



***Feasibility Study
For
Generation Interconnection
Request
GEN-2005-017***

***SPP Tariff Studies
(#GEN-2005-017)***

March 7, 2006

Executive Summary

<OMITTED TEXT> (Customer) has requested a Feasibility Study for the purpose of interconnecting 340MW of generation within the service territory of Southwestern Public Service Company (SPS) (d/b/a Xcel Energy, Inc.) in Sherman County Texas approximately 60 miles north of the Potter County Interchange. The Customer's proposed point of interconnection is in the existing Potter - Finney 345kV line at a new switching station. This 345kV line is owned by SPS. The proposed in-service date is December 30, 2007.

Power flow analysis has indicated that for the powerflow cases studied, it is possible to interconnect the 340MW of generation with transmission system reinforcements within the local transmission systems. In order to maintain acceptable bus voltages in the local area, the customer will need to install 4 switched capacitor banks, two 115kV 30MVAR and two 34.5kV 15MVAR units, plus a 34.5kV 30MVAR SVC in the Customer's generator substation for a total of 120MVAR. Dynamic Stability studies performed as part of the impact study will provide additional guidance as to whether the required reactive compensation can be static or a portion must be dynamic (such as a SVC).

The requirements for interconnection consist of adding a new 345kV switching station with 3 breakers. This 345kV addition shall be constructed and maintained by SPS. The Customer did not propose a specific 345kV line extending to serve its 345-34.5kV facilities. It is assumed that obtaining all necessary right-of-way for the substation additions in the Potter – Finney 345kV line will not be a significant expense.

The total cost for adding a new 345kV switching station, the required interconnection facility, is estimated at \$7,434,666. Other Network Constraints in the American Electric Power West (AEPW), Sunflower Electric Power Corporation (SUNC), SPS, West Plains Energy (WEPL) (d/b/a/ Aquila, Inc.) and Western Farmers Electric Cooperative (WFEC) systems that may be verified with a transmission service request and associated studies are listed in Table 3. These Network Constraints are in the local area of the new generation when this generation is sunk throughout the SPP footprint for the Energy Resource Interconnection request. With a defined source and sink in a Transmission Service Request (TSR), this list of Network Constraints will be refined and expanded to account for all Network Upgrade requirements. This cost does not include building 345kV line from the Customer substation into the new SPS switching station. This cost does not include the Customer's 345-115-34.5kV substations.

In Table 4, a value of Available Transfer Capability (ATC) associated with each overloaded facility is included. These values may be used by the Customer for future analyses including the determination of lower generation capacity levels that may be installed. When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower. When a facility is overloaded for more than 10 contingencies, then only the results with the 10 highest values of loading may be included in this table. Given the contingency

analyses in this area with the Customer exporting generation, steady-state solutions were not obtained for outages of SPS' eastern and northern 345kV lines. These contingency analyses will have to be re-evaluated as part of a TSR with additional transmission facilities between SPS and the remainder of SPP.

The cost and final sizing of reactors in the new interconnection facility will be determined by an Electromagnetic Transient Program (EMTP) study, at the Customer's expense, that will be conducted upon the signing of an Impact Study Agreement. The 30 MVAR size and cost could change depending on the results of the EMTP study.

There are several other proposed generation additions in the general area of the Customer's facility. It was assumed in this preliminary analysis that these other projects within the SPS service territory will be in service. Those previously queued projects that have advanced to nearly complete phases were included in this Feasibility Study. In the event that another request for a generation interconnection with a higher priority withdraws, then this request may have to be re-evaluated to determine the local Network Constraints.

Introduction

<OMITTED TEXT> (Customer) has requested a Feasibility Study for the purpose of interconnecting 340MW of generation within the service territory of SPS in Sherman County Texas north of the Potter County Interchange. The existing Potter – Finney 345kV line is owned by SPS, and the proposed generation interconnection is within SPS. The Customer's proposed point of interconnection is at a new switching station in the Potter – Finney 345kV line. The proposed in-service date is December 30, 2007.

Interconnection Facilities

The primary objective of this study is to identify the system problems associated with connecting the plant to the area transmission system. The Feasibility and other subsequent Interconnection Studies are designed to identify attachment facilities, Network Upgrades and other direct assignment facilities needed to accept power into the grid at the interconnection receipt point.

The requirements for interconnection consist of adding a new 345kV switching station with 3 breakers. This 345kV addition shall be constructed and maintained by SPS. The Customer did not propose a route of its 345kV line to serve its 345-34.5kV facilities. It is assumed that obtaining all necessary right-of-way for the substation additions in the Potter – Finney 345kV line will not be a significant expense.

The total cost for adding a new 345kV switching station in the Potter – Finney 345kV line, the required interconnection facility, is estimated at \$7,434,666. Other Network Constraints in the AEPW, SPS, SUNC, WEPL and WFEC systems that were identified are listed in Table 3. These estimates will be refined during the development of the impact study based on the final designs. This cost does not include building 345kV line from the Customer substation into the new SPS switching station. The Customer is responsible for this 345kV line up to the point of interconnection. This cost does not include the Customer's 345-115-34.5kV substations and the cost estimate should be determined by the Customer.

The costs of interconnecting the facility to the SPS transmission system are listed in Table 2. **These costs do not include any cost that might be associated with short circuit study results or dynamic stability study results.** These costs will be determined when and if a System Impact Study is conducted.

Table 3: Network Constraints

Facility
AEPW - ELK CITY - CLINTON JUNCTION 138kV, 54121 – 54148, Base Case
AEPW - ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1, Base Case
AEPW - ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2, Base Case
SPS - Grapevine Interchange - ELK CITY 230kV, 50827 - 54153, Base Case
AEPW - Grapevine Interchange - ELK CITY 230kV, 50827 - 54153, Base Case
WEPL - Greensburg - Judson Large 115kV, 58764 - 58771, Base Case
WEPL - Harper - Medicine Lodge 138kV, 58768 - 58774, Base Case
SPS - McLean Rural - SHAMROCK 115kV, 50840 - 54295, Base Case
AEPW - McLean Rural - SHAMROCK 115kV, 50840 - 54295, Base Case
SPS - MCLELLN - Kirby 115kV, 50838 - 50932, Base Case
SPS - MCLELLN - McLean Rural 115kV, 50838 - 50840, Base Case
WEPL - Medicine Lodge - Sun City 115kV, 58773 - 58797, Base Case
WEPL - Medicine Lodge 138-115kV, 58773 - 58774, Base Case
WEPL - Mullergren - Spearville 230kV, 58779 - 58795, Base Case
SPS - Randall County Interchange - PALODU 115kV, 51020 - 51082, Base Case
SUNC - BEELER - DIGHTON TAP 115kV, 56359 - 56360
SUNC - BEELER - NESS CITY 115kV, 56359 - 56456
SPS - Bowers Interchange 115-69kV, 50819 - 50820
SPS - Bushland Interchange - Deaf Smith Interchange 230kV, 50993 - 51111
SPS - Canyon West - Canyon East 115kV, 51078 - 51080
SPS - Canyon West - Dawn 115kV, 51078 - 51102
WFEC - CARTER JCT - DILL JCT 69kV, 55846 - 55876
WEPL - Cimarron River Tap - Cimarron River Plant 115kV, 58752 - 58754
WEPL - Cimarron River Tap - Cudahy 115kV, 58752 - 58759
SPS - Conway - Kirby 115kV, 50928 - 50932
SPS - Dawn - Hereford Interchange 115kV, 51102 - 51106
SUNC - DIGHTON TAP - MANNING TAP 115kV, 56360 - 56362
SPS - East Plant Interchange - Manhattan 115kV, 50956 - 50978
SPS - East Plant Interchange - Pierce Tap 115kV, 50956 - 50964

Table 3: Network Constraints

Facility
SPS - East Plant Interchange 230-115kV, 50956 - 50957
AEPW - ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148
AEPW - ELK CITY - ELKCTY-4 138-()kV, 54121 - WND 2
AEPW - ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1
AEPW - ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2
AEPW - Grapevine Interchange - ELK CITY 230kV, 50827 - 54153
SPS - Grapevine Interchange - ELK CITY 230kV, 50827 - 54153
SPS - Grapevine Interchange - Kirby 115kV, 50826 - 50932
SPS - Grapevine Interchange - Nichols Station 230kV, 50827 - 50915
SPS - Grapevine Interchange 230-115kV, 50826 - 50827
SPS - Gray County Interchange 115-69kV, 50781 - 50782
WEPL - Great Bend Tap - Seward 115kV, 58766 - 58792
WEPL - Greensburg - Judson Large 115kV, 58764 - 58771
WEPL - Greensburg - Sun City 115kV, 58764 - 58797
SPS - Hale Co Interchange - Tuco Interchange 115kV, 51402 - 51532
SPS - Happy Interchange - TULIAT 115kV, 51302 - 51310
WEPL - Harper - Medicine Lodge 138kV, 58768 - 58774
SPS - HASTNG - Van Buren 1 Tap 69kV, 50949 - 50961
AEPW - JERICHO - CLARENDON 69kV, 54277 - 54278
AEPW - JERICHO - JERIC2WT 115-()kV, 54276 - WND 2
AEPW - LAKE PAULINE - ELDORADO 69kV, 54297 - 55896
WFEC - LAKE PAULINE - ELDORADO 69kV, 54297 - 55896
SPS - LE-WAIT 115-69kV, 52350 - 52441
SPS - McCullough - Bowers Interchange 69kV, 50805 - 50819
SPS - McCullough - Kingsmill Interchange 69kV, 50805 - 50807
SPS - McLean Rural - SHAMROCK 115kV, 50840 - 54295
AEPW - McLean Rural - SHAMROCK 115kV, 50840 - 54295
SPS - MCLELLN - Kirby 115kV, 50838 - 50932
SPS - MCLELLN - McLean Rural 115kV, 50838 - 50840

Table 3: Network Constraints

Facility
WEPL - Medicine Lodge - Sun City 115kV, 58773 - 58797
WEPL - Medicine Lodge 138-115kV, 58773 - 58774
WEPL - Mullergren - Spearville 230kV, 58779 - 58795
SPS - Nichols Station - Whitaker 115kV, 50914 - 50922
SPS - Osage Switching Station - Canyon East 115kV, 51014 - 51080
SUNC - PALMER - TRIBUNE SWITCH 115kV, 56431 - 56438
SPS - PALODU - Happy Interchange 115kV, 51082 - 51302
SPS - Pierce Tap - Osage Switching Station 115kV, 50964 - 51014
SPS - Randall County Interchange - PALODU 115kV, 51020 - 51082
SPS - Randall County Interchange 230-115kV, 51020 - 51021
SPS - Roswell Interchange 115-69kV, 52093 - 52094
SPS - Seven Rivers Interchange 115-69kV, 52294 - 52295
WEPL - Seward - St John 115kV, 58792 - 58796
AEPW - SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2
AEPW - SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1
AEPW - SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2
AEPW - SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1
WEPL - Spearville - SPRV-1 7 230-()kV, 58795 - WND 1
SUNC - SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2
WEPL - St John - ST_JOHN 115kV, 58796 - 56624
MIDW - St John - ST_JOHN 115kV, 58796 - 56624
SPS - Swisher County Interchange 230-115kV, 51320 - 51321
SPS - Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772
WEPL - Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772
SPS - TULIAT - Kress Interchange 115kV, 51310 - 51316
SPS - Whitaker - East Plant Interchange 115kV, 50922 - 50956

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148,	10WP, Base Case	103.8	258	6/1/2008
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	15SP, Base Case	103.3	271	
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	10SP, Base Case	101.9	299	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1,	07WP, Base Case	136.8	0	12/30/200 7
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	10WP, Base Case	135.2	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	15SP, Base Case	134.6	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	10SP, Base Case	131.3	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	06AP, Base Case	124.6	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2,	07WP, Base Case	134.0	0	12/30/200 7
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	10WP, Base Case	132.6	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	15SP, Base Case	131.6	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	10SP, Base Case	129.2	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	06AP, Base Case	123.5	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153,	15SP, Base Case	127.6	0	12/30/2007
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153,	07WP, Base Case	127.5	0	12/30/2007
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	10WP, Base Case	125.3	0	
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	10SP, Base Case	121.5	0	
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	06AP, Base Case	109.1	0	
Greensburg - Judson Large 115kV, 58764 - 58771,	15SP, Base Case	163.0	0	12/30/2007
Greensburg - Judson Large 115kV, 58764 - 58771	07WP, Base Case	149.6	0	
Greensburg - Judson Large 115kV, 58764 - 58771	10SP, Base Case	148.2	0	
Greensburg - Judson Large 115kV, 58764 - 58771	10WP, Base Case	145.1	0	
Greensburg - Judson Large 115kV, 58764 - 58771	06AP, Base Case	106.6	241	
Harper - Medicine Lodge 138kV, 58768 - 58774,	15SP, Base Case	135.0	0	12/30/2007
Harper - Medicine Lodge 138kV, 58768 - 58774	07WP, Base Case	122.3	40	
Harper - Medicine Lodge 138kV, 58768 - 58774	10WP, Base Case	116.3	157	
Harper - Medicine Lodge 138kV, 58768 - 58774	10SP, Base Case	107.5	240	
McLean Rural - SHAMROCK 115kV, 50840 - 54295,	15SP, Base Case	103.9	245	6/1/2010
McLean Rural - SHAMROCK 115kV, 50840 - 54295,	10SP, Base Case	100.5	326	6/1/2010

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
MCLELLN - Kirby 115kV, 50838 - 50932,	15SP, Base Case	112.6	47	6/1/2008
MCLELLN - Kirby 115kV, 50838 - 50932	10SP, Base Case	108.0	131	
MCLELLN - McLean Rural 115kV, 50838 - 50840,	15SP, Base Case	110.3	111	6/1/2008
MCLELLN - McLean Rural 115kV, 50838 - 50840	10SP, Base Case	105.9	184	
Medicine Lodge - Sun City 115kV, 58773 - 58797,	15SP, Base Case	140.8	0	12/30/2007
Medicine Lodge - Sun City 115kV, 58773 - 58797	07WP, Base Case	134.3	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	10WP, Base Case	129.7	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	10SP, Base Case	126.7	0	
Medicine Lodge 138-115kV, 58773 - 58774,	15SP, Base Case	137.3	0	12/30/2007
Medicine Lodge 138-115kV, 58773 - 58774	07WP, Base Case	130.6	0	
Medicine Lodge 138-115kV, 58773 - 58774	10WP, Base Case	123.6	0	
Medicine Lodge 138-115kV, 58773 - 58774	10SP, Base Case	112.7	0	
Mullergren - Spearville 230kV, 58779 - 58795,	15SP, Base Case	104.6	240	6/1/2009
Mullergren - Spearville 230kV, 58779 - 58795	10SP, Base Case	101.0	317	
Randall County Interchange - PALODU 115kV, 51020 - 51082,	10SP, Base Case	110.9	0	6/1/2008

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
	06AP, 50827-50915, SPS SPS-OKLA - SPS SPS-AMA , Grapevine Interchange - Nichols Station 230kV	No solution.	0	4/1/2008
	06AP, 50827-54153, SPS SPS-OKLA - AEPW WESTERN , Grapevine Interchange - ELK CITY 230kV	No solution.	0	4/1/2008
	06AP, 50858-56449, SPS SPS-AMA - SUNC SEPC , Finney Station - HOLCOMB 345kV	No solution.	0	4/1/2008
	06AP, 50858-99974, SPS SPS-AMA - , Finney Station - 2003-13 345kV	No solution.	0	4/1/2008
	06AP, 50888-99951, SPS SPS-AMA - , Potter County Interchange - 2005-17T 345kV	No solution.	0	4/1/2008
	06AP, 51534-54119, SPS SPS-CNPL - AEPW WESTERN , Tuco Interchange - OKLAUNION 345kV	No solution.	0	4/1/2008
	06AP, 54119-54131, AEPW WESTERN , OKLAUNION - LAWTON EASTSIDE 345kV	No solution.	0	4/1/2008
	06AP, 56449-56465, SUNC SEPC , HOLCOMB - SETAB 345kV	No solution.	0	4/1/2008
	06AP, 99951-99992, , 2005-17T - 2002-08T 345kV	No solution.	0	4/1/2008
	06AP, 99974-99992, , 2003-13 - 2002-08T 345kV	No solution.	0	4/1/2008
	07WP, 50858-56449, SPS SPS-AMA - SUNC SEPC , Finney Station - HOLCOMB 345kV	No solution.	0	12/30/2007
	07WP, 50858-99974, SPS SPS-AMA - , Finney Station - 2003-13 345kV	No solution.	0	12/30/2007
	07WP, 50888-99951, SPS SPS-AMA - , Potter County Interchange - 2005-17T 345kV	No solution.	0	12/30/2007
	07WP, 51534-54119, SPS SPS-CNPL - AEPW WESTERN , Tuco Interchange - OKLAUNION 345kV	No solution.	0	12/30/2007

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
	07WP, 54119-54131, AEPW WESTERN , OKLAUNION - LAWTON EASTSIDE 345kV	No solution.	0	12/30/2007
	07WP, 99951-99992, , 2005-17T - 2002-08T 345kV	No solution.	0	12/30/2007
	07WP, 99974-99992, , 2003-13 - 2002-08T 345kV	No solution.	0	12/30/2007
	10SP, 50858-56449, SPS SPS-AMA - SUNC SEPC , Finney Station - HOLCOMB 345kV	No solution.	0	6/1/2008
	10SP, 50858-99974, SPS SPS-AMA - , Finney Station - 2003-13 345kV	No solution.	0	6/1/2008
	10SP, 50888-99951, SPS SPS-AMA - , Potter County Interchange - 2005-17T 345kV	No solution.	0	6/1/2008
	10SP, 51534-54119, SPS SPS-CNPL - AEPW WESTERN , Tuco Interchange - OKLAUNION 345kV	No solution.	0	6/1/2008
	10SP, 56449-56465, SUNC SEPC , HOLCOMB - SETAB 345kV	No solution.	0	6/1/2008
	10SP, 99951-99992, , 2005-17T - 2002-08T 345kV	No solution.	0	6/1/2008
	10SP, 99974-99992, , 2003-13 - 2002-08T 345kV	No solution.	0	6/1/2008
	10WP, 50858-56449, SPS SPS-AMA - SUNC SEPC , Finney Station - HOLCOMB 345kV	No solution.	0	12/1/2010
	10WP, 50858-99974, SPS SPS-AMA - , Finney Station - 2003-13 345kV	No solution.	0	12/1/2010
	10WP, 50888-99951, SPS SPS-AMA - , Potter County Interchange - 2005-17T 345kV	No solution.	0	12/1/2010
	10WP, 51534-54119, SPS SPS-CNPL - AEPW WESTERN , Tuco Interchange - OKLAUNION 345kV	No solution.	0	12/1/2010

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
	10WP, 56449-56465, SUNC SEPC , HOLCOMB - SETAB 345kV	No solution.	0	12/1/2010
	10WP, 99951-99992, , 2005-17T - 2002-08T 345kV	No solution.	0	12/1/2010
	10WP, 99974-99992, , 2003-13 - 2002-08T 345kV	No solution.	0	12/1/2010
	15SP, 50858-56449, SPS SPS-AMA - SUNC SEPC , Finney Station - HOLCOMB 345kV	No solution.	0	6/1/2015
	15SP, 50858-99974, SPS SPS-AMA - , Finney Station - 2003-13 345kV	No solution.	0	6/1/2015
	15SP, 50888-99951, SPS SPS-AMA - , Potter County Interchange - 2005-17T 345kV	No solution.	0	6/1/2015
	15SP, 51534-54119, SPS SPS-CNPL - AEPW WESTERN , Tuco Interchange - OKLAUNION 345kV	No solution.	0	6/1/2015
	15SP, 56449-56465, SUNC SEPC , HOLCOMB - SETAB 345kV	No solution.	0	6/1/2015
	15SP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	No solution.	0	6/1/2015
	15SP, 99951-99992, , 2005-17T - 2002-08T 345kV	No solution.	0	6/1/2015
	15SP, 99974-99992, , 2003-13 - 2002-08T 345kV	No solution.	0	6/1/2015

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
BEELER - DIGHTON TAP 115kV, 56359 - 56360,	07WP, 56469-58795-56468, SUNC SEPC - WEPL , SPEARVILLE 345-230kV	111.9	150	12/30/2007
BEELER - DIGHTON TAP 115kV, 56359 - 56360	07WP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	111.9	153	
BEELER - DIGHTON TAP 115kV, 56359 - 56360	06AP, 58779-58795, WEPL , Mullergren - Spearville 230kV	104.4	267	
BEELER - NESS CITY 115kV, 56359 - 56456,	07WP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	108.6	204	12/30/2007
BEELER - NESS CITY 115kV, 56359 - 56456	07WP, 56469-58795-56468, SUNC SEPC - WEPL , SPEARVILLE 345-230kV	108.5	202	
BEELER - NESS CITY 115kV, 56359 - 56456	06AP, 58779-58795, WEPL , Mullergren - Spearville 230kV	102.4	300	
Bowers Interchange 115-69kV, 50819 - 50820,	06AP, 50827-50915, SPS SPS-OKLA - SPS SPS-AMA , Grapevine Interchange - Nichols Station 230kV	101.7	301	4/1/2008
Bushland Interchange - Deaf Smith Interchange 230kV, 50993 - 51111,	15SP, 51435-51441, SPS SPS-CNPL, Tolk Interchange - Tolk 1 230-24kV	106.9	125	6/1/2011
Canyon West - Canyon East 115kV, 51078 - 51080,	10SP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	149.2	0	12/30/2007
Canyon West - Canyon East 115kV, 51078 - 51080	06AP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	128.6	0	
Canyon West - Canyon East 115kV, 51078 - 51080	07WP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	109.7	88	
Canyon West - Canyon East 115kV, 51078 - 51080	10WP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	100.9	315	
Canyon West - Dawn 115kV, 51078 - 51102,	10SP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	126.2	0	4/1/2008
Canyon West - Dawn 115kV, 51078 - 51102	06AP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	116.2	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
CARTER JCT - DILL JCT 69kV, 55846 - 55876,	06AP, 54277-54278, AEPW WTU , JERICHO - CLARENDON 69kV	111.8	0	4/1/2008
CARTER JCT - DILL JCT 69kV, 55846 - 55876	06AP, 54276-54277-54303, AEPW WTU , JERICHO 115-69kV	111.8	0	
CARTER JCT - DILL JCT 69kV, 55846 - 55876	06AP, 50932-54276, SPS SPS-AMA - AEPW WTU , Kirby - JERICHO 115kV	111.8	0	
CARTER JCT - DILL JCT 69kV, 55846 - 55876	06AP, 54278-54279, AEPW WTU , CLARENDON - CLARENDON REA 69kV	111.5	0	
CARTER JCT - DILL JCT 69kV, 55846 - 55876	06AP, 54279-54280, AEPW WTU , CLARENDON REA - HEDLEY 69kV	111.3	0	
CARTER JCT - DILL JCT 69kV, 55846 - 55876	06AP, 54280-54281, AEPW WTU , HEDLEY - NORTH MEMPHIS REA 69kV	111.2	0	
CARTER JCT - DILL JCT 69kV, 55846 - 55876	06AP, 54275-54281, AEPW WTU , NW Memphis - NORTH MEMPHIS REA 69kV	111.0	0	
CARTER JCT - DILL JCT 69kV, 55846 - 55876	06AP, 56386-56557, SUNC NORTON-D - MIDW REG E-IL, GRAHAM SUBSTATION - BEACH STATION 115kV	107.4	0	
CARTER JCT - DILL JCT 69kV, 55846 - 55876	06AP, 56373-56386, SUNC NORTON-D, RHOADES - GRAHAM SUBSTATION 115kV	107.4	0	
CARTER JCT - DILL JCT 69kV, 55846 - 55876	06AP, 56448-56447, SUNC SEPC , HOLCOMB - HOLCOMB GENERATOR 115-22kV	101.3	0	
Cimarron River Tap - Cimarron River Plant 115kV, 58752 - 58754,	10SP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	102.0	313	6/1/2008
Cimarron River Tap - Cudahy 115kV, 58752 - 58759,	10SP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	101.6	317	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Conway - Kirby 115kV, 50928 - 50932,	06AP, 50827-50915, SPS SPS-OKLA - SPS SPS-AMA , Grapevine Interchange - Nichols Station 230kV	153.4	0	12/30/2007
Conway - Kirby 115kV, 50928 - 50932	15SP, 50805-50807, SPS SPS-OKLA, McCullough - Kingsmill Interchange 69kV	124.5	0	
Conway - Kirby 115kV, 50928 - 50932	15SP, 50750-50782, SPS SPS-OKLA, Hutchinson Co. Interchange - Gray County Interchange 115kV	121.7	0	
Conway - Kirby 115kV, 50928 - 50932	15SP, 50805-50819, SPS SPS-OKLA, McCullough - Bowers Interchange 69kV	117.1	0	
Conway - Kirby 115kV, 50928 - 50932	15SP, 50808-50842, SPS SPS-OKLA, Kingsmill Interchange - Steer Water Wind Gen 115kV	114.9	0	
Conway - Kirby 115kV, 50928 - 50932	15SP, 50807-50808, SPS SPS-OKLA, Kingsmill Interchange 115-69kV	114.9	0	
Conway - Kirby 115kV, 50928 - 50932	10SP, 50805-50807, SPS SPS-OKLA, McCullough - Kingsmill Interchange 69kV	113.8	0	
Conway - Kirby 115kV, 50928 - 50932	15SP, 50600-58772, SPS SPS-OKLA - WEPL , Texas County Interchange PHSF - East Liberal 115kV	110.5	0	
Conway - Kirby 115kV, 50928 - 50932	15SP, 50596-50600, SPS SPS-OKLA, Texas County Interchange - Texas County Interchange PHSF 115kV	110.3	0	
Conway - Kirby 115kV, 50928 - 50932	15SP, 50914-50922, SPS SPS-AMA , Nichols Station - Whitaker 115kV	110.1	0	
Dawn - Hereford Interchange 115kV, 51102 - 51106,	10SP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	121.7	0	4/1/2008
Dawn - Hereford Interchange 115kV, 51102 - 51106	06AP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	113.7	27	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
DIGHTON TAP - MANNING TAP 115kV, 56360 - 56362,	07WP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	118.2	60	12/30/2007
DIGHTON TAP - MANNING TAP 115kV, 56360 - 56362	07WP, 56469-58795-56468, SUNC SEPC - WEPL , SPEARVILLE 345-230kV	118.1	56	
DIGHTON TAP - MANNING TAP 115kV, 56360 - 56362	06AP, 58779-58795, WEPL , Mullergren - Spearville 230kV	107.9	211	
East Plant Interchange - Manhattan 115kV, 50956 - 50978,	15SP, 50915-51041, SPS SPS-AMA , Nichols Station - Amarillo S Interchange 230kV	117.4	0	6/1/2011
East Plant Interchange - Manhattan 115kV, 50956 - 50978	15SP, 50907-51021, SPS SPS-AMA , Harrington Station - Randall County Interchange 230kV	109.8	0	
East Plant Interchange - Manhattan 115kV, 50956 - 50978	15SP, 51020-51021, SPS SPS-AMA , Randall County Interchange 230-115kV	109.7	0	
East Plant Interchange - Pierce Tap 115kV, 50956 - 50964,	15SP, 50915-51041, SPS SPS-AMA , Nichols Station - Amarillo S Interchange 230kV	123.2	0	6/1/2011
East Plant Interchange - Pierce Tap 115kV, 50956 - 50964	15SP, 51020-51021, SPS SPS-AMA , Randall County Interchange 230-115kV	110.2	0	
East Plant Interchange - Pierce Tap 115kV, 50956 - 50964	15SP, 50907-51021, SPS SPS-AMA , Harrington Station - Randall County Interchange 230kV	110.2	0	
East Plant Interchange 230-115kV, 50956 - 50957,	15SP, 50915-51041, SPS SPS-AMA , Nichols Station - Amarillo S Interchange 230kV	101.3	309	6/1/2013

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148,	10WP, 54109-54121, AEPW WESTERN , CLINTO AIR FORCE BASE TAP - ELK CITY 138kV	127.8	0	12/30/2007
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	10WP, 54109-54126, AEPW WESTERN , CLINTO AIR FORCE BASE TAP - HOBART JUNCTION 138kV	126.8	0	
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	15SP, 54109-54121, AEPW WESTERN , CLINTO AIR FORCE BASE TAP - ELK CITY 138kV	126.8	0	
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	10SP, 54109-54121, AEPW WESTERN , CLINTO AIR FORCE BASE TAP - ELK CITY 138kV	125.7	0	
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	15SP, 54109-54126, AEPW WESTERN , CLINTO AIR FORCE BASE TAP - HOBART JUNCTION 138kV	125.0	0	
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	10SP, 54109-54126, AEPW WESTERN , CLINTO AIR FORCE BASE TAP - HOBART JUNCTION 138kV	124.1	0	
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	07WP, 54121-56001, AEPW WESTERN - WFEC AEP-CS , ELK CITY - MOREWOOD SW 138kV	123.9	0	
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	10WP, 54121-56001, AEPW WESTERN - WFEC AEP-CS , ELK CITY - MOREWOOD SW 138kV	122.7	0	
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	07WP, 54109-54121, AEPW WESTERN , CLINTO AIR FORCE BASE TAP - ELK CITY 138kV	119.7	0	
ELK CITY - CLINTON JUNCTION 138kV, 54121 - 54148	07WP, 54109-54126, AEPW WESTERN , CLINTO AIR FORCE BASE TAP - HOBART JUNCTION 138kV	118.7	7	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
ELK CITY - ELKCTY-4 138-()kV, 54121 - WND 2,	10SP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	102.3	0	6/1/2008
ELK CITY - ELKCTY-4 69- ()kV, 54122 - WND 1	10SP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	103.3	0	
ELK CITY - ELKCTY-4 69- ()kV, 54122 - WND 1	15SP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	100.4	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1,	07WP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	147.3	0	12/30/2007
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	15SP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	144.9	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	07WP, 54294-54295-54302, AEPW WTU , SHAMROCK 115-69kV	143.8	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	07WP, 50838-50932, SPS SPS-OKLA - SPS SPS- AMA , MCLELLN - Kirby 115kV	143.8	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	07WP, 50838-50840, SPS SPS-OKLA, MCLELLN - McLean Rural 115kV	143.8	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	07WP, 50840-54295, SPS SPS-OKLA - AEPW WTU , McLean Rural - SHAMROCK 115kV	143.7	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	07WP, 54293-54294-54301, AEPW WTU , SHAMROCK 138-69kV	143.4	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	07WP, 54292-54293, AEPW WTU , WELLINGTON - SHAMROCK 138kV	143.4	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	07WP, 54291-54292, AEPW WTU , HOLLIS TAP - WELLINGTON 138kV	143.0	0	
ELK CITY - ELKCTY-6 138-()kV, 54121 - WND 1	10WP, 50838-50932, SPS SPS-OKLA - SPS SPS- AMA , MCLELLN - Kirby 115kV	142.6	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2,	07WP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	143.0	0	12/30/200 7
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	15SP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	140.8	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	07WP, 54294-54295-54302, AEPW WTU , SHAMROCK 115-69kV	139.7	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	07WP, 54293-54294-54301, AEPW WTU , SHAMROCK 138-69kV	139.7	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	07WP, 50840-54295, SPS SPS-OKLA - AEPW WTU , McLean Rural - SHAMROCK 115kV	139.7	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	07WP, 50838-50932, SPS SPS-OKLA - SPS SPS- AMA , MCLELLN - Kirby 115kV	139.7	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	07WP, 50838-50840, SPS SPS-OKLA, MCLELLN - McLean Rural 115kV	139.7	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	07WP, 54292-54293, AEPW WTU , WELLINGTON - SHAMROCK 138kV	139.6	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	07WP, 54291-54292, AEPW WTU , HOLLIS TAP - WELLINGTON 138kV	139.3	0	
ELK CITY - ELKCTY-6 230-()kV, 54153 - WND 2	07WP, 54290-54291, AEPW WTU , CHILDRESS - HOLLIS TAP 138kV	139.1	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153,	07WP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	140.6	0	12/30/2007
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153,	15SP, 50838-50932, SPS SPS-OKLA - SPS SPS-AMA , MCLELLN - Kirby 115kV	140.5	0	12/30/2007
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	07WP, 56469-58795-56468, SUNC SEPC - WEPL , SPEARVILLE 345-230kV	139.9	0	
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	07WP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	139.8	0	
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	15SP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	138.7	0	
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	07WP, 50838-50932, SPS SPS-OKLA - SPS SPS-AMA , MCLELLN - Kirby 115kV	138.5	0	
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	07WP, 50838-50840, SPS SPS-OKLA, MCLELLN - McLean Rural 115kV	138.3	0	
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	15SP, 50840-54295, SPS SPS-OKLA - AEPW WTU , McLean Rural - SHAMROCK 115kV	138.3	0	
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	15SP, 54294-54295-54302, AEPW WTU , SHAMROCK 115-69kV	138.2	0	
Grapevine Interchange - ELK CITY 230kV, 50827 - 54153	07WP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	138.1	0	
Grapevine Interchange - Kirby 115kV, 50826 - 50932,	06AP, 50827-50915, SPS SPS-OKLA - SPS SPS-AMA , Grapevine Interchange - Nichols Station 230kV	102.9	275	4/1/2008
Grapevine Interchange - Nichols Station 230kV, 50827 - 50915,	15SP, 50928-50932, SPS SPS-AMA , Conway - Kirby 115kV	108.7	0	6/1/2008
Grapevine Interchange - Nichols Station 230kV, 50827 - 50915	10SP, 50928-50932, SPS SPS-AMA , Conway - Kirby 115kV	101.7	0	
Grapevine Interchange 230-115kV, 50826 - 50827,	06AP, 50827-50915, SPS SPS-OKLA - SPS SPS-AMA , Grapevine Interchange - Nichols Station 230kV	239.1	0	4/1/2008

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Gray County Interchange 115-69kV, 50781 - 50782,	15SP, 50928-50932, SPS SPS-AMA , Conway - Kirby 115kV	102.9	250	6/1/2011
Great Bend Tap - Seward 115kV, 58766 - 58792,	10SP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	107.9	216	6/1/2008
Greensburg - Judson Large 115kV, 58764 - 58771,	15SP, 58792-58796, WEPL , Seward - St John 115kV	179.1	0	12/30/2007
Greensburg - Judson Large 115kV, 58764 - 58771	15SP, 58787-58796, WEPL , Pratt - St John 115kV	177.9	0	
Greensburg - Judson Large 115kV, 58764 - 58771	07WP, 58794-58871, WEPL , Spearville - North Judson Large 115kV	176.0	0	
Greensburg - Judson Large 115kV, 58764 - 58771	15SP, 58771-58871, WEPL , Judson Large - North Judson Large 115kV	175.8	0	
Greensburg - Judson Large 115kV, 58764 - 58771	15SP, 58794-58871, WEPL , Spearville - North Judson Large 115kV	175.1	0	
Greensburg - Judson Large 115kV, 58764 - 58771	07WP, 58794-58795, WEPL , Spearville 230-115kV	174.7	0	
Greensburg - Judson Large 115kV, 58764 - 58771	15SP, 58794-58795, WEPL , Spearville 230-115kV	172.5	0	
Greensburg - Judson Large 115kV, 58764 - 58771	06AP, 58779-58795, WEPL , Mullergren - Spearville 230kV	171.7	0	
Greensburg - Judson Large 115kV, 58764 - 58771	15SP, 56362-56433, SUNC LANE-SCO - SUNC WHEATLAN, MANNING TAP - SCOTT CITY 115kV	171.2	0	
Greensburg - Judson Large 115kV, 58764 - 58771	15SP, 58766-58778, WEPL , Great Bend Tap - Mullergren 115kV	171.2	0	
Greensburg - Sun City 115kV, 58764 - 58797,	06AP, 58779-58795, WEPL , Mullergren - Spearville 230kV	102.2	306	4/1/2008
Greensburg - Sun City 115kV, 58764 - 58797	15SP, 58792-58796, WEPL , Seward - St John 115kV	100.9	323	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Hale Co Interchange - Tuco Interchange 115kV, 51402 - 51532,	06AP, 51321-51533, SPS SPS-CNPL, Swisher County Interchange - Tuco Interchange 230kV	151.6	0	12/30/2007
Hale Co Interchange - Tuco Interchange 115kV, 51402 - 51532	15SP, 51321-51533, SPS SPS-CNPL, Swisher County Interchange - Tuco Interchange 230kV	132.7	0	
Hale Co Interchange - Tuco Interchange 115kV, 51402 - 51532	07WP, 51321-51533, SPS SPS-CNPL, Swisher County Interchange - Tuco Interchange 230kV	123.5	1	
Hale Co Interchange - Tuco Interchange 115kV, 51402 - 51532	06AP, 51435-51533, SPS SPS-CNPL, Tolk Interchange - Tuco Interchange 230kV	120.2	13	
Hale Co Interchange - Tuco Interchange 115kV, 51402 - 51532	10SP, 51321-51533, SPS SPS-CNPL, Swisher County Interchange - Tuco Interchange 230kV	116.6	0	
Hale Co Interchange - Tuco Interchange 115kV, 51402 - 51532	06AP, 51419-51733, SPS SPS-CNPL, Plant X Interchange - Sundown Interchange 230kV	101.4	311	
Hale Co Interchange - Tuco Interchange 115kV, 51402 - 51532	07WP, 51435-51533, SPS SPS-CNPL, Tolk Interchange - Tuco Interchange 230kV	101.1	325	
Happy Interchange - TULIAT 115kV, 51302 - 51310,	06AP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	144.7	0	12/30/2007
Happy Interchange - TULIAT 115kV, 51302 - 51310	07WP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	115.1	27	
Happy Interchange - TULIAT 115kV, 51302 - 51310	10WP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	107.0	183	
Happy Interchange - TULIAT 115kV, 51302 - 51310	06AP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	105.6	209	
Happy Interchange - TULIAT 115kV, 51302 - 51310	06AP, 51435-51441, SPS SPS-CNPL, Tolk Interchange - Tolk 1 230-24kV	104.9	212	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Harper - Medicine Lodge 138kV, 58768 - 58774,	15SP, 58796-56624, WEPL - MIDW REG E-IL, St John - ST_JOHN 115kV	146.1	0	12/30/2007
Harper - Medicine Lodge 138kV, 58768 - 58774	07WP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	144.3	0	
Harper - Medicine Lodge 138kV, 58768 - 58774	15SP, 58760-58778, WEPL , East Hall Tap - Mullergren 115kV	143.4	0	
Harper - Medicine Lodge 138kV, 58768 - 58774	15SP, 50928-50932, SPS SPS-AMA , Conway - Kirby 115kV	142.0	0	
Harper - Medicine Lodge 138kV, 58768 - 58774	15SP, 51321-51533, SPS SPS-CNPL, Swisher County Interchange - Tuco Interchange 230kV	141.8	0	
Harper - Medicine Lodge 138kV, 58768 - 58774	15SP, 58771-58871, WEPL , Judson Large - North Judson Large 115kV	141.8	0	
Harper - Medicine Lodge 138kV, 58768 - 58774	15SP, 50915-51041, SPS SPS-AMA , Nichols Station - Amarillo S Interchange 230kV	141.4	0	
Harper - Medicine Lodge 138kV, 58768 - 58774	15SP, 50838-50932, SPS SPS-OKLA - SPS SPS-AMA , MCLELLN - Kirby 115kV	141.3	0	
Harper - Medicine Lodge 138kV, 58768 - 58774	15SP, 58794-58871, WEPL , Spearville - North Judson Large 115kV	141.3	0	
Harper - Medicine Lodge 138kV, 58768 - 58774	15SP, 58773-58817, WEPL , Medicine Lodge 115-34.5kV	140.2	0	
HASTNG - Van Buren 1 Tap 69kV, 50949 - 50961,	15SP, 50937-50938, SPS SPS-AMA , Northwest Interchange 115-69kV	103.8	0	6/1/2011

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
JERICHO - CLARENDON 69kV, 54277 - 54278,	15SP, 50838-50932, SPS SPS-OKLA - SPS SPS-AMA , MCLELLN - Kirby 115kV	112.5	0	12/30/2007
JERICHO - CLARENDON 69kV, 54277 - 54278	15SP, 50840-54295, SPS SPS-OKLA - AEPW WTU , McLean Rural - SHAMROCK 115kV	109.3	0	
JERICHO - CLARENDON 69kV, 54277 - 54278	15SP, 54294-54295-54302, AEPW WTU , SHAMROCK 115-69kV	109.3	0	
JERICHO - CLARENDON 69kV, 54277 - 54278	10SP, 50838-50932, SPS SPS-OKLA - SPS SPS-AMA , MCLELLN - Kirby 115kV	107.1	0	
JERICHO - CLARENDON 69kV, 54277 - 54278	10SP, 50838-50840, SPS SPS-OKLA, MCLELLN - McLean Rural 115kV	106.4	0	
JERICHO - CLARENDON 69kV, 54277 - 54278	10SP, 54294-54295-54302, AEPW WTU , SHAMROCK 115-69kV	104.7	0	
JERICHO - CLARENDON 69kV, 54277 - 54278	10SP, 50840-54295, SPS SPS-OKLA - AEPW WTU , McLean Rural - SHAMROCK 115kV	104.7	0	
JERICHO - CLARENDON 69kV, 54277 - 54278	15SP, 54293-54294-54301, AEPW WTU , SHAMROCK 138-69kV	104.6	0	
JERICHO - CLARENDON 69kV, 54277 - 54278	15SP, 54292-54293, AEPW WTU , WELLINGTON - SHAMROCK 138kV	104.3	0	
JERICHO - CLARENDON 69kV, 54277 - 54278	15SP, 54291-54292, AEPW WTU , HOLLIS TAP - WELLINGTON 138kV	101.0	0	
JERICHO - JERIC2WT 115-()kV, 54276 - WND 2,	15SP, 50604-50618, SPS SPS-OKLA, TC-Cole - Perryton Interchange 115kV	100.9	0	6/1/2010
JERICHO - JERIC2WT 115-()kV, 54276 - WND 2	10SP, 58782-58837, WEPL , North Liberal Tap - North Liberal 115kV	100.0	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896,	06AP, 54111-56043, AEPW WESTERN - WFEC AEP-KP , ALTUS JCT TAP - RUSSELL 138kV	124.5	0	12/30/2007
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896,	07WP, 50600-58772, SPS SPS-OKLA - WEPL , Texas County Interchange PHSF - East Liberal 115kV	106.9	0	12/30/2007
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896	10WP, 58786-56551, WEPL - MIDW REG E-IL, Plainville - SALINE RIVER 115kV	105.4	0	
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896	10WP, 56445-56448, SUNC SEPC , GARDEN CITY - HOLCOMB 115kV	105.4	0	
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896	07WP, 50614-50632, SPS SPS-OKLA, Texas Farmers - Spearman Sub 115kV	104.0	0	
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896	07WP, 50614-50618, SPS SPS-OKLA, Texas Farmers - Perryton Interchange 115kV	104.0	0	
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896	07WP, 50907-50891, SPS SPS-AMA , Harrington Station - Harrington 1 230-24kV	101.2	0	
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896	07WP, 50907-50892, SPS SPS-AMA , Harrington Station - Harrington 2 230-24kV	101.1	0	
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896	10SP, 58782-58837, WEPL , North Liberal Tap - North Liberal 115kV	101.1	0	
LAKE PAULINE - ELDORADO 69kV, 54297 - 55896	10SP, 50618-50619, SPS SPS-OKLA, Perryton Interchange 115-69kV	101.0	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
LE-WAIT 115-69kV, 52350 - 52441,	15SP, 50604-50618, SPS SPS-OKLA, TC-Cole - Perryton Interchange 115kV	124.6	0	12/30/2007
LE-WAIT 115-69kV, 52350 - 52441	15SP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	124.6	0	
LE-WAIT 115-69kV, 52350 - 52441	15SP, 50596-99943, SPS SPS-OKLA - , Texas County Interchange - 2002-06 115kV	124.5	0	
LE-WAIT 115-69kV, 52350 - 52441	10SP, 58782-58837, WEPL , North Liberal Tap - North Liberal 115kV	111.4	0	
LE-WAIT 115-69kV, 52350 - 52441	10SP, 56420-56448, SUNC WHEATLAN - SUNC SEPC , FLETCHER - HOLCOMB 115kV	111.4	0	
LE-WAIT 115-69kV, 52350 - 52441	10SP, 56392-56393, SUNC PIONEER , PIONEER TAP - PLYMELL 115kV	111.4	0	
LE-WAIT 115-69kV, 52350 - 52441	10SP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	111.4	0	
LE-WAIT 115-69kV, 52350 - 52441	10SP, 54275-54282, AEPW WTU , NW Memphis - MEMPHIS 69kV	111.4	0	
LE-WAIT 115-69kV, 52350 - 52441	10SP, 50618-50619, SPS SPS-OKLA, Perryton Interchange 115-69kV	111.4	0	
LE-WAIT 115-69kV, 52350 - 52441	10SP, 50615-50619, SPS SPS-OKLA, Wade - Perryton Interchange 69kV	111.4	0	
McCullough - Bowers Interchange 69kV, 50805 - 50819,	06AP, 50827-50915, SPS SPS-OKLA - SPS SPS-AMA , Grapevine Interchange - Nichols Station 230kV	125.1	0	4/1/2008
McCullough - Kingsmill Interchange 69kV, 50805 - 50807,	06AP, 50827-50915, SPS SPS-OKLA - SPS SPS-AMA , Grapevine Interchange - Nichols Station 230kV	133.7	0	4/1/2008

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
McLean Rural - SHAMROCK 115kV, 50840 - 54295,	15SP, 54279-54280, AEPW WTU , CLARENDON REA - HEDLEY 69kV	123.6	0	12/30/2007
McLean Rural - SHAMROCK 115kV, 50840 - 54295,	15SP, 54280-54281, AEPW WTU , HEDLEY - NORTH MEMPHIS REA 69kV	122.6	0	12/30/2007
McLean Rural - SHAMROCK 115kV, 50840 - 54295	15SP, 54275-54281, AEPW WTU , NW Memphis - NORTH MEMPHIS REA 69kV	120.9	0	
McLean Rural - SHAMROCK 115kV, 50840 - 54295	15SP, 54275-54282, AEPW WTU , NW Memphis - MEMPHIS 69kV	120.1	0	
McLean Rural - SHAMROCK 115kV, 50840 - 54295	10SP, 54279-54280, AEPW WTU , CLARENDON REA - HEDLEY 69kV	119.8	0	
McLean Rural - SHAMROCK 115kV, 50840 - 54295	10SP, 54280-54281, AEPW WTU , HEDLEY - NORTH MEMPHIS REA 69kV	119.0	0	
McLean Rural - SHAMROCK 115kV, 50840 - 54295	10SP, 54275-54281, AEPW WTU , NW Memphis - NORTH MEMPHIS REA 69kV	117.4	0	
McLean Rural - SHAMROCK 115kV, 50840 - 54295	10SP, 54275-54282, AEPW WTU , NW Memphis - MEMPHIS 69kV	116.6	0	
McLean Rural - SHAMROCK 115kV, 50840 - 54295	15SP, 54282-54283, AEPW WTU , MEMPHIS - RED RIVER ARSENAL 69kV	116.0	0	
McLean Rural - SHAMROCK 115kV, 50840 - 54295	15SP, 54283-54284, AEPW WTU , RED RIVER ARSENAL - ESTELENE 69kV	115.7	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
MCLELLN - Kirby 115kV, 50838 - 50932,	10SP, 54275-54282, AEPW WTU , NW Memphis - MEMPHIS 69kV	124.2	0	12/30/2007
MCLELLN - Kirby 115kV, 50838 - 50932	10SP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	116.2	0	
MCLELLN - Kirby 115kV, 50838 - 50932	15SP, 50604-50618, SPS SPS-OKLA, TC-Cole - Perryton Interchange 115kV	112.6	0	
MCLELLN - Kirby 115kV, 50838 - 50932	10SP, 58782-58837, WEPL , North Liberal Tap - North Liberal 115kV	108.3	0	
MCLELLN - Kirby 115kV, 50838 - 50932	10SP, 50618-50619, SPS SPS-OKLA, Perryton Interchange 115-69kV	108.2	0	
MCLELLN - Kirby 115kV, 50838 - 50932	10SP, 50615-50619, SPS SPS-OKLA, Wade - Perryton Interchange 69kV	108.2	0	
MCLELLN - Kirby 115kV, 50838 - 50932	10SP, 50613-50615, SPS SPS-OKLA, Booker - Wade 69kV	108.2	0	
MCLELLN - Kirby 115kV, 50838 - 50932	10SP, 56420-56448, SUNC WHEATLAN - SUNC SEPC , FLETCHER - HOLCOMB 115kV	108.0	0	
MCLELLN - Kirby 115kV, 50838 - 50932	10SP, 56392-56393, SUNC PIONEER , PIONEER TAP - PLYMELL 115kV	107.7	0	
MCLELLN - Kirby 115kV, 50838 - 50932	06AP, 54276-54277-54303, AEPW WTU , JERICO 115-69kV	105.8	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
MCLELLN - McLean Rural 115kV, 50838 - 50840,	10SP, 54275-54282, AEPW WTU , NW Memphis - MEMPHIS 69kV	122.1	0	12/30/2007
MCLELLN - McLean Rural 115kV, 50838 - 50840	10SP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	113.9	43	
MCLELLN - McLean Rural 115kV, 50838 - 50840	15SP, 50604-50618, SPS SPS-OKLA, TC-Cole - Perryton Interchange 115kV	110.3	0	
MCLELLN - McLean Rural 115kV, 50838 - 50840	10SP, 58782-58837, WEPL , North Liberal Tap - North Liberal 115kV	106.2	0	
MCLELLN - McLean Rural 115kV, 50838 - 50840	10SP, 50622-50624, SPS SPS-OKLA, Sherman County 115kV	106.1	0	
MCLELLN - McLean Rural 115kV, 50838 - 50840	10SP, 50618-50619, SPS SPS-OKLA, Perryton Interchange 115-69kV	106.0	0	
MCLELLN - McLean Rural 115kV, 50838 - 50840	10SP, 50615-50619, SPS SPS-OKLA, Wade - Perryton Interchange 69kV	106.0	0	
MCLELLN - McLean Rural 115kV, 50838 - 50840	10SP, 50613-50615, SPS SPS-OKLA, Booker - Wade 69kV	106.0	0	
MCLELLN - McLean Rural 115kV, 50838 - 50840	10SP, 56420-56448, SUNC WHEATLAN - SUNC SEPC , FLETCHER - HOLCOMB 115kV	105.9	0	
MCLELLN - McLean Rural 115kV, 50838 - 50840	10SP, 56392-56393, SUNC PIONEER , PIONEER TAP - PLYMELL 115kV	105.6	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Medicine Lodge - Sun City 115kV, 58773 - 58797,	06AP, 58779-58795, WEPL , Mullergren - Spearville 230kV	162.6	0	12/30/2007
Medicine Lodge - Sun City 115kV, 58773 - 58797	07WP, 58794-58871, WEPL , Spearville - North Judson Large 115kV	160.9	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	07WP, 58794-58795, WEPL , Spearville 230-115kV	159.6	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	15SP, 58792-58796, WEPL , Seward - St John 115kV	156.6	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	15SP, 58771-58871, WEPL , Judson Large - North Judson Large 115kV	153.3	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	07WP, 58771-58871, WEPL , Judson Large - North Judson Large 115kV	153.1	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	15SP, 58794-58871, WEPL , Spearville - North Judson Large 115kV	152.8	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	15SP, 58794-58795, WEPL , Spearville 230-115kV	150.2	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	07WP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	149.9	0	
Medicine Lodge - Sun City 115kV, 58773 - 58797	10WP, 58794-58871, WEPL , Spearville - North Judson Large 115kV	149.6	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Medicine Lodge 138-115kV, 58773 - 58774,	07WP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	148.8	0	12/30/2007
Medicine Lodge 138-115kV, 58773 - 58774	07WP, 58796-56624, WEPL - MIDW REG E-IL, St John - ST_JOHN 115kV	144.8	0	
Medicine Lodge 138-115kV, 58773 - 58774	15SP, 58796-56624, WEPL - MIDW REG E-IL, St John - ST_JOHN 115kV	144.8	0	
Medicine Lodge 138-115kV, 58773 - 58774	15SP, 58773-58817, WEPL , Medicine Lodge 115-34.5kV	144.2	0	
Medicine Lodge 138-115kV, 58773 - 58774	15SP, 58760-58778, WEPL , East Hall Tap - Mullergren 115kV	144.1	0	
Medicine Lodge 138-115kV, 58773 - 58774	10WP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	143.5	0	
Medicine Lodge 138-115kV, 58773 - 58774	15SP, 58771-58871, WEPL , Judson Large - North Judson Large 115kV	142.4	0	
Medicine Lodge 138-115kV, 58773 - 58774	07WP, 58794-58871, WEPL , Spearville - North Judson Large 115kV	142.2	0	
Medicine Lodge 138-115kV, 58773 - 58774	15SP, 51321-51533, SPS SPS-CNPL, Swisher County Interchange - Tuco Interchange 230kV	142.2	0	
Medicine Lodge 138-115kV, 58773 - 58774	15SP, 58794-58871, WEPL , Spearville - North Judson Large 115kV	142.2	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Mullergren - Spearville 230kV, 58779 - 58795,	15SP, 58764-58771, WEPL , Greensburg - Judson Large 115kV	124.1	28	12/30/2007
Mullergren - Spearville 230kV, 58779 - 58795	15SP, 58764-58797, WEPL , Greensburg - Sun City 115kV	122.0	52	
Mullergren - Spearville 230kV, 58779 - 58795	15SP, 58773-58797, WEPL , Medicine Lodge - Sun City 115kV	120.6	64	
Mullergren - Spearville 230kV, 58779 - 58795	10SP, 58764-58771, WEPL , Greensburg - Judson Large 115kV	117.8	89	
Mullergren - Spearville 230kV, 58779 - 58795	15SP, 56362-56433, SUNC LANE-SCO - SUNC WHEATLAN, MANNING TAP - SCOTT CITY 115kV	116.7	110	
Mullergren - Spearville 230kV, 58779 - 58795	15SP, 56456-56607, SUNC SEPC - MIDW REG E-IL, NESS CITY 115kV	116.7	105	
Mullergren - Spearville 230kV, 58779 - 58795	15SP, 56360-56362, SUNC LANE-SCO, DIGHTON TAP - MANNING TAP 115kV	116.0	118	
Mullergren - Spearville 230kV, 58779 - 58795	10SP, 58764-58797, WEPL , Greensburg - Sun City 115kV	115.7	115	
Mullergren - Spearville 230kV, 58779 - 58795	10SP, 58773-58797, WEPL , Medicine Lodge - Sun City 115kV	114.7	127	
Mullergren - Spearville 230kV, 58779 - 58795	15SP, 56359-56360, SUNC LANE-SCO, BEELER - DIGHTON TAP 115kV	114.3	136	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Nichols Station - Whitaker 115kV, 50914 - 50922,	15SP, 50915-51041, SPS SPS-AMA , Nichols Station - Amarillo S Interchange 230kV	125.3	0	12/30/2007
Nichols Station - Whitaker 115kV, 50914 - 50922	15SP, 50907-51021, SPS SPS-AMA , Harrington Station - Randall County Interchange 230kV	116.0	0	
Nichols Station - Whitaker 115kV, 50914 - 50922	15SP, 51020-51021, SPS SPS-AMA , Randall County Interchange 230-115kV	115.9	0	
Nichols Station - Whitaker 115kV, 50914 - 50922	15SP, 50928-50932, SPS SPS-AMA , Conway - Kirby 115kV	112.1	0	
Nichols Station - Whitaker 115kV, 50914 - 50922	15SP, 50751-50915, SPS SPS-OKLA - SPS SPS-AMA , Hutchinson Co. Interchange - Nichols Station 230kV	105.8	118	
Nichols Station - Whitaker 115kV, 50914 - 50922	15SP, 50826-50932, SPS SPS-OKLA - SPS SPS-AMA , Grapevine Interchange - Kirby 115kV	104.0	229	
Nichols Station - Whitaker 115kV, 50914 - 50922	15SP, 50600-58772, SPS SPS-OKLA - WEPL , Texas County Interchange PHSF - East Liberal 115kV	101.3	295	
Nichols Station - Whitaker 115kV, 50914 - 50922	15SP, 50596-50600, SPS SPS-OKLA, Texas County Interchange - Texas County Interchange PHSF 115kV	101.1	301	
Nichols Station - Whitaker 115kV, 50914 - 50922	15SP, 50750-50782, SPS SPS-OKLA, Hutchinson Co. Interchange - Gray County Interchange 115kV	100.6	326	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Osage Switching Station - Canyon East 115kV, 51014 - 51080,	10SP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	162.8	0	12/30/2007
Osage Switching Station - Canyon East 115kV, 51014 - 51080	15SP, 51435-51441, SPS SPS-CNPL, Tolk Interchange - Tolk 1 230-24kV	135.9	0	
Osage Switching Station - Canyon East 115kV, 51014 - 51080	06AP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	135.6	0	
Osage Switching Station - Canyon East 115kV, 51014 - 51080	07WP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	117.7	0	
Osage Switching Station - Canyon East 115kV, 51014 - 51080	10WP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	109.6	68	
Osage Switching Station - Canyon East 115kV, 51014 - 51080	06AP, 51435-51441, SPS SPS-CNPL, Tolk Interchange - Tolk 1 230-24kV	105.8	149	
PALMER - TRIBUNE SWITCH 115kV, 56431 - 56438,	10SP, 56429-56451-56452, SUNC WHEATLAN - SUNC SEPC , MINGO 345-115kV	101.7	0	6/1/2008

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
PALODU - Happy Interchange 115kV, 51082 - 51302,	10SP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	172.6	0	12/30/2007
PALODU - Happy Interchange 115kV, 51082 - 51302	06AP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	151.7	0	
PALODU - Happy Interchange 115kV, 51082 - 51302	15SP, 51435-51441, SPS SPS-CNPL, Tolk Interchange - Tolk 1 230-24kV	139.0	0	
PALODU - Happy Interchange 115kV, 51082 - 51302	10SP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	134.5	0	
PALODU - Happy Interchange 115kV, 51082 - 51302	15SP, 51396-51418, SPS SPS-CNPL, LC-SOL - Plant X Interchange 115kV	130.2	0	
PALODU - Happy Interchange 115kV, 51082 - 51302	15SP, 51388-51396, SPS SPS-CNPL, Lamton Interchange - LC-SOL 115kV	128.3	0	
PALODU - Happy Interchange 115kV, 51082 - 51302	15SP, 51111-51419, SPS SPS-CLHF - SPS SPS-CNPL, Deaf Smith Interchange - Plant X Interchange 230kV	127.5	0	
PALODU - Happy Interchange 115kV, 51082 - 51302	15SP, 51419-51733, SPS SPS-CNPL, Plant X Interchange - Sundown Interchange 230kV	126.8	0	
PALODU - Happy Interchange 115kV, 51082 - 51302	15SP, 51402-51418, SPS SPS-CNPL, Hale Co Interchange - Plant X Interchange 115kV	126.2	0	
PALODU - Happy Interchange 115kV, 51082 - 51302	15SP, 51014-51080, SPS SPS-AMA - SPS SPS-CLHF, Osage Switching Station - Canyon East 115kV	126.2	0	
PALODU - Happy Interchange 115kV, 51082 - 51302	10SP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	114.2	0	
Pierce Tap - Osage Switching Station 115kV, 50964 - 51014,	15SP, 50915-51041, SPS SPS-AMA , Nichols Station - Amarillo S Interchange 230kV	108.5	0	6/1/2011

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Randall County Interchange - PALODU 115kV, 51020 - 51082,	10SP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	175.0	0	12/30/2007
Randall County Interchange - PALODU 115kV, 51020 - 51082	06AP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	152.9	0	
Randall County Interchange - PALODU 115kV, 51020 - 51082	15SP, 51435-51441, SPS SPS-CNPL, Tolk Interchange - Tolk 1 230-24kV	141.3	0	
Randall County Interchange - PALODU 115kV, 51020 - 51082	10SP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	136.7	0	
Randall County Interchange - PALODU 115kV, 51020 - 51082	15SP, 51396-51418, SPS SPS-CNPL, LC-SOL - Plant X Interchange 115kV	132.7	0	
Randall County Interchange - PALODU 115kV, 51020 - 51082	15SP, 51388-51396, SPS SPS-CNPL, Lamton Interchange - LC-SOL 115kV	130.8	0	
Randall County Interchange - PALODU 115kV, 51020 - 51082	15SP, 51111-51419, SPS SPS-CLHF - SPS SPS-CNPL, Deaf Smith Interchange - Plant X Interchange 230kV	129.9	0	
Randall County Interchange - PALODU 115kV, 51020 - 51082	15SP, 51419-51733, SPS SPS-CNPL, Plant X Interchange - Sundown Interchange 230kV	129.3	0	
Randall County Interchange - PALODU 115kV, 51020 - 51082	15SP, 51402-51418, SPS SPS-CNPL, Hale Co Interchange - Plant X Interchange 115kV	128.7	0	
Randall County Interchange - PALODU 115kV, 51020 - 51082	15SP, 51014-51080, SPS SPS-AMA - SPS SPS-CLHF, Osage Switching Station - Canyon East 115kV	128.5	0	
Randall County Interchange 230-115kV, 51020 - 51021,	10SP, 50915-51041, SPS SPS-AMA , Nichols Station - Amarillo S Interchange 230kV	114.9	0	6/1/2008
Roswell Interchange 115-69kV, 52093 - 52094,	15SP, 50604-50618, SPS SPS-OKLA, TC-Cole - Perryton Interchange 115kV	104.6	0	6/1/2011
Roswell Interchange 115-69kV, 52093 - 52094	15SP, 50596-99943, SPS SPS-OKLA - , Texas County Interchange - 2002-06 115kV	104.6	0	
Roswell Interchange 115-69kV, 52093 - 52094	15SP, 54290-54296, AEPW WTU , CHILDRESS - LAKE PAULINE 138kV	104.6	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Seven Rivers Interchange 115-69kV, 52294 - 52295,	15SP, 50596-99943, SPS SPS-OKLA - , Texas County Interchange - 2002-06 115kV	116.5	0	6/1/2011
Seward - St John 115kV, 58792 - 58796,	10WP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	162.5	0	12/30/2007
Seward - St John 115kV, 58792 - 58796	07WP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	148.9	0	
Seward - St John 115kV, 58792 - 58796	10WP, 58764-58771, WEPL , Greensburg - Judson Large 115kV	141.5	0	
Seward - St John 115kV, 58792 - 58796	10WP, 58764-58797, WEPL , Greensburg - Sun City 115kV	137.5	0	
Seward - St John 115kV, 58792 - 58796	10WP, 58773-58797, WEPL , Medicine Lodge - Sun City 115kV	135.6	0	
Seward - St John 115kV, 58792 - 58796	10SP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	129.7	0	
Seward - St John 115kV, 58792 - 58796	07WP, 58764-58771, WEPL , Greensburg - Judson Large 115kV	129.0	0	
Seward - St John 115kV, 58792 - 58796	07WP, 58764-58797, WEPL , Greensburg - Sun City 115kV	125.2	0	
Seward - St John 115kV, 58792 - 58796	07WP, 58773-58797, WEPL , Medicine Lodge - Sun City 115kV	123.4	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2,	07WP, 54275-54281, AEPW WTU , NW Memphis - NORTH MEMPHIS REA 69kV	117.5	0	12/30/2007
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2	06AP, 54276-54277-54303, AEPW WTU , JERICHO 115-69kV	116.7	0	
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2	06AP, 50932-54276, SPS SPS-AMA - AEPW WTU , Kirby - JERICHO 115kV	116.6	0	
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2	10WP, 54275-54282, AEPW WTU , NW Memphis - MEMPHIS 69kV	116.6	0	
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2	06AP, 54277-54278, AEPW WTU , JERICHO - CLARENDON 69kV	116.4	0	
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2	07WP, 54275-54282, AEPW WTU , NW Memphis - MEMPHIS 69kV	116.3	0	
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2	10WP, 54282-54283, AEPW WTU , MEMPHIS - RED RIVER ARSENAL 69kV	115.2	0	
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2	07WP, 54282-54283, AEPW WTU , MEMPHIS - RED RIVER ARSENAL 69kV	115.1	0	
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2	07WP, 54283-54284, AEPW WTU , RED RIVER ARSENAL - ESTELENE 69kV	115.0	0	
SHAMROCK - SHAMRCK1 115-()kV, 54295 - WND 2	10WP, 54283-54284, AEPW WTU , RED RIVER ARSENAL - ESTELENE 69kV	115.0	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1,	07WP, 54275-54281, AEPW WTU , NW Memphis - NORTH MEMPHIS REA 69kV	119.9	0	12/30/2007
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1	06AP, 54276-54277-54303, AEPW WTU , JERICHO 115-69kV	119.4	0	
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1	06AP, 50932-54276, SPS SPS-AMA - AEPW WTU , Kirby - JERICHO 115kV	119.4	0	
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1	06AP, 54277-54278, AEPW WTU , JERICHO - CLARENDON 69kV	119.1	0	
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1	10WP, 54275-54282, AEPW WTU , NW Memphis - MEMPHIS 69kV	118.2	0	
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1	07WP, 54275-54282, AEPW WTU , NW Memphis - MEMPHIS 69kV	118.0	0	
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1	10WP, 54282-54283, AEPW WTU , MEMPHIS - RED RIVER ARSENAL 69kV	117.3	0	
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1	07WP, 54282-54283, AEPW WTU , MEMPHIS - RED RIVER ARSENAL 69kV	117.2	0	
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1	06AP, 54278-54279, AEPW WTU , CLARENDON - CLARENDON REA 69kV	117.1	0	
SHAMROCK - SHAMRCK1 69-()kV, 54294 - WND 1	10WP, 54283-54284, AEPW WTU , RED RIVER ARSENAL - ESTELENE 69kV	117.1	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2,	06AP, 54276-54277-54303, AEPW WTU , JERICHO 115-69kV	115.4	0	12/30/2007
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2	06AP, 50932-54276, SPS SPS-AMA - AEPW WTU , Kirby - JERICHO 115kV	115.4	0	
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2	06AP, 54277-54278, AEPW WTU , JERICHO - CLARENDON 69kV	115.1	0	
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2	06AP, 54278-54279, AEPW WTU , CLARENDON - CLARENDON REA 69kV	112.9	0	
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2	06AP, 54279-54280, AEPW WTU , CLARENDON REA - HEDLEY 69kV	112.5	0	
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2	06AP, 54280-54281, AEPW WTU , HEDLEY - NORTH MEMPHIS REA 69kV	112.3	0	
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2	06AP, 54275-54281, AEPW WTU , NW Memphis - NORTH MEMPHIS REA 69kV	112.3	0	
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2	07WP, 54275-54281, AEPW WTU , NW Memphis - NORTH MEMPHIS REA 69kV	111.1	0	
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2	06AP, 54284-54285, AEPW WTU , ESTELENE - CAREY 69kV	109.9	142	
SHAMROCK - SHAMRCK2 138-()kV, 54293 - WND 2	06AP, 54285-54286, AEPW WTU , CAREY - AIRPORT 69kV	109.8	143	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1,	06AP, 54276-54277-54303, AEPW WTU , JERICHO 115-69kV	112.3	0	12/30/2007
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1	06AP, 50932-54276, SPS SPS-AMA - AEPW WTU , Kirby - JERICHO 115kV	112.3	0	
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1	06AP, 54277-54278, AEPW WTU , JERICHO - CLARENDON 69kV	112.0	0	
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1	06AP, 54278-54279, AEPW WTU , CLARENDON - CLARENDON REA 69kV	110.0	0	
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1	06AP, 54279-54280, AEPW WTU , CLARENDON REA - HEDLEY 69kV	109.7	0	
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1	06AP, 54280-54281, AEPW WTU , HEDLEY - NORTH MEMPHIS REA 69kV	109.5	0	
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1	06AP, 54275-54281, AEPW WTU , NW Memphis - NORTH MEMPHIS REA 69kV	109.4	0	
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1	06AP, 54285-54286, AEPW WTU , CAREY - AIRPORT 69kV	107.3	173	
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1	06AP, 54284-54285, AEPW WTU , ESTELENE - CAREY 69kV	107.3	173	
SHAMROCK - SHAMRCK2 69-()kV, 54294 - WND 1	07WP, 54275-54281, AEPW WTU , NW Memphis - NORTH MEMPHIS REA 69kV	107.0	0	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1,	15SP, 58771-58770, WEPL , Judson Large - Judson Large Generator 115-13.8kV	113.2	17	12/30/2007
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1	07WP, 58771-58770, WEPL , Judson Large - Judson Large Generator 115-13.8kV	108.0	165	
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1	10WP, 58771-58770, WEPL , Judson Large - Judson Large Generator 115-13.8kV	108.0	152	
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1	15SP, 56456-56607, SUNC SEPC - MIDW REG E-IL, NESS CITY 115kV	103.7	242	
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1	15SP, 58752-58759, WEPL , Cimarron River Tap - Cudahy 115kV	103.3	261	
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1	10SP, 56456-56607, SUNC SEPC - MIDW REG E-IL, NESS CITY 115kV	102.8	276	
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1	15SP, 56362-56433, SUNC LANE-SCO - SUNC WHEATLAN, MANNING TAP - SCOTT CITY 115kV	102.6	269	
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1	15SP, 50600-58772, SPS SPS-OKLA - WEPL , Texas County Interchange PHSF - East Liberal 115kV	102.5	279	
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1	15SP, 50596-50600, SPS SPS-OKLA, Texas County Interchange - Texas County Interchange PHSF 115kV	102.5	279	
Spearville - SPRV-1 7 230- ()kV, 58795 - WND 1	10SP, 56362-56433, SUNC LANE-SCO - SUNC WHEATLAN, MANNING TAP - SCOTT CITY 115kV	102.3	288	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2,	15SP, 58771-58770, WEPL , Judson Large - Judson Large Generator 115-13.8kV	113.7	12	12/30/2007
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2	10WP, 58771-58770, WEPL , Judson Large - Judson Large Generator 115-13.8kV	108.1	147	
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2	07WP, 58771-58770, WEPL , Judson Large - Judson Large Generator 115-13.8kV	107.9	159	
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2	15SP, 56456-56607, SUNC SEPC - MIDW REG E-IL, NESS CITY 115kV	104.2	232	
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2	10SP, 56456-56607, SUNC SEPC - MIDW REG E-IL, NESS CITY 115kV	103.5	258	
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2	15SP, 58752-58759, WEPL , Cimarron River Tap - Cudahy 115kV	103.4	259	
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2	15SP, 56362-56433, SUNC LANE-SCO - SUNC WHEATLAN, MANNING TAP - SCOTT CITY 115kV	103.1	258	
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2	15SP, 56360-56362, SUNC LANE-SCO, DIGHTON TAP - MANNING TAP 115kV	102.8	266	
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2	10SP, 56429-56451-56452, SUNC WHEATLAN - SUNC SEPC , MINGO 345-115kV	102.5	276	
SPEARVILLE - SPRV-1 7 345-()kV, 56469 - WND 2	10SP, 56362-56433, SUNC LANE-SCO - SUNC WHEATLAN, MANNING TAP - SCOTT CITY 115kV	102.5	280	
St John - ST_JOHN 115kV, 58796 - 56624,	10WP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	135.6	0	12/30/2007
St John - ST_JOHN 115kV, 58796 - 56624,	07WP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	119.5	58	12/30/2007
St John - ST_JOHN 115kV, 58796 - 56624	10SP, 58779-56871, WEPL - WERE WEST , Mullergren - CIRCLE 230kV	100.5	334	
Swisher County Interchange 230-115kV, 51320 - 51321,	10SP, 51321-51533, SPS SPS-CNPL, Swisher County Interchange - Tuco Interchange 230kV	114.7	0	6/1/2008

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772,	10WP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	110.7	37	12/30/2007
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772,	07WP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	110.5	89	12/30/2007
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772	10WP, 56469-58795-56468, SUNC SEPC - WEPL , SPEARVILLE 345-230kV	110.5	32	
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772	07WP, 56469-58795-56468, SUNC SEPC - WEPL , SPEARVILLE 345-230kV	110.4	80	
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772	10SP, 56449-56469, SUNC SEPC , HOLCOMB - SPEARVILLE 345kV	105.4	163	
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772	06AP, 56448-56447, SUNC SEPC , HOLCOMB - HOLCOMB GENERATOR 115-22kV	104.9	0	
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772	06AP, 50827-50915, SPS SPS-OKLA - SPS SPS-AMA , Grapevine Interchange - Nichols Station 230kV	102.2	260	
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772	07WP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	100.6	319	
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772	10WP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	100.6	319	
Texas County Interchange PHSF - East Liberal 115kV, 50600 - 58772	10WP, 50751-50915, SPS SPS-OKLA - SPS SPS-AMA , Hutchinson Co. Interchange - Nichols Station 230kV	100.3	328	
TIPTON & HEADERICK - SNYDER 69kV, 54125 - 54138	15SP, 54126-54158, AEPW WESTERN , HOBART JUNCTION - TAMARAC TAP 138kV	106.8	272	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Table 4: Contingency Analysis Results

Facility	Model & Contingency	Facility Loading (% Rate B) Or Voltage (PU)	ATC (MW)	Date Required (M/D/Y)
TULIAT - Kress Interchange 115kV, 51310 - 51316,	06AP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	141.2	0	12/30/2007
TULIAT - Kress Interchange 115kV, 51310 - 51316	07WP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	112.1	89	
TULIAT - Kress Interchange 115kV, 51310 - 51316	10WP, 51041-51321, SPS SPS-AMA - SPS SPS-CNPL, Amarillo S Interchange - Swisher County Interchange 230kV	103.7	257	
TULIAT - Kress Interchange 115kV, 51310 - 51316	06AP, 50993-51111, SPS SPS-AMA - SPS SPS-CLHF, Bushland Interchange - Deaf Smith Interchange 230kV	102.0	293	
TULIAT - Kress Interchange 115kV, 51310 - 51316	06AP, 51435-51441, SPS SPS-CNPL, Tolk Interchange - Tolk 1 230-24kV	101.3	306	
Whitaker - East Plant Interchange 115kV, 50922 - 50956,	15SP, 50915-51041, SPS SPS-AMA , Nichols Station - Amarillo S Interchange 230kV	117.7	0	6/1/2011
Whitaker - East Plant Interchange 115kV, 50922 - 50956	15SP, 50907-51021, SPS SPS-AMA , Harrington Station - Randall County Interchange 230kV	108.6	0	
Whitaker - East Plant Interchange 115kV, 50922 - 50956	15SP, 51020-51021, SPS SPS-AMA , Randall County Interchange 230-115kV	108.5	0	
Whitaker - East Plant Interchange 115kV, 50922 - 50956	15SP, 50928-50932, SPS SPS-AMA , Conway - Kirby 115kV	104.8	189	

Note: When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. If the loading of a facility is higher, the level of ATC will be lower.

Powerflow Analysis

A powerflow analysis was conducted for the facility using modified versions of the 2006 April, 2007 Winter Peak, 2010 Summer and Winter Peak, and 2015 Summer Peak models. The output of the Customer's facility was offset in each model by a reduction in output of existing online SPP generation. The proposed in-service date of the generator is December 30, 2007. The available seasonal models used were through the 2015 Summer Peak of which is the end of the current SPP planning horizon.

The analysis of the Customer's project indicates that, given the requested generation level of 340MW and location, additional criteria violations will occur on the existing AEPW, SPS, SUNC, WEPL and WFEC facilities under steady state conditions in the peak seasons.

There are several other proposed generation additions in the general area of the Customer's facility. Local projects that were previously queued were assumed to be in service in this Feasibility Study. Those local projects that were previously queued and have advanced to nearly complete phases were included in this Feasibility Study.

In order to complete valid load flow solutions for various contingencies, additional reactive compensation is required in the SPS area. Without a contingency where valid solutions were obtained, 120MVAR is required on a steady state basis to achieve adequate voltage levels. This customer must install 4 switched capacitor banks in the Customer's 345-115-34.5kV Substations with two banks being 115kV and the other two 34.5kV. A 30MVAR SVC is required. Dynamic Stability studies performed as part of the impact study will provide additional guidance as to whether the reactive compensation can be static or a portion must be dynamic (such as a SVC).

Valid load flow solutions could not be achieved for all contingencies without additional transmission facilities between SPS and the remainder of SPP. When additional transmission facilities are evaluated as part of a future transmission service request, then the need for additional reactive compensation may have to be re-evaluated at that time.

Powerflow Analysis Methodology

The Southwest Power Pool (SPP) criteria states that: "The transmission system of the SPP region shall be planned and constructed so that the contingencies as set forth in the Criteria will meet the applicable *NERC Planning Standards* for System Adequacy and Security – Transmission System Table I hereafter referred to as NERC Table I) and its applicable standards and measurements".

Using the created models and the ACCC function of PSS\E, single contingencies in portions or all of the modeled control areas of American Electric Power West, Southwestern Public Service Company, Sunflower Electric Power Corporation, West Plains Energy and Western Farmers Electric Cooperative were applied and the

resulting scenarios analyzed. This satisfies the ‘more probable’ contingency testing criteria mandated by NERC and the SPP criteria.

Conclusion

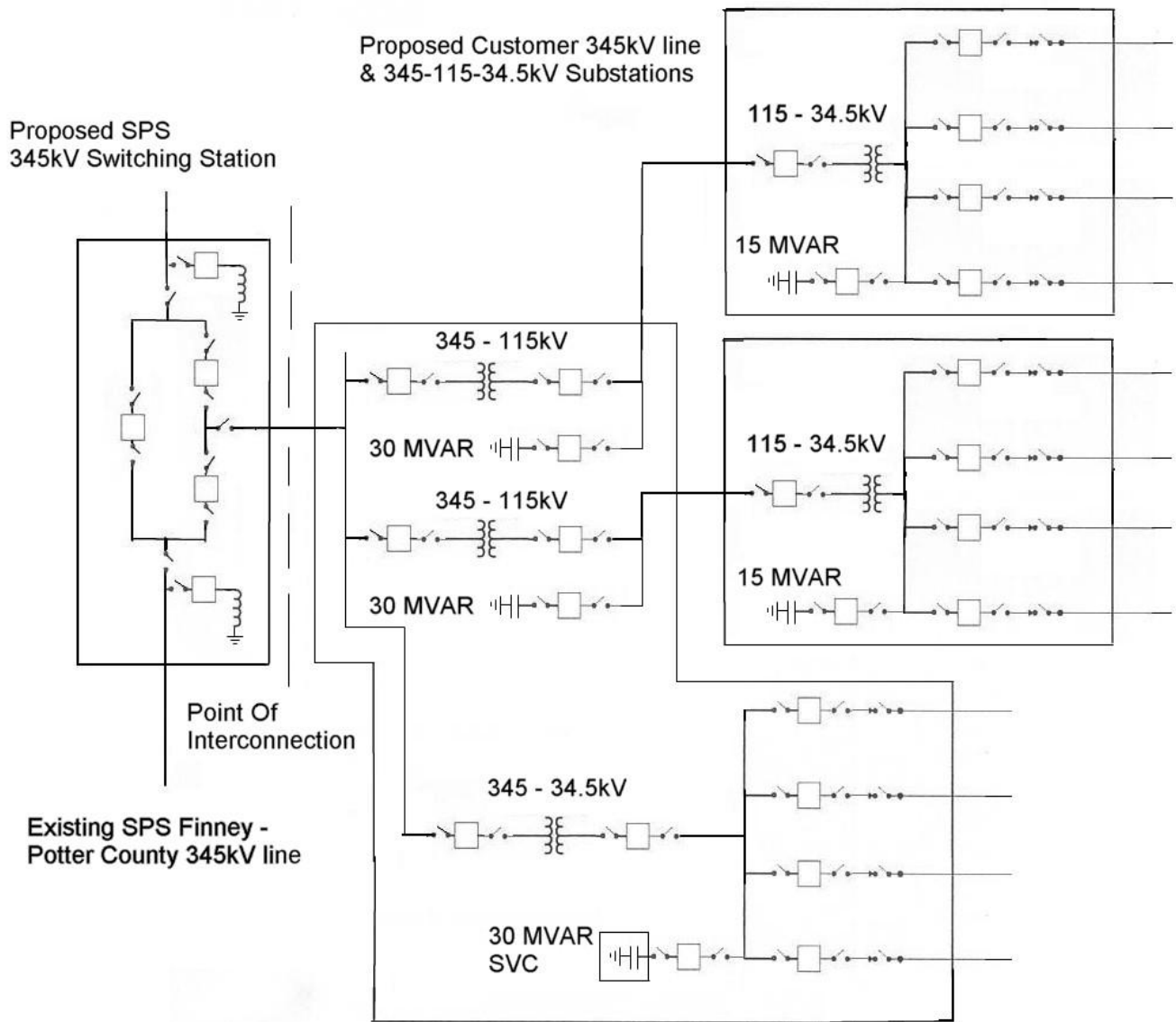
The minimum cost of interconnecting the Customer project is estimated at \$7,434,666 for SPS’ interconnection Network Upgrade facilities listed in Table 2 excluding upgrades of other transmission facilities by AEPW, SPS, SUNC, WEPL and WFEC listed in Table 3 of which are Network Constraints. At this time, the cost estimates for other Direct Assignment facilities including those in Table 1 have not been defined by the Customer. As stated earlier, local projects that were previously queued are assumed to be in service in this Feasibility Study.

In Table 4, a value of Available Transfer Capability (ATC) associated with each overloaded facility is included. These values may be used by the Customer to determine lower generation capacity levels that may be installed. When transmission service associated with this interconnection is evaluated, the loading of the facilities listed in this table may be greater due to higher priority reservations. When a facility is overloaded for more than 10 contingencies, then only the results with the 10 highest values of loading may be included in this table. Given the contingency analyses in this area with the Customer exporting generation, steady-state solutions were not obtained for outages of SPS’ eastern and northern 345kV lines. These contingency analyses will have to be re-evaluated as part of a TSR with additional transmission facilities between SPS and the remainder of SPP.

The cost and final sizing of the reactors in the new interconnection facility will be determined by an Electromagnetic Transient Program (EMTP) study, at the Customer’s expense, that will be conducted upon the signing of an Impact Study Agreement. The 30 MVAR size and cost could change depending on the results of the EMTP study.

These interconnection costs do not include any cost that may be associated with short circuit or transient stability analysis. These studies will be performed if the Customer signs a System Impact Study Agreement.

The required interconnection costs listed in Table 2 and other upgrades associated with Network Constraints listed in Table 3 do not include all costs associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer requests transmission service through Southwest Power Pool’s OASIS.



**Figure 1: Proposed Interconnection
(Final substation design to be determined)**

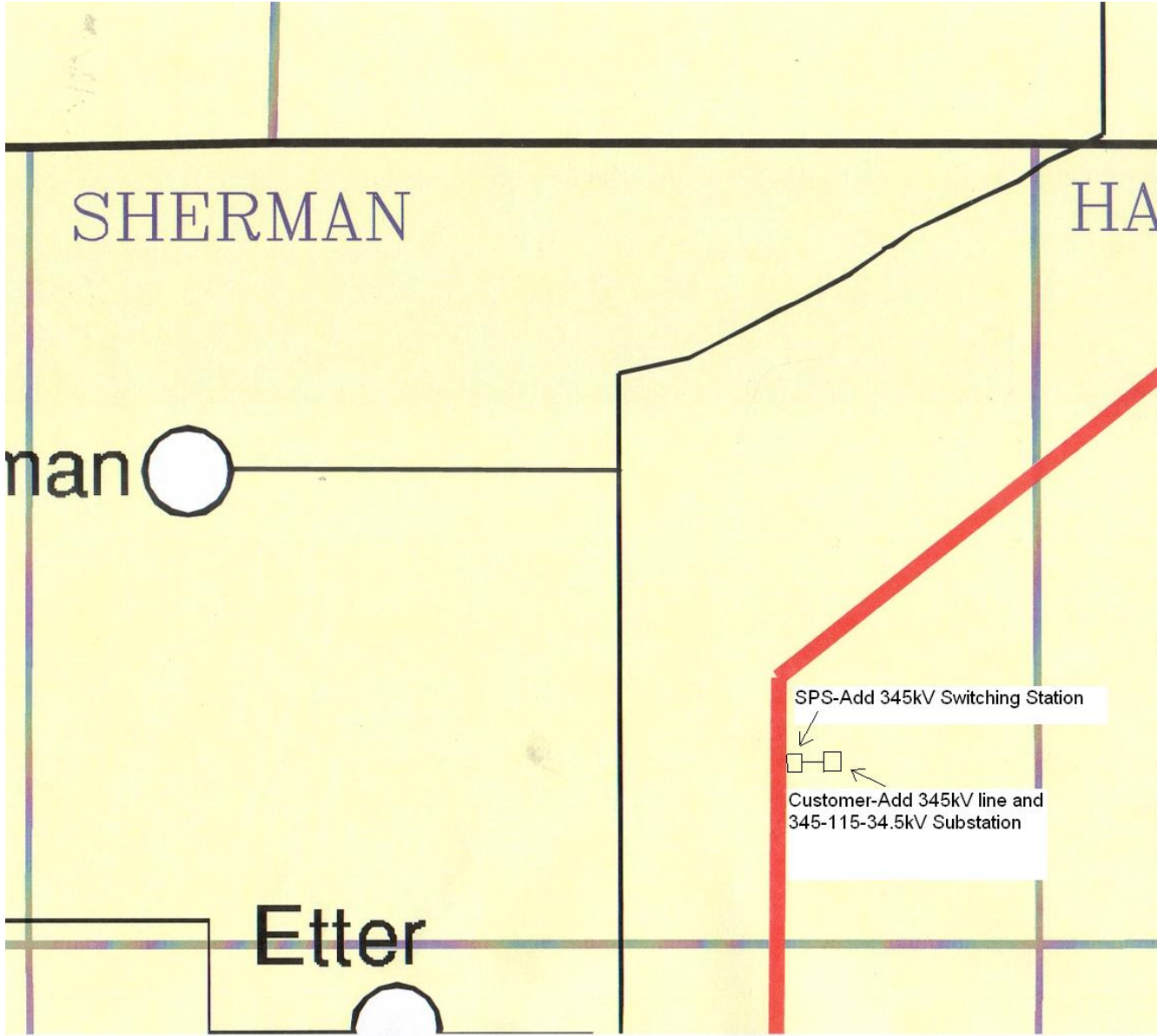


Figure 2: Map Of The Surrounding Area