

**Available Flowgate Capability Flow Based Results  
For the Manitoba Hydro Group Study  
MISO Project A000  
12/16/08**

MISO's evaluation of the four transmission service requests must indicate no constraints or mitigation of any determined constraints found in the Network Analysis and the Flowbased Analysis before any of them can be accepted. Thus, before these requests can be accepted, in addition to the constraints to be determined in the Network Analysis evaluation, these requests must mitigate the impact the flowgates identified in the Flowgate Analysis Summary. Details regarding those TSRs are provided below.

Point of Receipt	Point of Delivery	OASIS AREF No.	SIS No.	Capacity	Start Date	Stop Date
MHEB	CIN	A339	76486855	80	5/1/2007	5/1/2009
MHEB	NSP	A340	76486858	80	5/1/2007	5/1/2009
MHEB	NSP	A351	76503369	30	4/1/2008	4/1/2013
MHEB	NSP	A406	76612785	250	11/1/2009	11/1/2014

Note that minimum posted available transfer capacity on the MHEX\_S flowgate is 100 MW, of which 57 MW corresponds to the MISO allocation. If A339 proceeds, MHEX\_S flowgate will not have sufficient transfer capability available for A340, and likewise if A340 proceeds, there would be no available capacity on the MHEX\_S flowgate for A351 and A406.

For A339, the following flowgates are constraints to the transfer. Transmission service cannot be granted without system improvements.

Flowgate Name	Limiting Constraint	Contingency	Rating (MVA)	Lowest Available Flowgate Capacity (pre-transfer)	TDF
MHEX_S	Letellier - Drayton 230 kV Dorsey - Roseau 500 kV Richer - Roseau 230 kV Glenboro - Rugby 230 kV	Base Case	1972	57 out of 100	100.00%
BREWHEJEFROC	Breed - Wheatland 345 kV	Jefferson - Rockport 765 kV	786	-150	26.39%
COOPER_S	Cooper - St. Joe 345 kV Cooper - Fairport 345 kV	Base Case	670	-472	17.62%
FTCAL_S	Fort Calhoun South	Base Case	451	-101	11.18%

For A340, the following flowgate is a constraint to the transfer. Note that if A339 proceeds, then there is no available transfer capability along this flowgate for A340 and thus service could not be granted without transmission improvements. Likewise for A351 and A406, if A339 or A340 proceeds, the MHEX\_S flowgate will have no capacity available and hence system improvements would be required before service can be granted.

Flowgate Name	Limiting Constraint	Contingency	Rating (MVA)	Lowest Available Flowgate Capacity (pre-transfer)	TDF
MHEX_S	Letellier - Drayton 230 kV Dorsey - Roseau 500 kV Richer - Roseau 230 kV Glenboro - Rugby 230 kV	Base Case	1972	57 out of 100	100.00%