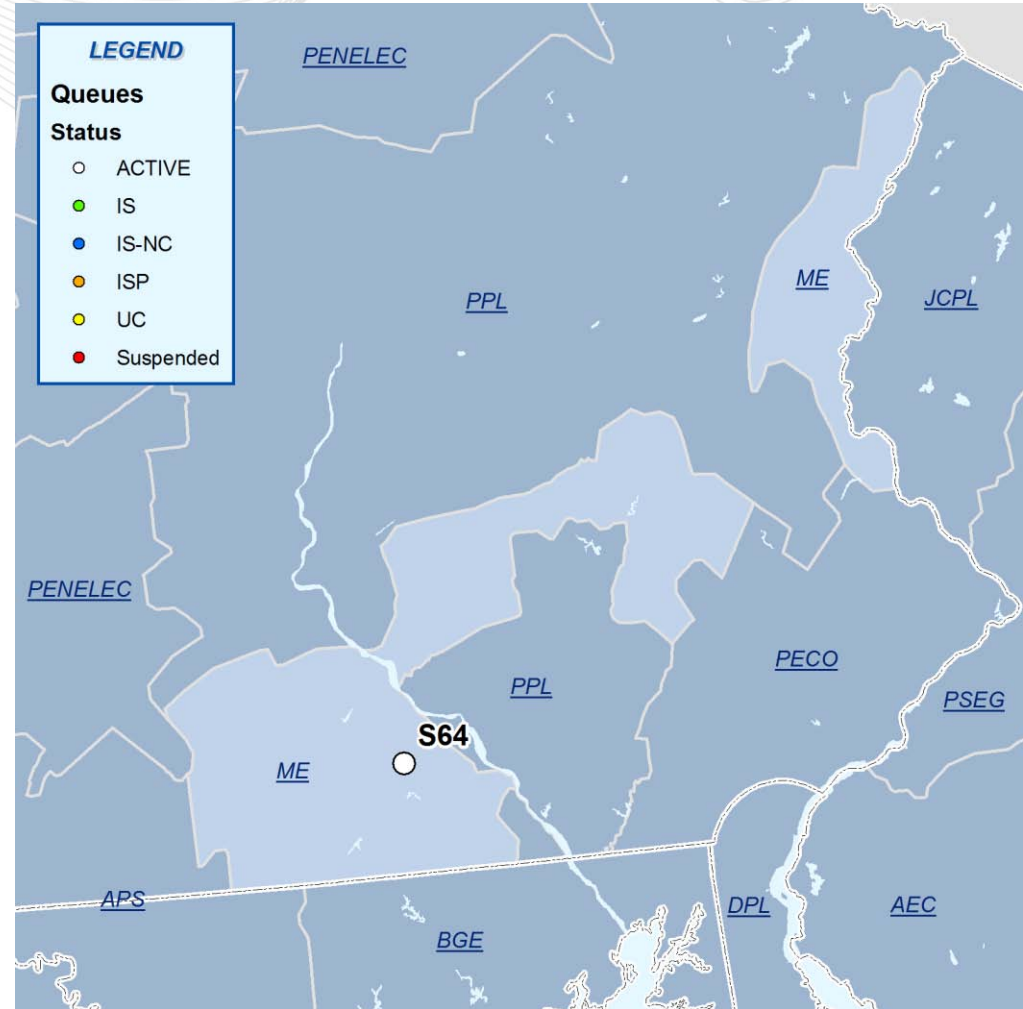
Queue Number	Project Name	MWC	MWE	Fuel Type
T167	Four Rivers 230kV	120	190	Natural Gas
T180	Gainesville 230kV	650	690	Natural Gas
U1-031	Earlys 230kV	80	80	Wood



Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1296	Four Rivers - Add new breaker to create new position for generator	5/31/2013	0.8	T167
n1297	Elmont - Upgrade wave trap to 3000A	5/31/2013	0.03	T167
n1298	Four Rivers - Upgrade wave trap to 3000A	5/31/2013	0.03	T167
n1278	Ladysmith - Replace 500kV breaker H1T552 with a 63kA S breaker	6/1/2012	0.6	T180
n1279	Ladysmith - Replace 500kV breaker H1T575 with a 63kA S breaker	6/1/2012	0.002	T180
n1304	Loudoun - Replace 230kV breaker 204552 with a 63kA-S breaker	6/1/2012	0.19	T180
n1305	Loudoun - Replace 230kV breaker 209452 with a 63kA-S breaker	6/1/2012	0.19	T180
n1306	Loudoun - Replace 230kV breaker WT2045 with a 63kA-S breaker	6/1/2012	0.19	T180
n1307	Loudoun - Replace 230kV breaker 200852 with a 63kA-S breaker	6/1/2012	0.19	T180
n1308	Loudoun - Replace 230kV breaker 203052 with a 63kA-S breaker	6/1/2012	0.19	T180
n1309	Loudoun - Replace 230kV breaker 295T2030 with a 63kA-S breaker	6/1/2012	0.19	T180

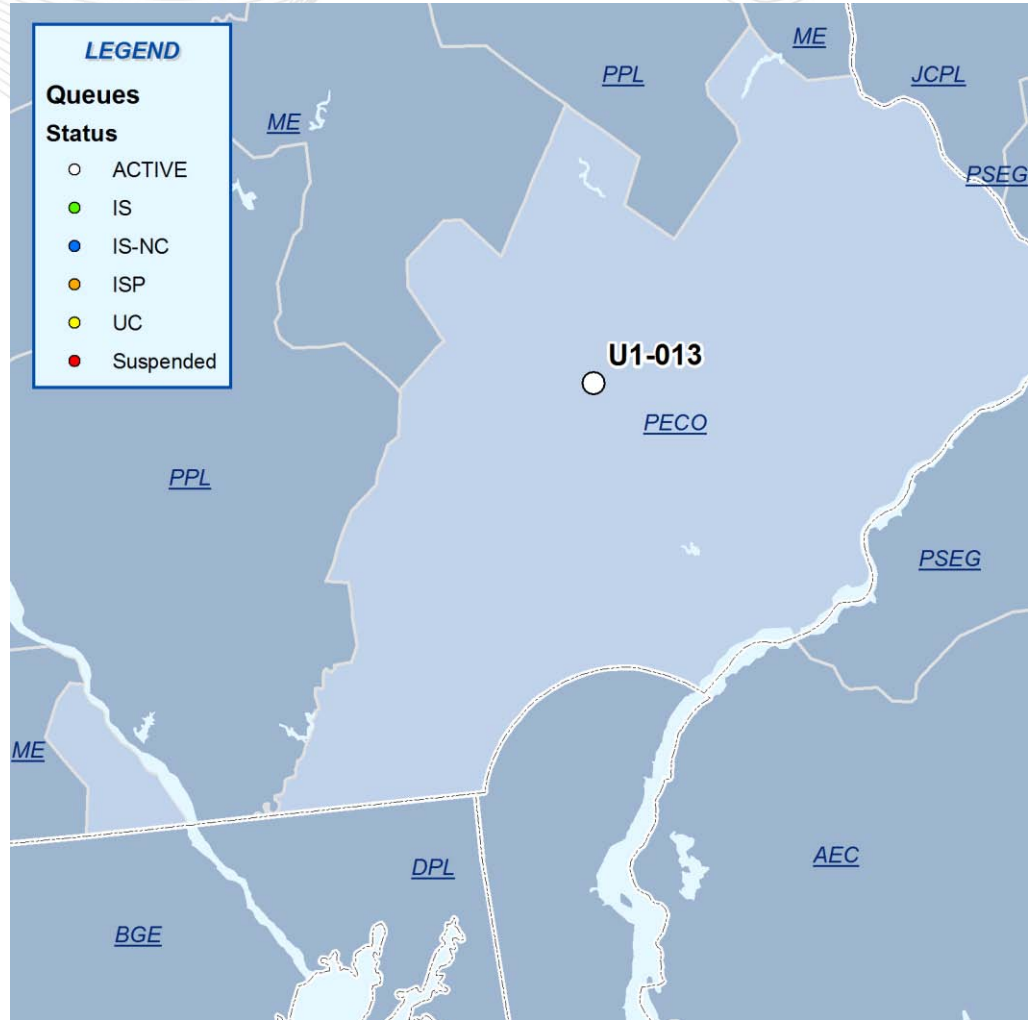
Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1310	Loudoun - Replace 230kV breaker 29552 with a 63kA-S breaker	6/1/2012	0.19	T180
n1343	Gainesville - Loudoun - Reconductor 230kV line 2030 to 1200 MVA and convert 115kV line 124 to 230kV including 3 breakers and associated equipment	6/1/2012	6.3	T180
n1344	Gainesville - Build new 4 breaker substation at customer facility and loop in and out line 2101 to Bristers	6/1/2012	3.4	T180
n1345	Gainesville - Vint - Reconductor 230kV line	6/1/2012	0.5	T180
n1362	Earleys - Install 115kV breaker to create new position for generator	6/1/2012	0.55	U1-031

Queue Number	Project Name	MWC	MWE	Fuel Type
S64	York Inc. 115kV	18	18	Biomass
U1-057	North Lebanon	900	950	Natural Gas



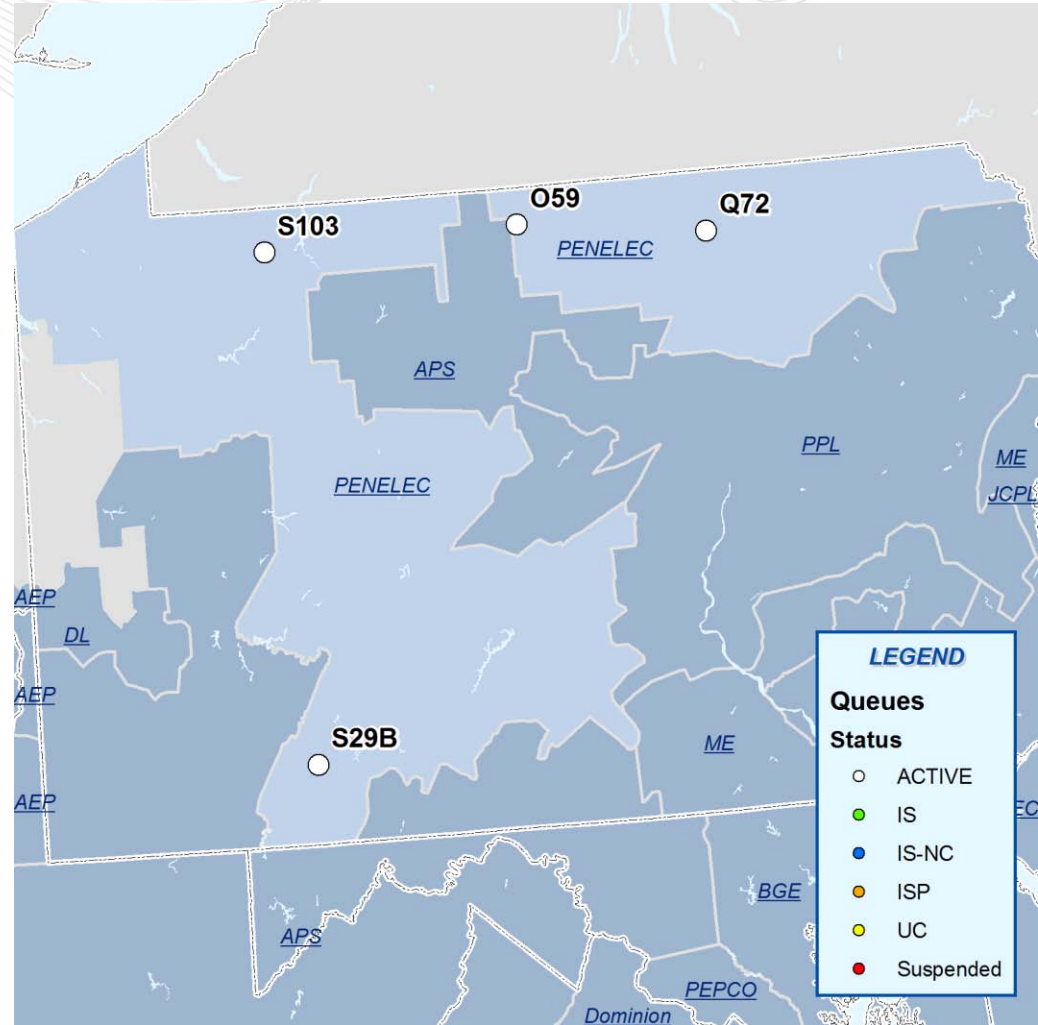
Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1393	York - Install 115kV three breaker ring bus	1/1/2011	3.4	S64
n1394	York - Relocate existing 115kV line to provide for attachment to the new 3 breaker ring bus substation	1/1/2011	0.4	S64
n1395	York - Relocate existing line for the Interconnection Customer's existing facility to the new 3 breaker ring bus substation	1/1/2011	0.054	S64

Queue Number	Project Name	MWC	MWE	Fuel Type
U1-013	Eddystone	630	630	Natural Gas



Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1525	Richmond - Upgrade 230kV breaker 545 with a 50 kA minimum rated breaker	1/1/2013	0.085	U1-012
n1526	Waneeta - Replace 230kV breaker 425 with a 63kA breaker	1/1/2013	0.25	U1-012
n1527	Richmond - Upgrade 230kV breaker 415 with a 50kA minimum rated breaker	1/1/2013	0.085	U1-012
n1528	Plymouth Meeting - Replace 230kV breaker 265 with a 63kA breaker	1/1/2013	0.25	U1-012
n1529	Waneeta - Upgrade 230kV breaker 85 with a 50kA minimum breaker	1/1/2013	0.085	U1-012

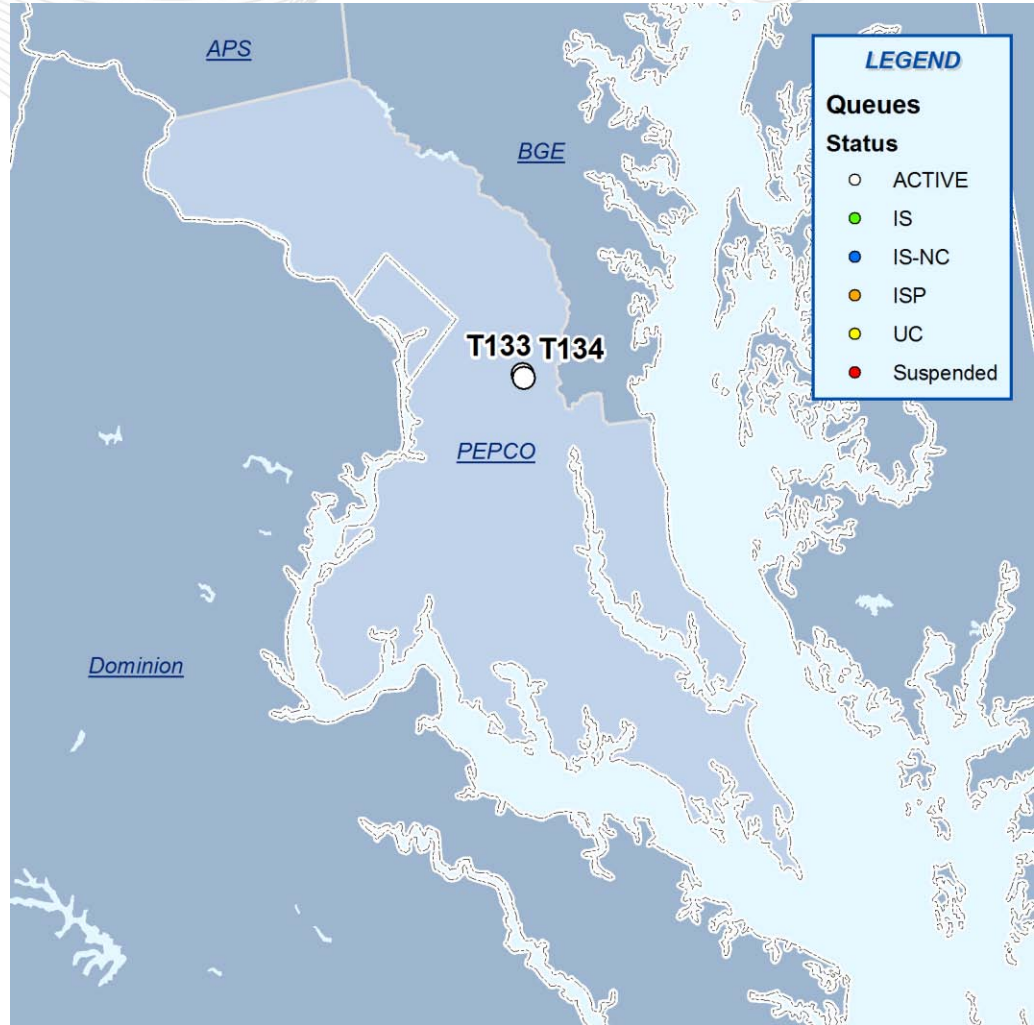
Queue Number	Project Name	MWC	MWE	Fuel Type				
O59	Gold 115kV	19.8	99	Wind				
S29B	Somerset 23kV	5.7	5.7	Methane				
S103	Warren 115kV	57	Natural Gas	Q72	Mansfield – S. Troy 115kV	12	60	Wind
Q72	Mansfield – S. Troy 115kV	12	60	Wind				



Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1280	Sabinsville - Replace 115/34.5kV transformer, circuit breaker and associated substation conductors	12/1/2007	1.5	O59
n1281	Gaines - Ansonia - Replace/Upgrade 34.5kV line	12/1/2007	0.95	O59
n1283	Ansonia - Wellsboro - Replace/Upgrade 34.5kV line	12/1/2007	1.66	O59
n1284	Gold-Sabinsville (N36) - Relay and control work at the Interconnection substation	12/1/2007	0.02	O59
n1288	Laurel Highlands - New 23kV radio controlled switch at the POI tapped of the 23kV line. New loop/tap structure connected to switch adj. to the distribution right-of-way	7/1/2008	0.047	S29B
n1289	Somerset - DTT hardware and control work at substation. Control wiring inside of control building, fiber box inside of building above and below grade conduit.	7/1/2008	0.102	S29B
n1290	Somerset - Laurel Highlands - Install Communication equipment of approx. 1.8 miles of fiber optic cable from substation to POI	7/1/2008	0.148	S29B
n1463	Warren - Install 115kV substation (engineering oversight and support) for relay installation	6/1/2008	0.0639	S103
n1509	Mansfield - S. Troy Q72 - Install 115kV 3 breaker ring bus termination point at a new interconnection substation approx. 10.6 miles east of substation	11/30/2008	3.2	Q72

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1510	Customer Facility Substation - Engineering and oversight of substation to include relaying	11/30/2008	0.064	Q72
n1511	Mansfield -S. Troy Q72 - Install new tap structure extending form the 115kV line to interconnection substation	11/30/2008	0.08	Q72
n1512	Mansfield - Everts Drive - Fiber optic cable from Mansfield to P47 (Everts Drive Sub) approx. 15.5 miles	11/30/2008	1.3	Q72
n1513	Mansfield - Relay and control work at 115kV substation	11/30/2008	0.227	Q72
n1514	Everts Drive - Relay and control work at 115kV substation	11/30/2008	0.227	Q72
n1515	Siegfried - Install motorized disconnect switches on each side of the 230kV substation bus tie breaker and set up relay scheme to open disconnect switches when a stuck breaker is detected	11/30/2008	0.1	Q72

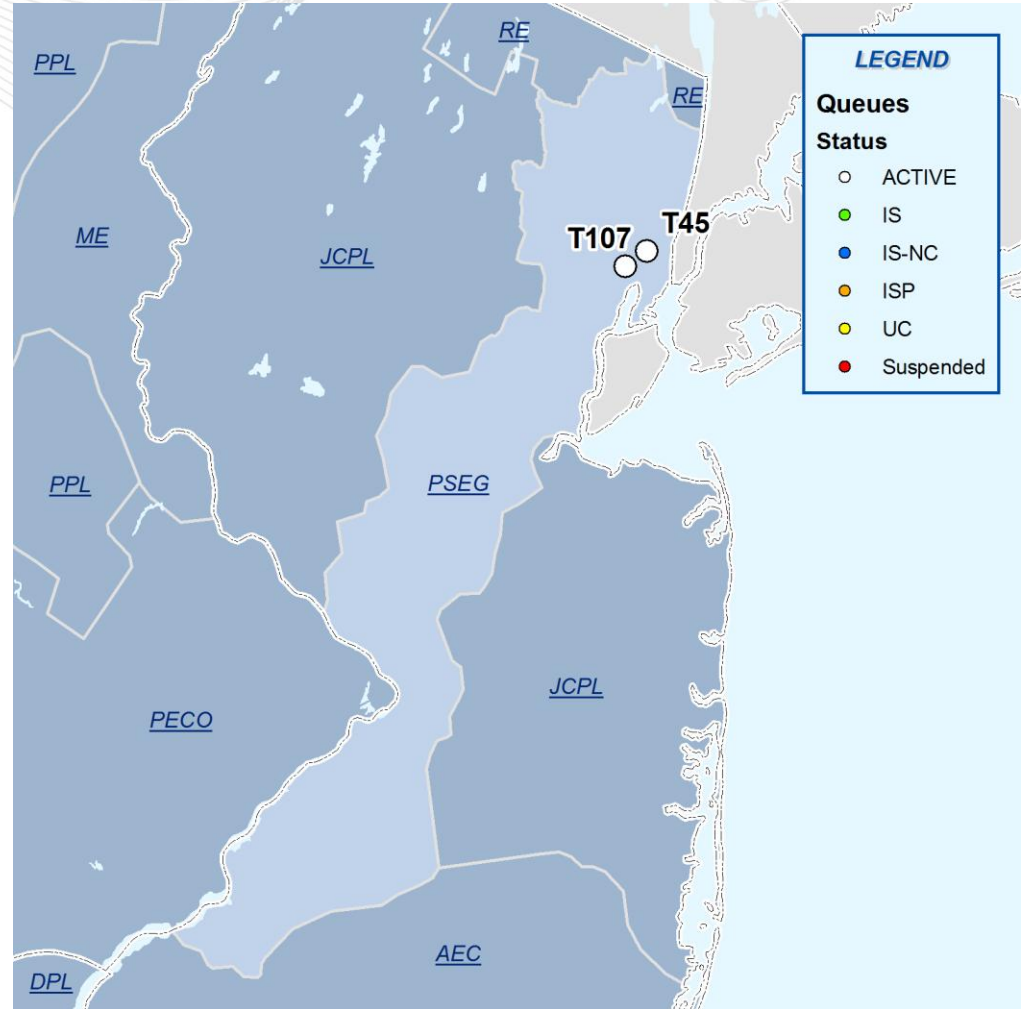
Queue Number	Project Name	MWC	MWE	Fuel Type
T133	Chalk Point – Bowie 230kV	225	225	Natural Gas
T134	Chalk Point – Bowie 230kV	325	325	Natural Gas



Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1292	Aquasco - Construct an 8 breaker 230kV ring bus substation	5/31/2011	16	T133
n1293	Aquasco - Loop 20363 and 23065 lines into substation	5/31/2011	2	T133
n1294	Aquasco - Install 2 breakers to create an additional breaker position at substation	5/31/2012	3.2	T134

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1320	Otter Creek - Conastone - Reconductor the 12 mile 230kV circuit with 795 kcmil 30/19 ACSS conductor (PPL segment) and increase the line rating on the BGE segment to 140 degree C	12/31/2012	7.5	T146
n1542	Brunner - Yorkana - Reconductor (PPL portion) approx. .64 miles of 1033 kcmil ACSR with 1590 kcmil ACCC	1/1/2013	0.65	U1-012
n1551	Alburtis - Branchburg - Replace 500kV breaker with 63kA breaker	6/1/2011	1.4	U1-057
n1552	Alburtis - Replace 500kV breaker at cap bank 1 with a 63kA breaker	6/1/2011	1.4	U1-057
n1553	Alburtis - Replace 500kV breaker at cap bank 2 with a 63kA breaker	6/1/2011	1.4	U1-057
n1554	Alburtis - Hosensack - Replace 500kV breaker at Hosensack 3E with a 63kA breaker	6/1/2011	1.4	U1-057
n1555	Alburtis - Wescos - Replace 500kV breaker at Wescos East G with a 63kA breaker	6/1/2011	1.4	U1-057

Queue Number	Project Name	MWC	MWE	Fuel Type
T45	Hudson 230kV	205	205	Natural Gas
T107	Essex 230kV	625	625	Natural Gas



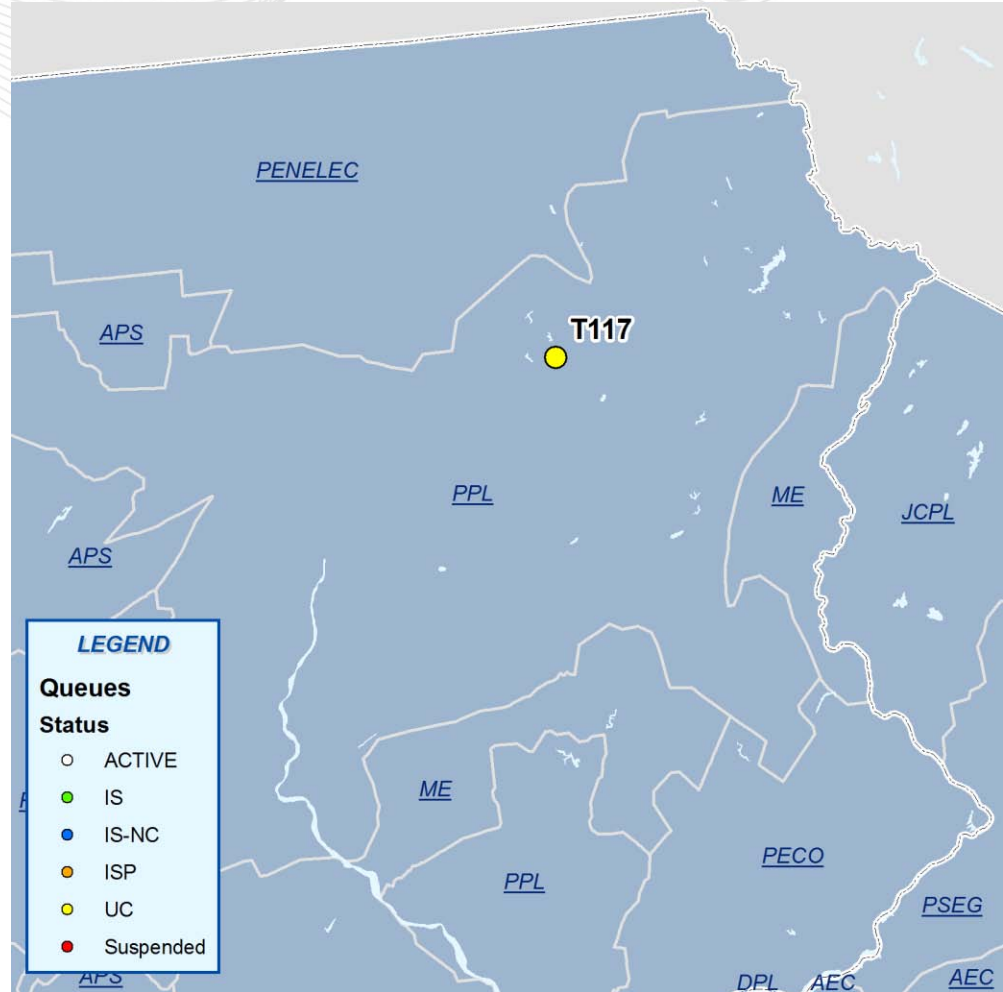
Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1142	Hudson - South Waterfront - Construct second pipe type cable circuit including new termination points at both ends	6/1/2010	41.9	Q86
n1143	Athenia - Meadows - Reconductor 11.63 mile 230kV C-2281 with 1590 ACSS	6/1/2010	13.1	Q86
n1144	Kearny - Meadows - Reconductor .69 mile 230kV circuit with 1590 ACSS	6/1/2010	0.78	Q86
n1157	Bergen - Construct 3 miles of new 230kV line w/ bundled 1033.5 conductor which will include 1 mile of new right of ways between Q86 and Hudson	6/1/2010	45	Q86
n1276	Branchburg - Replace 230kV Breaker 72H with 63 kA Symmetrical Breaker (including disconnect switch)	6/1/2011	0.5	T45
n1322	Kearny - Marion - Reconductor 1/2 mile of the n1314 circuit, replace circuit breakers and disconnect switches at Kearny station and replace circuit breakers and disconnect switches at Marion station	6/1/2011	2	T45
n1403	Bergen - Replace 230kV breaker 11H with 80kA Symmetrical Breaker	1/31/2012	1	T107

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1404	Bergen - Replace 230kV breaker 20H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1405	ECRR- Replace 138kV breaker 901 with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1406	ECRR - Replace 138kV breaker 902 with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1407	Essex - Replace 138kV breaker 1BM with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1408	Essex - Replace 138kV breaker 2BM with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1409	Essex - Replace 138kV breaker 20H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1410	Essex - Replace 138kV breaker 21H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1411	Essex - Replace 138kV breaker 10H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1412	Essex - Replace 138kV breaker 11H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1413	Essex - Replace 138kV breaker 11HL with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1414	Newport - Replace 230kV breaker 23H with 63kA Symmetrical Breaker	1/31/2012	0.5	T107

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1415	South water - Replace 230kV breaker 12H with 80kA Symmetrical Breaker	1/31/2012	0.5	T107
n1416	Southwater - Replace 230kV breaker 22H with 80kA Symmetrical Breaker	1/31/2012	0.5	T107
n1417	Southwater - Replace 230kV breaker 32H with 80kA Symmetrical Breaker	1/31/2012	0.5	T107
n1418	Southwater - Replace 230kV breaker 52H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1419	Southwater - Replace 230kV breaker 62H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1420	Southwater - Replace 230kV breaker 72H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1421	Southwater - Replace 230kV breaker 82H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1422	Essex - Replace 230kV breaker 22H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1423	Marion 3 - Replace 138kV breaker 3PM with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1424	Marion 3 - Replace 138kV breaker 6PM with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1425	Marion 1 - Replace 138kV breaker 8PM with 80kA Symmetrical Breaker	1/31/2012	1	T107

Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1426	Marion 1 - Replace 138kV breaker 5PM with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1427	Marion 3 - Replace 138kV breaker 7PM with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1428	Bergen - Replace 230kV breaker 10H with 63kA Symmetrical Breaker	1/31/2012	5	T107
n1429	Branchburg - Replace 230kV breaker 102H with 80kA Symmetrical Breaker	1/31/2012	1	T107
n1430	Essex 31 - Replace 138kV breaker 2LM with 63kA Symmetrical Breaker	1/31/2012	5	T107
n1470	Branchburg - Replace 230kV breaker 72H with one rated 65kA	6/1/2011	0.5	T45
n1541	Richmond - Camden 7 - Reconductor (PS portion) Position 42H at Camden 230kV bus section 2-6, disconnect switch 230BS2-6/2 - 831MVA and disconnect switch 230BS2-6/6 - 831 MVA	1/1/2013	4.1	U1-012
n1556	Branchburg - Replace 230kV breaker 61H with a 63kA minimum rated breaker	6/1/2011	0.5	U1-057
n1557	Branchburg - Replace 230kV breaker 81H with a 63kA minimum rated breaker	6/1/2011	0.5	U1-057

Queue Number	Project Name	MWC	MWE	Fuel Type
T117	Hunlock Creek 69kV	126	126	Natural Gas



Upgrade	Description	In Service Date	Cost Estimate (\$M)	Driver
n1285	Hunlock Creek - Replace 66kV breaker #66270 at Mountain substation	1/31/2011	.41	T117
n1286	Hunlock Creek - Replace 66kV breaker #66295 at Mountain substation	1/31/2011	(costs in N1285 above)	T117
n1287	Hunlock Creek - Mountain - Upgrade (reconductor/rebuild) 66kV #1 line	1/31/2011	1.504	T117