The following material presents insight into potential redispatch options in the context of Lore-Turkey River-Cassville 161kV limits found in the revised MAIN TASG (Transmission Assessment Study Group)2003 summer assessment.

Listed below are some redispatch factors for selected units from the MAIN 2003 summer TASG case (posted on 4/11/2003). The units listed below were chosen because of: 1) Their proximity to the Lore-Turkey River-Cassville 161 kV line and 2) Output levels in the TASG 2003 base case indicate that they may be available for redispatch. Redispatch factors (composed of Generation Shift Factors (GSF) pairs) for selected units are shown based on their size and proximity. The redispatch factors show what percentage of the redispatch will be expected to flow across the selected limit.

Lore-Turkey River-Cassville 161kV for loss of Wempletown-Paddock 345kV + 69 operating steps			**Redispatch Factor**
Stoneman (52MW DPC) to Cordova		(CE, 451 MW on in case)	49.2%
Stoneman (52MW DPC) to Beaver Channel			51.3%
Stoneman (52MW DPC) to Rockford Energy Center		(CE, 377MW on in case)	46.6%
Stoneman (52MW DPC) to Collins			45.2%
Stoneman (52MW DPC) to Joliet			45.1%
Stoneman (52MW DPC) to Elk Mound		(DPC, 63 MW on in case)	39.8%
Germantown (WEC)	to Cordova	(CE)	8.6%
Germantown (WEC)	to Beaver Channel	(ALTW, 234MW on in case)	10.7%
Fitchburg (MGE)	to Cordova (CE)		14.5%
Collins (CE)	to Cordova (CE)		4.0%

Real-time redispatch must take into account other potential transmission limitations. NERC MRD (Market ReDispatch) policy allows for non-firm redispatch to support firm transmission service to the extent it remains flowing and is not curtailed by other TLR activity. For example, a Stoneman against Rockford Energy Center redispatch has a 6.2% factor in the aggravating direction for Flowgate 3006 ECL-ARP. That redispatch direction would be subject to TLR activity on Flowgate 3006.

The **attached spreadsheet** lists additional GSFs (Generation Shift Factors) for selected units with significant size and proximity to the Lore-Turkey River-Cassville 161kV. The GSFs are referenced to the Stoneman generation, which is in close proximity to the downstream end of Lore-Turkey River-Cassville 161kV. The Net Redispatch shift factors can be obtained by subtracting the decremented (dec) unit GSF from the increased (inc) unit GSF.

Redispatch Factor = (GSF_{inc} - GSF_{dec}) *100% (a negative factor would reduce flow)

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GSF Analysis related to potential redispatch options

to relieve Lore-Turkey River-Cassville 161kV flows for the outage of Wempletown Paddock 345kV.

Data is based on the MAIN 2003 summer TASG case posted 4/11/2003
GSF's for selected units are shown based on their size and proximity.
GSF are referenced to the Stoneman generation, which is in close proximity to the downstream end of Lore-Turkey River-Cassville 161kV.
The Net Redispatch shift factors can be obtained by subtracting the dec unit GSF from the inc unit GSF.

Subsystem (Case Bus#_ Bus name)	Flowgate 3704 Powshk-Reasnr flo Montez-Bondu	Notes	Flowgate 6801 QuadCty West	Notes	Flowgate 6004 MWSI	Notes	Flowgate 6009 Cooper_S	Notes	Flowgate 3006 EauCl-Arpin	Notes	**Flowgate 3707+ Lore-TurkeyRv161 flo Wemp-Pad345** **+69kV Op steps**	Notes
34024_LANS5_4G	-0.0156		-0.1162		0.0355		0.0328		0.0793		**0.3487**	
34041_BEVCHN28	0.0167		-0.0107		-0.0062		-0.0184		-0.016		**0.5127**	
34090_ARNOLD1G	-0.0021		-0.268		-0.0095		0.0229		0.03		**0.478**	
34146_OTTUMW1G	0.1141		-0.2564		0.0414		0.0243		0.0174		**0.469**	
35981_LEECO_G1	0.0113		0.2123		-0.0184		-0.0381		-0.0463		**0.475**	
37524_BYRON_1U	0.0087		0.1656		-0.0246		-0.0423		-0.0582		**0.4688**	
37526_COLLI_1U	0.0033		0.0488		-0.0117		-0.0733		-0.0539		**0.4523**	
37542_JO_29_7U	0.0041		0.0597		-0.0171		-0.0674		-0.059		**0.4508**	
37551_QUAD__1U	0.0183		0.3628		-0.007		-0.0221		-0.0208		**0.4927**	
37616_CORDO_	0.0183		0.3656		-0.007		-0.0222		-0.0209		**0.4923**	
37620_ROCKF_BP	0.0077		0.1449		-0.0262		-0.0448		-0.0619		**0.4658**	
37655_KENDA_1C	0.0044		0.0562		-0.0163		-0.0674		-0.0579		**0.4515**	
39000_NED_G1	-0.0005		0.0063		-0.0048		-0.0028		-0.0099		**0.033**	
39043_ROR_G5	0.0041		0.0998		-0.0445		-0.038		-0.0871		**0.3501**	
39137_CHA1_18	0.0029		0.0902		-0.0551		-0.0357		-0.1024		**0.3571**	
39277_CCD_GT1	0.0017		0.071		-0.0634		-0.04		-0.1169		**0.3911**	
39323_GER_GT1	0.0011		0.062		-0.0682		-0.0416		-0.1247		**0.4059**	
39403_PRS_GT1	0.0028		0.0733		-0.0478		-0.0482		-0.0968		**0.4114**	
39430_PL_PRG1	0.003		0.0684		-0.0421		-0.0534		-0.0905		**0.4309**	
39590_PUL_G7	-0.0027		0.0371		-0.1132		-0.0282		-0.1876		**0.3998**	
39678_WES_G3	-0.0101		-0.0115		-0.1597		-0.0009		-0.2703		**0.3955**	
39822_FCH_14_1	0.002		0.0787		-0.0584		-0.0327		-0.1063		**0.3471**	
39968_BLT_G7	0.0017		0.0752		-0.0601		-0.0319		-0.1088		**0.3459**	
63804_CBLUF1G	-0.0698		-0.1843		0.1169		0.1818		0.0466		**0.455**	
63881_NEAL__1G	-0.0664		-0.1809		0.1641		0.1555		0.0699		**0.4494**	
64487_LOUIS31G	0.0266		-0.4238		0.0023		-0.0092		-0.0017		**0.4836**	
68701_STONE	**0**		**0**		**0**		**0**		**0**		**0**	
69397_ELKMDGEN	-0.0221		-0.0944		0.3897		0.0412		0.2476		**0.3982**	
69538_ALMA5_4G	-0.0219		-0.11		0.2064		0.0438		0.1706		**0.3866**	
69542_JPM	-0.0219		-0.11		0.2064		0.0438		0.1706		**0.3866**	