

**Computation of Power Transfer Distribution Factors (PTDFs)
for SW Minnesota-->"Twin Cities 80%/Eastern WI 20%" Deliveries
NDEX = 2080, MHEX = 2175 MW**

SW Minnesota generation level, MW:	Riel-Roseau Co 500 kV loading, MW			DF %	MW Initial reduction w/r to existing	MW incremental delivery accommodated	Total delivery accommodated (starting from 825 MW)
	1600	1200	difference				
Existing System ("825 MW" + BRIGO "31A" facilities)	1900.7	1878.5	22.2	5.55	--	--	
Base Plan	1849.3	1831.7	17.6	4.40	46.8	1064	1889
Base + 40% series comp	1835.8	1819.3	16.5	4.13	59.2	1435	2260
Base + 50% series comp	1831.3	1815.0	16.3	4.07	63.5	1558	2383
Base + 60% series comp	1825.7	1810.0	15.7	3.93	68.5	1745	2570
Base + 70% series comp	1819.8	1804.5	15.3	3.82	74.0	1935	2760
Base Plan+Double Circuit Lyon Co-FRA-Helena 34	1830.6	1814.5	16.1	4.02	64.0	1590	2415
Base Plan+Double Circuit + 40% series comp	1818.8	1803.8	15.0	3.75	74.7	1992	2817
Base Plan+Double Circuit + 50% series comp	1815.3	1800.7	14.6	3.65	77.8	2132	2957
Base Plan+Double Circuit + 60% series comp	1811.2	1796.9	14.3	3.57	81.6	2283	3108
Base Plan+Double Circuit + 70% series comp	1806.9	1792.8	14.1	3.53	85.7	2431	3256
System Alt (with TC So Loop & BRK-Lyon Co 345 kV)	1839.0	1821.7	17.3	4.32	56.8	1313	2138
System Alt (original)	1847.4	1829.3	18.1	4.53	49.2	1087	1912