



***Feasibility Study
PID 255
251MW Plant***

Prepared by:

***Southwest Power Pool
Independent Coordinator of Transmission
415 N. McKinley, Suite 140
Little Rock, AR 72205***

| Rev | Issue Date | Description of Revision | Revised By | Project Manager |
|------------|-------------------|-----------------------------------------------------------|-------------------|------------------------|
| 0 | 4/12/11 | Post Feasibility Study | EC | BR |
| 1 | 5/26/11 | Interconnection facilities cost added to Secitons 1 and 4 | EC | BR |

Contents

| | |
|---------------------------------------------------------------------------------------------------------------------|-----------|
| ENERGY RESOURCE INTERCONNECTION SERVICE | 3 |
| 1. INTRODUCTION..... | 3 |
| 2. SHORT CIRCUIT ANALYSIS/BREAKER RATING ANALYSIS..... | 3 |
| 2.1 MODEL INFORMATION | 3 |
| 2.2 SHORT CIRCUIT ANALYSIS | 3 |
| 2.3 ANALYSIS RESULTS | 4 |
| 2.4 PROBLEM RESOLUTION..... | 4 |
| 3. LOAD FLOW ANALYSIS | 4 |
| 3.1 MODEL INFORMATION | 4 |
| 3.2 LOAD FLOW ANALYSIS | 5 |
| 3.3 ANALYSIS RESULTS | 5 |
| 4. FACILITIES AT THE POINT OF INTERCONNECTION..... | 6 |
| APPENDIX A: PRIOR GENERATION INTERCONNECTION AND TRANSMISSION SERVICE REQUESTS USED IN STUDY MODELS..... | 51 |

Energy Resource Interconnection Service

1. Introduction

This Energy Resource Interconnection Service (ERIS) is based on the Customer's request for 251MW interconnection on Entergy's transmission system at the Colton Road 138kV substation. The proposed commercial operation date of the project is January 6, 2013. The objective of this study is to assess the reliability impact of the new facility on the Entergy transmission system as well as its effects on the system's existing short circuit current capability. It is also intended to determine whether the transmission system meets standards established by NERC Reliability Standards and Entergy's planning guidelines when the plant is connected to Entergy's transmission system. If not, transmission improvements will be identified.

The Feasibility Study process required a load flow analysis to determine if the existing transmission lines are adequate to handle the full output from the plant for simulated transfers to adjacent control areas. A short circuit analysis is performed to determine if the generation would cause the available fault current to surpass the fault duty of existing equipment within the Entergy transmission system.

This ERIS Feasibility Study was based on information provided by the Customer and assumptions made by Entergy's Independent Coordinator of Transmission (ICT) planning group and Entergy's Transmission Technical System Planning group. All supplied information and assumptions are documented in this report. If the actual equipment installed is different from the supplied information or the assumptions made, the results outlined in this report are subject to change.

It was determined that there are no Entergy transmission system upgrades required for this ERIS request. The estimated cost of interconnection facilities is \$7.5 Million; which covers the cost of the construction of a new 138kV, 3-element ring bus substation at the Customer's point of interconnection.

The load flow results from the ERIS study are for information only. ERIS does not in and of itself convey any transmission service.

CLECO has been identified as an affected system. The customer will need to satisfy the requirements deemed necessary by CLECO.

2. Short circuit Analysis/Breaker Rating Analysis

2.1 Model Information

The short circuit analysis was performed on the Entergy system short circuit model using ASPEN software. This model includes all generators interconnected to the Entergy system or interconnected to an adjacent system and having an impact on this interconnection request, IPP's with signed IOAs, and approved future transmission projects on the Entergy transmission system.

2.2 Short Circuit Analysis

The method used to determine if any short circuit problems would be caused by the addition of the PID 255 generation is as follows:

Three phase and single phase to ground faults were simulated on the Entergy base case short circuit model and the worst case short circuit level was determined at each station. The PID 255 generator was then modeled in the base case to generate a revised short circuit model. The base case short circuit results were then compared with the results from the revised model to identify any breakers that were under-rated as a result of additional short circuit contribution from PID 255 generation. Any breakers identified to be upgraded through this comparison are mandatory upgrades.

2.3 Analysis Results

The results of the short circuit analysis indicated that the additional generation due to PID 255 generation caused no increase in short circuit current such that they exceeded the fault interrupting capability of the high voltage circuit breakers within the vicinity of the PID 255 plant **with and without priors**. Priors included are: 221, 231, 238, 240, 244, 247, 250, 251, 252, 253 and 254.

2.4 Problem Resolution

As a result of the short circuit analysis findings, no resolution was required on the Entergy Transmission System.

3. Load Flow Analysis

3.1 Model Information

The load flow analysis was performed based on the projected 2014 summer peak load flow model. Approved future projects in the 2011-2013 ICT Base Plan were used in the models for scenarios three and four. The loads were scaled based on the forecasted loads for the year. All firm power transactions between Entergy and its neighboring control areas were modeled for the year 2014 excluding short-term firm transactions on the same transmission interface. An economic dispatch was carried out on Entergy generating units after the scaling of load and modeling of transactions. The PID 255 generation interconnection point was modeled on the existing Vatican – East Opelousas 138kV transmission line. These associated facilities were then modeled in the case to build a revised case for the load flow analysis. Transfers were simulated between thirteen (13) control areas and Entergy using the requesting generator as the source and adjacent control area as sink.

This study considered the following four scenarios:

| Scenario No. | Approved Future Transmission Projects | Pending Transmission Service & Study Requests |
|--------------|---------------------------------------|-----------------------------------------------|
| 1 | Not Included | Not Included |
| 2 | Not Included | Included |
| 3 | Included | Not Included |
| 4 | Included | Included |

The generator step-up transformers, generators, and interconnecting lines were modeled according to the information provided by the customer.

3.2 Load Flow Analysis

3.2.1 Load Flow Analysis:

With the above assumptions implemented, the First Contingency Incremental Transfer Capability (FCITC) values are calculated. The FCITC depends on various factors – the system load, generation dispatch, scheduled maintenance of equipment, and the configuration of the interconnected system and the power flows in effect among the interconnected systems. The FCITC is also dependent on previously confirmed firm reservations on the interface.

3.2.2 Performance Criteria

The criteria for overload violations are as follows:

A) With All Lines in Service

- The MVA flow in any branch should not exceed Rate A (normal rating).

B) Under Contingencies

- The MVA flow through any facility should not exceed Rate A.

3.2.3 Power Factor Consideration / Criteria

Entergy, consistent with the FERC Large Generator Interconnection Procedures (LGIP) requires the customer to be capable of supplying at least 0.33 MVAR (*i.e.*, 0.95 lagging power factor) and absorbing at least 0.33 MVAR (*i.e.*, 0.95 leading power factor) for every MW of power injected into the grid. In the event that, under normal operating conditions, the customer facility does not meet the prescribed power factor requirements at the point of interconnection, the customer shall take necessary steps, such as the installation of reactive power compensating devices, to achieve the desired power factor.

3.3 Analysis Results

Summary of the analysis results are documented in following table for each scenario.

Table 3.3.1: Summary of Results for PID 255 – ERIS Load Flow Study

| Interface | | Summer Peak Case Used | FCITC Available for Scenario 1 | FCITC Available for Scenario 2 | FCITC Available for Scenario 3 | FCITC Available for Scenario 4 |
|-----------|---------------------------------------|-----------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| AECI | Associated Electric Cooperative, Inc. | 2014 | -910 | -4858 | -520 | -828 |
| AEPW | American Electric Power West | 2014 | -1086 | -9190 | -306 | -8201 |
| AMRN | Ameren Transmission | 2014 | -872 | -3304 | -549 | -850 |
| CLEC | CLECO | 2014 | 129 | -4492 | 47 | -89 |
| EES | Entergy | 2014 | -472 | -8453 | -2628 | -6673 |
| EMDE | Empire District Electric Co | 2014 | -949 | -10800 | -464 | -4345 |
| LAFA | Lafayette Utilities System | 2014 | -1138 | -740 | 49 | 220 |
| LAGN | Louisiana Generating, LLC | 2014 | -71 | -1502 | -322 | -1042 |
| LEPA | Louisiana Energy & Power Authority | 2014 | -72 | -470 | -1421 | -1442 |

| | | | | | | |
|-------|-----------------------------------------|------|------|--------|------|-------|
| OKGE | Oklahoma Gas & Electric Company | 2014 | -992 | -9901 | -414 | -3980 |
| SMEPA | South Mississippi Electric Power Assoc. | 2014 | * | -2565 | * | -1441 |
| SOCO | Southern Company | 2014 | -967 | -3659 | -702 | -962 |
| SPA | Southwest Power Administration | 2014 | -953 | -11133 | -486 | -4480 |
| TVA | Tennessee Valley Authority | 2014 | -882 | -3316 | -636 | -908 |

*Actual rating of supplemental upgrade was not used to calculate FCITC

4. Facilities at the Point of Interconnection

The Interconnection Customer's designated Point of Interconnection (POI) is the proposed Colton 138kV substation. It is projected an additional 138kV, 3-element ring bus configuration will be required with the construction of the substation. The estimated cost for a 138kV, 3-element ring bus configuration substation is \$7.5 Million. This cost is based on parametric estimating techniques for a "typical" site. Cost may significantly change based on specific project parameters that are not known at this time. Costs specific to this interconnection will be developed during the Facilities Study. The interconnection customer is responsible for constructing all facilities needed to deliver generation to the POI.

TABLE 3.3.2: DETAILS OF SCENARIO 1 RESULTS: (WITHOUT FUTURE PROJECTS AND WITHOUT PENDING TRANSMISSION SERVICE & STUDY REQUEST)

| Limiting Elements | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | LAFa | LAGN | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|--------------------------------------------------|--------------------------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Beaver Creek 115/138kV phase shifter transformer | 9,200,000 | X | X | X | | X | X | | | | X | X | X | X | X |
| Bonin - Cecelia 138kV | 17,250,000 | | | | | | | | | X | | | | | |
| Carroll 230/138kV transformer (CLECO) | 9,200,000 | X | X | X | | X | X | | | | X | X | X | X | X |
| Champagne - East Opelousas 138kV | 6,250,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| Conroe 1 - Conroe 2 138kV | TBD | | X | | | | | | | | | | | | |
| Conway - Wyandotte 138kV | 6,250,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| East Leesville - Rodemacher 230kV (CLECO) | 65,500,000 | X | X | X | | X | X | | X | | X | X | X | X | X |
| East Opelousas - Colton Road 138kV | 3,750,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| French Settlement - Sorrento 230kV | 14,000,000 | X | X | X | | | X | | | | X | X | X | X | X |
| Greenwood - Humphrey 115kV | 1,250,000 | | | | | | | X | | | | | | | |
| Greenwood - Terrebonne 115kV | 12,500,000 | | | | | | | X | | | | | | | |
| Habetz - Richard 138kV | Included in 2011 ICT Base Plan | | | | | | | | X | | | | | | |
| International Paper - Mansfield 138kV (CLECO) | 23,750,000 | X | X | X | | | X | | | | X | | X | X | X |
| International Paper - Wallake 138kV (CLECO) | 23,750,000 | X | X | X | | | X | | | | X | | X | X | X |

| Limiting Elements | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | Lafa | Lagn | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|----------------------------------------------------------------|--------------------------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Jackson Miami - Jackson Monument Street 115kV | 3,750,000 | | | | | | | | | | | X | | | |
| Judice - Scott1 138kV | 10,000,000 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Mossville - Roy S. Nelson 138kV | 3,750,000 | | | | | X | | | | | | | | | |
| Plantation - Cedar Hill 138kV | 3,750,000 | | X | | | | | | | | | | | | |
| Pleasant Hill 500/161kV transformer | Included in 2011 ICT Base Plan | | | | | | X | | | | | | | X | |
| Raceland - Coteau 115kV | 15,325,000 | | | | | | | | | X | | | | | |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Committed to by others | | | | | | | | | | | X | | | |
| Scott1 - Bonin 138kV | 6,250,000 | | | | | | | X | | | | | | | |
| Semere - Scott2 138kV | 20,000,000 | | | | | | | X | | | | | | | |
| Toledo - Leesville (CLECO) 138kV | 28,750,000 | X | X | X | | X | X | | | | X | X | X | X | X |
| Toledo - VP Tap 138kV | Included in 2011 ICT Base Plan | X | X | X | | X | X | | | | X | X | X | X | X |
| Vatican - Colton Road 138kV | 15,000,000 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Vatican - Scott1 138kV | 3,750,000 | | | | | | | X | | | | | | | |

TABLE 3.3.3: DETAILS OF SCENARIO 2 RESULTS: (WITHOUT FUTURE PROJECTS AND WITH PENDING TRANSMISSION SERVICE & STUDY REQUEST)

| Limiting Elements | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | LAFa | LAGN | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|-------------------------------------------------|--------------------------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Ameila Bulk - Bevil 230kV | 10,500,000 | | | | | X | | | | | | | | | |
| Amelia Bulk - Helbig 230kV | 17,500,000 | | X | | | X | | | | | | | | | |
| Bevil - Cypress 230kV | 22,750,000 | | | | | X | | | | | | | | | |
| Big Three - Carlyss 230kV | 3,500,000 | X | X | X | X | X | X | | X | | X | X | X | X | X |
| Big Three - Sabine 230kV | 64,750,000 | | X | | | X | X | | | | X | | | X | |
| Bonin - Cecelia 138kV | 17,250,000 | | | | | | | | | X | | | | | |
| Carlyss - Roy S. Nelson 230kV | 28,000,000 | | | | | X | | | | | | | | | |
| Cedar Hill - Tamina 138kV | Included in 2011 ICT Base Plan | | X | | | | | | | | | | | | |
| Champagne - East Opelousas 138kV | 6,250,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| Colonial Academy - Richard 138kV | 13,750,000 | | | | | | | X | | | | | | | |
| Columbus MS (TVA) - Weyerhouser Tap (TVA) 161kV | 13,750,000 | | | | | | | | | | | X | | | |

| Limiting Elements | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | LAFa | LAGN | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|-------------------------------------------------------|--------------------------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Coly - Vignes 230kV - Supplemental Upgrade | Committed to by others | | | | | | | | | X | | | | | |
| Conroe Bulk2 - Plantation 138kV | 3,750,000 | | X | | | | | | | | | | | | |
| Cypress 500/138kV transformer 1 | 18,000,000 | | X | | | X | | | | | | | | | |
| Cypress 500/230kV transformer | 21,000,000 | | X | | | X | | | | | | | | | |
| East Leesville - Rodemacher 230kV (CLECO) | 66,500,000 | X | X | X | | X | X | | X | | X | X | X | X | X |
| East Opelousas - Colton Road 138kV | 3,750,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| Florence - South Jackson 115kV - Supplemental Upgrade | Committed to by others | | | | | | | | | | | X | | | |
| French Settlement - Sorrento 230kV | 14,000,000 | X | X | X | | | X | | | | X | X | X | X | X |
| Habetz - Richard 138kV | Included in 2011 ICT Base Plan | | | | | | | X | | | | | | | |
| Hartburg - Inland Orange 230kV | 7,000,000 | | | | | X | | | | | | | | | |
| Hartburg - Inland Orange 230kV - Supplemental Upgrade | Committed to by others | | | | | X | | | | | | | | | |
| Hartburg 500/230kV transformer 1 | 21,000,000 | | | | | X | | | | | | | | | |

| Limiting Elements | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | Lafa | LAGN | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|--------------------------------------------------|--------------------------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Hebert - Bayou Cove 138kV | 1,250,000 | X | X | X | | X | X | | | | X | | | X | |
| Helbig - McLewis 230kV | Included in 2011 ICT Base Plan | | | | | X | | | | | | | | | |
| Inland - McLewis 230kV | Included in 2011 ICT Base Plan | | | | | X | | | | | | | | | |
| Inland - McLewis 230kV - Supplemental Upgrade | Committed to by others | | | | | X | | | | | | | | | |
| International Paper - Mansfield 138kV (CLECO) | 3,750,000 | X | X | X | | | X | | | | X | | X | X | X |
| Jackson Miami - Jackson Monument Street 115kV | 3,750,000 | | | | | | | | | | | X | | | |
| Jackson Miami - Rex Brown 115kV | Included in 2011 ICT Base Plan | | | | | | | | | | | X | | | |
| Judice - Scott1 138kV | 10,000,000 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| McAdams 500/230kV transformer 1 | Included in 2011 ICT Base Plan | X | | X | | | X | | | | X | | X | X | |
| Mossville - Roy S. Nelson 138kV | 3,750,000 | | | | | X | | | | | | | | | |
| Philadelphia MS (TVA) - South Philadelphia 161kV | 1,250,000 | | | | | | | | | | | X | | | |
| Plantation - Cedar Hill 138kV | 3,750,000 | | X | | | | | | | | | | | | |

| Limiting Elements | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | Lafa | LAGN | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|------------------------------------------------------------|------------------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| PPG - Verdine 230kV | 3,500,000 | | | | | X | | | | | | | | | |
| Rex Brown W - Rex Brown C 115kV ckt 1 | TBD | | | | | | | | | | | X | | | |
| Roy S. Nelson 500/230kV auto | 21,000,000 | | | | X | X | | | | | | | | | |
| Roy S. Nelson - Verdine 230kV | 5,250,000 | | | | | X | | | | | | | | | |
| Scott1 - Bonin 138kV | 6,250,000 | | | | | | | X | | | | | | | |
| Semere - Scott2 138kV | 20,000,000 | | | | | | | X | | | | | | | |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Committed to by others | | | | | | | | | | | | | X | |
| Vatican - Colton Road 138kV | 15,000,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |

TABLE 3.3.4: DETAILS OF SCENARIO 3 RESULTS: (WITH FUTURE PROJECTS AND WITHOUT PENDING TRANSMISSION SERVICE & STUDY REQUEST)

| Limiting Element | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | LAFA | LAGN | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|-------------------------------------------------------|--------------------------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Beaver Creek 115/138kV phase shifter transformer | 9,200,000 | X | X | X | | | X | | | | X | | | X | X |
| Carroll 230/138kV transformer (CLECO) | 9,200,000 | X | X | X | | X | X | | | | X | X | X | X | X |
| Champagne - East Opelousas 138kV | 6,250,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| Conroe 1 - Conroe 2 138kV | TBD | | X | | | | | | | | | | | | |
| Conway - Wyandotte 138kV | 6,250,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| East Leesville - Rodemacher 230kV (CLECO) | 66,500,000 | X | X | X | | X | X | | X | | X | X | X | X | X |
| East Opelousas - Colton Road 138kV | 3,750,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| Florence - South Jackson 115kV - Supplemental Upgrade | Committed to by others | | | | | | | | | | | X | | | |
| International Paper - Mansfield 138kV (CLECO) | 23,750,000 | X | X | X | | | X | | | | X | | X | X | X |
| International Paper - Wallake 138kV (CLECO) | 22,500,000 | X | X | X | | | X | | | | X | | X | X | X |
| Jackson Miami - Jackson Monument Street 115kV | 3,750,000 | | | | | | | | | | | X | | | |
| Jackson Miami - Rex Brown 115kV | Included in 2011 ICT Base Plan | | | | | | | | | | | X | | | |

| | | | | | | | | | | | | | | | |
|----------------------------------------------------------------|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Committed to by others | | | | | | | | | | | X | | | |
| Vatican - Colton Road 138kV | 15,000,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| Willow Glen - Evergreen 230kV ckt 2 | Included in 2011 ICT Base Plan | | | | | X | | | | X | | | | | |

TABLE 3.3.5: DETAILS OF SCENARIO 4 RESULTS: (WITH FUTURE PROJECTS AND WITH PENDING TRANSMISSION SERVICE & STUDY REQUEST)

| Limiting Element | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | Lafa | Lagn | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|-------------------------------------------------|------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Ameila Bulk - Bevil 230kV | 10,500,000 | | | | | X | | | | | | | | | |
| Amelia Bulk - Helbig 230kV | 17,500,000 | | X | | | X | | | | | | | | | |
| Bevil - Cypress 230kV | 22,750,000 | | | | | X | | | | | | | | | |
| Big Three - Carlyss 230kV | 3,500,000 | | X | | | X | X | | | | X | | | X | |
| Big Three - Sabine 230kV | 64,750,000 | | X | | | X | X | | | | X | | | X | |
| Bonin - Cecelia 138kV | 17,250,000 | | | | | | | | | X | | | | | |
| Carlyss - Roy S. Nelson 230kV | 28,000,000 | | | | | X | | | | | | | | | |
| Champagne - East Opelousas 138kV | 6,250,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| Columbus MS (TVA) - Weyerhouser Tap (TVA) 161kV | 13,750,000 | | | | | | | | | | | X | | | |
| Conroe Bulk2 - Plantation 138kV | 3,750,000 | | X | | | | | | | | | | | | |

| Limiting Element | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | LAFA | LAGN | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|-------------------------------------------------------|--------------------------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Cypress 500/138kV transformer 1 | 18,000,000 | | X | | | X | | | | | | | | | |
| Cypress 500/230kV transformer | 21,000,000 | | X | | | X | | | | | | | | | |
| East Leesville - Leesville 230kV (CLECO) | 10,500,000 | X | X | | | | X | | | | X | | | X | |
| East Leesville - Rodemacher 230kV (CLECO) | 66,500,000 | X | X | X | | X | X | | X | | X | X | X | X | X |
| East Opelousas - Colton Road 138kV | 3,750,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |
| Florence - South Jackson 115kV - Supplemental Upgrade | Committed to by others | | | | | | | | | | | X | | | |
| Hartburg - Inland Orange 230kV | 7,000,000 | | | | | X | | | | | | | | | |
| Hartburg - Inland Orange 230kV - Supplemental Upgrade | Committed to by others | | | | | X | | | | | | | | | |
| Hartburg 500/230kV transformer 1 | 21,000,000 | | | | | X | | | | | | | | | |
| Hebert - Bayou Cove 138kV | 1,250,000 | | X | | | X | | | | | | | | | |
| Helbig - McLewis 230kV | Included in 2011 ICT Base Plan | | | | | X | | | | | | | | | |

| Limiting Element | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | LAFA | LAGN | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|--------------------------------------------------|--------------------------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Inland - McLewis 230kV | Included in 2011 ICT Base Plan | | | | | X | | | | | | | | | |
| Inland - McLewis 230kV - Supplemental Upgrade | Committed to by others | | | | | X | | | | | | | | | |
| International Paper - Mansfield 138kV (CLECO) | 23,750,000 | X | X | X | | | X | | | | X | | X | X | X |
| Jackson Miami - Jackson Monument Street 115kV | 3,500,000 | | | | | | | | | | | X | | | |
| Jackson Miami - Rex Brown 115kV | Included in 2011 ICT Base Plan | | | | | | | | | | | X | | | |
| Leesville 230/138kV transformer (CLECO) | 9,200,000 | | X | | | | | | | | X | | | | |
| Mossville - Roy S. Nelson 138kV | 3,750,000 | | | | | X | | | | | | | | | |
| Philadelphia MS (TVA) - South Philadelphia 161kV | 1,250,000 | | | | | | | | | | | X | | | |
| Plantation - Cedar Hill 138kV | 3,750,000 | | X | | | | | | | | | | | | |
| PPG - Verdine 230kV | 3,500,000 | | | | | X | | | | | | | | | |
| Rex Brown W - Rex Brown C 115kV ckt 1 | TBD | | | | | | | | | | | X | | | |

| Limiting Element | Est. Cost | AECI | AEPW | AMRN | CLECO | EES | EMDE | LAFA | LAGN | LEPA | OKGE | SMEPA | SOCO | SPA | TVA |
|-------------------------------|------------|------|------|------|-------|-----|------|------|------|------|------|-------|------|-----|-----|
| Roy S. Nelson 500/230kV auto | 21,000,000 | | | | X | X | | | | | | | | | |
| Roy S. Nelson - Verdine 230kV | 5,250,000 | | | | | X | | | | | | | | | |
| Vatican - Colton Road 138kV | 15,000,000 | X | X | X | X | X | X | X | X | | X | X | X | X | X |

3.3.1 DETAILS OF SCENARIO 1 – 2014

AECI

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|----------------------------------------------|------|
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | -910 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | -910 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -721 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -284 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -252 |
| French Settlement - Sorrento 230kV | Fairview - Gypsy 230kV | -169 |
| French Settlement - Sorrento 230kV | Fairview - Madisonville 230kV | -142 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -55 |
| Toledo - VP Tap 138kV | Colfax - Rodemacher 230kV | -29 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | -15 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Rodemacher 230kV | 72 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Montgomery 230kV | 92 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 97 |
| Toledo - VP Tap 138kV | Colfax - Montgomery 230kV | 100 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 107 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 122 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 152 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 181 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 195 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Montgomery 230kV | 205 |
| French Settlement - Sorrento 230kV | Franklin - Mcknight 500kV | 208 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 211 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 214 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 215 |
| French Settlement - Sorrento 230kV | Front Street - Michoud 230kV | 219 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 219 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |

AEPW

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|-------|
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | -1086 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | -1086 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -420 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -209 |
| French Settlement - Sorrento 230kV | Fairview - Gypsy 230kV | -195 |
| French Settlement - Sorrento 230kV | Fairview - Madisonville 230kV | -164 |

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|---------------------------------------------|------|
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -147 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -46 |
| Toledo - VP Tap 138kV | Colfax - Rodemacher 230kV | -22 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | -14 |
| Conroe 1 - Conroe 2 138kV | Oak Ridge - Porter 138kV | 30 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Rodemacher 230kV | 55 |
| Toledo - VP Tap 138kV | Colfax - Montgomery 230kV | 74 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Montgomery 230kV | 89 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 101 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 103 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 111 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 150 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Montgomery 230kV | 158 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 182 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 196 |
| Plantation - Cedar Hill 138kV | Oak Ridge - Porter 138kV | 202 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 214 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 217 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 217 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 223 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |
| French Settlement - Sorrento 230kV | Franklin - Mcknight 500kV | 236 |

AMRN

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|----------------------------------------------|------|
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | -872 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | -872 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -760 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -295 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -266 |
| French Settlement - Sorrento 230kV | Fairview - Gypsy 230kV | -164 |
| French Settlement - Sorrento 230kV | Fairview - Madisonville 230kV | -138 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -56 |
| Toledo - VP Tap 138kV | Colfax - Rodemacher 230kV | -30 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | -15 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Rodemacher 230kV | 74 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Montgomery 230kV | 93 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 96 |
| Toledo - VP Tap 138kV | Colfax - Montgomery 230kV | 104 |

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------|---------------------------------------------|-----|
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 106 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 125 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 152 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 181 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 194 |
| French Settlement - Sorrento 230kV | Franklin - Mcknight 500kV | 205 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 210 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Montgomery 230kV | 212 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 213 |
| French Settlement - Sorrento 230kV | Front Street - Michoud 230kV | 213 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 215 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 219 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |

CLECO

| Limiting Element | Contingency Element | ATC |
|------------------------------------|---------------------------------------------|-----|
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 129 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 142 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 147 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 199 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 213 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 236 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 236 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 240 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 246 |

EES

| Limiting Element | Contingency Element | ATC |
|------------------------------------|-------------------------------------------|-----|
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 129 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 142 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 147 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 199 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 213 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 236 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 236 |

| Limiting Element | Contingency Element | ATC |
|------------------------------------|---------------------------------------------|-----|
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 240 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 246 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 129 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 142 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 147 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 199 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 213 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |

EMDE

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|----------------------------------------------|------|
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | -949 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | -949 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -642 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -267 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -224 |
| French Settlement - Sorrento 230kV | Fairview - Gypsy 230kV | -174 |
| French Settlement - Sorrento 230kV | Fairview - Madisonville 230kV | -147 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -53 |
| Toledo - VP Tap 138kV | Colfax - Rodemacher 230kV | -27 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | -14 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Rodemacher 230kV | 68 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Montgomery 230kV | 91 |
| Toledo - VP Tap 138kV | Colfax - Montgomery 230kV | 94 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 98 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 108 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 118 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 151 |
| Pleasant Hill 500/161kV transformer | ANO 500/161/22kV 3 Winding Transformer | 164 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 182 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Montgomery 230kV | 194 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 195 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 211 |
| French Settlement - Sorrento 230kV | Franklin - Mcknight 500kV | 214 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 214 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 216 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 220 |
| French Settlement - Sorrento 230kV | Front Street - Michoud 230kV | 227 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |

Lafa

| Limiting Element | Contingency Element | ATC |
|------------------------------------|---------------------------------------------|-------|
| Greenwood - Terrebonne 115kV | Webre - Wells 500kV | -1138 |
| Semere - Scott2 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | -407 |
| Semere - Scott2 138kV | Vil Plat (CLECO) - West Fork (CLECO) 230kV | -329 |
| Habetz - Richard 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | -180 |
| Habetz - Richard 138kV | Vil Plat (CLECO) - West Fork (CLECO) 230kV | -117 |
| Semere - Scott2 138kV | Wells 500/230kV transformer | -17 |
| Scott1 - Bonin 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | 19 |
| Scott1 - Bonin 138kV | Vil Plat (CLECO) - West Fork (CLECO) 230kV | 46 |
| Greenwood - Humphrey 115kV | Webre - Wells 500kV | 65 |
| Vatican - Colton Road 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | 89 |
| Vatican - Colton Road 138kV | Vil Plat (CLECO) - West Fork (CLECO) 230kV | 103 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 123 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 140 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 154 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 154 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 165 |
| Habetz - Richard 138kV | Wells 500/230kV transformer | 178 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 183 |
| Vatican - Colton Road 138kV | Richard - Wells 500kV | 186 |
| Habetz - Richard 138kV | Acadian - Bonin 230kV (Lafa) | 192 |
| Scott1 - Bonin 138kV | Wells 500/230kV transformer | 212 |
| Vatican - Scott1 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | 216 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (Lafa) 230kV | 221 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 224 |
| Vatican - Scott1 138kV | Vil Plat (CLECO) - West Fork (CLECO) 230kV | 229 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |

Lagn

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------|---------------------------------------------|-----|
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -71 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 102 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 112 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 151 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 158 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 177 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 190 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 211 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (Lafa) 230kV | 212 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 215 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 221 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |

| Limiting Element | Contingency Element | ATC |
|-----------------------------|----------------------------------|-----|
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |

LEPA

| Limiting Element | Contingency Element | ATC |
|-----------------------------|---------------------------------------------|-----|
| Bonin - Cecelia 138kV | Colonial Academy - Richard 138kV | -72 |
| Bonin - Cecelia 138kV | Acadia GSU - Colonial Academy 138kV | 46 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 103 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 104 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 107 |
| Bonin - Cecelia 138kV | Acadia GSU - Scanlan 138kV | 123 |
| Raceland - Coteau 115kV | Terrebonne 230/115kV transformer | 141 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 153 |

OKGE

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|----------------------------------------------|------|
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | -992 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | -992 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -570 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -249 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -199 |
| French Settlement - Sorrento 230kV | Fairview - Gypsy 230kV | -181 |
| French Settlement - Sorrento 230kV | Fairview - Madisonville 230kV | -152 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -51 |
| Toledo - VP Tap 138kV | Colfax - Rodemacher 230kV | -26 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | -14 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Rodemacher 230kV | 64 |
| Toledo - VP Tap 138kV | Colfax - Montgomery 230kV | 88 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Montgomery 230kV | 90 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 99 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 108 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 113 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 151 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 182 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Montgomery 230kV | 183 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 195 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 212 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 215 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 216 |
| French Settlement - Sorrento 230kV | Franklin - Mcknight 500kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 221 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |
| French Settlement - Sorrento 230kV | Front Street - Michoud 230kV | 235 |

SMEPA

| Limiting Element | Contingency Element | ATC |
|----------------------------------------------------------------|------------------------------------------------|------|
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | McAdams 500/230kV transformer 1 | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Eldorado EHV - Sterlington 500kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | McAdams - Pickens 230kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Canton - Pickens 230kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | SilverCreekTie(SMEPA) - Prentiss (SMEPA) 161kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Lakeover 500/115kV transformer | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Mosel (SMEPA) - Creek (SMEPA) 161kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Canton South - Canton 230kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Base Case | * |
| Jackson Miami - Jackson Monument Street 115kV | South Jackson 230/115kV transformer 1 | -928 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -433 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | -385 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | -385 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson Forrest Hill - Ray Braswell 115kV | -202 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson HICO - North Jackson 115kV | -178 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson HICO - Rex Brown E 115kV | -178 |
| French Settlement - Sorrento 230kV | Fairview - Gypsy 230kV | -102 |
| French Settlement - Sorrento 230kV | Fairview - Madisonville 230kV | -85 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -71 |
| Toledo - VP Tap 138kV | Colfax - Rodemacher 230kV | -45 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson Forrest Hill - Southwest Jackson 115kV | -38 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | -17 |
| Jackson Miami - Jackson Monument Street 115kV | Klean - Jackson Northeast 115kV | 4 |
| Jackson Miami - Jackson Monument Street 115kV | Ray Braswell - West Jackson 115kV | 44 |
| Jackson Miami - Jackson Monument Street 115kV | Klean - Flowood 115kV | 72 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 89 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 98 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Rodemacher 230kV | 103 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Montgomery 230kV | 110 |
| Jackson Miami - Jackson Monument Street 115kV | North Jackson - Jackson Canton Road 115kV | 116 |
| French Settlement - Sorrento 230kV | Front Street - Michoud 230kV | 129 |
| Toledo - VP Tap 138kV | Colfax - Montgomery 230kV | 154 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 157 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 157 |
| French Settlement - Sorrento 230kV | Franklin - Mcknight 500kV | 170 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 180 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 193 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 202 |

| Limiting Element | Contingency Element | ATC |
|------------------------------------|---------------------------------------------|-----|
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 205 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 211 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 214 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |

SOCO

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|----------------------------------------------|------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -967 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | -700 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | -700 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -352 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -338 |
| French Settlement - Sorrento 230kV | Fairview - Gypsy 230kV | -147 |
| French Settlement - Sorrento 230kV | Fairview - Madisonville 230kV | -123 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -63 |
| Toledo - VP Tap 138kV | Colfax - Rodemacher 230kV | -36 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | -16 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Rodemacher 230kV | 86 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 93 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Montgomery 230kV | 100 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 103 |
| Toledo - VP Tap 138kV | Colfax - Montgomery 230kV | 124 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 139 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 154 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 181 |
| French Settlement - Sorrento 230kV | Front Street - Michoud 230kV | 186 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 194 |
| French Settlement - Sorrento 230kV | Franklin - Mcknight 500kV | 203 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 207 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 210 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 214 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 215 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Montgomery 230kV | 247 |

SPA

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|----------------------------------------------|------------|
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | -953 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | -953 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -674 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -272 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -236 |
| French Settlement - Sorrento 230kV | Fairview - Gypsy 230kV | -174 |
| French Settlement - Sorrento 230kV | Fairview - Madisonville 230kV | -146 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -54 |
| Toledo - VP Tap 138kV | Colfax - Rodemacher 230kV | -28 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | -14 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Rodemacher 230kV | 69 |
| Pleasant Hill 500/161kV transformer | ANO 500/161/22kV 3 Winding Transformer | 83 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Montgomery 230kV | 91 |
| Toledo - VP Tap 138kV | Colfax - Montgomery 230kV | 96 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 98 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 107 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 119 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 151 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 181 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 195 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Montgomery 230kV | 197 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 211 |
| French Settlement - Sorrento 230kV | Franklin - Mcknight 500kV | 212 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 214 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 215 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 220 |
| French Settlement - Sorrento 230kV | Front Street - Michoud 230kV | 227 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |

TVA

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|------------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -882 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | -809 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | -809 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -324 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -308 |
| French Settlement - Sorrento 230kV | Fairview - Gypsy 230kV | -156 |
| French Settlement - Sorrento 230kV | Fairview - Madisonville 230kV | -131 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -59 |
| Toledo - VP Tap 138kV | Colfax - Rodemacher 230kV | -33 |

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|---------------------------------------------|------------|
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | -15 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Rodemacher 230kV | 80 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 95 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Montgomery 230kV | 96 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 104 |
| Toledo - VP Tap 138kV | Colfax - Montgomery 230kV | 114 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | 132 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 153 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 181 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 194 |
| French Settlement - Sorrento 230kV | Franklin - Mcknight 500kV | 197 |
| French Settlement - Sorrento 230kV | Front Street - Michoud 230kV | 201 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 208 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 211 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 215 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 217 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Toledo - Leesville (CLECO) 138kV | Colfax - Montgomery 230kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 231 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 231 |

3.3.2 DETAILS OF SCENARIO 2 - 2014

AECI

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|-------|
| Big Three - Carlyss 230kV | Hollywood - Roy S. Nelson 138kV | -4858 |
| Big Three - Carlyss 230kV | Hollywood - Orange 138kV | -4566 |
| Big Three - Carlyss 230kV | Marshall - Mossville 138kV | -4471 |
| Big Three - Carlyss 230kV | Toomey - Marshall 138kV | -4453 |
| Big Three - Carlyss 230kV | Orange - Toomey 138kV | -4289 |
| Big Three - Carlyss 230kV | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -3448 |
| McAdams 500/230kV transformer 1 | Choctaw MS (TVA) - Clay (TVA) 500kV | -3250 |
| Big Three - Carlyss 230kV | Colfax - Rodemacher 230kV | -3199 |
| Big Three - Carlyss 230kV | Clarence (CLECO) - Montgomery 230kV | -3162 |
| Big Three - Carlyss 230kV | Colfax - Montgomery 230kV | -3152 |
| Big Three - Carlyss 230kV | Clarence - Messick 230kV (CLECO) | -3085 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -644 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -470 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 68 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 71 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 77 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | 84 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | 84 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 134 |
| Hebert - Bayou Cove 138kV | Jennings - Bayou Cove 138kV | 201 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 226 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 239 |

AEPW

| Limiting Element | Contingency Element | ATC |
|---------------------------------|----------------------------------|-------|
| Cypress 500/138kV transformer 1 | Cypress 500/230kV transformer | -9190 |
| Cypress 500/230kV transformer | Cypress 500/138kV transformer 1 | -8342 |
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | -8015 |
| Big Three - Carlyss 230kV | Hartburg 500/230kV transformer 1 | -5062 |
| Big Three - Carlyss 230kV | Hartburg - Inland Orange 230kV | -5057 |
| Big Three - Carlyss 230kV | Bevil - Cypress 230kV | -4920 |
| Big Three - Carlyss 230kV | Inland - McLewis 230kV | -4914 |
| Big Three - Carlyss 230kV | Ameila Bulk - Bevil 230kV | -4809 |
| Big Three - Carlyss 230kV | Helbig - McLewis 230kV | -4791 |
| Big Three - Carlyss 230kV | Hollywood - Roy S. Nelson 138kV | -3837 |
| Big Three - Carlyss 230kV | Amelia Bulk - China Bulk 230kV | -3772 |
| Big Three - Carlyss 230kV | Cypress 500/138kV transformer 1 | -3641 |
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -3301 |
| Amelia Bulk - Helbig 230kV | Cypress - Hartburg 500kV | -2761 |
| Big Three - Carlyss 230kV | Base Case | -1971 |

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|------|
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -543 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -397 |
| Plantation - Cedar Hill 138kV | Oak Ridge - Porter 138kV | -357 |
| Cedar Hill - Tamina 138kV | Oak Ridge - Porter 138kV | -313 |
| Conroe Bulk2 - Plantation 138kV | Oak Ridge - Porter 138kV | -21 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 69 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 72 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 78 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 78 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | 101 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | 101 |
| Hebert - Bayou Cove 138kV | Jennings - Bayou Cove 138kV | 171 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 228 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 241 |

AMRN

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|-------|
| Big Three - Carlyss 230kV | Colfax - Rodemacher 230kV | -3304 |
| Big Three - Carlyss 230kV | Colfax - Montgomery 230kV | -3256 |
| McAdams 500/230kV transformer 1 | Choctaw MS (TVA) - Clay (TVA) 500kV | -3211 |
| Big Three - Carlyss 230kV | Roy S. Nelson - Richard 500kV | -3027 |
| Big Three - Carlyss 230kV | Franklin - Mcknight 500kV | -2699 |
| Big Three - Carlyss 230kV | Webre - Wells 500kV | -2252 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -658 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -481 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 68 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 71 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 76 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | 81 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | 81 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 142 |
| Hebert - Bayou Cove 138kV | Jennings - Bayou Cove 138kV | 207 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 226 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 239 |

CLECO

| Limiting Element | Contingency Element | ATC |
|------------------------------------|---------------------------------------------|-------|
| Big Three - Carlyss 230kV | Hartburg - Roy S. Nelson 500kV | -4492 |
| Roy S. Nelson 500/230kV auto | Cypress - Hartburg 500kV | -463 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 76 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 79 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 86 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 248 |

EES

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------------------|----------------------------------------|-------|
| Inland - McLewis 230kV | Cypress - Hartburg 500kV | -8453 |
| Helbig - McLewis 230kV | Cypress - Hartburg 500kV | -8078 |
| Hartburg - Inland Orange 230kV - Supplemental Upgrade | Cypress - Hartburg 500kV | -8060 |
| Hartburg - Inland Orange 230kV | Cypress - Hartburg 500kV | -7988 |
| Inland - McLewis 230kV - Supplemental Upgrade | Cypress - Hartburg 500kV | -7644 |
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | -7310 |
| Cypress 500/138kV transformer 1 | Cypress 500/230kV transformer | -6332 |
| Hartburg 500/230kV transformer 1 | Cypress - Hartburg 500kV | -5925 |
| Cypress 500/230kV transformer | Cypress 500/138kV transformer 1 | -5571 |
| Bevil - Cypress 230kV | Hartburg 500/230kV transformer 1 | -4856 |
| Bevil - Cypress 230kV | Hartburg - Inland Orange 230kV | -4843 |
| Big Three - Carlyss 230kV | Hartburg 500/230kV transformer 1 | -4707 |
| Big Three - Carlyss 230kV | Hartburg - Inland Orange 230kV | -4702 |
| Big Three - Carlyss 230kV | Inland - McLewis 230kV | -4588 |
| Big Three - Carlyss 230kV | Bevil - Cypress 230kV | -4579 |
| Bevil - Cypress 230kV | Inland - McLewis 230kV | -4548 |
| Big Three - Carlyss 230kV | Ameila Bulk - Bevil 230kV | -4493 |
| Big Three - Carlyss 230kV | Helbig - McLewis 230kV | -4486 |
| Ameila Bulk - Bevil 230kV | Hartburg 500/230kV transformer 1 | -4361 |
| Ameila Bulk - Bevil 230kV | Hartburg - Inland Orange 230kV | -4348 |
| Bevil - Cypress 230kV | Helbig - McLewis 230kV | -4283 |
| Big Three - Carlyss 230kV | Crockett - Grimes 345kV | -4071 |
| Ameila Bulk - Bevil 230kV | Inland - McLewis 230kV | -4040 |
| Big Three - Carlyss 230kV | LeBrock (AEPW) - TenRusk (AEPW) 345kV | -3872 |
| Big Three - Carlyss 230kV | TenRusk (AEPW) - Crockett (AEPW) 345kV | -3853 |
| Ameila Bulk - Bevil 230kV | Helbig - McLewis 230kV | -3766 |
| Inland - McLewis 230kV | Bevil - Cypress 230kV | -3126 |
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -3037 |
| Inland - McLewis 230kV | Ameila Bulk - Bevil 230kV | -2888 |
| Cypress 500/138kV transformer 1 | Hartburg 500/230kV transformer 1 | -2799 |
| Amelia Bulk - Helbig 230kV | Cypress - Hartburg 500kV | -2792 |
| Cypress 500/138kV transformer 1 | Hartburg - Inland Orange 230kV | -2791 |

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------------------|-----------------------------------------------------|-------|
| Carlyss - Roy S. Nelson 230kV | Roy S. Nelson - Verdine 230kV | -2741 |
| Hartburg - Inland Orange 230kV - Supplemental Upgrade | Bevil - Cypress 230kV | -2696 |
| Hartburg - Inland Orange 230kV | Bevil - Cypress 230kV | -2594 |
| Cypress 500/138kV transformer 1 | Inland - McLewis 230kV | -2593 |
| Helbig - McLewis 230kV | Bevil - Cypress 230kV | -2499 |
| Hartburg - Inland Orange 230kV - Supplemental Upgrade | Ameila Bulk - Bevil 230kV | -2459 |
| Cypress 500/138kV transformer 1 | Helbig - McLewis 230kV | -2420 |
| Hartburg - Inland Orange 230kV | Ameila Bulk - Bevil 230kV | -2356 |
| Helbig - McLewis 230kV | Ameila Bulk - Bevil 230kV | -2251 |
| Mossville - Roy S. Nelson 138kV | Hartburg - Roy S. Nelson 500kV | -2119 |
| Inland - McLewis 230kV - Supplemental Upgrade | Bevil - Cypress 230kV | -1977 |
| Big Three - Carlyss 230kV | Base Case | -1964 |
| Carlyss - Roy S. Nelson 230kV | PPG - Verdine 230kV | -1829 |
| Inland - McLewis 230kV - Supplemental Upgrade | Ameila Bulk - Bevil 230kV | -1727 |
| Bevil - Cypress 230kV | Big Three - Carlyss 230kV | -1181 |
| Cypress 500/138kV transformer 1 | Crockett - Grimes 345kV | -1143 |
| Bevil - Cypress 230kV | Big Three - Sabine 230kV | -1031 |
| PPG - Verdine 230kV | Carlyss - Roy S. Nelson 230kV | -803 |
| Cypress 500/138kV transformer 1 | LeBrock (AEPW) - TenRusk (AEPW) 345kV | -799 |
| Roy S. Nelson - Verdine 230kV | Carlyss - Roy S. Nelson 230kV | -785 |
| Cypress 500/138kV transformer 1 | TenRusk (AEPW) - Crockett (AEPW) 345kV | -767 |
| Bevil - Cypress 230kV | Cypress - Lumberton 138kV | -761 |
| Cypress 500/138kV transformer 1 | Big Three - Carlyss 230kV | -741 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -696 |
| Cypress 500/138kV transformer 1 | Big Three - Sabine 230kV | -636 |
| Bevil - Cypress 230kV | Kountze - Lumberton 138kV | -599 |
| Ameila Bulk - Bevil 230kV | Big Three - Carlyss 230kV | -519 |
| Roy S. Nelson 500/230kV auto | Cypress - Hartburg 500kV | -512 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -509 |
| Ameila Bulk - Bevil 230kV | Big Three - Sabine 230kV | -363 |
| Bevil - Cypress 230kV | Cypress - Honey 138kV | -260 |
| Bevil - Cypress 230kV | Bragg - Honey 138kV | -69 |
| Ameila Bulk - Bevil 230kV | Cypress - Lumberton 138kV | 10 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 62 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 65 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 70 |
| Willow Glen 500/230kV Transformer | Willow Glen - Willow Glen 2 500/138kV transformer 1 | 102 |
| Hebert - Bayou Cove 138kV | Jennings - Bayou Cove 138kV | 157 |
| Ameila Bulk - Bevil 230kV | Kountze - Lumberton 138kV | 181 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 225 |
| Roy S. Nelson - Verdine 230kV | Cypress - Hartburg 500kV | 226 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |

| Limiting Element | Contingency Element | ATC |
|-------------------------------|----------------------------------|-----|
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 238 |
| Cypress 500/230kV transformer | Hartburg 500/230kV transformer 1 | 242 |

EMDE

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|--------|
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | -10800 |
| Big Three - Carlyss 230kV | Amelia Bulk - China Bulk 230kV | -4692 |
| Big Three - Carlyss 230kV | Hollywood - Roy S. Nelson 138kV | -4609 |
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -4448 |
| Big Three - Carlyss 230kV | Hollywood - Orange 138kV | -4332 |
| Big Three - Carlyss 230kV | Marshall - Mossville 138kV | -4241 |
| Big Three - Carlyss 230kV | Toomey - Marshall 138kV | -4224 |
| Big Three - Carlyss 230kV | Orange - Toomey 138kV | -4069 |
| McAdams 500/230kV transformer 1 | Choctaw MS (TVA) - Clay (TVA) 500kV | -3562 |
| Big Three - Carlyss 230kV | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -3249 |
| Big Three - Carlyss 230kV | Eldorado EHV - Sterlington 500kV | -3140 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -620 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -453 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 68 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 71 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 77 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | 88 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | 88 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 120 |
| Hebert - Bayou Cove 138kV | Jennings - Bayou Cove 138kV | 193 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 226 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 240 |

LAFA

| Limiting Element | Contingency Element | ATC |
|------------------------|---------------------------------------------|------|
| Semere - Scott2 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | -740 |
| Semere - Scott2 138kV | Vil Plat (CLECO) - West Fork (CLECO) 230kV | -663 |
| Habetz - Richard 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | -408 |
| Habetz - Richard 138kV | Vil Plat (CLECO) - West Fork (CLECO) 230kV | -345 |
| Semere - Scott2 138kV | Wells 500/230kV transformer | -319 |
| Habetz - Richard 138kV | Acadian - Bonin 230kV (LAFA) | -20 |
| Habetz - Richard 138kV | Wells 500/230kV transformer | -14 |
| Scott1 - Bonin 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | 0 |
| Scott1 - Bonin 138kV | Vil Plat (CLECO) - West Fork (CLECO) 230kV | 27 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 71 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 74 |

| Limiting Element | Contingency Element | ATC |
|------------------------------------|--------------------------------------------|-----|
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 80 |
| Habetz - Richard 138kV | Flander - Acadian 230kV (LAFA) | 105 |
| Vatican - Colton Road 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | 130 |
| Vatican - Colton Road 138kV | Vil Plat (CLECO) - West Fork (CLECO) 230kV | 143 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 192 |
| Colonial Academy - Richard 138kV | Cocodrie (CLECO) - Vil Plat (CLECO) 230kV | 202 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 203 |
| Scott1 - Bonin 138kV | Wells 500/230kV transformer | 215 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 221 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - Krotz Spring 138kV | 237 |
| Scott1 - Bonin 138kV | Judice - Scott1 138kV | 242 |
| Scott1 - Bonin 138kV | Cocodrie - Vil Plat 230kV | 248 |

LAGN

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------|---------------------------------------------|-------|
| Big Three - Carlyss 230kV | Hartburg - Roy S. Nelson 500kV | -1502 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -799 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -584 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 69 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 72 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 78 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 221 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 234 |

LEPA

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------|-----------------------------------------------------|------|
| Willow Glen 500/230kV Transformer | Coly 500/230kV transformer | -470 |
| Bonin - Cecelia 138kV | Colonial Academy - Richard 138kV | -183 |
| Bonin - Cecelia 138kV | Acadia GSU - Colonial Academy 138kV | -61 |
| Coly - Vignes 230kV - Supplemental Upgrade | A.A.C. - Polsky Carville 230kV | 12 |
| Bonin - Cecelia 138kV | Acadia GSU - Scanlan 138kV | 19 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 33 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 35 |
| Coly - Vignes 230kV - Supplemental Upgrade | A.A.C. - Licar 230kV | 36 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 37 |
| Willow Glen 500/230kV Transformer | Willow Glen - Willow Glen 2 500/138kV transformer 1 | 68 |
| Coly - Vignes 230kV - Supplemental Upgrade | Belle Helene - Licar 230kV | 120 |

OKGE

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|-------|
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | -9901 |
| Big Three - Carlyss 230kV | Hartburg 500/230kV transformer 1 | -5953 |
| Big Three - Carlyss 230kV | Hartburg - Inland Orange 230kV | -5947 |
| Big Three - Carlyss 230kV | Inland - McLewis 230kV | -5778 |
| Big Three - Carlyss 230kV | Bevil - Cypress 230kV | -5773 |
| Big Three - Carlyss 230kV | Ameila Bulk - Bevil 230kV | -5643 |
| Big Three - Carlyss 230kV | Helbig - McLewis 230kV | -5634 |
| Big Three - Carlyss 230kV | Amelia Bulk - China Bulk 230kV | -4403 |
| Big Three - Carlyss 230kV | Hollywood - Roy S. Nelson 138kV | -4367 |
| Big Three - Carlyss 230kV | Cypress 500/138kV transformer 1 | -4218 |
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -4077 |
| McAdams 500/230kV transformer 1 | Choctaw MS (TVA) - Clay (TVA) 500kV | -3837 |
| Big Three - Carlyss 230kV | Base Case | -2247 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -597 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -436 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 68 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 71 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 77 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | 92 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | 92 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 106 |
| Hebert - Bayou Cove 138kV | Jennings - Bayou Cove 138kV | 186 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 227 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 240 |

SMEPA

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|------------------------------------------------|-------|
| Big Three - Carlyss 230kV | Webre - Wells 500kV | -2565 |
| Big Three - Carlyss 230kV | Hartburg - Roy S. Nelson 500kV | -2526 |
| Jackson Miami - Jackson Monument Street 115kV | South Jackson 230/115kV transformer 1 | -1594 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -830 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson HICO - North Jackson 115kV | -772 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson HICO - Rex Brown E 115kV | -772 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson Forrest Hill - Ray Braswell 115kV | -760 |
| Rex Brown W - Rex Brown C 115kV ckt 1 | South Jackson 230/115kV transformer 1 | -658 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -606 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson Forrest Hill - Southwest Jackson 115kV | -595 |
| Jackson Miami - Jackson Monument Street 115kV | Klean - Jackson Northeast 115kV | -569 |
| Rex Brown W - Rex Brown C 115kV ckt 1 | Ray Braswell 500/115kV transformer 1 | -560 |
| Jackson Miami - Jackson Monument Street 115kV | Choctaw MS (TVA) - Clay (TVA) 500kV | -505 |
| Jackson Miami - Jackson Monument Street 115kV | Klean - Flowood 115kV | -501 |

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------------------|------------------------------------------------|------|
| Jackson Miami - Jackson Monument Street 115kV | North Jackson - Jackson Canton Road 115kV | -478 |
| Jackson Miami - Jackson Monument Street 115kV | Lake Castle - Lakeover 230kV | -445 |
| Jackson Miami - Rex Brown 115kV | South Jackson 230/115kV transformer 1 | -259 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Choctaw MS (TVA) - Clay (TVA) 500kV | -100 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Bogalusa - Adams Creek 500/230kV transformer | -42 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Bogalusa - Franklin 500kV | -42 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | 36 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | 36 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 65 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 68 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 74 |
| Philadelphia MS (TVA) - South Philadelphia 161kV | Philadelphia MS (TVA) - Sebastopol (TVA) 161kV | 106 |
| Florence - South Jackson 115kV - Supplemental Upgrade | South Jackson - Pop Spring 115kV | 124 |
| Columbus MS (TVA) - Weyerhouser Tap (TVA) 161kV | Sturgis MS (TVA) - NW Louisville (TVA) 161kV | 145 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Georgetown - Pop Spring 115kV | 146 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Kemper (SOCO) - Kemper1 (SOCO) 230kV | 152 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Georgetown - Silver Creek 115kV | 153 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Franklin - Grand Gulf 500kV | 166 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Sebastopol (TVA) - Five Points MS (TVA) 161kV | 171 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Homewood (SMEPA) - Five Points MS (TVA) 161kV | 194 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 225 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 238 |

SOCO

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|-------|
| McAdams 500/230kV transformer 1 | Choctaw MS (TVA) - Clay (TVA) 500kV | -3659 |
| Big Three - Carlyss 230kV | Webre - Wells 500kV | -2400 |
| Big Three - Carlyss 230kV | Hartburg - Roy S. Nelson 500kV | -1926 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -733 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -535 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | 65 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | 65 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 66 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 70 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 75 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 180 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 225 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 239 |

SPA

| Limiting Element | Contingency Element | ATC |
|------------------------------------------------------------|---------------------------------------------|-------|
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | * |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Franklin - Grand Gulf 500kV | * |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Eldorado EHV - Sheridan 500kV | * |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Baxter Wilson - Ray Braswell 500kV | * |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Richard - Wells 500kV | * |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Livonia - Wilbert 138kV | * |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Livonia - Line 642 Tap 138kV | * |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Krotz Spring - Line 642 Tap 138kV | * |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Etta - McNeil 500kv | * |
| Big Three - Carlyss 230kV | Amelia Bulk - China Bulk 230kV | -4781 |
| Sterlington - Perryville 500kV ckt2 - Supplemental Upgrade | Base Case | * |
| Big Three - Carlyss 230kV | Hollywood - Roy S. Nelson 138kV | -4674 |
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -4585 |
| Big Three - Carlyss 230kV | Hollywood - Orange 138kV | -4393 |
| Big Three - Carlyss 230kV | Marshall - Mossville 138kV | -4301 |
| Big Three - Carlyss 230kV | Toomey - Marshall 138kV | -4284 |
| Big Three - Carlyss 230kV | Orange - Toomey 138kV | -4126 |
| McAdams 500/230kV transformer 1 | Choctaw MS (TVA) - Clay (TVA) 500kV | -3492 |
| Big Three - Carlyss 230kV | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -3308 |
| Big Three - Carlyss 230kV | Eldorado EHV - Sterlington 500kV | -3172 |

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|------|
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -626 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -458 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 68 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 71 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 77 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | 88 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | 88 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 126 |
| Hebert - Bayou Cove 138kV | Jennings - Bayou Cove 138kV | 194 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 226 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 240 |

TVA

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------------|-------|
| Big Three - Carlyss 230kV | Roy S. Nelson - Richard 500kV | -3316 |
| Big Three - Carlyss 230kV | Webre - Wells 500kV | -2339 |
| Big Three - Carlyss 230kV | Hartburg - Roy S. Nelson 500kV | -1739 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -698 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -510 |
| Big Three - Carlyss 230kV | Roy S. Nelson 500/230kV auto | -424 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Labbe (LAFA) 230kV | 67 |
| Judice - Scott1 138kV | Sellers Road (CLECO) - Segura (CLECO) 230kV | 70 |
| French Settlement - Sorrento 230kV | Bogalusa - Adams Creek 500/230kV transformer | 75 |
| French Settlement - Sorrento 230kV | Bogalusa - Franklin 500kV | 75 |
| Judice - Scott1 138kV | Segura (CLECO) 230/138kV transformer' | 76 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 166 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 226 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 239 |

3.3.3 DETAILS OF SCENARIO 3 - 2014

AECI

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|------|
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -828 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -635 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 38 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| East Leesville - Leesville 230kV (CLECO) | Colfax - Rodemacher 230kV | 248 |

AEPW

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|-------|
| Cypress 500/138kV transformer 1 | Cypress 500/230kV transformer | -8201 |
| Cypress 500/230kV transformer | Cypress 500/138kV transformer 1 | -7402 |
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -3217 |
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | -1805 |
| Amelia Bulk - Helbig 230kV | Cypress - Hartburg 500kV | -1518 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -684 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -525 |
| Cypress 500/138kV transformer 1 | Big Three - Carlyss 230kV | -445 |
| Cypress 500/138kV transformer 1 | Big Three - Sabine 230kV | -314 |
| Plantation - Cedar Hill 138kV | Oak Ridge - Porter 138kV | -183 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 22 |
| Conroe Bulk2 - Plantation 138kV | Oak Ridge - Porter 138kV | 164 |
| East Leesville - Leesville 230kV (CLECO) | Colfax - Rodemacher 230kV | 205 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Leesville 230/138kV transformer (CLECO) | Colfax - Rodemacher 230kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Hebert - Bayou Cove 138kV | Jennings - Bayou Cove 138kV | 231 |

AMRN

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|------|
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -850 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -652 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 40 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |

CLECO

| Limiting Element | Contingency Element | ATC |
|------------------------------------|------------------------------------|-----|
| Roy S. Nelson 500/230kV auto | Cypress - Hartburg 500kV | -89 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |

EES

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------------------|----------------------------------------|-------|
| Hartburg - Inland Orange 230kV - Supplemental Upgrade | Cypress - Hartburg 500kV | -6673 |
| Inland - McLewis 230kV - Supplemental Upgrade | Cypress - Hartburg 500kV | -6210 |
| Helbig - McLewis 230kV | Cypress - Hartburg 500kV | -5835 |
| Cypress 500/138kV transformer 1 | Cypress 500/230kV transformer | -5616 |
| Cypress 500/230kV transformer | Cypress 500/138kV transformer 1 | -4920 |
| Hartburg - Inland Orange 230kV | Cypress - Hartburg 500kV | -4799 |
| Hartburg 500/230kV transformer 1 | Cypress - Hartburg 500kV | -4545 |
| Inland - McLewis 230kV | Cypress - Hartburg 500kV | -4305 |
| Bevil - Cypress 230kV | Hartburg 500/230kV transformer 1 | -4083 |
| Bevil - Cypress 230kV | Hartburg - Inland Orange 230kV | -4073 |
| Bevil - Cypress 230kV | Inland - McLewis 230kV | -3764 |
| Ameila Bulk - Bevil 230kV | Hartburg 500/230kV transformer 1 | -3588 |
| Ameila Bulk - Bevil 230kV | Hartburg - Inland Orange 230kV | -3578 |
| Bevil - Cypress 230kV | Helbig - McLewis 230kV | -3519 |
| Ameila Bulk - Bevil 230kV | Inland - McLewis 230kV | -3257 |
| Ameila Bulk - Bevil 230kV | Helbig - McLewis 230kV | -3002 |
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -2918 |
| Willow Glen - Evergreen 230kV ckt 2 | Bayou Laboutte 500/230kV transformer 1 | -2667 |
| Willow Glen - Evergreen 230kV ckt 2 | Iberville - Bayou Laboutte 230kV | -2655 |
| Carlyss - Roy S. Nelson 230kV | Roy S. Nelson - Verdine 230kV | -2551 |
| Cypress 500/138kV transformer 1 | Hartburg 500/230kV transformer 1 | -2029 |
| Cypress 500/138kV transformer 1 | Hartburg - Inland Orange 230kV | -2023 |
| Mossville - Roy S. Nelson 138kV | Hartburg - Roy S. Nelson 500kV | -1976 |
| Cypress 500/138kV transformer 1 | Inland - McLewis 230kV | -1819 |
| Cypress 500/138kV transformer 1 | Helbig - McLewis 230kV | -1659 |
| Carlyss - Roy S. Nelson 230kV | PPG - Verdine 230kV | -1634 |
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | -1623 |
| Amelia Bulk - Helbig 230kV | Cypress - Hartburg 500kV | -1525 |
| Hartburg - Inland Orange 230kV - Supplemental Upgrade | Bevil - Cypress 230kV | -1311 |
| Hartburg - Inland Orange 230kV - Supplemental Upgrade | Ameila Bulk - Bevil 230kV | -1071 |
| Bevil - Cypress 230kV | Big Three - Carlyss 230kV | -999 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -902 |
| Bevil - Cypress 230kV | Big Three - Sabine 230kV | -854 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -692 |
| PPG - Verdine 230kV | Carlyss - Roy S. Nelson 230kV | -626 |
| Roy S. Nelson - Verdine 230kV | Carlyss - Roy S. Nelson 230kV | -618 |

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|----------------------------------------|------|
| Cypress 500/138kV transformer 1 | Crockett - Grimes 345kV | -575 |
| Bevil - Cypress 230kV | Cypress - Lumberton 138kV | -532 |
| Inland - McLewis 230kV - Supplemental Upgrade | Bevil - Cypress 230kV | -521 |
| Bevil - Cypress 230kV | Kountze - Lumberton 138kV | -378 |
| Ameila Bulk - Bevil 230kV | Big Three - Carlyss 230kV | -360 |
| Cypress 500/138kV transformer 1 | Big Three - Carlyss 230kV | -340 |
| Cypress 500/138kV transformer 1 | LeBrock (AEPW) - TenRusk (AEPW) 345kV | -284 |
| Inland - McLewis 230kV - Supplemental Upgrade | Ameila Bulk - Bevil 230kV | -267 |
| Cypress 500/138kV transformer 1 | TenRusk (AEPW) - Crockett (AEPW) 345kV | -255 |
| Cypress 500/138kV transformer 1 | Big Three - Sabine 230kV | -240 |
| Ameila Bulk - Bevil 230kV | Big Three - Sabine 230kV | -210 |
| Roy S. Nelson 500/230kV auto | Cypress - Hartburg 500kV | -90 |
| Bevil - Cypress 230kV | Cypress - Honey 138kV | -17 |
| Helbig - McLewis 230kV | Bevil - Cypress 230kV | 116 |
| Bevil - Cypress 230kV | Bragg - Honey 138kV | 164 |
| Ameila Bulk - Bevil 230kV | Cypress - Lumberton 138kV | 199 |
| Hebert - Bayou Cove 138kV | Jennings - Bayou Cove 138kV | 212 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |

EMDE

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|-------|
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -4345 |
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | -2438 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -794 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -609 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 34 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| East Leesville - Leesville 230kV (CLECO) | Colfax - Rodemacher 230kV | 238 |

LAFa

| Limiting Element | Contingency Element | ATC |
|------------------------------------|------------------------------------|-----|
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 235 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 246 |

LAGN

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------|------------------------------------|-------|
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -1042 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -799 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |

LEPA

| Limiting Element | Contingency Element | ATC |
|-------------------------------------|----------------------------------------|-------|
| Willow Glen - Evergreen 230kV ckt 2 | Bayou Laboutte 500/230kV transformer 1 | -1442 |
| Willow Glen - Evergreen 230kV ckt 2 | Iberville - Bayou Laboutte 230kV | -1435 |
| Bonin - Cecelia 138kV | Colonial Academy - Richard 138kV | 87 |

OKGE

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|-------|
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -3980 |
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | -2232 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -760 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -583 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 30 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| East Leesville - Leesville 230kV (CLECO) | Colfax - Rodemacher 230kV | 228 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Leesville 230/138kV transformer (CLECO) | Colfax - Rodemacher 230kV | 244 |

SMEPA

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|------------------------------------------------|-------|
| Jackson Miami - Jackson Monument Street 115kV | South Jackson 230/115kV transformer 1 | -1441 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -1115 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -855 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson Forrest Hill - Ray Braswell 115kV | -558 |
| Jackson Miami - Jackson Monument Street 115kV | Klean - Jackson Northeast 115kV | -440 |
| Rex Brown W - Rex Brown C 115kV ckt 1 | South Jackson 230/115kV transformer 1 | -423 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson HICO - North Jackson 115kV | -415 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson HICO - Rex Brown E 115kV | -415 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson Forrest Hill - Southwest Jackson 115kV | -399 |
| Jackson Miami - Jackson Monument Street 115kV | Klean - Flowood 115kV | -375 |
| Jackson Miami - Jackson Monument Street 115kV | Choctaw MS (TVA) - Clay (TVA) 500kV | -285 |
| Jackson Miami - Jackson Monument Street 115kV | Lake Castle - Lakeover 230kV | -265 |
| Jackson Miami - Jackson Monument Street 115kV | Ray Braswell - West Jackson 115kV | -233 |
| Rex Brown W - Rex Brown C 115kV ckt 1 | Ray Braswell 500/115kV transformer 1 | -194 |
| Florence - South Jackson 115kV - Supplemental | Choctaw MS (TVA) - Clay (TVA) 500kV | -171 |

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------------------|------------------------------------------------|------|
| Upgrade | | |
| Jackson Miami - Rex Brown 115kV | South Jackson 230/115kV transformer 1 | -135 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Bogalusa - Adams Creek 500/230kV transformer | -89 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Bogalusa - Franklin 500kV | -89 |
| Florence - South Jackson 115kV - Supplemental Upgrade | South Jackson - Pop Spring 115kV | 49 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Kemper (SOCO) - Kemper1 (SOCO) 230kV | 59 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Georgetown - Pop Spring 115kV | 71 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Franklin - Grand Gulf 500kV | 76 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Georgetown - Silver Creek 115kV | 77 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Sebastopol (TVA) - Five Points MS (TVA) 161kV | 104 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Sturgis MS (TVA) - NW Louisville (TVA) 161kV | 110 |
| Philadelphia MS (TVA) - South Philadelphia 161kV | Philadelphia MS (TVA) - Sebastopol (TVA) 161kV | 179 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Columbus MS (TVA) - Weyerhouser Tap (TVA) 161kV | Sturgis MS (TVA) - NW Louisville (TVA) 161kV | 226 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Base Case | 241 |

SOCO

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|------|
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -962 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -737 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 51 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |

SPA

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|-------|
| Big Three - Sabine 230kV | Cypress - Hartburg 500kV | -4480 |
| Big Three - Carlyss 230kV | Cypress - Hartburg 500kV | -2513 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -803 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -616 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 36 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |

| Limiting Element | Contingency Element | ATC |
|------------------------------------------|-----------------------------|------------|
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| East Leesville - Leesville 230kV (CLECO) | Colfax - Rodemacher 230kV | 240 |

TVA

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|------------|
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -908 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -697 |
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | 47 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |

3.3.4 DETAILS OF SCENARIO 4 - 2014

AECI

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|---------------------------------------------|------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -520 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -239 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -45 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -19 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -16 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 36 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 46 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 165 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 219 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 230 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | 234 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 249 |

AEPW

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|---------------------------------------------|------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -306 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -197 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -37 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -11 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -11 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 38 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 47 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 163 |
| Conroe 1 - Conroe 2 138kV | Oak Ridge - Porter 138kV | 219 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 220 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | 224 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 232 |

AMRN

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -549 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -245 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -46 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -20 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -16 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 36 |

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|-----------------------------------------|-----|
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 45 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 166 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 218 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | 238 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 249 |

CLECO

| Limiting Element | Contingency Element | ATC |
|------------------------------------|------------------------------------|-----|
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 47 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 60 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 160 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 240 |

EES

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------|---------------------------------------------|-------|
| Willow Glen - Evergreen 230kV ckt 2 | Bayou Laboutte 500/230kV transformer 1 | -2628 |
| Willow Glen - Evergreen 230kV ckt 2 | Iberville - Bayou Laboutte 230kV | -2619 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -260 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -49 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -27 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 37 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 46 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 165 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 217 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 229 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 247 |

EMDE

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|---------------------------------------------|------------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -464 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -229 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -43 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -17 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -15 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 36 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 46 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 165 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 219 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 231 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | 231 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 249 |

Lafa

| Limiting Element | Contingency Element | ATC |
|------------------------------------|-----------------------------------------|------------|
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 49 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 62 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 135 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 191 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 201 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 218 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |

LAGN

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------|-----------------------------------------|------------|
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -322 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -61 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 38 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 48 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 164 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 214 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 225 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 243 |

LEPA

| Limiting Element | Contingency Element | ATC |
|-------------------------------------|----------------------------------------|-------|
| Willow Glen - Evergreen 230kV ckt 2 | Bayou Laboutte 500/230kV transformer 1 | -1421 |
| Willow Glen - Evergreen 230kV ckt 2 | Iberville - Bayou Laboutte 230kV | -1416 |

OKGE

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|---------------------------------------------|------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -414 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -219 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -41 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -15 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -14 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 37 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 46 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 164 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 219 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | 229 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 231 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 250 |

SMEPA

| Limiting Element | Contingency Element | ATC |
|----------------------------------------------------------------|-------------------------------------------|-------|
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | McAdams - Pickens 230kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Eldorado EHV - Sterlington 500kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Canton - Pickens 230kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Magee (SMEPA) - Creek 161kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Colum (SMEPA) - SW Lonestar (SMEPA) 161kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Canton South - Canton 230kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Pelahatchie - Rankin 115kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Mosel (SMEPA) - Creek (SMEPA) 161kV | * |
| Ray Braswell 500/230kV transformer ckt2 - Supplemental Upgrade | Base Case | * |
| Jackson Miami - Jackson Monument Street 115kV | South Jackson 230/115kV transformer 1 | -1094 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson Forrest Hill - Ray Braswell 115kV | -441 |
| Jackson Miami - Jackson Monument Street 115kV | Klean - Jackson Northeast 115kV | -331 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -322 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson HICO - North Jackson 115kV | -302 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson HICO - Rex Brown E 115kV | -302 |
| Jackson Miami - Jackson Monument Street 115kV | Jackson Forrest Hill - Southwest Jackson | -282 |

| Limiting Element | Contingency Element | ATC |
|-------------------------------------------------------|----------------------------------------------|------|
| | 115kV | |
| Jackson Miami - Jackson Monument Street 115kV | Klean - Flowood 115kV | -266 |
| Jackson Miami - Jackson Monument Street 115kV | Ray Braswell - West Jackson 115kV | -176 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -60 |
| Jackson Miami - Jackson Monument Street 115kV | North Jackson - Jackson Canton Road 115kV | -42 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -25 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 33 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 42 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Bogalusa - Adams Creek 500/230kV transformer | 169 |
| Florence - South Jackson 115kV - Supplemental Upgrade | Bogalusa - Franklin 500kV | 169 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 171 |
| Jackson Miami - Rex Brown 115kV | South Jackson 230/115kV transformer 1 | 211 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 217 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 229 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 247 |

SOCO

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -702 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -277 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -52 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -26 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -20 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 35 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 44 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 168 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 218 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 248 |

SPA

| Limiting Element | Contingency Element | ATC |
|-----------------------------------------------|---------------------------------------------|------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -486 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -232 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -44 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -18 |

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|---------------------------------------------|-----|
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -15 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 36 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 46 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 165 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 219 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 231 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | 231 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 249 |

TVA

| Limiting Element | Contingency Element | ATC |
|--------------------------------------------------|---------------------------------------------|------|
| International Paper - Mansfield 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -636 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Rodemacher 230kV | -261 |
| East Leesville - Rodemacher 230kV (CLECO) | Colfax - Montgomery 230kV | -49 |
| International Paper - Wallake 138kV (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -24 |
| Carroll 230/138kV transformer (CLECO) | Dolet Hills - S.W. Shreveport 345kV (CLECO) | -18 |
| Conway - Wyandotte 138kV | T300/331 - Willow Glen 138kV | 35 |
| Conway - Wyandotte 138kV | Oak Grove - T300/331 138kV | 45 |
| Vatican - Colton Road 138kV | Webre - Wells 500kV | 167 |
| Vatican - Colton Road 138kV | Cocodrie - Vil Plat 230kV | 218 |
| Vatican - Colton Road 138kV | East Opelousas - Colton Road 138kV | 220 |
| East Opelousas - Colton Road 138kV | Vatican - Colton Road 138kV | 220 |
| Vatican - Colton Road 138kV | Vil Plat - West Fork 230kV | 230 |
| Vatican - Colton Road 138kV | Champagne - East Opelousas 138kV | 230 |
| Champagne - East Opelousas 138kV | Vatican - Colton Road 138kV | 230 |
| Beaver Creek 115/138kV phase shifter transformer | Colfax - Rodemacher 230kV | 244 |
| Vatican - Colton Road 138kV | Wells (CLECO) - West Fork (CLECO) 230kV | 248 |

APPENDIX A: Prior Generation Interconnection and Transmission Service Requests Used in Study Models

Prior Generation Interconnection NRIS requests that were included in this study:

| PID | Substation | MW | In Service Date |
|---------|-------------------|-----|-----------------|
| PID 221 | Wolfcreek | 875 | In Service |
| PID 223 | PID-223 Tap | 125 | 10/1/2010 |
| PID 224 | PID-224 Tap | 100 | 12/1/2009 |
| PID 233 | PID-233 | 150 | 12/31/2013 |
| PID 238 | Hinds 230kV | 550 | In Service |
| PID 240 | Hot Springs 500kV | 650 | In Service |
| PID 247 | Stowell 138kV | 180 | 6/1/2011 |
| PID 254 | Wells 500kV | 251 | 1/1/2013 |

Prior transmission service requests that were included in this study:

| OASIS # | PSE | MW | Begin | End |
|----------|-----------------------------|-----|----------|----------|
| 1668165 | Entergy Services (SPO) | 600 | 1/1/2013 | 1/1/2043 |
| 74597193 | NRG Power Marketing | 300 | 1/1/2013 | 1/1/2018 |
| 74597198 | NRG Power Marketing | 300 | 1/1/2013 | 1/1/2018 |
| 74728369 | Brazos Electric Cooperative | 100 | 1/1/2012 | 1/1/2017 |
| 74728395 | Brazos Electric Cooperative | 100 | 1/1/2012 | 1/1/2017 |
| 74728400 | Brazos Electric Cooperative | 100 | 1/1/2012 | 1/1/2017 |
| 74728415 | Brazos Electric Cooperative | 100 | 1/1/2012 | 1/1/2017 |
| 74728420 | Brazos Electric Cooperative | 100 | 1/1/2012 | 1/1/2017 |
| 74789476 | Entergy Services (SPO) | 74 | 1/1/2012 | 1/1/2016 |
| 74799834 | Cargill Power Markets | 101 | 7/1/2012 | 7/1/2017 |
| 74799836 | Cargill Power Markets | 101 | 7/1/2012 | 7/1/2017 |
| 74799837 | Cargill Power Markets | 101 | 7/1/2012 | 7/1/2017 |
| 74799848 | Cargill Power Markets | 101 | 7/1/2013 | 7/1/2018 |
| 74799851 | Cargill Power Markets | 101 | 7/1/2013 | 7/1/2018 |
| 74799853 | Cargill Power Markets | 101 | 7/1/2013 | 7/1/2018 |
| 74835023 | AECI / APM | 103 | 1/1/2012 | 1/1/2017 |
| 74846159 | AEPM | 65 | 1/1/2015 | 1/1/2020 |
| 74899933 | Entergy Services (SPO) | 322 | 2/1/2011 | 2/1/2041 |
| 74899954 | Entergy Services (SPO) | 1 | 2/1/2011 | 2/1/2014 |
| 74899956 | Entergy Services (SPO) | 100 | 2/1/2011 | 2/1/2014 |
| 74899968 | Entergy Services (SPO) | 65 | 1/1/2013 | 1/1/2015 |
| 74899969 | Entergy Services (SPO) | 50 | 1/1/2012 | 1/1/2015 |
| 74899972 | Entergy Services (SPO) | 1 | 1/1/2015 | 1/1/2045 |
| 74899974 | Entergy Services (SPO) | 1 | 1/1/2015 | 1/1/2045 |
| 74899976 | Entergy Services (SPO) | 1 | 1/1/2015 | 1/1/2045 |
| 74899980 | Entergy Services (SPO) | 584 | 1/1/2015 | 1/1/2045 |
| 74899988 | Entergy Services (SPO) | 1 | 6/1/2012 | 6/1/2042 |
| 74899989 | Entergy Services (SPO) | 485 | 6/1/2012 | 6/1/2042 |
| 74899993 | Entergy Services (SPO) | 1 | 6/1/2012 | 6/1/2042 |
| 74899996 | Entergy Services (SPO) | 450 | 6/1/2012 | 6/1/2042 |
| 74900000 | Entergy Services (SPO) | 620 | 6/1/2012 | 6/1/2042 |
| 74900014 | Entergy Services (SPO) | 35 | 6/1/2012 | 6/1/2042 |
| 74900016 | Entergy Services (SPO) | 20 | 6/1/2012 | 6/1/2042 |
| 74901827 | Entergy Services (SPO) | 1 | 2/1/2011 | 2/1/2041 |
| 75009400 | Entergy Services (SPO) | 1 | 1/1/2012 | 1/1/2042 |
| 75029832 | Entergy Services (SPO) | 130 | 6/1/2015 | 6/1/2045 |