

ECONOMIC STUDY

ICTES-2011-001

INFORMATION ONLY

Follow Up Information

Prepared for:

**Entergy Service, Inc. (SPO)
American Electric Power Service Corporation (AEPSC)
GDS Associates, Inc. (GDS), as agent of
East Texas Electric Cooperative, Inc. (“ETEC”),
Tex-La Electric Cooperative of Texas, Inc. (TEXL), and
Northeast Texas Electric Cooperative, Inc. (NTEC)**

Prepared by:

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

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0	05/17/2012	Original
1	06/08/2012	Added Information for all the Alternative and Option studies

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1. Quarry – Rivtrin Projects

1.1 2015 Top 5 Congested Flowgates by Cost

1.1.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
LEATOL_CYPHAR_ENT	Leach – Toledo 138kV FTLO Cypress – Hartburg 500kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

1.1.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
HS-CAR_BLAMTP_ENT	Hot Springs South – Carpenter 115kV FTLO Blakely – Mt Pine 115kV

1.2 2015 Top 5 Congested Flowgates by Hours

1.2.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
LEATOL_CYPHAR_ENT	Leach – Toledo 138kV FTLO Cypress – Hartburg 500kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV

1.2.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
LASTHM_WEBWL_ENT	Louisiana Station 138kV FTLO Webre – Wells 500kV

1.3 2020 Top 5 Congested Flowgates by Cost

1.3.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

1.3.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
MORGL_PLSMAY_ENT	Morrilton East – Gleason 161kV FTLO Pleasant Hills – Mayflower 500kV

1.4 2020 Top 5 Congested Flowgates by Hours

1.4.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

1.4.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
MNDMIN_MTOELD_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV

1.5 GridView Differences

1.5.1 2015

Review Change/Scenario: Diff_A=NEW+PROJECTS_2015.mdb

Changed Table List: 3 Changed Record: 'Branch' ADD - 4, RMV - 0, MDF - 6

In...	Action	BranchName*	R	X	B	RateA	RateB	RateC	Ratio	An...	Status
1	ADD	334027_334028_1	0.001435	0.01652	0.26132	1194	1194	1194	0	0	-1
2	ADD	334027_334049_1	0.00042	0.0047	0.07393	1326	1326	1326	0	0	-1
3	ADD	334027_509241_1	0.001435	0.01652	0.26132	1194	1194	1194	0	0	-1
4	ADD	334049_334055_1	0.00044	0.0255	0	525	525	525	1	0	-1
1	MDF-NEW	334054_334055_1	0.00842	0.02294	0.00529	139	139	139	0	0	-1
1	MDF-OLD	334054_334055_1	0.00842	0.02294	0.00529	121	121	121	0	0	-1
2	MDF-NEW	334056_334059_NO	0.00769	0.01998	0.00484	145	145	145	0	0	-1
2	MDF-OLD	334056_334059_NO	0.00769	0.01998	0.00484	145	145	145	0	0	0
3	MDF-NEW	334058_334059_1	0.00246	0.01091	0.00297	145	145	145	0	0	0
3	MDF-OLD	334058_334059_1	0.00246	0.01091	0.00297	145	145	145	0	0	-1
4	MDF-NEW	334073_334074_1	0.000535	0.0033...	0.001...	357	357	357	0	0	-1
4	MDF-OLD	334073_334074_1	0.00101	0.0048	0.00119	206	206	206	0	0	-1
5	MDF-NEW	334074_334075_1	0.001258	0.0078...	0.00407	357	357	357	0	0	-1
5	MDF-OLD	334074_334075_1	0.00241	0.01136	0.0028	191	191	191	0	0	-1
6	MDF-NEW	334334_334335_1	0.00152	0.00892	0.00258	265	265	265	0	0	-1
6	MDF-OLD	334334_334335_1	0.00361	0.00924	0.00234	143	143	143	0	0	-1

Change Category:

Added Record (ADD)

Removed Record (RMV)

Modified Record (MDF)

1.5.1.1 BRANCH

Index	Action	BranchName*	FromBus	ToBus	CKT	R	X	B	RateA	RateB	RateC	Ratio	Angle	Status	Length
1	ADD	334027_334028_1	334027	334028	1	0.001435	0.01652	0.26132	1194	1194	1194	0	0	-1	0
2	ADD	334027_334049_1	334027	334049	1	0.00042	0.0047	0.07393	1326	1326	1326	0	0	-1	0
3	ADD	334027_509241_1	334027	509241	1	0.001435	0.01652	0.26132	1194	1194	1194	0	0	-1	0
4	ADD	334049_334055_1	334049	334055	1	0.00044	0.0255	0	525	525	525	1	0	-1	0
1	MDF-NEW	334054_334055_1	334054	334055	1	0.00842	0.02294	0.00529	139	139	139	0	0	-1	5.33
1	MDF-OLD	334054_334055_1	334054	334055	1	0.00842	0.02294	0.00529	121	121	121	0	0	-1	5.33
2	MDF-NEW	334056_334059_NO	334056	334059	NO	0.00769	0.01998	0.00484	145	145	145	0	0	-1	4.78
2	MDF-OLD	334056_334059_NO	334056	334059	NO	0.00769	0.01998	0.00484	145	145	145	0	0	0	4.78
3	MDF-NEW	334058_334059_1	334058	334059	1	0.00246	0.01091	0.00297	145	145	145	0	0	0	2.76
3	MDF-OLD	334058_334059_1	334058	334059	1	0.00246	0.01091	0.00297	145	145	145	0	0	-1	2.76
4	MDF-NEW	334073_334074_1	334073	334074	1	0.000535	0.003321	0.001729	357	357	357	0	0	-1	1.16
4	MDF-OLD	334073_334074_1	334073	334074	1	0.00101	0.0048	0.00119	206	206	206	0	0	-1	1.16
5	MDF-NEW	334074_334075_1	334074	334075	1	0.001258	0.007815	0.00407	357	357	357	0	0	-1	2.73
5	MDF-OLD	334074_334075_1	334074	334075	1	0.00241	0.01136	0.0028	191	191	191	0	0	-1	2.73
6	MDF-NEW	334334_334335_1	334334	334335	1	0.00152	0.00892	0.00258	265	265	265	0	0	-1	2.26
6	MDF-OLD	334334_334335_1	334334	334335	1	0.00361	0.00924	0.00234	143	143	143	0	0	-1	2.26

1.5.1.2 BUS

Index	Action	BusID*	Name	BaseKV	Type	GL	BL	PSSEAreaID	PSSEZoneID	VM	VA	Owner	LoadAreaName
1	ADD	334027	7QUARRY	345	1	0	0	351		100	1	0	1 Entergy Texas
2	ADD	334049	7RIVTRIN	345	1	0	0	320		100	1	0	1 Entergy Texas

1.5.1.3 INTERFACE BRANCHES

Index	Action	BranchName	InterfaceName	UseDefault	Coefficient
1	ADD	334027_5CWOTAB		-1	1
2	ADD	334027_5CENT to CLE		-1	1
3	ADD	334027_5CSPP to CLE		0	1
4	ADD	334027_5CEES_to_AE		-1	1
1	RMV	334028_5CWOTAB		-1	1
2	RMV	334028_5CENT to CLE		-1	1
3	RMV	334028_5CSPP to CLE		0	1
4	RMV	334028_5CEES_to_AE		-1	1

1.5.2 2020

Review Change/Scenario: Diff A=NEW+PROJECTS_2020.mdb

Changed Table List: 3 Changed Record: 'Branch' ADD - 4, RMV - 1, MDF - 5

Branch	Index	Action	BranchName*	R	X	B	RateA	RateB	RateC	Ratio	Angle	Status
Bus	1	ADD	334027_334...	0.001435	0.01652	0.26132	1194	1194	1194	0	0	-1
InterfaceBranches	2	ADD	334027_334...	0.00042	0.0047	0.07393	1326	1326	1326	0	0	-1
	3	ADD	334027_509...	0.001435	0.01652	0.26132	1194	1194	1194	0	0	-1
	4	ADD	334049_334...	0.00044	0.0255	0	525	525	525	1	0	-1
	1	RMV	334028_509...	0.00287	0.03304	0.52264	1194	1194	1194	0	0	-1
	1	MDF-NEW	334054_334...	0.00842	0.02294	0.00529	139	139	139	0	0	-1
	1	MDF-OLD	334054_334...	0.00842	0.02294	0.00529	121	121	121	0	0	-1
	2	MDF-NEW	334056_334...	0.00769	0.01998	0.00484	145	145	145	0	0	-1
	2	MDF-OLD	334056_334...	0.00769	0.01998	0.00484	145	145	145	0	0	0
	3	MDF-NEW	334058_334...	0.00246	0.01091	0.00297	145	145	145	0	0	0
	3	MDF-OLD	334058_334...	0.00246	0.01091	0.00297	145	145	145	0	0	-1
	4	MDF-NEW	334073_334...	0.000535	0.003321	0.00...	357	357	357	0	0	-1
	4	MDF-OLD	334073_334...	0.00101	0.0048	0.00...	206	206	206	0	0	-1
	5	MDF-NEW	334074_334...	0.001258	0.007815	0.00...	357	357	357	0	0	-1
	5	MDF-OLD	334074_334...	0.00241	0.01136	0.0028	191	191	191	0	0	-1

Change Category:

- Added Record (ADD)
- Removed Record (RMV)
- Modified Record (MDF)

1.5.2.1 BRANCHES

Index	Action	BranchName*	FromBus	ToBus	CKT	R	X	B	RateA	RateB	RateC	Ratio	Angle	Status	Length
1	ADD	334027_334028_1	334027	334028	1	0.001435	0.01652	0.26132	1194	1194	1194	0	0	-1	0
2	ADD	334027_334049_1	334027	334049	1	0.00042	0.0047	0.07393	1326	1326	1326	0	0	-1	0
3	ADD	334027_509241_1	334027	509241	1	0.001435	0.01652	0.26132	1194	1194	1194	0	0	-1	0
4	ADD	334049_334055_1	334049	334055	1	0.00044	0.0255	0	525	525	525	1	0	-1	0
1	RMV	334028_509241_1	334028	509241	1	0.00287	0.03304	0.52264	1194	1194	1194	0	0	-1	64.17
1	MDF-NEW	334054_334055_1	334054	334055	1	0.00842	0.02294	0.00529	139	139	139	0	0	-1	5.33
1	MDF-OLD	334054_334055_1	334054	334055	1	0.00842	0.02294	0.00529	121	121	121	0	0	-1	5.33
2	MDF-NEW	334056_334059_NO	334056	334059	NO	0.00769	0.01998	0.00484	145	145	145	0	0	-1	4.78
2	MDF-OLD	334056_334059_NO	334056	334059	NO	0.00769	0.01998	0.00484	145	145	145	0	0	0	4.78
3	MDF-NEW	334058_334059_1	334058	334059	1	0.00246	0.01091	0.00297	145	145	145	0	0	0	2.76
3	MDF-OLD	334058_334059_1	334058	334059	1	0.00246	0.01091	0.00297	145	145	145	0	0	-1	2.76
4	MDF-NEW	334073_334074_1	334073	334074	1	0.000535	0.003321	0.001729	357	357	357	0	0	-1	1.16
4	MDF-OLD	334073_334074_1	334073	334074	1	0.00101	0.0048	0.00119	206	206	206	0	0	-1	1.16
5	MDF-NEW	334074_334075_1	334074	334075	1	0.001258	0.007815	0.00407	357	357	357	0	0	-1	2.73
5	MDF-OLD	334074_334075_1	334074	334075	1	0.00241	0.01136	0.0028	191	191	191	0	0	-1	2.73

1.5.2.2 BUSES

Index	Action	BusID*	Name	BaseKV	Type	GL	BL	PSSEAreaID	PSSEZoneID	VM	VA	Owner	LoadAreaName
1	ADD	334027	7QUARRY	345	1	0	0	351		100	1	0	1 Entergy Texas
2	ADD	334049	7RIVTRIN	345	1	0	0	320		100	1	0	1 Entergy Texas

1.5.2.3 INTERFACE BRANCHES

Index	Action	BranchName*	InterfaceName*	UseDefaultDirection	Coefficient
1	ADD	334027_509241_1	WOTAB		-1 1
2	ADD	334027_509241_1	ENT to CLECO_SPP_LEPA_LAFA_AECI_SEMPA		-1 1
3	ADD	334027_509241_1	SPP to CLECO_ENT_AECI_LEPA_LEFA_LaGen		0 1
4	ADD	334027_509241_1	EES_to_AEPW		-1 1
1	RMV	334028_509241_1	WOTAB		-1 1
2	RMV	334028_509241_1	ENT to CLECO_SPP_LEPA_LAFA_AECI_SEMPA		-1 1
3	RMV	334028_509241_1	SPP to CLECO_ENT_AECI_LEPA_LEFA_LaGen		0 1
4	RMV	334028_509241_1	EES_to_AEPW		-1 1

1.6 APC Breakdown

1.6.1 2015

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2015	77	-42	35

1.6.2 2022

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2022	64	-33	31

1.7 Entergy to AEPW Interface Values

1.7.1 Entergy to AEPW interface values (Sum of flow for entire year)

	Reference	Change	
	Total MWhrs	Total MWhrs	DIFFERENCE (MWhrs)
2015	-4,154,718	-4,624,125	469,407
2020	-5,262,349	-6,301,393	1,039,044

1.7.2 Average power flow from Entergy to AEPW

	Reference	Change	
	AVERAGE POWER FLOW (MW)	AVERAGE POWER FLOW (MW)	DIFFERENCE (MW)
2015	-485	-536	-51
2020	-605	-720	-116

2. Alternative Project 1

2.1 2015 Top 5 Congested Flowgates by Cost

2.1.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

2.1.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MTZTAP_GRIWAL	Mt Zion Tap – Wintex 138 kV FTLO Grimes to Bentwater 138 kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
BLAMTP_HS-CAR_ENT	Blakely – Mt Pine 115 kV FTLO Hot Springs South – Carpenter 115kV

2.2 2015 Top 5 Congested Flowgates by Hours

2.2.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

2.2.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MTZTAP_GRIWAL	Mt Zion Tap – Wintex 138 kV FTLO Grimes to Bentwater 138 kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

2.3 2020 Top 5 Congested Flowgates by Cost

2.3.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

2.3.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MTZTAP_GRIWAL	Mt Zion Tap – Wintex 138 kV FTLO Grimes to Bentwater 138 kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
MORGL_PLSMAY_ENT	Morrilton East – Gleason 161kV FTLO Pleasant Hills – Mayflower 500kV

2.4 2020 Top 5 Congested Flowgates by Hours

2.4.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

2.4.2 Change Case

Contingency	
MTZTAP_GRIWAL	Mt Zion Tap – Wintex 138 kV FTLO Grimes to Bentwater 138 kV
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

2.5 GridView Differences

2.5.1 2015

Review Change/Scenario: 2015_OPTN1.mdb

Changed Table List: 1 Changed Record: 'Branch' ADD - 1, RMV - 0, MDF - 0

Branch	Index	Action	BranchName*	From...	ToBus	CKT	R	X	B	RateA	RateB	RateC
	1	ADD	334026_334028_3	334026	334028	3	0.00044	0.0255	0.975	525	525	525

Change Category:

- Added Record (ADD)
- Removed Record (RMV)
- Modified Record (MDF)

2.5.2 2020

Review Change/Scenario: 2020_OPTN1.mdb

Changed Table List: 1 Changed Record: 'Branch' ADD - 1, RMV - 0, MDF - 8

Branch	Index	Action	BranchName*	From...	ToBus	C.	R	X	B	RateA	RateB	Rate
	1	ADD	334026_334028_3	334026	334028	3	0.00044	0.0255	0.975	525	525	525
	1	MDF-NEW	334023_334024_1	334023	334024	1	2.37223...	0.0180...	5.48409...	243	243	243
	1	MDF-OLD	334023_334024_1	334023	334024	1	0.0042	0.0195	0.005	206	206	206
	2	MDF-NEW	334024_334025_1	334024	334025	1	3.43856...	0.0213...	0.0111223	243	243	243
	2	MDF-OLD	334024_334025_1	334024	334025	1	0.0066	0.0304	0.0078	206	206	206
	3	MDF-NEW	334025_334026_1	334025	334026	1	6.59134...	0.0409...	0.0213203	273	273	273
	3	MDF-OLD	334025_334026_1	334025	334026	1	0.0127	0.0583	0.0149	206	206	206
	4	MDF-NEW	334026_334039_1	334026	334039	1	0.01329	0.09845	0.0299	312	312	312
	4	MDF-OLD	334026_334039_1	334026	334039	1	0.02304	0.10611	0.02729	206	206	206
	5	MDF-NEW	334026_334060_1	334026	334060	1	0.009789	0.0725	0.02202	312	312	312
	5	MDF-OLD	334026_334060_1	334026	334060	1	0.0171	0.07827	0.02001	206	206	206
	6	MDF-NEW	334043_334044_1	334043	334044	1	0.014759	0.0631...	0.017433	206	206	206
	6	MDF-OLD	334043_334044_1	334043	334044	1	0.02776	0.07806	0.01875	112	112	112
	7	MDF-NEW	334058_334060_1	334058	334060	1	0.00273	0.0202	0.006138	312	312	312
	7	MDF-OLD	334058_334060_1	334058	334060	1	0.00476	0.02182	0.00557	206	206	206
	8	MDF-NEW	334100_334117_1	334100	334117	1	0.008577	0.0532...	0.027746	312	312	312
	8	MDF-OLD	334100_334117_1	334100	334117	1	0.00948	0.054	0.02193	206	206	206

Change Category:

- Added Record (ADD)
- Removed Record (RMV)
- Modified Record (MDF)

2.6 APC Breakdown

2.6.1 2015

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2015	-4	1	-3

2.6.2 2020

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2020	26	-4	22

2.7 Entergy to AEPW Interface Values

2.7.1 Entergy to AEPW interface values (Sum of flow for entire year)

	Reference	Change	
	Total MWhrs	Total MWhrs	DIFFERENCE (MWhrs)
2015	-3,947,972	-3,934,013	-13,959
2020	-5,079,328	-5,328,776	249,448

2.7.2 Average power flow from Entergy to AEPW

	Reference	Change	
	AVERAGE POWER FLOW (MW)	AVERAGE POWER FLOW (MW)	DIFFERENCE (MW)
2015	-463	-462	1
2020	-584	-611	27

3. Alternative Project 2

3.1 2015 Top 5 Congested Flowgates by Cost

3.1.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

3.1.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MTZTAP_GRIWAL	Mt Zion Tap – Wintex 138 kV FTLO Grimes to Bentwater 138 kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
BLAMTP_HS-CAR_ENT	Blakely-Mt Pine 115 kV FTLO Hot Springs –Carpenter 115 kV

3.2 2015 Top 5 Congested Flowgates by Hours

3.2.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

3.2.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MTZTAP_GRIWAL	Mt Zion Tap – Wintex 138 kV FTLO Grimes to Bentwater 138 kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

3.3 2020 Top 5 Congested Flowgates by Cost

3.3.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

3.3.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MTZTAP_GRIWAL	Mt Zion Tap – Wintex 138 kV FTLO Grimes to Bentwater 138 kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
MORGL_PLSMAY_ENT	Morrilton East – Gleason 161kV FTLO Pleasant Hills – Mayflower 500kV

3.4 2020 Top 5 Congested Flowgates by Hours

3.4.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

3.4.2 Change Case

Contingency	
MTZTAP_GRIWAL	Mt Zion Tap – Wintex 138 kV FTLO Grimes to Bentwater 138 kV
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

3.5 GridView Differences

3.5.1 2015

Review Change/Scenario: 2015_OPTN2.mdb

Changed Table List: 1 Changed Record: 'Branch' ADD - 0, RMV - 0, MDF - 1

Branch	Index	Action	BranchName*	From...	ToBus	CKT	R	X	B	RateA	RateB	RateC
	1	MDF-NEW	334026_334060_1	334026	334060	1	0.00897	0.054...	0.02...	339	339	339
	1	MDF-OLD	334026_334060_1	334026	334060	1	0.0171	0.078...	0.02...	206	206	206

Change Category:

- Added Record (ADD)
- Removed Record (RMV)
- Modified Record (MDF)

3.5.2 2020

Review Change/Scenario: 2020_OPTN2.mdb

Changed Table List: 1 Changed Record: 'Branch' ADD - 0, RMV - 0, MDF - 1

Index	Action	BranchName*	FromBus	ToBus	CKT	R	X	B	RateA	RateB	Ra
1	MDF-NEW	334026_334060_1	334026	334060	1	0.00...	0.05...	0.02...	339	339	33
1	MDF-OLD	334026_334060_1	334026	334060	1	0.0171	0.07...	0.02...	206	206	20

Change Category:

Added Record (ADD)
 Removed Record (RMV)
 Modified Record (MDF)

◀ ▶

3.6 APC Breakdown

3.6.1 2015

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2015	-6	6	0

3.6.2 2020

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2020	-5	6	1

3.7 Entergy to AEPW Interface Values

3.7.1 Entergy to AEPW interface values (Sum of flow for entire year)

	Reference	Change	
	Total MWhrs	Total MWhrs	Difference (MWhrs)
2015	-3,177,261	-3,086,073	-91,188
2020	-4,298,774	-4,214,545	-84,229

3.7.2 Average power flow from Entergy to AEPW

	Reference	Change	
	Average Power Flow (MW)	Average Power Flow (MW)	Difference (MW)
2015	-379	-368	-1
2020	-498	-488	10

4. Alternative Project 3

4.1 2015 Top 5 Congested Flowgates by Cost

4.1.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
LEATOL_CYPHAR_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
PPGROS_NELCL_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

4.1.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
GRIWAL_GRIMT_.ENT	Grimes – Bentwater 138 kV FTLO Grimes – Mt Zion 138 kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

4.2 2015 Top 5 Congested Flowgates by Hours

4.2.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

4.2.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
GRIWAL_GRIMT_.ENT	Grimes – Bentwater 138 kV FTLO Grimes – Mt Zion 138 kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

4.3 2020 Top 5 Congested Flowgates by Cost

4.3.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

4.3.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV
GRIWAL_GRIMT._ENT	Grimes – Bentwater 138 kV FTLO Grimes – Mt Zion 138 kV

4.4 2020 Top 5 Congested Flowgates by Hours

4.4.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

4.4.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
GRIWAL_GRIMT._ENT	Grimes – Bentwater 138 kV FTLO Grimes – Mt Zion 138 kV
TBLCH_MTOHTB_ENT	Toledo – Leach 138kV FTLO Mt Olive – Hartburg 500kV

4.5 GridView Differences

4.5.1 2015

Review Change/Scenario: 2015_OPTN3.mdb

Changed Table List: 1 Changed Record: 'Branch' ADD - 0, RMV - 0, MDF - 3

Branch	Index	Action	BranchName*	FromBus	ToBus	CKT	R	X	B	RateA	RateB	RateC
	1	MDF-NEW	334026_334060_1	334026	334060	1	0.00...	0.05...	0.02...	339	339	339
	1	MDF-OLD	334026_334060_1	334026	334060	1	0.0171	0.07...	0.02...	206	206	206
	2	MDF-NEW	334057_334058_1	334057	334058	1	0.00...	0.00...	0.00...	299	299	299
	2	MDF-OLD	334057_334058_1	334057	334058	1	0.002	0.0084	0.00...	206	206	206
	3	MDF-NEW	334058_334060_1	334058	334060	1	0.0025	0.01...	0.00...	339	339	339
	3	MDF-OLD	334058_334060_1	334058	334060	1	0.00...	0.02...	0.00...	206	206	206

Change Category:

Added Record (ADD)
 Removed Record (RMV)
 Modified Record (MDF)

III

4.5.2 2020

Review Change/Scenario: 2020_OPTN3.mdb

Changed Table List: 1 Changed Record: 'Branch' ADD - 0, RMV - 0, MDF - 3

Index	Action	BranchName*	FromBus	ToBus	CKT	R	X	B	RateA	RateB
1	MDF-NEW	334026_334060_1	334026	334060	1	0.00897	0.05...	0.02...	339	339
1	MDF-OLD	334026_334060_1	334026	334060	1	0.0171	0.07...	0.02...	206	206
2	MDF-NEW	334057_334058_1	334057	334058	1	0.00104	0.00...	0.00...	299	299
2	MDF-OLD	334057_334058_1	334057	334058	1	0.002	0.0084	0.00...	206	206
3	MDF-NEW	334058_334060_1	334058	334060	1	0.0025	0.01...	0.00...	339	339
3	MDF-OLD	334058_334060_1	334058	334060	1	0.00476	0.02...	0.00...	206	206

Change Category:

Added Record (ADD)
 Removed Record (RMV)
 Modified Record (MDF)

III

4.6 APC Breakdown

4.6.1 2015

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2015	16	-10	6

4.6.2 2020

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2020	16	-11	5

4.7 Entergy to AEPW Interface Values

4.7.1 Entergy to AEPW interface values (Sum of flow for entire year)

	Reference	Change	
	Total MWhrs	Total MWhrs	DIFFERENCE (MWhrs)
2015	-3,177,261	-3,361,436	184,175
2020	-4,298,774	-4,443,070	144,296

4.7.2 Average power flow from Entergy to AEPW

	Reference	Change	
	AVERAGE POWER FLOW (MW)	AVERAGE POWER FLOW (MW)	DIFFERENCE (MW)
2015	-379	-399	20
2020	-498	-514	16

5. Alternative Project 4

5.1 2015 Top 5 Congested Flowgates by Cost

5.1.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
LEATOL_CYPHAR_ENT	Leach – Toledo 138kV FTLO Cypress – Hartburg 500kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

5.1.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
LEATOL_CYPHAR_ENT	Leach – Toledo 138kV FTLO Cypress – Hartburg 500kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV

5.2 2015 Top 5 Congested Flowgates by Hours

5.2.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
LEATOL_CYPHAR_ENT	Leach – Toledo 138kV FTLO Cypress – Hartburg 500kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV

5.2.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
LEATOL_CYPHAR_ENT	Leach – Toledo 138kV FTLO Cypress – Hartburg 500kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
GRIMTZ_POND_ENT	Grimes- Mt Zion 138kV FTLO Grimes – Ponderosa 230kV

5.3 2020 Top 5 Congested Flowgates by Cost

5.3.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

5.3.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
MDNMDN_TUSVEN_ENT	Minden – Minden 115kV FTLO Trussel's – Vienna 115kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
MORGL_PLSMAY_ENT	Morrilton East – Gleason 161kV FTLO Pleasant Hills – Mayflower 500kV

5.4 2020 Top 5 Congested Flowgates by Hours

5.4.1 Base Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
GRIMTZ_WDN_ENT	Grimes – Mt Zion 138kV FTLO Grimes – Bentwater 138kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

5.4.2 Change Case

Contingency	
ADDTIG_CHTAI_ENT	Addis – Tiger 230kV FTLO Chenango – Air Liquide 230kV
RGNAT_PLAVID_ENT	Red Gum – Natchez 115kV FTLO Plantation – Vidalia 115kV
COWCO_COWSA_ENT	Cow – Colonial Orange 138kV FTLO Cow – Sabine 138kV
GRIMTZ_POND_ENT	Grimes- Mt Zion 138kV FTLO Grimes – Ponderosa 230kV
PPGROS_NELCL_ENT	PPG – Rose Bluff 230kV FTLO Nelson – Carlyss 230kV

5.5 GridView Differences

5.5.1 2015

Review Change/Scenario: Diff.mdb

Changed Table List: 5

Changed Record: 'Branch' ADD - 5, RMV - 0, MDF - 1

Index	Action	BranchName*	FromBus	ToBus	CKT	R	X	B	RateA	RateB	RateC
1	ADD	334087_199...	334087	19982...	1	0.00014	-7.054...	0	150	150	150
2	ADD	334088_199...	334088	19982...	1	4.000...	0.021...	0	750	750	750
3	ADD	334088_334...	334088	334990	1	0.00684	0.052...	0.117...	519	519	519
4	ADD	334094_199...	334094	19982...	1	0.00146	0.093...	0	150	150	150
5	ADD	334990_334...	334990	334028	1	0.0004	0.0311	0	700	700	700
1	MDF-NEW	334087_334...	334087	334104	1	2.20...	9.98...	2.88...	384	384	384
1	MDF-OLD	334087_334...	334087	334104	1	0.00...	0.01...	0.00...	191	191	191

Change Category:

Added Record (ADD)
 Removed Record (RMV)
 Modified Record (MDF)

List Record

Delete Table

Delete Record

Delete Tiny Diff

Export

Load

Modify

Close

Review Change/Scenario: Diff.mdb

Changed Table List: 5 Changed Record: 'Bus' ADD - 4, RMV - 0, MDF - 0

Branch	Index	Action	BusID*	Name	BaseKV	Type	GL	BL	PSSEAreaID	PSSEZoneID	VM	VA
Bus	1	ADD	334088	6WCO...	230	1	0	0	351	103	0.99579	-33
Contingency	2	ADD	334094	6WCO...	13.8	1	0	0	351	102	1	0
ContingencyCheckLines	3	ADD	334990	6GRII...	230	1	0	0	351	100	1.012	-34
ContingencyDefinition	4	ADD	19982...	19982...	230	1	0	0	351	103	0.99579	-33

Review Change/Scenario: Diff.mdb

Changed Table List: 5 Changed Record: 'Contingency' ADD - 5, RMV - 0, MDF - 0

Branch	Index	Action	Name*	Active	Dispatch	Commitment
Bus	1	ADD	GRIMTZ_POND_ENT	-1	-1	-1
Contingency	2	ADD	GRIWDS_POND_ENT	-1	-1	-1
ContingencyCheckLines	3	ADD	PONDCON_CHINPOR_ENT	-1	-1	-1
ContingencyDefinition	4	ADD	PONDCON_LONGPOND_...	-1	-1	-1
	5	ADD	CONGOS_CONPLANT	-1	-1	-1

Review Change/Scenario: Diff.mdb

Changed Table List: 5 Changed Record: 'ContingencyCheckLines' ADD - 5, RMV - 0, MDF - 0

Branch	Index	Action	BranchName*	Name*	Rating
Bus	1	ADD	334026_334039_1	GRIWDS_POND_ENT	-1
Contingency	2	ADD	334026_334060_1	GRIMTZ_POND_ENT	-1
ContingencyCheckLines	3	ADD	334087_334104_1	PONDCON_CHINPOR_...	-1
ContingencyDefinition	4	ADD	334087_334104_1	PONDCON_LONGPON...	-1
	5	ADD	334091_334104_1	CONGOS_CONPLANT	-1

Review Change/Scenario: Diff.mdb

Changed Table List: 5 Changed Record: 'ContingencyDefinition' ADD - 5, RMV - 0, MDF - 0

	Index	Action	BranchName*	Name*	Status	
Branch	1	ADD	334075_334087_1	PONDCON_LONGPOND_ENT	0	
Bus	2	ADD	334088_334990_1	GRIMTZ_POND_ENT	0	
Contingency	3	ADD	334088_334990_1	GRIWDS_POND_ENT	0	
ContingencyCheckLines	4	ADD	334099_334103_1	CONGOS_COMPLANT	0	
ContingencyDefinition	5	ADD	334203_334204_1	PONDCON_CHINPOR_ENT	0	

4.5.2 2020

Review Change/Scenario: Diff.mdb

Changed Table List: 5 Changed Record: 'Branch' ADD - 5, RMV - 0, MDF - 1

Branch	Index	Action	BranchName*	FromBus	ToBus	CKT	R	X	B	RateA	RateB	RateC
Bus	1	ADD	334087_199...	334087	19982...	1	0.00014	-7.054...	0	150	150	150
Contingency	2	ADD	334088_199...	334088	19982...	1	4.000...	0.021...	0	750	750	750
ContingencyCheckLines	3	ADD	334088_334...	334088	334990	1	0.00684	0.052...	0.117...	519	519	519
ContingencyDefinition	4	ADD	334094_199...	334094	19982...	1	0.00146	0.093...	0	150	150	150
	5	ADD	334990_334...	334990	334028	1	0.0004	0.0311	0	700	700	700
	1	MDF-NEW	334087_334...	334087	334104	1	2.20...	9.98...	2.88...	384	384	384
	1	MDF-OLD	334087_334...	334087	334104	1	0.00...	0.01...	0.00...	191	191	191

Change Category:

Added Record (ADD)
 Removed Record (RMV)
 Modified Record (MDF)

List Record **Modify**

Delete Table **Delete Record** **Delete Tiny Diff** **Export** **Load** **Close**

Review Change/Scenario: Diff.mdb

Changed Table List: 5 Changed Record: 'Bus' ADD - 4, RMV - 0, MDF - 0

Branch	Index	Action	BusID*	Name	BaseKV	Type	GL	BL	PSSEAreaID	PSSEZoneID	VM	VA
Bus	1	ADD	334088	6WCO...	230	1	0	0	351	103	0.99579	-33
Contingency	2	ADD	334094	6WCO...	13.8	1	0	0	351	102	1	0
ContingencyCheckLines	3	ADD	334990	6GRII...	230	1	0	0	351	100	1.012	-34
ContingencyDefinition	4	ADD	19982...	19982...	230	1	0	0	351	103	0.99579	-33

Review Change/Scenario: Diff.mdb

Changed Table List: 5 Changed Record: 'Contingency' ADD - 5, RMV - 0, MDF - 0

Branch	Index	Action	Name*	Active	Dispatch	Commitment
Bus	1	ADD	GRIMTZ_POND_ENT	-1	-1	-1
Contingency	2	ADD	GRIWDS_POND_ENT	-1	-1	-1
ContingencyCheckLines	3	ADD	PONDCON_CHINPOR_ENT	-1	-1	-1
ContingencyDefinition	4	ADD	PONDCON_LONGPOND_...	-1	-1	-1
	5	ADD	CONGOS_CONPLANT	-1	-1	-1

Review Change/Scenario: Diff.mdb

Changed Table List: 5 Changed Record: 'ContingencyCheckLines' ADD - 5, RMV - 0, MDF - 0

Branch	Index	Action	BranchName*	Name*	Rating
Bus	1	ADD	334026_334039_1	GRIWDS_POND_ENT	-1
Contingency	2	ADD	334026_334060_1	GRIMTZ_POND_ENT	-1
ContingencyCheckLines	3	ADD	334087_334104_1	PONDCON_CHINPOR_...	-1
ContingencyDefinition	4	ADD	334087_334104_1	PONDCON_LONGPON...	-1
	5	ADD	334091_334104_1	CONGOS_CONPLANT	-1

Review Change/Scenario: Diff.mdb

Changed Table List: 5 Changed Record: 'ContingencyDefinition' ADD - 5, RMV - 0, MDF - 0

	Index	Action	BranchName*	Name*	Status	
Branch	1	ADD	334075_334087_1	PONDCON_LONGPOND_ENT	0	
Bus	2	ADD	334088_334990_1	GRIMTZ_POND_ENT	0	
Contingency	3	ADD	334088_334990_1	GRIWDS_POND_ENT	0	
ContingencyCheckLines	4	ADD	334099_334103_1	CONGOS_COMPLANT	0	
ContingencyDefinition	5	ADD	334203_334204_1	PONDCON_CHINPOR_ENT	0	

5.6 APC Breakdown

5.6.1 2015

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2015	42	-23	19

5.6.2 2020

Year	Production Cost Savings (M\$)	Import Cost Savings (M\$)	Adjusted Production Cost Savings (M\$)
2020	30.2	-11.5	18.7

5.7 Entergy to AEPW Interface Values

5.7.1 Entergy to AEPW interface values (Sum of flow for entire year)

	Reference	Change	
	Total MWhrs	Total MWhrs	DIFFERENCE (MWhrs)
2015	-4,154,718	- 4,725,525	570,807
2020	-5,262,349	-5,753,407	491,058

5.7.2 Average power flow from Entergy to AEPW

	Reference	Change	
	AVERAGE POWER FLOW (MW)	AVERAGE POWER FLOW (MW)	DIFFERENCE (MW)
2015	-474	-539	65
2020	-599	-655	56

6. DTEC Project (Raw File Format)

1, 100.00, 32, 0, 1, 60.00 / PSS®E-32.1 WED, APR 11 2012 12:10

2010 SERIES ENTERGY POWER FLOW MODELS

2020 WINTER PEAK PEAK - FINAL

700408,'BRONSONT ', 69.0000,1, 520, 537, 1,1.02489, -36.1049
700409,'BRONSON ', 69.0000,1, 520, 537, 1,1.02439, -36.1437
700410,'HEMPHILL ', 138.0000,1, 520, 537, 1,1.00955, -29.8593
700411,'SIXMILE ', 138.0000,1, 520, 537, 1,1.01082, -28.5661
700412,'PENDLTON ', 138.0000,1, 520, 537, 1,1.00930, -31.8412
700413,'BLCKANKL ', 138.0000,1, 520, 537, 1,1.00998, -33.6597
700414,'HOLLY ', 138.0000,1, 520, 537, 1,1.01067, -34.4307
700415,'HOLLY ', 69.0000,1, 520, 537, 1,1.03524, -34.9685
700416,'SANAUGUS ', 69.0000,1, 520, 537, 1,1.03213, -35.2920
700417,'HURSTOWN ', 69.0000,1, 520, 537, 1,1.03000, -36.0997
700418,'HURST T ', 69.0000,1, 520, 537, 1,1.04084, -35.2384
700419,'HUXLEY ', 69.0000,1, 520, 537, 1,1.02985, -36.1574
700420,'HILLTOP ', 138.0000,1, 520, 537, 1,1.01303, -34.5042
700422,'PROSPECT ', 138.0000,1, 520, 537, 1,1.01643, -35.2413
700423,'TIMPSON ', 69.0000,4, 520, 537, 1,1.00000, 0.0000
700424,'CENTRALRH ', 138.0000,1, 520, 537, 1,1.01241, -36.1190
700425,'SHADYGRV ', 138.0000,1, 520, 537, 1,1.01180, -35.9828
700426,'MARTNSVL ', 138.0000,1, 520, 537, 1,1.01125, -35.6677
700432,'CHIRENO ', 138.0000,1, 520, 537, 1,1.01063, -35.1910
701200,'CENTERSOTXLA', 138.0000,1, 520, 537, 1,1.01482, -34.5099
701201,'CENTERSOTXLA', 69.0000,1, 520, 537, 1,1.04105, -35.1509
701202,'FITZETXLA ', 138.0000,1, 520, 537, 1,1.01404, -35.9172
701204,'TIMPSONTXLA ', 138.0000,1, 520, 537, 1,1.01470, -35.7616
701205,'TIMPSONTXLA ', 69.0000,4, 520, 537, 1,1.00000, 0.0000
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509088,'2 ',1, 520, 999, 9.075, 0.000, 0.000, 0.000, 0.000, 0.000, 1,1
509088,'3 ',0, 520, 999, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 1,1
700409,'1 ',1, 520, 537, 3.695, 0.697, 0.000, 0.000, 0.000, 0.000, 1,1
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700411,'1 ',1, 520, 537, 5.191, 0.981, 0.000, 0.000, 0.000, 0.000, 1,1
700412,'1 ',1, 520, 537, 5.571, 1.052, 0.000, 0.000, 0.000, 0.000, 1,1
700413,'1 ',1, 520, 537, 5.060, 0.956, 0.000, 0.000, 0.000, 0.000, 1,1
700415,'1 ',1, 520, 537, 4.098, 0.774, 0.000, 0.000, 0.000, 0.000, 1,1

700416,'1 ',1, 520, 537,	7.838,	1.480,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
700417,'1 ',1, 520, 537,	4.806,	0.908,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
700419,'1 ',1, 520, 537,	2.969,	0.561,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
700420,'1 ',1, 520, 537,	3.417,	0.645,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
700422,'1 ',1, 520, 537,	10.747,	0.000,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
700423,'1 ',0, 520, 537,	11.252,	0.000,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
700424,'1 ',1, 520, 537,	13.807,	0.000,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
700425,'1 ',1, 520, 537,	7.081,	0.000,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
700426,'1 ',1, 520, 537,	4.721,	0.000,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
701201,'1 ',1, 520, 537,	5.089,	0.961,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
701202,'1 ',1, 520, 537,	9.677,	0.000,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
701204,'1 ',1, 520, 537,	11.252,	0.000,	0.000,	0.000,	0.000,	0.000,	0.000,	1,1
0 /END OF LOAD DATA, BEGIN FIXED SHUNT DATA								
0 /END OF FIXED SHUNT DATA, BEGIN GENERATOR DATA								
0 /END OF GENERATOR DATA, BEGIN BRANCH DATA								
334286,700432,'1 ', 7.93000E-3, 4.89400E-2,	0.01459,	215.07,	225.40,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
334288,700408,'1 ', 7.29500E-2, 1.35300E-1,	0.00212,	40.63,	42.57,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,0,1, 0.00, 1,1.0000
334334,700411,'1 ', 1.23000E-2, 7.58800E-2,	0.02261,	215.07,	225.40,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
509058,701200,'1 ', 2.77000E-3, 1.70700E-2,	0.00509,	215.07,	225.40,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,2, 0.00, 1,1.0000
509088,700422,'1 ', 4.70000E-3, 3.03500E-2,	0.00824,	215.07,	225.40,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700408,700409,'1 ', 9.35000E-3, 1.73500E-2,	0.00027,	40.63,	42.57,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700408,700416,'1 ', 1.47960E-1, 3.47760E-1,	0.00651,	63.33,	66.36,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700409,700410,'1 ', 9.91300E-2, 1.83870E-1,	0.00287,	40.63,	42.57,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,0,1, 0.00, 1,1.0000
700410,700411,'1 ', 7.51000E-3, 2.86800E-2,	0.01647,	126.66,	132.72,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700410,700412,'1 ', 1.33000E-2, 5.07700E-2,	0.02916,	126.66,	132.72,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700412,700413,'1 ', 1.36200E-2, 5.20000E-2,	0.02987,	126.66,	132.72,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700413,700414,'1 ', 6.45000E-3, 2.46200E-2,	0.01414,	126.66,	132.72,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700414,700420,'1 ', 4.61000E-3, 2.84600E-2,	0.00848,	215.07,	225.40,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,2, 0.00, 1,1.0000
700414,700432,'1 ', 1.12800E-2, 4.30800E-2,	0.02474,	126.66,	132.72,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700415,700416,'1 ', 1.93000E-2, 4.53600E-2,	0.00085,	63.33,	66.36,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,2, 0.00, 1,1.0000
700415,700418,'1 ', 6.38000E-3, 2.43400E-2,	0.01398,	63.33,	66.36,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,0,1, 0.00, 1,1.0000
700417,700418,'1 ', 1.30540E-1, 1.64470E-1,	0.00230,	32.21,	33.80,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,2, 0.00, 1,1.0000
700417,700419,'1 ', 7.66000E-3, 2.92300E-2,	0.01679,	63.33,	66.36,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700418,701201,'1 ', 4.47000E-3, 1.70800E-2,	0.00981,	63.33,	66.36,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700420,701200,'1 ', 3.32000E-3, 2.04900E-2,	0.00611,	215.07,	225.40,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700422,701204,'1 ', 4.33000E-3, 2.80000E-2,	0.00760,	215.07,	225.40,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,2, 0.00, 1,1.0000
700423,701202,'1 ', 3.46300E-2, 6.76200E-2,	0.00100,	40.63,	42.57,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,0,1, 0.00, 1,1.0000
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700424,700425,'1 ', 4.67400E-3, 2.88300E-2,	0.00859,	215.07,	225.40,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,1, 0.00, 1,1.0000
700424,701202,'1 ', 7.13000E-3, 4.40100E-2,	0.01312,	215.07,	225.40,	0.00,	0.00000,	0.00000,	0.00000,	0.00000,1,2, 0.00, 1,1.0000

700425,700426,'1 ', 5.35000E-3, 3.30100E-2, 0.00984, 215.07, 225.40, 0.00, 0.00000, 0.00000, 0.00000, 0.00000, 0.00000, 1,2, 0.00, 1,1.0000
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700426,701205,'1 ', 3.35830E-1, 3.45490E-1, 0.00461, 27.48, 28.79, 0.00, 0.00000, 0.00000, 0.00000, 0.00000, 0.00000, 0,2, 0.00, 1,1.0000
701201,701205,'1 ', 1.74080E-1, 3.39950E-1, 0.00479, 40.63, 42.57, 0.00, 0.00000, 0.00000, 0.00000, 0.00000, 0.00000, 0,1, 0.00, 1,1.0000
701202,701204,'1 ', 2.28000E-3, 1.40380E-2, 0.00418, 215.07, 225.40, 0.00, 0.00000, 0.00000, 0.00000, 0.00000, 0.00000, 1,1, 0.00, 1,1.0000
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700415,700414, 0,'1 ',2,1,1, 0.00000E+0, 0.00000E+0,2,'HOLLY ',1, 1,1.0000
1.99000E-3, 5.72600E-2, 100.00
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130.650, 0.000
701201,701200, 0,'1 ',2,1,1, 0.00000E+0, 0.00000E+0,2,'CENTERSOTXLA',1, 1,1.0000
2.69000E-3, 8.29700E-2, 100.00
67.0000, 0.000, 0.000, 30.00, 50.00, 50.00, 0, 0, 1.10000, 0.90000, 1.10000, 0.90000, 33, 0, 0.00000, 0.00000, 0.000
130.650, 0.000
701204,701205, 0,'1 ',2,1,1, 0.00000E+0, 0.00000E+0,2,'TIMPSON-TXLA',0, 1,1.0000
1.99000E-3, 5.72600E-2, 100.00
130.650, 0.000, 0.000, 30.00, 40.00, 50.00, 0, 0, 1.10000, 0.90000, 1.10000, 0.90000, 33, 0, 0.00000, 0.00000, 0.000
67.0000, 0.000
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0 /END OF ZONE DATA, BEGIN INTER-AREA TRANSFER DATA
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700415,1,0,1,1.05000,0.95000, 0, 100.0, ' ', 0.00, 1, 12.00
701201,1,0,1,1.05000,0.95000, 0, 100.0, ' ', 0.00, 1, 12.00
0 /END OF SWITCHED SHUNT DATA, BEGIN GNE DATA
0 /END OF GNE DATA
Q