Feasibility Study for PID 206 168MW Plant Jacinto

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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 167.67 MW from the PID 206 plant to the Entergy Transmission System between the Jacinto and Shepherd substations. The proposed North Jacinto 138kV substation would be located approximately 4 miles north of the existing Jacinto 138 kV 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 2010 and 2012 Summer Peak cases, 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 2010 and 2012, 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 (2012 Summer)	FCITC Available for Scenario 3	FCITC Available for Scenario 4 (2012 Summer)
AECI	Associated Electric Cooperative, Inc.	2010	167 MW	0 MW	167 MW	0 MW
AEP-W	American Electric Power - West	2010	0 MW	0 MW	0 MW	0 MW
AMRN	Ameren Transmission	2010	167 MW	0 MW	167 MW	0 MW
CLEC	CLECO	2010	0 MW	0 MW	0 MW	0 MW
EES	Entergy	2010	167 MW	0 MW	167 MW	0 MW
EMDE	Empire District Electric Co	2010	0 MW	0 MW	31 MW	0 MW
LAFA	Lafayette Utilities Sustem	2010	0 MW	0 MW	0 MW	0 MW
LAGN	Louisiana Generating, LLC	2010	167 MW	0 MW	167 MW	0 MW
LEPA	Louisiana Energy & Power Authority	2010	167 MW	0 MW	167 MW	0 MW
OKGE	Oklahoma Gas & Electric Company	2010	0 MW	0 MW	21 MW	0 MW
SMEPA	South Mississippi Electric Power Assoc.	2010	167 MW	0 MW	167 MW	0 MW
SOCO	Southern Company	2010	167 MW	0 MW	167 MW	0 MW
SWPA	Southwest Power Administration	2010	0 MW	0 MW	0 MW	0 MW
TVA	Tennessee Valley Authority	2010	167 MW	0 MW	167 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-206 to 13 of Entergy's control area interfaces and dispatch within Entergy control area is limited by the following facilities:

2010 Summer Peak		**Interface**													
Limiting Element	**Cost**	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Bonin - Scott 138kV	$1,300,000							X							
Bull Shoals - Bull Shoals Dam SPA 161kV	$142,500						X								
Cedar Hill - Tamina 138kV	$970,000		X												
Champagne - East Opelousas 138kV	$1,397,500							X							
Champagne - Krotz Spring 138kV	$3,387,500				X			X							
Danville - North Magazine REA 161kV	$6,500,000		X				X				X			X	
Gibson - Humphrey 115kV	$2,817,500							X							
Greenwood - Humphrey 115kV	$135,000							X							
Greenwood - Terrebone 115kV	$2,540,000							X							
Harrison East - Summit 161kV	$5,395,000						X								
Krotz Spring - Line 642 Tap 138kV	$15,000				X			X							
Livonia - Line 642 Tap 138kV	$3,235,000				X			X							
Livonia - Wilbert 138kV	$4,822,500				X			X							
Plantation - Cedar Hill 138kV	$782,500		X												
Porter - Tamina 138kV	$127,500		X												

2012 Summer Peak		**Interface**													
Limiting Element	**Cost**	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Bull Shoals - Bull Shoals Dam SPA 161kV	$142,500						X								
Cedar Hill - Tamina 138kV	$970,000		X												
Champagne - Krotz Spring 138kV	$3,387,500				X			X							
Conroe Bulk - Plantation 138kV	$732,500		X												
Gibson - Humphrey 115kV	$2,817,500							X							
Greenwood - Humphrey 115kV	$135,000							X							
Greenwood - Terrebone 115kV	$2,540,000							X							
Jacinto - Splendora 138kV	$3,217,500	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Krotz Spring - Line 642 Tap 138kV	$15,000				X			X							
Livonia - Line 642 Tap 138kV	$3,235,000				X			X							
Livonia - Wilbert 138kV	$4,822,500				X			X							
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Other Owner		X				X				X				
Plantation - Cedar Hill 138kV	$782,500		X												
Porter - Tamina 138kV	$127,500		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-206 to 13 of Entergy's control area interfaces and dispatch within Entergy control area is limited by the following facilities:

2012 Summer Peak + Priors	**Interface**														
Limiting Element	**Cost**	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
A.A.C. - Polsky Carville 230kV	$1,500,000					X						X			
Acadia GSU - Scanlan 138kV	$485,000							X							
Addis - Big Cajun 1 230kV	$12,470,000					X				X					
ANO - Russellville North 161kV	$2,197,500	X	X				X				X			X	
Apollo - Splendora 138kV	$667,500	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bonin - Scott 138kV	$1,300,000							X							
Bonin 230/138kV transformer (LAFA)	$5,000,000							X		X					
Bull Shoals - Bull Shoals Dam SPA 161kV	$142,500						X								
Caney Creek - Peach Creek 138kV	$1,695,000	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cecelia - Semere 138kV	$137,500							X							
Cedar Hill - Tamina 138kV	$970,000		X												
Colonial Academy - Acadia GSU 138kV	$2,092,500							X							
Colonial Academy - Richard 138kV	$2,652,500							X							
Coly - Vignes 230kV	$5,230,000					X						X			
Conroe Bulk - Plantation 138kV	$732,500		X												
Danville - North Magazine REA 161kV	$6,500,000										X				
Florence - South Jackson 115kV	$1,905,000											X			
Habetz - Richard 138kV	$3,272,500							X							
Harrison East - Summit 161kV	$5,395,000						X								
Jacinto - Peach Creek 138kV	$4,122,500	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jacinto - Splendora 138kV	$3,217,500	X	X	X	X	X	X	X	X	X	X	X	X	X	X
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Other Owner		X				X				X				
Moril - Cecelia 138kV	$6,182,500									X					
Morton - Pelahatchie 115kV	$1,517,500											X			
New Hebron - Sliver Creek 115kV	$2,275,000											X			
North Crowley - Scott 138kV	$4,265,000				X			X		X					
Plantation - Cedar Hill 138kV	$782,500		X												
Polsky Carville - Willow Glen 230kV	$2,500,000					X						X			
Porter - Apollo 138kV	$4,125,000	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Porter - Tamina 138kV	$127,500		X								X				
Raceland - Coteau 115kV	$3,065,000							X							
Richard - Scott 138kV	$7,060,000							X		X					
Semere - Scott 138kV	$4,057,500				X			X							

2012 Summer Peak + Priors	Interface														
Limiting Element	**Cost**	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Sorrento - Vignes 230kV	$8,120,000					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 206 to 13 of Entergy's control area interfaces and dispatch within Entergy control area is limited by the following facilities:

2010 + Future Projects	**Interface**														
Limiting Element	**Cost**	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
ANO - Russellville North 161kV	$2,197,500		X				X				X			X	
Bonin - Scott 138kV	$1,300,000							X							
Bonin 230/138kV transformer (LAFA)	$5,000,000							X							
Bull Shoals - Bull Shoals Dam SPA 161kV	$142,500						X								
Champagne - East Opelousas 138kV	$1,397,500							X							
Champagne - Krotz Spring 138kV	$3,387,500				X			X							
Danville - North Magazine REA 161kV	$6,500,000		X				X				X			X	
Gibson - Humphrey 115kV	$2,817,500							X							
Greenwood - Humphrey 115kV	$135,000							X							
Greenwood - Terrebone 115kV	$2,540,000							X							
Krotz Spring - Line 642 Tap 138kV	$15,000				X			X							
Livonia - Line 642 Tap 138kV	$3,235,000				X			X							
Livonia - Wilbert 138kV	$4,822,500				X			X							
Melborne - Sage 161kV	$1,192,500						X							X	
Porter - Tamina 138kV	$127,500		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 206 to 13 of Entergy's control area interfaces and dispatch within Entergy control area is limited by the following facilities:

2012 Summer Peak + Future Projects + Priors		**Interface**													
Limiting Element	**Cost**	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Acadia GSU - Scanlan 138kV	$485,000							X							
Addis - Big Cajun 1 230kV	$12,470,000					X				X					
ANO - Russellville North 161kV	$2,197,500	X	X				X				X			X	
Apollo - Splendora 138kV	$667,500	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bonin - Scott 138kV	$1,300,000							X							
Bonin 230/138kV transformer (LAFA)	$5,000,000							X		X					
Bull Shoals - Bull Shoals Dam SPA 161kV	$142,500						X								
Caney Creek - Peach Creek 138kV	$1,695,000	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cecelia - Semere 138kV	$137,500							X							
Colonial Academy - Acadia GSU 138kV	$2,092,500							X							
Colonial Academy - Richard 138kV	$2,652,500							X							
Florence - South Jackson 115kV	$1,905,000											X			
Habetz - Richard 138kV	$3,272,500							X							
Jacinto - Peach Creek 138kV	$4,122,500	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jacinto - Splendora 138kV	$3,217,500	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Magee - New Hebron 115kV	$4,157,500											X			
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Other Owner		X				X				X				
Moril - Cecelia 138kV	$6,182,500									X					
Morton - Pelahatchie 115kV	$1,517,500											X			
New Hebron - Sliver Creek 115kV	$2,275,000											X			
North Crowley - Scott 138kV	$4,265,000				X			X		X					
Porter - Apollo 138kV	$4,125,000	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Porter - Tamina 138kV	$127,500	X	X	X			X				X		X	X	X
Raceland - Coteau 115kV	$3,065,000							X							
Richard - Scott 138kV	$7,060,000							X		X					
Russellville East - Russellville South 161kV	$1,025,000		X				X				X			X	
Semere - Scott 138kV	$4,057,500				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 Study:

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 in the Entergy system including the proposed Lake Charles Cogeneration units.

B. Short Circuit Analysis

The method used to determine if any short circuit problems would be caused by the addition of the PID 206 generation is as follows:

i. 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 206 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 206 generation. The breakers identified to be upgraded through this comparison are *mandatory* upgrades.

C. Analysis Results

The results of the short circuit analysis indicates that the additional generation due to PID 206 generator does not cause an increase in short circuit current such that they exceed the fault interrupting capability of the high voltage circuit breakers within the Entergy Transmission system.

D. Problem Resolution

There were no problems identified for this part of the study that were a result of the additional PID 206 generation.

IV. Upgrade Classification:

The identified upgrades were classified by the ICT as base plan or supplemental. The following table is the results of that classification.

Limiting Element	Cost	Base Plan or Supplemental
A.A.C. - Polsky Carville 230kV	$1,500,000	Supplemental
Acadia GSU - Scanlan 138kV	$485,000	Supplemental
Addis - Big Cajun 1 230kV	$12,470,000	Supplemental
ANO - Russellville North 161kV	$2,197,500	Supplemental
Apollo - Splendora 138kV	$667,500	Base Plan
Bonin - Scott 138kV	$1,300,000	Supplemental
Bonin 230/138kV transformer (LAFA)	$5,000,000	Supplemental
Bull Shoals - Bull Shoals Dam SPA 161kV	$142,500	Supplemental
Caney Creek - Peach Creek 138kV	$1,695,000	Supplemental
Cecelia - Semere 138kV	$137,500	Supplemental
Cedar Hill - Tamina 138kV	$970,000	Base Plan
Champagne - East Opelousas 138kV	$1,397,500	Supplemental
Champagne - Krotz Spring 138kV	$3,387,500	Supplemental
Colonial Academy - Richard 138kV	$2,652,500	Supplemental
Coly - Vignes 230kV	$5,230,000	Supplemental
Conroe Bulk - Plantation 138kV	$732,500	Base Plan
Danville - North Magazine REA 161kV	$6,500,000	Supplemental
Florence - South Jackson 115kV	$1,905,000	Supplemental
Gibson - Humphrey 115kV	$2,817,500	Supplemental
Greenwood - Humphrey 115kV	$135,000	Supplemental
Greenwood - Terrebone 115kV	$2,540,000	Supplemental
Habetz - Richard 138kV	$3,272,500	Supplemental
Harrison East - Summit 161kV	$5,395,000	Supplemental
Jacinto - Peach Creek 138kV	$4,122,500	Base Plan
Jacinto - Splendora 138kV	$3,217,500	Base Plan
Krotz Spring - Line 642 Tap 138kV	$15,000	Supplemental
Livonia - Line 642 Tap 138kV	$3,235,000	Supplemental
Livonia - Wilbert 138kV	$4,822,500	Supplemental
Magee - New Hebron 115kV	$4,157,500	Supplemental
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Other Owner	Supplemental
Melborne - Sage 161kV	$1,192,500	Supplemental
Moril - Cecelia 138kV	$6,182,500	Supplemental
Morton - Pelahatchie 115kV	$1,517,500	Supplemental
New Hebron - Sliver Creek 115kV	$2,275,000	Supplemental
North Crowley - Scott 138kV	$4,265,000	Supplemental
Plantation - Cedar Hill 138kV	$782,500	Base Plan
Polsky Carville - Willow Glen 230kV	$2,500,000	Supplemental

Limiting Element	Cost	Base Plan or Supplemental
Porter - Apollo 138kV	$4,125,000	Base Plan
Porter - Tamina 138kV	$127,500	Base Plan
Raceland - Coteau 115kV	$3,065,000	Supplemental
Richard - Scott 138kV	$7,060,000	Supplemental
Russellville East - Russellville South 161kV	$1,025,000	Supplemental
Semere - Scott 138kV	$4,057,500	Supplemental
Sterlington 500/115kV transformer 2	$8,100,000	Supplemental

APPENDIX A: Prior Transactions Included in the FCITC calculation for PID 206

Generator Interconnection				
PID	**Location**	**MW**	**kV**	**Year In Service**
195	BigCajun2 Unit 4	710	230	2010
197	Cypress	336	230	2010
198	Plum Point	700	500	2010
202	Port Acre	164	69	2010
203	GrandGulf	1522	500	2015
204	RiverBend	1522	500	2015

Transmission Service				
OASIS #	**POR**	**POD**	**MW**	**Begin**
1365013	LAGN	EES	75	3/1/2010
1382405	LAGN	DENL	60	12/1/2009
1402295	LAGN	SMEPA	75	6/1/2009
1406786	EES	EES	100	4/1/2010
1408199	EES	EES	100	4/1/2010
1413255	PUPP	CSWS	225	1/1/2007
1413580	LAGN	CNWY	50	1/1/2011
1416723	EES	EDE	50	5/1/2010
1416727	EES	EDE	25	5/1/2010
1416729	EES	EDE	10	5/1/2010
1418968	LAGN	WMUC	15	1/1/2010
1435303	EES	EES	150	1/1/2010
1453400	LAGN	LAGN	20	5/1/2007
1431165	AMRN	SOCO	103	1/1/2008
1449881	AMRN	SOCO	103	1/1/2008
1452308	AMRN	LAGN	100	1/1/2008
1452603	AMRN	LAGN	100	9/1/2007
1453402	AMRN	SOCO	103	1/1/2009
1454694	EES	CLEC	103	1/1/2008
1454934	EES	CLEC	52	1/1/2008
1454935	EES	CLEC	103	1/1/2008
1455357	EES	CLEC	52	1/1/2008
1456636	OKGE	EES	10	10/1/2007
1457041	EES	LAGN	50	1/1/2008
1458435	LAGN	CLEC	103	10/1/2008
1458437	LAGN	AMRN	103	10/1/2009
1458446	LAGN	AMRN	103	1/1/2014
1458447	LAGN	CSWS	103	1/1/2013
1458448	LAGN	SOCO	103	1/1/2013
1460876	EES	CSWS	75	3/1/2009
1460878	EES	CSWS	75	3/1/2009
1460879	EES	CSWS	75	3/1/2009
1460881	EES	CSWS	75	3/1/2009

Transmission Service				
OASIS #	**POR**	**POD**	**MW**	**Begin**
1460898	CLEC	LEPA	3	1/1/2009
1460899	SPA	LEPA	5	1/1/2009
1460900	CSWS	LEPA	116	1/1/2009
1461442	EES	LEPA	12	1/1/2009
1462910	EES	CLEC	225	1/1/2008
1463203	LAGN	ETEC	50	1/1/2010
1466193	EES	CLEC	206	1/1/2009
1466196	EES	CLEC	206	1/1/2009
1466197	LAGN	CLEC	206	1/1/2009
1467085	EES	AMRN	78	5/1/2010

APPENDIX B: Approved Future Projects Included in the FCITC calculation for PID 206

Hilltop: Install Switching Station	2007
Palm St. Substation: UAMS Little Rock Campus Expansion	2007
Maumelle East Substation - Install Second Transmission Tie	2008
Construct new substation Hwy 64 & Beryl	2008
Port Hudson: 69kV bus upgrade	2007
Winn: Install 69kV Cap Bank	2007
69 kV Nesser Capacitor Installation	2007
Cameron LNG: New 25 MVA POD	2007
Shintech Load Expansion	2007
69 kV McManus Capacitor Installation	2008
St. Gabriel: Add new 230/34.5 kV substation with a 50 MVA transformer	2008
Pinnacle Substation (Part 1) Build 1 mile of 69 kV loop and install 25 MVA transfromer and 2 feeders	2008
Grimes: Reconfigure Substation	2007
SHECO - Menard Substation Upgrades	2007
SHECO - Turkey Creek Substation Upgrades	2007
Kolbs & Hanks: 230 kV Bus Upgrades	2007
JNEC Deweyville - Add breakers & cut-in Line 81	2007
Brazos - Interconnect New 138kV Fish Creek Sub on Line 96	2007
Frontier Park-build sub to relieve Hankamer T1 OL using PeeDee xfmr. Install 811PD bkr & convert	2007
Calvert: Expand cap bank to 12 MVAr	2008
Sandy Shores: Install 11 MVAr cap bank	2008
Line 886: Tamina-Cedar Hill Upgrade 138 kV line	2008
Johnstown-build sub using Bayou Warehouse Xfmr (possibly Metro xfmr)	2008
Beaumont 69 kV Improvement Plan: Option 2	2009
Walnut Grove-Lamkin-Monroe Lin	2007
Perryville: Establish Midstream	2007
Ruston: Add 2nd POD	2007
Bastrop: Replace 10MVA Transformer with 67MVA	2008
2004 Hammond-Amite Convert 115kv	2007
Tennessee Gas Pipeline (Happy Jack)	2008
Loblolly-Hammond Build 230kv Line	2009
Downstream of Gypsy: Phase 3	2010
Amite South Import Improvement: Phase 2	2010
Amite South Import Improvement: Phase 3	2010
St. James	2007
Wesco 230 kV Substation	2009
McComb: Install Capacitor Bank	2007
Senatobia: Install Capacitor Bank	2007
Liberty-Gloster: Upgrade 115 kV Line For Natchez De-listing	2007
Church Rd Substation & 11.3 miles 230kV	2008

Sunnybrook Substation & Radial 115kv from golf carts store (includes 0.4 miles of UG 115kv - Jackson Ave and Natchez Trace	2008

APPENDIX C: Results for Scenario 1:

AECI

Limiting Element	Contingency Element	ATC
NONE	NONE	167

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
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0

AMRN

Limiting Element	Contingency Element	ATC
NONE	NONE	167

CLECO

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
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Richard - Wells 500kV	79

EMDE

Limiting Element	Contingency Element	ATC
Bull Shoals - Bull Shoals Dam SPA 161kV	Bee Branch AECC - Quitman 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bee Branch AECC - Clinton 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Clinton - Clinton West AECC 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bull Shoals - Lead Hills 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Botkinburg AECC - Clinton West AECC 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Clevcov - Lead HL 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Marshall - Botkinburg AECC 161kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0
Harrison East - Summit 161kV	Bee Branch AECC - Quitman 161kV	121
Bull Shoals - Bull Shoals Dam SPA 161kV	Marshall - St. Joe 161kV	141
Bull Shoals - Bull Shoals Dam SPA 161kV	Everton - St. Joe 161kV	164

LAGN

Limiting Element	Contingency Element	ATC
NONE	NONE	167

LAFA

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
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	0
Livonia - Wilbert 138kV	Richard - Wells 500kV	86
Champagne - East Opelousas 138kV	Webre - Wells 500kV	112

OKGE

Limiting Element	Contingency Element	ATC
NONE	NONE	167

SMEPA

Limiting Element	Contingency Element	ATC
NONE	NONE	167

SOCO

Limiting Element	Contingency Element	ATC
NONE	NONE	167

SWPA

Limiting Element	Contingency Element	ATC
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	0

TVA

Limiting Element	Contingency Element	ATC
NONE	NONE	167

APPENDIX D: Results for Scenario 2:

AECI

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	79
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	79
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	100
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	109
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	109
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	159

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
Porter - Tamina 138kV	Metro - Oak Ridge 138kV	0
Cedar Hill - Tamina 138kV	Metro - Oak Ridge 138kV	0
Plantation - Cedar Hill 138kV	Metro - Oak Ridge 138kV	0
Conroe Bulk - Plantation 138kV	Metro - Oak Ridge 138kV	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Porter - Tamina 138kV	Conair - Lewis Creek SES 138kV	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Con. of FG5029 DOLHILL7 345 TO SW SHV 7 345	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Porter - Tamina 138kV	Metro - Goslin 138kV	0
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	70
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	70
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	89
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	99
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	99
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	145

AMRN

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	80
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	80
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	101
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	110
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	110

Porter - Apollo 138kV	Porter - China/Porter Series Compensation	160

CLECO

Limiting Element	Contingency Element	ATC
Semere - Scott 138kV	Wells 500/230kV transformer	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
North Crowley - Scott 138kV	Richard - Scott 138kV	0
North Crowley - Scott 138kV	Wells 500/230kV transformer	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
North Crowley - Scott 138kV	Greenwood - Terrebone 115kV	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	90
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	90
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	114
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	120
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	120

EES

Limiting Element	Contingency Element	ATC
Coly - Vignes 230kV	Polsky Carville - Willow Glen 230kV	0
Coly - Vignes 230kV	A.A.C. - Polsky Carville 230kV	0
Coly - Vignes 230kV	A.A.C. - Licar 230kV	0
Coly - Vignes 230kV	Belle Helene - Licar 230kV	0
Coly - Vignes 230kV	Belle Helene - Woodstock 230kV	0
Coly - Vignes 230kV	Vulchlor - Woodstock 230kV	0
Sorrento - Vignes 230kV	Polsky Carville - Willow Glen 230kV	0
Sorrento - Vignes 230kV	A.A.C. - Polsky Carville 230kV	0
Sorrento - Vignes 230kV	A.A.C. - Licar 230kV	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Sorrento - Vignes 230kV	Belle Helene - Licar 230kV	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Addis - Big Cajun 1 230kV	Big Cajun 2 - Webre 500kV	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Sorrento - Vignes 230kV	Belle Helene - Woodstock 230kV	0
Sorrento - Vignes 230kV	Vulchlor - Woodstock 230kV	0

Limiting Element	Contingency Element	ATC
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Polsky Carville - Willow Glen 230kV	Coly - Vignes 230kV	65
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	81
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	81
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	103
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	114
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	114
A.A.C. - Polsky Carville 230kV	Coly - Vignes 230kV	116

EMDE

Limiting Element	Contingency Element	ATC
Bull Shoals - Bull Shoals Dam SPA 161kV	Bee Branch AECC - Quitman 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bee Branch AECC - Clinton 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Clinton - Clinton West AECC 161kV	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bull Shoals - Lead Hills 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Clevcov - Lead HL 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Botkinburg AECC - Clinton West AECC 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Marshall - Botkinburg AECC 161kV	0
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Con. of FG5029 DOLHILL7345 TO SWSHV7345	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Marshall - St. Joe 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Everton - St. Joe 161kV	14
Harrison East - Summit 161kV	Bee Branch AECC - Quitman 161kV	17
Bull Shoals - Bull Shoals Dam SPA 161kV	Harrison East - Everton 161kV	76
Harrison East - Summit 161kV	Bee Branch AECC - Clinton 161kV	76
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	77
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	77
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	98
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	107

Porter - Apollo 138kV	China/Porter Series Compensation ckt2	107
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	156
Harrison East - Summit 161kV	Clinton - Clinton West AECC 161kV	162

LAFA

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Semere - Scott 138kV	Bonin - Labbe 230kV (LAFA)	0
Bonin 230/138kV transformer (LAFA)	Acadian - Bonin 230kV (LAFA)	0
Semere - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	0
Semere - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	0
Semere - Scott 138kV	Greenwood - Terrebone 115kV	0
North Crowley - Scott 138kV	Bonin - Labbe 230kV (LAFA)	0
Semere - Scott 138kV	Wells 500/230kV transformer	0
Bonin 230/138kV transformer (LAFA)	Flanders - Acadian 230kV (LAFA)	0
North Crowley - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	0
Semere - Scott 138kV	Bonin - Cecelia 138kV	0
North Crowley - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	0
Semere - Scott 138kV	Flander - Hopkins 138kV (LAFA)	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Colonial Academy - Richard 138kV	Bonin - Labbe 230kV (LAFA)	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
North Crowley - Scott 138kV	Wells 500/230kV transformer	0
Colonial Academy - Richard 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	0
Semere - Scott 138kV	Roy S. Nelson - Richard 500kV	0
Semere - Scott 138kV	Hartburg - Roy S. Nelson 500kV	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Colonial Academy - Richard 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	0
North Crowley - Scott 138kV	Greenwood - Terrebone 115kV	0
Bonin - Scott 138kV	Bonin - Labbe 230kV (LAFA)	0
Bonin - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	8
Richard - Scott 138kV	Bonin - Labbe 230kV (LAFA)	8
Habetz - Richard 138kV	Bonin - Labbe 230kV (LAFA)	14
Richard - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	18
Habetz - Richard 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	25
Colonial Academy - Acadia GSU 138kV	Bonin - Labbe 230kV (LAFA)	32
Bonin - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	35
Colonial Academy - Acadia GSU 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	38
Richard - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	45
Raceland - Coteau 115kV	Terrebone 230/115kV transformer	56
Habetz - Richard 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	57
Colonial Academy - Acadia GSU 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	64
Cecelia - Semere 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	73
Colonial Academy - Richard 138kV	Greenwood - Terrebone 115kV	75
Cecelia - Semere 138kV	Bonin - Labbe 230kV (LAFA)	77
Acadia GSU - Scanlan 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	91

Limiting Element	Contingency Element	ATC
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	93
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	93
Acadia GSU - Scanlan 138kV	Bonin - Labbe 230kV (LAFA)	100
North Crowley - Scott 138kV	Roy S. Nelson - Richard 500kV	101
North Crowley - Scott 138kV	Hartburg - Roy S. Nelson 500kV	108
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	118
Acadia GSU - Scanlan 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	118
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	123
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	123
Colonial Academy - Richard 138kV	Wells 500/230kV transformer	131

LAGN

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Sterlington 500/115kV transformer 2	Sterlington 500/115kV transformer 1	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Sterlington 500/115kV transformer 1	Sterlington 500/115kV transformer 2	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	91
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	91
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	116
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	122
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	122

LEPA

Limiting Element	Contingency Element	ATC
Bonin 230/138kV transformer (LAFA)	Acadian - Bonin 230kV (LAFA)	0
North Crowley - Scott 138kV	Bonin - Labbe 230kV (LAFA)	0
North Crowley - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	0
North Crowley - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	0
Bonin 230/138kV transformer (LAFA)	Flanders - Acadian 230kV (LAFA)	0
Moril - Cecelia 138kV	Flander - Hopkins 138kV (LAFA)	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
North Crowley - Scott 138kV	Richard - Scott 138kV	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0

Limiting Element	Contingency Element	ATC
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Addis - Big Cajun 1 230kV	Big Cajun 2 - Webre 500kV	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Richard - Scott 138kV	Bonin - Labbe 230kV (LAFA)	38
Addis - Big Cajun 1 230kV	Coly - McKnight 500kV	80
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	91
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	91
Richard - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	110
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	116
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	122
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	122
Addis - Big Cajun 1 230kV	Enjay - Fancy Point 230kV	132
Addis - Big Cajun 1 230kV	Fancy Point - McKnight 500kV	139

OKGE

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Porter - Tamina 138kV	Conair - Lewis Creek SES 138kV	0
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Con. of FG 5029 DOLHILL7345 TO SW SHV7345	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	74
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	74
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	95
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	105
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	105
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	143
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	152

SMEPA

Limiting Element	Contingency Element	ATC
Coly - Vignes 230kV	Polsky Carville - Willow Glen 230kV	0
Coly - Vignes 230kV	A.A.C. - Polsky Carville 230kV	0
Coly - Vignes 230kV	A.A.C. - Licar 230kV	0
Coly - Vignes 230kV	Belle Helene - Licar 230kV	0
Coly - Vignes 230kV	Belle Helene - Woodstock 230kV	0

Limiting Element	Contingency Element	ATC
Coly - Vignes 230kV	Vulchlor - Woodstock 230kV	0
Sorrento - Vignes 230kV	Polsky Carville - Willow Glen 230kV	0
Sorrento - Vignes 230kV	A.A.C. - Polsky Carville 230kV	0
Sorrento - Vignes 230kV	A.A.C. - Licar 230kV	0
Sorrento - Vignes 230kV	Belle Helene - Licar 230kV	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Sorrento - Vignes 230kV	Belle Helene - Woodstock 230kV	0
Sorrento - Vignes 230kV	Vulchlor - Woodstock 230kV	0
Florence - South Jackson 115kV	Bogalusa - Adams Creek 500/230kV transformer	0
Florence - South Jackson 115kV	Bogalusa - Franklin 500kV	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Florence - South Jackson 115kV	Bogalusa - Adams Creek 500/230kV transformer	0
Florence - South Jackson 115kV	Bogalusa - Franklin 500kV	0
Florence - South Jackson 115kV	New Hebron - Sliver Creek 115kV	0
Morton - Pelahatchie 115kV	Angie - Adams Creek 230kV	3
Florence - South Jackson 115kV	Magee - New Hebron 115kV	5
Polsky Carville - Willow Glen 230kV	Coly - Vignes 230kV	69
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	86
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	86
Florence - South Jackson 115kV	Angie - Adams Creek 230kV	102
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	109
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	116
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	116
A.A.C. - Polsky Carville 230kV	Coly - Vignes 230kV	123
Florence - South Jackson 115kV	Wolf Creek - McAdams 500kV	135
New Hebron - Sliver Creek 115kV	Florence - South Jackson 115kV	135

SOCO

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0

Limiting Element	Contingency Element	ATC
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	83
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	83
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	105
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	114
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	114

SWPA

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	77
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	77
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	98
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	108
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	108
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	157

TVA

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	81
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	81
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	104
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	112
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	112

APPENDIX E: Results for Scenario 3:

AECI

Limiting Element	Contingency Element	ATC
NONE	NONE	167

AEP-W

Limiting Element	Contingency Element	ATC
Porter - Tamina 138kV	Oak Ridge - Porter 138kV	0
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	34
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	82

AMRN

Limiting Element	Contingency Element	ATC
NONE	NONE	167

CLECO

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
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Jacinto - Jacinto North (ETEC) 138kV	Sheperd - Jacinto North (ETEC) 138kV	206

EES

Limiting Element	Contingency Element	ATC
NONE	NONE	167

EMDE

Limiting Element	Contingency Element	ATC
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	31
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	63
Bull Shoals - Bull Shoals Dam SPA 161kV	Saint Joe - Hilltop 161kV	163

LAFA

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
Greenwood - Terrebone 115kV	Webre - Wells 500kV	0
Champagne - Krotz Spring 138kV	Webre - Wells 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	42
Bonin - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	168

LAGN

Limiting Element	Contingency Element	ATC
NONE	NONE	167

LEPA

Limiting Element	Contingency Element	ATC
NONE	NONE	167

OKGE

Limiting Element	Contingency Element	ATC
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	21
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	55

SMEPA

Limiting Element	Contingency Element	ATC
NONE	NONE	167

SOCO

Limiting Element	Contingency Element	ATC
NONE	NONE	167

SWPA

Limiting Element	Contingency Element	ATC
Danville - North Magazine REA 161kV	ANO - Fort Smith 500kV	45
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	49
Melborne - Sage 161kV	Dell - ISES 500kV	148

TVA

Limiting Element	Contingency Element	ATC
NONE	NONE	167

APPENDIX F: Results for Scenario 4:

AECI

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	65
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	65
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	72
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	72
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	94
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	115
Porter - Tamina 138kV	Jacinto - Peach Creek 138kV	136

AEP-W

Limiting Element	Contingency Element	ATC
Porter - Tamina 138kV	Oak Ridge - Porter 138kV	0
Porter - Tamina 138kV	Metro - Oak Ridge 138kV	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Porter - Tamina 138kV	Conair - Lewis Creek SES 138kV	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Porter - Tamina 138kV	Metro - Goslin 138kV	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
'MANSFLD4 138' TO BUS 'IPAPER 4 138	Con. of FG5029 DOLHILL7345 TO SW SHV7345	0
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	59
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	59
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	64
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	64
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	83
Porter - Tamina 138kV	Jacinto - Peach Creek 138kV	95

Limiting Element	Contingency Element	ATC
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	104
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	130
Porter - Tamina 138kV	Caney Creek - Peach Creek 138kV	161

AMRN

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	65
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	65
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	73
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	73
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	95
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	115
Porter - Tamina 138kV	Jacinto - Peach Creek 138kV	140

CLECO

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Semere - Scott 138kV	Wells 500/230kV transformer	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
North Crowley - Scott 138kV	Richard - Scott 138kV	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
North Crowley - Scott 138kV	Wells 500/230kV transformer	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
North Crowley - Scott 138kV	Greenwood - Terrebone 115kV	0
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	71
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	71
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	82
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	82
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	107
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	126

EES

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Addis - Big Cajun 1 230kV	Big Cajun 2 - Webre 500kV	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Addis - Big Cajun 1 230kV	Coly - McKnight 500kV	9
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	67
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	67
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	74
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	74
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	97
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	120

EMDE

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Con of FG5029 DOLHILL7345 TO SWSHV7345	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Saint Joe - Hilltop 161kV	32
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	63
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	63
Bull Shoals - Bull Shoals Dam SPA 161kV	Everton - St. Joe 161kV	67
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	70
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	70
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	92
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	112
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	117
Porter - Tamina 138kV	Jacinto - Peach Creek 138kV	125
Bull Shoals - Bull Shoals Dam SPA 161kV	Harrison East - Everton 161kV	139

LAGN

Limiting Element	Contingency Element	ATC

Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	72
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	72
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	83
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	83
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	109
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	128

LAFA

Limiting Element	**Contingency Element**	**ATC**
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Semere - Scott 138kV	Bonin - Labbe 230kV (LAFA)	0
Bonin 230/138kV transformer (LAFA)	Acadian - Bonin 230kV (LAFA)	0
Semere - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	0
Semere - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	0
Semere - Scott 138kV	Greenwood - Terrebone 115kV	0
North Crowley - Scott 138kV	Bonin - Labbe 230kV (LAFA)	0
Semere - Scott 138kV	Wells 500/230kV transformer	0
Bonin 230/138kV transformer (LAFA)	Flanders - Acadian 230kV (LAFA)	0
North Crowley - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	0
Semere - Scott 138kV	Bonin - Cecelia 138kV	0
North Crowley - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Semere - Scott 138kV	Flander - Hopkins 138kV (LAFA)	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Colonial Academy - Richard 138kV	Bonin - Labbe 230kV (LAFA)	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
North Crowley - Scott 138kV	Wells 500/230kV transformer	0
Colonial Academy - Richard 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	0
Semere - Scott 138kV	Roy S. Nelson - Richard 500kV	0
Semere - Scott 138kV	Hartburg - Roy S. Nelson 500kV	0
Colonial Academy - Richard 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	0
North Crowley - Scott 138kV	Greenwood - Terrebone 115kV	0

Limiting Element	Contingency Element	ATC
Bonin - Scott 138kV	Bonin - Labbe 230kV (LAFA)	0
Raceland - Coteau 115kV	Terrebone 230/115kV transformer	7
Bonin - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	8
Richard - Scott 138kV	Bonin - Labbe 230kV (LAFA)	14
Habetz - Richard 138kV	Bonin - Labbe 230kV (LAFA)	19
Richard - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	23
Habetz - Richard 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	29
Bonin - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	36
Colonial Academy - Acadia GSU 138kV	Bonin - Labbe 230kV (LAFA)	38
Colonial Academy - Acadia GSU 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	42
Richard - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	49
Habetz - Richard 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	61
Colonial Academy - Acadia GSU 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	69
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	73
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	73
Cecelia - Semere 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	77
Colonial Academy - Richard 138kV	Greenwood - Terrebone 115kV	80
Cecelia - Semere 138kV	Bonin - Labbe 230kV (LAFA)	82
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	84
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	84
Acadia GSU - Scanlan 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	96
Cecelia - Semere 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	104
Acadia GSU - Scanlan 138kV	Bonin - Labbe 230kV (LAFA)	106
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	110
North Crowley - Scott 138kV	Roy S. Nelson - Richard 500kV	111
North Crowley - Scott 138kV	Hartburg - Roy S. Nelson 500kV	119
Acadia GSU - Scanlan 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	123
North Crowley - Scott 138kV	Franklin - McKnight 500kV	127
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	129
Colonial Academy - Richard 138kV	Wells 500/230kV transformer	141

LEPA

Limiting Element	Contingency Element	ATC
Bonin 230/138kV transformer (LAFA)	Acadian - Bonin 230kV (LAFA)	0
North Crowley - Scott 138kV	Bonin - Labbe 230kV (LAFA)	0
North Crowley - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	0
Bonin 230/138kV transformer (LAFA)	Flanders - Acadian 230kV (LAFA)	0
North Crowley - Scott 138kV	Point Mouton (LAFA) - Labbe (LAFA) 230kV	0
Moril - Cecelia 138kV	Flander - Hopkins 138kV (LAFA)	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
North Crowley - Scott 138kV	Richard - Scott 138kV	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0

Limiting Element	Contingency Element	ATC
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Addis - Big Cajun 1 230kV	Big Cajun 2 - Webre 500kV	0
Addis - Big Cajun 1 230kV	Coly - McKnight 500kV	3
Richard - Scott 138kV	Bonin - Labbe 230kV (LAFA)	64
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	72
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	72
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	83
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	83
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	109
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	128
Addis - Big Cajun 1 230kV	Enjay - Fancy Point 230kV	129
Richard - Scott 138kV	Wells (CLECO) - Point Mouton (LAFA) 230kV	136

OKGE

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Porter - Tamina 138kV	Conair - Lewis Creek SES 138kV	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
'MANSFLD4 138' TO BUS 'IPAPER 4 138'	Con of FG5029 DOLHILL7345 TO SWSHV7345	0
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	62
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	62
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	68
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	68
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	89
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	98
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	110
Porter - Tamina 138kV	Jacinto - Peach Creek 138kV	114

SMEPA

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Florence - South Jackson 115kV	New Hebron - Sliver Creek 115kV	9
Morton - Pelahatchie 115kV	Angie - Adams Creek 230kV	13
Florence - South Jackson 115kV	Magee - New Hebron 115kV	21
Florence - South Jackson 115kV	Bogalusa - Adams Creek 500/230kV transformer	55
Florence - South Jackson 115kV	Bogalusa - Franklin 500kV	55
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	69
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	69
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	78
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	78
New Hebron - Sliver Creek 115kV	Florence - South Jackson 115kV	89
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	102
Florence - South Jackson 115kV	Angie - Adams Creek 230kV	119
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	122
Magee - New Hebron 115kV	Florence - South Jackson 115kV	143

SOCO

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	67
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	67
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	76
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	76
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	99
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	119
Porter - Tamina 138kV	Jacinto - Peach Creek 138kV	162

SWPA

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
ANO - Russellville North 161kV	ANO - Fort Smith 500kV	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	64
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	64
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	71
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	71
Russellville East - Russellville South 161kV	ANO - Fort Smith 500kV	90
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	92
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	113
Porter - Tamina 138kV	Jacinto - Peach Creek 138kV	128

TVA

Limiting Element	Contingency Element	ATC
Jacinto - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Splendora 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Splendora 138kV	Porter - China/Porter Series Compensation	0
Apollo - Splendora 138kV	China/Porter Series Compensation ckt2	0
Apollo - Splendora 138kV	China Bulk - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	China/Porter Series Compensation ckt2	0
Jacinto - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	0
Apollo - Splendora 138kV	Porter - China/Porter Series Compensation	0
Jacinto - Peach Creek 138kV	Porter - China/Porter Series Compensation	0
Porter - Apollo 138kV	China Bulk - China/Porter Series Compensation	66
Porter - Apollo 138kV	China/Porter Series Compensation ckt2	66
Caney Creek - Peach Creek 138kV	China Bulk - China/Porter Series Compensation	74
Caney Creek - Peach Creek 138kV	China/Porter Series Compensation ckt2	74
Caney Creek - Peach Creek 138kV	Porter - China/Porter Series Compensation	97
Porter - Apollo 138kV	Porter - China/Porter Series Compensation	118
Porter - Tamina 138kV	Jacinto - Peach Creek 138kV	153