

## August 6, 2004 Chronic Limiter Update

2003 ATC Chronic Limiters (Jan 1 – Dec 31):

2003 Rank	Flowgate Name	MWh Refused	Solution Proposed
1	Paddock Transformer flo Paddock-Rockdale	6,694,154	<b>2<sup>nd</sup> Paddock 345/138kV transformer and 2<sup>nd</sup> Paddock – Town Line Road 345kV line <sup>1</sup></b>
2	Lore-Turkey River flo Wempletown-Paddock (Op Guide)	5,386,015	2nd Wempletown – Paddock 345kV line (2005)
3	Turkey River-Casville flo Wempletown-Paddock (Op Guide)	5,202,641	2nd Wempletown – Paddock 345kV line (2005)
4	Zion – Pleasant Prairie flo Wempletown – Paddock	5,155,125	2nd Wempletown – Paddock 345kV line (2005)
5	Turkey River – Cassville flo Wempletown – Paddock	5,057,806	2nd Wempletown – Paddock 345kV line (2005)
6	Albers – Paris flo Wempletown – Paddock	4,363,774	2nd Wempletown – Paddock 345kV line (2005)
7	Stiles – Pioneer flo N. Appleton – Lawn Rd	3,970,349	Rebuild Morgan – Falls – Pioneer – Stiles (2005)
8	Cassville – Nelson Dewey flo Wempletown – Paddock	3,521,114	2nd Wempletown – Paddock 345kV line (2005)
9	Zion – Pleasant Prairie flo Zion – Arcadian	3,373,179	<b>A change in ARS TRM methodology will lead to increased capacity on this flowgate</b>
10	Pleasant Prairie – Racine flo Wempletown – Paddock	3,310,364	2nd Wempletown – Paddock 345kV line (2005)
11	Flow South OTDF	3,262,376	Plains – Stiles Projects (2006) Cranberry – Conover 138kV line (2007)
12	Flow South PTFDF	3,020,095	Plains – Stiles Projects (2006) Cranberry – Conover 138kV line (2007)
13	N. Appleton – Lost Dauphin flo N. Appleton – Mason St.	2,900,955	Forest Junction Substation (5/2003)
14	Lore – Turkey River flo Wempletown – Paddock	2,859,133	2nd Wempletown – Paddock 345kV line (2005)
15	Stiles – Amberg flo Morgan – Plains	2,232,681	Plains – Stiles Projects (2006) Cranberry – Conover 138kV line (2007)
16	N. Appleton – Lost Dauphin flo East Krok – Kewaunee	2,199,936	Forest Junction Substation (5/2003)
17	Eau Claire – Arpin PTFDF	2,181,033	Arrowhead – Gardner Park 345kV line (2008)
18	N. Appleton – Lost Dauphin flo Kewaunee Transformer	2,166,314	Forest Junction Substation (5/2003)
19	Amberg – Plains flo Morgan – Plains	2,150,880	Plains – Stiles Projects (2006) Cranberry – Conover 138kV line (2007)
20	Pleasant Prairie – Arcadian flo Pleasant Prairie – Racine	2,132,856	<b>Increase emergency temperature limit of Pleasant Prairie – Arcadian 345kV line to 167° F. <sup>1</sup></b> <b>Bain – Racine 345kV line (2012)</b>

<sup>1</sup> Provisional project, but not yet included in Ten Year Assessment

2004 ATC Chronic Limiters (Jan 1 – Jun 30):

2004 Rank	Flowgate Name	MWh Refused	Solution Proposed
1	Turkey River – Cassville flo Wempletown – Paddock	5,142,262	2nd Wempletown – Paddock 345kV line (2005)
2	Zion – Pleasant Prairie flo Wempletown – Paddock	3,652,457	2nd Wempletown – Paddock 345kV line (2005)
3	Lore – Turkey River flo Wempletown – Paddock	3,557,925	2nd Wempletown – Paddock 345kV line (2005)
4	Albers – Paris flo Wempletown – Paddock	3,521,604	2nd Wempletown – Paddock 345kV line (2005)
5	Paddock Transformer flo Paddock – Rockdale	3,273,499	<b>2<sup>nd</sup> Paddock 345/138kV transformer and 2<sup>nd</sup> Paddock – Town Line Road 345kV line <sup>1</sup></b>
6	Zion – Pleasant Prairie flo Zion – Arcadian	3,048,749	<b>A change in ARS TRM methodology will lead to increased capacity on this flowgate</b>
7	Cassville – Nelson Dewey flo Wempletown – Paddock	2,906,576	2nd Wempletown – Paddock 345kV line (2005)
8	Center – Fiebrantz flo Zion – Arcadian (OpGuide)	2,823,089	<b>4.5 ohm reactor placed in series with the Cornell – Fiebrantz – Center 138kV line <sup>1</sup></b>
9	T Corners – Wien flo Eau Claire – Arpin (OpGuide)	2,809,512	Arrowhead – Gardner Park 345kV line (2008)
10	Eau Claire – Arpin PTFD	2,563,225	Arrowhead – Gardner Park 345kV line (2008)
11	Flow South PTFD	2,353,673	Plains – Stiles Projects (2006) Cranberry – Conover 138kV line (2007)
12	Flow South OTDF	2,132,952	Plains – Stiles Projects (2006) Cranberry – Conover 138kV line (2007)
13	Pleasant Prairie – Racine flo Wempletown – Paddock	1,876,689	2nd Wempletown – Paddock 345kV line (2005)
14	Lore – Turkey River flo Wempletown – Paddock (OpGuide)	1,686,229	2nd Wempletown – Paddock 345kV line (2005)
15	Center – Fiebrantz flo Wempletown – Paddock (OpGuide)	1,479,585	<b>4.5 ohm reactor placed in series with the Cornell – Fiebrantz – Center 138kV line <sup>1</sup></b> 2nd Wempletown – Paddock 345kV line (2005)
16	Russell – Rockdale flo Paddock – Rockdale	1,413,852	Reconductor Russell – Rockdale 138kV line (2004)
17	Turkey River – Cassville flo Wempletown – Paddock (OpGuide)	1,167,339	2nd Wempletown – Paddock 345kV line (2005)
18	Amberg – Plains flo Morgan – Plains	1,132,060	Plains – Stiles Projects (2006) Cranberry – Conover 138kV line (2007)
19	McGulpin – Straits ckt 1 flo McGulpin – Straits ckt 3	1,104,782	<b>3<sup>rd</sup> McGulpin – Straits 138kV cable <sup>1</sup></b>
20	Zion – Arcadian flo Zion – Pleasant Prairie	1,077,275	<b>A change in ARS TRM methodology will lead to increased capacity on this flowgate</b>

<sup>1</sup> Provisional project, but not yet included in Ten Year Assessment