



*Feasibility Study
for PID 216
251MW Plant
Wilton 230kV*

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I. Introduction

The purpose of this feasibility study is a preliminary evaluation of the system impact of the proposed generation on the Entergy transmission system. The study addresses the short circuit and load flow aspects only. The study evaluates injection of 251 MW from the PID 216 plant to the Entergy Transmission System between the Panama and Romeville 230kV substations. The proposed Wilton 230kV substation would be located approximately 2.2 miles south of the Panama 230kV substation towards Romeville 230kV substation. The proposed generation was dispatched to 13 interfaces of Entergy's control area. The study also considers dispatch into the Entergy control area to provide additional information. The load flow study was performed on the latest available 2015 Summer Peak case due to the in-service date of the prior Generator Interconnection Requests upgrades in the queue, using PSS/E and MUST software by Siemens Power Technologies International (Siemens-PTI). The short circuit study was performed on the Entergy system short circuit model using ASPEN software. The requested in-service date for this facility is January 1, 2010

II. Load Flow Study:

A. Model and Study Information

The following modifications were made to the base cases to reflect the latest information available:

- Entergy load was scaled to reflect the latest load forecast.
- Entergy generation was dispatched according to the most recent economic dispatch data.
- Confirmed firm transmission reservations were modeled for the years 2015, excluding short-term firm transactions on the same transmission interface.
- Generation in each of the 13 different control area interfaces and Entergy were scaled uniformly to accommodate the transfer.

This study considers the following four scenarios:

Table II-A: Scenarios

Scenario No.	Approved Future Transmission Projects	Pending Transmission Service and Interconnection Study Requests
1	Not Included	Not Included
2	Not Included	Included
3	Included	Not Included
4	Included	Included

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. In real-time operations, the dynamic nature of these factors may affect the transfer capability as reported in this study.

B. Analysis Results

Table II-B: Summary of Results

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.	2015	0 MW	0 MW	0 MW	0 MW
AEP-W	American Electric Power - West	2015	0 MW	0 MW	0 MW	0 MW
AMRN	Ameren Transmission	2015	0 MW	0 MW	0 MW	0 MW
CLEC	CLECO	2015	0 MW	0 MW	0 MW	0 MW
EES	Entergy	2015	0 MW	0 MW	0 MW	0 MW
EMDE	Empire District Electric Co	2015	0 MW	0 MW	0 MW	0 MW
LAFA	Lafayette Utilities Systeem	2015	0 MW	0 MW	0 MW	0 MW
LAGN	Louisiana Generating, LLC	2015	0 MW	0 MW	0 MW	0 MW
LEPA	Louisiana Energy & Power Authority	2015	1 MW	0 MW	0 MW	0 MW
OKGE	Oklahoma Gas & Electric Company	2015	0 MW	0 MW	0 MW	0 MW
SMEPA	South Mississippi Electric Power Assoc.	2015	0 MW	0 MW	0 MW	0 MW
SOCO	Southern Company	2015	0 MW	0 MW	0 MW	0 MW
SWPA	Southwest Power Administration	2015	0 MW	0 MW	0 MW	0 MW
TVA	Tennessee Valley Authority	2015	0 MW	0 MW	0 MW	0 MW

The results of this study are a preliminary evaluation of the system impact. The stated estimates are non-binding. No interconnection or transmission rights are implied via the results of this study. The costs of the upgrades are planning estimates only. Detailed cost estimates and solutions for the limiting elements will be provided in the Facilities Study. The results of the Facilities Study may be different depending on the existence of previously queued transmission

service and interconnection service requests that continue to the Facilities Study phase, as well as transmission system configuration changes due to identified system upgrades.

C. Scenario 1

Without the approved future transmission projects and the pending transmission service & interconnection study requests, this analysis indicates that the export of the full output from PID-216 to 13 of Entergy’s control area interfaces and dispatch within Entergy control area is limited by the following facilities:

2015 Summer Peak		Interface													
Limiting Element	Cost (\$)	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Acadia - Colonial Academy 138kV	10,462,500							X							
Addis - Willow Glen 138kV	9,585,000	X	X	X	X	X	X	X	X	X	X		X	X	X
ANO - Russellville North 161kV	9,796,000	X	X				X				X			X	
Bonin 230/138kV transformer (LAFA)	5,000,000							X							
Bull Shoals - Bull Shoals Dam SPA 161kV	142,500						X								
BUS 'BRKN BW4 138' TO BUS 'BETHEL 4 138'	TBD										X				
Cedar Hill - Tamina 138kV	970,000		X												
Champagne - East Opelousas 138kV	6,875,000		X		X	X	X	X			X			X	
Champagne - Krotz Spring 138kV	28,684,000	X	X	X	X	X	X	X	X		X	X	X	X	X
Chauvin - Ashland 115kV	4,606,875									X					
China Bulk - Sabine 230kV	14,733,900		X												
Colonial Academy - Richard 138kV	2,652,500							X							
Conroe Bulk - Plantation 138kV	732,500		X												
Conway West - Lake Conway 115kV	5,508,000													X	
Conway West 161/115kV transformer	5,000,000													X	
Danville - North Magazine REA 161kV	6,500,000		X				X				X			X	
Derbigny - Nine Mile 230kV	6,652,130											X			
Duboin - Bayou Warehouse 138kV	14,191,750							X							
Fairview - Gypsy 230kV	34,728,000	X	X	X	X	X	X	X	X		X	X	X	X	X
French Settlement - Sorrento 230kV	3,345,300	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Front Street - Michoud 230kV	8,055,450	X	X	X	X	X	X				X	X	X	X	X
Gibson - Humphrey 115kV	21,584,961	X	X	X	X	X	X	X	X		X		X	X	X
Gibson - Ramos 138kV	5,753,263	X	X		X		X	X			X			X	
Greenwood - Humphery 115kV	2,667,252	X	X	X	X	X	X	X	X		X		X	X	X
Greenwood - Terrebone 115kV	22,113,272	X	X	X	X	X	X	X	X		X		X	X	X
Habetz - Richard 138kV	16,362,500							X							
Harrison East - Everton 161kV	5,602,000						X								
Harrison East - Summit 161kV	5,395,000						X								

2015 Summer Peak		Interface													
Limiting Element	Cost (\$)	AECI	AEPW	AMRN	CLECO	EES	EMDE	Lafa	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Hot Springs Village - Cheetah 115kV	1,923,750													X	
Independence SES - Moorefield 161kV	7,992,000						X				X			X	
International Paper - Mansfield 138kV (CLECO)	TBD		X												
International Paper - Wallake 138kV (CLECO)	TBD		X												
Jonesboro - Jonesboro North (AECC) 161kV	1,570,000													X	
Judice - Scott 138kV	10,000,000				X										
Krotz Spring - Line 642 Tap 138kV	136,701	X	X	X	X	X	X	X	X		X	X	X	X	X
Lake Conway - Mayflower 115kV	2,700,000													X	
Livonia - Line 642 Tap 138kV	100,000	X	X	X	X	X	X	X	X		X	X	X	X	X
Livonia - Wilbert 138kV	39,288,000	X	X	X	X	X	X	X	X		X	X	X	X	X
Melborne - Sage 161kV	1,192,000						X				X			X	
North Crowley - Richard 138kV	14,000,000							X							
North Crowley - Scott1 138kV	11,361,000							X							
Oak Ridge - Porter 138kV	2,845,125		X												
Plantation - Cedar Hill 138kV	1,056,375		X												
Pleasant Hill 500/161kV transformer	30,389,000						X							X	
Porter - Tamina 138kV	127,500		X												
Raceland - Coteau 115kV	3,065,000									X					
Richard - Scott 138kV	35,300,000							X							
Russellville East - Russellville North 161kV	4,910,000	X	X				X				X			X	
Russellville East - Russellville South 161kV	1,660,500	X	X	X			X				X			X	
Russellville South - Dardanelle Dam 161kV	7,142,000		X				X				X			X	
Scott1 - Bonin 138kV	6,500,000							X							
Semere - Scott2 138kV	11,361,000							X							
St. Joe - Hilltop 161kV	2,970,000						X								
Winnfield 230/115kV transformer	4,050,000		X												

For the detailed information about the FCITC calculation for each interface, please refer to the appended study results in Appendix C.

D. Scenario 2:

Without the approved future transmission projects, but with the pending transmission service & interconnection study requests, this analysis indicates that the export of the full output from PID-216 to 13 of Entergy’s control area interfaces and dispatch within Entergy control area is limited by the following facilities:

2015 Summer Peak + Prior transactions		Interface													
Limiting Element	Cost (\$)	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Acadia - Colonial Academy 138kV	10,462,500							X							
Acadia GSU - Scanlan 138kV	485,000							X							
Addis - Willow Glen 138kV	9,585,000				X			X		X					
ANO - Russellville North 161kV	9,796,000	X	X	X			X				X			X	
Bonin 230/138kV transformer (LAFA)	5,000,000							X							
Bull Shoals - Bull Shoals Dam SPA 161kV	142,500						X								
BUS 'BRKN BW4 138' TO BUS 'BETHEL 4 138'	TBD										X				
Calico Rock - Melborne 161kV	6,735,150						X							X	
Calico Rock - Norfolk 161kV	3,288,600													X	
Chauvin - Ashland 115kV	4,606,875									X					
Colonial Academy - Richard 138kV	2,652,500							X							
Conway West - Lake Conway 115kV	5,508,000													X	
Conway West 161/115kV transformer	5,000,000													X	
Danville - North Magazine REA 161kV	6,500,000		X				X				X			X	
Fairview - Gypsy 230kV	34,728,000	X	X	X	X	X	X	X	X		X	X	X	X	X
Florence - South Jackson 115kV	1,905,000											X			
French Settlement - Sorrento 230kV	3,345,300	X	X	X	X	X	X	X	X		X	X	X	X	X
Habetz - Richard 138kV	16,362,500							X							
Harrison East - Everton 161kV	5,602,000						X								
Harrison East - Summit 161kV	5,395,000						X								
Hot Springs Village - Cheetah 115kV	1,923,750													X	
Independence SES - Moorefield 161kV	7,992,000						X				X			X	
International Paper - Mansfield 138kV (CLECO)	TBD		X				X				X			X	
International Paper - Wallake 138kV (CLECO)	TBD		X				X				X			X	
Jonesboro - Jonesboro North (AECC) 161kV	1,570,000													X	
Judice - Scott 138kV	10,000,000				X										
Lake Conway - Mayflower 115kV	2,700,000													X	
Lakeover 500/115kV transformer	8,100,000											X			

2015 Summer Peak + Prior		Interface													
Limiting Element	Cost (\$)	AECI	AEPW	AMRN	CLECO	EES	EMDE	Lafa	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	TBD		X								X				
Melborne - Sage 161kV	1,192,500						X				X			X	
North Crowley - Richard 138kV	14,000,000							X							
North Crowley - Scott1 138kV	11,942,000				X			X							
Pleasant Hill 500/161kV transformer	30,389,000						X							X	
Ray Braswell 500/115kV transformer 1	8,100,000											X			
Ray Braswell 500/230kV transformer 1	7,000,000											X			
Ray Braswell 500/230kV transformer 2	7,000,000											X			
Richard - Scott 138kV	35,300,000							X							
Russellville East - Russellville North 161kV	4,910,000	X	X	X			X				X			X	
Russellville East - Russellville South 161kV	1,660,500	X	X	X			X				X			X	
Russellville South - Dardanelle Dam 161kV	7,142,000	X	X	X			X				X			X	
Ruston East - Vienna 115kV	1,049,000		X												
Scott1 - Bonin 138kV	6,500,000							X							
Semere - Scott2 138kV	5,477,625				X			X							
St. Joe - Hilltop 161kV	2,970,000						X				X				
Sterlington 500/115kV transformer 1	19,401,000		X								X			X	
Sterlington 500/115kV transformer 2	19,401,000		X		X		X				X			X	

For the detailed information about the FCITC calculation for each interface, please refer to the appended study results in Appendix D.

E. Scenario 3:

With the approved future transmission projects, but without the pending transmission service & interconnection study requests, this analysis indicates that the export of the full output from PID 216 to 13 of Entergy’s control area interfaces and dispatch within Entergy control area is limited by the following facilities:

2015 Summer Peak + CP Upgrades		Interface													
Limiting Element	Cost	AECI	AEPW	AMRN	CLECO	EES	EMDE	Lafa	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Acadia - Colonial Academy 138kV	10,462,500							X							
Acadia GSU - Scanlan 138kV	485,000							X							
Addis - Willow Glen 138kV	9,585,000	X	X	X	X	X	X	X	X	X	X		X	X	X
ANO - Russellville North 161kV	9,796,000	X	X				X				X			X	
Bull Shoals - Bull Shoals Dam SPA 161kV BUS 'BRKN BW4 138' TO BUS 'BETHEL 4 138'	142,500 TBD						X						X		
Cedar Hill - Tamina 138kV	970,000		X												
Champagne - East Opelousas 138kV	6,875,000		X		X	X	X	X			X			X	
Champagne - Krotz Spring 138kV	28,684,000	X	X	X	X	X	X	X	X		X	X	X	X	X
Chauvin - Ashland 115kV	4,606,875									X					
China Bulk - Sabine 230kV	14,733,900		X												
Colonial Academy - Richard 138kV	2,652,500							X							
Conroe Bulk - Plantation 138kV	732,500		X												
Conway West - Lake Conway 115kV	5,508,000													X	
Conway West 161/115kV transformer	5,000,000													X	
Danville - North Magazine REA 161kV	6,500,000		X				X				X			X	
Duboin - Bayou Warehouse 138kV	14,191,750							X							
Fairview - Gypsy 230kV	34,728,000	X	X	X	X	X	X	X	X		X	X	X	X	X
Fairview - Madisonville 230kV	34,759,100				X	X			X						
French Settlement - Sorrento 230kV	3,345,300	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Front Street - Michoud 230kV	8,055,450	X	X	X			X				X	X	X	X	X
Gibson - Humphrey 115kV	21,584,961	X	X	X	X	X	X	X	X		X		X	X	X
Gibson - Ramos 138kV	5,753,263		X		X		X	X			X			X	
Gibson 138/115kV transformer	3,375,000							X							
Greenwood - Humphery 115kV	2,667,252	X	X	X	X	X	X	X	X		X		X	X	X
Greenwood - Terrebone 115kV	22,113,272	X	X	X	X	X	X	X	X		X		X	X	X
Habetz - Richard 138kV	13,362,500							X							
Harrison East - Everton 161kV	5,602,000						X								

2015 Summer Peak + CP Upgrades		Interface													
Limiting Element	Cost	AECI	AEPW	AMRN	CLECO	EES	EMDE	Lafa	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Harrison East - Summit 161kV	5,395,000						X								
Hot Springs Village - Cheetah 115kV	1,923,750													X	
Independence SES - Moorefield 161kV	7,992,000						X				X			X	
International Paper - Mansfield 138kV (CLECO)	TBD		X												
International Paper - Wallake 138kV (CLECO)	TBD		X												
Jonesboro - Jonesboro North (AECC) 161kV	1,570,000													X	
Judice - Scott 138kV	10,000,000				X										
Krotz Spring - Line 642 Tap 138kV	136,701	X	X	X	X	X	X	X	X		X	X	X	X	X
Lake Conway - Mayflower 115kV	2,700,000													X	
Livonia - Line 642 Tap 138kV	100,000	X	X	X	X	X	X	X	X		X	X	X	X	X
Livonia - Wilbert 138kV	39,288,000	X	X	X	X	X	X	X	X		X	X	X	X	X
Melborne - Sage 161kV	1,192,000						X				X			X	
North Crowley - Richard 138kV	14,000,000							X							
North Crowley - Scott1 138kV	11,942,000							X							
Oak Ridge - Porter 138kV	2,845,125		X												
Plantation - Cedar Hill 138kV	1,056,375		X												
Pleasant Hill 500/161kV transformer	30,389,000						X							X	
Porter - Tamina 138kV	127,500		X												
Raceland - Coteau 115kV	3,065,000									X					
Richard - Scott 138kV	35,300,000							X							
Russellville East - Russellville North 161kV	4,910,000	X	X				X				X			X	
Russellville East - Russellville South 161kV	1,660,500	X	X	X			X				X			X	
Russellville South - Dardanelle Dam 161kV	7,142,000		X				X				X			X	
Scott1 - Bonin 138kV	6,500,000							X							
Semere - Scott2 138kV	11,361,000							X							
St. Joe - Hilltop 161kV	2,970,000						X								
Winnfield 230/115kV transformer	4,050,000		X												

For the detailed information about the FCITC calculation for each interface, please refer to the appended study results in Appendix E.

F. Scenario 4:

With the approved future transmission projects and the pending transmission service & interconnection study requests, this analysis indicates that the export of the full output from PID 216 to 13 of Entergy’s control area interfaces and dispatch within Entergy control area is limited by the following facilities:

2015 Summer Peak + CP Upgrades+Prior		Interface													
Limiting Element	Cost	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFa	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Acadia - Colonial Academy 138kV	10,462,500							X							
Acadia GSU - Scanlan 138kV	485,000							X							
Addis - Willow Glen 138kV	9,585,000				X			X		X					
ANO - Russellville North 161kV	9,796,000	X	X	X			X				X			X	
Bonin 230/138kV transformer (LAFa)	5,000,000							X							
Bull Shoals - Bull Shoals Dam SPA 161kV	142,500						X								
BUS 'BRKN BW4 138' TO BUS 'BETHEL 4 138'	TBD										X				
Calico Rock - Melborne 161kV	6,735,150						X							X	
Calico Rock - Norfolk 161kV	3,288,600													X	
Chauvin - Ashland 115kV	4,606,875									X					
Colonial Academy - Richard 138kV	2,652,500							X							
Conway West - Lake Conway 115kV	5,508,000													X	
Conway West 161/115kV transformer	5,000,000													X	
Danville - North Magazine REA 161kV	6,500,000		X				X				X			X	
Fairview - Gypsy 230kV	34,728,000	X	X	X		X	X	X	X		X	X	X	X	X
Florence - South Jackson 115kV	1,905,000											X			
French Settlement - Sorrento 230kV	3,345,300	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Habetz - Richard 138kV	13,362,500							X							
Harrison East - Everton 161kV	5,602,000						X								
Harrison East - Summit 161kV	5,395,000						X								
Hot Springs Village - Cheetah 115kV	1,923,750													X	
Independence SES - Moorefield 161kV	7,992,000						X							X	
International Paper - Mansfield 138kV (CLECO)	TBD		X				X				X			X	
International Paper - Wallake 138kV (CLECO)	TBD		X				X				X			X	
Jonesboro - Jonesboro North (AECC) 161kV	1,570,000													X	
Judice - Scott 138kV	10,000,000				X										

2015 Summer Peak + CP Upgrades+Prior transactions		Interface													
Limiting Element	Cost (\$)	AECI	AEPW	AMRN	CLECO	EES	EMDE	Lafa	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Lake Conway - Mayflower 115kV	2,700,000													X	
Lakeover 500/115kV transformer	8,100,000											X			
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	TBD		X								X				
Melborne - Sage 161kV	1,192,500						X							X	
North Crowley - Richard 138kV	14,000,000							X							
North Crowley - Scott1 138kV	11,942,000				X			X							
Pleasant Hill 500/161kV transformer	30,389,000						X							X	
Ray Braswell 500/115kV transformer 1	8,100,000											X			
Ray Braswell 500/230kV transformer 1	7,000,000											X			
Ray Braswell 500/230kV transformer 2	7,000,000											X			
Richard - Scott 138kV	35,300,000							X							
Russellville East - Russellville North 161kV	4,910,000	X	X	X			X				X			X	
Russellville East - Russellville South 161kV	1,660,500	X	X	X			X				X			X	
Russellville South - Dardanelle Dam 161kV	7,142,000	X	X	X			X				X			X	
Ruston East - Vienna 115kV	1,049,000		X												
Scott1 - Bonin 138kV	6,500,000							X							
Semere - Scott2 138kV	11,361,000				X			X							
St. Joe - Hilltop 161kV	2,970,000						X				X				
Sterlington 500/115kV transformer 1	19,401,000		X								X			X	
Sterlington 500/115kV transformer 2	19,401,000		X		X		X				X			X	

For the detailed information about the FCITC calculation for each interface, please refer to the appended study results in Appendix F.

III. Short Circuit Analysis / Breaker Rating Analysis

A. 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.

B. Short Circuit Analysis

The method used to determine if any short circuit problems would be caused by the addition of the PID-216 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-216 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-216 generation. The breakers identified to be upgraded through this comparison are *mandatory* upgrades.

C. Analysis Results

There were no breakers that were found to be under-rated as a result of the additional short circuit current due to PID-216 generator without priors.

The results of the short circuit analysis indicates that the additional generation due to PID-216 generator does cause an increase in short circuit current such that they exceed the fault interrupting capability of the high voltage circuit breakers within the vicinity of the PID-216 plant with priors.

Table I: Underrated Breakers With Priors Included

<u>Substation</u>	<u>Breaker</u>	<u>Max Fault w/o PID-216 (amps)</u>	<u>Max Fault with PID-216 (amps)</u>	<u>Interrupting Rating (amps)</u>
W GLEN 2 138.kV	9805	54853	55163	55000
	9810	54853	55163	55000
	9815	54853	55163	55000
	9830	54853	55163	55000
	9835	54853	55163	55000
	9890	54853	55163	55000
	9895	54853	55163	55000

Table I illustrates the station name, worst case fault level, and the number of breakers that were found to be under-rated at the respective locations as a result of the additional short circuit current due to PID-216 generator and includes prior PID's 197, 206, 207, 208, 211, 213 and 215.

D. Problem Resolution

Table III illustrates the station name, and the cost associated with upgrading the breakers at each station both for mandatory and optional breaker upgrades.

<u>Substation</u>	<u>Number of Breakers</u>	<u>New Breaker Rating</u>	<u>Estimated cost of Breaker Upgrades (\$)</u>
W GLEN 2 138.kV	7	63 kA	*\$2,000,000

* Price based on 145 kV Breaker

The impact on breaker rating due to line upgrades will be evaluated during facilities study phase.

The results of the short circuit analysis based upon the current configuration of the Entergy transmission system and Generation Interconnection Study Queue. Therefore, these results are subject to change.

APPENDIX A: Prior Translations Included in the FCITC calculation for PID 216

Generator Interconnection				
PID	Location	MW	kV	Year In Service
207	Grand Gulf	1594	500	2015
208	Fancy Point	1594	500	2015
210	Lewis Creek	358	138	2010
211	Lewis Creek	570	138	2011

Transmission Service				
OASIS #	POR	POD	MW	Begin
1338849	LEPA	CLECO	45	9/1/2005
1460876	EES	AEPW	75	3/1/2009
1460878	EES	AEPW	75	3/1/2009
1460879	EES	AEPW	75	3/1/2009
1460881	EES	AEPW	75	3/1/2009
1450222	PUPP	AEPW	225	1/1/2007
1460900	AEPW	LEPA	116	1/1/2009
1468113	EES	EES	20	6/1/2011
1468285	AMRN	SOCO	103	9/1/2007
1468286	AMRN	SOCO	103	9/1/2007
1468288	AMRN	SOCO	103	1/1/2008
1468289	AMRN	SOCO	103	1/1/2008
1470484	EES	WMUC	20	1/1/2011
1477636	EES	SWPA	27	6/1/2010
1477639	EES	AMRN	15	6/1/2010
1478781	EES	EES	804	1/1/2008
1481059	LAGN	DENL	60	2/1/2011
1481111	LAGN	CNWY	50	2/1/2011
1481119	LAGN	BUBA	30	2/1/2011
1481235	LAGN	LEPA	50	2/1/2011
1481438	LAGN	EES	20	2/1/2011
1483241	LAGN	SOCO	103	1/1/2010
1483243	LAGN	SOCO	206	1/1/2010
1483244	LAGN	SOCO	309	1/1/2010

APPENDIX B: Approved Future Projects Included in the FCITC calculation for PID 216

Year	Approved Future Projects
2007 – 2010	Amite South Area Improvements Phase II
	Amite South Area Improvements Phase III
	Maumell
	Dewitt Capacitor Bank
	Sandy Shores Capacitor Bank
	Upgrade Liberty – Gloster
	Winn Capacitor Bank
	Upgrade Fawil Auto transformer

APPENDIX C: Results for Scenario 1:

AECI

Limiting Element	Contingency Element	ATC
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	10
Addis - Willow Glen 138kV	Webre - Wells 500kV	69
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	70
Front Street - Michoud 230kV	Franklin - McKnight 500kV	96
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	101
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	101
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	115
Livonia - Wilbert 138kV	Richard - Wells 500kV	170
Fairview - Gypsy 230kV	Base Case	235
Gibson - Ramos 138kV	Webre - Wells 500kV	250

AEP-W

Limiting Element	Contingency Element	ATC
Porter - Tamina 138kV	Oak Ridge - Porter 138kV	0
Cedar Hill - Tamina 138kV	Oak Ridge - Porter 138kV	0
Plantation - Cedar Hill 138kV	Oak Ridge - Porter 138kV	0
Conroe Bulk - Plantation 138kV	Oak Ridge - Porter 138kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Porter - Tamina 138kV	Metro - Oak Ridge 138kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0

Limiting Element	Contingency Element	ATC
Oak Ridge - Porter 138kV	Porter - Tamina 138kV	0
China Bulk - Sabine 230kV	Amelia Bulk - China Bulk 230kV	0
Cedar Hill - Tamina 138kV	Metro - Oak Ridge 138kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
Plantation - Cedar Hill 138kV	Metro - Oak Ridge 138kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	7
Addis - Willow Glen 138kV	Webre - Wells 500kV	57
Oak Ridge - Porter 138kV	Cedar Hill - Tamina 138kV	71
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	74
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	108
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	108
Front Street - Michoud 230kV	Franklin - McKnight 500kV	109
Livonia - Wilbert 138kV	Richard - Wells 500kV	131
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	132
Oak Ridge - Porter 138kV	Plantation - Cedar Hill 138kV	170
Gibson - Ramos 138kV	Webre - Wells 500kV	194
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	207
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	217
Conroe Bulk - Plantation 138kV	Metro - Oak Ridge 138kV	231
Winnfield 230/115kV transformer	Clarence (CLECO) - Montgomery 230kV	243
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	246

AMRN

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	10
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	69
Addis - Willow Glen 138kV	Webre - Wells 500kV	71
Front Street - Michoud 230kV	Franklin - McKnight 500kV	95
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	99
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	99
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	113
Livonia - Wilbert 138kV	Richard - Wells 500kV	176
Fairview - Gypsy 230kV	Base Case	231

CLECO

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Front Street - Slidell 230kV	0
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Judice - Scott 138kV	Flander - Hopkins 138kV (CLECO/LAFA)	0
Judice - Scott 138kV	Greenwood - Terrebone 115kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
Judice - Scott 138kV	Greenwood - Humphery 115kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
Judice - Scott 138kV	Gibson - Humphrey 115kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	4
Addis - Willow Glen 138kV	Webre - Wells 500kV	35
Livonia - Wilbert 138kV	Richard - Wells 500kV	67
Gibson - Ramos 138kV	Webre - Wells 500kV	85
Judice - Scott 138kV	Gibson 138/115kV transformer	93
Judice - Scott 138kV	Gibson - Ramos 138kV	93
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	94
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	133
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	133
Front Street - Michoud 230kV	Franklin - McKnight 500kV	208
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	234
Greenwood - Humphery 115kV	Richard - Wells 500kV	235

EMDE

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161kV transformer	0
Bull Shoals - Bull Shoals Dam SPA 161kV	St. Joe - Hilltop 161kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Everton - St. Joe 161kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Harrison East - Everton 161kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
St. Joe - Hilltop 161kV	Bull Shoals - Bull Shoals Dam SPA 161kV	0
St. Joe - Hilltop 161kV	Bull Shoals - Flippin 161kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Harrison East - Everton 161kV	Bull Shoals - Bull Shoals Dam SPA 161kV	0
St. Joe - Hilltop 161kV	Flippin - Summit 161kV	0
ANO - Russellville North 161kV	Morrilton East - Pleasant Hill 161kV	0
Harrison East - Everton 161kV	Bull Shoals - Flippin 161kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bull Shoals - Lead Hills 161kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	9
Melborne - Sage 161kV	Dell - Independence SES 500kV	25
St. Joe - Hilltop 161kV	Eureka Springs - Osage Springs 161kV	32
Bull Shoals - Bull Shoals Dam SPA 161kV	Clevcov - Lead HL 161kV	38
St. Joe - Hilltop 161kV	Harrison East - Summit 161kV	43
Independence SES - Moorefield 161kV	Dell - Independence SES 500kV	51
Harrison East - Summit 161kV	St. Joe - Hilltop 161kV	57
Addis - Willow Glen 138kV	Webre - Wells 500kV	66
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	71
Melborne - Sage 161kV	Sage - Guion 161kV	81
Harrison East - Everton 161kV	Flippin - Summit 161kV	88
Melborne - Sage 161kV	Newport - Newport Industrial 161kV	89
Harrison East - Summit 161kV	Everton - St. Joe 161kV	98
Front Street - Michoud 230kV	Franklin - McKnight 500kV	99
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	103
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	103
Melborne - Sage 161kV	Mountain View - Guion 161kV	107
Independence SES - Moorefield 161kV	Newport - Newport Industrial 161kV	116
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	119

Limiting Element	Contingency Element	ATC
Melborne - Sage 161kV	Newport AB - Newport Industrial 161kV	122
Independence SES - Moorefield 161kV	Newport AB - Newport Industrial 161kV	148
Livonia - Wilbert 138kV	Richard - Wells 500kV	159
Melborne - Sage 161kV	Cash - Newport AB 161kV	161
St. Joe - Hilltop 161kV	ANO - Fort Smith 500kV	161
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	164
Harrison East - Summit 161kV	Harrison East - Everton 161kV	180
Independence SES - Moorefield 161kV	Cash - Newport AB 161kV	187
Melborne - Sage 161kV	Cash - Jonesboro 161kV	188
Independence SES - Moorefield 161kV	Cash - Jonesboro 161kV	214
Melborne - Sage 161kV	Newport - Swifton 161kV	223
Gibson - Ramos 138kV	Webre - Wells 500kV	234
Fairview - Gypsy 230kV	Base Case	242
Harrison East - Everton 161kV	Harrison East - Summit 161kV	248
Independence SES - Moorefield 161kV	Newport - Swifton 161kV	248

EES

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	Front Street - Slidell 230kV	0
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	10
Addis - Willow Glen 138kV	Webre - Wells 500kV	69
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	84
Livonia - Wilbert 138kV	Richard - Wells 500kV	158
Front Street - Michoud 230kV	Franklin - McKnight 500kV	212

LAGN

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Springfield 230kV	0
Fairview - Gypsy 230kV	Hammond - Springfield 230kV	0
French Settlement - Sorrento 230kV	Franklin - Mcknight 500kV	1
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	16
Addis - Willow Glen 138kV	Webre - Wells 500kV	83
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	118

Lafa

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Bonin 230/138kV transformer (Lafa)	Acadian - Bonin 230kV (Lafa)	0
Fairview - Gypsy 230kV	French Settlement - Springfield 230kV	0
Fairview - Gypsy 230kV	Hammond - Springfield 230kV	0
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Bonin 230/138kV transformer (Lafa)	Flander - Acadian 230kV (Lafa)	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Semere - Scott2 138kV	Bonin - Labbe 230kV (Lafa)	0
North Crowley - Scott1 138kV	Bonin - Labbe 230kV (Lafa)	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Semere - Scott2 138kV	Point Des Mouton - Wells 230kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
Semere - Scott2 138kV	Point Des Mouton (Lafa) - Labbe (Lafa) 230kV	0
North Crowley - Scott1 138kV	Point Des Mouton - Wells 230kV	0
North Crowley - Scott1 138kV	Point Des Mouton (Lafa) - Labbe (Lafa) 230kV	0
Colonial Academy - Richard 138kV	Bonin - Labbe 230kV (Lafa)	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - Mcknight 500kV	1
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	3
Addis - Willow Glen 138kV	Webre - Wells 500kV	29
Scott1 - Bonin 138kV	Bonin - Labbe 230kV (Lafa)	50
Colonial Academy - Richard 138kV	Point Des Mouton - Wells 230kV	51
Livonia - Wilbert 138kV	Richard - Wells 500kV	60

Limiting Element	Contingency Element	ATC
North Crowley - Scott1 138kV	Richard - Scott 138kV	68
Richard - Scott 138kV	Bonin - Labbe 230kV (LAFA)	69
Gibson - Ramos 138kV	Webre - Wells 500kV	76
Scott1 - Bonin 138kV	Point Des Mouton - Wells 230kV	87
Colonial Academy - Richard 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	87
Richard - Scott 138kV	Point Des Mouton - Wells 230kV	100
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	109
Scott1 - Bonin 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	120
Richard - Scott 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	135
Acadia - Colonial Academy 138kV	Point Des Mouton - Wells 230kV	150
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	151
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	151
Semere - Scott2 138kV	Wells 500/230kV transformer	154
Duboin - Bayou Warehouse 138kV	Webre - Wells 500kV	154
Acadia - Colonial Academy 138kV	Bonin - Labbe 230kV (LAFA)	156
Habetz - Richard 138kV	Point Des Mouton - Wells 230kV	161
Habetz - Richard 138kV	Bonin - Labbe 230kV (LAFA)	177
North Crowley - Scott1 138kV	Wells 500/230kV transformer	179
North Crowley - Richard 138kV	Point Des Mouton - Wells 230kV	182
Acadia - Colonial Academy 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	186

LEPA

Limiting Element	Contingency Element	ATC
French Settlement - Sorrento 230kV	Franklin - Mcknight 500kV	1
Addis - Willow Glen 138kV	Webre - Wells 500kV	20
Addis - Willow Glen 138kV	Louisiana Station - Wilbert 138kV	99
Chauvin - Ashland 115kV	Coteau - Houma 115kV	109
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	140
Raceland - Coteau 115kV	Terrebone 230/115kV transformer	142

OKGE

Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
BUS 'BRKN BW4 138' TO BUS 'BETHEL 4 138'	BUS 'VALIANT7 345' TO BUS 'PITTSB-7 345'	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	8
Addis - Willow Glen 138kV	Webre - Wells 500kV	63
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	72
Front Street - Michoud 230kV	Franklin - McKnight 500kV	101
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	104
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	104
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	123
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	145
Livonia - Wilbert 138kV	Richard - Wells 500kV	150
Gibson - Ramos 138kV	Webre - Wells 500kV	221
Fairview - Gypsy 230kV	Base Case	248

SMEPA

Limiting Element	Contingency Element	ATC
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	19
Front Street - Michoud 230kV	Franklin - McKnight 500kV	56
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	56
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	68
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	68
Front Street - Michoud 230kV	Franklin - McKnight 500kV	73
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	73
Fairview - Gypsy 230kV	Base Case	160
Front Street - Michoud 230kV	Bogalusa - Adams Creek 500/230kV transformer	218
Front Street - Michoud 230kV	Bogalusa - Franklin 500kV	218
Derbigny - Nine Mile 230kV	Napoleon - Nine Mile 230kV	226

SOCO

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	13
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	66
Addis - Willow Glen 138kV	Webre - Wells 500kV	84
Front Street - Michoud 230kV	Franklin - McKnight 500kV	87
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	91
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	91
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	97
Livonia - Wilbert 138kV	Richard - Wells 500kV	205
Fairview - Gypsy 230kV	Base Case	211

SWPA

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Lake Conway - Mayflower 115kV	Pleasant Hill 500/161kV transformer	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Hergett JCWL - Jonesboro 161kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Conway West 161/115kV transformer	Pleasant Hill 500/161kV transformer	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161kV transformer	0
Jonesboro - Jonesboro North (AECC) 161kV	Independence SES - Moorefield 161kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Batesville - Moorefield 161kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Batesville - Cushman 161 kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Cushman - Sage 161kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Jim Hill 161/115kV transformer	0
Jonesboro - Jonesboro North (AECC) 161kV	Greenbrier - Pleasant Hill 161kV	0
Conway West - Lake Conway 115kV	Pleasant Hill 500/161kV transformer	0
Jonesboro - Jonesboro North (AECC) 161kV	Jim Hill - Texas East Station 8 115kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Melborne - Sage 161kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Plum Point - Shelby(TVA) 500kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
ANO - Russellville North 161kV	Morrilton East - Pleasant Hill 161kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	9
Melborne - Sage 161kV	Dell - Independence SES 500kV	20
Independence SES - Moorefield 161kV	Dell - Independence SES 500kV	41
Melborne - Sage 161kV	Sage - Guion 161kV	64
Addis - Willow Glen 138kV	Webre - Wells 500kV	66
Melborne - Sage 161kV	Newport - Newport Industrial 161kV	69
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	71
Hot Springs Village - Cheetah 115kV	Russellville East - Russellville South 161kV	75
Melborne - Sage 161kV	Mountain View - Guion 161kV	84
Independence SES - Moorefield 161kV	Newport - Newport Industrial 161kV	89
Melborne - Sage 161kV	Newport AB - Newport Industrial 161kV	93
Front Street - Michoud 230kV	Franklin - McKnight 500kV	99
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	103
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	103

Limiting Element	Contingency Element	ATC
Independence SES - Moorefield 161kV	Newport AB - Newport Industrial 161kV	113
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	119
Melborne - Sage 161kV	Cash - Newport AB 161kV	124
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	129
Independence SES - Moorefield 161kV	Cash - Newport AB 161kV	144
Melborne - Sage 161kV	Cash - Jonesboro 161kV	144
Livonia - Wilbert 138kV	Richard - Wells 500kV	159
Independence SES - Moorefield 161kV	Cash - Jonesboro 161kV	164
Melborne - Sage 161kV	Newport - Swifton 161kV	177
Independence SES - Moorefield 161kV	Newport - Swifton 161kV	197
Melborne - Sage 161kV	Hoxies AECC - Swifton 161 kV	205
Independence SES - Moorefield 161kV	Hoxies AECC - Swifton 161 kV	225
Gibson - Ramos 138kV	Webre - Wells 500kV	233
Independence SES - Moorefield 161kV	Hoxies AECC - Walnut Ridge 161kV	238
Fairview - Gypsy 230kV	Base Case	242

TVA

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	11
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	68
Addis - Willow Glen 138kV	Webre - Wells 500kV	77
Front Street - Michoud 230kV	Franklin - McKnight 500kV	91
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	96
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	96
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	107
Livonia - Wilbert 138kV	Richard - Wells 500kV	180
Fairview - Gypsy 230kV	Base Case	222

APPENDIX D: Results for Scenario 2:

AECI

Limiting Element	Contingency Element	ATC
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Fairview - Gypsy 230kV	Bogalusa - Franklin 500kV	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	105
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	114

AEP-W

Limiting Element	Contingency Element	ATC
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
Sterlington 500/115kV transformer 1	Eldorado EHV - Sterlington 500kV	0
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	0
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	13
Fairview - Gypsy 230kV	Front Street - Slidell 230kV	39
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	115
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	122
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Contingency of FlowGate 5029 DOLHILL7 345 TO SW SHV 7 345	134
Ruston East - Vienna 115kV	Eldorado EHV - Sterlington 500kV	229

AMRN

Limiting Element	Contingency Element	ATC
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	104
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	113

CLECO

Limiting Element	Contingency Element	ATC
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Judice - Scott 138kV	Flander - Hopkins 138kV (CLECO/LAFA)	0
Judice - Scott 138kV	Greenwood - Terrebone 115kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	43
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	43
Fairview - Gypsy 230kV	Front Street - Slidell 230kV	76
Judice - Scott 138kV	Greenwood - Humphery 115kV	117
Semere - Scott2 138kV	Wells 500/230kV transformer	120
Addis - Willow Glen 138kV	Louisiana Station - Wilbert 138kV	131
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	157
Judice - Scott 138kV	Gibson - Humphrey 115kV	158
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	168
North Crowley - Scott1 138kV	Wells 500/230kV transformer	208

EMDE

Limiting Element	Contingency Element	ATC
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161kV transformer	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	St. Joe - Hilltop 161kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Everton - St. Joe 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Harrison East - Everton 161kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
St. Joe - Hilltop 161kV	Bull Shoals - Bull Shoals Dam SPA 161kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
ANO - Russellville North 161kV	Morrilton East - Pleasant Hill 161kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Fairview - Gypsy 230kV	Bogalusa - Franklin 500kV	0
St. Joe - Hilltop 161kV	Bull Shoals - Flippin 161kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Harrison East - Everton 161kV	Bull Shoals - Bull Shoals Dam SPA 161kV	0
St. Joe - Hilltop 161kV	Flippin - Summit 161kV	0
Harrison East - Everton 161kV	Bull Shoals - Flippin 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bull Shoals - Lead Hills 161kV	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Clevcov - Lead HL 161kV	0
St. Joe - Hilltop 161kV	Harrison East - Summit 161kV	0
Harrison East - Summit 161kV	St. Joe - Hilltop 161kV	0
St. Joe - Hilltop 161kV	Eureka Springs - Osage Springs 161kV	0
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	0
Melborne - Sage 161kV	Dell - Independence SES 500kV	0
Harrison East - Everton 161kV	Flippin - Summit 161kV	0
Harrison East - Summit 161kV	Everton - St. Joe 161kV	0
Independence SES - Moorefield 161kV	Dell - Independence SES 500kV	0
Melborne - Sage 161kV	Sage - Guion 161kV	26
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	26
St. Joe - Hilltop 161kV	ANO - Fort Smith 500kV	33
Melborne - Sage 161kV	Newport - Newport Industrial 161kV	36
Melborne - Sage 161kV	Mountain View - Guion 161kV	52
Harrison East - Summit 161kV	Harrison East - Everton 161kV	62
Melborne - Sage 161kV	Newport AB - Newport Industrial 161kV	69
Independence SES - Moorefield 161kV	Newport - Newport Industrial 161kV	73
Independence SES - Moorefield 161kV	Newport AB - Newport Industrial 161kV	105
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	107
Melborne - Sage 161kV	Cash - Newport AB 161kV	108
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	116

Limiting Element	Contingency Element	ATC
Melborne - Sage 161kV	Cash - Jonesboro 161kV	134
Harrison East - Everton 161kV	Harrison East - Summit 161kV	136
Independence SES - Moorefield 161kV	Cash - Newport AB 161kV	145
Independence SES - Moorefield 161kV	Cash - Jonesboro 161kV	171
Melborne - Sage 161kV	Newport - Swifton 161kV	176
Melborne - Sage 161kV	Hoxies AECC - Swifton 161 kV	211
Independence SES - Moorefield 161kV	Newport - Swifton 161kV	212
Calico Rock - Melborne 161kV	ANO - Fort Smith 500kV	220
Harrison East - Everton 161kV	ANO - Fort Smith 500kV	245
Independence SES - Moorefield 161kV	Hoxies AECC - Swifton 161 kV	247

EES

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	35
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	35
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	133
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	136

LAFa

Limiting Element	Contingency Element	ATC
Bonin 230/138kV transformer (LAFa)	Acadian - Bonin 230kV (LAFa)	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Bonin 230/138kV transformer (LAFa)	Flander - Acadian 230kV (LAFa)	0
Semere - Scott2 138kV	Bonin - Labbe 230kV (LAFa)	0
North Crowley - Scott1 138kV	Bonin - Labbe 230kV (LAFa)	0
Semere - Scott2 138kV	Point Des Mouton - Wells 230kV	0
Semere - Scott2 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	0
North Crowley - Scott1 138kV	Point Des Mouton - Wells 230kV	0
Colonial Academy - Richard 138kV	Bonin - Labbe 230kV (LAFa)	0
North Crowley - Scott1 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	0
Richard - Scott 138kV	Bonin - Labbe 230kV (LAFa)	0
North Crowley - Scott1 138kV	Richard - Scott 138kV	0
Colonial Academy - Richard 138kV	Point Des Mouton - Wells 230kV	0
Colonial Academy - Richard 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	15
Richard - Scott 138kV	Point Des Mouton - Wells 230kV	29
Acadia - Colonial Academy 138kV	Bonin - Labbe 230kV (LAFa)	29
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	48
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	48
Scott1 - Bonin 138kV	Bonin - Labbe 230kV (LAFa)	48
Semere - Scott2 138kV	Wells 500/230kV transformer	50
Richard - Scott 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	62
North Crowley - Scott1 138kV	Wells 500/230kV transformer	73
Habetz - Richard 138kV	Bonin - Labbe 230kV (LAFa)	76
Acadia - Colonial Academy 138kV	Point Des Mouton - Wells 230kV	78

Limiting Element	Contingency Element	ATC
North Crowley - Richard 138kV	Bonin - Labbe 230kV (LAFA)	78
Scott1 - Bonin 138kV	Point Des Mouton - Wells 230kV	86
North Crowley - Richard 138kV	Point Des Mouton - Wells 230kV	105
Addis - Willow Glen 138kV	Louisiana Station - Wilbert 138kV	105
Habetz - Richard 138kV	Point Des Mouton - Wells 230kV	108
Acadia - Colonial Academy 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	113
Scott1 - Bonin 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	119
Semere - Scott2 138kV	Richard - Scott 138kV	125
Acadia GSU - Scanlan 138kV	Bonin - Labbe 230kV (LAFA)	126
Acadia GSU - Scanlan 138kV	Point Des Mouton - Wells 230kV	133
North Crowley - Richard 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	139
Habetz - Richard 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	146
Acadia GSU - Scanlan 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	168
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	182
North Crowley - Scott1 138kV	Bonin 230/138kV transformer (LAFA)	191

LAGN

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	53
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	53
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	194

LEPA

Limiting Element	Contingency Element	ATC
Chauvin - Ashland 115kV	Coteau - Houma 115kV	0
Addis - Willow Glen 138kV	Louisiana Station - Wilbert 138kV	27

OKGE

Limiting Element	Contingency Element	ATC
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
BUS 'BRKN BW4 138' TO BUS 'BETHEL 4 138'	BUS 'VALIANT7 345' TO BUS 'PITTSB-7 345'	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Fairview - Gypsy 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
Sterlington 500/115kV transformer 1	Eldorado EHV - Sterlington 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0

Limiting Element	Contingency Element	ATC
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	0
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	21
St. Joe - Hilltop 161kV	ANO - Fort Smith 500kV	57
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	109
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	118
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Contingency of FlowGate 5029 DOLHILL7 345 TO SW SHV 7 345	218

SMEPA

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Ray Braswell 500/115kV transformer 1	Lakeover 500/115kV transformer	0
Lakeover 500/115kV transformer	Ray Braswell 500/115kV transformer 1	0
Ray Braswell 500/230kV transformer 2	Ray Braswell 500/230kV transformer 1	0
Ray Braswell 500/230kV transformer 1	Ray Braswell 500/230kV transformer 2	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Florence - South Jackson 115kV	Bogalusa - Adams Creek 500/230kV transformer	0
Florence - South Jackson 115kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	89
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	91
Florence - South Jackson 115kV	McAdams - Wolf Creek 500kV	103
Florence - South Jackson 115kV	Angie - Adams Creek 230kV	173
Florence - South Jackson 115kV	Lakeover - McAdams 500kV	199
Florence - South Jackson 115kV	South Jackson - Pop Spring 115kV	219
Florence - South Jackson 115kV	Franklin - Grand Gulf 500kV	232
Lakeover 500/115kV transformer	Lakeover - McAdams 500kV	242
Florence - South Jackson 115kV	Georgetown - Pop Spring 115kV	242

SOCO

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	102
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	107

SWPA

Limiting Element	Contingency Element	ATC
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Lake Conway - Mayflower 115kV	Pleasant Hill 500/161kV transformer	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Hergett JCWL - Jonesboro 161kV	0
Conway West 161/115kV transformer	Pleasant Hill 500/161kV transformer	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161kV transformer	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Fairview - Gypsy 230kV	Bogalusa - Franklin 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Independence SES - Moorefield 161kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Batesville - Moorefield 161kV	0
Conway West - Lake Conway 115kV	Pleasant Hill 500/161kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
ANO - Russellville North 161kV	Morrilton East - Pleasant Hill 161kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Batesville - Cushman 161 kV	0
Sterlington 500/115kV transformer 1	Eldorado EHV - Sterlington 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Cushman - Sage 161kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Jim Hill 161/115kV transformer	0
Jonesboro - Jonesboro North (AECC) 161kV	Greenbrier - Pleasant Hill 161kV	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Jim Hill - Texas East Station 8 115kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Plum Point - Shelby(TVA) 500kV	0
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	0
Jonesboro - Jonesboro North (AECC) 161kV	Melborne - Sage 161kV	0
Melborne - Sage 161kV	Dell - Independence SES 500kV	0
Independence SES - Moorefield 161kV	Dell - Independence SES 500kV	0
Hot Springs Village - Cheetah 115kV	Russellville East - Russellville South 161kV	15
Melborne - Sage 161kV	Sage - Guion 161kV	20
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	28
Melborne - Sage 161kV	Newport - Newport Industrial 161kV	28
Melborne - Sage 161kV	Mountain View - Guion 161kV	40
Melborne - Sage 161kV	Newport AB - Newport Industrial 161kV	53
Independence SES - Moorefield 161kV	Newport - Newport Industrial 161kV	56
Independence SES - Moorefield 161kV	Newport AB - Newport Industrial 161kV	81
Melborne - Sage 161kV	Cash - Newport AB 161kV	83
Melborne - Sage 161kV	Cash - Jonesboro 161kV	103
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	107
Independence SES - Moorefield 161kV	Cash - Newport AB 161kV	111

Limiting Element	Contingency Element	ATC
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	116
Independence SES - Moorefield 161kV	Cash - Jonesboro 161kV	131
Melborne - Sage 161kV	Newport - Swifton 161kV	140
ANO - Russellville North 161kV	Pleasant Hill - ANO 500kV	155
Melborne - Sage 161kV	Hoxies AECC - Swifton 161 kV	168
Independence SES - Moorefield 161kV	Newport - Swifton 161kV	168
Calico Rock - Melborne 161kV	ANO - Fort Smith 500kV	183
Independence SES - Moorefield 161kV	Hoxies AECC - Swifton 161 kV	196
Independence SES - Moorefield 161kV	Plum Point - Shelby(TVA) 500kV	203
Independence SES - Moorefield 161kV	Hoxies AECC - Walnut Ridge 161kV	209
ANO - Russellville North 161kV	Pleasant Hill 500/161kV transformer	225
Calico Rock - Norfolk 161kV	ANO - Fort Smith 500kV	241

TVA

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	101
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	110

APPENDIX E: Results for Scenario 3:

AECI

Limiting Element	Contingency Element	ATC
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	43
Front Street - Michoud 230kV	Franklin - McKnight 500kV	138
Livonia - Wilbert 138kV	Richard - Wells 500kV	155
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	251

AEP-W

Limiting Element	Contingency Element	ATC
Porter - Tamina 138kV	Oak Ridge - Porter 138kV	0
Cedar Hill - Tamina 138kV	Oak Ridge - Porter 138kV	0
Plantation - Cedar Hill 138kV	Oak Ridge - Porter 138kV	0
Conroe Bulk - Plantation 138kV	Oak Ridge - Porter 138kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Porter - Tamina 138kV	Metro - Oak Ridge 138kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Oak Ridge - Porter 138kV	Porter - Tamina 138kV	0
China Bulk - Sabine 230kV	Amelia Bulk - China Bulk 230kV	0
Cedar Hill - Tamina 138kV	Metro - Oak Ridge 138kV	0

Limiting Element	Contingency Element	ATC
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
Plantation - Cedar Hill 138kV	Metro - Oak Ridge 138kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	35
Oak Ridge - Porter 138kV	Cedar Hill - Tamina 138kV	69
Livonia - Wilbert 138kV	Richard - Wells 500kV	119
Front Street - Michoud 230kV	Franklin - McKnight 500kV	156
Oak Ridge - Porter 138kV	Plantation - Cedar Hill 138kV	169
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	206
Gibson - Ramos 138kV	Webre - Wells 500kV	208
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	215
Conroe Bulk - Plantation 138kV	Metro - Oak Ridge 138kV	230
Winnfield 230/115kV transformer	Clarence (CLECO) - Montgomery 230kV	241
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	245

AMRN

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	44
Front Street - Michoud 230kV	Franklin - McKnight 500kV	137
Livonia - Wilbert 138kV	Richard - Wells 500kV	160
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	246

CLECO

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Front Street - Slidell 230kV	0
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Judice - Scott 138kV	Flander - Hopkins 138kV (CLECO/LAFA)	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Judice - Scott 138kV	Greenwood - Terrebone 115kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Madisonville 230kV	Richard - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
Judice - Scott 138kV	Greenwood - Humphery 115kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
Judice - Scott 138kV	Gibson - Humphrey 115kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	22
Livonia - Wilbert 138kV	Richard - Wells 500kV	66
Gibson - Ramos 138kV	Webre - Wells 500kV	93
Judice - Scott 138kV	Gibson - Ramos 138kV	93
Judice - Scott 138kV	Gibson 138/115kV transformer	93

EMDE

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161kV transformer	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	St. Joe - Hilltop 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Everton - St. Joe 161kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Harrison East - Everton 161kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
St. Joe - Hilltop 161kV	Bull Shoals - Bull Shoals Dam SPA 161kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
St. Joe - Hilltop 161kV	Bull Shoals - Flippin 161kV	0

Limiting Element	Contingency Element	ATC
Harrison East - Everton 161kV	Bull Shoals - Bull Shoals Dam SPA 161kV	0
St. Joe - Hilltop 161kV	Flippin - Summit 161kV	0
ANO - Russellville North 161kV	Morrilton East - Pleasant Hill 161kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
Harrison East - Everton 161kV	Bull Shoals - Flippin 161kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bull Shoals - Lead Hills 161kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
Melborne - Sage 161kV	Dell - Independence SES 500kV	24
St. Joe - Hilltop 161kV	Eureka Springs - Osage Springs 161kV	31
Bull Shoals - Bull Shoals Dam SPA 161kV	Clevcov - Lead HL 161kV	38
Addis - Willow Glen 138kV	Webre - Wells 500kV	41
St. Joe - Hilltop 161kV	Harrison East - Summit 161kV	42
Independence SES - Moorefield 161kV	Dell - Independence SES 500kV	50
Harrison East - Summit 161kV	St. Joe - Hilltop 161kV	57
Melborne - Sage 161kV	Sage - Guion 161kV	81
Harrison East - Everton 161kV	Flippin - Summit 161kV	88
Melborne - Sage 161kV	Newport - Newport Industrial 161kV	89
Harrison East - Summit 161kV	Everton - St. Joe 161kV	98
Melborne - Sage 161kV	Mountain View - Guion 161kV	107
Independence SES - Moorefield 161kV	Newport - Newport Industrial 161kV	115
Melborne - Sage 161kV	Newport AB - Newport Industrial 161kV	121
Front Street - Michoud 230kV	Franklin - McKnight 500kV	142
Livonia - Wilbert 138kV	Richard - Wells 500kV	145
Independence SES - Moorefield 161kV	Newport AB - Newport Industrial 161kV	147
Melborne - Sage 161kV	Cash - Newport AB 161kV	161
St. Joe - Hilltop 161kV	ANO - Fort Smith 500kV	161
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	163
Harrison East - Summit 161kV	Harrison East - Everton 161kV	180
Independence SES - Moorefield 161kV	Cash - Newport AB 161kV	187
Melborne - Sage 161kV	Cash - Jonesboro 161kV	187
Independence SES - Moorefield 161kV	Cash - Jonesboro 161kV	213
Melborne - Sage 161kV	Newport - Swifton 161kV	222
Harrison East - Everton 161kV	Harrison East - Summit 161kV	248
Independence SES - Moorefield 161kV	Newport - Swifton 161kV	248
Gibson - Ramos 138kV	Webre - Wells 500kV	250

EES

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Front Street - Slidell 230kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
Fairview - Madisonville 230kV	Richard - Wells 500kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	43
Livonia - Wilbert 138kV	Richard - Wells 500kV	157

LAFa

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Fairview - Gypsy 230kV	Front Street - Slidell 230kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Semere - Scott2 138kV	Bonin - Labbe 230kV (LAFa)	0
North Crowley - Scott1 138kV	Bonin - Labbe 230kV (LAFa)	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Semere - Scott2 138kV	Point Des Mouton - Wells 230kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
Semere - Scott2 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	0
North Crowley - Scott1 138kV	Point Des Mouton - Wells 230kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
North Crowley - Scott1 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	0
Colonial Academy - Richard 138kV	Bonin - Labbe 230kV (LAFa)	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	18
Scott1 - Bonin 138kV	Bonin - Labbe 230kV (LAFa)	48
Livonia - Wilbert 138kV	Richard - Wells 500kV	49
Colonial Academy - Richard 138kV	Point Des Mouton - Wells 230kV	49
North Crowley - Scott1 138kV	Richard - Scott 138kV	67

Limiting Element	Contingency Element	ATC
Richard - Scott 138kV	Bonin - Labbe 230kV (LAFA)	68
Gibson - Ramos 138kV	Webre - Wells 500kV	83
Colonial Academy - Richard 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	85
Scott1 - Bonin 138kV	Point Des Mouton - Wells 230kV	86
Richard - Scott 138kV	Point Des Mouton - Wells 230kV	99
Scott1 - Bonin 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	119
Richard - Scott 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	134
Acadia - Colonial Academy 138kV	Point Des Mouton - Wells 230kV	149
Semere - Scott2 138kV	Wells 500/230kV transformer	152
Acadia - Colonial Academy 138kV	Bonin - Labbe 230kV (LAFA)	153
Habetz - Richard 138kV	Point Des Mouton - Wells 230kV	160
Duboin - Bayou Warehouse 138kV	Webre - Wells 500kV	160
Habetz - Richard 138kV	Bonin - Labbe 230kV (LAFA)	174
North Crowley - Scott1 138kV	Wells 500/230kV transformer	178
North Crowley - Richard 138kV	Point Des Mouton - Wells 230kV	181
Acadia - Colonial Academy 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	185
Habetz - Richard 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	199
Acadia GSU - Scanlan 138kV	Point Des Mouton - Wells 230kV	205
North Crowley - Richard 138kV	Bonin - Labbe 230kV (LAFA)	208
North Crowley - Richard 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	216
Greenwood - Humphery 115kV	Richard - Wells 500kV	228
Gibson 138/115kV transformer	Webre - Wells 500kV	239
Acadia GSU - Scanlan 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	241
Semere - Scott2 138kV	Richard - Scott 138kV	242
Greenwood - Terrebone 115kV	Point Des Mouton - Wells 230kV	250

LAGN

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	Front Street - Slidell 230kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Fairview - Gypsy 230kV	Richard - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
Fairview - Madisonville 230kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	52

LEPA

Limiting Element	Contingency Element	ATC
French Settlement - Sorrento 230kV	Franklin - Mcknight 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	14
Addis - Willow Glen 138kV	Louisiana Station - Wilbert 138kV	95
Chauvin - Ashland 115kV	Coteau - Houma 115kV	109
Raceland - Coteau 115kV	Terrebone 230/115kV transformer	144

OKGE

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
BUS 'BRKN BW4 138' TO BUS 'BETHEL 4 138'	BUS 'VALIANT7 345' TO BUS 'PITTSB-7 345'	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	39
Livonia - Wilbert 138kV	Richard - Wells 500kV	136
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	145
Front Street - Michoud 230kV	Franklin - McKnight 500kV	146
Gibson - Ramos 138kV	Webre - Wells 500kV	236

SMEPA

Limiting Element	Contingency Element	ATC
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Front Street - Michoud 230kV	Franklin - McKnight 500kV	106
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	166
French Settlement - Sorrento 230kV	Front Street - Slidell 230kV	224
Front Street - Michoud 230kV	Bogalusa - Franklin 500kV	251

SOCO

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	53
Front Street - Michoud 230kV	Franklin - McKnight 500kV	127
Livonia - Wilbert 138kV	Richard - Wells 500kV	205
Front Street - Michoud 230kV	Fairview - Gypsy 230kV	215

SWPA

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Lake Conway - Mayflower 115kV	Pleasant Hill 500/161kV transformer	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Hergett JCWL - Jonesboro 161kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Conway West 161/115kV transformer	Pleasant Hill 500/161kV transformer	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161kV transformer	0
Jonesboro - Jonesboro North (AECC) 161kV	Independence SES - Moorefield 161kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Batesville - Moorefield 161kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Batesville - Cushman 161 kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Cushman - Sage 161kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Jim Hill 161/115kV transformer	0
Jonesboro - Jonesboro North (AECC) 161kV	Greenbrier - Pleasant Hill 161kV	0
Conway West - Lake Conway 115kV	Pleasant Hill 500/161kV transformer	0
Jonesboro - Jonesboro North (AECC) 161kV	Jim Hill - Texas East Station 8 115kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Melborne - Sage 161kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Plum Point - Shelby(TVA) 500kV	0
Champagne - East Opelousas 138kV	Webre - Wells 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	0
ANO - Russellville North 161kV	Morrilton East - Pleasant Hill 161kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
Melborne - Sage 161kV	Dell - Independence SES 500kV	19
Independence SES - Moorefield 161kV	Dell - Independence SES 500kV	40
Addis - Willow Glen 138kV	Webre - Wells 500kV	41
Melborne - Sage 161kV	Sage - Guion 161kV	63
Melborne - Sage 161kV	Newport - Newport Industrial 161kV	68
Hot Springs Village - Cheetah 115kV	Russellville East - Russellville South 161kV	74
Melborne - Sage 161kV	Mountain View - Guion 161kV	83
Independence SES - Moorefield 161kV	Newport - Newport Industrial 161kV	88
Melborne - Sage 161kV	Newport AB - Newport Industrial 161kV	93
Independence SES - Moorefield 161kV	Newport AB - Newport Industrial 161kV	113
Melborne - Sage 161kV	Cash - Newport AB 161kV	123

Limiting Element	Contingency Element	ATC
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	128
Front Street - Michoud 230kV	Franklin - McKnight 500kV	142
Independence SES - Moorefield 161kV	Cash - Newport AB 161kV	143
Melborne - Sage 161kV	Cash - Jonesboro 161kV	143
Livonia - Wilbert 138kV	Richard - Wells 500kV	145
Independence SES - Moorefield 161kV	Cash - Jonesboro 161kV	163
Melborne - Sage 161kV	Newport - Swifton 161kV	176
Independence SES - Moorefield 161kV	Newport - Swifton 161kV	196
Melborne - Sage 161kV	Hoxies AECC - Swifton 161 kV	205
Independence SES - Moorefield 161kV	Hoxies AECC - Swifton 161 kV	225
Independence SES - Moorefield 161kV	Hoxies AECC - Walnut Ridge 161kV	238
Gibson - Ramos 138kV	Webre - Wells 500kV	249

TVA

Limiting Element	Contingency Element	ATC
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Webre - Wells 500kV	0
Greenwood - Humphery 115kV	Webre - Wells 500kV	0
Livonia - Line 642 Tap 138kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Krotz Spring - Line 642 Tap 138kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Greenwood - Terrebone 115kV	Richard - Wells 500kV	0
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Addis - Willow Glen 138kV	Webre - Wells 500kV	48
Front Street - Michoud 230kV	Franklin - McKnight 500kV	132
Livonia - Wilbert 138kV	Richard - Wells 500kV	179

APPENDIX F: Results for Scenario 4:

AECI

Limiting Element	Contingency Element	ATC
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	35
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	60

AEP-W

Limiting Element	Contingency Element	ATC
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
Sterlington 500/115kV transformer 1	Eldorado EHV - Sterlington 500kV	0
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	0
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	12
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	38
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	66
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Contingency of FlowGate 5029 DOLHILL7 345 TO SW SHV 7 345	133
Ruston East - Vienna 115kV	Eldorado EHV - Sterlington 500kV	228

AMRN

Limiting Element	Contingency Element	ATC
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	35
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	59

CLECO

Limiting Element	Contingency Element	ATC
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Judice - Scott 138kV	Flander - Hopkins 138kV (CLECO/LAFA)	0
Judice - Scott 138kV	Greenwood - Terrebone 115kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	50
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	101
Judice - Scott 138kV	Greenwood - Humphery 115kV	117
Semere - Scott2 138kV	Wells 500/230kV transformer	118
Addis - Willow Glen 138kV	Louisiana Station - Wilbert 138kV	123
Judice - Scott 138kV	Gibson - Humphrey 115kV	158
North Crowley - Scott1 138kV	Wells 500/230kV transformer	206

EMDE

Limiting Element	Contingency Element	ATC
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161kV transformer	0
Bull Shoals - Bull Shoals Dam SPA 161kV	St. Joe - Hilltop 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Everton - St. Joe 161kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Harrison East - Everton 161kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
St. Joe - Hilltop 161kV	Bull Shoals - Bull Shoals Dam SPA 161kV	0
St. Joe - Hilltop 161kV	Bull Shoals - Flippin 161kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0

Limiting Element	Contingency Element	ATC
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Harrison East - Everton 161kV	Bull Shoals - Bull Shoals Dam SPA 161kV	0
St. Joe - Hilltop 161kV	Flippin - Summit 161kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Harrison East - Everton 161kV	Bull Shoals - Flippin 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bull Shoals - Lead Hills 161kV	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Clevcov - Lead HL 161kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
St. Joe - Hilltop 161kV	Harrison East - Summit 161kV	0
Harrison East - Summit 161kV	St. Joe - Hilltop 161kV	0
St. Joe - Hilltop 161kV	Eureka Springs - Osage Springs 161kV	0
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	0
Melborne - Sage 161kV	Dell - Independence SES 500kV	0
Harrison East - Everton 161kV	Flippin - Summit 161kV	0
Harrison East - Summit 161kV	Everton - St. Joe 161kV	0
Independence SES - Moorefield 161kV	Dell - Independence SES 500kV	0
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	24
Melborne - Sage 161kV	Sage - Guion 161kV	28
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	36
St. Joe - Hilltop 161kV	ANO - Fort Smith 500kV	37
Melborne - Sage 161kV	Newport - Newport Industrial 161kV	40
Melborne - Sage 161kV	Mountain View - Guion 161kV	57
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	61
Harrison East - Summit 161kV	Harrison East - Everton 161kV	75
Melborne - Sage 161kV	Newport AB - Newport Industrial 161kV	76
Independence SES - Moorefield 161kV	Newport - Newport Industrial 161kV	80
Independence SES - Moorefield 161kV	Newport AB - Newport Industrial 161kV	116
Melborne - Sage 161kV	Cash - Newport AB 161kV	119
Melborne - Sage 161kV	Cash - Jonesboro 161kV	148
Independence SES - Moorefield 161kV	Cash - Newport AB 161kV	160
Harrison East - Everton 161kV	Harrison East - Summit 161kV	161
Independence SES - Moorefield 161kV	Cash - Jonesboro 161kV	189
Melborne - Sage 161kV	Newport - Swifton 161kV	195
Melborne - Sage 161kV	Hoxies AECC - Swifton 161 kV	234
Independence SES - Moorefield 161kV	Newport - Swifton 161kV	234
Calico Rock - Melborne 161kV	ANO - Fort Smith 500kV	241

EES

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	43
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	78
Fairview - Gypsy 230kV	French Settlement - Springfield 230kV	246

LAGN

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	63
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	176

LAFa

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Semere - Scott2 138kV	Bonin - Labbe 230kV (LAFa)	0
North Crowley - Scott1 138kV	Bonin - Labbe 230kV (LAFa)	0
Semere - Scott2 138kV	Point Des Mouton - Wells 230kV	0
Semere - Scott2 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	0
Colonial Academy - Richard 138kV	Bonin - Labbe 230kV (LAFa)	0
North Crowley - Scott1 138kV	Point Des Mouton - Wells 230kV	0
North Crowley - Scott1 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Richard - Scott 138kV	Bonin - Labbe 230kV (LAFa)	0
North Crowley - Scott1 138kV	Richard - Scott 138kV	0
Colonial Academy - Richard 138kV	Point Des Mouton - Wells 230kV	0
Colonial Academy - Richard 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	14
Acadia - Colonial Academy 138kV	Bonin - Labbe 230kV (LAFa)	27
Richard - Scott 138kV	Point Des Mouton - Wells 230kV	28
Scott1 - Bonin 138kV	Bonin - Labbe 230kV (LAFa)	47
Semere - Scott2 138kV	Wells 500/230kV transformer	49
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	59
Richard - Scott 138kV	Point Des Mouton (LAFa) - Labbe (LAFa) 230kV	62
North Crowley - Scott1 138kV	Wells 500/230kV transformer	72
Habetz - Richard 138kV	Bonin - Labbe 230kV (LAFa)	75
Acadia - Colonial Academy 138kV	Point Des Mouton - Wells 230kV	77
North Crowley - Richard 138kV	Bonin - Labbe 230kV (LAFa)	77
Scott1 - Bonin 138kV	Point Des Mouton - Wells 230kV	86
Addis - Willow Glen 138kV	Louisiana Station - Wilbert 138kV	98
North Crowley - Richard 138kV	Point Des Mouton - Wells 230kV	104

Limiting Element	Contingency Element	ATC
Habetz - Richard 138kV	Point Des Mouton - Wells 230kV	107
Acadia - Colonial Academy 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	112
Scott1 - Bonin 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	119
Semere - Scott2 138kV	Richard - Scott 138kV	124
Acadia GSU - Scanlan 138kV	Bonin - Labbe 230kV (LAFA)	124
Acadia GSU - Scanlan 138kV	Point Des Mouton - Wells 230kV	133
North Crowley - Richard 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	138
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	139
Habetz - Richard 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	146
Acadia GSU - Scanlan 138kV	Point Des Mouton (LAFA) - Labbe (LAFA) 230kV	168
North Crowley - Scott1 138kV	Bonin 230/138kV transformer (LAFA)	191

LEPA

Limiting Element	Contingency Element	ATC
Chauvin - Ashland 115kV	Coteau - Houma 115kV	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Addis - Willow Glen 138kV	Louisiana Station - Wilbert 138kV	25

OKGE

Limiting Element	Contingency Element	ATC
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
BUS 'BRKN BW4 138' TO BUS 'BETHEL 4 138'	BUS 'VALIANT7 345' TO BUS 'PITTSB-7 345'	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Sterlington 500/115kV transformer 1	Eldorado EHV - Sterlington 500kV	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	0
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	19
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	36
St. Joe - Hilltop 161kV	ANO - Fort Smith 500kV	57
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	63
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Contingency of FlowGate 5029 DOLHILL7 345 TO SW SHV 7 345	206

SMEPA

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
Ray Braswell 500/115kV transformer 1	Lakeover 500/115kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Lakeover 500/115kV transformer	Ray Braswell 500/115kV transformer 1	0
Ray Braswell 500/230kV transformer 2	Ray Braswell 500/230kV transformer 1	0
Ray Braswell 500/230kV transformer 1	Ray Braswell 500/230kV transformer 2	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
Florence - South Jackson 115kV	Bogalusa - Adams Creek 500/230kV transformer	0
Florence - South Jackson 115kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	27
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	52
Florence - South Jackson 115kV	McAdams - Wolf Creek 500kV	103
Florence - South Jackson 115kV	Angie - Adams Creek 230kV	173
Florence - South Jackson 115kV	Lakeover - McAdams 500kV	199
Florence - South Jackson 115kV	South Jackson - Pop Spring 115kV	219
Florence - South Jackson 115kV	Franklin - Grand Gulf 500kV	232
Lakeover 500/115kV transformer	Lakeover - McAdams 500kV	241
Florence - South Jackson 115kV	Georgetown - Pop Spring 115kV	242

SOCO

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Fairview - Gypsy 230kV	Bogalusa - Franklin 500kV	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	33
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	58

SWPA

Limiting Element	Contingency Element	ATC
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Lake Conway - Mayflower 115kV	Pleasant Hill 500/161kV transformer	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Hergett JCWL - Jonesboro 161kV	0
Conway West 161/115kV transformer	Pleasant Hill 500/161kV transformer	0
Russellville East - Russellville North 161kV	ANO - Fort Smith 500kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161kV transformer	0
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	0
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Independence SES - Moorefield 161kV	0

Limiting Element	Contingency Element	ATC
Jonesboro - Jonesboro North (AECC) 161kV	Batesville - Moorefield 161kV	0
Conway West - Lake Conway 115kV	Pleasant Hill 500/161kV transformer	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
ANO - Russellville North 161kV	Morrilton East - Pleasant Hill 161kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Batesville - Cushman 161 kV	0
Sterlington 500/115kV transformer 1	Eldorado EHV - Sterlington 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Cushman - Sage 161kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Jim Hill 161/115kV transformer	0
Jonesboro - Jonesboro North (AECC) 161kV	Greenbrier - Pleasant Hill 161kV	0
Russellville South - Dardanelle Dam 161kV	ANO - Fort Smith 500kV	0
Melborne - Sage 161kV	ANO - Fort Smith 500kV	0
Independence SES - Moorefield 161kV	ANO - Fort Smith 500kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Jim Hill - Texas East Station 8 115kV	0
Jonesboro - Jonesboro North (AECC) 161kV	Plum Point - Shelby(TVA) 500kV	0
International Paper - Mansfield 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	0
Jonesboro - Jonesboro North (AECC) 161kV	Melborne - Sage 161kV	0
Melborne - Sage 161kV	Dell - Independence SES 500kV	0
Independence SES - Moorefield 161kV	Dell - Independence SES 500kV	0
Hot Springs Village - Cheetah 115kV	Russellville East - Russellville South 161kV	14
Melborne - Sage 161kV	Sage - Guion 161kV	20
International Paper - Wallake 138kV (CLECO)	Dolet Hills - S.W. Shreevport 345kV (CLECO)	26
Melborne - Sage 161kV	Newport - Newport Industrial 161kV	27
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	36
Melborne - Sage 161kV	Mountain View - Guion 161kV	40
Melborne - Sage 161kV	Newport AB - Newport Industrial 161kV	52
Independence SES - Moorefield 161kV	Newport - Newport Industrial 161kV	56
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	61
Independence SES - Moorefield 161kV	Newport AB - Newport Industrial 161kV	80
Melborne - Sage 161kV	Cash - Newport AB 161kV	82
Melborne - Sage 161kV	Cash - Jonesboro 161kV	102
Independence SES - Moorefield 161kV	Cash - Newport AB 161kV	110
Independence SES - Moorefield 161kV	Cash - Jonesboro 161kV	131
Melborne - Sage 161kV	Newport - Swifton 161kV	139
ANO - Russellville North 161kV	Pleasant Hill - ANO 500kV	155
Melborne - Sage 161kV	Hoxies AECC - Swifton 161 kV	167
Independence SES - Moorefield 161kV	Newport - Swifton 161kV	167
Calico Rock - Melborne 161kV	ANO - Fort Smith 500kV	182
Independence SES - Moorefield 161kV	Hoxies AECC - Swifton 161 kV	195
Independence SES - Moorefield 161kV	Plum Point - Shelby(TVA) 500kV	203
Independence SES - Moorefield 161kV	Hoxies AECC - Walnut Ridge 161kV	208
ANO - Russellville North 161kV	Pleasant Hill 500/161kV transformer	224
Calico Rock - Norfolk 161kV	ANO - Fort Smith 500kV	241
Hot Springs Village - Cheetah 115kV	Russellville South - Dardanelle Dam 161kV	258

TVA

Limiting Element	Contingency Element	ATC
Fairview - Gypsy 230kV	French Settlement - Sorrento 230kV	0
French Settlement - Sorrento 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Bogalusa - Franklin 500kV	0
Fairview - Gypsy 230kV	Bogalusa - Adams Creek 500/230kV transformer	0
French Settlement - Sorrento 230kV	Fairview - Gypsy 230kV	34
French Settlement - Sorrento 230kV	Franklin - McKnight 500kV	57