



***System Impact Study for
Transmission Service Request from
Tenaska (Rusk County) to Entergy***

***SPP/WSCC
Transmission Planning
(#OAIS 99006)***

August 25, 1999

Table of Contents

Table of Contents	2
Executive Summary	3
Introduction	4
Study Methodology	5
Table 1: ACCC Results	6
Available Transfer Capability	7
Table 2: Available Transfer Capability	8
Table 3: System Improvements Costs	9
Output of Linear (TLTG) Runs	10

Executive Summary

Coral Power, LLC has requested a system impact study for transmission service from a merchant plant in Rusk County, Texas. Transmission service for 450 MW has been requested from June 1, 2001 to May 31, 2004, with the OASIS request # 121839 from Central and South West (CSW) to Entergy.

The principal objective of this study is to identify system problems and potential system modifications necessary to facilitate the 450 MW transfer while maintaining system reliability and stability.

The analysis in this document shows that to accommodate a 450 MW transfer, upgrades will be required on the CSW 138 kV and 115 kV transmission systems. These upgrades include reconductoring a 138 kV transmission line and replacing a 115 kV switch. The total estimated cost of these upgrades in 1999 dollars is \$400,000.

The Southwest Power Pool (SPP) and CSW shall use due diligence to add necessary facilities or upgrade the Transmission system to provide the requested transmission service, provided Coral Power, LLC agrees to compensate CSW for such costs pursuant to the terms of section 27 of the SPP Open Access Transmission Tariff. Expedited procedures for new facilities are available to Coral Power, LLC per section 19.8 of the SPP Open Access Transmission Service Tariff.

Engineering and construction of any new facilities or modifications will not start until after a transmission service agreement and/or construction agreement is in place and CSWS receives the appropriate authorization to proceed from the SPP after they receive authorization from the transmission customer.

Introduction

Coral Power, LLC has requested a impact study for transmission service from a merchant plant in Rusk County Texas. Transmission service for 450 MW has been requested from June 1, 2001 to May 31, 2004. The total generation capability of the plant is 900 MW.

The principal objective of this study is to identify the restraints on the system that may limit the transfer to less than 450 MW. This study includes steady-state contingency analysis (PSS/E function ACCC) and Available Transfer Capability (ATC) analysis.

The steady-state analysis considers the impact of an 450 MW transfer on transmission line loading and transmission bus voltages for outages of single and double circuit transmission lines, autotransformers, and generators on the CSW system.

The ATC analysis shows the amount of First Contingency Incremental Transfer Capabilities (FCITC) between given the study systems and what if any the limitations are for transferring up to 450 MW.

Study Methodology

The CSW and SPP criteria state that the following conditions be met in order to maintain a reliable and stable system.

- 1) More probably contingency testing must conclude that
 - a) All facility loadings are within their emergency ratings and all voltages are within their emergency limits (0.90-1.05 per unit) and
 - b) Facility loadings can be returned to their normal limits within four hours
- 2) Less probable contingency testing shall conclude that
 - a) Neither uncontrolled islanding, nor uncontrolled loss of large amounts of load will result.

More probable contingency testing is defined as losing any single piece of equipment or multi-circuit transmission lines. Less probable contingency testing involves the loss of any two critical pieces of equipment such as 345 kV autotransformers and generating units or the loss of critical transmission lines in the same right-of-way.

A 2000 summer peak case, a 2000 winter peak case, a 2003 summer peak case, and a 2003 winter peak case were used to model the transmission network and system loads. Base Southwest Power Pool Cases for 2001 summer and winter peaks and 2004 summer and winter peaks were not available at the time of this study. These cases were modified to reflect expected changes due to be in service by 2001 that were not included in the base cases.

Using the created models and the ACCC function of PSS/E, single and select double contingency outages on the CSW system were analyzed. Shown in table 1 are the outages that caused overloads and the upgrades needed to solve the overloading problems.

The only outage identified was the loss of Entergy's McNeil 500-115 kV autotransformer. This results in an overload of switch #1143 at Patterson on the outgoing 115 kV line to Ashdown REC when 600 MW is being transferred into the SPP over the East DC tie.

Table 1: ACCC Results

Conditions:

1) 2001 Summer Peak

2) Rusk County generation on at 450 MW

3) 600 MW coming into SPP over the East DC tie

Load flow case description	Overloaded lines/ Buses with low voltage	Solutions
McNeil 500-115 kV autotransformer out	Patterson-Ashdown REC	Replace 600 A switch #1143 at Patterson

See the System Improvement Costs section for the complete list of upgrades required to facilitate the 450 MW transfer.

Available Transfer Capability

ATC study was run using default participation points for Entergy. In other words, the generation was scaled down among all available on-line generators. The purpose of this study was to ensure that the desired power transfer (450 MW) could be accomplished while maintaining system reliability.

Results for the studies are shown in Table 2. The PSS/E TLTG command was used. The TLTG output for all of the cases is attached.

As shown in the table, the amount of First Contingency Incremental Transfer Capability available is 450 MW for all of the seasons studied, except for one case. That case is the 2001 summer peak with the East DC tie bringing 600 MW into the SPP from ERCOT.

The only contingency that caused a problem was the loss of the Wilkes-Longwood 345 kV line. This resulted in an overload of the Jefferson Switching Station to IPC Jefferson 138 kV line during 2001 summer peak. In order to facilitate the 450 MW transfer, the upgrades listed in the System Improvement Costs section will be required.

Table 2: Available Transfer Capability

Tenaska (Rusk County) 450 MW to Entergy

Case Description	East DC Flow	FCITC	Limiting Constraint	Contingency
2001 Summer Peak	36 to ERCOT	450	None	None
2001/2002 Winter Peak	36 to ERCOT	450	None	None
2003 Summer Peak	36 to ERCOT	450	None	None
2003/2004 Winter Peak	36 to ERCOT	450	None	None
2001 Summer Peak	600 to SPP	412	Jefferson Switch-IPC Jefferson 138 kV; 336 ACSR conductor	Wilkes-Longwood 345 kV
2001/2002 Winter Peak	600 to SPP	450	None	None
2003 Summer Peak	600 to SPP	450	None	None
2003/2004 Winter Peak	600 to SPP	450	None	None
2001 Summer Peak	600 to ERCOT	450	None	None
2001/2002 Winter Peak	600 to ERCOT	450	None	None
2003 Summer Peak	600 to ERCOT	450	None	None
2003/2004 Winter Peak	600 to ERCOT	450	None	None

See the System Improvement Costs section for the complete list of upgrades required to facilitate the 450 MW transfer.

System Improvement Costs

In order to accommodate the requested transfer of 450 MW, the improvements in Table 3 must be made on the CSW system. These improvements and costs correspond with the base case scenario of transferring 450 MW to Entergy.

Table 3: System Improvement Costs

SYSTEM IMPROVEMENT	COST IN (1999 DOLLARS)
Rebuild reconductor & the Jefferson Switching Station- IPC Jefferson 138 kV line, 1.49 miles, to 795 ACSR.	\$380,000
Replace 600 A switch #1143 at Patterson	\$20,000
TOTAL	\$400,000

The estimated time frames for engineering and construction of the projects listed above are:

Line reconductor: 18 Months
Switch replacement: 6 Months

The line reconductor may require a Certificate of Convenience and Necessity (CCN) exemption. Times are for each individual project. No consideration was given to possible outage conflicts during construction, conflicts with construction during the summer peak, engineering and construction manpower constraints, etc. Time frame is based on engineering starting when approval is received to start on the project.

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2000 SUMMER PEAK - 01SP TENASKA

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF6914 SYSTEM CONDITIONS ATTEMPTED 2 INSOLUBLE SYSTEM CONDITIONS

INCR.	TRANS	LIMITING ELEMENT				DISTR.	PRE- RATING	CONTINGENCY DESCRIPTION					
CAPAB	FROM	TO	CKT	FACTOR	MW	A/B							
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	4750	[SKYLN4 138]	TO	4751	[QUAIL4 138]
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	9231	[2BELKTP 69.0]	TO	9239	[2OTTUMW 69.0]
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	17268	[3SE-VKS 115]	TO	17330	[3B.WLSN 115]
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	16799	[6SOLAC 230]	TO	16800	[2SOLAC 69.0]
510.0 *	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	4644	[CHLOC267.0]	TO	4656	[CKSKI267.0]
510.0 *	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	17622	[3HSEHVW 115]	TO	17626	[3FRIEND 115]
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	4604	[MILLR4 138]	TO	4702	[SONR 4 138]
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	6788	[FMC 3 115]	TO	6807	[6TH ST 3 115]
510.0 *	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	213	[ELKS 269.0]	TO	217	[ELKS 6 230]
757.5	16534	4MT.ZION 138	16556	4GRIMES 138 1	-0.29052	14.2	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
802.8	16528	4L558T48 138	16534	4MT.ZION 138 1	-0.29052	27.3	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
857.4	16528	4L558T48 138	16532	4HUNTSVL 138 1	0.29051	-43.1	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
905.0	3630	TENASKA7 345	3631	TENGEN_7 345 1	-1.00000	0.0	905.0	BASE CASE					

932.2	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22751	6.1	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
941.7	3420	LIEBERM4	138	3548	IPCJEFF4	138	1	-0.04739	-69.8	114.4	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]	
CKT 1																	
999.8	16503	4WALDEN	138	16518	4APRIL	138	1	0.22751	-21.5	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1004.4	16575	4RIVTRIN	138	16576	4STALEY	138	1	0.10191	-17.4	85.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1035.4	3522	CHEROKE4	138	3557	KNOXLEE4	138	1	-0.06200	-144.8	209.0	OPEN	3454	[SW SHV 7 345]	TO	3424	[LONGWD 7 345]	
CKT 1																	
OPEN 3454 [SW SHV 7 345] TO 3528 [DIANA 7 345]																	
CKT 1																	
1043.4	16518	4APRIL	138	16519	4LFOREST	138	1	0.22751	-31.4	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	*	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	7657	[IAT G1 1]	TO	7682	[IATAN 7 345]
CKT 1																	
1072.4	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.10191	31.3	78.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1089.6	3525	CROCKET4	138	3673	LATEXO 4	138	1	0.24665	-33.7	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1102.1	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.14226	45.2	111.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1106.3	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22751	-45.8	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1117.0	3672	GRAPLND4	138	3673	LATEXO 4	138	1	-0.24665	40.5	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1117.0	17450	3RINGLD	115	17451	3SAILES	115	1	0.04820	60.8	114.6	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]	
CKT 1																	
1117.0	17450	3RINGLD	115	17451	3SAILES	115	1	0.04820	60.8	114.6	OPEN	17529	[7ELDEHV 345]	TO	17530	[8ELDEHV 500]	
CKT 1																	
1126.4	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22751	50.3	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1140.7	16568	4MAGROVE	138	16576	4STALEY	138	1	-0.10191	31.3	85.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1140.9	3672	GRAPLND4	138	3677	SLOCUM4	138	1	0.24664	-46.4	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1142.4	16541	4CORIGAN	138	16542	4L111T41	138	1	-0.10191	38.5	78.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1164.7	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.14226	-53.9	111.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1168.3	3670	ALTO 4	138	3677	SLOCUM4	138	1	-0.24664	53.2	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1169.6	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.18647	68.9	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1175.6	3548	IPCJEFF4	138	3551	JEFFRSN4	138	1	-0.04739	-80.2	135.9	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]	
CKT 1																	

1195.8	3593	PIRKEY 7 345	3630	TENASKA7 345 1	-1.00000	2.4	1193.4	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1197.2	3526	CROCKET7 345	3630	TENASKA7 345 1	-1.00000	2.4	1194.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1199.6	3670	ALTO 4 138	3675	PINEGRV4 138 1	0.24664	-60.9	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1208.2	3602	SABMINT4 138	3605	SEMRSHL4 138 1	0.18647	61.7	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1													
1210.7	3522	CHEROKE4 138	3611	TATUM 4 138 1	0.06200	133.9	209.0	OPEN	3454	[SW SHV 7 345]	TO	3424	[LONGWD 7 345]
CKT 1													
										OPEN		3454	[SW SHV 7 345] TO 3528 [DIANA 7 345]
CKT 1													
1223.7	16508	4CONROE 138	16514	4PLANTAT 138 1	0.20000	-19.9	224.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1235.7	3549	JACKSNV4 138	3675	PINEGRV4 138 1	-0.24664	69.8	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2000/01 WINTER PEAK - 01WP TENASKA

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF6916 SYSTEM CONDITIONS ATTEMPTED 2 INSOLUBLE SYSTEM CONDITIONS

INCR.	TRANS	LIMITING ELEMENT				DISTR.	PRE- RATING	CONTINGENCY DESCRIPTION			
CAPAB	FROM	TO	CKT	FACTOR	MW	A/B					
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	8255 [SED 80 269.0]	TO	8293 [BRT323 269.0]
CKT 1											
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	8255 [SED 80 269.0]	TO	8293 [BRT323 269.0]
CKT 1											
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	8255 [SED 80 269.0]	TO	8293 [BRT323 269.0]
CKT 1											
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	5374 [GOLDSBY269.0]	TO	5468 [OU SW 269.0]
CKT 1											
510.0 *	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	8255 [SED 80 269.0]	TO	8322 [FRG397 269.0]
CKT 1											
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	3863 [ORU--E4 138]	TO	3873 [WARNTAP4 138]
CKT 1											
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	8255 [SED 80 269.0]	TO	8322 [FRG397 269.0]
CKT 1											
510.0 *	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	4130 [L.E.S.-4 138]	TO	4140 [S.W.S.-4 138]
CKT 1											
510.0 *	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	8256 [COL 94 269.0]	TO	8267 [RIV167 269.0]
CKT 1											
770.4	16534	4MT.ZION 138	16556	4GRIMES 138 1	-0.29077	18.0	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]
CKT 1											
798.6	16528	4L558T48 138	16534	4MT.ZION 138 1	-0.29077	26.3	205.9	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]
CKT 1											
832.5	16528	4L558T48 138	16532	4HUNTSVL 138 1	0.29077	-36.2	205.9	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]
CKT 1											
873.8	16575	4RIVTRIN 138	16576	4STALEY 138 1	0.10139	-3.6	85.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]
CKT 1											

902.4	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.10139	13.6	77.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
905.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	905.0	BASE CASE						
933.1	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22776	6.5	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
949.6	16541	4CORIGAN	138	16542	4L111T41	138	1	-0.10139	18.3	77.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
970.9	16568	4MAGROVE	138	16576	4STALEY	138	1	-0.10139	13.6	84.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
975.6	16503	4WALDEN	138	16518	4APRIL	138	1	0.22776	-16.2	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1003.0	16518	4APRIL	138	16519	4LFOREST	138	1	0.22776	-22.5	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1042.5	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22776	-31.5	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1048.3	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.14265	38.0	111.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1053.4	16508	4CONROE	138	16514	4PLANTAT	138	1	0.19927	14.8	224.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	*	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	6860	[WJCCTYW3 115]	TO	6867	[CHAPMAN3 115]
CKT 1																	
1062.9	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22776	36.1	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1083.3	3525	CROCKET4	138	3673	LATEXO 4	138	1	0.24576	-1.3	264.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1087.7	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.14265	-43.5	111.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1089.9	16514	4PLANTAT	138	16516	4TAMINA	138	1	0.19927	7.6	224.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1112.8	3672	GRAPLND4	138	3673	LATEXO 4	138	1	-0.24576	8.5	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1131.8	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.18590	76.6	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1132.4	3672	GRAPLND4	138	3677	SLOCUM4	138	1	0.24576	-13.3	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1160.3	3670	ALTO 4	138	3677	SLOCUM4	138	1	-0.24576	20.1	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1164.8	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.18590	70.4	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1167.8	3592	PIRKEY 4	138	3593	PIRKEY 7	345	1	-0.67399	127.6	659.5	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1187.5	3670	ALTO 4	138	3675	PINEGRV4	138	1	0.24576	-26.8	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1194.8	3593	PIRKEY 7	345	3630	TENASKA7	345	1	-1.00000	0.9	1193.9	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1195.7	16510	4LEWIS	138	16515	4SHEAWIL	138	1	0.09642	29.6	144.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	

1195.9	3526	CROCKET7	345	3630	TENASKA7	345	1	-1.00000	0.9	1195.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1210.0	3549	JACKSNV4	138	3675	PINEGRV4	138	1	-0.24576	32.4	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1215.8	16567	4GULFTRN	138	16575	4RIVTRIN	138	1	-0.13249	16.3	144.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1226.2	16567	4GULFTRN	138	16574	4CARLILE	138	1	0.13248	-17.7	144.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1257.1	16532	4HUNTSVL	138	16533	4L558TP9	138	1	0.16958	-8.4	204.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1257.8	16533	4L558TP9	138	16575	4RIVTRIN	138	1	0.16958	-8.4	204.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1310.9	16537	4BLANCHD	138	16574	4CARLILE	138	1	-0.13249	29.0	144.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1316.1	3593	PIRKEY 7	345	3630	TENASKA7	345	1	-0.95304	60.4	1193.9	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]
CKT 1																

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2003 SUMMER PEAK - 03SP TENASKA

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF 7009 SYSTEM CONDITIONS ATTEMPTED 3 INSOLUBLE SYSTEM CONDITIONS

INCR. TRANS CAPAB	LIMITING ELEMENT				DISTR.	PRE- RATING SHIFT	BAS/CNT	CONTINGENCY DESCRIPTION		
----->	FROM	TO	CKT	FACTOR	MW	A/B	-----			
510.0 CKT 1	3631 TENGEN_7 345	3634 TENGENC118.0 1		-0.33333	0.0	170.0	OPEN	17062 [3CLOVEL 115]	TO	17063 [3GMEADW 115]
510.0 CKT 1	3631 TENGEN_7 345	3634 TENGENC118.0 1		-0.33333	0.0	170.0	OPEN	7060 [FTSCOTT269.0]	TO	7069 [SE4DEVO269.0]
510.0 CKT 1	3631 TENGEN_7 345	3633 TENGENB118.0 1		-0.33333	0.0	170.0	OPEN	6636 [AUBURN 6 230]	TO	6646 [SWISVAL6 230]
510.0 CKT 1	3631 TENGEN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	7022 [CHASE 269.0]	TO	7030 [MIDIAN 269.0]
510.0 CKT 1	3631 TENGEN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	16769 [4TOOMEY 138]	TO	16823 [4MRSHAL 138]
510.0 CKT 1	3631 TENGEN_7 345	3633 TENGENB118.0 1		-0.33333	0.0	170.0	OPEN	4841 [HSL 4 138]	TO	4866 [MIDWY4 138]
510.0 CKT 1	* 3631 TENGEN_7 345	3633 TENGENB118.0 1		-0.33333	0.0	170.0	OPEN	5559 [TEXASCO3 115]	TO	5564 [TC-GUYM3 115]
510.0 CKT 1	* 3631 TENGEN_7 345	3634 TENGENC118.0 1		-0.33333	0.0	170.0	OPEN	16892 [2PT.HUD 69.0]	TO	16959 [2ALSEN 69.0]
510.0 CKT 1	* 3631 TENGEN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	6929 [SANTAFE269.0]	TO	6930 [SANTAFJ269.0]
772.1 CKT 1	16534 4MT.ZION 138	16556 4GRIMES 138 1		-0.30641	30.6	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]
819.5 CKT 1	16528 4L558T48 138	16534 4MT.ZION 138 1		-0.30641	45.1	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]
876.4 CKT 1	16528 4L558T48 138	16532 4HUNTSVL 138 1		0.30641	-62.6	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]
905.0	3630 TENASKA7 345	3631 TENGEN_7 345 1		-1.00000	0.0	905.0	BASE CASE			

942.7	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22270	3.9	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1019.1	16503	4WALDEN	138	16518	4APRIL	138	1	0.22270	-21.0	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	16605	[2DORMAN 69.0]	TO	16616	[2WINFREE69.0]	
CKT 1																	
1059.0	*	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	4104	[ALTUSJT269.0]	TO	6245	[OMPARK-269.0]
CKT 1																	
1068.3	16518	4APRIL	138	16519	4LFOREST	138	1	0.22270	-32.0	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1089.4	3525	CROCKET4	138	3673	LATEXO 4	138	1	0.22984	-15.4	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1093.2	3522	CHEROKE4	138	3557	KNOXLEE4	138	1	-0.06017	-143.2	209.0	OPEN	3454	[SW SHV 7 345]	TO	3424	[LONGWD 7 345]	
CKT 1																	
											OPEN	3454	[SW SHV 7 345]	TO	3528	[DIANA 7 345]	
CKT 1																	
1120.3	3672	GRAPLND4	138	3673	LATEXO 4	138	1	-0.22984	22.5	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1139.2	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22270	-47.9	205.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1145.1	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.13891	47.2	111.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1147.7	3672	GRAPLND4	138	3677	SLOCUM4	138	1	0.22984	-28.8	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1159.7	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22270	52.5	205.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1179.2	3670	ALTO 4	138	3677	SLOCUM4	138	1	-0.22984	36.0	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1194.9	3593	PIRKEY 7	345	3630	TENASKA7	345	1	-1.00000	0.8	1194.1	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1195.8	3526	CROCKET7	345	3630	TENASKA7	345	1	-1.00000	0.8	1195.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1212.9	16575	4RIVTRIN	138	16576	4STALEY	138	1	0.06888	1.4	85.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1214.9	3670	ALTO 4	138	3675	PINEGRV4	138	1	0.22984	-44.2	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1215.7	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.13891	-56.9	112.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1237.9	3420	LIEBERM4	138	3548	IPCJEFF4	138	1	-0.04655	-57.1	114.8	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]	
CKT 1																	
1252.6	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.18328	57.4	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1256.4	3549	JACKSNV4	138	3675	PINEGRV4	138	1	-0.22984	53.8	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1265.4	16532	4HUNTSVL	138	16533	4L558TP9	138	1	0.21199	-63.2	205.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1265.9	16533	4L558TP9	138	16575	4RIVTRIN	138	1	0.21199	-63.3	205.1	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	

1268.8	17450	3RINGLD	115	17451	3SAILES	115	1	0.04981	51.6	114.8	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]		
CKT 1																		
1268.8	17450	3RINGLD	115	17451	3SAILES	115	1	0.04981	51.5	114.8	OPEN	17529	[7ELDEHV 345]	TO	17530	[8ELDEHV 500]		
CKT 1																		
1271.9	3592	PIRKEY	4	138	3593	PIRKEY	7	345	1	-0.66411	185.1	659.6	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																		
1285.0	3522	CHEROKE4	138	3611	TATUM	4	138	1	0.06017	131.6	208.9	OPEN	3454	[SW SHV 7 345]	TO	3424	[LONGWD 7 345]	
CKT 1																		
													OPEN	3454	[SW SHV 7 345]	TO	3528	[DIANA 7 345]
CKT 1																		
1290.4	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.18328	50.5	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]		
CKT 1																		
1326.4	3593	PIRKEY	7	345	3630	TENASKA7	345	1	-0.95300	69.9	1194.1	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]	
CKT 1																		
1327.5	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.06888	13.4	78.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1354.4	16555	7GRIMES	345	16556	4GRIMES	138	1	0.38508	3.1	524.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2003/04 WINTER PEAK - 03WP TENASKA

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF7010 SYSTEM CONDITIONS ATTEMPTED 2 INSOLUBLE SYSTEM CONDITIONS

INCR. TRANS CAPAB	LIMITING ELEMENT				DISTR.	PRE- SHIFT	RATING BAS/CNT	CONTINGENCY DESCRIPTION			
	FROM	TO	CKT	FACTOR	MW	A/B					
510.0 CKT 1	3631 TENGEN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	8258 [CAR108 269.0]	TO	8326 [JAS403T269.0]	
510.0 CKT 1	3631 TENGEN_7 345	3634 TENGENC118.0 1		-0.33333	0.0	170.0	OPEN	8259 [ATL109 269.0]	TO	8282 [OAK280 269.0]	
510.0 CKT 1	3631 TENGEN_7 345	3633 TENGENB118.0 1		-0.33333	0.0	170.0	OPEN	8258 [CAR108 269.0]	TO	8326 [JAS403T269.0]	
510.0 CKT 1	3631 TENGEN_7 345	3633 TENGENB118.0 1		-0.33333	0.0	170.0	OPEN	9192 [2SOTTUM 69.0]	TO	9239 [2OTTUMW 69.0]	
510.0 CKT 1	3631 TENGEN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	8708 [5CALIF 161]	TO	9336 [2CALIF 69.0]	
510.0 CKT 1	* 3631 TENGEN_7 345	3633 TENGENB118.0 1		-0.33333	0.0	170.0	OPEN	5403 [IDABEL 4 138]	TO	5529 [VALLANT4 138]	
510.0 CKT 1	3631 TENGEN_7 345	3634 TENGENC118.0 1		-0.33333	0.0	170.0	OPEN	8258 [CAR108 269.0]	TO	8326 [JAS403T269.0]	
510.0 CKT 1	* 3631 TENGEN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	4428 [PENSA 269.0]	TO	4470 [LANGYPS269.0]	
510.0 CKT 1	* 3631 TENGEN_7 345	3634 TENGENC118.0 1		-0.33333	0.0	170.0	OPEN	9192 [2SOTTUM 69.0]	TO	9239 [2OTTUMW 69.0]	
772.8 CKT 1	16534 4MT.ZION 138	16556 4GRIMES 138 1		-0.30651	31.0	205.8	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]	
807.7 CKT 1	16528 4L558T48 138	16534 4MT.ZION 138 1		-0.30651	41.6	205.9	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]	
849.5 CKT 1	16528 4L558T48 138	16532 4HUNTSVL 138 1		0.30651	-54.4	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]	
905.0	3630 TENASKA7 345	3631 TENGEN_7 345 1		-1.00000	0.0	905.0	BASE CASE				

963.7	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22302	9.0	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1019.7	16503	4WALDEN	138	16518	4APRIL	138	1	0.22302	-21.4	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1055.8	16518	4APRIL	138	16519	4LFOREST	138	1	0.22302	-29.5	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	17485	[3ELD-DO 115]	TO	17491	[3T.E.EL 115]
CKT 1																
1059.0	* 3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	17485	[3ELD-DO 115]	TO	17489	[3ELD-MO 115]
CKT 1																
1103.4	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.13918	42.5	111.1	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1108.0	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22302	-41.1	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1109.4	3525	CROCKET4	138	3673	LATEXO 4	138	1	0.22919	10.7	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1129.2	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22302	45.8	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1134.9	16575	4RIVTRIN	138	16576	4STALEY	138	1	0.06854	6.9	84.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1143.1	3672	GRAPLND4	138	3673	LATEXO 4	138	1	-0.22919	-3.0	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1155.9	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.13918	-49.6	111.3	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1165.8	3672	GRAPLND4	138	3677	SLOCUM4	138	1	0.22919	-2.2	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1166.8	16532	4HUNTSVL	138	16533	4L558TP9	138	1	0.21139	-41.3	205.4	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1167.2	16533	4L558TP9	138	16575	4RIVTRIN	138	1	0.21139	-41.3	205.4	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1172.3	3592	PIRKEY 4	138	3593	PIRKEY 7 345	1		-0.66268	118.2	658.7	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																
1194.4	3593	PIRKEY 7 345		3630	TENASKA7 345	1		-1.00000	0.8	1193.6	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1195.8	3526	CROCKET7 345		3630	TENASKA7 345	1		-1.00000	0.8	1195.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1197.6	3670	ALTO 4	138	3677	SLOCUM4	138	1	-0.22919	9.5	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1206.8	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.06853	5.1	77.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1229.0	3670	ALTO 4	138	3675	PINEGRV4	138	1	0.22919	-16.7	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1245.9	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.18284	59.2	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																
1254.9	3549	JACKSNV4	138	3675	PINEGRV4	138	1	-0.22919	22.7	264.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1277.9	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.18284	53.3	286.9	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																

1293.6	16541	4CORIGAN	138	16542	4L1111T41	138	1	-0.06853	11.1	77.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1307.1	16568	4MAGROVE	138	16576	4STALEY	138	1	-0.06853	5.1	84.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1320.3	3593	PIRKEY 7 345		3630	TENASKA7 345	1		-0.95300	64.7	1193.6	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]
CKT 1																
1361.8	3525	CROCKET4	138	3526	CROCKET7	345	1	-0.22919	-17.9	330.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1371.8	17607	3MURF-S	115	17609	4MURFRE	138	1	-0.04204	-1.4	59.1	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]
CKT 1																
1371.8	17607	3MURF-S	115	17609	4MURFRE	138	1	-0.04204	-1.4	59.1	OPEN	17529	[7ELDEHV 345]	TO	17530	[8ELDEHV 500]
CKT 1																
1385.3	16555	7GRIMES	345	16556	4GRIMES	138	2	0.38540	-9.4	524.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1385.3	16555	7GRIMES	345	16556	4GRIMES	138	1	0.38540	-9.4	524.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1428.9	17450	3RINGLD	115	17451	3SAILES	115	1	0.04959	43.7	114.5	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]
CKT 1																

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2000 SUMMER PEAK - 01SP TENASKA DC IN

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF6914 SYSTEM CONDITIONS ATTEMPTED 2 INSOLUBLE SYSTEM CONDITIONS

INCR. TRANS CAPAB	LIMITING ELEMENT				DISTR. FACTOR	PRE- SHIFT MW	RATING BAS/CNT A/B	CONTINGENCY DESCRIPTION		
	FROM	TO	CKT							
172.2 CKT 1	3420	LIEBERM4 138	3548	IPCJEFF4 138 1	-0.04739	-105.7	113.8	OPEN	3424 [LONGWD 7 345]	TO 3620 [WILKES 7 345]
412.3 CKT 1	3548	IPCJEFF4 138	3551	JEFFRSN4 138 1	-0.04739	-116.0	135.5	OPEN	3424 [LONGWD 7 345]	TO 3620 [WILKES 7 345]
493.0 CKT 1	17450	3RINGLD 115	17451	3SAILES 115 1	0.04820	90.6	114.4	OPEN	3424 [LONGWD 7 345]	TO 17529 [7ELDEHV 345]
493.1 CKT 1	17450	3RINGLD 115	17451	3SAILES 115 1	0.04820	90.6	114.4	OPEN	17529 [7ELDEHV 345]	TO 17530 [8ELDEHV 500]
510.0 CKT 1	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	6913 [SANDHLJ3 115]	TO 6916 [WMCIPHER3 115]
510.0 CKT 1	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	4134 [L.W.S.N4 138]	TO 4151 [112GORE4 138]
510.0 CKT 1	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	7144 [MID AMJ269.0]	TO 7148 [NEWTON 269.0]
510.0 CKT 1	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	4460 [ADMIRAL269.0]	TO 4463 [BOOMER 269.0]
510.0 CKT 1	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	7728 [NASHUA 5 161]	TO 7729 [SHOLCRK5 161]
510.0 CKT 1	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	16855 [2MORIL 69.0]	TO 16875 [2NEWIBER69.0]
510.0 CKT 1	* 3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	9152 [2CAIRO 69.0]	TO 9163 [2MACON 69.0]
510.0 CKT 1	* 3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	4018 [HUGO---269.0]	TO 4043 [FTOWSON269.0]
510.0 CKT 1	* 3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	7092 [BCRKJCT269.0]	TO 7126 [THEATER269.0]

592.4	3522	CHEROKE4	138	3557	KNOXLEE4	138	1	-0.06200	-172.3	209.0	OPEN	3454	[SW SHV 7 345]	TO	3424	[LONGWD 7 345]	
CKT 1																	
622.1	3225	ASHDWN3	115	3305	PATTERS3	115	1	-0.04900	-87.5	118.0	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]	
CKT 1																	
622.2	3225	ASHDWN3	115	3305	PATTERS3	115	1	-0.04900	-87.5	118.0	OPEN	17529	[7ELDEHV 345]	TO	17530	[8ELDEHV 500]	
CKT 1																	
709.1	17607	3MURF-S	115	17609	4MURFRE	138	1	-0.04560	-27.4	59.7	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]	
CKT 1																	
709.2	17607	3MURF-S	115	17609	4MURFRE	138	1	-0.04560	-27.4	59.7	OPEN	17529	[7ELDEHV 345]	TO	17530	[8ELDEHV 500]	
CKT 1																	
732.4	16534	4MT.ZION	138	16556	4GRIMES	138	1	-0.29052	6.8	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
767.4	3522	CHEROKE4	138	3611	TATUM	4	138	1	0.06200	161.4	208.9	OPEN	3454	[SW SHV 7 345]	TO	3424	[LONGWD 7 345]
CKT 1																	
777.1	16528	4L558T48	138	16534	4MT.ZION	138	1	-0.29052	19.9	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
798.7	17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.52975	462.5	885.6	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]	
CKT 1																	
809.7	3424	LONGWD 7 345		17529	7ELDEHV	345	1	0.52975	462.6	891.5	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]	
CKT 1																	
831.5	3598	ROKHILL4	138	3611	TATUM	4	138	1	-0.06200	-157.1	208.7	OPEN	3454	[SW SHV 7 345]	TO	3424	[LONGWD 7 345]
CKT 1																	
831.6	16528	4L558T48	138	16532	4HUNTSVL	138	1	0.29051	-35.8	205.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
841.8	3522	CHEROKE4	138	3557	KNOXLEE4	138	1	-0.05732	-160.7	209.0	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]	
CKT 1																	
858.9	17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.46693	484.5	885.6	OPEN	37	[DOLHILL6 230]	TO	38	[DOLHILL7 345]	
CKT 1																	
871.4	3424	LONGWD 7 345		17529	7ELDEHV	345	1	0.46693	484.6	891.5	OPEN	37	[DOLHILL6 230]	TO	38	[DOLHILL7 345]	
CKT 1																	
878.2	3592	PIRKEY 4 138		3602	SABMINT4	138	1	0.11106	189.4	287.0	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]	
CKT 1																	
891.9	*17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.50397	436.1	885.6	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
896.6	*3522	CHEROKE4	138	3557	KNOXLEE4	138	1	-0.06408	-151.5	209.0	OPEN	3454	[SW SHV 7 345]	TO	3528	[DIANA 7 345]	
CKT 1																	
902.1	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22751	-0.7	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
903.5	*3424	LONGWD 7 345		17529	7ELDEHV	345	1	0.50397	436.2	891.5	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
905.0	3630	TENASKA7 345		3631	TENGEN_7 345	1		-1.00000	0.0	905.0	BASE	CASE					
943.1	3602	SABMINT4 138		3605	SEMRSHL4 138	1		0.11106	182.2	286.9	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]	
CKT 1																	

969.0 16503 4WALDEN 138 16518 4APRIL 138 1 0.22751 -14.7 205.8 OPEN 3593 [PIRKEY 7 345] TO 3630 [TENASKA7 345]
 CKT 1
 999.4 16534 4MT.ZION 138 16556 4GRIMES 138 1 -0.10914 -96.9 206.0 OPEN 16503 [4WALDEN 138] TO 16556 [4GRIMES 138]
 CKT 1
 1012.3 16518 4APRIL 138 16519 4LFOREST 138 1 0.22751 -24.6 205.7 OPEN 3593 [PIRKEY 7 345] TO 3630 [TENASKA7 345]
 CKT 1
 1013.6 *16534 4MT.ZION 138 16556 4GRIMES 138 1 -0.11020 -94.3 206.0 OPEN 3424 [LONGWD 7 345] TO 17529 [7ELDEHV 345]
 CKT 1
 1015.1 16575 4RIVTRIN 138 16576 4STALEY 138 1 0.10191 -18.5 85.0 OPEN 3593 [PIRKEY 7 345] TO 3630 [TENASKA7 345]
 CKT 1
 1022.2 3420 LIEBERM4 138 3548 IPCJEFF4 138 1 -0.04063 -72.3 113.8 OPEN 3454 [SW SHV 7 345] TO 3424 [LONGWD 7 345]
 CKT 1
 CKT 1
 OPEN 3454 [SW SHV 7 345] TO 3528 [DIANA 7 345]
 CKT 1
 1031.1 3522 CHEROKE4 138 3611 TATUM 4 138 1 0.05732 149.8 208.9 OPEN 3424 [LONGWD 7 345] TO 3620 [WILKES 7 345]
 CKT 1

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2000/01 WINTER PEAK - 01WP TENASKA DC IN

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF6916 SYSTEM CONDITIONS ATTEMPTED 2 INSOLUBLE SYSTEM CONDITIONS

INCR. TRANS CAPAB	LIMITING ELEMENT				DISTR. FACTOR	PRE- SHIFT MW	RATING BAS/CNT A/B	CONTINGENCY DESCRIPTION	
	FROM	TO	CKT						
510.0 CKT 1	3631 TENGAN_7 345	3633 TENGEB118.0 1		-0.33333	0.0	170.0	OPEN	8264 [DIA131 269.0]	TO 8308 [SAR362T269.0]
510.0 CKT 1	3631 TENGAN_7 345	3634 TENGEC118.0 1		-0.33333	0.0	170.0	OPEN	16909 [4ADDIS 138]	TO 17041 [3PLAQMN 115]
510.0 CKT 1	3631 TENGAN_7 345	3634 TENGEC118.0 1		-0.33333	0.0	170.0	OPEN	16524 [4CLVELND 138]	TO 16525 [4JACINTO 138]
510.0 CKT 1	3631 TENGAN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	17197 [3BATESV 115]	TO 17199 [3COMO 115]
510.0 CKT 1	3631 TENGAN_7 345	3633 TENGEB118.0 1		-0.33333	0.0	170.0	OPEN	9957 [2BUCODA 69.0]	TO 9964 [2KENNET 69.0]
510.0 CKT 1	3631 TENGAN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	8158 [BUF243J269.0]	TO 8301 [BUF342 269.0]
510.0 CKT 1	* 3631 TENGAN_7 345	3634 TENGEC118.0 1		-0.33333	0.0	170.0	OPEN	8138 [SEK225T269.0]	TO 8141 [SHR444 269.0]
510.0 CKT 1	* 3631 TENGAN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	9495 [2CLINTN 69.0]	TO 9505 [2LADUE 69.0]
510.0 CKT 1	* 3631 TENGAN_7 345	3633 TENGEB118.0 1		-0.33333	0.0	170.0	OPEN	7355 [CLIFTON113.8]	TO 7356 [CLIFTON3 115]
614.5 CKT 1	3276 LSSOUTH4 138	3527 DIANA 4 138 1		-0.07123	-240.2	284.0	OPEN	3615 [WELSH 7 345]	TO 3620 [WILKES 7 345]
							OPEN	3615 [WELSH 7 345]	TO 3301 [NWTXARK7 345]
721.7 CKT 1	17450 3RINGLD 115	17451 3SAILES 115 1		0.04760	79.7	114.1	OPEN	3424 [LONGWD 7 345]	TO 17529 [7ELDEHV 345]
721.8 CKT 1	17450 3RINGLD 115	17451 3SAILES 115 1		0.04760	79.7	114.1	OPEN	17529 [7ELDEHV 345]	TO 17530 [8ELDEHV 500]

740.4	16534	4MT.ZION	138	16556	4GRIMES	138	1	-0.29077	9.6	205.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
768.3	16528	4L558T48	138	16534	4MT.ZION	138	1	-0.29077	17.9	205.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
784.8	3225	ASHDWR3	115	3305	PATTERS3	115	1	-0.04832	-81.0	118.9	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]
CKT 1																
784.9	3225	ASHDWR3	115	3305	PATTERS3	115	1	-0.04832	-80.9	118.9	OPEN	17529	[7ELDEHV 345]	TO	17530	[8ELDEHV 500]
CKT 1																
802.3	16528	4L558T48	138	16532	4HUNTSVL	138	1	0.29077	-27.9	205.4	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
846.3	17607	3MURF-S	115	17609	4MURFRE	138	1	-0.04508	-21.8	59.9	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]
CKT 1																
846.4	17607	3MURF-S	115	17609	4MURFRE	138	1	-0.04508	-21.7	59.9	OPEN	17529	[7ELDEHV 345]	TO	17530	[8ELDEHV 500]
CKT 1																
884.3	16575	4RIVTRIN	138	16576	4STALEY	138	1	0.10139	-4.8	84.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
899.7	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22776	-1.0	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
905.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	905.0	BASE CASE					
912.9	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.10139	14.7	77.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
941.8	16503	4WALDEN	138	16518	4APRIL	138	1	0.22776	-8.7	205.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
960.0	16541	4CORIGAN	138	16542	4L111T41	138	1	-0.10139	19.5	77.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
969.1	16518	4APRIL	138	16519	4LFOREST	138	1	0.22776	-15.0	205.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
980.9	16568	4MAGROVE	138	16576	4STALEY	138	1	-0.10139	14.7	84.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1008.5	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22776	-24.1	205.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1014.8	17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.52818	350.2	886.3	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]
CKT 1																
1016.1	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.14265	33.0	111.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1024.7	3424	LONGWD 7	345	17529	7ELDEHV	345	1	0.52818	350.3	891.6	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]
CKT 1																
1028.8	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.11066	173.1	287.0	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]
CKT 1																
1029.1	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22776	28.7	205.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1029.1	17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.46448	408.2	886.3	OPEN	37	[DOLHILL6 230]	TO	38	[DOLHILL7 345]
CKT 1																
1032.1	16508	4CONROE	138	16514	4PLANTAT	138	1	0.19927	19.2	224.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1040.4	3424	LONGWD 7	345	17529	7ELDEHV	345	1	0.46448	408.3	891.6	OPEN	37	[DOLHILL6 230]	TO	38	[DOLHILL7 345]
CKT 1																
1055.1	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.14265	-38.5	112.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																

1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	*	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	5124	[MSKGE7 345]	TO	5125	[MSKG5G18.0]
CKT 1																	
1068.8	16514	4PLANTAT	138	16516	4TAMINA	138	1	0.19927	12.0	224.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1084.4	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.11066	166.9	286.9	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]	
CKT 1																	
1089.4	*17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.50196	339.4	886.3	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1095.6	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.18590	83.3	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1099.9	*	3424	LONGWD 7	345	17529	7ELDEHV	345	1	0.50196	339.5	891.6	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]
CKT 1																	

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2003 SUMMER PEAK - 03SP TENASKA DC IN

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF7009 SYSTEM CONDITIONS ATTEMPTED 3 INSOLUBLE SYSTEM CONDITIONS

INCR. TRANS CAPAB	LIMITING ELEMENT				DISTR. FACTOR	PRE- SHIFT MW	RATING BAS/CNT A/B	CONTINGENCY DESCRIPTION	
	FROM	TO	CKT						
473.8 CKT 1	3420 LIEBERM4	138 3548 IPCJEFF4	138 1	-0.04655	-92.2	114.3	OPEN	3424 [LONGWD 7 345]	TO 3620 [WILKES 7 345]
510.0 CKT 1	3631 TENGEN_7	345 3634 TENGENC118.0	1	-0.33333	0.0	170.0	OPEN	8539 [PHELPS 113.0]	TO 8557 [MAIN 269.0]
510.0 CKT 1	3631 TENGEN_7	345 3633 TENGENB118.0	1	-0.33333	0.0	170.0	OPEN	3405 [FLOURNY4 138]	TO 3423 [LONGWD 4 138]
510.0 CKT 1	3631 TENGEN_7	345 3634 TENGENC118.0	1	-0.33333	0.0	170.0	OPEN	3395 [BROOKS 269.0]	TO 3400 [EDWARDS269.0]
510.0 CKT 1	3631 TENGEN_7	345 3632 TENGENA118.0	1	-0.33333	0.0	170.0	OPEN	9030 [2MILAN 69.0]	TO 9034 [2PSFTAP 69.0]
510.0 CKT 1	* 3631 TENGEN_7	345 3634 TENGENC118.0	1	-0.33333	0.0	170.0	OPEN	8774 [5GRNVTP 161]	TO 9347 [5SUNRIS 161]
510.0 CKT 1	3631 TENGEN_7	345 3633 TENGENB118.0	1	-0.33333	0.0	170.0	OPEN	9957 [2BUCODA 69.0]	TO 9959 [2DENTON 69.0]
510.0 CKT 1	* 3631 TENGEN_7	345 3633 TENGENB118.0	1	-0.33333	0.0	170.0	OPEN	6062 [LEA RD 3 115]	TO 6067 [WARD 3 115]
510.0 CKT 1	3631 TENGEN_7	345 3632 TENGENA118.0	1	-0.33333	0.0	170.0	OPEN	5582 [SHM MKE269.0]	TO 5587 [MOORE W269.0]
510.0 CKT 1	* 3631 TENGEN_7	345 3632 TENGENA118.0	1	-0.33333	0.0	170.0	OPEN	17146 [3AVE C 115]	TO 17169 [3MIDTN 115]
636.6 CKT 1	17450 3RINGLD	115 17451 3SAILES	115 1	0.04981	82.8	114.5	OPEN	3424 [LONGWD 7 345]	TO 17529 [7ELDEHV 345]
636.8 CKT 1	17450 3RINGLD	115 17451 3SAILES	115 1	0.04981	82.8	114.5	OPEN	17529 [7ELDEHV 345]	TO 17530 [8ELDEHV 500]
651.3 CKT 1	3522 CHEROKE4	138 3557 KNOXLEE4	138 1	-0.06017	-169.8	209.0	OPEN	3454 [SW SHV 7 345]	TO 3424 [LONGWD 7 345]

											OPEN	3454	[SW SHV 7 345]	TO	3528	[DIANA 7 345]			
CKT 1	693.0	3548	IPCJEFF4	138	3551	JEFFRSN4	138	1	-0.04655	-103.5	135.8	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]		
CKT 1	735.2	17607	3MURF-S	115	17609	4MURFRE	138	1	-0.04254	-28.4	59.7	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]		
CKT 1	735.3	17607	3MURF-S	115	17609	4MURFRE	138	1	-0.04254	-28.4	59.7	OPEN	17529	[7ELDEHV 345]	TO	17530	[8ELDEHV 500]		
CKT 1	745.8	16534	4MT.ZION	138	16556	4GRIMES	138	1	-0.30641	22.6	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1	792.6	16528	4L558T48	138	16534	4MT.ZION	138	1	-0.30641	37.1	205.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1	841.9	3277	LYDIA	7	345	3615	WELSH	7	345	1	-0.21619	-876.8	1058.8	OPEN	3615	[WELSH 7 345]	TO	3620	[WILKES 7 345]
CKT 1												OPEN	3615	[WELSH 7 345]	TO	3301	[NWTXARK7 345]		
CKT 1	842.7	3522	CHEROKE4	138	3611	TATUM	4	138	1	0.06017	158.2	208.9	OPEN	3454	[SW SHV 7 345]	TO	3424	[LONGWD 7 345]	
CKT 1												OPEN	3454	[SW SHV 7 345]	TO	3528	[DIANA 7 345]		
CKT 1	849.2	16528	4L558T48	138	16532	4HUNTSVL	138	1	0.30641	-54.7	205.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1	854.8	17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.51342	449.0	887.9	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]		
CKT 1	865.7	3424	LONGWD	7	345	17529	7ELDEHV	345	1	0.51342	449.1	893.6	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]	
CKT 1	904.6	17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.46807	464.5	887.9	OPEN	3277	[LYDIA 7 345]	TO	4037	[VALIANT7 345]		
CKT 1	905.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	905.0	BASE	CASE						
CKT 1	912.3	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22270	-2.7	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1	916.4	3598	ROKHILL4	138	3611	TATUM	4	138	1	-0.06017	-153.5	208.6	OPEN	3454	[SW SHV 7 345]	TO	3424	[LONGWD 7 345]	
CKT 1												OPEN	3454	[SW SHV 7 345]	TO	3528	[DIANA 7 345]		
CKT 1	916.5	3424	LONGWD	7	345	17529	7ELDEHV	345	1	0.46807	464.6	893.6	OPEN	3277	[LYDIA 7 345]	TO	4037	[VALIANT7 345]	
CKT 1	932.2	*17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.48853	432.5	887.9	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]		
CKT 1	943.6	*3424	LONGWD	7	345	17529	7ELDEHV	345	1	0.48853	432.6	893.6	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1	986.9	3522	CHEROKE4	138	3557	KNOXLEE4	138	1	-0.05635	-153.4	209.0	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]		
CKT 1	987.9	16503	4WALDEN	138	16518	4APRIL	138	1	0.22270	-14.3	205.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1	1024.5	*3522	CHEROKE4	138	3557	KNOXLEE4	138	1	-0.06306	-144.4	209.0	OPEN	3454	[SW SHV 7 345]	TO	3528	[DIANA 7 345]		
CKT 1	1035.6	3592	PIRKEY	4	138	3602	SABMINT4	138	1	0.10874	174.3	286.9	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]	
CKT 1																			

1036.8	16518	4APRIL	138	16519	4LFOREST	138	1	0.22270	-25.3	205.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	8126	[MON376J269.0]	TO	8317	[MON383 269.0]	
CKT 1																	
1059.0	*	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	5884	[TERRY 3 115]	TO	5928	[SULPHUR3 115]
CKT 1																	
1084.1	16534	4MT.ZION	138	16556	4GRIMES	138	1	-0.11673	-79.4	205.9	OPEN	16503	[4WALDEN 138]	TO	16556	[4GRIMES 138]	
CKT 1																	
1088.6	*	16534	4MT.ZION	138	16556	4GRIMES	138	1	-0.11705	-78.5	205.9	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]
CKT 1																	
1099.3	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.10874	167.4	286.9	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]	
CKT 1																	
1107.2	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22270	-41.3	205.3	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1116.4	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.13891	43.1	112.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2003/04 WINTER PEAK - 03WP TENASKA DC IN

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF7010 SYSTEM CONDITIONS ATTEMPTED 2 INSOLUBLE SYSTEM CONDITIONS

INCR.	TRANS	LIMITING ELEMENT				DISTR.	PRE- RATING	CONTINGENCY DESCRIPTION			
CAPAB	FROM	TO	CKT	FACTOR	MW	A/B					
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	204 [BONIN 4 138]	TO	205 [BONIN 269.0]
CKT 1											
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	3386 [ARSHILL4 138]	TO	3428 [MCWILLI4 138]
CKT 1											
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	6706 [CHISLM4 138]	TO	6710 [EVANS 4 138]
CKT 1											
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	17856 [5CLIN-W# 161]	TO	17872 [5MARSHL 161]
CKT 1											
510.0	* 3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	16748 [2PNECBK269.0]	TO	16749 [2PNECBKC69.0]
CKT 1											
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	4002 [FIXCT4 138]	TO	4028 [WELETK4 138]
CKT 1											
510.0	* 3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	3307 [PETTY 269.0]	TO	3308 [PETTY 4 138]
CKT 2											
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	5124 [MSKGE7 345]	TO	5126 [MSKG6G24.0]
CKT 1											
510.0	* 3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	16630 [2AMELIA 69.0]	TO	16633 [2ELIZBTH69.0]
CKT 1											
710.6	17607	3MURF-S 115	17609	4MURFRE 138 1	-0.04204	-30.0	59.8	OPEN	3424 [LONGWD 7 345]	TO	17529 [7ELDEHV 345]
CKT 1											
710.7	17607	3MURF-S 115	17609	4MURFRE 138 1	-0.04204	-30.0	59.8	OPEN	17529 [7ELDEHV 345]	TO	17530 [8ELDEHV 500]
CKT 1											
745.2	16534	4MT.ZION 138	16556	4GRIMES 138 1	-0.30651	22.4	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]
CKT 1											
779.8	16528	4L558T48 138	16534	4MT.ZION 138 1	-0.30651	33.0	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]
CKT 1											

789.5	17450	3RINGLD	115	17451	3SAILES	115	1	0.04959	75.1	114.2	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]
CKT 1																
789.7	17450	3RINGLD	115	17451	3SAILES	115	1	0.04959	75.1	114.2	OPEN	17529	[7ELDEHV 345]	TO	17530	[8ELDEHV 500]
CKT 1																
821.4	16528	4L558T48	138	16532	4HUNTSVL	138	1	0.30651	-45.8	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
905.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	905.0	BASE	CASE				
930.4	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22302	1.5	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
986.0	16503	4WALDEN	138	16518	4APRIL	138	1	0.22302	-14.0	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1016.1	17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.51305	366.7	888.0	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]
CKT 1																
1018.0	17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.46705	412.6	888.0	OPEN	3277	[LYDIA 7 345]	TO	4037	[VALIANT7 345]
CKT 1																
1022.0	16518	4APRIL	138	16519	4LFOREST	138	1	0.22302	-22.0	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1026.3	3424	LONGWD 7	345	17529	7ELDEHV	345	1	0.51305	366.8	893.3	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]
CKT 1																
1029.2	3424	LONGWD 7	345	17529	7ELDEHV	345	1	0.46705	412.6	893.3	OPEN	3277	[LYDIA 7 345]	TO	4037	[VALIANT7 345]
CKT 1																
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	7230	[RIPLEY 269.0]	TO	7242	[21ST 269.0]
CKT 1																
1059.0	* 3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	3768	[CARSN-S4 138]	TO	3800	[T.P.S.-4 138]
CKT 1																
1073.8	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22302	-33.7	205.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1074.1	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.13918	37.9	111.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1077.0	*17529	7ELDEHV	345	17530	8ELDEHV	500	1	0.48785	362.6	888.0	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1087.8	* 3424	LONGWD 7	345	17529	7ELDEHV	345	1	0.48785	362.7	893.3	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1095.0	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22302	38.4	205.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1126.1	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.13918	-45.0	111.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1151.1	16532	4HUNTSVL	138	16533	4L558TP9	138	1	0.21139	-38.4	204.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1151.6	16533	4L558TP9	138	16575	4RIVTRIN	138	1	0.21139	-38.4	205.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1155.9	16575	4RIVTRIN	138	16576	4STALEY	138	1	0.06854	5.4	84.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1195.2	3593	PIRKEY 7	345	3630	TENASKA7	345	1	-1.00000	1.8	1193.4	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1196.6	3526	CROCKET7	345	3630	TENASKA7	345	1	-1.00000	1.8	1194.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1212.3	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.18284	65.3	286.9	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																

1222.7	3525	CROCKET4	138	3673	LATEXO 4	138	1	0.22919	-15.2	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1227.6	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.06853	6.7	77.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1244.4	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.18284	59.4	286.9	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																
1253.3	3592	PIRKEY 4	138	3593	PIRKEY 7 345	1		-0.66268	171.1	659.4	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																
1256.3	3672	GRAPLND4	138	3673	LATEXO 4	138	1	-0.22919	22.9	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1273.3	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.10843	148.8	286.9	OPEN	3424	[LONGWD 7 345]	TO	3620	[WILKES 7 345]
CKT 1																
1279.0	3672	GRAPLND4	138	3677	SLOCUM4	138	1	0.22919	-28.1	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1293.5	16534	4MT.ZION	138	16556	4GRIMES	138	1	-0.11753	-54.0	206.0	OPEN	3424	[LONGWD 7 345]	TO	17529	[7ELDEHV 345]
CKT 1																

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2000 SUMMER PEAK - 01SP TENASKA DC OUT

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF6914 SYSTEM CONDITIONS ATTEMPTED 3 INSOLUBLE SYSTEM CONDITIONS

INCR. TRANS CAPAB	LIMITING ELEMENT				DISTR. FACTOR	PRE- SHIFT MW	RATING BAS/CNT A/B	CONTINGENCY DESCRIPTION	
	FROM	TO	CKT						
510.0 CKT 1	3631 TENGEN_7 345	3633 TENGENB118.0 1		-0.33333	0.0	170.0	OPEN	17597 [3RICHWD# 115]	TO 17624 [3GURD-N# 115]
510.0 CKT 1	3631 TENGEN_7 345	3634 TENGENC118.0 1		-0.33333	0.0	170.0	OPEN	3928 [COFTAP 4 138]	TO 3929 [COFTAP 7 345]
510.0 CKT 1	3631 TENGEN_7 345	3633 TENGENB118.0 1		-0.33333	0.0	170.0	OPEN	6742 [GOODYR 3 115]	TO 6748 [N TYLER3 115]
510.0 CKT 1	3631 TENGEN_7 345	3634 TENGENC118.0 1		-0.33333	0.0	170.0	OPEN	8258 [CAR108 269.0]	TO 8326 [JAS403T269.0]
510.0 * CKT 1	3631 TENGEN_7 345	3634 TENGENC118.0 1		-0.33333	0.0	170.0	OPEN	16802 [4LC BULK 138]	TO 16803 [2LC BULK69.0]
510.0 CKT 1	3631 TENGEN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	8259 [ATL109 269.0]	TO 8290 [SOL315 269.0]
510.0 CKT 1	3631 TENGEN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	8258 [CAR108 269.0]	TO 8326 [JAS403T269.0]
510.0 * CKT 1	3631 TENGEN_7 345	3633 TENGENB118.0 1		-0.33333	0.0	170.0	OPEN	17430 [3STERL 115]	TO 17431 [1STER 7B13.8]
510.0 * CKT 1	3631 TENGEN_7 345	3632 TENGENA118.0 1		-0.33333	0.0	170.0	OPEN	9202 [2CLUBTP 69.0]	TO 9210 [2LCKRDG 69.0]
780.4 CKT 1	16534 4MT.ZION 138	16556 4GRIMES 138 1		-0.29052	21.3	205.4	OPEN	3593 [PIRKEY 7 345]	TO 3630 [TENASKA7 345]
826.2 CKT 1	16528 4L558T48 138	16534 4MT.ZION 138 1		-0.29052	34.4	205.6	OPEN	3593 [PIRKEY 7 345]	TO 3630 [TENASKA7 345]
881.0 CKT 1	16528 4L558T48 138	16532 4HUNTSVL 138 1		0.29051	-50.1	205.8	OPEN	3593 [PIRKEY 7 345]	TO 3630 [TENASKA7 345]
905.0	3630 TENASKA7 345	3631 TENGEN_7 345 1		-1.00000	0.0	905.0	BASE CASE		

960.2	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22751	12.7	205.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
996.7	16575	4RIVTRIN	138	16576	4STALEY	138	1	0.10191	-16.6	85.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
997.0	3525	CROCKET4	138	3673	LATEXO 4	138	1	0.24665	-10.9	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1024.5	3672	GRAPLND4	138	3673	LATEXO 4	138	1	-0.24665	17.7	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1028.3	16503	4WALDEN	138	16518	4APRIL	138	1	0.22751	-28.0	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1048.5	3672	GRAPLND4	138	3677	SLOCUM4	138	1	0.24664	-23.6	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	*	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	143	[RODEMR 6 230]	TO	192	[G2RODEMR22.0]
CKT 1																	
1065.3	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.10191	30.6	78.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1072.2	16518	4APRIL	138	16519	4LFOREST	138	1	0.22751	-38.0	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1076.1	3670	ALTO	4	138	3677	SLOCUM4	138	1	-0.24664	30.4	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																	
1107.4	3670	ALTO	4	138	3675	PINEGRV4	138	1	0.24664	-38.1	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																	
1127.9	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.14226	49.3	111.2	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1133.7	16568	4MAGROVE	138	16576	4STALEY	138	1	-0.10191	30.5	85.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1135.4	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22751	-52.3	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1135.7	16541	4CORIGAN	138	16542	4L111T41	138	1	-0.10191	37.7	78.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1143.5	3549	JACKSNV4	138	3675	PINEGRV4	138	1	-0.24664	47.1	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1155.5	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22751	56.9	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1191.2	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.14226	-58.0	111.4	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1194.9	3593	PIRKEY 7	345	3630	TENASKA7	345	1	-1.00000	1.4	1193.5	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1196.3	3526	CROCKET7	345	3630	TENASKA7	345	1	-1.00000	1.4	1194.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1204.2	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.18647	62.5	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1214.6	3592	PIRKEY 4	138	3593	PIRKEY 7	345	1	-0.67587	162.1	658.8	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1242.7	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.18647	55.3	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	

1244.8	16508	4CONROE	138	16514	4PLANTAT	138	1	0.20000	-24.3	224.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1301.9	16514	4PLANTAT	138	16516	4TAMINA	138	1	0.20000	-35.7	224.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1317.3	16510	4LEWIS	138	16515	4SHEAWIL	138	1	0.09750	15.9	144.4	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1319.5	3593	PIRKEY 7 345	3630	TENASKA7 345	1	-0.95304	64.0	1193.5	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]		
CKT 1																
1350.3	16532	4HUNTSVL	138	16533	4L558TP9	138	1	0.17018	-23.9	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1350.5	16533	4L558TP9	138	16575	4RIVTRIN	138	1	0.17018	-23.9	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1352.7	3525	CROCKET4	138	3526	CROCKET7 345	1	-0.24664	3.7	330.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																
1353.0	16567	4GULFTRN	138	16575	4RIVTRIN	138	1	-0.13334	37.5	142.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1364.3	16567	4GULFTRN	138	16574	4CARLILE	138	1	0.13333	-39.0	142.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2000/01 WINTER PEAK - 01WP TENASKA DC OUT

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF6916 SYSTEM CONDITIONS ATTEMPTED 2 INSOLUBLE SYSTEM CONDITIONS

INCR.	TRANS	LIMITING ELEMENT				DISTR.	PRE- RATING	CONTINGENCY DESCRIPTION				
CAPAB	FROM	TO	CKT	FACTOR	MW	A/B						
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	8261 [NIX114 269.0]	TO	8330 [BHV415 269.0]	
CKT 1												
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	5388 [HAZLTNJ269.0]	TO	5535 [WAKITA 269.0]	
CKT 1												
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	8261 [NIX114 269.0]	TO	8330 [BHV415 269.0]	
CKT 1												
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	8262 [ASH121 269.0]	TO	8278 [LAW260 269.0]	
CKT 1												
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	5604 [RIVERVW3 115]	TO	5628 [HUTCH S3 115]	
CKT 1												
510.0	*	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	17094 [6PARIS 230]	TO	17100 [6LABARE 230]
CKT 1												
510.0	*	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	8261 [NIX114 269.0]	TO	8330 [BHV415 269.0]
CKT 1												
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	9734 [2GNSVL2 69.0]	TO	9737 [2THEODS 69.0]	
CKT 1												
510.0	*	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	8680 [7NEWMAD 345]	TO	8842 [5NEWMAD 161]
CKT 2												
797.9	16534	4MT.ZION 138	16556	4GRIMES 138 1	-0.29077	26.0	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]	
CKT 1												
826.3	16528	4L558T48 138	16534	4MT.ZION 138 1	-0.29077	34.3	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]	
CKT 1												
860.4	16528	4L558T48 138	16532	4HUNTSVL 138 1	0.29077	-44.2	206.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]	
CKT 1												
866.6	16575	4RIVTRIN 138	16576	4STALEY 138 1	0.10139	-2.9	85.0	OPEN	3593 [PIRKEY 7 345]	TO	3630 [TENASKA7 345]	
CKT 1												

895.4	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.10139	12.8	78.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
905.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	905.0	BASE CASE						
942.6	16541	4CORIGAN	138	16542	4L111T41	138	1	-0.10139	17.6	78.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
964.1	16568	4MAGROVE	138	16576	4STALEY	138	1	-0.10139	12.8	85.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
964.4	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22776	13.7	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
988.1	3525	CROCKET4	138	3673	LATEXO 4	138	1	0.24576	22.1	264.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1007.0	16503	4WALDEN	138	16518	4APRIL	138	1	0.22776	-23.4	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1017.8	3672	GRAPLND4	138	3673	LATEXO 4	138	1	-0.24576	-14.8	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1034.5	16518	4APRIL	138	16519	4LFOREST	138	1	0.22776	-29.6	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1037.3	3672	GRAPLND4	138	3677	SLOCUM4	138	1	0.24576	10.0	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	*	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	17564	[8SHERID 500]	TO	17621	[8HSEHV 500]
CKT 1																	
1065.5	3670	ALTO	4	138	3677	SLOCUM4	138	1	-0.24576	-3.1	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																	
1074.3	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22776	-38.7	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1075.1	16508	4CONROE	138	16514	4PLANTAT	138	1	0.19927	10.2	224.4	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1078.8	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.14265	42.7	111.2	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1092.8	3670	ALTO	4	138	3675	PINEGRV4	138	1	0.24576	-3.6	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																	
1094.8	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22776	43.3	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1099.2	3592	PIRKEY 4	138	3593	PIRKEY 7	345	1	-0.67399	81.7	659.2	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1111.3	16514	4PLANTAT	138	16516	4TAMINA	138	1	0.19927	3.0	224.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1115.5	3549	JACKSNV4	138	3675	PINEGRV4	138	1	-0.24576	9.2	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1118.6	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.14265	-48.2	111.4	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1164.9	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.18590	70.4	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1194.5	3593	PIRKEY 7	345	3630	TENASKA7	345	1	-1.00000	0.3	1194.2	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1195.3	3526	CROCKET7	345	3630	TENASKA7	345	1	-1.00000	0.3	1195.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	

1197.9	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.18590	64.3	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																
1201.3	16510	4LEWIS	138	16515	4SHEAWIL	138	1	0.09642	29.0	144.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1222.7	16567	4GULFTRN	138	16575	4RIVTRIN	138	1	-0.13249	17.5	144.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1225.6	3525	CROCKET4	138	3526	CROCKET7	345	1	-0.24576	-28.7	329.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1232.8	16567	4GULFTRN	138	16574	4CARLILE	138	1	0.13248	-18.9	144.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1269.3	16532	4HUNTSVL	138	16533	4L558TP9	138	1	0.16958	-10.1	205.2	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1269.9	16533	4L558TP9	138	16575	4RIVTRIN	138	1	0.16958	-10.1	205.2	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1314.6	3593	PIRKEY 7 345		3630	TENASKA7 345	1		-0.95304	58.8	1194.2	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]
CKT 1																

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2003 SUMMER PEAK - 03SP TENASKA DC OUT

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF 7009 SYSTEM CONDITIONS ATTEMPTED 8 INSOLUBLE SYSTEM CONDITIONS

INCR.	TRANS	LIMITING ELEMENT				DISTR.	PRE- RATING	CONTINGENCY DESCRIPTION						
CAPAB	FROM	TO	CKT	FACTOR	SHIFT	BAS/CNT								
					MW	A/B								
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	3934	[RICE CK4 138]	TO	3945	[N.E.S.-4 138]	
CKT 1														
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	8259	[ATL109 269.0]	TO	8282	[OAK280 269.0]	
CKT 1														
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	8259	[ATL109 269.0]	TO	8282	[OAK280 269.0]	
CKT 1														
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	4008	[WETUMTP269.0]	TO	6209	[OMWEUMK269.0]	
CKT 1														
510.0	*	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	5407	[IODINE 4 138]	TO	5449	[MOORLND4 138]
CKT 1														
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	8259	[ATL109 269.0]	TO	8291	[SOL315T269.0]	
CKT 1														
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	8259	[ATL109 269.0]	TO	8282	[OAK280 269.0]	
CKT 1														
510.0	*	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	9751	[2DORA 69.0]	TO	9761	[2VANZNT 69.0]
CKT 1														
510.0	*	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	8970	[2BETHCT 69.0]	TO	8971	[2BETHNY 69.0]
CKT 1														
795.9	16534	4MT.ZION 138	16556	4GRIMES 138 1	-0.30641	38.2	205.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1														
843.7	16528	4L558T48 138	16534	4MT.ZION 138 1	-0.30641	52.7	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1														
901.1	16528	4L558T48 138	16532	4HUNTSVL 138 1	0.30641	-70.1	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1														
905.0	3630	TENASKA7 345	3631	TENGEN_7 345 1	-1.00000	0.0	905.0	BASE CASE						

970.8	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22270	10.3	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
992.4	3525	CROCKET4	138	3673	LATEXO 4	138	1	0.22984	6.9	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1023.4	3672	GRAPLND4	138	3673	LATEXO 4	138	1	-0.22984	0.2	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1047.8	16503	4WALDEN	138	16518	4APRIL	138	1	0.22270	-27.3	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1050.9	3672	GRAPLND4	138	3677	SLOCUM4	138	1	0.22984	-6.5	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	17223	[6ANDRUS 230]	TO	17225	[LANDRUSK]	
CKT 1																	
1059.0	*	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																	
1082.7	3670	ALTO	4	138	3677	SLOCUM4	138	1	-0.22984	13.9	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																	
1097.3	16518	4APRIL	138	16519	4LFOREST	138	1	0.22270	-38.4	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1118.4	3670	ALTO	4	138	3675	PINEGRV4	138	1	0.22984	-22.1	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																	
1160.0	3549	JACKSNV4	138	3675	PINEGRV4	138	1	-0.22984	31.6	235.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1168.6	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22270	-54.3	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1172.0	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.13891	51.2	111.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1189.2	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22270	58.9	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1194.6	3593	PIRKEY 7	345	3630	TENASKA7	345	1	-1.00000	0.4	1194.2	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1195.0	16575	4RIVTRIN	138	16576	4STALEY	138	1	0.06888	2.6	84.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1195.4	3526	CROCKET7	345	3630	TENASKA7	345	1	-1.00000	0.4	1195.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1202.8	3592	PIRKEY 4	138	3593	PIRKEY 7	345	1	-0.66411	139.6	659.2	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1243.3	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.13891	-60.9	111.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1280.8	16532	4HUNTSVL	138	16533	4L558TP9	138	1	0.21199	-66.0	205.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1281.3	16533	4L558TP9	138	16575	4RIVTRIN	138	1	0.21199	-66.1	205.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1285.0	3592	PIRKEY 4	138	3602	SABMINT4	138	1	0.18328	51.5	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	
1309.9	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.06888	12.2	78.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																	
1322.8	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.18328	44.6	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																	

1324.9	3593	PIRKEY 7 345	3630	TENASKA7 345 1	-0.95300	68.4	1194.2	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]
CKT 1													
1372.3	3525	CROCKET4 138	3526	CROCKET7 345 1	-0.22984	-14.6	330.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1381.5	16555	7GRIMES 345	16556	4GRIMES 138 2	0.38508	-7.6	524.4	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1381.5	16555	7GRIMES 345	16556	4GRIMES 138 1	0.38508	-7.6	524.4	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1397.4	16556	4GRIMES 138	16566	4MAG AND 138 1	0.13812	13.0	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1403.0	16552	4SOTA 138	16566	4MAG AND 138 1	-0.13812	-12.2	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1411.9	16568	4MAGROVE 138	16576	4STALEY 138 1	-0.06888	12.2	85.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1423.3	16541	4CORIGAN 138	16542	4L111T41 138 1	-0.06888	20.0	78.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													
1434.0	16551	4NAVSOTA 138	16552	4SOTA 138 1	-0.13812	-7.9	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1													

1-99 SOUTHWEST POWER POOL BASE CASE POWER FLOW MODEL
 2003/04 WINTER PEAK - 03WP TENASKA DC OUT

*** TLTG EXPORT LIMIT OUTPUT FOR SUBSYSTEM TENASKA ***

SOLUTION OF7010 SYSTEM CONDITIONS ATTEMPTED 2 INSOLUBLE SYSTEM CONDITIONS

INCR.	TRANS	LIMITING ELEMENT				DISTR.	PRE- RATING	CONTINGENCY DESCRIPTION					
CAPAB	FROM	TO	CKT	FACTOR	MW	A/B							
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	8260	[ORO110 269.0]	TO	8282	[OAK280 269.0]
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	8261	[NIX114 269.0]	TO	8268	[NIC170 269.0]
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	3304	[PATTERS269.0]	TO	3306	[PATTERS4 138]
510.0	3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	8262	[ASH121 269.0]	TO	8278	[LAW260 269.0]
510.0	3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	3938	[BV-COM-269.0]	TO	3939	[BV-COM-4 138]
510.0	3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	8261	[NIX114 269.0]	TO	8268	[NIC170 269.0]
510.0	* 3631	TENGEN_7 345	3632	TENGENA118.0 1	-0.33333	0.0	170.0	OPEN	5419	[LASALLE4 138]	TO	5421	[LATTAJT4 138]
510.0	* 3631	TENGEN_7 345	3634	TENGENC118.0 1	-0.33333	0.0	170.0	OPEN	5801	[HALE CO3 115]	TO	5802	[PLANT X3 115]
510.0	* 3631	TENGEN_7 345	3633	TENGENB118.0 1	-0.33333	0.0	170.0	OPEN	8597	[JRPS 5 161]	TO	8599	[MENTOR 5 161]
798.4	16534	4MT.ZION 138	16556	4GRIMES 138 1	-0.30651	39.2	205.5	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
833.5	16528	4L558T48 138	16534	4MT.ZION 138 1	-0.30651	49.8	205.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
875.8	16528	4L558T48 138	16532	4HUNTSVL 138 1	0.30651	-62.7	205.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
905.0	3630	TENASKA7 345	3631	TENGEN_7 345 1	-1.00000	0.0	905.0	BASE CASE					

994.8	16503	4WALDEN	138	16556	4GRIMES	138	1	-0.22302	16.0	205.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1010.0	3525	CROCKET4	138	3673	LATEXO 4	138	1	0.22919	33.5	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1044.0	3672	GRAPLND4	138	3673	LATEXO 4	138	1	-0.22919	-25.7	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1051.1	16503	4WALDEN	138	16518	4APRIL	138	1	0.22302	-28.5	205.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1059.0	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	143	[RODEMR 6 230]	TO	192	[G2RODEMR22.0]		
CKT 1																		
1059.0	*	3630	TENASKA7	345	3631	TENGEN_7	345	1	-1.00000	0.0	1059.0	OPEN	17330	[3B.WLSN 115]	TO	17331	[1B.WLSNH]	
CKT 1																		
1066.7	3672	GRAPLND4	138	3677	SLOCUM4	138	1	0.22919	20.5	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1087.4	16518	4APRIL	138	16519	4LFOREST	138	1	0.22302	-36.5	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1098.9	3670	ALTO	4	138	3677	SLOCUM4	138	1	-0.22919	-13.1	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																		
1101.8	3592	PIRKEY	4	138	3593	PIRKEY	7	345	1	-0.66268	71.7	658.4	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																		
1118.9	16575	4RIVTRIN	138	16576	4STALEY	138	1	0.06854	8.1	84.8	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1130.3	3670	ALTO	4	138	3675	PINEGRV4	138	1	0.22919	5.9	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]	
CKT 1																		
1131.9	16502	4DOBBIN	138	16562	4TUBULAR	138	1	-0.13918	46.9	110.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1139.9	16519	4LFOREST	138	16578	4WDHAVN	138	1	0.22302	-48.2	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1156.5	3549	JACKSNV4	138	3675	PINEGRV4	138	1	-0.22919	0.1	265.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1161.4	16508	4CONROE	138	16578	4WDHAVN	138	1	-0.22302	53.0	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1182.2	16532	4HUNTSVL	138	16533	4L558TP9	138	1	0.21139	-44.3	205.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1182.7	16533	4L558TP9	138	16575	4RIVTRIN	138	1	0.21139	-44.3	205.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1184.7	16502	4DOBBIN	138	16506	4LONGMIR	138	1	0.13918	-54.0	110.9	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1191.0	16542	4L111T41	138	16568	4MAGROVE	138	1	-0.06853	3.9	77.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1194.2	3593	PIRKEY	7	345	3630	TENASKA7	345	1	-1.00000	0.3	1194.0	OPEN	3526	[CROCKET7 345]	TO	3630	[TENASKA7 345]	
CKT 1																		
1195.2	3526	CROCKET7	345	3630	TENASKA7	345	1	-1.00000	0.3	1195.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1262.4	3525	CROCKET4	138	3526	CROCKET7	345	1	-0.22919	-40.7	330.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]		
CKT 1																		
1276.8	3592	PIRKEY	4	138	3602	SABMINT4	138	1	0.18284	53.5	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]	
CKT 1																		

1277.7	16541	4CORIGAN	138	16542	4L111T41	138	1	-0.06853	9.9	77.7	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1291.5	16568	4MAGROVE	138	16576	4STALEY	138	1	-0.06853	3.9	84.6	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1308.8	3602	SABMINT4	138	3605	SEMRSHL4	138	1	0.18284	47.7	287.0	OPEN	3528	[DIANA 7 345]	TO	3593	[PIRKEY 7 345]
CKT 1																
1318.9	3593	PIRKEY 7 345		3630	TENASKA7 345	138	1	-0.95300	63.0	1194.0	OPEN	3526	[CROCKET7 345]	TO	16555	[7GRIMES 345]
CKT 1																
1413.0	16555	7GRIMES 345		16556	4GRIMES 138	2		0.38540	-20.5	524.1	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1413.0	16555	7GRIMES 345		16556	4GRIMES 138	1		0.38540	-20.5	524.1	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1475.0	16556	4GRIMES 138		16566	4MAG AND 138	1		0.13838	1.9	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1479.9	16552	4SOTA 138		16566	4MAG AND 138	1		-0.13838	-1.2	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																
1502.0	16551	4NAVSOTA 138		16552	4SOTA 138	1		-0.13838	1.8	206.0	OPEN	3593	[PIRKEY 7 345]	TO	3630	[TENASKA7 345]
CKT 1																