



SPP *Southwest Power Pool*

*Preliminary
System Impact Study
SPP-2004-073-1P
For The Designation of a New
Network Resource
Requested By
Westar Energy*

From AEPW to WR

*For a Reserved Amount Of 300MW
From 9/1/2004
To 9/1/2005*

SPP Engineering, Tariff Studies

System Impact Study

Westar Energy has requested a system impact study to designate a New Network Resource in the AEPW Control Area for 300 MW to serve Network Load in the WERE Control Area. The period of the service requested is from 9/1/2004 to 9/1/2005. The OASIS reservation number is 672318. The principal objective of this study is to identify system constraints on the SPP Regional Tariff System and potential system facility upgrades that may be necessary to provide the requested service.

This study was performed for the AEPW to WR request in order to provide preliminary results identifying facility upgrades that may be required for the requested service. The preliminary study is performed with only confirmed reservations included in the models. The models do not include any reservations, even those with a higher priority, that are still in study mode. The results of the transfer analyses are documented in Tables 1, 2, and 3 of the report. Table 1 summarizes the results of the Scenario 1 system impact analysis. Table 2 summarizes the results of the Scenario 2 system impact analysis. Table 3 summarizes the results of the Scenario 3 system impact analysis. The results given in Tables 1, 2, and 3 include upgrades that may be assigned to higher priority requests. If a facility identified for the AEPW to WR study is also identified for a study with higher priority, the facility will be assigned to the request with the highest priority. If the higher priority customer does not take service, the facility would then be assigned to the AEPW to WR request. The primary purpose of this preliminary study is to provide the customer with an estimated cost of the facility upgrades that may be required in order to accommodate the requested service. The preliminary study is performed by monitoring each facility at 90% of its rating. This is done to provide an estimate of possible overloads that may be assigned to the customer if requests with higher priority are accepted.

Eight seasonal models were used to study the AEPW to WR request for the requested service period. The SPP 2004 Series Cases Update 2, 2004 Summer Peak (04SP), 2004 Summer Shoulder (04SH), 2004 Fall Peak (04FA), 2004/05 Winter Peak (04WP), 2005 April Minimum (05AP), 2005 Spring Peak (05G), 2005 Summer Peak (05SP), and 2005 Summer Shoulder (05SH) were used to study the impact of the request on the SPP system during the requested service period of 9/1/2004 to 9/1/2005. The chosen base case models were modified to reflect the most current modeling information. The cases were modified to reflect firm transfers during the requested service period that were not already included in the January 2004 base case series models. From the eight seasonal models, three system scenarios were developed. Scenario 1 includes confirmed West to East transfers not already included in the January 2004 base case series models, SPS Exporting, and the Lamar HVDC Tie flowing from SPS to Lamar, and ERCOT exporting. Scenario 2 includes confirmed East to West transfers not already included in the January 2004 base case series models, SPS Importing, and the Lamar HVDC Tie flowing from Lamar to SPS, and ERCOT importing. Scenario 3 includes confirmed West to East transfers not already included in the January 2004 base case series models, SPS Importing, and the Lamar HVDC Tie flowing from Lamar to SPS, and ERCOT importing.

PTI's MUST First Contingency Incremental Transfer Capability (FCITC) DC analysis was used to study the request. The MUST options chosen to conduct the System Impact Study analysis can be found in Appendix A. The MUST option to convert MVA branch ratings to estimated MW ratings was used to partially compensate for reactive loading.

These study results are preliminary estimates only and are not intended for use in final determination of the granting of service. These results do not include an evaluation of potential constraints in the planning horizon beyond the reservation period that may limit the right to renew service. Any solutions, upgrades, and costs provided in the preliminary System Impact Study are planning estimates only. The final ATC and upgrades required may vary from these results due to the status of higher priority requests, unknown facility upgrades and proposed transmission plans that will be identified during the facility study process, and the final results of the full AC analysis.

SPP will also review the possibility of curtailment of previously confirmed service and/or the redispatch of units as an option for relieving the additional impacts on the SPP facilities caused by the AEPW to WR request. It is the responsibility of the customer to reach an agreement with the applicable party concerning the curtailment of confirmed service and the redispatch of units. The curtailment and redispatch requirements would be called upon prior to implementing NERC TLR Level 5a. These options will be evaluated as part of the Facility Study. Execution of a Facility Study Agreement is now required to maintain queue position. The final upgrade solutions, cost assignments and available redispatch and curtailment options will be determined upon the completion of the facility study.

Table 1 – SPP facility overloads identified for the AEPW to WR transfer using Scenario 1

Study Case	From Area - To Area	Branch Overload	Rating <MW>	BC % Loading	TC % Loading	%TDF	Outaged Branch Causing Overload	ATC <MW>	Solution	Estimated Cost
04SP	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	241	131.5	136.2	3.7540	53154 CHAMSPR5 161 53195 FARMGNTN5 161 1	0	Rebuild 12 miles with 2156MCM ACSR. Replace Chamber Springs wavetrapp & reset relays.	\$ 7,200,000
04SP	OKGE-OKGE	55234 PECANCK5 161 *B415 PECANCK1 1 1	366	91.8	96.0	5.1420	55224 MUSKOG7 345 55302 FTSMITH7 345 1	300	Add 2nd 345/161 kV 369MVA transformer.	\$ 3,000,000
04SP	OKGE-OKGE	55235 PECANCK7 345 *B415 PECANCK1 1 1	362	92.7	97.0	5.1420	55224 MUSKOG7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility	
04SP	WERE-WERE	57301 EAST ST3 115 57309 WEMPOR13 115 1	90	85.5	102.3	5.0620	56863 MORRIS 6 230 *B362 MORRIS2X 1 1	259	May be relieved due to Westar Operating Procedure 0625 - Outage of the Morris 230/115kV Transformer	TBD
04SP	WERE-OKGE	56981 CRESWLN4 138 54759 NEWKIRK4 138 1	165	84.5	92.8	4.5540	Unit:5 6751 WCG S U1 25.0 I d:1	300	Solution Undetermined	TBD
04SH	OKGE-OKGE	55228 5TRIBES5 161 55234 PECANCK5 161 1	221	97.3	102.0	3.4850	55230 AGENCY 5 161 55234 PECANCK5 161 1	171	May be able to increase CTR (if relays will coordinate) at Five Tribes sub.	\$ 5,000
04SH	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	242	109.7	116.5	5.4560	53154 CHAMSPR5 161 53195 FARMGNTN5 161 1	0	See Previous Upgrade Specified For Facility	
04SH	OKGE-OKGE	55234 PECANCK5 161 *B415 PECANCK1 1 1	366	96.3	100.9	5.6090	55224 MUSKOG7 345 55302 FTSMITH7 345 1	242	See Previous Upgrade Specified For Facility	
04SH	OKGE-OKGE	55235 PECANCK7 345 *B415 PECANCK1 1 1	364	97.1	101.7	5.6090	55224 MUSKOG7 345 55302 FTSMITH7 345 1	190	See Previous Upgrade Specified For Facility	
04FA	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	272	90.7	96.3	5.0830	53154 CHAMSPR5 161 53195 FARMGNTN5 161 1	300	See Previous Upgrade Specified For Facility	
04WP	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	272	95.3	99.3	3.7040	53154 CHAMSPR5 161 53195 FARMGNTN5 161 1	300	See Previous Upgrade Specified For Facility	
04WP	WERE-WERE	56851 AUBURN 6 230 *B161 AUBRN77X 1 1	304	90.0	93.9	3.9350	56765 HOYT 7 345 56766 JEC N 7 345 1	300	May be relieved due to Westar Operating Procedure 400 - Outage of the Jeffrey Energy Center to Hoyt 345kV Line	TBD
04WP	WERE-WERE	57151 AUBURN 3 115 *B161 AUBRN77X 1 1	305	89.8	93.7	3.9350	56765 HOYT 7 345 56766 JEC N 7 345 1	300	May be relieved due to Westar Operating Procedure 400 - Outage of the Jeffrey Energy Center to Hoyt 345kV Line	TBD
05AP		NONE IDENTIFIED						300		
05G	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	272	86.8	93.1	5.6510	53157 SFAYTVL5 161 53195 FARMGNTN5 161 1	300	See Previous Upgrade Specified For Facility	
05G	OKGE-OKGE	55235 PECANCK7 345 *B415 PECANCK1 1 1	366	86.4	91.1	5.7060	55224 MUSKOG7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility	
05SP	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	241	136.6	141.0	3.5780	53154 CHAMSPR5 161 53195 FARMGNTN5 161 1	0	See Previous Upgrade Specified For Facility	
05SP	OKGE-OKGE	55234 PECANCK5 161 *B399 PECANCK1 1 1	365	90.9	95.0	4.9410	55224 MUSKOG7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility	
05SP	OKGE-OKGE	55235 PECANCK7 345 *B399 PECANCK1 1 1	362	91.8	95.9	4.9410	55224 MUSKOG7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility	
05SP	WERE-OKGE	56981 CRESWLN4 138 54759 NEWKIRK4 138 1	165	84.0	95.2	6.1450	Unit:5 6751 WCG S U1 25.0 I d:1	300	Solution Undetermined	TBD
05SH	OKGE-OKGE	55228 5TRIBES5 161 55234 PECANCK5 161 1	221	98.4	103.2	3.5020	55230 AGENCY 5 161 55234 PECANCK5 161 1	99	See Previous Upgrade Specified For Facility	
05SH	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	242	116.1	122.9	5.4510	53154 CHAMSPR5 161 53195 FARMGNTN5 161 1	0	See Previous Upgrade Specified For Facility	
05SH	OKGE-OKGE	55234 PECANCK5 161 *B399 PECANCK1 1 1	366	98.8	103.4	5.6390	55224 MUSKOG7 345 55302 FTSMITH7 345 1	76	See Previous Upgrade Specified For Facility	
05SH	OKGE-OKGE	55235 PECANCK7 345 *B399 PECANCK1 1 1	364	99.7	104.4	5.6390	55224 MUSKOG7 345 55302 FTSMITH7 345 1	19	See Previous Upgrade Specified For Facility	
05SH	WERE-OKGE	56981 CRESWLN4 138 54759 NEWKIRK4 138 1	165	83.9	91.1	3.9500	Unit:5 6751 WCG S U1 25.0 I d:1	300	Solution Undetermined	TBD
									This cost may be significantly higher due to additional facilities whose solutions will be determined during the Facility Study process	\$*
									Total Cost with Facilities Monitored @ 90% Loading	\$ 10,205,000
									Total Cost with Facilities Monitored @ 100% Loading	\$ 10,205,000

Table 2 – SPP facility overloads identified for the AEPW to WR transfer using Scenario 2

Study Case	From Area - To Area	Branch Overload	Rating <MW>	BC % Loading	TC % Loading	%TDF	Outaged Branch Causing Overload	ATC <MW>	Solution	Estimated Cost
04SP	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	241	115.6	120.3	3.7540	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	0	See Previous Upgrade Specified For Facility in Scenario 1	
04SP	WERE-WERE	57301 EAST ST3 115 57309 WEMPOR13 115 1	90	87.3	104.1	5.0620	57305 MORRIS 3 115 *B362 MORRIS2X 1 1	227	May be relieved due to Westar Operating Procedure 0625 - Outage of the Morris 230/115kV Transformer	TBD
04SP	WERE-WERE	56861 EMANHAT6 230 *B237 EMANHT3X 1 1	302	88.3	92.7	4.4970	56873 SUMMIT 6 230 *B471 SUMMIT1X 1 1	300	May be relieved due to Westar Operating Procedure 0617 - Outage of the Summit 345/230kV Transformer	TBD
04SP	WERE-WERE	57326 EMANHAT3 115 *B237 EMANHT3X 1 1	304	87.4	91.8	4.4970	56773 SUMMIT 7 345 *B471 SUMMIT1X 1 1	300	May be relieved due to Westar Operating Procedure 0617 - Outage of the Summit 345/230kV Transformer	TBD
04SP	WERE-WERE	56794 ROSEHIL7 345 *B431 ROSEHL3X 1 1	429	88.7	91.3	3.7940	56794 ROSEHIL7 345 *B430 ROSEHL1X 1 1	300	Solution Undetermined	TBD
04SP	WERE-WERE	57368 EXIDE J3 115 57381 SUMMIT 3 115 1	193	79.6	91.7	7.7790	57371 NORTHVW3 115 57381 SUMMIT 3 115 1	300	Rebuild and reconductor 4.94 miles with 1192 ACSR.	\$ 1,100,000
04SP	WERE-WERE	57328 FT JCT 3 115 57335 MCDOWEL3 115 1	67	76.6	91.1	3.2340	56766 JEC N 7 345 56773 SUMMIT 7 345 1	300	May be relieved due to Westar Operating Procedure 402 - Outage of the Jeffrey Energy Center to Summit 345 kV Line	TBD
04SH	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	242	93.6	100.4	5.4560	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	283	See Previous Upgrade Specified For Facility in Scenario 1	
04SH	WERE-WERE	56794 ROSEHIL7 345 *B431 ROSEHL3X 1 1	430	89.3	93.5	6.0820	56794 ROSEHIL7 345 *B430 ROSEHL1X 1 1	300	Solution Undetermined	TBD
04SH	WERE-WERE	57062 ROSEHIL4 138 *B431 ROSEHL3X 1 1	433	88.5	92.7	6.0820	56794 ROSEHIL7 345 *B430 ROSEHL1X 1 1	300	Solution Undetermined	TBD
04FA		NONE IDENTIFIED						300		
04WP		NONE IDENTIFIED						300		
05AP		NONE IDENTIFIED						300		
05G		NONE IDENTIFIED						300		
05SP	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	241	118.5	122.9	3.5780	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	0	See Previous Upgrade Specified For Facility in Scenario 1	
05SP	WERE-WERE	56794 ROSEHIL7 345 *B415 ROSEHL3X 1 1	429	88.0	93.7	8.1210	57062 ROSEHIL4 138 *B414 ROSEHL1X 1 1	300	Solution Undetermined	TBD
05SP	WERE-WERE	57062 ROSEHIL4 138 *B415 ROSEHL3X 1 1	432	87.2	92.8	8.1210	56794 ROSEHIL7 345 *B414 ROSEHL1X 1 1	300	Solution Undetermined	TBD
05SH	WERE-WERE	56794 ROSEHIL7 345 *B415 ROSEHL3X 1 1	429	88.3	92.5	6.0830	56794 ROSEHIL7 345 *B414 ROSEHL1X 1 1	300	Solution Undetermined	TBD
05SH	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	242	86.1	92.9	5.4510	53157 SFAYTVL5 161 53195 FARMGTN5 161 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
05SH	WERE-WERE	57062 ROSEHIL4 138 *B415 ROSEHL3X 1 1	432	87.5	91.7	6.0830	56794 ROSEHIL7 345 *B414 ROSEHL1X 1 1	300	Solution Undetermined	TBD
									This cost may be significantly higher due to additional facilities whose solutions will be determined during the Facility Study process	\$*
									Total Cost with Facilities Monitored @ 90% Loading	\$ 1,100,000
									Total Cost with Facilities Monitored @ 100% Loading	\$ -

Table 3 – SPP facility overloads identified for the AEPW to WR transfer using Scenario 3

Study Case	From Area - To Area	Branch Overload	Rating <MW>	BC % Loading	TC % Loading	%TDF	Outaged Branch Causing Overload	ATC <MW>	Solution	Estimated Cost
04SP	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	241	128.1	132.8	3.7540	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	0	See Previous Upgrade Specified For Facility in Scenario 1	
04SP	WERE-WERE	57301 EAST ST3 115 57309 WEMPORI3 115 1	90	89.2	106.1	5.0620	57305 MORRIS 3 115 *B362 MORRIS2X 1 1	192	May be relieved due to Westar Operating Procedure 0625 - Outage of the Morris 230/115kV Transformer	TBD
04SP	OKGE-OKGE	55235 PECANCK7 345 *B415 PECANCK1 1 1	362	87.8	92.1	5.1420	55224 MUSKOGEE7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
04SP	WERE-WERE	56861 EMANHAT6 230 *B237 EMANHT3X 1 1	302	87.4	91.9	4.4970	56773 SUMMIT 7 345 *B471 SUMMIT1X 1 1	300	May be relieved due to Westar Operating Procedure 0617 - Outage of the Summit 345/230kV Transformer	TBD
04SP	OKGE-OKGE	55234 PECANCK5 161 *B415 PECANCK1 1 1	365	86.9	91.2	5.1420	55224 MUSKOGEE7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
04SP	WERE-WERE	57368 EXIDE J3 115 57381 SUMMIT 3 115 1	193	79.5	91.5	7.7790	57371 NORTHVW3 115 57381 SUMMIT 3 115 1	300	See Previous Upgrade Specified For Facility in Scenario 2	
04SP	WERE-WERE	57326 EMANHAT3 115 *B237 EMANHT3X 1 1	304	86.6	91.1	4.4970	56773 SUMMIT 7 345 *B471 SUMMIT1X 1 1	300	May be relieved due to Westar Operating Procedure 0617 - Outage of the Summit 345/230kV Transformer	TBD
04SH	OKGE-OKGE	55228 5TRIBES5 161 55234 PECANCK5 161 1	221	92.2	97.0	3.4850	55230 AGENCY 5 161 55234 PECANCK5 161 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
04SH	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	242	106.4	113.1	5.4560	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	0	See Previous Upgrade Specified For Facility in Scenario 1	
04SH	OKGE-OKGE	55234 PECANCK5 161 *B415 PECANCK1 1 1	366	91.6	96.2	5.6090	55224 MUSKOGEE7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
04SH	OKGE-OKGE	55235 PECANCK7 345 *B415 PECANCK1 1 1	364	92.4	97.0	5.6090	55224 MUSKOGEE7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
04SH	WERE-WERE	56794 ROSEHIL7 345 *B431 ROSEHL3X 1 1	430	87.1	91.3	6.0820	56794 ROSEHIL7 345 *B430 ROSEHL1X 1 1	300	Solution Undetermined	
04FA	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	272	87.6	93.2	5.0830	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
04WP	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	272	90.2	94.3	3.7040	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
04WP	WERE-WERE	56851 AUBURN 6 230 *B161 AUBRN77X 1 1	304	88.0	91.9	3.9350	56765 HOYT 7 345 56766 JEC N 7 345 1	300	May be relieved due to Westar Operating Procedure 400 - Outage of the Jeffrey Energy Center to Hoyt 345kV Line	TBD
04WP	WERE-WERE	57151 AUBURN 3 115 *B161 AUBRN77X 1 1	305	87.8	91.7	3.9350	56765 HOYT 7 345 56766 JEC N 7 345 1	300	May be relieved due to Westar Operating Procedure 400 - Outage of the Jeffrey Energy Center to Hoyt 345kV Line	TBD
05AP		NONE IDENTIFIED						300		
05G	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	272	91.0	97.3	5.6510	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
05SP	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	241	131.1	135.6	3.5780	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	0	See Previous Upgrade Specified For Facility in Scenario 1	
05SP	WERE-WERE	56794 ROSEHIL7 345 *B415 ROSEHL3X 1 1	428	85.8	91.5	8.1210	57062 ROSEHIL4 138 *B414 ROSEHL1X 1 1	300	Solution Undetermined	TBD
05SP	AEPW-AEPW	53781 BA101-N4 138 53818 ONETA--4 138 1	233	85.3	91.1	4.4510	53797 BANNTAP4 138 53818 ONETA--4 138 1	300	Solution Undetermined	TBD
05SH	AEPW-AEPW	53154 CHAMSPR5 161 53170 TONTITN5 161 1	242	110.4	117.2	5.4510	53154 CHAMSPR5 161 53195 FARMGTN5 161 1	0	See Previous Upgrade Specified For Facility in Scenario 1	
05SH	OKGE-OKGE	55234 PECANCK5 161 *B399 PECANCK1 1 1	366	91.9	96.6	5.6390	55224 MUSKOGEE7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
05SH	OKGE-OKGE	55235 PECANCK7 345 *B399 PECANCK1 1 1	363	92.8	97.4	5.6390	55224 MUSKOGEE7 345 55302 FTSMITH7 345 1	300	See Previous Upgrade Specified For Facility in Scenario 1	

Study Case	From Area - To Area	Branch Overload	Rating <MW>	BC % Loading	TC % Loading	%TDF	Outaged Branch Causing Overload	ATC <MW>	Solution	Estimated Cost
05SH	OKGE-OKGE	55228 5TRIBES5 161 55234 PECANCK5 161 1	221	90.8	95.6	3.5020	55230 AGENCY 5 161 55234 PECANCK5 161 1	300	See Previous Upgrade Specified For Facility in Scenario 1	
									This cost may be significantly higher due to additional facilities whose solutions will be determined during the Facility Study process	\$*
									Total Cost with Facilities Monitored @ 90% Loading	\$ -
									Total Cost with Facilities Monitored @ 100% Loading	\$ -

Appendix A

MUST CHOICES IN RUNNING FCITC DC ANALYSIS

CONSTRAINTS/CONTINGENCY INPUT OPTIONS

1. AC Mismatch Tolerance – 2 MW
2. Base Case Rating – Rate A
3. Base Case % of Rating – 90%
4. Contingency Case Rating – Rate B
5. Contingency Case % of Rating – 90%
6. Base Case Load Flow – Do not solve AC
7. Convert branch ratings to estimated MW ratings – Yes
8. Contingency ID Reporting – Labels
9. Maximum number of contingencies to process - 50000

MUST CALCULATION OPTIONS

1. Phase Shifters Model for DC Linear Analysis – Constant flow for Base Case and Contingencies
2. Report Base Case Violations with FCITC – Yes
3. Maximum number of violations to report in FCITC table - 50000
4. Distribution Factor (OTDF and PTDF) Cutoff – 0.03
5. Maximum times to report the same elements - 10
6. Apply Distribution Factor to Contingency Analysis – Yes
7. Apply Distribution Factor to FCITC Reports – Yes
8. Minimum Contingency Case flow change – 1 MW
9. Minimum Contingency Case Distribution Factor change – 0.0
10. Minimum Distribution Factor for Transfer Sensitivity Analysis – 0.0