

This analysis is based on the original power flow cases that MP supplied. Please note that in each power flow case, MP chose a different Stinson PST setting that is different from the other cases, and they are also different from the settings in MISO's MTEP models.

130.33

140.33

127.67

98.71

[illegible]

This analysis is based on the original power flow cases that MP supplied. Please note that in each power flow case, MP chose a different Stinson PST setting that is different from the other cases, and they are also different from the settings in MISO's MTEP models.

130.33

140.33

127.67

98.71

DATA IN COLUMNS F AND G HAS BEEN REMOVED AS HIGHLY CONFIDENTIAL TRADE SECRET DATA AND CEII										West to East (Summer High Wind) - SHW							
										Pre-LRTP				Post-LRTP			
										MP		ATC				MP	
										900 MW		900 MW (two transformers)		550 MW (One transformer)		900 MW	
										S1_SHW_MP		S1_SHW_ATC_900		S1_SHW_ATC_550		S2_SHW_MP	
Monitored Facility										Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	608624	FORBES 4	230	1	230	608	470	470							
608615	ARROWHD4	230	615466	GRE-BEARCK 4	230	1	230	608	327	359	318.5	88.73	313.8	87.4			
608615	ARROWHD4	230	615466	GRE-BEARCK 4	230	1	230	608	327	359	337.6	94.05	335.1	93.33			
608615	ARROWHD4	230	615466	GRE-BEARCK 4	230	1	230	608	327	359	339.7	94.62	337.1	93.9			
608615	ARROWHD4	230	615466	GRE-BEARCK 4	230	1	230	608	327	359	337.7	94.05	335.1	93.34			
608615	ARROWHD4	230	615466	GRE-BEARCK 4	230	1	230	608	327	359	337.6	94.05	335.1	93.33			
608615	ARROWHD4	230	699448	AWHD PST	230	1	230	608/696	800	800							
608615	ARROWHD4	230	997397	ARD7	115	2	230/115	608	373	438							
608615	ARROWHD4	230	997397	ARD7	115	2	230/115	608	373	438							
608615	ARROWHD4	230	997399	ARD7	115	2	230/115	608	373	438							
608615	ARROWHD4	230	997399	ARD7	115	2	230/115	608	373	438							
608622	IRONRNG4	230	608625	BLCKBRY4	230	1	230	608	470	470							
608622	IRONRNG4	230	608625	BLCKBRY4	230	1	230	608	470	470							
608622	IRONRNG4	230	608625	BLCKBRY4	230	1	230	608	470	470							
608622	IRONRNG4	230	608625	BLCKBRY4	230	1	230	608	470	470							
608622	IRONRNG4	230	608625	BLCKBRY4	230	1	230	608	470	470							
608622	IRONRNG4	230	608625	BLCKBRY4	230	2	230	608	470	470							
608622	IRONRNG4	230	608625	BLCKBRY4	230	2	230	608	470	470							
608622	IRONRNG4	230	608625	BLCKBRY4	230	2	230	608	470	470							
608622	IRONRNG4	230	608625	BLCKBRY4	230	2	230	608	470	470							
608624	FORBES 4	230	997486	FBS7ABC	230	1	230	608/600	672	672							
608624	FORBES 4	230	997486	FBS7ABC	230	1	230	608/600	672	672							
608624	FORBES 4	230	997486	FBS7ABC	230	1	230	608/600	672	672							
608624	FORBES 4	230	997486	FBS7ABC	230	1	230	608/600	672	672							
608673	ARROWHD7	115	618001	GRE-BERGNTPT7	115	1	115	608	92	101							
608673	ARROWHD7	115	618001	GRE-BERGNTPT7	115	1	115	608	92	101							
608673	ARROWHD7	115	618001	GRE-BERGNTPT7	115	1	115	608	92	101							
608673	ARROWHD7	115	618001	GRE-BERGNTPT7	115	1	115	608	92	101							
608673	ARROWHD7	115	618001	GRE-BERGNTPT7	115	1	115	608	92	101							
608673	ARROWHD7	115	618001	GRE-BERGNTPT7	115	1	115	608	92	101							
608673	ARROWHD7	115	997397	ARD7	115	2	115	608	373	438							

		102.22		98.21		144.6		144.05		143.42		113.45		113.4		113.77		119.82		119.67		120.25		127.85		Page 18 of 27	
				West to East (Shoulder High Wind) - SSH												East to West (Summer) - SRF											
				Pre-LRTP						Post-LRTP						Pre-LRTP						Post-LRTP					
ATC				MP		ATC				MP		ATC				MP		ATC				MP		ATC			
900 MW (two transformers)		550 MW (One transformer)		900 MW		900 MW (two transformers)		550 MW (One transformer)		900 MW		900 MW (two transformers)		550 MW (One transformer)		900 MW		900 MW (two transformers)		550 MW (One transformer)		900 MW		900 (t transf			
S2_SHW_ATC_900		S2_SHW_ATC_550		S1_SSH_MP		S1_SSH_ATC_900		S1_SSH_ATC_550		S2_SSH_MP		S2_SSH_ATC_900		S2_SSH_ATC_550		S1_SRF_MP		S1_SRF_ATC_900		S1_SRF_ATC_550		S2_SRF_MP		S2_SRF			
Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)			
166.7	91.58	163.9	90.03																								
						186.5	102.48																				
						186.5	102.48	168.2	92.4																		
181.6	99.8	173.8	95.49																								
						185.8	102.1																				
				164.5	90.37																						
				259.2	142.42					188.5	103.57																
				204.3	112.26																						
				259.2	142.42	186.7	102.6	195.1	107.17	188.5	103.57																
				246.4	135.37			182.3	100.17	175.9	96.65																
						181.6	99.8																				
								164.1	90.16																		
						182.3	100.19																				
						182.3	100.19	164.1	90.16																		
166.7	91.58	159	87.35																								
						181.6	99.8																				
				160.4	88.14																						
				255.1	140.15					184.4	101.31																
				200.3	110.07																						
				255.1	140.15	182.6	100.33	190.9	104.9	184.4	101.31																
				242.3	133.12			178.2	97.92	171.8	94.42																
						234.7	93.9																				
						234.4	93.75																				
						235.6	94.23																				
						235.6	94.23																				
						234.7	93.9																				
																#DIV/0!	88.07	#DIV/0!	88.02	#DIV/0!	88.28	#DIV/0!	87.83	#DIV/0!			
																1045	87.08	1038.5	86.54	1022.7	85.22						
				1052.3	87.69	1063.3	88.61	1075.8	89.65																		
				#DIV/0!	86.97	#DIV/0!	87.78	#DIV/0!	88.86																		
										598.3	85.11	603	85.77														

125.46		121.99		109.87		118.29		106.46		108.93		
				West to East/North (Winter) - WNF								
				Pre-LRTP				Post-LRTP				
				MP		ATC		MP		ATC		
MW wo rmers)	550 MW (One transformer)			416 MW		416 MW		416 MW		416 MW		
ATC_900		S2_SRF_ATC_550		S1_WNF_MP		S1_WNF_ATC		S2_WNF_MP		S2_WNF_ATC		Comments
AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading		
86.13	#DIV/0!	86.54			#DIV/0!	87.91			#DIV/0!	86.44		
	323.6	85.16										
	323.7	85.19										
	323.6	85.17										
					327	86.05						
					326.4	85.9						
	323.5	85.12										
	323.6	85.16										
					327	86.05						
94.94	1971	94.83										
95.3	1976	95.07										
95.3	1976.2	95.08										
91.93												
93.39												
90.09												
92.77												
94.9	573.3	85.31										
			1194.5	99.95	1192.8	99.81						
			1164.5	97.44	1161.3	97.17						
			1158.4	96.93	1156	96.73						
			1164.6	97.45	1159.3	97.01						
			1137.1	95.15	1131.6	94.68						
							330.2	98.67	322.8	96.46		
							893.2	93.42	890.3	93.12		
							858.9	89.83	856.2	89.56		
							882.7	92.32	881.3	92.17		
							856.4	89.57	853.6	89.27		
							856.4	89.57	853.6	89.27		
			#DIV/0!	87	#DIV/0!	86.45	#DIV/0!	85.77	#DIV/0!	85.48		
			1115.4	106.06								
			1115.7	106.08	1108.4	105.4						
			1145.3	108.9	1139.3	108.33						

125.46		121.99		109.87		118.29		106.46		108.93		
			West to East/North (Winter) - WNF									
			Pre-LRTP				Post-LRTP					
			MP		ATC		MP		ATC			
MW wo rmers)	550 MW (One transformer)		416 MW		416 MW		416 MW		416 MW			
												Comments
ATC_900	S2_SRF_ATC_550		S1_WNF_MP		S1_WNF_ATC		S2_WNF_MP		S2_WNF_ATC			
AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading		
			1115	106.02	1110	105.54						
			1142.3	108.62	1136.9	108.11						
											The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.	
89.42							487.2	94.56				
							487.2	94.56				
89.29										496.3	96.32	
89.29										496.3	96.32	
											The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.	
											The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.	
							487.5	94.63				
							487.5	94.63	527.7	102.43	The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.	
									530.2	102.92	The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.	
									525.6	102.02	The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.	
											The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.	

125.46		121.99		109.87		118.29		106.46		108.93	
			West to East/North (Winter) - WNF								
			Pre-LRTP				Post-LRTP				
			MP		ATC		MP		ATC		
MW w/o transformers)	550 MW (One transformer)		416 MW		416 MW		416 MW		416 MW		
											Comments
ATC_900	S2_SRF_ATC_550		S1_WNF_MP		S1_WNF_ATC		S2_WNF_MP		S2_WNF_ATC		
AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	Cont Flow (MVA)	AC %Loading	
88.23									488	94.73	
							479.4	93.05			
							479.4	93.05	521.3	101.19	The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.
							478.7	92.91	523.5	101.61	The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.
									518.8	100.71	The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.
							478.7	92.91			
			557	108.12	564.5	109.58					
			557	108.12							
			557	108.12							
			557	108.12							
											The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.
											The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.
											The unique pre-selected setting of Stinson PST in in MP's models is the reason behind this overload. With a different setting, this overload can be avoided.

