Southeastern Regional Transmission Planning Process

Preliminary 10 Year Expansion Plan

June 24, 2009

Table of Contents

Section 1. 10 YEAR EXPANSION PLAN EAST REGION

Section 2. 10 YEAR EXPANSION PLAN WEST REGION

Section 1.

10 YEAR EXPANSION PLAN
EAST REGION

EAST REGION PROJECTS

In Year: 2010

Project Name: **BARNESVILLE PRIMARY 115 KV CAPACITOR PROJECT**

Description: Install 1- 2 X 30MVAR (60 MVAR total), 115 kV capacitor bank at Barnesville Primary.

Supporting Statement: In 2010, during the summer peak hour under contract sales to Florida and Branch #4 off, the loss of the Barnesville end of the Barnesville Primaryend of the Barnesville - Forsythe 115 kV line results in the 115 kV bus voltage at Barnesville to drop to 92.9%.

In Year: 2010

Project Name: **EAST SOCIAL CIRCLE - MONROE 115 KV LINE RECONDCT. - PHASE I**

Description: Reconductor the 636 ACSR conductor (approximately 2.1 miles in length) between East Social Circle and Social Circle Jct. with 1351 ASCR conductor built using 230 kV specifications (operate the line at 115 kV).

Supporting Statement: As of 2010, the Social Circle Jct. - East Social Circle segment of the East Social Circle - Monroe 115 kV line will overload under certain single element contingencies out of which the most critical contingency is a loss of the Bay Creek 230/115 kV transformer bank. Other critical single element contingencies includes loss of the Winder 230/115 kV transformer bank and loss of the Bay Creek - LPM Monroe 230 Kv line.

In 2011, postcontingency loading of the East Social Circle - Social Circle Jct line segment will be 102% of its 188 MVA contingency rating.

In Year: 2010

Project Name: **GTC -- OLA 230-KV PROJ., PHASE-II (OLA - JACKSON CK. LINE)**

Description: Create a 230-kV circuit from Klondike to Ola by way of two new GTC load stations, Jackson Creek and East Lake, by constructing a 1351 acsr line from Jackson Creek to East Lake and converting the existing East Lake - Ola 115-kV line to 230-kV operation. Also, install a 400 MVA, 230/115-kV autobank at OLA and three 115-kV breakers to terminate the lines to McDonough, Porterdale and Island Shoals. (GTC to construct)

Supporting Statement: By 2010, loss of the 115-kV feed into McDonough, from Stockbridge, will overload the McDonough - Ola - Porterdale and McDonough - S.Griffin 115-kV lines. Other contingencies overload McDonough - Stockbridge, McDonough - S.Griffin, Jonesboro - Stockbridge and the Stockbridge autobank. In addition to the overlad problem, severe, widespread voltage degredation will occur during some of the contingency outages.

EAST REGION PROJECTS

In Year: 2010

Project Name: **GTC NORTH AMERICUS REACTOR PROJECTS**

Description: Install two reactors at North Americus, a 2% 230kV current limiting reactor on the North Americus - North Tifton 230kV line and a 2% 230kV current limiting reactor on the North Americus - Talbot County #2 230kV line.

Supporting Statement: Supporting Statement:
In 2010, the North Americus - North Tifton 230kV line can exceed its 220 MVA thermal rating for the loss of the North Tifton 500/230kV transformer during a outage of the Hatch #1 generating unit.

In 2010, the Tazwell - Talbot County #2 line section of the North Americus - Talbot County #2 230kV line can exceed its 433MVA line rating for loss of the Fortson - N. Tifton 500kV line during a outage of Hatch #2 generating unit.

In Year: 2010

Project Name: **KLONDIKE 230-KV REACTOR PROJECT**

Description: Install a 3-phase set of 4000 amp, 230-kV, series reactors, (approximately 0.5% @ 4000 amp per phase) (Mk. RECO), between the autobank and 230-kV bus leading to the bus tie breakers, (314 & 324)

Supporting Statement: During shoulder load conditions with a major generating unit out of service, loss of the Klondike - Norcross 500-kV line causes the Klondike 500/230-kV autobank to overload its 1644 MVA bonus rating by 2.5% , (124% of nameplate).

In Year: 2010

Project Name: **MCDONOUGH 4&5 NETWORK IMPV (JACK MCDONOUGH - SMYRNA 230 KV)**

Description: Acquire land and construct the Jack McDonough - Smyrna 230 kV line via Cumberland (convert from 115 kV) and GTC Galleria (new) substations. Add a 5-element GIS 230 kV ring bus at Smyrna and replace the 300-MVA 230/115 kV transformer with two 400-MVA transformers.

Supporting Statement: By 2012, McDonough generation will increase from 520 MW to 2520 MW. Loss of the Jack McDonough - Peachtree 230 kV line, which will normally carry 950 MW, will cause severe overloading of the facilities surrounding McDonough, including the Adamsville - Jack McDonough and East Point - Jack McDonough 230 kV lines, the two Northwest 230/115 kV transformers, and the Northside Drive - Spring Street 115 kV line. The new Jack McDonough - Smyrna 230 kV line will solve or mitigate these thermal loading problems and provide a second transmission source into Smyrna, increasing reliability in the dense Smyrna / Cobb County load center. Worst cases: 2012 shoulder and Gross cases with Bowen 4 off.

EAST REGION PROJECTS

In Year: 2010

Project Name: **MCINTOSH - WEST MCINTOSH 230-KV RECONDUCTOR**

Description: Reconductor the McIntosh - West McIntosh 230-kV Black & White lines with 2-1351 ACSS sagged for 160 C operation (non-ITS except West McIntosh termination equipment work)

Supporting Statement: By 2010 with Effingham CC generation running at 400 MW and McIntosh CTs off, loss of the McIntosh - West McIntosh 230-kV Black line and McIntosh CC 10 loads the McIntosh - West McIntosh 230-kV White line to 101% of its 1144 MVA conductor rating (2-1272 ACSR).

By 2011 with Effingham CC generation running at 400 MW and McIntosh CTs off, loss of the McIntosh - West McIntosh 230-kV White line and McIntosh CC 11 loads the McIntosh - West McIntosh 230-kV Black line to 100% of its 1204 MVA conductor rating (2-1351 ACSR).

In Year: 2010

Project Name: **OFFERMAN - GILMAN PAPER 115KV LINE UPGRADE**

Description: Rebuild the Offerman - Patterson section of the Offerman - Gilman Paper 115kV line (3.88 miles of 336 ACSR) for 100C operation.

Supporting Statement: With the loss of the any section of line from Blackshear Junction (27), which is tapped off of the Kettle Creek - Offterman (White) 115kV Line, to Blackshear, Blackshear must be restored from the Offerman - Gilman Paper 115 kV line. With the conversion of College Avenue and Hoboken to 115 kV, and the resulting higher loading on Offerman - Gilman Paper line, these sections exceed their 50°C ratings.

In Year: 2010

Project Name: **PEGAMORE 230KV SWITCHING STATION PROJECT**

Description: Construct a new 230kV switching station (Pegamore 230kV SS) on the newly converted Bowen – Villa Rica 230kV line at Huntsville Junction, and install three 230kV breakers to terminate the Bowen, Villa Rica, and McConnell Road 230kV Lines. Construct a new 230kV line using existing ROW, from Pegamore to Huntsville (GPC), and from Huntsville to the McConnell Road 230/115kV substation (GTC). Install a 230kV breaker at McConnell substation and terminate the Pegamore line. Convert the Huntsville, Battlefield, and Cedarcrest substations to 230kV operation (GTC)

Supporting Statement: In summer 2008 loss of the McConnell Rd. 230/115kV transformer, the Big Shanty - McConnell Rd. 230kV line or the McConnell Rd. - Hwy. 120 115kV line segment will overload the Portland - Huntsville jct. 115kV line segment to as much as 119% of its 477 ACSR (155 MVA) rating.

This project will alleviate the thermal overload and provide approximately 100 MVAR's of reactive support in the area. This line will also provide for the future reconfiguration of the 230kV bus at Plant Bowen and allow for moving a unit from the 500kV to the 230kV bus. The reconfiguration will provide an additional 500 MVAR's of reactive support.

EAST REGION PROJECTS

In Year: 2010

Project Name: **PLANT BOWEN CONVERSION OF UNIT ONE TO 230 KV**

Description: Convert Bowen Unit #1 to 230kV operation by installing a new GSU and connecting to the re-configured 230kV bus (see TEAMS project 11326)

Supporting Statement: By 2010, the NERC Category B requirements for Fault Induced Delayed Voltage Recovery (FIDVR) will be approximately 450 dynamic MVAR's. The Plant Bowen 230 kV bus is being reconfigured to support the conversion of the Bowen - Villa Rica 500kV line to 230kV Operation in 2009. (see TEAMS project 11326). This reconfiguration will also support the conversion of Unit #1 to 230 kV high side operation in 2010. The conversion of Bowen Unit #1 to 230kV operation will provide approximately 450 dynamic MVAR's.

This TEAMS project should be coordinated with TEAMS Project 11326.

In Year: 2010

Project Name: **PROCTOR & GAMBLE TRANSMISSION CONNECTION MODIFICATION**

Description: Remove the Breaker (131508), CCVT, and line trap at P&G and replace with a N.O. RLB switch w/ motor op. The 115/13.8 kV Bank B at P&G will be reconfigured to be served off the new Albany-Mitchell(BLACK) 115kV Line. The 115/13.8 kV Bank A & C at P&G will be reconfigured to be served off the Albany-Radium Springs 115kV line.

Supporting Statement: Loss of either end of the Albany-P&G-Mitchell 115 kV line overloads the other end and causes a 6%+ voltage drop at P&G until Cooper Tire load is switched to its alternate source. Upon adding the additional load at P&G, the thermal overloading and voltage deviation is worse.

In Year: 2010

Project Name: **STATESBORO - WADLEY 115KV UPGRADE**

Description: Upgrade the Swainsboro - Nunez tap line section, 2.6 miles, of the Statesboro - Wadley 115-kV line to 100 C.

Supporting Statement: Loss of the Statesboro end of the Statesboro - Wadley 115-kV line, Statesboro - Metter, will load the Swainsboro - Nunez tap section to 103% of its 79 MVA, 50 C conductor rating.

EAST REGION PROJECTS

In Year: 2010

Project Name: **THOMSON 500/230-KV PROJECT**

Description: GPC:
Expand the 500-kV ring bus at Warthen and terminate the Thomson Primary 500-kV line.
Construct a 500-kV switchyard and expand the 230-kV switchyard at Thomson Primary.
Install a 1344 MVA, 500/230-kV transformer at Thomson Primary.
Replace the 140 MVA, 230/115-kV transformer at Thomson Primary with a 300 MVA transformer.
Build 23 miles of 230-kV line on new ROW from Thomson Primary to Dum Jon.
Install a 230-kV breaker at Dum Jon to terminate the Thomson Primary line.
Replace the 125 MVA, 230/115-kV transformer at Evans Primary with a 300 MVA transformer.

GTC:
Construct 35 miles of 500-kV line from Warthen to Thomson Primary.

Supporting Statement: By 2010, loss of the Goshen - Peach Orchard section of the Dum Jon - Goshen 230-kV line will load the Dum Jon - West Augusta 115-kv line to 136% of its 249 MVA rating. An outage of the Goshen 230-kV #1 bus will load the Goshen - Vogtle 230-kV Black line to 102% of its 866 MVA conductor rating and the Goshen 230/115-kv #2 transformer to 118% of its 280 MVA nameplate rating. See Project Documentation for additional thermal and voltage problems.

In Year: 2010

Project Name: **TREUTLEN (SAV) 115-KV CAPACITOR BANK**

Description: Install a single-stage, 36 MVAR, 115-kV capacitor in the Treutlen 115/46/25/13.8-kV substation. Allow for a future 115-kV line termination for the Old Louisville Road 115-kV line.

Supporting Statement: Loss of the McIntosh EFACEC 115-kV tap section of the McIntosh Treutlen 115-kV line causes the voltage at EFACEC to drop to 93% from 100%, a 7% drop.

In Year: 2010

Project Name: **UNION POINT - WARRENTON 115-KV RECONDUCTOR**

Description: Rebuild the Union Point - Warrenton 115-kV line (26.7 miles of 336 ACSR) with 1351 ACSR conductor at 230-kV specs.

Supporting Statement: By 2010, with the Thomson 500/230-kV Project, loss of the East Social Circle - Rutledge 115-kV line section will load the line to 124% of its 124 MVA conductor rating.

EAST REGION PROJECTS

In Year: 2011

Project Name: **ARKWRIGHT - GORDON #1 115 KV LINE RECONDUCTOR**

Description: Reconductor the Arkwright - Gordon #1 115 kV line (23.6 miles) with 100C 795 ACSR conductor.

Supporting Statement: In 2011, loss of the West Milledgeville - Riggins Mill 230 kV line causes the Gordon - Mixon section of the Arkwright - Gordon #1 line to load to 130% of its 91-MVA rating.

In Year: 2011

Project Name: **DANIEL SIDING 115-KV CAPACITOR**

Description: Install a 60 MVAR (2X30), 115-kV capacitor bank

Supporting Statement: By 2011, additional reactive/voltgae support is needed in the Hinesville for N-2 conditions. Voltages in the Hinesville/Riceboro area are OK with the loss of the Dorchester 230/115-kV transformer or the Little Ogeechee end of the Hinesville - Little Ogeechee 115-kV line. If the Hinesville 115-kV capacitor were to trip, voltages in the area drop 6%. This is a N-2 condition, but does show the dependance of the area on existing capcitors. Daniel Siding is a better location for the capacitor vs. Dorchester. The Dorchester 115-kV capacitor is timed for 2014 (TEAMS #11085).

In Year: 2011

Project Name: **DEPTFORD - WHITEMARSH 115 KV LINE RECONDUCTOR**

Description: On new ROW, build a new Deptford - Whitemarsh 115 kV line using 795 ACSR while keeping the existing line in service. Once the new line is in service, remove the old line.

Supporting Statement: By 2009, normal loading during Hot weather will load the 4/0 copper conductor to 109% of its 85 MVA, 104° F rating (101% of its 91 MVA, 95° F rating).

EAST REGION PROJECTS

In Year: 2011

Project Name: **FACTORY SHOALS 230/115KV EXPANSION**

Description: Create a 230/115kV network substation at Factory Shoals. Install one 230/115kV 125MVA or greater autobank (plant transfer). Tap the Adamsville-Douglasville 230kV line from Buzzard Roost (GTC) for 230kV source using existing line. Create a 115kV network station by breakering up the Douglasville-Greenbriar 115kV line, with option for a third 115kV bay. Install three 230kV breakers at Buzzard Roost, looping in the Adamsville-Douglasville 230kV line, with a third terminal serving Factory Shoals. Install relaying as necessary at Factory Shoals and Buzzard Roost.

Supporting Statement: For the loss of the Douglasville - Groover Lake segment of the Douglasville - Greenbriar 115kV line in 2011, overloads will occur on the Gordon Road - Hightower (116.2%), Adamsville - Hightower (116.1%), and Adamsville - Greenbriar (111.0%) segments of the Douglasville - Greenbriar 115kV line.

For the loss of the Mason Creek - Post Road segment of the Douglasville - Post Road 115kV line, will overload the 230/115kV Bank A at Douglasville (GTC).

The current planning estimate is for the work at Factory Shoals only.

In Year: 2011

Project Name: **LIZELLA JUNCTION 115 KV SWITCHING STATION**

Description: At Lizella Junction, construct a new 115 kV switching station and install two single-stage capacitor banks (30 MVAr each bank). Terminate the Forrest Road, Dorsett, South Macon and Thomaston 115 kV lines.

Supporting Statement: Loss of the Dorsett - Hartley Bridge Jct. line section causes voltage deviation of as much as 9.6% and post-contingency voltages as low as 89% at five 115 kV buses. Also, loss of the South Macon - Vineville 115 kV line section causes the Arkwright - Bass Road Jct section of the Arkwright - Forrest Road 115 kV line to load to 104% of its rating as limited by the buswork at Arkwright. No operating procedure is available.

EAST REGION PROJECTS

In Year: 2011

Project Name: **MCDONOUGH 115-KV LINE BREAKER INSTALLATION**

Description: Install a 115-kV line breaker in the Greenwood Park/Hampton tap line bay at the McDonough substation. Also, change the normally open point to be between Dailey Mill and Greenwood Park instead of between Greenwood Park and McDonough. The Greenwood Park load would now be served normally from the McDonough substation.

Supporting Statement: Serving the Greenwood Park 115-kV substation normally from McDonough, (after the 230/115-kV autobank is installed at GTC's Ola substation - scheduled for summer of 2010), will enhance the voltage profile on the Hampton tap line and eliminate the need to switch the Greenwood Park load off of the tap for expected summer peak load conditions starting in 2011. If a circuit breaker is installed to terminate the line instead of using the 115-kV transfer bus, system reliability will be enhanced through relay scheme simplification and a reduction of 115-kV line exposure, on the Greenwood Park substation, by at least 12 miles.

In Year: 2011

Project Name: **MCDONOUGH 4&5 NETWK IMPV (DAVIS ST - WEST END 115 KV RECOND)**

Description: Rebuild the Davis Street - West End 115 kV line (2.7 miles of 1033 AAC) using 170C 795 ACSS.

Supporting Statement: By 2012, McDonough generation will increase from 520 MW to 2520 MW. This project of one of several that are needed prevent contingency overloading of various facilities associated with delivery of the generation from Units 4 and 5. Loss of the Jack McDonough - Peachtree 230 kV line causes the Davis Street - West End 115 kV line to load to 125% of its 199-MVA rating (G12v3Ds08-BRA4 case).

In Year: 2011

Project Name: **MCDONOUGH 4&5 NETWK IMPV (GRADY-MORELAND AVE 115 KV RECOND)**

Description: Reconductor the Grady - Moreland Avenue (approximately 3.5 miles of 636 ACSR) with conductor capable of 1500 amps.

Supporting Statement: With the addition of McDonough Units 4, 5 and 6 by 2012, the Grady - Moreland Avenue 115 kV line will be loaded to 94% of its 188-MVA rating with no contingency in effect. Consequently, 50 contingencies cause the line to load to as high as 120% of its rating. Numerous contingencies cause lesser overloads in 2011.

EAST REGION PROJECTS

In Year: 2011

Project Name: **MCDONOUGH 4&5 NETWK IMPV (N MAR - SMYRNA B&W 115 KV RECONDS)**

Description: On each line, rebuild approximately 3.7 miles of 657 ACAR and 397 ACSR 115 kV line from Smyrna to the Lockheed tap with 1033 Composite Conductor @ 200 C 115 kV construction.

Supporting Statement: With the addition of McDonough Units 4 and 5, and the construction of the Jack McDonough - Smyrna 230 kV line and second Smyrna 230/115 kV transformer, more power flows out of Smyrna on the 115 kV network.

Loss of the White line causes the Black line to load to 105% of its 149-MVA rating. Loss of the Black line causes the White line to load to 104% of its 149-MVA rating (H11v3Ds08-BOW4 case).

In Year: 2011

Project Name: **MCDONOUGH 4&5 NETWORK IMPV (ATK-NSD & NSD-NW 115 KV RECONDS)**

Description: Rebuild and reconfigure the Atkinson - Northside Drive and Northside Drive - Northwest 115 kV lines to increase capacity between Northside Drive and Northwest.

Supporting Statement: By 2012, McDonough generation will increase from 520 MW to 2520 MW. This project of one of several that are needed prevent contingency overloading of various facilities associated with delivery of the generation from Units 4 and 5.

Loss of the Atkinson - Northside Drive 115 kV line or Jack McDonough - Peachtree 230 kV line causes the Northside Drive - Northwest 115 kV line to load to as high as 114% of its 182-MVA rating.

In Year: 2012

Project Name: **2012 BASE REACTIVE POWER SUPPORT**

Description: Install capacitors to improve the overall voltage profile in Georgia in 2012.

- Soperton Primary 115 kV 30 MVAr
- Factory Shoals 115 kV 45 MVAr

Supporting Statement: This project is continuation of an attempt to levelize and to improve the voltage profile in the Georgia ITS by optimally installing a number of shunt capacitors in the system. 150 MVAr of shunt reactive support is proposed for allocation in 2012.

EAST REGION PROJECTS

In Year: 2012

Project Name: **ARKWRIGHT 115 KV SWITCHING STATION BUS REPLACEMENT**

Description: Construct a new breaker-and-a-half substation with 3000A capacity adjacent to the existing substation. Allow for future 230 kV and 115 kV expansion. Retire the existing sub. Install a new control house.

Supporting Statement: In the 2015-2018 timeframe, the North Macon area will require a new 230 kV source. The Arkwright substation is an ideal location to terminate a 230 kV line from the Branch area and distribute power through the existing 115 kV system. The substation is extremely old, has an unusual selector-bus design and cannot be rebuilt in place. Near-term, 115 kV line overloads due to the bus ampacity, as well as the need to add capacitor for area voltage support, drive the need to advance the reconstruction project.

In Year: 2012

Project Name: **COLEMAN 115/46-KV PROJECT**

Description: Install a 115/46-kV, 60 MVA, LTC auto-transformer in the Coleman 115/13.8 -kV substation. Loop the Pooler - Ga. Pacific 46-kV line section into the Coleman substation.

Supporting Statement: The 46-kV normal bus voltage at Pooler is 96%. Loss of the Grange Road - Ga. Port 46-kV line section loads the Millhaven - Rossignol Hill 46-kV line to 102% of its 795 AAC, 75C, 67 MVA conductor rating.

In Year: 2012

Project Name: **DECATUR - MORELAND AVE 115-KV UPGRADE**

Description: Upgrade approximately 1.6 miles of 50C-sagged 636 ACSR conductor from Decatur to Kirkland for 100C operation.

Supporting Statement: By 2010 (coincident with additional load at Emory), loss of the Grady - Moreland Ave. or Emory - Scottdale 115-kV line will cause the Decatur - Moreland Ave line to112% its 50C rating of 96 MVA.

NOTE: Opening the Austin Drive - Decatur 115kV line at Decatur will relieve this overload until 2012. By 2012 this line is projected to be loaded to 134% of it 96 MVA rating.

EAST REGION PROJECTS

In Year: 2012

Project Name: **GOAT ROCK 230/115KV AUTO LOWSIDE JUMPER REPLACEMENT**

Description: Replace the 1590AAC lowside jumpers with 2000 AAC jumpers on the Goat Rock 230/115kV Auto.

Supporting Statement: Supporting Statement:
In 2012, The Goat Rock 230/115kv transformer can exceed its 298MVA element rating for loss of the First Avenue - Lee Road 230kV line during an outage of Yates 7 generating unit under shoulder conditions.

In Year: 2012

Project Name: **JACK MCDONOUGH - WEST MARIETTA 115KV (WHITE) RECONDUCTOR**

Description: Reconductor approximately 4 miles of 115 kV line from the Plant McDonough 115 kV substation to King Springs (3.18mi 739ACAR, 0.88mi 636)

Supporting Statement: In 2008 cases, the JackMac-King Spring segment of the JackMac-West Marietta 115kV line overloads as early as 2009 based on a 75C 739.8ACAR rating for loss of the far end, W.Marietta-Fair Oaks (08V3d_C09_McD1_off)(DJS-12-1-08).

In Year: 2012

Project Name: **LOOP SERVICE TO WALTON #6 115 KV SUBSTATION**

Description: Make necessary arrangement to loop the Ponce de Leon - Snellville 115 KV line thru the Walton EMC #6 substation.

Supporting Statement: The Snellville - Walton #6 115kV line was constructed as a test case for underground transmission. This line was constructed using 750 UG XLPE conductor with a rating of 80 MVA. There are currently two banks in the Walton #6 substation with a normally open RLD switch separating the banks. One bank (#1) is served from the underground transmission line from Snellville and the other bank (#2) is served by way of a tap from the Ponce deLeon - Snellville line. By 2012, the combined load on the Walton #6 banks will be 81 MVA. If the tap serving bank #2 is out, the entire load will have to be served by way of the underground line from Snellville. Under the tap loss contingency the underground line would be loaded to 101% of its 80 MVA rating.

In Year: 2012

Project Name: **MCDONOUGH 6 NETWK IMPV (JACK MCDONOUGH-NW B&W 230 KV UPG)**

Description: This project upgrades the two existing 230 kV lines from their 50C rating to a 75 C rating, increasing their capacity from 306 to 481 MVA.

Supporting Statement: By 2012, McDonough generation will increase from 520 MW to 2520 MW. At that time, loss of either of the Jack McDonough - Northwest 230 kV lines causes the other to exceed its rating.

EAST REGION PROJECTS

In Year: 2012

Project Name: **MCDONOUGH 6 NETWORK IMPV (DAVIS ST-NORTHWEST 115 KV RECOND)**

Description: Reconductor the Davis Street - Northwest 115 kV line (approximately 2.6 miles of 1033 AAC) with conductor capable of at least 1500 amperes.

Supporting Statement: By 2012, McDonough generation will increase from 520 MW to 2520 MW. At that time, loss of the East Point - Georgia Tech 230 kV line causes the Davis Street - Northwest 115 kV line to load to 104% of its 199 MVA rating (G12v3Ds08-BRA4 case).

In Year: 2012

Project Name: **MCDONOUGH 6 NETWORK IMPV (NSIDE DR-SPRING ST 115 KV RECOND)**

Description: Reconductor the Northside Drive - Spring Street 115 kV line (approximately 1.2 miles of 1033 AAC) with conductor capable of carrying 1500 amperes. Reuse the existing structures. No substation work required at this time.

Supporting Statement: With the addition of McDonough Units 4, 5 and 6, loss of the Jack McDonough - Peachtree 230 kV line causes the Northside Drive - Spring Street 115 kV line to load to 108% of its 199-MVA rating (H12v3Ds08-BRA4 case).

In Year: 2012

Project Name: **MCDONOUGH 6 NETWORK IMPV (REMOVE PEACHTREE 115 KV)**

Description: At Peachtree, convert all load transformers to 230 kV highside, remove the 230/115 kV transformer (Bank A) and add two 230 kV bus tie breakers in series. Tie the Boulevard and Rottenwood Creek 115 kV lines together outside the substation. RLB 115251 at Rottenwoood Creek will remain normally-open.

Supporting Statement: By 2012, McDonough generation will increase from 520 MW to 2520 MW. At that time, loss of the Boulevard - Peachtree 230 kV line will carry approximate 950 MW. Loss of this line causes the Boulevard - Peachtree 115 kV line to load to 114% of its 188-MVA rating, and loads the Peachtree 230/115 kV autobank to 114% of its 320-MVA bonus rating.

EAST REGION PROJECTS

In Year: 2012

Project Name: **MELDRIM 230/115-KV TRANSFORMER PROJECT**

Description: Construct a 230-kV bus at Meldrim and install a 230/115-kV, 300 MVA transformer. Loop the Blanford - Little Ogeechee 230-kV Black/White lines through Meldrim.

Rebuild the Meldrim - Ga. Pacific - Black Creek tap section of the Claxton - Meldrim 115-kV line with 1033 ACSR conductor.

Supporting Statement: Loss of the McIntosh - Treutlen 115-kv line section loads the Dean Forest - Meldrim 115-kv line to 101% of its 155 MVA rating.
Loss of the McIntosh - Treutlen 115-kv line section drops the 115-kv bus voltage at Treutlin to 93%.

In Year: 2012

Project Name: **NORCROSS - OCEE 230KV LINE RECONDUCTOR**

Description: 1. Norcross - Ocee 230kv Line
Reconductor 3.45 miles of 1033 ACSR, 230-kV line from Norcross - Berkeley Lake using1033 SSAC conductor at 160 degree C.
2. Berkeley Lake 230/25-kV Substation
Replace 1590 AAC jumpers with a jumpers capable of carrying 1700 A.

Supporting Statement: The Norcross - Ocee 230-kV line was originally constructed in 1966 using 1033 ACSR conductor with a 100 degree C rating of 509 MVA. Studies indicates that the section of this line from Norcross - Berkely Lake will reach its rating by 2012. The contingencies that causes this section of line to load to 102% of its 100 degree C rating is the loss of the Alpharetta end of the Alpharetta - Ocee 230kV line.

In Year: 2012

Project Name: **NORCROSS - SUWANEE 115-KV LINE PROJECT**

Description: Norcross - Suwanee 115-kV Line
Rebuild 1.49 miles of 2-4/0CU and .15 mile of 795 ACSR with 1622 ACSR/TW from the Old Atlanta Road junction to the Sugarloaf tap.

Supporting Statement: In 2012, the Sugarloaf tap - Old Atlanta Road junction section of the Norcross - Suwanee 115-kV line loads to 103% of its 181 MVA rating for the loss of the Norcross end of this line. The Old Atlanta Road junction to Suwanee section of this line is constructed using 1622 ACSR/TW.

Note:NEETRAC Report: Poor tensile strength and high elongation values indicate that this sample is annealed (due to a history of thermal overloads). The conductor may be suitable for continued operation provided that: 1) annealing has not caused NESC ground clearance problems, and 2) remaining strength still meets NESC loading requirements. If ground clearance is a problem on these lines, reconductoring is the recommended corrective action.

EAST REGION PROJECTS

In Year: 2012

Project Name: **NORTH AMERICUS - NORTH TIFTON 115KV LINE UPGRADE**

Description: In 2010 upgrade 18.1 miles of the North Americus - North Tifton 115kV line section from Crisp 2 to Ashburn J from 50C 336.4 to 100C

Supporting Statement: In 2010 under Gross conditions, with the Hatch #1 unit off line and the loss of the North Tifton 500/230 Autobank causes the Crisp #2 to Doles Junction section of the North Americus - North Tiftion 115kV line to exceed its 44 mva limit by 8.7% percent.

In Year: 2012

Project Name: **NORTH CARROLLTON 30MVAR CAPACITOR BANK**

Description: Install a 30MVAR capacitor bank on the 115kV bus at North Carrollton substation

Supporting Statement: As early as 2012, the Bremen-N.Mt. Zion segment of the Bremen-Possum Branch 115kV line overloads for loss of Hickory Level-Sand Hill 115kV with Yates3 out (G12v1Bs09_YAT3). The overload can be delayed using an operating solution by opening the Possum Branch-Tisinger 115kV line segment only if there is voltage support at North Carrollton. The problem is fixed in 2013 with the addition of a 230/115kV substation near Clem (was East Carrolton Project) DJS, 4/6/09.

In Year: 2012

Project Name: **PETTIT CREEK 115KV CAPACITOR BANK INCREASE**

Description: Upgrade the existing 115kV capacitor bank at Pettit Creek 115/46/12kV substation to 45MVAR. Install a 2nd stage, 115kV, 45-MVAR capacitor bank.

Supporting Statement: Based on 2009 series cases, as early as 2012, voltages in the Pettit Creek-Cartersville 115kV line area will fall below guidelines for loss of the Cartersville end. For G12v1Bs09, Cartvl 11 = 93%, Cartvl 14 = 93%, Peep Val = 91%, Toyo = 94%, Cartvl 20 = 92%, Carvl 22 = 92%.

The installation of additional capacitors will provide voltage support in the area through 2018

EAST REGION PROJECTS

In Year: 2013

Project Name: **CUMMING - MCGRAU FORD 230KV LINE REACTOR PROJECT**

Description: Install 230kV, 2000A, 2% three phase set of series line reactors on the Cumming - McGrau Ford 230kV line.

Supporting Statement: Delayed to 2013, due to the delay of the Sharon Springs 230/115kV Substation Project

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In Year: 2013

Project Name: **DANIEL SIDING - LITTLE OGEECHEE 115-KV RECONDUCTOR**

Description: Re-conductor the Daniel Siding - Little Ogeechee section of the Hinesville Primary - Little Ogeechee 115-kV line with 2-636 ACSR conductor (non-ITS)

Supporting Statement: Loss of the Dorchester 230-kV source will load the Little Ogeechee - Richmond Hill section of the Hinesville - Little Ogeechee 115-kV line to 103% of its 255 MVA conductor rating.

In Year: 2013

Project Name: **EAST CARROLLTON 230/115 KV SUBSTATION PROJECT**

Description: GTC - Construct the E. Carrollton 230/115 kV substation looping the Hickory Level - Yellowdirt 230 kV line and the Possum Branch-Yates 115 kV line.
GPC - Reconductor 1.5 miles of 477, 115 kV line with 1351 ACSR, 115 kV line from Clem-Oak Mtn.-Holox-E.Carrollton-Southwire-Carrollton#2 Jct.

Supporting Statement: In 2014, loss of the hickory Level-Sand Hill section of the Hiclory Level-Possum Branch 115 kV line causes the Mt. Zion-Jonesville Jct. section of the Bremen-Possum Branch 115 kV line to load to 101% of its 100C rating (188 MVA). Loss of either the Bremen or Hickory Level 230/115 kV transformers will cause the other transformer to exceed its rating (400 MVA).

In Year: 2013

Project Name: **EAST POINT - CAMP CREEK 115-KV LINE RECONDUCTOR**

Description: Reconductor, using 230-kV specs, approximately one span of the existing 397 ACSR conductor with 1351 ACSR, on the E.Point - Camp Creek 115-kV line, starting at the East Point substation, This will make the conductor in the entire 115-kV line segment, from East Point to the Ben Hill tap, 1351 ACSR. Replace 600A line switches at East Point.

Supporting Statement: By 2012, the Annewakee, Camp Creek and Ben Hill loads are forecasted to be larger than the capacity of the short section of 397 ACSR, 115-kV conductor, in the alternate feed from East Point.

EAST REGION PROJECTS

In Year: 2013

Project Name: **EAST SOCIAL CIRCLE 230KV SERIES REACTORS (GTC)**

Description: Install 2% reactor at East Social Circle on Branch - East Social Circle 230 line (the line through Forrest Lake & Eatonton Primary)

Supporting Statement: In 2013, under shoulder conditions, for the loss of Franklin 2 unit and Branch - Eatonton SW 230 kV line, Branch - East Social Cirle line overloads to 110%.

In Year: 2013

Project Name: **FIFE CAPACITOR ADDITION**

Description: Add a two stage, 30 MVAR per stage, (60 MVAR total), 115-kV capacitor bank to the Fife 115-kV bus.

Supporting Statement: Loss of the Yates end of the Morrow -Yates 115-kV line could cause voltage levels to drop below 105-kV, from a starting level of over 112-kV, at Fife 115-kV bus and the Owens Corning 115-kV bus #2. This voltage variation violates an ITS Planning Guideline for a non-regulated transmission bus and consequently violates the NERC compliance standards.

In Year: 2013

Project Name: **GTC - EAST WATKINSVILLE 230/115 KV AUTOBANK REPLACEMENT**

Description: GTC - Replace the existing 280 MVA transformer bank with a 400 MVA transformer bank.

Supporting Statement: In 2013, E. Watkinsville 230/115 kV transformer bank will load up to 114% of its 298 MVA nominal rating for a loss of the East Watkinsville - Barnett Shoals 230 kV segment of the Athena - East Watkinsville 230 kV line.

In Year: 2013

Project Name: **KRAFT - MCINTOSH 230-KV BLACK/WHITE LINE RECONDUCTOR**

Description: Rebuild the Kraft - McIntosh 230-kV Black & White lines (double circuit towers) with 2-795 ACSR conductor, (16 miles).

Supporting Statement: By 2011, loss of a Kraft - McIntosh 230-kV line will load the remaining Kraft - McIntosh 230-kV line to 101% of its 509 MVA conductor rating.

EAST REGION PROJECTS

In Year: 2013

Project Name: **LITTLE OGEECHEE 230-KV CAPACITOR**

Description: Install a 162 MVAR, 230-kV capacitor bank in the Little Ogeechee (SAV) 230/115-kV substation.

Supporting Statement: By 2009, there is a steady decline in the normal 230-kV voltages in the Savannah area. McIntosh/West McIntosh is the main power/voltage source for the Savannah/Hinesville area.From McIntosh to Little Ogeechee to Dorchester is essentially a radial system with a 3% voltage drop from McIntosh to Little Ogeechee/Dorchester.

In Year: 2013

Project Name: **LLOYD SHOALS / PORTERDALE AREA IMPROVEMENT PROJECT (PHASE-1)**

Description: Upgrade, to 100 Deg. C, 3.5 miles of 397 ACSR conductor from Porterdale to the S. Covington Jct., on the Lloyd Shoals - Porterdale 115-kV line - (GPC)

Supporting Statement: An overload on the Porterdale to S. Covington Jct. section of the Lloyd Shoals - Porterdale 115-kV line will occur for the loss of the S.Griffin end of the Lloyd Shoals - S.Griffin 115-kV line.

In Year: 2013

Project Name: **MCDONOUGH 4&5 NETWORK IMPV (LASSITER-N MAR 115 KV RECOND)**

Description: Reconductor the North Marietta - Marietta #5 section (approximately 1.2 miles of 636 ACSR) with conductor capable of carrying 1500 amperes. Replace termination equipment at North Marietta.

Supporting Statement: By 2012, McDonough generation will increase from 520 MW to 2520 MW. At that time, loss of the North Marietta - Marietta #4 115 kV line section loads the North Marietta - Marietta #5 section of the Lassiter Road - North Marietta 115 kV line to just under 100% of its 188-MVA rating. The next year, loading reaches 102%.

In Year: 2013

Project Name: **ORANGE 115KV CAPACITOR**

Description: Install a 2-stage, 60 MVAR 115kV capacitor bank.

Loss of the Holly Springs - New Light section of the Hopewell - Holly Springs 115-kV will result in 93.0% voltage on the line. The voltage deviation is 6.6%.

Supporting Statement: Loss of the Holly Springs - New Light section of the Hopewell - Holly Springs 115-kV will result in 93% voltage on the line.

EAST REGION PROJECTS

In Year: 2013

Project Name: **SHARON SPRINGS 230/115-KV SUBSTATION**

Description: 1. GTC-- Cumming - Sharon Springs 230kV line. Purchase ROW and construct 230 kV line. (~6.6 miles)
2. GTC-- Sharon Springs 230/115kV Substation. Install a 230/115kV, 300 MVA transformer with two (2) 115kV line breakers. Terminate 115kV lines to Hopewell and Suwanee.
3. GPC-- Cumming 230/115kV Substation. -- Install a 230kV breaker and terminate the Sharon Springs 230kV line.

Supporting Statement: In 2013, the Suwanee - Old Atlanta Road segment of the Hopewell - Suwanee 115kV line will load to 100% of its 207 MVA rating for the loss of the Hopweell - Brandywine segment and the Hopewell - Brandywine section loads to 100% of its 207 MVA rating for the loss of the Suwanee - Old Atlanta Road section. By 2014 the Brandywine - Highway 141 segment loads beyond its rating.

In Year: 2013

Project Name: **SUMMER GROVE 115 KV CAPACITOR PROJECT (GTC)**

Description: GTC - Install a 2 - step, 30 MVAR per step, 60 MVAR total, 115 kV capacitor bank at Summer Grove.

Supporting Statement: Loss of either end of the Yates - S.Coweta 115-kV line will cause NERC compliance voltage violations to occur at Yamaha, Summer Grove and Sharpsberg.

In Year: 2013

Project Name: **THOMASTON - YATES 115-KV LINE REBUILD**

Description: Tear down and rebuild the Yates - Newnan City #2 section (10.5 miles) and the North Thomaston - Thomaston section (2.2 miles) of the Thomaston - Yates 115 kV line with 1033 ACSR to operate at 100C.

Supporting Statement: In 2013, under contract sales to Florida, loss of the Yates - Shenandoah 115 kv line segment and subsequent switching to pick up the load, the Yates end of the Thomaston - Yates 115 kV line will load above its 155 MVA rating.
In 2013, the loss of the North Thomaston - Thomaston section will cause the Yates - Newnan #2 section to overload its 155 MVA rating.
In 2014, the loss of the Yates - Mountain Creek section will cause the North Thomaston - Thomaston section to overload its 155 MVA rating.

EAST REGION PROJECTS

In Year: 2014

Project Name: **2014 BASE REACTIVE POWER SUPPORT**

Description: Install capacitors to improve the overall voltage profile in Georgia in 2014.

- Porterdale 230 kV 90 MVAr (GPC)

Supporting Statement: This project is continuation of an attempt to levelize and to improve the voltage profile in the Georgia ITS by optimally installing a number of shunt capacitors in the system. 90 MVAr of shunt reactive support is proposed for allocation in 2014.

In Year: 2014

Project Name: **ARKWRIGHT - S. MACON 115 KV (BLACK) RECONDUCTOR**

Description: Reconductor 1.6 miles of 115 kV line with 795 ASCR from S. Macon to Ocmulgee Jct. section of the Arkwright - S. Macon 115 kV (Black) 115 kV line.

Supporting Statement: In 2011, under contract sales conditions, loss of the S. Macon end of the Forrest Rd. - S. Macon 115 kV line causes the South Macon end of the Arkwright - S. Macon (Black) 115 kV line to load to 102% of its contingency rating (124 MVA)

In Year: 2014

Project Name: **ARKWRIGHT 115KV CAPACITOR BANK**

Description: Add a 2-stage capacitor bank (60 MVA each) at Arkwright

Supporting Statement: Arkwright area is experiencing low voltages, since there is no strong 230 kV source in the area.

In Year: 2014

Project Name: **BRANCH - WEST MILLEDGEVILLE 230 KV LINE RECONDUCTOR**

Description: Increase the capacity of Branch - West Milledgeville 230 kV line by bundling the 100C 1351 ACSR conductor.

Supporting Statement: In 2014, loss of the Bonaire 500/230 kV autobank with Mid Georgia Cogen off causes the Branch - West Milledgeville230 kV line to exceed its 602-MVA rating.

EAST REGION PROJECTS

In Year: 2014

Project Name: **BRUNSWICK - ST SIMONS 115 KV RECONDUCTORING**

Description: Reconductor the Brunswick-Stonewall Street section (1.27 miles of 75C 477 ACSR on SSP and 1.35 miles of 100C 477 ACSR on CSP) using at least 795 ACSR sagged for 100C operation. Replace three 600-A switches at Brunswick with 1200-A switches.

Supporting Statement: With the Brunswick-East Beach 115 kV line out, the Brunswick-Saint Simons line cannot carry all of the load south of Brunswick.

In Year: 2014

Project Name: **CLAXTON - MELDRIM 115 KV RECONDUCTOR**

Description: Rebuild the Meldrim - River - Ga. Pacific tap section (7.2mi + 0.5mi) of the Claxton - Meldrim 115-kV line with 1033 ACSR conductor.

Supporting Statement: Loss of the McCall Road - Thalmann 500-kV line will load the Claxton - Meldrim 115-kV line to 103% of its 155 MVA rating.

In Year: 2014

Project Name: **DORCHESTER 115-KV CAPACITOR BANK**

Description: Install a 2x30 MVAR, 115-kV capacitor bank.

Supporting Statement: By 2014, additional reactive/voltgae support is needed in the Hinesville for N-2 conditions. Voltages in the Hinesville/Riceboro area are OK with the loss of the Dorchester 230/115-kV transformer or the Little Ogeechee end of the Hinesville - Little Ogeechee 115-kV line. If the Hinesville 115-kV capacitor were to trip, voltages in the area drop 6% - 7%. This is a N-2 condition, but does show the dependance of the area on existing capcitors. The Daniel Siding 115-kV capacitor (TEAMS # 12929)
is proposed for 2011. These capacitors will also help support the area during the construction outage of the Daniel Siding - Little Ogeechee 115-kV line (TEAMS #11238).

In Year: 2014

Project Name: **EAST WATKINSVILLE 115KV CAPACITOR (GTC ONLY)**

Description: GTC - Install a new 60 MVAR 115kV capacitor bank at the East Watkinsville Substation.

Supporting Statement: Voltage support is needed during contingency conditions in the Athens area.

The list of the critical single element contingencies includes loss of the E. Watkinsville 230/115 kV transformer bank, the Athens 2 - W. Athens line segment of the Athens 2 - E. Watkinsville 115 kV line, and the Athena - N. Athens line segment of the Athena - E. Watkinsville 115 kV line

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EAST REGION PROJECTS

In Year: 2014

Project Name: **EATONTON PRIMARY SWITCHING STATION SERIES REACTORS**

Description: Install 1600A 1% 230-kV reactor at Eatonton Primary switching station on Eatonton Primary - East Social Circle 230 kV line (switch # 190231). Relocate the trap and coupling capacitors.

Supporting Statement: This project was previously part of TEAMS 11696 - Tiger Creek Generation Improvements - Phase 2.

Loss of the Branch - East Social Circle 230 kV line causes the Eatonton Primary - East Social Circle 230 kV line to exceed its 602-MVA rating.

In Year: 2014

Project Name: **EVANS PRIMARY - FIFTEENTH STREET 115 KV RECONDUCTOR**

Description: Reconductor the Evans Primary - Furys Ferry tap section (3.5 mi) of the Evans Primary - Fiftenth Street 115-kV line with 795 ACSR conductor.

Supporting Statement: Loss of the Washington OPC - Warthen 500-kV line will load the Evans Primary - Furys Ferry tap section of the Evans Primary - Fifteenth Street 115-kV line to 102% of its 124 MVA conductor rating.

In Year: 2014

Project Name: **GORDON - NORTH DUBLIN 230KV LINE**

Description: GPC: Build the Gordon - N Dublin 230 kV line, 32 miles, using 1351 ACSR conductor on existing ROW. Terminate the line on a new 230 kV breaker at Gordon.

GTC: Terminate the line on 230 kV bus #2 with a new 230 kV breaker.

Supporting Statement: The Gordon - North Dublin 230 kV line will be needed by 2014 to support the local voltage profile under contingency conditions.

In Year: 2014

Project Name: **GOSHEN - WAYNESBORO 115-KV RE-CONDUCTOR**

Description: MEAG - Re-conductor the Goshen - Waynesboro 115-kV line, 18.7 miles, with 1033 ACSR.

Supporting Statement: Loss of the Wilson - Waynesboro 230-kV line (2016 Gross w/ Hatch #1 off) will load the Goshen - Waynesboro 115-kV line to 112% of its 124 MVA conductor rating.

EAST REGION PROJECTS

In Year: 2014

Project Name: **GRADY TO MORROW (BLACK) 115KV LINE RECONDUCTOR**

Description: Reconductor the Morrow to Murray Lake Tap segment of the Grady to Morrow (black) 115kV line with 1033 ACSR sagged to operate at 100 degree C. The existing line is approx. 3.3 miles of 397 ACSR operated at 100 degree C.

Supporting Statement: By 2014, loss of the Klondike - Norcross 500-kV line loads the Morrow to Murray Lake tap section of the Grady - Morrow 115-kV(black) line to 106% of its 135 MVA rating(600 A switches at Morrow, the 397 ACSR conductor is rated for 140 MVA). There are five(5) other contingencies that causes this line segment to load beyond its rating.

In Year: 2014

Project Name: **GTC: HIGHWAY-54 230/115-KV TFM. ADDITION - (GTC ONLY)**

Description: GTC - Install a 230/115-kV transformer at the Highway 54 substation. Also, at Hwy-54, install 115-kV circuit breakers and terminate two new 115-kV lines from Tyrone and Ebenezer Rd., a distance of approximately 4.0 and 4.5 miles respectively. Add approximately 1.5 miles of 115-kV conductor to loop the Tyrone substation into the Line Creek - S.Coweta line and re-terminate the Ebenezer tap, (off the O'Hara - S.Coweta 115-kV line), into a newly established breaker position at the Bernhard Road substation. Install three 115-kV circuit breakers at Tyrone and three at Bernhard Road.

Supporting Statement: Loss of one end of the O'Hara - S.Coweta 115-kV line will overload the other end. The same situation will occur on the Line Creek - S.Coweta 115-kV line.

In Year: 2014

Project Name: **KETTLE CREEK 115KV CAPACITOR BANK**

Description: Install a 115kV 2 - 22.5 MVAR capacitor banks (45 MVAR) at Kettle Creek Primary.
Install a 30 MVAR capacitor bank at Offerman
Install a 30 MVAR capacitor bank at NE Waycross

Supporting Statement: The loss of the Douglas - Wilsonville 230kV Line causes the Pinegrove - Lakeland section of the Kettle Creek Primary - Pinegrove 115kV line to exceed its 50C 4/0 ACSR conductor rating of 47 MVA. In addition, voltages in the Waycross area and Kettle Creek Primary fall below 95%

EAST REGION PROJECTS

In Year: 2014

Project Name: **LAWRENCEVILLE - LAWRENCEVILLE #4 115-KV TAP**

Description: GPC - Reconductor 1.05 miles of 115-kV, 336 ACSR conductor using a conductor capable of carrying at least 1000 amps from Lawrenceville to North Lawrenceville.

MEAG - Replace jumpers at Lawrenceville.

Supporting Statement: The Lawrenceville #4 substation is served on a tap off the Bay Creek - Moon Road 115kV line. The alternate source of feed to Lawrenceville #4 is from the Lawrenceville Primary substation by way of the Blaze Recycling junction.

In 2014, if the Lawrenceville #4 tap is lost, the normal open point between Lawrenceville #4 and Blaze Recycling will be closed in order to serve this load from Lawrenceville Primary. The section of 336 ACSR conductor between Lawrenceville and North Lawrenceville will then load to 101% its 124 MVA rating.

In Year: 2014

Project Name: **MCEVER ROAD - SHOAL CREEK 115KV RECONDUCTOR**

Description: GPC --- Reconductor the McEver - Shoal Creek 115 kV line with 1033 ACSR.

GTC --- Replace the existing 750 AAC jumpers at College Square with 1590 AAC jumpers.

Supporting Statement: In 2014, the McEver Rd - College Square segment of the McEver Rd - Shoal Creek 115 kV line will overload for 3 different contingencies out of which the worst one is a loss of the Shoal Creek - Gwinnet WFP section of the same line (103% of its 114 MVA contingency rating).

Note: This line is a segment of the Boulevard - Tallulah Falls 115 kV line built using 2-4/0 Cu (50 C) between 1909 and 1911. The segments of the line were reconductored over the years. Tests conducted by NEETRAC in 2006 revealed poor condition of the conductor.

In Year: 2014

Project Name: **MILLEDGEVILLE - W. MILLEDGEVILLE 115 KV LINE RECONDUCTOR**

Description: Reconductor the Milledgeville - West Milledgeville 115 kV line (8.2 miles of 636 ACSR) with 100C 1351 ACSR.

Supporting Statement: With contract sales to Florida and Hatch #2 off, loss of the Branch - Gordon 230 kV lines causes the Fishing Creek to W. Milledgeville section of the Milledgeville - W. Milledgeville 115 kV line to load to 102% of its 188-MVA rating.

EAST REGION PROJECTS

In Year: 2014

Project Name: **SNELLVILLE 230/115KV TRANSFORMER PROJECT**

Description: Replace the Snellville 230/115kV, 280MVA transformer with a 400MVA transformer.

Supporting Statement: By 2014, the Snellville 230/115kV transformer will load to 99.2% of its 280 MVA nameplate rating during Hot weather condition. By 2017, the Snellville 230/115kV transformer will load to 105% of its 332 MVA contingency rating for the loss of the Bay Creek 230/115kV transformer. By 2018 there will be seven (7) contingencies that causes the Snellville transformer to load beyond its 332 MVA rating (1600A low-side switch). The Snellville 230/115kV transformer has a bonus rating of 364MVA.

In Year: 2014

Project Name: **WEST BRUNSWICK - ALTAMAHA 115 KV LINE**

Description: Acquire ROW and construct 8 miles of 795 ACSR CSP 115 kV line from West Brunswick to Altamaha. Split the Altamaha bus with a normally-open RLB switch, with the load fed from McManus. Operate normally-open between Magnolia Bluff and Sapelo River (switch 974611 at Sapelo). Close switch 513771. Terminate on a new breaker at West Brunswick and on a new BLD switch at Altamaha.

Supporting Statement: Voltages are poor when all loads along the McManus-Riceboro 115 kV line are served from Riceboro.

In Year: 2015

Project Name: **ATHENA - EAST WATKINSVILLE 115KV RECONDUCTOR**

Description: Reconductor 1.84 miles of 336 ACSR with 1033 ACSR from East Athens to STR 108/31 on the East Watkinsville to East Athens line segment. Replace 600A switch 021061 at East Athens with a 1200A switch and replace jumpers with 1033 ACSR or better.

Supporting Statement: As of 2014, loss of the E. Watkinsville - Barnett Shoals 230 kV line segment of the Athena - E. Watkinsville 230 kV line will cause the East Athens - East Watkinsville line segment (100C 336 ACSR) of the Athena - East Watkinsville 115 kV line to overload.

In Year: 2015

Project Name: **AULTMAN ROAD - BONAIRE PRIMARY 115 KV RECONDUCTOR (MEAG)**

Description: Reconductor 3.2 miles of Bonaire - Peach Blossom 115 kV line with 100C 795 ACSR.

Supporting Statement: For no unit off cases, for the loss of Perry - PPG Tap 2 115 kV line, Bonaire - Peach Blossom 115 kV line overloads to 104%.

EAST REGION PROJECTS

In Year: 2015

Project Name: **AUSTIN DRIVE - MORROW 115-KV REBUILD PROJECT/PHASE-2**

Description: Reconductor the Austin Drive - River Road (7.1 miles of 336 ACSR with 795 ACSR conductor rated for 100 C operation) and the Morrow - Ellenwood (2.0 miles of 795 ACSR with 1351 SSAC conductor rated for 170 C operation) 115kV line sections of the Austin Drive - Morrow 115kV line.

Supporting Statement: By the year 2012, an outage of the Austin Dr. 230/115-kV transformer will load the River Road to Rainbow Dr. section of the Austin Drive - Morrow 115kV line to load to 103% of its 124MVA rating. By 2015 this line section will load to 107%.

Furthermore the Transco and Fairview 115kV Substations are served radially from Stockbridge with normally open tie from Ellenwood to Fairview. By 2014, if the Stockbridge end of this line is out, the normal open point between Ellenwood and Fairview will have to be closed to served the Fairview and Transco Substations (approximately 95 MVA). When this normal point is closed it will put the 95MVA of load on the Austiin Drive - Morrow 115kV line and will overload the Morrow to Ellenwood section to 102% of its 216 MVA rating.

NOTE: With the loss of the Austin Drive transformer, a operating proceedure have been identified that can be utilized until 2015. Also, for the loss of the Transco tap, a operating proceedure can be utilized.

In Year: 2015

Project Name: **BAY CREEK 230/115KV 2ND TRANSFORMER**

Description: GTC - Install a 2nd 230/115-kV, 400 MVA transformer in the Bay Creek Substation.

Supporting Statement: Studies indicates that by 2015 with the loss of the Bay Creek 230/115kV transformer, the Bay Creek - Monroe 115kV will load to 105% of its 188 MVA rating.

EAST REGION PROJECTS

In Year: 2015

Project Name: **BETHABARA 230/115KV SUBSTATION PROJECT**

Description: GTC - Build a new 230/115kV substation Bethabara.
Build a new 230 kV switching station Clarksboro.
Build a new 115 kV switching station Jefferson Road.
Build a new 230kV line from Bethabara to Clarksboro (160C 1351 SACC).
Build a new 115kV line segment from Bethabara to the Georgia Square substation (100C 795 ACSR).

GPC - Loop the Athens - Winder 115 kV line into the 115 kV Jefferson Road Switching Station and add and/or modify relaying at the Athens and Winder as necessary.

Supporting Statement: This project will reduce contingency loadings on a number of transmission facilities in the Athens area. In 2011, critical single-element contingencies include loss of either of the transformer banks in the Athens area (i.e., 230/115 kV transformer banks at Athena, Center, and East Watkinsville). in 2012, the critical contingency is a loss ofr the Winder Primary - Richardson Jct. section of the Winder Primary - Athens 115 kV transmission line.

In Year: 2015

Project Name: **BONAIRE - EASTMAN PRIMARY 115-KV LINE UPGRADE**

Description: On the Bonaire - Eastman Primary 115-kV line, upgrade the Cochran tap, 1.5 miles of 336 ACSR, to 100 C.

Supporting Statement: Serving Hawkinsville and Industrial Boulevard from Cochran Primary during peak load conditions loads the Cochran Primary tap line to 102% of its 63 MVA conductor rating.

In Year: 2015

Project Name: **BOULEVARD 230/115-KV TRANSFORMER PROJECT**

Description: Install a 400 MVA, 230/115-kV transformer in the Boulevard (SAV) 115/46/13.8-kV substation. Build the Boulevard - Dean Forest 230-kV and Dean Forest - Kraft 230-kV lines.

Supporting Statement: Loss of one Deptford – Kraft 115-kV line will load the other line to 103% of its 212 MVA, underground cable section and to 101% of its 216 MVA conductor rating.

In Year: 2015

Project Name: **BRUNSWICK - EAST BEACH 115 KV RECONDUCTORING (PHASE I)**

Description: Reconductor 1.73 miles of 559.5 ACAR, between structure #37 and Stonewall Street, with 100°C-sagged 795 ACSR.

Supporting Statement: With the Brunswick-Saint Simons 115 kV line out, the Brunswick-East Beach line cannot carry all of the load south of Brunswick.

EAST REGION PROJECTS

In Year: 2015

Project Name: **CHATSWORTH 230/25KV SUBSTATION**

Description: Convert the existing substation to 230kV highside operation.

Supporting Statement: In 2015, a loss of the East Dalton - Gravitt 115kV line segment causes low voltage at Gravitt (94.6%) and Chatsworth (95.2%). The change in voltage at Gravitt is 5.7% under contingency during the shoulder case with Bowen 4 offline.

In Year: 2015

Project Name: **COD - DAWSON CROSSING - GAINESVILLE 115 KV RECONDUCTOR - II**

Description: Reconductor 336 ASCR conductor between Bark Camp and Gainesville #1 (aproximatelly 2.6 miles between) with a 795 ACSR conductor.

Replace the 600 A switches at Gainesville #1 to carry at least 1200A @ 95F ambient.

Supporting Statement: In 2015, loss of the Dawson Forest - Dawsonville 115 kV line segment of the Dawson Crossing - Gainesville #1 115 kV line overloads the Bark Camp - Gainesville #1 115 kV line segment (100C 336 ACSR) of the Dawson Crossing - Gainesville #1 115 kV line.

In Year: 2015

Project Name: **COLERAIN 230 KV CAPACITOR BANK**

Description: Install a 2-step, 60 MVAR per step capacitor bank.

Supporting Statement: Loss of the Duval-Thalmann 500 kV line causes 21 buses to fall below 95%, including 3 non-regulated buses that drop more than 5%.

In Year: 2015

Project Name: **DACULA 115-KV CAPACITOR BANK**

Description: Install a 115kV, 30 MVAR capacitor Bank at the Dacula Substation.

Supporting Statement: The loss of the Lawrenceville - Winder 115kV line in Winder will result in low voltage in the Dacula area. The pre-contingency to post-contingency voltage variation is 5% or greater.

EAST REGION PROJECTS

In Year: 2015

Project Name: **DEAL BRANCH 115-KV CAPACITOR**

Description: Install a 2x30 MVAR, 115-kV capacitor at Deal Branch.

Supporting Statement: Loss of the Statesboro end of the Deal Branch - Statesboro 115-kV Black or White line will drop the voltage at Brooklet and SE Bullock by more than 8%. Also, contingemcy line loading on these lines are 96%. The capacitor bank addresses the voltage issue and delays the re-conductor of the Deal Branch - Statesboro 115-kV Black and White lines to 2019. (Reference TEAMS # 12049 & 12418)

In Year: 2015

Project Name: **DOUGLASVILLE - WEST MARIETTA 115 KV LINE REBUILD**

Description: Reconductor approximately 2.3 miles of existing 477 ACSR, 115 kV line from Douglasville to Lithia Springs using 795 ACSR conductor rated at 100 degrees C.

Supporting Statement: The Douglasville - Austell section of the Douglasville to West Marietta 115 kV line loads to 105% of its 477 ACSR 100C rating (155 MVA) caused by the loss of the West Marietta end of the line.

In Year: 2015

Project Name: **EAST WALTON 500/230KV PROJECT**

Description: GTC: - Construct a 500 kV line from the new Rockville 500 kV Switching Station to the new East Walton 500/230/115 kV substation.

- Construct 230kV lines from East Walton to LPM Monroe Power (170C 1351.5 Martin/SSAC), from East Walton to the new Bostwick Switching Station (160C 2-795.0 Martin/SSAC), and from Bethabara to East Walton (White Line - 170C 1351.5 SSAC).

- Reconductor Bostwick - East Watkinsville (100C 2x795 ACSR) and Center Primary - Clarksboro 230 kV lines (100C 1351 ACSR).

- Replace line traps at Center and East Watkinsville.

GPC - Construct a new Rockville 500 kV Substation. Construct a new 230kV line from East Walton to Bethabara (Black Line - 170C 1351.5 SSAC).

MEAG - Construct a new 230 kV line from LPM Monroe to Cornish Mountain (100C 1351 ACSR).

Supporting Statement: This project is required to support the expected generation expansion plan in the Wallace Dam area. With the projected generation in service, loss of the Klondike - Scherer 500 kV line will overload the Klondike - O'Hara 500 kV line.

EAST REGION PROJECTS

In Year: 2015

Project Name: **GTC DANIEL SIDING - RICEBORO 115-KV LINE PROJECT**

Description: GTC: Create the Daniel Siding - Riceboro 115-kV line by building the Burnt Church - Tradeport 115-kV line section (11.65 mi). Install two 115-kV breakers at Daniel Siding. Reconductor the Daniel Siding - Sterling Creek - Burnt Church line sections (8.5 mi) w/ 795 ACSR.

Supporting Statement: Loss of the Dorchester - Cay Creek section of the Dorchester - Riceboro 115-kV lines drops the voltages at Riceboro and Interstate Paper more than 5%.

In Year: 2015

Project Name: **HINESVILLE - LUDOWICI PRIMARY 115-KV RE-CONDUCTOR**

Description: Re-conductor the Ludowici - Horse Creek section (8.1 miles of 477 ACSR) of the Hinesville - Ludowici 115-kV line with 795 ACSR conductor.

Supporting Statement: Loss of the McCall Road - Thalmann 500-kV line (2012 Gross Hatch #2 off) will load the Ludowici - Horse Creek section (8.1 miles of 477 ACSR) of the Hinesville - Ludowici 115-kV line to 101% of its 155 MVA conductor rating

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In Year: 2015

Project Name: **JESUP - LUDOWICI PRIMARY 115-KV RE-CONDUCTOR**

Description: Re-conductor the Rayonier - North Jesup - Jesup section (7.5 miles of 336 ACSR) of the Jesup - Ludowici Primary 115-kV line with 795 ACSR conductor.

Supporting Statement: Loss of the McCall Road - Thalmann 500-kV line will load the Rayonier - North Jesup - Jesup sections of the Jesup - Ludowici Primary 115-kV line to 104% of its 124 MVA conductor rating.

In Year: 2015

Project Name: **LINE CREEK 115-KV CAPACITOR ADDITION**

Description: Add a second stage, 30MVAR, 115-kV capacitor, to the existing single-stage capacitor bank, at the Line Creek 230/115-kV substation.

Supporting Statement: Loss of the 230/115-kV auto transformer, at Line Creek, could cause voltage levels to drop around 109-kV, from a starting level of nearly 115-kV, at the Owens Corning 115-kV bus #1. This voltage variation violates an ITS Planning Standard guideline for a non-regulated transmission bus.

EAST REGION PROJECTS

In Year: 2015

Project Name: **LLOYD SHOALS - SOUTH GRIFFIN 115KV RECONDUCTOR**

Description: Reconductor the section of the Subject Transmission Line from South Griffin Substation to Jackson Substation (18.62 miles). Remove 3 # 3/0 copper conductor and install 3-795 ACSR Conductor, sagged for 100 Degree C operation, in its place. Also, replace 1-3/8" OHGW with a new 3/8" OHGW. Include update on profile from Land. Replace hardware and poles as necessary.

Supporting Statement: This conductor is over 98 years old and has reached the end of its useful life. See NEETRAC report #06-134 Release 8. This copper conductor is stressed to its maximum design temperatures. The NEETRAC report says the remaining Mechanical strength is only 90% of RBS. With the stress of operating at maximum we expect that the mechanical strength will continue to deteriorate over the future years and the conductor will be thermally overloaded for the loss of the feed from LLoyd Shoals.

In Year: 2015

Project Name: **MCCONNELL ROAD - SOUTH ACWORTH 115 KV LINE RECONDUCTORING**

Description: GTC - Rebuild the McConnell Road - Due West 115 kV line section (4.7 miles of 636 ACSR) AND the Proctor Creek - STR8 segment (0.56 miles of 762 ACSR) using 1033 composite conductor. Replace jumpers at Due West.

Supporting Statement: The McConnell Road – Due West 115 kV line loads to 103% of the 636 ACSR's 100C rating of 188 MVA when Bowen #4 is off and the South Acworth end of the South Acworth – McConnell Road line is open.

Furthermore, loss of the S.Acworth-Due West segment causes overload on the S.Acworth-Proctor Creek segment.

In Year: 2015

Project Name: **MCINTOSH - BLANDFORD - MELDRIM 230KV BLACK/WHITE RECONDUCTOR**

Description: Re-conductor the McIntosh - Blandford - Meldrim 230-kV Black/White lines (8.6 + 9.6 miles) with 2-1033 ACSR conductor.

Supporting Statement: Loss of one of the McIntosh - Meldrim 230-kV lines will load the other line to 102% of its 509 MVA conductor rating.

EAST REGION PROJECTS

In Year: 2015

Project Name: **NORTH KEITHSBURG - ORANGE 115KV LINE**

Description: Construct a new 115kV, 3-terminal network switching station at Orange.
Construct a new line from North Keithsburg to Orange using 795ACSR.
Create Holly Springs-Orange 115kV line and Hopewell-Orange 115kV line.

Justification:
As early as 2015, the Hopewell-Birmingham Highway segment of the Holly Springs-Hopewell 115kv line overloads for loss of the far end at Holly Springs-New Light Church segment.
(08V3b-C15-Buf)

Supporting Statement: As early as 2015, the Hopewell-Birmingham Highway segment of the Holly Springs-Hopewell 115kv line overloads for loss of the far end at Holly Springs-New Light Church segment.
(08V3b-C15-Buf)

In Year: 2015

Project Name: **OHARA - RIVERDALE 115KV LINE RECONDUCTOR**

Description: Reconductor 1.6 miles of 636 ACSR w/1033 ACSR from O'hara to the Corinth Rd. substation, on the Riverdale - O'hara 115-kV line. Also, change the normally open point to be between the Tara Tap and Valley Hill, (instead of between the Tara Tap & the Tara substation).

Supporting Statement: An outage of the Line Creek autobank, (or 230-kV radial line), causes the O'hara to King St. section of the Riverdale - O'hara 115-kV line, to overload its 100 degree C, 188MVA rating.

In Year: 2015

Project Name: **SOUTH COWETA - YATES 115 KV LINE RECONDUCTOR**

Description: Reconductor approximately 19 miles of the S.Coweta - Yates 477 ACSR, 115 kV line with 1033 ACSR, from Yates to Madras, Madras to Yamaha and S.Coweta to the Sharpsberg tap.

Supporting Statement: Under "contract" interchange sales with Yates unit #3 off line, loss of either end of the S. Coweta - Yates 115 kV line causes the South Coweta - Sharpesburg section or the Yates - Madras - Yamaha sections, to load to approximately 105% of their 155 MVA, 100 degree C rating.

EAST REGION PROJECTS

In Year: 2015

Project Name: **SOUTH METRO ATLANTA PROJECT PHASE 3**

Description: Rebuild the existing O'hara - Bonanza - Hampton 115-kV line sections, (approximately 12 miles), with double circuit, 1351 acsr conductor at 230-kV specs. to create a new 230-kV circuit from O'Hara to McDonough, and add a 230/115 kV, 400 MVA autobank at McDonough - (GPC)
(**note: construction of the Hampton to McDonough line section listed under TEAMS #12912, for a 2013 completion) Serve the Greenwood Park and Dailey Mill loads, at 115-kV, from McDonough.

Also, construct a 115-kV line between the Peeksville and Ingram substations, approximately 6.5 miles - (GTC) and add three breakers at the Locust Grove substation to terminate lines from McDonough, S.Griffin and Ola, - (GPC)

Supporting Statement: Loss of the Klondike end of the Klondike - Ola 230-kV line will overload the Ola - Porterdale 115-kV line. Also, loss of the Jonesboro - Stockbridge 230-kV line, (or the Stockbridge autobank), will overload the Jonesboro - Stockbridge 115-kV line. Conversely, loss of the Jonesboro end of the Jonesboro - Stockbridge 115-kV line will overload the Stockbridge autobank. In addition, loss of the S.Griffin end of the McDonough - S.Griffin 115-kV line will overload the opposite end from McDonough to Locust Grove.

In Year: 2016

Project Name: **(GTC) - LLOYD SHOALS / PORTERDALE AREA IMPVM'T PROJ(PHASE-2)**

Description: Upgrade, to 100 Deg. C, 2.3 miles of 397 ACSR conductor from Porterdale to the S. Covington Jct.on the Lloyd Shoals - Porterdale 115-kV line - (GPC)
Also, add a 2-stage, 20 MVAR per stage, (40 MVAR total), 115-kV capacitor bank at S.Covington, - (GTC)

Supporting Statement: By 2016, loss of the Arkwright end of the Arkwright to Lloyd Shoals 115-kv line will overload the Porterdale to S.Covington line section. Voltage support will also be necessary during the contingency.

In Year: 2016

Project Name: **ATHENS - WINDER 115 KV LINE RECONDUCTOR**

Description: Reconductor the Athens - Winder 115kV line from Jefferson Road SS to Russell.

Supporting Statement: Loss of the Winder Primary 230/115 kV transformer overloads the Jefferson Rd SS - Russels line segment (100C 336 ACSR) of the Athens - Winder 115 kV line.

EAST REGION PROJECTS

In Year: 2016

Project Name: **ATHENS AREA 115 KV LINE RECONDUCTOR PROJECT**

Description: Reconductor the 336 ACSR line segments line from Georgia Square Jct to Mars Hill Jct (approximately 0.5 mi) and from Mars Hill Jct. to Mars Hill (approximately 2.3 mi) with 636 ASCR. Replace switches and jumpers as necessary.

Supporting Statement: As of 2013, loss of the East Watkinsville - Watkinsville 115 kV segment of the Bethabara - East Watkinsville 115 kV line will cause Mars Hill Jct. - Mars Hill and Mars Hill Jct. - Georgia Square Jct. 115 kV sections of the Bethabara - East Watkinsville 115 kV line to load up to 103% of their 124 MVA contingency rating.

In Year: 2016

Project Name: **BRUNSWICK - EAST BEACH 115 KV UPGRADE (PHASE II)**

Description: Upgrade 1.6 miles of 50C-sagged 247 AAC conductor, between Frederica Jct and Sea Island, for 75C operation.

Supporting Statement: This section loads to 101% of its 104°F rating in the 2016 hot weather case with no contingency.

In Year: 2016

Project Name: **BUCKHEAD AREA 230 KV CAPACITOR PROJECT**

Description: Install a 230 kV, 120 MVAR, single-stage capacitor bank

Supporting Statement: By 2014, the total substation load on the single 230 kV line running from Bull Sluice to Boulevard is 450 MW and 210 MVAr. This project is intended to displace the import of reactive power into the metro area as well as support the local bus voltage.

In Year: 2016

Project Name: **CENTER PRIMARY - COMMERCE 115KV LINE RECONDUCTOR**

Description: GPC --- Reconductor the Center Primary - Commerce 115kV line from Center to J.M. Huber and from SE Toyota to Commerce #4 with 795 ACSR conductor sagged for 100C operation.

GTC --- Replace breaker disconnect switches and jumpers at Center Primary.

Supporting Statement: As of 2014, loss of the Winder Primary - Gum Sp.115 kV line segment of the Winder - Middle Fork 115 kV line will cause the Center - J.M. Huber line segment (100C 336 ACSR) of the Center - Commerce 115 kV line to overload.

EAST REGION PROJECTS

In Year: 2016

Project Name: **CONYERS - CORNISH MOUNTAIN 115 KV LINE RECONDUCTORING**

Description: Reconductor the Conyers - Sigman Road section of the Conyers - Cornish Mtn. 115 kV line (4.8 miles of 636.0 ACSR) with 100C-sagged, 230 kV-constructed 1351 ACSR.

Supporting Statement: In 2010, the loss of the Conyers 230/115 kV transformer will load the Cornish Mountain-Sigman Road section of the Conyers - Cornish Mountain 115 kV line to 104% of its 188 MVA rating. In 2010 to 2015, an operating procedure (open breaker at Conyers facing Lithonia) exist to relieve this overload. By 2016, the loading on this line with the Conyers transformer out is projected to be 112%.

In Year: 2016

Project Name: **CORNELIA SOUTH CLEVELAND 115 KV LINE RECONDUCTOR**

Description: GTC --- Reconductor the Cornelia - Leaf 115 kV line segment (aproximatelly 8.3 miles long) with 795 ACSR.

Replace 336.4 ACSR jumpers at Leaf (GTC) and 750 AAC jumpers at Cornelia with at least 1000 A jumpers.

Supporting Statement: Loss of the Clermont Jct. - Clermont line segment of the Clermont Jct. - South Cleveland 115 kV line causes the Cornelia - Leaf line segment (100C 336 ACSR) of the Cornelia - South Cleveland 115 kV line to overload.

In Year: 2016

Project Name: **DEAL BRANCH - STATESBORO PRIMARY 115-KV BLACK RECONDUCTOR**

Description: Re-conductor the Statesboro Primary - Fair Road section (2.58 miles) of the Deal Branch - Statesboro Primary 115-kV Black line with 795 ACSR conductor.

Supporting Statement: Loss of the Statesboro Primary - North Statesboro 115-kV section of the Deal Branch - Statesboro Primary 115-kV White line will load the Statesboro Primary - Fair Road section of the Deal Branch - Statesboro Primary 115-kV Black line to 103% of its 124 MVA conductor rating.

In Year: 2016

Project Name: **DEAL BRANCH - STATESBORO PRIMARY 115-KV WHITE RECONDUCTOR**

Description: Re-conductor the Statesboro - North Statesboro section, 5.6 miles, of the Deal Branch - Statesboro 115-kV White line with 795 ACSR.

Supporting Statement: Loss of the Statesboro - Fair Road section of the Deal Branch - Statesboro 115-kV Black line will load the Statesboro - North Statesboro 115-kV section of the Deal Branch - Statesboro 115-kV White line to 101% of its 124 MVA conductor rating.

EAST REGION PROJECTS

In Year: 2016

Project Name: **DORSETT - ECHECONNEE 230 KV LINE**

Description: At the Echeconnee substation, acquire necessary land for the addition of 230/115-kV transformer.
Use 400 MVA, 230/115-kV transformer.
Terminate the Dorsett 230-kV radial line

Dorsett 230/115 kV Substation : Terminate the Echeconnee 230-kV line.

Dorsett - Echeconnee 230-kV Line: Land department to determine if there is enough ROW to construct new 230-kV line along the existing 115 kV line.
Construct ~ 5 miles of 230-kV line using 1351 ACSR conductor.

Supporting Statement: By 2014, several 115 kV lines in the south Macon area will exceed their design ratings under contingency.

In Year: 2016

Project Name: **EMORY 115 KV CAPACITOR BANK**

Description: Install a 115-kV, 45mvar capacitor bank in the Emory substation.

Supporting Statement: By 2016, contingency voltage levels, in the Emory area, will be close to the minimum acceptable levels.

In Year: 2016

Project Name: **FORTSON - WARM SPRINGS 115KV UPGRADE**

Description: Upgrade 4.68 miles of 50C 636 ACSR conductor and .77 miles of 50C 477 ACSR conductor to 100C 636 ACSR conductor from Fortson to Warm Springs

Supporting Statement: Supporting Statement:
In 2016, under gross loading conditions and loss of Hatch 2, loss of the Fortson - Flat Rock section of the Bull Creek - Fortson 115KV line causes the Columbus 1st Avenue - River Front Junction section of the Bull Creek - First Avenue 115 KV line to load to 100.2% of its rating (249 MVA).

In Year: 2016

Project Name: **GAINESVILLE #2 - MCEVER RD. 115 KV RECONDUCTOR**

Description: Rebuild the Gainesville #2 - McEver Rd 115 kV line (approximately 5.3 miles long) with 1033 ACSR conductor constructed for 100 C operation.

Supporting Statement: As of 2016, loss of the Gainesville #1 - Linwood line segment will overload Chicopee - Gainesville #2-2 and Chicopee - Oakwood line segments of the Gainesville #2 - McEver Rd 115 kV line (both segments are built with 636 ACSR).

EAST REGION PROJECTS

In Year: 2016

Project Name: **GEORGIA PACIFIC TAP 115KV CAPACITOR**

Description: At the Georgia Pacific tap on the Claxton - Meldrim 115-kV line, construct a three breaker switching station with a 115-kV, 30 MVAR capacitor bank.
Terminate the Claxton, Meldrim and Old Louisville Road 115-kV lines.

Supporting Statement: Loss of the Meldrim - River section of the Claxton - Meldrim 115-kV line drops the voltage at Old Louisville Road to 94.8% from 100%, a 5.2% drop.

In Year: 2016

Project Name: **GTC - CLARKSBORO - WINDER PRIMARY 230 KV RECONDUCTOR**

Description: GTC - Reconductor the Clarksboro - Winder 230 kV line with 1351 ACSR.

Supporting Statement: Loss of the Middle Fork - South Hall 500 kV line will cause the Clarksboro - Winder Primary 230 kV line to exceed its contingency rating of 433 MVA (100C 795 ACSR).

In Year: 2016

Project Name: **GTC - FAIRVIEW 115-KV CAPACITOR ADDITION**

Description: Add a two-stage, 115-kV capacitor bank, (30 MVARs per stage), at the Fairview substation

Supporting Statement: Transmission voltage levels drop below acceptable levels under contingency operation

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In Year: 2016

Project Name: **GTC- OLA 230-KV CAPACITOR ADDITION**

Description: Add a two-stage, 230-kV capacitor bank, (60 MVARs per stage), at the Ola substation, (GTC)

Supporting Statement: Transmission voltage levels drop below acceptable levels under contingency operation

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In Year: 2016

Project Name: **HAMPTON SECOND, 115-KV, 45 MVAR, CAPACITOR BANK INSTALLATION**

Description: Install a second, 115-kV, 45 MVAR capacitor bank at the Hampton 115/25/12-kV substation.

Supporting Statement: A second 45 MVAR capacitor bank will be necessary, at the Hampton substation, to maintain an acceptable 115-kV voltage level when the O'Hara to S.Griffin line is outaged from the O'hara side.

EAST REGION PROJECTS

In Year: 2016

Project Name: **LAWRENCEVILLE - NORCROSS 230KV LINE RECONDUCTOR**

Description: Reconductor the remaining 1033 ACSR conductor on the Norcross - Lawrenceville 230-kV line between Boggs Road and Lawrenceville.

Supporting Statement: During 2003 the section of this line between Norcross and Boggs Road was reconductored to 1351 SSAC at 160 degree C. Studies indicates that the remaining section of the Norcross - Lawrenceville 230kV line between Lawrenceville and Boggs Road can overload with the loss of the South Hall 500/230-kV transformer and all the Buford Dam Hydro Generation off line.

In Year: 2016

Project Name: **MCCONNELL RD. - WEST MARIETTA 115KV LINE RECONDUCTOR**

Description: Reconductor 2.72 miles on the West Marietta-Mill Creek Jct. segment of the McConnell Road-West Marietta 115kV line, from 636ACSR to 1033ACSR

Supporting Statement: In the 2008 V2b cases, the West Marietta-Mill Creek Jct segment overloads as early as 2016 for loss of the McConnell 230/115 autobank (G16_08V2b_Bowen4off).

In Year: 2016

Project Name: **MEAG LAFAYETTE - LAFAYETTE #3 115KV LINE**

Description: Install a 115kV breaker at LaFayette and constuct 2.1 miles of 115kV, 795 ACSR line from LaFayette to LaFayette #3.

Supporting Statement: In 2016 opening the Lafayette - Lafayette #3 line segment causes low voltages at: Riegel Textile (94.7%), Lafayette #3 (93.5%), and NGEMC Roper (93.4%).

In Year: 2016

Project Name: **MIDDLE FORK - THOMSON 500 KV LINE PROJECT**

Description: Build a new 500 kV Middle Fork - Thomson 500 kV transmission line (approximately 110 miles long).

Note: This is in connection with TEAMS # 08497 (Middlefork 500/230 kV Project).

Supporting Statement: This project is required to support the expected generation expansion plan in the Wallace Dam area along with Middle Fork 500/230 kV project (TEAMS 08497) and East Walton - South Hall 500 kV project (TEAMS #10810).

EAST REGION PROJECTS

In Year: 2016

Project Name: **MIDDLE FORK - TOCCOA 115KV RECONDUCTOR**

Description: Reconductor the Middle Fork - Toccoa 115kV line with 1351 ACSR (approximately 11 miles). Replace jumpers and switches as needed.

Supporting Statement: Loss of the new Cornelia - Middle Fork 230 kV line (TEAMS 12729) causes the Middle Fork-Toccoa 115kV line (75C 2-4/0 Cu) to overload.

In Year: 2016

Project Name: **MIDDLE FORK 500/230-KV PROJECT**

Description: Install a 500/230 kV transformer at Middle Fork and loop in the South Hall-Oconee 500kV line.

Note: This is in connection with TEAMS # 12568 (Middlefork - Thomson 500 kV Project).

Supporting Statement: This project is required to support the expected generation expansion plan in the Wallace Dam area along with Middle Fork - Thomson 500 kV project (TEAMS #12567) and East Walton - South Hall 500 kV project (TEAMS #10810).

In Year: 2016

Project Name: **MONROE 230/115 KV PROJECT**

Description: Add a 400 MVA tfm. transformer at Monroe. Loop the existing East Social Circle - Monroe CT 230 kV line in the Monroe substation.

Supporting Statement: This project will help eliminate post-contingency overloading of the following facilities:

1) East Social Circle Jct. - Monroe line segment of the East Social Circle - Monroe 115 kV line for a loss of the Bay Creek 230/115 kV transformer and

2) East Social Circle 230/115 kV transformer for a loss of the East Social Circle - Walnut Grove segment of the East Social Circle - Snellville 20 kV line.

EAST REGION PROJECTS

In Year: 2016

Project Name: **MOUNTAIN VIEW PROJECT**

Description: Convert JCPENNEY Substation to 230 kV operation and add two 230/115 kV autotransformers. Loop the Morrow - Union CIty 230 kV line into JCPENNDY by building 2.2 miles of new 230 kV line. Create a new high capacity (1351 ACSR) JCPENNEY - Hartsfield-Jackson 115 kV line. Reconfigure system to tie (1) JCPENNEY to Hartsfield_Jackson to Delta to Mountain View (2) Mountain View to Hapeville (3) JCPENNEY to Mountain View (4) East Point - JCPENNEY (white) (5) East Point - JCPENNEY (black) (5) Morrow - JCPENNEY (white) and (6) Morrow - JCPENNEY (black).

Supporting Statement: Loss of the Morrow - Mountain View 115 kV line causes the East Point - Mountain View 115 kV line to overload its 397 ACSR 100 C rating of 140 MVA. Also, losing the East Point - Mountain View 115 kV line causes Morrow - Mountain View 115 kV line to overload its 762 ACSR 100 C rating of 207 MVA. These thermal problems are solved by providing another source, JC Penny 230/115 kV substation, and looping the East Point – Morrow and East Point – Mountain View 115 kV lines as well as the Mountain View - Morrow line 115 kV line into it.
The construction is tied to numerous variables:
(1) Hartsfield - Jackson and Delta load increases,
(2) Rumble Road major generation,
(3) McDonough generation,
(4) Rate of Airport area expansion, and
(5) The 230 kV reactor in the Grady - Morrow line.

In Year: 2016

Project Name: **OHARA 500/230-KV TRANSFORMER #2 ADDITION**

Description: Add a second 500/230 kV transformer at the O'Hara substation.

Supporting Statement: Loss of the 500/230 kV transformer at O'Hara causes Union City's 500/230 kV transformer to load to 113% of its 1344 MVA name plate rating, matching its 1529 MVA bonus rating.

In Year: 2016

Project Name: **PLANT VOGTLE NETWORK IMPROVEMENT PROJECT**

Description: Construct a 500 kV line from Plant Voglte to the new Thomson Primary 500/230kV substation.

Supporting Statement: To support the expansion of Plant Vogtle, a new 500 kV line will be required from Plant Vogtle to Thomson Primary to address transmission thermal and generator statbility issues.

EAST REGION PROJECTS

In Year: 2016

Project Name: **SCOTTDALE 230/115KV TRANSFORMER BANK #2**

Description: Install a 2nd 230/115-kV Transformer in the Scottdale 230/115kV Substation.

Supporting Statement: The loss of the existing Scottdale 230/115kV transformer will load the Austin Drive - Decatur 115kV line to 101% of its 187 MVA rating. The loss of this transformer will also, load the Grady - Moreland Avenue 115kV line to 102% of its 249MVA rating in 2016(limited by 1200A reactors). The loss of the Grady - Moreland Avenue 115kV line will load the Scottdale 230/115kV transformer to 104% of its 298 MVA rating (bonus rating of 364MVA).

In Year: 2016

Project Name: **SOCIAL CIRCLE PROJECT**

Description: Reconductor 636 ASCR section(s) of the Covington #3 - East Social Circle 115 kV line between Social Circle and East Social Circle (approximately 2.6 miles) with 1033 ACSR.

Supporting Statement: The East Social Circle - Social Circle line segment (100C 636 ACSR) of the Covington #3 - East Social Circle 115 kV line overloads for a loss of the Branch - Eatonton C 230 kV line.

In Year: 2016

Project Name: **SOUTH CLEVELAND 115 KV CAPACITOR INCREASE**

Description: Increase the size of the 2 capacitor banks from 15 MVAR each to 30 MVAR each.

Supporting Statement: Voltage support is needed during contingency conditions.

In Year: 2016

Project Name: **STATESBORO - JIMPS 115KV RADIAL LINE**

Description: Re-conductor the Statesboro - Langston section of the Claxton - Statesboro 115-kV line with 795 ACSR.

Supporting Statement: Loss of the Vidalia - Loop Road 115-kV line section will load the Statesboro - Langston section of the Claxton - Statesboro 115-kV line to 101% of its 124 MVA conductor rating.

Later, loss of the Statesboro - Langston section of the Claxton - Statesboro 115-kV line will drop the voltage at Langston from 100.1% to 90.8% and the voltage at Jimps to 91% from 98.3%.

EAST REGION PROJECTS

In Year: 2016

Project Name: **UNION POINT PRIMARY 115 KV CAPACITOR BANK**

Description: Install a 2nd 30 MVAr capacitor bank with the associated equipment. The size of the existing capacitor bank is 33 MVAR.

Supporting Statement: Voltage support is needed during post-contingency conditions.

Loss of the East Social Circle - Rutledge line segment of the East Social Circle - Union Point Primary 115 kV line will cause unacceptable voltage drops (> 5% for unregulated buses and > 8% for regulated buses) and/or unacceptable post-contingency voltages (< 90%) at almost all substations fed from this line as of 2009.

In Year: 2016

Project Name: **WAYNESBORO 230/115-KV TRANSFORMER PROJECT**

Description: Replace the 280 MVA, 230/115-kV transformer with a 400 MVA transformer.

Supporting Statement: Loss of the Wadley - Waynesboro 230-kV line loads the Waynesboro 230/115-kV transformer to 114% of its 280 MVA nameplate rating.

In Year: 2017

Project Name: **ADAMSVILLE - DOUGLASVILLE 230 KV LINE RECONDUCTOR PROJECT**

Description: Reconductor 1.6 miles of 1033 AAC in the Adamsville - Bakers Ferry 230 kV line section.

Supporting Statement: Loading on the Adamsville - Bakers Ferry section of the Adamsville - Douglasville 230 kV line exceeds its 397-MVA rating after losing the Douglasville - Villa Rica 230 kV line.

In Year: 2017

Project Name: **ATHENS - EAST WATKINSVILLE 115 KV RECOND**

Description: Reconducter the Athens-East Watkinsville 115kV line from STR31A near East Watkinsville to the South Athens substation, approximately 5.3 miles, with 1033 ACSR. Replace switches and jumpers at South Athens.

Supporting Statement: As of 2017, loss of the Athens 2 - W. Athens segment of the Athena - E. Watkinsville 115 kV line will cause the East Watkinsville - South Athens line segment to overload.

EAST REGION PROJECTS

In Year: 2017

Project Name: **BOLTON STREET - DEPTFORD 115-KV RECONDUCTOR**

Description: Re-conductor the Deptford - Bolton Street 115-kV line; 3.0 miles of SSP, 927 ACAR; with 1033 ACSR.

Supporting Statement: By 2017, loss of the Deptford - Remlers Corner 115-kV line will load the Deptford - Bolton Street 115-kV line to 101% of its 181 MVA conductor rating.

In Year: 2017

Project Name: **CENTER PRI 121348 - TRUS JOIST MACMILLAN 115 KV PROJECT**

Description: Upgrade the 336 ASCR line from Colonial Pipeline Jct. to Neese (about 5.5 miles) for 100C operation.

Supporting Statement: As of 2017, loss of the Center Primary - Neese line segment will cause the CPL Danielsville line segment to overload following the closing of the Neese Jct. – CPL Danielsville. The later operating procedure is necessary to pick up the dropped load at Neese and PPL Neese.

In Year: 2017

Project Name: **COMMERCE PRIMARY - MIDDLE FORK 115 KV RECONDUCTOR PROJECT**

Description: Reconductor the Middle Fork - N. Commerce Jct. 115 kV line segment (approximatelly13.9 miles long) with 100C 1033 ASCR.

Replace 500 Cu jumpers at Commerce Primary with 1590 AAC jumpers.

Supporting Statement: As of 2017, the Middle Fork - N. Commerce Jct. of the Commerce Primary - Middle Fork 115 kV line will overload for a loss of the Middlefork - South Hall 500 kV line.

In Year: 2017

Project Name: **CORNELIA - TALLULAH LODGE 115KV RECONDUCTOR**

Description: Reconductor the Cornelia - Tallulah Lodge 115kV line (approximately 16.7 miles) with 100C 1033 ACSR. Replace two (2) 600A breaker disconnect switches and associated jumpers with 1600A equipment at Cornelia.

Supporting Statement: As of 2014, loss of the Airline - Bio 115 kV line segment will cause the Cornelia - Chase line segment (75C 2-4/0 Cu) of the Cornelia - Tallula Lodge 115 kV line to overload.

In addtion, this line is a segment of the Boulevard – Tallulah Falls 115 kV line built using 2-4/0 Cu (50 C) between 1909 and 1911. The condiction of the conductor is poor.

EAST REGION PROJECTS

In Year: 2017

Project Name: **CORNELIA 230/115 KV PROJECT**

Description: Add a 400 MVA autobank at Cornelia. Build a new 230kV line from Cornelia to Middle Fork.

Supporting Statement: This project will help reduce loading on the Middle Fork - Toccoa 115 kV line (as of 2014), and Clermont Jct. - Middle Fork 230 kV line and the Middlefork 230/115 kV transformer (as of 2016).

Note: Iin 2016, a new 500 kV line from Thomson to Middlefork will be in service (see TEAMS #12568 and #08497) and it will increase loading on the existing facilities in the Middlefork area.

In Year: 2017

Project Name: **DEAN FOREST - KRAFT 230-KV RECONDUCTOR**

Description: Reconductor the Dean Forest - Kraft 230-kV line, 5.7 miles, with 2-1033 ACSR conductor.

Supporting Statement: Loss of the McCall Road - Thalmann 500-kV line loads the Dean Forest - Kraft 230-kV line to 101% of its 572 MVA conductor rating.

In Year: 2017

Project Name: **DORCHESTER 230-KV PROJECT**

Description: Provide a 2nd 230-kV source into the Dorchester substation and voltage support for the Hinesville area.

Supporting Statement: Loss of the Dorchester - Little Ogeechee 230-kV line or the Dorchester 400 MVA, 230-kV transformer loads the Little Oggeechee - Daniel Siding 115-kV line section to 101% of its 376 MVA conductor rating.
Loss of the Little Ogeechee - Richmond Hill 115-kV line section will load the Dorchester 400 MVA, 230/115-kV transformer to 104% of its 400 MVA nameplate rating.

In Year: 2017

Project Name: **EAST WALTON - SOUTH HALL 500 KV LINE**

Description: Construct a 500 kV line from the South Hall 500/230 kV substation to the new Eastville 500/230/115kV substation.

Supporting Statement: This project is required to support the expected generation expansion plan in the Wallace Dam area along with Middle Fork - Thomson 500 kV project (TEAMS #12568) and Middle Fork 500/230 kV project (TEAMS 08497).

EAST REGION PROJECTS

In Year: 2017

Project Name: **HOPEWELL - MCGRAU FORD SECOND 230-KV LINE**

Description: GPC - Construct a second 230-kV line between McGrau Ford and Hopewell.
GTC - At Hopewell, terminate the new McGrau Ford 230kV line & remove the 2% Reactor

Supporting Statement: By 2017 the Norcross - Ocee 230kV line will load to 102% of its 509 MVA rating for the loss of the Alpharetta - Glaze Drive 230kV line. The reactor in the Hopewell - McGrau Ford 230kV line need to be removed to serve the load growth on the 230kV system in the area between Hopewell - Ocee - Norcross.

In Year: 2017

Project Name: **JONESBORO - O'HARA 230-KV LINE RECONDUCTOR**

Description: Provide a 1351 SSAC, 160 degree C, 230-kV circuit from the Jonesboro substation to the O'Hara substation approximately 8 miles in length by: reconductoring the 230-kV circuit on the existing double circuit structures from the Jonesboro - S. Griffin 115-kV line junction to the Jonesboro substation, (approximately 4 miles), with 1351 SSAC, 160 Deg. C sagged wire. Connect the new, 1351 SSAC, 160 Deg. C conductors to the existing SSAC conductors, (sag for 160 degree C operation), and reconductor an additional 2 miles of the existing 1351 ACSR circuit into the O'Hara substation. Also, provide for R/W perfection and surveys as necessary to complete line work described.

Supporting Statement: Loss of the Union City 500/230-kV transformer causes the Jonesboro - O'Hara 230-kV circuit to exceed its maximum rating of 596 MVA.

In Year: 2017

Project Name: **MCCONNELL-VILLA RICA 115KV LINE RECONDUCTOR**

Description: Reconductor 4.07 miles on the McConnell Road - Highway 120 segment of the McConnell Road - Villa Rica 115kV line, from 636ACSR to 1351ACSR.

Supporting Statement: Beginning in 2016, the 636ACSR on McConnell Road - Highway 120 overloads to 103% for loss of the Villa Rica - New Georgia segment with McDonough 4 out, (C16_McD4, 2007 cases).

In Year: 2017

Project Name: **N. AMERICUS - N. TIFTON 115 KV LINE UPGRADE, SYLVESTER TAP**

Description: On the N. Americus - N. Tifton 115 kV line, upgrade 2.9 miles of 336 ACSR to operate at 100C from Sylvester Jct. to Ashburn Jct.

Supporting Statement: In 2013, under contract sales, the loss of the N. Americus - E. Americus Jct. section of the N. Americus - N. Tifton 115 kV line causes the Sylverster Jct. - Ashburn Jct. section to load to 101% of its 63 MVA design rating.

EAST REGION PROJECTS

In Year: 2017

Project Name: **NORTH GEORGIA DYNAMIC VOLTAGE & REACTIVE SUPPORT PROJECT**

Description: Install a Static Var System in North Georgia (locations to be determined).

Supporting Statement: North Georgia is rapidly growing and has very limited generation support. Recent studies have shown that a normally cleared three-phase fault in the North Georgia area will cause the voltages in this area to fall below 80% of nominal for several seconds. This condition could cause uncontroled, widespread loss of load. The solution will require dynamic reactive support to maintain an acceptable voltage to address the NERC Category "B" fault induced delayed voltage recovery issues in Northeast Georgia.

In Year: 2017

Project Name: **PITTMAN ROAD SECOND STAGE 115KV CAPACITOR BANK PROJECT**

Description: Install a second 30 MVAR, 115 kV capacitor bank stage

Supporting Statement: In 2017, under shoulder conditions with Franklin #2 off line, loss of the Lagrange #7 - Lagrange #11 line segment results in the 115 kV bus voltage at Lagrange #11 dropping to 6.1%, down to 94.6% from a starting voltage of 100.7%.

In Year: 2017

Project Name: **VOGTLE - WILSON 230-KV RECONDUCTOR**

Description: Reconductor the Vogtle - Wilson 230-kV line, 1.4 miles, with 2-1033 ACSR.

Supporting Statement: Loss of the Vogtle - West McIntosh 500-kV line loads the Vogtle - Wilson 230-kV line to 101% of its 807 MVA conductor rating.

In Year: 2017

Project Name: **YATES - NEWNAN #3 , 115-KV (RADIAL) LINE RECONDUCTOR PROJECT**

Description: Reconductor approximately 12 miles of 115 kV line using 1033 ACSR from Yates to Shenandoah

Supporting Statement: By summer 2017, the projected loding on the Yates - Newnan#3, (Newnan Primary), radial line will exceed its maximum rating.

EAST REGION PROJECTS

In Year: 2018

Project Name: **BRANCH - EATONTON PRIMARY 230 KV REACTOR INSTALLATION**

Description: Install 2% reactor at Eatonton Primary substation on the Branch 230 kV line (PCB 190668).

Supporting Statement: In 2018, for the loss of Mcdonough 6 unit, loss of Branch - Forrest lake 230 kV line causes Branch - Eatonton #3 230 kV line to overload to 102.4%.

In Year: 2018

Project Name: **CORN CRIB 230/115 KV SUBSTATION**

Description: Construct a new 230/115kv substation with a 300 MVA autobank.The substation will have a three terminal 230 kV ring bus and a four terminal 115 kV ring bus. Loop in the Thomaston - Yates 230kv line creating the Corn Crib - Yates 230kv line and the Corn Crib -Thomaston 230kv line. Loop in the Thomaston - Yates 115kv line creating the Corn Crib - Yates (Black) 115kv line and Corn Crib - Thomaston 115kv line. Terminate the Yates - Newnan #3 Junction line creating the Corn Crib - Yates (White) line.

Supporting Statement: In 2018, under contract sales to Florida, loss of the Yates - Mountain Creek line segment and subsequent switching to pick up load, the Yates end of the Thomaston - Yates 115 kv line will load to 105% of its contingency rating (155 MVA).

In 2018 the North Thomaston - Thomaston segment of the Thomaston - Yates 115kv line loads to 100% of its contigency rating (155 MVA) with the loss of the Yates to Mountain Creek segment of this line.

In 2018 the Lagrange - Lagrange #3 segment of the Lagrange - Yates 115 line loads to 104% of its contingency rating (155 MVA) with the loss of the North Thomaston - Thomaston segment of the Thomaston - Yates 115kv line. There are 4 other contingencies that causes the Lagrange - Lagrange #3 segment to overlaod.

In Year: 2018

Project Name: **DU - NELSON 230/115KV SUBSTATION**

Description: Add a third 140 MVA 230/115kV autotransformers in parallel with the existing 230/115kV autotransformers.

Supporting Statement: The existing autotransformers have name plate ratings of 140 MVA . By 2013 a loss of bank #1 will cause bank #2 to load 6 MVA over its contingency rating of 180 MVA (103%).

EAST REGION PROJECTS

In Year: 2018

Project Name: **MCINTOSH 230/115-KV TRANSFORMER PROJECT**

Description: Install a 300 MVA, 230/115-kV transformer in parallel to the existing 280 MVA 230/115-kV transformer.

Supporting Statement: Base loading on the McIntosh 230/115-kV transformer will be 100% of its 280 MVA nameplate and 94% of its 319 MVA bonus rating.

In Year: 2018

Project Name: **NORCROSS - DERING CIRCLE 230 KV LINE IMPROVEMENT**

Description: Increase the rating of the Norcross - Dering Circle 230 kV line by replacing the1200A line traps and 1200A switches at Dering Circle.

Supporting Statement: The Dering - Norcros 230kV line is constructed using 1351 ACSR conductor with a 100 degree C rating of 602 MVA. This line is limited to 497 MVA by the 1200 A traps at Dering Circle and the next limit is the 1200A switches (539 MVA) at Dering Circle. Studies indicates that in 2018, the Dering Circle - Norcross 230kV line will load to 101% of its 497 MVA rating with the loss of the Bull Sluice to North Spring section of the Bull Sluice - North Park 230kV line.

In Year: 2018

Project Name: **NUNEZ AREA 230/115-KV PROJECT**

Description: Build the Nunez Area 230/115-kV substation with a 115-kV line to the Nunez (GTC) 115/25-kV substation. At the Nunez tap, build a three breaker switching station, terminating the Wadley, Statesboro Primary and Nunez Area 115-kV lines.

Supporting Statement: Loss of the Statesboro end of the Statesboro Primary - Wadley 115-kV line, drops the voltage at Register from 99.5% to 91.5%, a 8.1% drop. The Nunez tap - Stillmore 115-kV line section loads to 95% of its 79 MVA conductor rating.

EAST REGION PROJECTS

In Year: 2018

Project Name: **SOUTH HALL - SUWANEE 230KV**

Description:
1. South Hall - Suwanee 230kV Line
Construct 19 miles of 230KV line from South Hall - Suwanee using 1622 ACSR/TW conductor. Loop this line thru the Rock Quarry 230kV Substation. GTC will convert the Rock Quary Substation to 230kV high side.
2. Rock Quarry 115kV to 230KV conversion (GTC)
Request GTC to convert this substation to 230kV high side.
3. South Hall 500/230KV substation
Install a 230KV PCB to terminate the Suwanee 230KV Line.
4. Suwanee 230/115kV substation
Install a 230KV PCB to terminate the 230kV line to South Hall.

Supporting Statement: The conversion of the Rock Quarry substation to 230KV high Side will relieve the overloaded condition on the North AWRF - Shoal Creek 115kV line. The North AWRF - Shoal Creek 115kV line loads to 105% of its 216 MVA rating with the loss of either end of this line. The loss of the Suwanee 230/115kV transformer will cause the Exit 44 to North AWRF 115 kV line to load102% of its 216 MVA rating.

In Year: 2019

Project Name: **ANTHONY SHOALS - WASHINGTON 115 KV RECONDUCTOR PROJECT**

Description: Reconductor the 115 kV line from Anthony Shoals to Dehli Tap (approximately 4.9 miles). Replace switches and jumpers at Anthony Shoals and Delhi Tap.

Supporting Statement: As of 2011, loss of the Washington #2 - Washington tap followed by the subsequent switching to pick up the dropped load at Washington #2 will cause the Anthony Shoals - Delhi Tap line segment to load above its contingency thermal capacity (57 MVA).

In Year: 2019

Project Name: **CLARKSTON - NORCROSS 115KV LINE RECONDUCTOR PROJECT**

Description: Reconductor the existing 636 ACSR line segments on both ends of the Clarkston - Norcross 115kV line, with 1033 ACSR, from Norcross to the Northcrest Tap and from Clarkston to Lawrenceville Hwy. A total distance of approximately 5 miles.

Supporting Statement:
Supporting Statement:
Loss of one end of the Clarkston to Norcross 115kV line overloads the opposite end. (Present rating is 188MVA @ 100° C)

EAST REGION PROJECTS

In Year: 2019

Project Name: **CLERMONT JCT. - GAINESVILLE #1 115 KV RECONDUCTOR PROJECT**

Description: GPC: Reconductor 9.7 miles of the Clermont Jct. - Gainesville #1 115kV line with 1033 ACSR conductor.

GTC: Replace 750 AAC jumpers at Hagar Creek and Kubota Drive with 1590 AAC jumpers.

Supporting Statement: By 2013, loss of the Clermont Jct. 230/115 kV transformer bank will load the Clermont Jct. - Gainesville #1 115 kV line to 110% of its 182 MVA contingency rating.

Note: This line is a segment of the Boulevard – Tallulah Falls 115 kV line built using 2-4/0 Cu (50 C) between 1909 and 1911.

In Year: 2019

Project Name: **CUMMING 230/115KV TRANSFORMER ADDITION**

Description: Install a 2nd 230/115-kV transformer in the Cummings Substation.

Supporting Statement: Supporting Statement:
Studies indicate that by 2015, the loss of the Cumming 230/115 kV transformer will cause the Buford - Buford Dam and the Buford - Shoals Creek 115kV lines to load beyond its rating.

In Year: 2019

Project Name: **EAST POINT 230/115 KV TRANSFORMER REPLACEMENT PROJECT**

Description: Replace both of the existing 280 MVA, 230/115 kV transformers, at the East Point substation, with 400 MVA, 230/115 kV transformers.

Supporting Statement: There are two 230/115 kV transformers at East Point which have a re-rated capacity of 298 MVA. Losing one of the two transformes results in the overload of the remaining transformer - worst case in 106% of the 298 rerated capacity.

EAST REGION PROJECTS

In Year: 2019

Project Name: **GAINESVILLE #2 230/115 KV AUTOBANK REPLACEMENTS**

Description: Replace the existing 230/115 kV, 280MVA transformer banks at Gainesville #2 with 400 MVA autobanks and low-side bank breakers.

Supporting Statement: As of 2013, Gainesville #2-1 230/115 kV, 280 MVA, transformer bank will exceed its potential 330 MVA bonus ratings by 2% for a loss of Gainesville #2-2 - South Hall 230 kV line. This transformer bank will also overload for a loss of the Gainesville #2-2 230/115 kV transformer bank.

As of 2013, Gainesville #2-2 230/115 kV, 280 MVA, transformer bank will almost reach its potential 339 MVA bonus ratings (98%) for a loss of Gainesville #2-1 230/115 kV transformer bank or Gainesville #2-1 - South Hall 230 kV line.

In Year: 2019

Project Name: **KATHLEEN - CAGLES 115 KV LINE RECONDUCTOR**

Description: Reconductor the Kathleen - Cagles section (5.49 miles) of the Kathleen - Perry 115 kV line. Replace 350 AAC jumpers on both sides of Cagles - Medusa section.

Supporting Statement: In 2014 - 2018, under the loss of one generating unit (Branch 4 (14,15) and Yates 7 (16-18)), and Bonaire - Hwy 96 115 kV line, Kathleen - Cagles section overloads to 102+%

In Year: 2019

Project Name: **LAWRENCEVILLE - MOON ROAD 115-KV RECONDUCTOR**

Description: Reconductor 2.98 miles of 636ACSR conductor on the Lawrenceville - Moon Road 115-kV line from Lawrenceville - Lawrenceville City #3 using a conductor rated for at least 1500 amps.

Supporting Statement: Studies indicates that this section of line will load to 102 % of its 188 MVA rating in 2012 with the loss of the Bay Creek 230/115kV autobank or the Bay Creek - Moon Road 115kV line.

NOTE: Under the above contingencies, in 2012, the Lawrenceville #4 load can be switched to the North Lawrenceville Tap. In 2013 a 60 MVAR, 115kV capacitor bank will be added at Moon Road which will reduce the VAR flow on the Lawrenceville to Moon Road 115kV line and delay the projected overload on this line until 2014. In 2014 to 2018 the Lawrenceville #4 load can be switched to the North Lawrenceville tap, thus delaying the need for this project until 2019.

EAST REGION PROJECTS

In Year:	2019
Project Name:	**WILMINGTON ISLAND - WHITEMARSH 115-KV RECONDUCTOR**
Description:	Re-build the Wilmington Island - Whitemarsh 115-kV line section, 3.6 miles, with 795 ACSR conductor.
Supporting Statement:	By 2013, normal hot weather loading will reach 101% of the Rate A, 85 MVA conductor rating.

Section 2.

10 YEAR EXPANSION PLAN
WEST REGION

West Region Projects

In Year:	2009 - 2010 - 2011
Project Name:	**Carriere SW 230/115 kV Project**
Description:	Purchase ROW for entire line and continue Kiln-Necaise 115 kV line up to Salem for Phase 2 ('09). Install 400 MVA rated autobank at Logtown and move Logtown autobank up to Carriere SW ('10). Construct new 230/115 kV substation at Carriere SW and complete 230 kV line from Kiln to Carriere SW Phase 3 of project and upgrade Picayune 115 kV substation ('11).
Supporting Statement:	Loss of Kiln to Nicholson Tap results in overload on Necaise to Spence and loss of Necaise-Spence 115 kV line results in overload of Kiln-Nicholson Tap 115 kV line.

In Year:	2010
Project Name:	**600 A Johnson 115kV Switch Replacement at Molino**
Description:	Replace 600A switch #1441 at Molino prior to 2009 summer.
Supporting Statement:	For the loss of Barry S.P. - Crist S.P. 230 kV T.L. and Crist #7 offline, the 600A Johnson Switch exceeds ratings. #1441 starting 2009.

In Year:	2010
Project Name:	**Columbia Capacitor Bank Modification**
Description:	Add new cap bank and modify existing cap bank (total 37.4 MVAR)
Supporting Statement:	Loss of the Hattiesburg SW – Oak Grove tap 115 kV line will depress voltages below acceptable levels cap bank split for operational considerations.

In Year:	2010
Project Name:	**Lay Dam – Mitchell Dam 115kV TL**
Description:	Retire Lay – Mitchell Dam (B) and reconduct Lay Dam– Mitchell Dam (A) 115kV TL with a minimum of 795 ACSS at 160℃.
Supporting Statement:	Lay Dam and Mitchell Dam are connected by two parallel 115kV transmission lines. These lines may overload for the loss of the other line, or for the loss of the Billingsley SS – South Bessemer 500kV TL under summer peak conditions.

In Year:	2010
Project Name:	**Barry – IPSCO 230kV TL**
Description:	Upgrade the Barry – IPSCO 230kV TL (4.16 Miles of 1351.5 54/19 ACSR @ 100ºC) to 125ºC operation.
Supporting Statement:	The loss of the Barry – Chickasaw 230kV TL with Daniel #1 off, the loading on the Barry – IPSCO 230kV TL exceeds 100%.

West Region Projects

In Year:	2010
Project Name:	**East Pelham 230/115 kV TS and associated Transmission Improvements**
Description:	Construct a 400 MVA 230/115 kV substation at the new East Pelham site.
Supporting Statement:	The worst contingency prior to the in service date of East Pelham 230/115 kV TS is the loss of the Leeds – Westover 115 kV TL at summer peak conditions with Gaston Unit 5 off.

In Year:	2010
Project Name:	**Alabaster SS Project**
Description:	Constract a 4 breaker switching station at Alabaster SS.
Supporting Statement:	This project is a part of the East Pelham project group.

In Year:	2010
Project Name:	**East Pelham TS – Alabaster SS 115kV TL**
Description:	Construct8.8 miles of new 115 kV TL from East Pelham TS – Alabaster SS.
Supporting Statement:	This project is a part of the East Pelham project group.

In Year:	2010
Project Name:	**15 MVAR Capacitor Bank at Deer Creek DS**
Description:	This project adds a 15 MVAR cap bank at Deer Creek DS by 2009 summer.
Supporting Statement:	During 2009 summer peak conditions with Farley Unit No. 1 off, Transmission Planning sees the need for a 15 MVAR capacitor bank at Deer Creek DS. The contingency situation which causes this need is the loss of the Pinedale – ECI Halstead 115 kV TL.

In Year:	2010
Project Name:	**Brentwood - Pine Forest 115 kV TL**
Description:	Reconductor 5.7 miles Brentwood - Pine Forest 115 kV T.L. Replace 477 ACSR @ 100℃ conductor with 1033.5 ACSR @100℃.
Supporting Statement:	For the loss of the Byrneville - Flomaton 115 kV T.L. and Crist #7 offline, the Brentwood - Pine Forest 115 kV T.L. exceeds its thermal limit starting in 2013.

West Region Projects

In Year:	2010
Project Name:	**Brentwood – Fairfield Double Circuit**
Description:	Construct a new Fairfield S.S. which will loops in the Brentwood - Bayou Chico 115 kV T.L. and construct a double circuit 1033 ACSR 115 kV T.L. from Fairfield to Brentwood.
Supporting Statement:	For the loss of the Bayou Marcus 115 kV T.L. and all Scenic Hills load on the Crist - Brentwood 115 kV T.L. the Brentwood - Bayou Chico 115 kV T.L. exceeds it thermal limit starting in 2010.

In Year:	2010
Project Name:	**600 A Johnson 115kV Switch Replacement at Molino**
Description:	Replace 600A switch #1437at Molino prior to 2011.
Supporting Statement:	For the loss of Barry S.P. - Crist S.P. 230 kV T.L. and Crist #7 offline, the 600A Johnson Switch exceeds ratings. #1437 starting 2011.

In Year:	2010
Project Name:	**NASA North 115kV TL Project**
Description:	Construct 4 miles of new 115 kV line from NASA Saturn Drive substation to a new 3 breaker ring bus tapping the Kiln - Picayune #2 115 kV line.
Supporting Statement:	Customer requested upgrade (NASA) of transmission system: MPCO & NASA have a signed contract. Line will go in-service after the Logtown autobank is replaced.

In Year:	2010
Project Name:	**Alabama River Pulp**
Description:	Upgrade 15 MVAR Capacitor Bank at Alabama River Pulp
Supporting Statement:	Existing Cap bank was built as a temporary fix. New permanent bank to be built.

In Year:	2010
Project Name:	**Install Two (2) Series Bus Tie Breakers at Silverhill T.S.**
Description:	This project calls for Installing two (2) series bus tie breakers at Silverhill T.S. remain as budgeted for completion before summer of 2012.
Supporting Statement:	A failure of the bus tie breaker (#600) at Silverhill T.S. can cause significant load drops.

West Region Projects

In Year:	2010
Project Name:	**Simcala Cap Bank**
Description:	Replace the 30 MVAR cap bank at Simcala with a 30 MVAR harmonic filtered bank.
Supporting Statement:	Fifth Harmonics Issues.

In Year:	2011
Project Name:	**Brentwood 230/115 kV Autotransformer #2**
Description:	Install a 2nd Brentwood 230/115 kV bank for a completion date 2010.
Supporting Statement:	For the loss of Brentwood 230/115 kV Autotransformer #1 and Crist #6 Offline, the 230/115kV Bank at Bellview and 230/115 kV Bank at Plant Crist exceed their rating.

In Year:	2011
Project Name:	**Chelsea Tap – Double Oak Mtn Tap 115 kV TL**
Description:	Reconductor 1.76 miles of 397 ACSR with 795 26/7 ACSR by summer of 2011.
Supporting Statement:	This project calls for the reconductor of the Chelsea Tap to Double Oak Mountain Tap 115 kV TL (currently a radial tap) with 795 ACSR which was completed in 2006. This tap line will become part of a new 115 kV network between East Pelham TS and East Chelsea SS in 2009 – 2010 timeframe.

In Year:	2011
Project Name:	**Holt T.S. – Tuscaloosa T.S. 115 kV TL**
Description:	Construct 9.54 miles of new 115 kV TL from Holt TS to Tuscaloosa TS built at 230 kV specs operated at 115 kV with 1351 54/19 ACSR @ 100℃.
Supporting Statement:	This project allows for the construction of a new 115 kV T.L. from Holt T.S. to Tuscaloosa T.S. built at 230 kV specifications and operated at 115 kV. This project was proposed to reduce thermal loadings in the Tuscaloosa area caused by the loss of the Holt – NUCOR Steel 115 kV T.L. with Greene County Unit #1 and the Greene County CT's off.

In Year:	2011
Project Name:	**North Theodore – Dawes Tap 115kV TL**
Description:	Reconduct 9.9 mile North Theodore – Dawes Tap 115kV TL. Replace the 397.5 18/1 ACSR @75˚C with 795 26/7 ACSS @160℃.
Supporting Statement:	Due to the numerous multi-step operating procedures in the Mobile area, this Mobile Area 115kV Networking project was approved in the fall of 2007.

West Region Projects

In Year:	2011
Project Name:	**Breaker # 1894 on Shoal River Terminal at South Crestview**
Description:	Replace the 800A Breaker #1894 at South Crestview prior to 2015 summer.
Supporting Statement:	With Crist # 6 offline and loss of Crist S.P. - Pace #1 115 kV T.L. the 800A breaker #1894 exceeds its rating.

In Year:	2011
Project Name:	**McIntosh – CAES 115kV TL Improvements**
Description:	Reconductor 1.74 mile McIntosh – C.A.E.S. bundled (2) 795 26/7 ACSR 115 kV TL with bundled (2) 795 26/7 ACSS @ 160℃ design. Loo p Barry S.P. – McIntosh T.S. “B” 115 kV TL into C.A.E.S. and reconductor this TL from C.A.E.S. to McIntosh T.S. with bundled (2) 795 26/7 ACSS @ 160℃ design (1.74 miles). Upgrade the C.A.E.S. and Barry S.P. “B” 115 kV terminals at McIntosh T.S. to 3000 A. Replace main bus at McIntosh T.S. with 2 – 1590 AAC.
Supporting Statement:	McIntosh – CAES 115kV TL Improvements Due to New PowerSouth Generation.

In Year:	2011
Project Name:	**Smith – Laguna Beach 115kV TL**
Description:	Convert the Smith - Laguna Beach 115 kV T.L. to 230 kV operation utilizing 1351 ACSR conductor.
Supporting Statement:	For the loss of the Laguna Beach 230/115 kV bank and Crist #7 offline, the Smith - Laguna Beach 115 kV T.L. exceeds its thermal limit starting in 2010.

In Year:	2011
Project Name:	**Laguna Beach 230/115 kV Autobank #2**
Description:	Install a second 230/115 kV 400 MVA Autotransformer at Laguna Beach prior 2011 summer.
Supporting Statement:	Multiple contingencies overload this circuit. New load projections make existing operating guides ineffective.

West Region Projects

In Year:	2011
Project Name:	**Laguna Beach - Holiday 115 kV TL** **Holiday - Hathaway Tap 115 kV TL**
Description:	Construct a new 115 kV T.L. from Long Beach to holiday of 1351.5 54/19 ACSR insulated for 230 kV operation and raconductoring the Holiday to Hathaway Tap with 1351.5 54/19 ACSR.
Supporting Statement:	With Smith # 1 offline, a second 230/115 Autotransformer at Laguna Beach, No second Autotransformer at Smith, loss of Smith 230/115 kV Autotransformer, 30 MVARs of 115 kV capacitors at Lullwater, construct a new 115 kV T.L. 1033.5 45/7 ACSR from Laguna Beach to Holiday 9.2 miles; the 477 26/7 ACSRLong Beach - Holiday 115 kV T.L. and Holiday - Hathaway Tap 115 kV Exceed their thermal ratings.

In Year:	2012
Project Name:	**Mobile Area 115kV Networking**
Description:	Big Creek T.S.: Install a 115kV line terminal for the North Mobile #3 line. Install network relaying on the North Theodore 115kV TL.
Supporting Statement:	Network improvement.

In Year:	2012
Project Name:	**Hattiesburg SW - West Hattiesburg 115kV TL**
Description:	Rebuild line with 1033 ACSR at 100℃
Supporting Statement:	This line exceeds its thermal rating for the outage of the parallel 115kV TL

In Year:	2012
Project Name:	**Hurricane Creek - Wiggins SS 115kV TL**
Description:	Rebuild line with 795 ACSR at 100℃
Supporting Statement:	This line exceeds its thermal rating for the outage of the Gulfport Landon - Hwy 53 115kV TL

In Year:	2012
Project Name:	**Mobile Area 115kV Networking**
Description:	North Theodore T.S.: Install distance relaying and retire overcurrent relaying on the breaker 736-756 and 726-736 line terminals. Upgrade the Big Creek line terminal to 2000A.
Supporting Statement:	Network improvement.

West Region Projects

In Year:	2012
Project Name:	**Shoal River to Santa Rosa 230kV T.L. Replace Laguna Beach - Santa Rosa #1 115kV T.L. with a NEW 230kV T.L. New Santa Rosa substation with two (2) 400 MVA Banks.**
Description:	Construction 52.0 miles of 131.5 54/19 ACSR 230kV T.L. From Shoal River to Santa Rosa. Install two (2) 230/115kV 400 MVA bank at Santa Rosa. Convert and reconductor the existing Santa Rosa #1 115 kV T.L. with a NEW 230 kV T.L.
Supporting Statement:	The existing submarine cable from Bluewater (PowerSouth) to Crystal Beach overloaded for numerous line outages. Operating guides have been used to mitigate these issues until now but can not be continued for the long term. Gulf approved this project for the summer of 2012.

In Year:	2012
Project Name:	**Clarkedale Delivery Point**
Description:	Install 3-way GOAB on the Sweatt-Stonewall 115 kV line.
Supporting Statement:	Customer driven project. Depends on EMEPA load exceeding area bank capacities.

In Year:	2012
Project Name:	**Barry – Chickasaw 230kV TL**
Description:	This project calls for the reconductor the 19.18 mile of line from Barry S.P. to Chickasaw TS. Replace 17.14 miles of bundle (2) 795 45/7 ACSR with bundle (2) 1033.5 ACSS and add a second 1351.5 ACSS to the existing 1.49 miles of 1351.5 ACSS.
Supporting Statement:	This project was proposed to alleviate loadings caused by the loss of the Barry – Crist 230 kV TL with Crist #7 and Hog Bayou unit off.

In Year:	2013
Project Name:	**31ST Ave – Kaul Tap – South Tuscaloosa 115kV TL**
Description:	This project asks for reconductor of the 31ST Ave – Kaul Tap – So. Tuscaloosa 115kV T.L with 1033 ACSS.
Supporting Statement:	For the loss of Loss of Hargrove – South Tuscaloosa 115kV TL during shoulder conditions the 31ST Ave – Kaul Tap – So. Tuscaloosa 115kV TL overloads.

West Region Projects

In Year:	2013
Project Name:	**Autaugaville 500/230**
Description:	Install Autaugaville 500/230 kV Autobank
Supporting Statement:	Central Alabama Improvements.

In Year:	**2013**
Project Name:	**Wiggins SS - Wiggins 5th Ave 115kV TL**
Description:	Reconductor line with 795 ACSR at 100℃ .
Supporting Statement:	Loss of Gulfport Landon - Hwy 53 115 kV line segment overloads this line segment when serving load radially from Wiggins. Operating procedure available.

In Year:	2013
Project Name:	**Molino - Champion 115kV TL**
Description:	Reconductor 8.16 miles Molino - Champion 115 kV T.L. Replace the 477.0 26/7 ACSR @ 100℃ with 1033.5 45/7 ACSR @ 100℃ prior to 2012.
Supporting Statement:	For the loss of the Barry S.P. - Crist S.P. 230 kV T.L. and Crist #7 off, the Molino - Champion 115 kV T.L. exceeds it thermal limit starting in 2012.

In Year:	**2013**
Project Name:	**Eaton - Hattiesburg County Drive 115kV TL**
Description:	Replace jumpers at Eaton.
Supporting Statement:	Jumpers overload for an outage of the Hattiesburg SW to Hwy 11 115 kV line.

In Year:	2013
Project Name:	**NEW Air Products - Avalon Tap 115 kV T.L.**
Description:	Construct a NEW 5.0 miles 477.0 26/7 ACSR 11kV T.L. from Air Product to Avalon Tap
Supporting Statement:	For the loss of the Crist S.P. - Pale #1115kV T.L. Causes loading issues Crestview · Holt-Munson - Jay Road 2 115kV T.L. with Smith #3 OFF.

West Region Projects

In Year:	2013
Project Name:	**S. Montgomery – Pinedale – ECI Hallstead 115kV TL**
Description:	Reconductor 6 miles of S. Montgomery – Pinedale – ECI Hallstead 115kV TL with 795 26/7 ACSR 100ºC
Supporting Statement:	Central Alabama Improvements.

In Year:	2013
Project Name:	**Montgomery SS – S. Montgomery 230kV TL**
Description:	Reconductor 7.71 miles of Montgomery SS – S. Montgomery 230kV TL with 1351 ACSS 160 ºC
Supporting Statement:	Central Alabama Improvements.

In Year:	2013
Project Name:	**North Auburn – Lafayette City**
Description:	Upgrade 17.2 miles of North Auburn – Lafayette City to 100ºC Operation
Supporting Statement:	Central Alabama Improvements.

In Year:	2013
Project Name:	**Bynum – Anniston 115kV TL**
Description:	Upgrade 6 miles of Bynum – Anniston 115kV TL to 200 ºC Operation (Replace hot parts in switches 16939, 16941, 14033)
Supporting Statement:	Central Alabama Improvements.

In Year:	2013
Project Name:	**North Selma – Autaugaville 230kv TL**
Description:	Upgrade 26 miles of North Selma – Autaugaville 230kv TL to 100 ºC
Supporting Statement:	Central Alabama Improvements.

West Region Projects

In Year:	2013
Project Name:	**Epes – Eutaw 115kV T.L.**
Description:	Construct Epes – Eutaw 115kV T.L. with 1033 54/7 ACSS
Supporting Statement:	Overload issues when losing Duncanville S.S. – Bradley Road 230kV TL.

In Year:	2013
Project Name:	**Plant Greene County**
Description:	Add 400MVA 230/115kV Autobank #2 at Plant Greene County
Supporting Statement:	Needed to alleviate thermal overloading.

In Year:	2013
Project Name:	**Pinckard TS – AL/FL State Line**
Description:	Reconductor 20.73 miles of Pinckard TS – AL/FL State Line with 1351 ACSS 160ºC built to 230kV specs but operate at 115kV. Also upgrade the Pinckard Substation Terminals to 2000A
Supporting Statement:	The recondctor was proposed fue to the loss of farley - sinai Cementery 230 kV tL w/ Lansing Smith #3 off, resulting in overload on subject line.

In Year:	**2013**
Project Name:	**Kemper County Generation**
Description:	IGCC plant addition in Kemper County Mississippi.
Supporting Statement:	Construct transmission necessary to server new base load generation.

In Year:	2013
Project Name:	**Pinckard - Slocomb**
Description:	Reconductor 12.5 miles of Pinckard TS – Slocomb TS 115kV TL with 1033.5 ACSS 160ºC. Upgrade the Holmes Creek Terminals at Pinckard TS to 2000A. Upgrade Switch 8717 to a 2000A Switch.
Supporting Statement:	Outage of Farley – Sinai Cemetery 230kV TL with Smith #3 generator off-line causes the Pinckard TS – Slocomb TS 115 kV to overload

West Region Projects

In Year:	2014
Project Name:	**Spanish Fort - Belforest 115kV TL**
Description:	Reconductor approximately 7.01 miles of existing 795 ACSR 115kV TL from Riviera Utilities (Spanish Fort) tap to Riviera Utilities (Belforest) tap in the Blakeley Island – Silverhill 115kV TL with 1033 54/7 ACSS conductor at 160ºC.
Supporting Statement:	The reconductor of Spanish Fort – Belforest 115kV T.L. was proposed due to the loss of either Chickasaw – Silverhill 230kV T.L. with Crist #7 off, resulting in overloads on subject line.

In Year:	2014
Project Name:	**North Brewton TS – North Brewton DS 115kV TL**
Description:	Construct a North Brewton TS – North Brewton DS 115kV TL, approx. 6 miles of 795 ACSS.
Supporting Statement:	Outage of Barry SP - Stockton Tap 115kV TL with Crist 7 offline causes the N. Brewton TS - Brewton Tap 115 kV TL to overload.

In Year:	**2014**
Project Name:	**Meridian Industrial 115kV TL Project**
Description:	Construct approx. 4 miles of new 115kV TL with 795 ACSR and reconductor approx. 0.6 miles of existing 115kVTL from tap point to Meridian NE and install a 3-way switch.
Supporting Statement:	Construction depends upon completion of new loads east of Meridian. One Distribution area solution for load growth in the area.

In Year:	**2014**
Project Name:	**Ocean Springs - Ingalls 115kV TL**
Description:	Reconductor 115 kV line beginning in 2012 with the Ingalls Tap – Singing River Mall 115 kV line segment
Supporting Statement:	Ingalls – SR Mall overloads for the outage of the Ocean Springs 230/115 kV transformer with Watson 5 off line.

In Year:	2014
Project Name:	**Mobile Area Networking**
Description:	Construct Schillinger Rd. D.S.- Lott Rd. D.S. Tap 115 kV TL 2.1 miles of 795 ACSR.
Supporting Statement:	Network improvement.

West Region Projects

In Year:	2014
Project Name:	**Mobile Area Networking**
Description:	Construct 3.7 miles of 795 ACSS Racetrack D.S. – Lott Road D.S. 115 kV TL.
Supporting Statement:	Network improvement.

In Year:	2014
Project Name:	**Henry Dam – Cedar Bend 115kV TL**
Description:	Reconductor Henry Dam – Cedar Bend 115kV TL with 795 ACSR.
Supporting Statement:	The loading on the Henry Dam – Cedar Bend 115kV is highly dependent on area generation assumptions. The retirement of some Anniston area generation has been periodically considered, and this would increases the loading seen on this line. If proposed generation in the area is running after 2011, this line will see increased loading as well.

In Year:	**2014**
Project Name:	**East Biloxi 115kV TL Project**
Description:	Tap the Percy Street to Keesler 115 kV T.L. and loop line to new East Biloxi substation. Once service is installed, some of the load from the Percy Street substation will shift to the new substation.
Supporting Statement:	Project driven by exceeding existing capacity at Percy St substation (Planned Capacity Increase).

In Year:	2014
Project Name:	**Cedar Bend - N. Cedar Bend 115kV T.L.**
Description:	Upgrade the Cedar Bend – N. Cedar Bend 115 kV TL to 100O C operation
Supporting Statement:	The loading on the Henry Dam – Cedar Bend 115kV is highly dependent on area generation assumptions. The retirement of some Anniston area generation has been periodically considered, and this would increases the loading seen on this line. If proposed generation in the area is running after 2011, this line will see increased loading as well.

In Year:	2014
Project Name:	**Co Line Rd**
Description:	Install 2nd 230/115kV Autobank at Co Line Rd
Supporting Statement:	Central Alabama Improvements.

West Region Projects

In Year:	2014
Project Name:	**Jordan Dam – Bouldin Dam "A" 115kV TL**
Description:	Reconductor 3.8 miles of Jordan Dam – Bouldin Dam "A" 115kV TL with 795 26/7 ACSR 160 ºC
Supporting Statement:	Central Alabama Improvements.

In Year:	2014
Project Name:	**Jordan Dam – Bouldin Dam "B" 115kV TL**
Description:	Reconductor 2.9 miles of Jordan Dam – Bouldin Dam "B" 115kV TL with 795 26/7 ACSR 160 ºC
Supporting Statement:	Central Alabama Improvements.

In Year:	2014
Project Name:	**Bouldin Dam – Elmore 115kV TL**
Description:	Upgrade 0.78 miles of Bouldin Dam – Elmore 115kV TL to 100 ºC
Supporting Statement:	Central Alabama Improvements.

In Year:	2014
Project Name:	**Mobile Area 115 kV Networking**
Description:	Reconductor 2.81 miles in the existing N Mobile-Crichton #1 115kV TL with 795 26/7 ACSS to construct the new N Mobile-North Crichton S.S. and terminate this line into North Crichton S.S.
Supporting Statement:	Network improvement.

In Year:	2014
Project Name:	**Mobile Area 115 kV Networking**
Description:	Reconductor 13.52 miles of existing 397.5 ACSR in the Chickasaw-South Mobile and North Mobile-South Mobile 115kV TLs from the new North Crichton S.S. to South Mobile D.S. with 397.5 26/7 ACSS.
Supporting Statement:	Network improvement.

West Region Projects

In Year:	2014
Project Name:	**Mobile Area 115 kV Networking**
Description:	Mobile Area 115 kV Networking: Construct 7.78 miles of 795 26/7 ACSS 115kV TL from Big Creek T.S. to a point east of Lynndell D.S.
Supporting Statement:	Network improvement.

In Year:	2014
Project Name:	**Reconfigure Anniston Area Transmission**
Description:	Reconductor 1.5m i2/0 Cu in the existing Anniston – Oxanna 115 kV TL with 795 ACSR. This section would become a segment of the new Anniston – Crooked Creek 115 kV TL. Reconnect 0.67mi of 397ACSR tap to Oxanna TS to the Anniston – Bynum 115 kV TL (1351 ACSS) with a 3-way 115kV switch at the tap point. Isolate the Anniston loop load from Crooked Creek by breaking the tie as shown in Figure 3. Add a second 795 ACSR circuit to existing double circuit structures on the West End – Greenbrier pole line and reconductor to the Cheaha tap with 795 ACSR to complete the new Anniston– Crooked Creek 115 kV TL.
Supporting Statement:	An outage of the West End DS – Oxanna Tap 115 kV line section creates thermal loading issues on the southern end of the Anniston – Crooked Creek 115 kV TL. This contingency also causes voltage problems throughout the Anniston area.

In Year:	2015
Project Name:	**Barnwell Tap – Barnwell 115kV TL**
Description:	Reconductor 9.65 miles of existing 4/0 ACSR 115 kV TL from the Baldwin County EMC (Barnwell) Substation to the Barnwell tap point on the Silverhill – Foley B 115 kV TL with 397 26/7 ACSR conductor.
Supporting Statement:	Loss of the Silverhill – Fish River 115kV TL with Crist #7 off results in the subject line reaching its thermal limit in 2015 producing unacceptable bus voltages in the area.

In Year:	2015
Project Name:	**Construct Bellwood – Mount Meigs 115 kV TL**
Description:	This project calls for the Construct of Bellwood – Mount Meigs 115 kV TL 4.5 miles with 795 26/7 ACSR.
Supporting Statement:	During summer peak conditions with Farley Unit 1 off, the loss of the Madison Park – Auburn University Montgomery Tap 115 kV TL results in a violation of the voltage drop criteria at Simcala by summer of 2011. Other buses on the Madison Park –Thurlow Dam 115 kV TL meet voltage drop criteria only marginally by 2015.

West Region Projects

In Year:	2015
Project Name:	**Brewton Tap – Flomaton 115kV TL**
Description:	Upgrade 12.98 miles Brewton Tap – Flomaton 115kV TL to 125ºC operation.
Supporting Statement:	The loss of the Barry – Stockton Tap 115kV TL, with Crist #7 off, results in the loading on the Brewton Tap - Flomaton 115kV TL to exceed 100% of its thermal rating starting in 2015.

In Year:	2015
Project Name:	**Mobile Area 115 kV Networking**
Description:	Construct a six terminal 2000A 115kV ring bus at the new North Crichton S.S.
Supporting Statement:	Network improvement.

In Year:	2015
Project Name:	**Mobile Area 115 kV Networking**
Description:	Loop the North Mobile T.S. – Crichton #1 115kV TL into the North Crichton S.S. Reconnect Wolf Ridge Tap to reconductored Crichton 115kV TL between N Mobile & new North Crichton S.S. Install a Transrupter II EX at Wolf Ridge DS, retire fuse.
Supporting Statement:	Network improvement.

In Year:	2015
Project Name:	**Mobile Area 115 kV Networking**
Description:	Loop the North Mobile T.S. – South Mobile D.S. 115kV TL into the North Crichton S.S. Install distance relaying at North Mobile T.S. (for TLs going to North Crichton S.S.)
Supporting Statement:	Network improvement.

In Year:	2015
Project Name:	**Mobile Area 115 kV Networking**
Description:	Loop the Chickasaw T.S. – South Mobile D.S. 115kV TL into North Crichton S.S.
Supporting Statement:	Network improvement.

In Year:	2015
Project Name:	**Mobile Area 115 kV Networking**
Description:	Reconductor 1.83 miles of existing (1.75 miles: 556 AAC & 0.8 miles: 397.5 ACSR) 115kV TL from Wolf Ridge Tap (structure 62) to Springhill D.S. (structure 92) in the North Mobile T.S. – Springhill D.S. 115kV TL with 795 26/7 ACSR.
Supporting Statement:	Network improvement.

West Region Projects

In Year:	2015
Project Name:	**Mobile Area 115 kV Networking**
Description:	Upgrade 0.958 miles of 397.5 ACSR 115kV TL from Michael Blvd D.S. to Michael Blvd Tap to 100˚C.
Supporting Statement:	Network improvement.

In Year:	2016
Project Name:	**Columbus First Ave – Phenix City DS 115kV TL**
Description:	Reconductor Columbus First Ave – Phenix City DS with 795 26/7 ACSR.
Supporting Statement:	Overloads of the Columbus First Ave – Phenix City DS 115 kV TL have been discovered in past studies under the loss of the Fuller Rd - Goat Rock 230 kV during shoulder conditions in 2016 and beyond.

In Year:	2016
Project Name:	**Pinckard – Ft. Rucker (North) 115kV TL**
Description:	Reconductor 0.32mi of Pinckard – Ft. Rucker (North) 115 kV T.L. with 795 26/7 ACSR.
Supporting Statement:	The loss of the Pinckard–Ft Rucker tap (South) 115kV TL and Crist #7 off results in the Pinckard – Ft. Rucker tap (North) 115kV TL exceeding 100% of its thermal limits starting in 2016.

In Year:	2016
Project Name:	**Jackson Area 115kV TL Improvements**
Description:	Construct a new 1.52 mile double (2) circuit 795 26/7 ACSR 115 kV TL from Jackson T.S. (SW 2619) to SW 16153.
Supporting Statement:	For the loss of the Daniel 500/230 kV autobank during shoulder conditions with Greene County CTs offline, the Lowman S.P. to Boise section of the Lowman S.P. – Jackson T.S. 115 kV TL overloads beginning in 2016.

In Year:	2016
Project Name:	**Mobile Area Networking**
Description:	Reconductor 2.5 miles of 556.6 AAC 115kV TL from Springdale D.S. to Springhill D.S. with 795 26/7 ACSR. Install distance relaying at North Mobile TS (TL going to Michael Blvd).
Supporting Statement:	Network improvement.

West Region Projects

In Year:	2016
Project Name:	**Barry SP - Crist SP 230kV TL**
Description:	Upgrade the Barry SP - Crist SP 230 kV TL to @ 125°C operation to be in service in 2013. If the Barry CTs are delayed with Crist #8 coming in service in 2014, this project might not be needed.
Supporting Statement:	With Crist #7 offline and the loss of Barry S.P. - Chickasaw 230 kV T.L., the Barry S.P. - Crist S.P. 230 kV T.L. exceeds its rating in 2013.

In Year:	2016
Project Name:	**Goulding – Oakfield 115 V TL**
Description:	Reconductor 4.35 miles Goulding - Oakfield 115 kV T.L. Replace the 336.4 26/7 ACSR @ 100℃ with 1033 ACSR and replace 600A switches #1285 an d #1281 on the Oakfield terminal at Goulding prior to 2013.
Supporting Statement:	For the loss of the Crist - Scenic Hills #1 115 kV T.L., All Scenic Hills load on Crist - Brentwood 115 kV T.L., and Crist #7 off, the Goulding - Oakfield 115 kV T.L. exceeds its thermal limit starting in 2013.

In Year:	2016
Project Name:	**Reconductor Eutaw – Plantation Pipeline – Colonial Pipeline 115kV TL**
Description:	This project calls for reconductor Eutaw – Plantation Pipeline (Akron) – Colonial Pipeline (Moundville) 115kV TL with 795 ACSR.
Supporting Statement:	Overload is caused in Summer Peak with Gorgas #10 Offline and the loss of Duncanville – Bradley Rd 230kV TL.

In Year:	**2017**
Project Name:	**Orange Grove 230/115 kV Project**
Description:	Construct a new 230/115 kV substation by tapping the Moss Point East – North Theodore 230 kV line and the Moss Point East – Bayou Casotte substations, construct a new 115 kV line between the new substation and Chevron PRCP and rebuild the line between the new substation and Bayou Casotte.
Supporting Statement:	For an outage of one Moss Point East 230/115 kV transformer with Chevron 5 off line. The parallel bank overloads. Additional 230/115 kV transformation required for serving load in Pascagoula area.

West Region Projects

In Year:	2017
Project Name:	**Silverhill – Magnolia 115kV TL**
Description:	Reconductor approx. 12.36 miles of existing 795 ACSR 115kV TL from Silverhill to Bladwin County EMC (Magnolia) Substation with 1033 ACSS conductor rated at 160 degree Centigrade operation on the Silverhill – Foley B 115kV TL.
Supporting Statement:	The loss of the Silverhill – Riviera Utilities (Southwest Foley) 115kV TL and Crist #7 off results in the subject line exceeding its thermal limit starting in 2013.

In Year:	2017
Project Name:	**Leeds to Westbury 115kV TL**
Description:	This project calls for the Upgrade of Leeds – Westbury 115 kV TL to 100ºC operation.
Supporting Statement:	Overload is driven by the loss of the Miller 500/230 kV autotransformer with a critical unit off, and the loss of Leeds to South Jefferson 230 kV TL with a critical unit off.

In Year:	2017
Project Name:	**Bellamy S.S. – Sonat Tap 115kV TL**
Description:	Upgrade Bellamy S.S. – Sonat Tap 115kV TL to 100ºC.
Supporting Statement:	Upgrades the Bellamy S.S. – Sonat Tap 115kV T.L. to 100ºC The subject line exceeds its thermal limit starting in 2017 by an outage of the Greene County – Meridian NE 230kV T.L. and Watson #5 off.

In Year:	2017
Project Name:	**SONAT York Tap – Cuba 115kV TL**
Description:	Upgrade 3.7mi SONAT York Tap – Cuba 115kV TL of 397 ACSR @ 75ºC to 100ºC.
Supporting Statement:	The worst contingency is during the Summer Peak with Watson #5 Offline, Greene County – Meridian NE 230kV T.L. out.

West Region Projects

In Year:	2017
Project Name:	**South Tuscaloosa – Hargrove – Cottondale 115kV TL**
Description:	Reconductor South Tuscaloosa – Hargrove – Cottondale 115kV TLwith 1033 ACSS.
Supporting Statement:	Transmission Planning recommends the reconductor of the South Tuscaloosa – Hargrove – Cottondale 115kV T.L. with 1033 ACSS to be scheduled for completion prior to summer of 2017.

In Year:	2018
Project Name:	**Gaston – East Pelham 230kV TL**
Description:	Upgrade the Gaston – Twelve Oaks – East Pelham 230 kV TL to 100℃.
Supporting Statement:	The loading on the Gaston – East Pelham 230 kV TL continues to be affected by the changes in generation dispatch under different contingencies. With normal generation dispatch, the loading between Gaston and East Pelham remains below the 75℃ rating through 2016. However, should Hill abee come on line in 2010, the system dispatch would then cause this line to load under contingency conditions to 100% in 2012 and by 2016, the existing rating would be exceeded.

In Year:	2018
Project Name:	**Holt T.S. – Tuscaloosa T.S. 115kV TL**
Description:	This project calls for converting Holt T.S. – Tuscaloosa T.S. 115kV TL to 230kV.
Supporting Statement:	Conversion to 230kV operation of the new Holt T.S. – Tuscaloosa T.S. TL that is built at 230kV specs and initially operated at 115kV. This 230kV conversion was proposed to relieve the loadings on several lines and increase the autobank capacity in the Tuscaloosa area.

In Year:	2018
Project Name:	**South Tuscaloosa – Stokes 115kV TL**
Description:	South Tuscaloosa – Stokes 115kV T.L. reconductor with 1033 ACSS.
Supporting Statement:	Reconductor of the South Tuscaloosa – Stokes 115kV T.L. with 1033 45/7 ACSS. This was proposed to address the thermal loading caused by the loss of the Greene County – Birdeye 115kV T.L. with Gorgas 10 offline.

West Region Projects

In Year:	2018
Project Name:	**Magnolia – Turkey Hill 115kV TL**
Description:	Reconductor Magnolia – Turkey Hill SS 115kV TL 3.67 Miles of 795 45/7 ACSR @ 100ºC.
Supporting Statement:	The contingency which causes the increased loading on this line is the loss of the Silverhill – Southwest Foley 115kV TL with Crist #8 off.

In Year:	2018
Project Name:	**South Bessemer**
Description:	Install 2nd 230/115kV Autobank at South Bessemer
Supporting Statement:	Central Alabama Improvements.

In Year:	2018
Project Name:	**Bessemer 230kV Ring Bus**
Description:	Construct 4 breaker 230 kV ring bus at Bessemer TS by 2018.
Supporting Statement:	The loss of the South Bessemer 230/115 kV auto at shoulder conditions with Gaston 5 off causes one of the existing 230/115 kV autos at Bessemer to overload in 2018.

In Year:	2019
Project Name:	**Kronospan – Honda 115kV T.L.**
Description:	Construct 10.31 miles 115kV TL from Kronospan – Honda with 795 ACSR 100 ºC
Supporting Statement:	Central Alabama Improvements.

West Region Projects

In Year:	2019
Project Name:	**Callaway – Gaskin 115kV TL**
Description:	Reconductor the Callaway Gaskin 115 kV T.L. for a in service date of 2018.
Supporting Statement:	For the loss of the Bay Springs Tap - Dale County 115 kV T.L., Scholz #2 at 46 MW, and Scholz #1 offline, the Callaway - Gaskin 115 kV T.L. reaches its thermal limit starting in 2019.

In Year:	2019
Project Name:	**North Opelika**
Description:	Second 230/115kV Autobank at North Opelika
Supporting Statement:	For the loss of the North Auburn 230/115 kV Autobank the autobank ar North Opelika overloads, thus requiring a 2nd autobank at North Opelika.

In Year:	2019
Project Name:	**Livingston – Mannington Wood Floors Tap 115kV T.L.**
Description:	Livingston – Mannington Wood Floors Tap 115kV T.L. reconductor with 795 26/7 ACSR
Supporting Statement:	Thermal Loading Issues.

In Year:	2019
Project Name:	**Cedar Cove – Mercedes 115kV T.L.**
Description:	Cedar Cove – Mercedes 115kV T.L. reconductor with 795 ACSR
Supporting Statement:	Thermal Issues.

In Year:	2019
Project Name:	**AU Montgomery Tap – AU Montgomery 115kV TL**
Description:	Reconductor 1.5 miles of AU Montgomery Tap – AU Montgomery 115kV TL with 1033 ACSR 100 ºC
Supporting Statement:	Thermal Issues.

West Region Projects

SMEPA

In Year:	2009
Project Name:	**Cole Road Transformer Replacement**
Description:	Upgrade 2 Cole Road 161/69kV
Supporting Statement:	Transformer overloads during the outage of the adjacent Unit, High load growth area
In Year:	2010
Project Name:	**Polkville 161kV Source**
Description:	Tap 161kV Line 172 with the White Oak Switching Station, Build 161/69kV Polkville Substation
Supporting Statement:	Outage of 69kV causes overloads and under voltages, Addition of Industrial load on loop has added to problems and reduced available 69kV transmission capacity
In Year:	2010
Project Name:	**Purvis Bulk Transformer Replacement**
Description:	Install 2-448MVA, 230/161kV Transformers, Relocate 2158MVA units to West Waynesboro
Supporting Statement:	Transformers limit export capability with MPCo during outage of one unit, additional export capability needed in 2011
In Year:	2011
Project Name:	**Silver Creek 161/115kV Interconnection**
Description:	Build Silver Creek 115/161 kV Substation (300 MVA). Tap 161 kV Line 168 and build 161 kV T.L.
Supporting Statement:	Single Interconnection with Entergy (Magee), outage impacts SMEPA's ability to serve off-system load.
In Year:	2012
Project Name:	**South Hoy 161kV Source**
Description:	Build 161/69 kV Substation at South Hoy. Build 161 kV Line Moselle to South Hoy.
Supporting Statement:	69 kV Low voltages and line overloads during 69 kV Contingency

West Region Projects

In Year:	2012
Project Name:	**Moselle 161kV Generation Expansion & Repower**
Description:	Add 2- 83MW Combustion Turbines at SMEPA's Meselle Generation Station and Re-power Steam Units with HRSGs
Supporting Statement:	Generation Deficient in 2012. Combined Cycle (CC) configuration is the most efficient option and building at an existing facility reduces construction time.
In Year:	2013
Project Name:	**Prentiss 161/69kV Substation**
Description:	Tap Silver Creek Interconnection and build Prentiss 161/69kV Substation
Supporting Statement:	69kV under voltages and line overloads during 69 kV contingency. 69 kV Transmission Capacity problem.
In Year:	2017
Project Name:	**East Waynesboro 230/69kV Substation**
Description:	Tap 230kV PowerSouth Interconnection Line 230 and Build E.Waynesboro 230/69kV substation, Tap 69kV Line 23 and upgrade supporting 69kV transmission.
Supporting Statement:	69kV contingencies in area cause 69kV under voltages and overloads. 69 kV Transmission capacity problem.

POWERSOUTH

In Year:	2010
Project Name:	**Clio Area Project**
Description:	Survey, Acquire and Construct Judson-Baker Hill Jct 115 kV TL 14.0 miles with 795 26/7 ACSR. Thermal uprate the Brundidge-Clio 115kV line to 151 MVA.
Supporting Statement:	Overloads are seen in Contract 2008 cases under several contingencies including Judson Tap-WF George out. This is a project to uprate aging lines to handle more loading under contingency conditions thereby increasing the reliability of the bulk electric system.

West Region Projects

In Year:	2010
Project Name:	**Baldwin County Project**
Description:	Survey, acquire, construct Miflin Jct.-Florida Ave 115kV line 1033 ACSS with one mile underground cable water crossing. Construct Miflin Sw. Station. Thermal uprate of Miflin Jct-Wolf Bay. 15 MVAR Cap banks at Florida Ave and Gulf shores.
Supporting Statement:	High load growth area (Orange Bch) being served radially. This is a project to strengthen the system to respond to single contingency conditions.

In Year:	2011
Project Name:	**Liberty-Glendale-Defuniak Reconductor**
Description:	Reconductor Liberty-Glendale-Defuniak Springs with 1033 ACSS conductor for 300 MVA path. Approx. 21 miles.
Supporting Statement:	High North-South flow with Smith #3 out causes overloads. This is a project to strengthen the system to respond to single contingency conditions.

In Year:	2010
Project Name:	**Bluewater-Villa Tasso Jct**
Description:	Uprate design temp to 100 deg C operation.
Supporting Statement:	This line overloads under a Smith #3 out and N-1 contingencies. This is a project to strengthen the system to respond to single contingency conditions.

In Year:	2011
Project Name:	**Belleville 230-115kV 2 nd Transformer**
Description:	Install second 90/120/150 MVA transformer at Belleville
Supporting Statement:	This transformer overloads under a McWilliams unit out and Lowman-Chastain Hill 115kV line out.

In Year:	2011
Project Name:	**Dale Co-Bay Springs Jct**
Description:	Uprate design temp to 100 deg C operation.
Supporting Statement:	This line overloads under a Smith #3 out and N-1 contingencies. This is a project to strengthen the system to respond to single contingency conditions.