

-----Original Message-----

From: Adamyk, Brian [<mailto:badamyk@hydro.mb.ca>]
Sent: Thursday, April 27, 2017 8:59 AM
To: 'Sim, Kevin' <Kevin.Sim@colliersprojectleaders.com>
Cc: Paterson, Scot <Scot.Paterson@colliersprojectleaders.com>; Andrei Aroutiounov <Andrei.Aroutiounov@smithandandersen.com>
Subject: RE: 16347_20170412_Request for Wpg Transit Fault Currents

The attached is still valid

From: Andrei Aroutiounov [<mailto:Andrei.Aroutiounov@smithandandersen.com>]
Sent: April-12-17 5:31 PM
To: Adamyk, Brian
Cc: Sim, Kevin; Paterson, Scot
Subject: 16347_20170412_Request for Wpg Transit Fault Currents

Hi Brian,

We're trying to confirm fault current levels associated with the new 25kV feed to Winnipeg Transit. Could you confirm that fault current on the 25kV loop will not exceed 10KAIC, or Could you advise what is the actual anticipated fault current on the new 25kV loop?

Regards,

Andrei

Smith + Andersen
Andrei Aroutiounov P.Eng.
Senior Project Manager - Electrical
d 204 500 9938 m 204 898 2623

MANITOBA HYDRO
INTEROFFICE MEMORANDUM

FROM Jason Beer C.E.T.
Technical Officer
Protection and Automation
Distribution Eng Dept - Gas & Electric
820 Taylor Ave (1), Winnipeg, MB, R3M 3T1

TO Brian Adamyk
Key Account Officer
Key Account Department
360 Portage Ave (6),
Winnipeg, Manitoba, R3C 0G8

DATE 2016-07-12

SUBJECT UTILITY INFORMATION REQUIRED FOR CITY OF WINNIPEG TRANSIT, 421 OSBORNE, WINNIPEG, MB

Customer Information

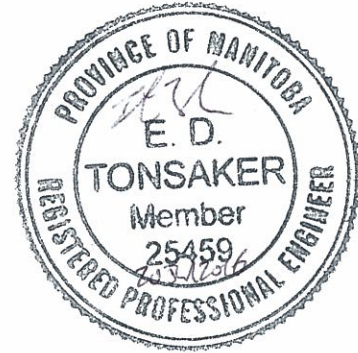
Name: CITY OF WINNIPEG TRANSIT
Address: 421 OSBORNE, WINNIPEG, MB

Source Information

Station: Harrow Station
Feeder: H58

Customer Owned Transformation

Upstream Protection¹: S&C SM4 125E Std Fuse



Fault Levels at Supply Transformer^{2,3}

Switching Configuration	Voltage (kV)	LLL (Amps)	LG (Amps)	R1 (pu)	X1 (pu)	R0 (pu)	X0 (pu)
H58 Normal System Operation ⁴	24.0	6989	7104	0.0691	0.3372	0.2221	0.2755
H58 Horizon Source, All Banks Paralleled	24.0	7354	7349	0.0651	0.3206	0.2221	0.2755

Impedances are per unit on a 100MVA base

Notes

1. Manitoba Hydro sources replacement protection from various manufacturers, therefore the protection stated above is only representative of the protection installed.
2. These values are reflective of the normal and expected maximum available fault levels at the customer location, depending on the configuration of the supply, and can be used for arc flash hazard calculation.
3. The values presented are hypothetical and based on assumptions regarding the resupply of the customer from its current means of supply. The final configuration may result in values different from those shown above. Manitoba Hydro does not communicate changes in fault level or impedance information to customers unless a new request is initiated.
4. The Normal switching configuration is intended for overcurrent protection coordination studies, power quality studies, harmonic assessment and mitigation reports, or power factor correction studies only. The normal fault level information is not to be used for equipment rating purposes.

Jason Beer C.E.T

