



**Feasibility Study Report
PID 242
120MW Plant**

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Rev	Issue Date	Description of Revision	Revised By	Project Manager
0	3/12/10	Posted	MEC	JDH

Contents

ENERGY RESOURCE INTERCONNECTION SERVICE	3
1. INTRODUCTION	3
2. SHORT CIRCUIT ANALYSIS/BREAKER RATING ANALYSIS.....	3
2.1 MODEL INFORMATION	3
2.2 SHORT CIRCUIT ANALYSIS	3
2.3 ANALYSIS RESULTS	4
2.4 PROBLEM RESOLUTION.....	4
3. LOAD FLOW ANALYSIS	4
3.1 MODEL INFORMATION	4
3.2 LOAD FLOW ANALYSES	4
3.3 ANALYSIS RESULTS	5
APPENDIX A: APPROVED PROJECTS AND TRANSACTIONS IN STUDY MODE	40

Energy Resource Interconnection Service

1. Introduction

This Energy Resource Interconnection Service (ERIS) is based on the Customer's request for 120MW interconnection on Entergy's transmission system at Alliance 115kV substation. The objective of this study is to assess the reliability impact of the new facility on the Entergy transmission system with respect to the steady state and transient stability performance of the system as well as its effects on the system's existing short circuit current capability. It is also intended to determine whether the transmission system meets standards established by NERC Reliability Standards and Entergy's planning guidelines when plant is connected to Entergy's transmission system. If not, transmission improvements will be identified.

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

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

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

2. Short Circuit Analysis/Breaker Rating Analysis

2.1 Model Information

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

2.2 Short Circuit Analysis

The method used to determine if any short circuit problems would be caused by the addition of the PID-241 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-242 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-242 generation. Any breakers identified to be upgraded through this comparison are mandatory upgrades.

2.3 Analysis Results

The results of the short circuit analysis indicates that the additional generation due to PID 242 generation causes no 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 242 plant **with and without priors**. Priors included are: 216, 217, 221, 223, 224, 228, 231, 233, 237, and 241.

2.4 Problem Resolution

As a result of the short circuit analysis findings, no resolution required.

3. Load Flow Analysis

3.1 Model Information

The load flow analysis was performed based on the projected 2015 summer peak load flow model. The loads were scaled based on the forecasted loads for the year. All firm power transactions between Entergy and its neighboring control areas were modeled for the year 2015 excluding short-term firm transactions on the same transmission interface. An economic dispatch was carried out on Entergy generating units after the scaling of load and modeling of transactions. The proposed 120MW generation and the associated facilities were then modeled in the case to build a revised case for the load flow analysis. Transfers were simulated between thirteen (13) control areas and Entergy using requesting generator as the source and adjacent control area as sink.

This study considered the following four scenarios:

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

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

3.2 Load Flow Analyses

3.2.1 Load Flow Analysis

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

3.2.2 Performance Criteria

The criteria for overload violations are as follows:

A) With All Lines in Service

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

B) Under Contingencies

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

3.2.3 Power Factor Consideration / Criteria

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

3.3 Analysis Results

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

Table 3.3 1: Summary of Results for PID-242 – ERIS Load Flow Study

Interface		Summer Peak Case Used	FCITC Available for Scenario 1	FCITC Available for Scenario 2	FCITC Available for Scenario 3	FCITC Available for Scenario 4
AECI	Associated Electric Cooperative, Inc.	2015 summer peak	0	0	0	0
AMRN	Ameren Transmission	2015 summer peak	0	0	0	0
CLEC	CLECO	2015 summer peak	0	0	0	0
AEPW	American Electric Power - West	2015 summer peak	0	0	0	0
EES	Entergy	2015 summer peak	0	0	0	0
EMDE	Empire District Electric Co	2015 summer peak	0	0	0	0
LAFA	Lafayette Utilities System	2015 summer peak	0	0	0	0
LAGN	Louisiana Generating, LLC	2015 summer peak	0	0	0	0
LEPA	Louisiana Energy & Power Authority	2015 summer peak	0	0	0	0
OKGE	Oklahoma Gas & Electric Company	2015 summer peak	0	0	0	0
SMEPA	South Mississippi Electric Power Assoc.	2015 summer peak	0	0	0	0

SOCO	Southern Company	2015 summer peak	0	0	0	0
SWPA	Southwest Power Administration	2015 summer peak	0	0	0	0
TVA	Tennessee Valley Authority	2015 summer peak	0	0	0	0

TABLE 3.3 2: DETAILS OF SCENARIO 1 RESULTS: (WITHOUT FUTURE PROJECTS AND WITHOUT PENDING TRANSMISSION SERVICE & STUDY REQUEST)

Limiting Elements	Cost Est.	AECI	AEPW	AMRN	CLECO	EES	EMDE	Lafa	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Belle Point - Gypsy 230kV ¹	Included in 2010 ICT Base Plan & Entergy's CP	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bull Shoals - Bull Shoals Dam SPA 161kV	Other Ownership						X								
Lake Conway - Mayflower 115kV	TBD													X	
Louisiana Station - Thomas 138kV	645,943				X			X		X					
Melbourne - Sage 161kV	4,207,000						X				X			X	
North Crowley - Scott1 138kV	Included in 2010 ICT Base Plan & Entergy's CP							X							
Pleasant Hill 500/161kV transformer	TBD						X							X	
Port Hudson - Thomas 138kV	TBD							X							
Port Hudson 230/138kV transformer 1	TBD									X					
Port Hudson 230/138kV transformer 2	TBD									X					
Richard - Scott1 138kV	Included in 2010 ICT Base Plan & Entergy's CP							X							
Semere - Scott2 138kV	Included in 2010 ICT Base Plan & Entergy's CP							X							
Sterlington 500/115kV transformer 2	Committed to by others	X	X	X	X		X				X			X	
Tezcuco - Waterford 230kV	TBD	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vacherie - Waterford 230kV	TBD				X			X		X					

¹ The Belle Point-Gypsy 230vK line upgrade project included in the 2009 ICT Base Plan was displaced by 2010 ICT Base Plan Project# BP-10-012 (Bayou Steel-Tezcuco 230kV).

TABLE 3.3 3: DETAILS OF SCENARIO 2 RESULTS: (WITHOUT FUTURE PROJECTS AND WITH PENDING TRANSMISSION SERVICE & STUDY REQUEST)

Limiting Elements	Cost Est.	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Ameila Bulk - Bevil 230kV	TBD					X									
Amelia Bulk - Helbig 230kV	7,702,500		X			X									
Bayou Cove - Richard 138kV ckt 1	41,357,926	X	X			X	X		X		X			X	
Belle Point - Gypsy 230kV ²	Included in 2010 ICT Base Plan & Entergy's CP	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Belle Point - Tezcucu 230kV ³	Included in 2010 ICT Base Plan & Entergy's CP	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bevil - Cypress 230kV	TBD					X									
Big Three - Carlyss 230kV	TBD		X			X									
Big Three - Sabine 230kV	TBD		X			X									
Colonial Welsh - Lake Charles Bulk 138kV	TBD	X	X	X		X	X				X			X	X
Colonial Welsh TP - Hebert 138kV	TBD	X	X	X		X	X				X			X	X
Cypress 500/138kV transformer 1	TBD		X			X									
Cypress 500/230kV transformer	TBD		X			X									
Duboin - Bayou Warehouse 138kV	TBD							X							
Fairview - Gypsy 230kV	TBD	X	X	X	X	X	X	X	X		X	X	X	X	X
Frisco - Tezcucu 230kV ckt 1	#N/A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Frisco - Tezcucu 230kV ckt 2	#N/A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Gibson - Humphrey 115kV	36,493,214	X	X	X	X	X	X	X	X		X	X	X	X	X
Gonzales - Sorrento 138kV	TBD				X			X		X					
Greenwood - Humphrey 115kV	3,281,488 (SS owned by LAGN)	X	X	X	X	X	X	X	X		X	X	X	X	X

² The Belle Point-Gypsy 230vK line upgrade project included in the 2009 ICT Base Plan was displaced by 2010 ICT Base Plan Project# BP-10-012 (Bayou Steel-Tezcucu 230kV).

³ The Belle Point-Tezcucu 230vK line upgrade project included in the 2009 ICT Base Plan was displaced by 2010 ICT Base Plan Project# BP-10-012 (Bayou Steel-Tezcucu 230kV).

Limiting Elements	Cost Est.	AECI	AEPW	AMRN	CLECO	EES	EMDE	Lafa	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Greenwood - Terrebonne 115kV	33,226,332	X	X	X	X	X	X	X	X		X	X	X	X	X
Gypsy - LaPlace 115kV	TBD	X	X	X	X	X	X				X	X	X	X	X
Hartburg - Inland Orange 230kV	Committed to by others		X			X									
Hartburg 500/230kV transformer 1	TBD		X			X									
Hebert - Bayou Cove 138kV	750,000	X	X	X		X	X				X			X	X
Helbig - McLewis 230kV	26,740,000		X			X									
Inland - McLewis 230kV	Committed to by others		X			X									
Jennings - Bayou Cove 138kV	2,106,000	X	X	X		X					X			X	
Lake Charles Bulk - Roy S Nelson 138kV ckt 1	17,265,000		X				X				X			X	
Lakeover 500/115kV transformer	8,100,000											X			
Livonia - Wilbert 138kV	41,123,000	X	X	X	X	X	X	X			X			X	X
Louisiana Station - Thomas 138kV	645,943				X			X		3					
Louisiana Station - Wilbert 138kV	2,990,250		X		X	X	X	X		X	X			X	
McAdams 500/230kV transformer 1	Included in 2010 ICT Base Plan & Entergy's CP	X	X	X			X				X		X	X	X
North Crowley - Scott1 138kV	Included in 2010 ICT Base Plan & Entergy's CP				X			X							
Port Hudson - Thomas 138kV	TBD				X			X		X					
Port Hudson 230/138 transformer 1	TBD									X					
Port Hudson 230/138 transformer 2	TBD									X					
Rex Brown W - Rex Brown C 115kV ckt 1	TBD											X			
Richard - Scott1 138kV	Included in 2010 ICT Base Plan & Entergy's CP							X							
Roy S. Nelson 500/230kV auto	TBD	X	X	X	X	X	X		X		X	X	X	X	X

TABLE 3.3 4: DETAILS OF SCENARIO 3 RESULTS: (WITH FUTURE PROJECTS AND WITHOUT PENDING TRANSMISSION SERVICE & STUDY REQUEST)

Limiting Element	Cost Est.	AECI	AEPW	AMRN	CLECO	EES	EMDE	Lafa	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Belle Point - Gypsy 230kV ⁴	Included in 2010 ICT Base Plan & Entergy's CP	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bull Shoals - Bull Shoals Dam SPA 161kV	TBD						X								
Calico Rock - Melbourne 161kV	13,274,000													X	
Pleasant Hill 500/161kV transformer	TBD						X							X	
Port Hudson 230/138 transformer 1	TBD									X					
Port Hudson 230/138 transformer 2	TBD									X					
Tezcuco - Waterford 230kV	TBD	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vacherie - Waterford 230kV	TBD				X			X		X					

⁴ The Belle Point-Gypsy 230vK line upgrade project included in the 2009 ICT Base Plan was displaced by 2010 ICT Base Plan Project# BP-10-012 (Bayou Steel-Tezcuco 230kV).

TABLE 3.3 5: DETAILS OF SCENARIO 4 RESULTS: (WITH FUTURE PROJECTS AND WITH PENDING TRANSMISSION SERVICE & STUDY REQUEST)

Limiting Elements	Cost Est.	AECI	AEPW	AMRN	CLECO	EES	EMDE	LAFA	LAGN	LEPA	OKGE	SMEPA	SOCO	SWPA	TVA
Ameila Bulk - Bevil 230kV	TBD					X									
Belle Point - Gypsy 230kV ⁵	Included in 2010 ICT Base Plan & Entergy's CP	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Belle Point - Tezcuco 230kV ⁶	Included in 2010 ICT Base Plan & Entergy's CP	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bevil - Cypress 230kV	TBD					X									
Big Three - Carlyss 230kV	TBD		X			X									
Big Three - Sabine 230kV	TBD		X			X									
Colonial Welsh - Lake Charles Bulk 138kV	TBD	X	X	X		X	X				X			X	X
Colonial Welsh TP - Hebert 138kV	TBD	X	X	X		X	X				X			X	X
Cypress 500/138kV transformer 1	TBD		X			X									
Cypress 500/230kV transformer	TBD		X			X									
Frisco - Tezcuco 230kV ckt 1	TBD	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Frisco - Tezcuco 230kV ckt 2	TBD	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Gonzales - Sorrento 138kV	TBD				X			X		X					
Greenwood - Terrebonne 115kV	33,226,332	X	X	X	X	X	X	X	X		X	X	X	X	X

⁵ The Belle Point-Gypsy 230vK line upgrade project included in the 2009 ICT Base Plan was displaced by 2010 ICT Base Plan Project# BP-10-012 (Bayou Steel-Tezcuco 230kV).

⁶ The Belle Point-Tezcuco 230vK line upgrade project included in the 2009 ICT Base Plan was displaced by 2010 ICT Base Plan Project# BP-10-012 (Bayou Steel-Tezcuco 230kV).

3.3.1 DETAILS OF SCENARIO 1 – 2015

AECI

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0

AEPW

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0

AMRN

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0

CLECO

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Louisiana Station - Thomas 138kV	Webre - Wells 500kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0

EES

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

EMDE

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161/22kV transformer	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 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
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Harrison East - Everton 161kV	0
Melbourne - Sage 161kV	Dell - Independence SES 500kV	0
Melbourne - Sage 161kV	ANO - Fort Smith 500kV	0
Melbourne - Sage 161kV	Newport - Newport Industrial 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bull Shoals - Lead HL 161kV	0

Limiting Element	Contingency Element	ATC
Melbourne - Sage 161kV	Newport AB - Newport Industrial 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Clevcov - Lead HL 161kV	0
Melbourne - Sage 161kV	Cash - Newport AB 161kV	0
Melbourne - Sage 161kV	Sansouci - Shelby (TVA) 500kV	0
Melbourne - Sage 161kV	Sage - Guion 161kV	0
Melbourne - Sage 161kV	Cash - Jonesboro 161kV	0
Melbourne - Sage 161kV	Mountain View - Guion 161kV	9
Melbourne - Sage 161kV	Newport - Swifton 161kV	12

Lafa

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Louisiana Station - Thomas 138kV	Webre - Wells 500kV	0
Semere - Scott2 138kV	Habetz - Richard 138kV	19
North Crowley - Scott1 138kV	Habetz - Richard 138kV	25
Semere - Scott2 138kV	North Crowley - Richard 138kV	27
Richard - Scott1 138kV	North Crowley - Richard 138kV	43
North Crowley - Scott1 138kV	Wells 500/230kV transformer	47
Semere - Scott2 138kV	Wells 500/230kV transformer	65
Port Hudson - Thomas 138kV	Webre - Wells 500kV	100

LAGN

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

LEPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Port Hudson 230/138 transformer 2	Port Hudson 230/138 transformer 1	0
Port Hudson 230/138 transformer 1	Port Hudson 230/138 transformer 2	0
Louisiana Station - Thomas 138kV	Webre - Wells 500kV	0
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	83

OKGE

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Melbourne - Sage 161kV	ANO - Fort Smith 500kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0

SMEPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

SOCO

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

SWPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Lake Conway - Mayflower 115kV	Pleasant Hill 500/161kV transformer	0
Pleasant Hill 500/161kV transformer	ANO 500/161/22kV transformer	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Melbourne - Sage 161kV	Dell - Independence SES 500kV	0
Melbourne - Sage 161kV	ANO - Fort Smith 500kV	0
Melbourne - Sage 161kV	Newport - Newport Industrial 161kV	0
Melbourne - Sage 161kV	Newport AB - Newport Industrial 161kV	0
Melbourne - Sage 161kV	Cash - Newport AB 161kV	0
Melbourne - Sage 161kV	Sansouci - Shelby (TVA) 500kV	0
Melbourne - Sage 161kV	Sage - Guion 161kV	0
Melbourne - Sage 161kV	Cash - Jonesboro 161kV	0
Melbourne - Sage 161kV	Mountain View - Guion 161kV	7
Melbourne - Sage 161kV	Newport - Swifton 161kV	10

TVA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

2.3.2 DETAILS OF SCENARIO 2 - 2015

AECI

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Gypsy - Belle Point 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	55
Gibson - Humphrey 115kV	Webre - Wells 500kV	68
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	88
Livonia - Wilbert 138kV	Webre - Wells 500kV	97
Bayou Cove - Richard 138kV ckt 1	Roy S. Nelson - Richard 500kV	118

AEPW

Limiting Element	Contingency Element	ATC
Hartburg - Inland Orange 230kV	Cypress - Hartburg 500kV	0
Inland - McLewis 230kV	Cypress - Hartburg 500kV	0
Helbig - McLewis 230kV	Cypress - Hartburg 500kV	0
Hartburg 500/230kV transformer 1	Cypress - Hartburg 500kV	0
Cypress 500/138kV transformer 1	Cypress 500/230kV transformer	0
Cypress 500/230kV transformer	Cypress 500/138kV transformer 1	0
Roy S. Nelson 500/230kV auto	Cypress - Hartburg 500kV	0
Cypress 500/138kV transformer 1	Hartburg 500/230kV transformer 1	0

Limiting Element	Contingency Element	ATC
Cypress 500/138kV transformer 1	Hartburg - Inland Orange 230kV	0
Cypress 500/138kV transformer 1	Inland - McLewis 230kV	0
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Cypress 500/138kV transformer 1	Helbig - McLewis 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Gypsy - Belle Point 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Amelia Bulk - Helbig 230kV	Cypress - Hartburg 500kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Big Three - Carlyss 230kV	Cypress - Hartburg 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Waterford 500/230 transformer kV	0
Louisiana Station - Wilbert 138kV	Webre - Wells 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Lake Charles Bulk - Roy S Nelson 138kV ckt 1	Roy S. Nelson - Richard 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Big Three - Sabine 230kV	Cypress - Hartburg 500kV	22
Gibson - Humphrey 115kV	Webre - Wells 500kV	57
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	58
Livonia - Wilbert 138kV	Webre - Wells 500kV	74
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	87
Bayou Cove - Richard 138kV ckt 1	Roy S. Nelson - Richard 500kV	93

AMRN

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0

Limiting Element	Contingency Element	ATC
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Tezcucu - Waterford 230kV	Gypsy - Belle Point 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Belle Point - Tezcucu 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Tezcucu 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Frisco - Tezcucu 230kV ckt 1	Frisco - Tezcucu 230kV ckt 2	0
Frisco - Tezcucu 230kV ckt 2	Frisco - Tezcucu 230kV ckt 1	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Waterford - Willow Glen 500kV	0
Tezcucu - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcucu - Waterford 230kV	Waterford - Willow Glen 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	55
Gibson - Humphrey 115kV	Webre - Wells 500kV	71
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	89
Livonia - Wilbert 138kV	Webre - Wells 500kV	102

CLECO

Limiting Element	Contingency Element	ATC
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Roy S. Nelson 500/230kV auto	Cypress - Hartburg 500kV	0
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Gypsy - Belle Point 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0
Louisiana Station - Thomas 138kV	Webre - Wells 500kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Belle Point - Tezcucu 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Tezcucu 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Port Hudson - Thomas 138kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Louisiana Station - Thomas 138kV	Richard - Wells 500kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0

Limiting Element	Contingency Element	ATC
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
North Crowley - Scott1 138kV	Wells 500/230kV transformer	0
Louisiana Station - Wilbert 138kV	Webre - Wells 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	28
Livonia - Wilbert 138kV	Webre - Wells 500kV	38
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	72
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	85
Port Hudson - Thomas 138kV	Richard - Wells 500kV	95
Gonzales - Sorrento 138kV	Webre - Wells 500kV	106
Vacherie - Waterford 230kV	Tezcuco - Waterford 230kV	113

EES

Limiting Element	Contingency Element	ATC
Hartburg - Inland Orange 230kV	Cypress - Hartburg 500kV	0
Inland - McLewis 230kV	Cypress - Hartburg 500kV	0
Helbig - McLewis 230kV	Cypress - Hartburg 500kV	0
Bevil - Cypress 230kV	Hartburg 500/230kV transformer 1	0
Bevil - Cypress 230kV	Hartburg - Inland Orange 230kV	0
Bevil - Cypress 230kV	Inland - McLewis 230kV	0
Ameila Bulk - Bevil 230kV	Hartburg 500/230kV transformer 1	0
Ameila Bulk - Bevil 230kV	Hartburg - Inland Orange 230kV	0
Bevil - Cypress 230kV	Helbig - McLewis 230kV	0
Ameila Bulk - Bevil 230kV	Inland - McLewis 230kV	0
Cypress 500/138kV transformer 1	Cypress 500/230kV transformer	0
Hartburg 500/230kV transformer 1	Cypress - Hartburg 500kV	0
Ameila Bulk - Bevil 230kV	Helbig - McLewis 230kV	0
Cypress 500/230kV transformer	Cypress 500/138kV transformer 1	0
Hartburg - Inland Orange 230kV	Bevil - Cypress 230kV	0
Hartburg - Inland Orange 230kV	Ameila Bulk - Bevil 230kV	0
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Roy S. Nelson 500/230kV auto	Cypress - Hartburg 500kV	0
Bevil - Cypress 230kV	Cypress - Lumberton 138kV	0
Inland - McLewis 230kV	Bevil - Cypress 230kV	0
Bevil - Cypress 230kV	Big Three - Carlyss 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Bevil - Cypress 230kV	Big Three - Sabine 230kV	0
Cypress 500/138kV transformer 1	Hartburg 500/230kV transformer 1	0

Limiting Element	Contingency Element	ATC
Bevil - Cypress 230kV	Kountze - Lumberton 138kV	0
Cypress 500/138kV transformer 1	Hartburg - Inland Orange 230kV	0
Inland - McLewis 230kV	Ameila Bulk - Bevil 230kV	0
Cypress 500/138kV transformer 1	Inland - McLewis 230kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Gypsy - Belle Point 230kV	0
Helbig - McLewis 230kV	Bevil - Cypress 230kV	0
Cypress 500/138kV transformer 1	Helbig - McLewis 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Bevil - Cypress 230kV	Cypress - Honey 138kV	0
Ameila Bulk - Bevil 230kV	Cypress - Lumberton 138kV	0
Ameila Bulk - Bevil 230kV	Big Three - Carlyss 230kV	0
Helbig - McLewis 230kV	Ameila Bulk - Bevil 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Bevil - Cypress 230kV	Bragg - Honey 138kV	0
Ameila Bulk - Bevil 230kV	Big Three - Sabine 230kV	0
Ameila Bulk - Bevil 230kV	Kountze - Lumberton 138kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Amelia Bulk - Helbig 230kV	Cypress - Hartburg 500kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Big Three - Carlyss 230kV	Cypress - Hartburg 500kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Ameila Bulk - Bevil 230kV	Cypress - Honey 138kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Ameila Bulk - Bevil 230kV	Bragg - Honey 138kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Belle Point - Gypsy 230kV	Waterford 500/230 transformer kV	0
Cypress 500/138kV transformer 1	Crockett - Grimes 345kV	0
Louisiana Station - Wilbert 138kV	Webre - Wells 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0

Limiting Element	Contingency Element	ATC
Big Three - Sabine 230kV	Cypress - Hartburg 500kV	20
Gibson - Humphrey 115kV	Webre - Wells 500kV	74
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	76
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	91
Bayou Cove - Richard 138kV ckt 1	Roy S. Nelson - Richard 500kV	106
Livonia - Wilbert 138kV	Webre - Wells 500kV	107

EMDE

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Gypsy - Belle Point 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Waterford - Willow Glen 500kV	0
Louisiana Station - Wilbert 138kV	Webre - Wells 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Lake Charles Bulk - Roy S Nelson 138kV ckt 1	Roy S. Nelson - Richard 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	56
Gibson - Humphrey 115kV	Webre - Wells 500kV	65
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	88
Livonia - Wilbert 138kV	Webre - Wells 500kV	90
Bayou Cove - Richard 138kV ckt 1	Roy S. Nelson - Richard 500kV	111

Lafa

Limiting Element	Contingency Element	ATC
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Louisiana Station - Thomas 138kV	Webre - Wells 500kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Port Hudson - Thomas 138kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Gonzales - Sorrento 138kV	Conway - Wyandotte 138kV	0
Gonzales - Sorrento 138kV	Geismar - Wyandotte 138kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Gonzales - Sorrento 138kV	Louisiana Station - Wilbert 138kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Louisiana Station - Thomas 138kV	Richard - Wells 500kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Sorrento 138/115kV transformer 1	Conway - Wyandotte 138kV	0
Sorrento 138/115kV transformer 1	Geismar - Wyandotte 138kV	0
Sorrento 138/115kV transformer 1	Louisiana Station - Wilbert 138kV	0
North Crowley - Scott1 138kV	Habetz - Richard 138kV	0
Richard - Scott1 138kV	North Crowley - Richard 138kV	0
Semere - Scott2 138kV	Habetz - Richard 138kV	0
Louisiana Station - Wilbert 138kV	Webre - Wells 500kV	0
Semere - Scott2 138kV	North Crowley - Richard 138kV	0
North Crowley - Scott1 138kV	Wells 500/230kV transformer	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
North Crowley - Scott1 138kV	Roy S. Nelson - Richard 500kV	8
Semere - Scott2 138kV	Wells 500/230kV transformer	18
Gibson - Humphrey 115kV	Webre - Wells 500kV	26
Livonia - Wilbert 138kV	Webre - Wells 500kV	31
Semere - Scott2 138kV	Greenwood - Terrebonne 115kV	38
Duboin - Bayou Warehouse 138kV	Patout - Teche 138kV (CLECO)	68
North Crowley - Scott1 138kV	Greenwood - Terrebonne 115kV	69
Port Hudson - Thomas 138kV	Richard - Wells 500kV	76
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	79
Semere - Scott2 138kV	Roy S. Nelson - Richard 500kV	83
Gonzales - Sorrento 138kV	Webre - Wells 500kV	92

Limiting Element	Contingency Element	ATC
Vacherie - Waterford 230kV	Tezcuco - Waterford 230kV	111

LAGN

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Gibson - Humphrey 115kV	Webre - Wells 500kV	74
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	77
Bayou Cove - Richard 138kV ckt 1	Roy S. Nelson - Richard 500kV	81

LEPA

Limiting Element	Contingency Element	ATC
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Louisiana Station - Thomas 138kV	Webre - Wells 500kV	0
Port Hudson 230/138 transformer 2	Port Hudson 230/138 transformer 1	0
Port Hudson 230/138 transformer 1	Port Hudson 230/138 transformer 2	0
Port Hudson - Thomas 138kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0

Limiting Element	Contingency Element	ATC
Louisiana Station - Thomas 138kV	Richard - Wells 500kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Gonzales - Sorrento 138kV	Conway - Wyandotte 138kV	0
Gonzales - Sorrento 138kV	Geismar - Wyandotte 138kV	0
Gonzales - Sorrento 138kV	Louisiana Station - Wilbert 138kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Louisiana Station - Thomas 138kV	Big Cajun 2 - Webre 500kV	0
Louisiana Station - Wilbert 138kV	Webre - Wells 500kV	0
Sorrento 138/115kV transformer 1	Conway - Wyandotte 138kV	0
Sorrento 138/115kV transformer 1	Geismar - Wyandotte 138kV	0
Sorrento 138/115kV transformer 1	Louisiana Station - Wilbert 138kV	0
Gonzales - Sorrento 138kV	Addis - Wilbert 138kV	4
Vacherie - Waterford 230kV	Tezcuco - Waterford 230kV	45
Gonzales - Sorrento 138kV	Port Hudson - Thomas 138kV	54
Port Hudson - Thomas 138kV	Richard - Wells 500kV	65
Gonzales - Sorrento 138kV	Webre - Wells 500kV	84
Vacherie - Waterford 230kV	Willow Glen 500/230kV Transformer	99
Vacherie - Waterford 230kV	Waterford - Valentine 230kV	99
Gonzales - Sorrento 138kV	Louisiana Station - Thomas 138kV	107

OKGE

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Gypsy - Belle Point 230kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Waterford - Willow Glen 500kV	0
Louisiana Station - Wilbert 138kV	Webre - Wells 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Lake Charles Bulk - Roy S Nelson 138kV ckt 1	Roy S. Nelson - Richard 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	56
Gibson - Humphrey 115kV	Webre - Wells 500kV	62
Livonia - Wilbert 138kV	Webre - Wells 500kV	84
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	88
Bayou Cove - Richard 138kV ckt 1	Roy S. Nelson - Richard 500kV	105

SMEPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Gypsy - Belle Point 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Rex Brown W - Rex Brown C 115kV ckt 1	Ray Braswell 500/115kV transformer 1	0
Lakeover 500/115kV transformer	Ray Braswell 500/115kV transformer 1	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Waterford - Willow Glen 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	45
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	96
Gibson - Humphrey 115kV	Webre - Wells 500kV	114

SOCO

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Gypsy - Belle Point 230kV	0

Limiting Element	Contingency Element	ATC
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Belle Point - Tezcucu 230kV	Tezcucu - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Tezcucu - Waterford 230kV	Belle Point - Tezcucu 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Frisco - Tezcucu 230kV ckt 1	Frisco - Tezcucu 230kV ckt 2	0
Frisco - Tezcucu 230kV ckt 2	Frisco - Tezcucu 230kV ckt 1	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Waterford 500/230 transformer kV	0
Tezcucu - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcucu - Waterford 230kV	Waterford - Willow Glen 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	52
Gibson - Humphrey 115kV	Webre - Wells 500kV	86
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	91

SWPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Tezcucu - Waterford 230kV	Gypsy - Belle Point 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Belle Point - Tezcucu 230kV	Tezcucu - Waterford 230kV	0
Sterlington 500/115kV transformer 2	Eldorado EHV - Sterlington 500kV	0
Tezcucu - Waterford 230kV	Belle Point - Tezcucu 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Frisco - Tezcucu 230kV ckt 1	Frisco - Tezcucu 230kV ckt 2	0
Frisco - Tezcucu 230kV ckt 2	Frisco - Tezcucu 230kV ckt 1	0

Limiting Element	Contingency Element	ATC
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Waterford 500/230 transformer kV	0
Louisiana Station - Wilbert 138kV	Webre - Wells 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Lake Charles Bulk - Roy S Nelson 138kV ckt 1	Roy S. Nelson - Richard 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	56
Gibson - Humphrey 115kV	Webre - Wells 500kV	66
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	88
Livonia - Wilbert 138kV	Webre - Wells 500kV	91
Bayou Cove - Richard 138kV ckt 1	Roy S. Nelson - Richard 500kV	111

TVA

Limiting Element	Contingency Element	ATC
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Gypsy - Belle Point 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Roy S. Nelson 500/230kV auto	Hartburg - Roy S. Nelson 500kV	0
Greenwood - Humphrey 115kV	Webre - Wells 500kV	0
Fairview - Gypsy 230kV	Front Street - Michoud 230kV	53
Gibson - Humphrey 115kV	Webre - Wells 500kV	77
Gypsy - LaPlace 115kV	Gypsy - Belle Point 230kV	89
Livonia - Wilbert 138kV	Webre - Wells 500kV	118

2.3.3 DETAILS OF SCENARIO 3 - 2015

AECI

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

AEPW

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

AMRN

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

CLECO

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

EES

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

EMDE

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161/22kV transformer	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 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
Bull Shoals - Bull Shoals Dam SPA 161kV	Harrison East - Everton 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Bull Shoals - Lead HL 161kV	0
Bull Shoals - Bull Shoals Dam SPA 161kV	Clevcov - Lead HL 161kV	0

Lafa

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0

LAGN

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0

LEPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Port Hudson 230/138 transformer 2	Port Hudson 230/138 transformer 1	67
Port Hudson 230/138 transformer 1	Port Hudson 230/138 transformer 2	89

OKGE

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0

SMEPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0

SOCO

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0

SPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Pleasant Hill 500/161kV transformer	ANO 500/161/22kV transformer	0
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0
Calico Rock - Melbourne 161kV	ANO - Fort Smith 500kV	116

TVA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0

2.3.4 DETAILS OF SCENARIO 4 - 2015

AECI

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0

AEPW

Limiting Element	Contingency Element	ATC
Helbig - McLewis 230kV	Cypress - Hartburg 500kV	0
Cypress 500/138kV transformer 1	Cypress 500/230kV transformer	0
Hartburg - Inland Orange 230kV	Cypress - Hartburg 500kV	0
Hartburg 500/230kV transformer 1	Cypress - Hartburg 500kV	0
Cypress 500/230kV transformer	Cypress 500/138kV transformer 1	0
Inland - McLewis 230kV	Cypress - Hartburg 500kV	0
Roy S. Nelson 500/230kV auto	Cypress - Hartburg 500kV	0
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Cypress 500/138kV transformer 1	Hartburg 500/230kV transformer 1	0
Cypress 500/138kV transformer 1	Hartburg - Inland Orange 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Cypress 500/138kV transformer 1	Inland - McLewis 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Cypress 500/138kV transformer 1	Helbig - McLewis 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0

Limiting Element	Contingency Element	ATC
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Big Three - Carlyss 230kV	Cypress - Hartburg 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Big Three - Sabine 230kV	Cypress - Hartburg 500kV	0

AMRN

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0

CLECO

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Roy S. Nelson 500/230kV auto	Cypress - Hartburg 500kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Louisiana Station - Thomas 138kV	Webre - Wells 500kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Port Hudson - Thomas 138kV	Webre - Wells 500kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Gonzales - Sorrento 138kV	Webre - Wells 500kV	51

EES

Limiting Element	Contingency Element	ATC
Bevil - Cypress 230kV	Hartburg 500/230kV transformer 1	0
Bevil - Cypress 230kV	Hartburg - Inland Orange 230kV	0
Bevil - Cypress 230kV	Inland - McLewis 230kV	0
Ameila Bulk - Bevil 230kV	Hartburg 500/230kV transformer 1	0
Ameila Bulk - Bevil 230kV	Hartburg - Inland Orange 230kV	0
Helbig - McLewis 230kV	Cypress - Hartburg 500kV	0
Bevil - Cypress 230kV	Helbig - McLewis 230kV	0
Cypress 500/138kV transformer 1	Cypress 500/230kV transformer	0
Ameila Bulk - Bevil 230kV	Inland - McLewis 230kV	0
Ameila Bulk - Bevil 230kV	Helbig - McLewis 230kV	0
Hartburg - Inland Orange 230kV	Cypress - Hartburg 500kV	0
Cypress 500/230kV transformer	Cypress 500/138kV transformer 1	0
Hartburg 500/230kV transformer 1	Cypress - Hartburg 500kV	0
Inland - McLewis 230kV	Cypress - Hartburg 500kV	0
Bevil - Cypress 230kV	Big Three - Carlyss 230kV	0
Bevil - Cypress 230kV	Cypress - Lumberton 138kV	0
Bevil - Cypress 230kV	Big Three - Sabine 230kV	0
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0

Limiting Element	Contingency Element	ATC
Bevil - Cypress 230kV	Kountze - Lumberton 138kV	0
Ameila Bulk - Bevil 230kV	Big Three - Carlyss 230kV	0
Bevil - Cypress 230kV	Cypress - Honey 138kV	0
Ameila Bulk - Bevil 230kV	Cypress - Lumberton 138kV	0
Ameila Bulk - Bevil 230kV	Big Three - Sabine 230kV	0
Bevil - Cypress 230kV	Crockett - Grimes 345kV	0
Roy S. Nelson 500/230kV auto	Cypress - Hartburg 500kV	0
Ameila Bulk - Bevil 230kV	Kountze - Lumberton 138kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Cypress 500/138kV transformer 1	Hartburg 500/230kV transformer 1	0
Cypress 500/138kV transformer 1	Hartburg - Inland Orange 230kV	0
Ameila Bulk - Bevil 230kV	Cypress - Honey 138kV	0
Cypress 500/138kV transformer 1	Inland - McLewis 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Ameila Bulk - Bevil 230kV	Crockett - Grimes 345kV	0
Cypress 500/138kV transformer 1	Helbig - McLewis 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Big Three - Carlyss 230kV	Cypress - Hartburg 500kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Big Three - Sabine 230kV	Cypress - Hartburg 500kV	0

EMDE

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0

Limiting Element	Contingency Element	ATC
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0

Lafa

Limiting Element	Contingency Element	ATC
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Louisiana Station - Thomas 138kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Port Hudson - Thomas 138kV	Webre - Wells 500kV	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
Gonzales - Sorrento 138kV	Webre - Wells 500kV	44

LAGN

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0

Limiting Element	Contingency Element	ATC
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0
Belle Point - Tezcucu 230kV	Tezcucu - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Tezcucu 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcucu 230kV ckt 1	Frisco - Tezcucu 230kV ckt 2	0
Frisco - Tezcucu 230kV ckt 2	Frisco - Tezcucu 230kV ckt 1	0
Tezcucu - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcucu - Waterford 230kV	Waterford 500/230 transformer kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0

LEPA

Limiting Element	Contingency Element	ATC
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Tezcucu 230kV	0
Belle Point - Tezcucu 230kV	Tezcucu - Waterford 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Louisiana Station - Thomas 138kV	Webre - Wells 500kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Frisco - Tezcucu 230kV ckt 1	Frisco - Tezcucu 230kV ckt 2	0
Frisco - Tezcucu 230kV ckt 2	Frisco - Tezcucu 230kV ckt 1	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Port Hudson 230/138 transformer 2	Port Hudson 230/138 transformer 1	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Port Hudson 230/138 transformer 1	Port Hudson 230/138 transformer 2	0
Vacherie - Waterford 230kV	Raceland - Waterford 230kV	0
Gonzales - Sorrento 138kV	Conway - Wyandotte 138kV	0
Port Hudson - Thomas 138kV	Webre - Wells 500kV	0
Gonzales - Sorrento 138kV	Geismar - Wyandotte 138kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Gonzales - Sorrento 138kV	Louisiana Station - Wilbert 138kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Sorrento 138/115kV transformer 1	Conway - Wyandotte 138kV	0
Sorrento 138/115kV transformer 1	Geismar - Wyandotte 138kV	0
Gonzales - Sorrento 138kV	Addis - Wilbert 138kV	0
Sorrento 138/115kV transformer 1	Louisiana Station - Wilbert 138kV	0

Limiting Element	Contingency Element	ATC
Gonzales - Sorrento 138kV	Port Hudson - Thomas 138kV	24
Gonzales - Sorrento 138kV	Webre - Wells 500kV	40
Gonzales - Sorrento 138kV	Louisiana Station - Thomas 138kV	77
Sorrento 138/115kV transformer 1	Addis - Wilbert 138kV	88

OKGE

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0

SMEPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Lakeover 500/115kV transformer	Ray Braswell 500/115kV transformer 1	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0

Limiting Element	Contingency Element	ATC
Rex Brown W - Rex Brown C 115kV ckt 1	Ray Braswell 500/115kV transformer 1	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0

SOCO

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcuco 230kV ckt 1	Frisco - Tezcuco 230kV ckt 2	0
Frisco - Tezcuco 230kV ckt 2	Frisco - Tezcuco 230kV ckt 1	0
Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcuco - Waterford 230kV	Waterford 500/230 transformer kV	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0

SWPA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcuco - Waterford 230kV	0
Tezcuco - Waterford 230kV	Belle Point - Gypsy 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Tezcuco 230kV	Tezcuco - Waterford 230kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Jennings - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Tezcuco - Waterford 230kV	Belle Point - Tezcuco 230kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcucu 230kV ckt 1	Frisco - Tezcucu 230kV ckt 2	0
Frisco - Tezcucu 230kV ckt 2	Frisco - Tezcucu 230kV ckt 1	0
Tezcucu - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcucu - Waterford 230kV	Waterford 500/230 transformer kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0

TVA

Limiting Element	Contingency Element	ATC
Belle Point - Gypsy 230kV	Tezcucu - Waterford 230kV	0
Hebert - Bayou Cove 138kV	Roy S. Nelson - Richard 500kV	0
Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	0
Belle Point - Tezcucu 230kV	Tezcucu - Waterford 230kV	0
Colonial Welsh TP - Hebert 138kV	Roy S. Nelson - Richard 500kV	0
Vacherie - Waterford 230kV	Landry - Raceland 230kV	0
Tezcucu - Waterford 230kV	Belle Point - Tezcucu 230kV	0
Colonial Welsh - Lake Charles Bulk 138kV	Roy S. Nelson - Richard 500kV	0
Belle Point - Gypsy 230kV	Fairview - Gypsy 230kV	0
Belle Point - Gypsy 230kV	Front Street - Michoud 230kV	0
Vacherie - Waterford 230kV	Landry - Terrebonne 230kV	0
Belle Point - Gypsy 230kV	Daniel - McKnight 500kV	0
Belle Point - Gypsy 230kV	Front Street - Slidell 230kV	0
Belle Point - Gypsy 230kV	Gypsy - LaPlace 115kV	0
Belle Point - Gypsy 230kV	Belle Point - LaPlace 115kV	0
Vacherie - Waterford 230kV	Waterford - Willow Glen 500kV	0
Vacherie - Waterford 230kV	Waterford 500/230 transformer kV	0
Frisco - Tezcucu 230kV ckt 1	Frisco - Tezcucu 230kV ckt 2	0
Frisco - Tezcucu 230kV ckt 2	Frisco - Tezcucu 230kV ckt 1	0
Tezcucu - Waterford 230kV	Waterford - Willow Glen 500kV	0
Tezcucu - Waterford 230kV	Waterford 500/230 transformer kV	0
McAdams 500/230kV transformer 1	Choctaw - FrenchCamp 500kV (TVA)	0
Greenwood - Terrebonne 115kV	Webre - Wells 500kV	0

APPENDIX A: Approved Projects and Transactions in Study Mode

Year	Approved Future Projects
2009 – 2013	EAI 2009S Conway West – Donaghey
	EAI 2009S Danville – Magazine
	EAI 2009S Gillett Capacitor Bank Approved
	EAI 2009W Donaghey - Conway South
	EAI 2010S SMEPA Approved
	EAI 2011W Aquilla Facility Study
	EAI 2012S Warren East Cap
	EGSL 2009S Install 37.7MVar Cap Bank at Acadia 138kV Sub
	ELL 2009S Amite_South_Area_Improvements_Phase_III
	ELL 2011S Sarepta+Additions
	ELL 2012S Ouachita-To Run First-upg-1478781-3SterlAutos+2BWAutos+splitbus
	ELL 2012S Ouachita-To Run Second Sterlington to NorthBastropVERSION1-Updated
	ELL 2013S Coly-Hammond_230kV
	ELL 2013S Loblolly-Hammond_230kV
	EMI 2008S Liberty-Gloster_Uprate_Line_To_190MVA_newnum
	EMI 2009S Indianola-Greenwood Upgrade Jumpers-Bus
	EMI 2010S Magee_XFMRs_2000A_switches
	ENOI 2009S Paterson Restore Breakers
	ETI 2009F Porter_Tamina_138kV_Replace_Breaker
	ETI 2009S Beaumont_69kV_Improvement_Plan
	ETI 2009S Close_College_Station_138kV_NO_Switch
	ETI 2009S Retap_Newton_Bulk_CT
	ETI 2009W Upgrade_Fawil_Auto
	ETI 2010S WRRIP_Ph_3_Interim_Lewis_Creek_Jacinto_Conversion
ETI 2011S WRRIP_Ph_3_Interim_Add_Alden_SVC	
ETI 2011S WRRIP_Ph_3_Interim_Upgrade_South_Beaumont_Fontenots_Corner_138kV Solution Set-TVA Affected System	
2012	New Lewis Creek – Conroe 230kV transmission line

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

PID	Substation	MW	In Service Date
PID 221	Wolfcreek	875	In Service
PID 223	PID-223 Tap	125	10/1/2010
PID 224	PID-224 Tap	100	12/1/2009
PID 228	PID-228	115	
PID 233	PID-233	150	
PID 237	Lakeover 500kV	550	
PID 240	Hot Springs 500kV	650	In Service
PID 241	Prospect 230kV	650	

Prior transmission service requests that were included in this study:

OASIS #	PSE	MW	Begin	End
1668165	Entergy Services (SPO)	600	1/1/2013	1/1/2043
1694305	Entergy Services (SPO)	15	5/1/2010	5/1/2020

OASIS #	PSE	MW	Begin	End
1694306	Entergy Services (SPO)	30	5/1/2010	5/1/2020
73582638	NRG Power Marketing	250	1/1/2012	1/1/2017
73592502	Constellation Energy Commodities Grp.	70	6/1/2010	6/1/2015
73595626	NRG Power Marketing	13	1/1/2012	1/1/2017