

**DETOUR GOLD CORPORATION
SYSTEM IMPACT ASSESSMENT
FOR
DETOUR LAKE PROJECT**

Report No.: RP-160388-02-141-0001

CAA ID No. 2010-380

Rev. 01

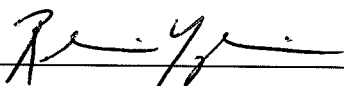
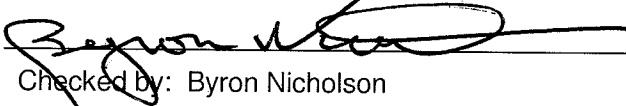
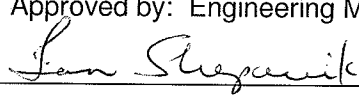
Prepared by:



AMEC Americas Limited
Energy and Mining Division
Power & Process Group
Suite 700, 2020 Winston Park Drive
Oakville, ON L6H 6X7

JULY 2010

APPROVALS

 Prepared by: Fabia Yazdanie, Sukhbir Kalhon	<u>July 20, 2010</u> Date
 Checked by: Byron Nicholson	<u>July 20, 2010</u> Date
N/A	
Approved by: Lead Discipline Engineer	Date
N/A	
Approved by: Engineering Manager	Date
 Approved by: Project Manager – Ian Shepanik	<u>July 20, 2010</u> Date

REVISION HISTORY

Rev.	Description	Prepared By	Checked By	Approved By	Date
A	Original, Draft	RY, SK	BJN	IS	2010/July/14
B	Minor, Non-technical Revisions	RY, SK	BJN	IS	2010/July/16
00	Incorporated IESO comments	RY, SK	BJN	IS	2010/July/19
01	Corrected typing error in 6.1	RY, SK	BJN	IS	2010/July/20

This report was prepared exclusively for Detour Gold Corporation and the Independent Electricity System Operator (IESO), by AMEC Americas Limited, a wholly owned subsidiary of AMEC Inc. The quality of information, conclusions and estimates contained herein is consistent with the level of effort involved in AMEC services and based on:

- information available at the time of preparation,
- data supplied by outside sources, and
- the assumptions, conditions and qualifications set forth in this report.

This report is intended to be used by Detour Gold Corporation and the IESO, subject to the terms and conditions of the contract with AMEC. Other use of, or reliance on, this report by a third party is at that party's sole risk.

TABLE OF CONTENTS

1.0	SUMMARY	2
2.0	INTRODUCTION	2
3.0	EXISTING SYSTEM	3
3.1	BASE CASE CONFIGURATION	3
4.0	PROPOSED SYSTEM	4
4.1	DESCRIPTION OF DETOUR LAKE	4
4.2	DETOUR LAKE PROJECT SYSTEM MODEL	4
5.0	SYSTEM STUDY PARAMETERS.....	4
5.1	DESCRIPTION OF STUDY CASES	4
5.2	SYSTEM CONSTRAINTS.....	5
6.0	IMPACT ON THE IESO-CONTROLLED GRID	6
6.1	STEADY STATE VOLTAGE ANALYSIS	6
6.2	THERMAL ANALYSIS	6
6.3	POWER FLOW CONSTRAINTS	8

LIST OF TABLES

Table 4.1: New Transmission Line Positive Sequence Impedance.....	4
Table 5.1: Summary of Study Cases.....	5
Table 5.2: ORTAC Acceptable System Voltages.....	5
Table 6.1: Summary of Thermal Analysis.....	7
Table 6.2: Monitored Power Flows	8

LIST OF APPENDICES

APPENDIX A: FIGURES.....	9
Appendix A1: Northeastern Ontario Area One Line Diagram with Detour Lake Project	9
Appendix A2: Detour Lake Project One Line Diagram.....	10
APPENDIX B: RESULTS SUMMARY TABLE.....	11

1.0 SUMMARY

This study and simulation results indicate that the addition of a 20 MW supply from 115 kV transmission line C3H to supply for Detour Lake Project construction power will not have a detrimental impact to the IESO controlled grid. This conclusion is based on the system configuration and contingencies studied, which are detailed in section 3.1.

All voltages remained within acceptable limits following the five contingencies studied. The voltage results are shown in Appendix B.

There are no identified thermal or post-contingency power flow limit violations. These study results are listed in Tables 6.1 and 6.2.

Loss of 500 kV transmission line P502X required the IESO identified loads to be rejected in order to maintain the power flows north on transmission lines A8K and A9K at Ansonville TS to remain within the IESO requirements. The Detour Lake Project loads were not required to be rejected in order to keep the power flows on A8K and A9K within the defined limits.

2.0 INTRODUCTION

Detour Gold Corporation (Detour Gold) is proposing to develop a gold mine in north-eastern Ontario, east of Island Falls. The Detour Lake Project will initially be connected to 115 kV transmission line C3H at Island Falls SS via a new 142 km transmission line, which will be built by Detour Gold. The 115 kV line will supply the construction load for the project until the permanent 230 kV transmission line is available. The Detour Lake Project at this stage will consist of one 115 kV–13.8 kV transformer supplying a load of 20 MW at a power factor of 0.9. The largest load in the project is a 1000 HP squirrel cage motor.

The purpose of this System Impact Assessment is to examine the feasibility of the proposed 115 kV connection arrangement of the project and the impact that the new load facility will have on local transmission facilities. This study reviews the steady state voltages and equipment thermal ratings during normal operation as well as during various system contingency outages. These contingencies are defined in section 5.0.

This study does not examine the impact of the Detour Lake project mining and processing loads when it is in service. The impact of the operating load of the facility will be studied in a separate system impact assessment when the project will be connected at 230 kV at Pinard TS. The line will be being designed for 230 kV but will operate at 115 kV at present. The 142 km line will be disconnected from Island Falls SS and extended north by approximately 40 km to connect into Pinard TS at 230 kV in the future.

The study was completed using Power Technologies Inc. (PTI) Power System Simulator (PSS/E), version 30.2 analysis software, in accordance with the IESO Ontario Resource and Transmission Assessment Criteria (ORTAC)¹. An initial model of the Ontario transmission system was provided by the IESO in order to determine the impact of the proposed Detour Lake facility on the existing system.

3.0 EXISTING SYSTEM

Detour Gold is proposing to connect the Detour Lake Project to the 115 kV transmission line C3H at Island Falls SS in the Northeast area of Ontario. A single line diagram of the north eastern region is included in Appendix A1. Connecting the project to Island Falls SS will require the construction of a 142 km transmission line between the Detour Lake Project main substation and Island Falls SS. Island Falls SS is located on the double circuit line C3H between Hunta SS and Abitibi Canyon junction, approximately 54 km north of Hunta SS and 38 km south of Abitibi Canyon.

The closest generation facility to the Detour Lake mine is Abitibi Canyon G2 and G3 units. These units are assumed to be operating in condenser mode for the purposes of this study. All other hydraulic generation is assumed to be out of service. All local thermal generation is assumed to be in service.

3.1 BASE CASE CONFIGURATION

The basis of this assessment is the IESO winter 2009-2010 system model with the following changes or additions made to the Northeast Ontario area. These changes were defined by the IESO in the SIA Technical Study for Detour Gold 115 kV Connection Scope of Work.

- The base assumptions are per [Ontario Resource and Transmission Assessment Criteria](#) (ORTAC);
- Coincident peak load for the area will be as forecast at project's in-service date, and up to 10 years into the future, based on median growth forecast (normal weather);
- Power factor at existing load facilities is assumed to be 0.90;
- Power factor at the Detour Lake Project facility is 0.90;
- Load is modelled as constant MVA for steady state thermal studies;
- Load is modelled as voltage dependent for voltage post contingency, pre-ULTC and transient performance;
- Load is modelled as constant MVA for pre-contingency and post-contingency, post-ULTC;
- All existing transmission facilities are assumed to be in service, except during specified contingencies;
- Transmission ratings are as per owner's specifications (Hydro One);
- Generation dispatch is based on the historical typical conditions;
- Flow North transfer is 730 MW (without Detour Gold);
- Coincident peak load conditions for North eastern Ontario is 1475 MW, not including the Detour facility;
- All local area thermal generation is in-service (TCPL Kapuskasing, Calstock CGS, TCPL Tunis, NP Cochrane);
- Abitibi Canyon generating units G2 and G3 are operating in condenser mode, all other local area hydraulic units are out of service (Harmon GS, Kipling GS, Little Long GS, Smoky Falls GS, Otter Rapids GS, Abitibi Canyon G1, G4 & G5);
- Pinard 230 kV reactors are in-service;
- Porcupine 230 kV SVC is in-service and Kirkland Lake 115 kV SVC is out-of-service;
- Series compensation of X503E and X504E lines are in-service;
- All system autotransformer ULTCs which operate in manual mode are locked during post contingency post-ULTC using the script provided by the IESO and
- Switch shunts are always locked.

4.0 PROPOSED SYSTEM

4.1 DESCRIPTION OF DETOUR LAKE

The Detour Lake Project will be connected to 115 kV transmission line C3H at Island Falls SS with a new 142 km transmission line built by Detour Gold. The line will be designed and built as a 230 kV system using 795 kcmil ACSR conductors and operated at 115 kV during the construction phase. The positive sequence impedance of the new transmission line is shown in Table 4.1 below.

Table 4.1: New Transmission Line Positive Sequence Impedance

	Impedance in Ohms
R	11.36 Ohms
X	69.2 Ohms
B	0.000474 Mhos

Emergency power for the project will be supplied by back-up generators on site. These generators will not be paralleled with the IESO grid.

The Detour Lake Project main substation, during the construction phase, will be equipped with one 230/115 kV-13.8 kV, 42/56/70(78) MVA, ONAN/ONAF/ONAF, Wye-delta transformer, with a positive sequence impedance of 8.5% on a 42 MVA base.

The project will have a peak construction load of 20 MW that will be supplied from one 13.8 kV bus. The starting of the largest load in the project, a 1000 HP booster pump, was not studied. The Detour Lake Project facility has been modelled per the Detour Lake Project single line diagrams included with the 115 kV SIA application.

A single line diagram of the Detour Lake Project configuration and local system facilities is shown in Appendix A2.

4.2 DETOUR LAKE PROJECT SYSTEM MODEL

The 20 MW Detour Lake Project construction load has been lumped and balanced across two 4.16 kV buses connected to the 13.8 kV bus of the facility. Each 10 MW load is connected to the 13.8 kV bus through a 13.8 - 4.16 kV, 12 MVA, 5.75% impedance transformer. The loads were modelled as constant MVA in pre-contingency and post-contingency post-ULTC conditions and as voltage dependent loads in post-contingency pre-ULTC conditions. System modelling settings not described in this report are as provided by the IESO. Refer to section 3.0.

5.0 SYSTEM STUDY PARAMETERS

5.1 DESCRIPTION OF STUDY CASES

The addition of the Detour Lake project to the transmission system was studied under normal conditions and contingencies that were stipulated by the IESO. Computer simulations included thermal analysis and power flow. The studied cases are summarized below.

Table 5.1: Summary of Study Cases

	Case	Detour Lake In-Service	Area Hydraulic Generation In-Service	Contingency
Thermal Analysis	A1	No	No	None
	A2	Yes	No	None
	B3	Yes	No	Loss of C2H (115 kV)
	B4	Yes	No	Loss of C3H (115 kV)
Steady State Voltage Analysis	B1	Yes	No	Loss of P502X (500 kV) with load rejection of Spruce Falls TMP Lines 3 & 4, Abitibi Iroquois Falls Consolidated, and Timmins TS.
	B2	Yes	No	Loss of X503E (500 kV)
	B3	Yes	No	Loss of C2H (115 kV)
	B4	Yes	No	Loss of C3H (115 kV)
	B5	Yes	No	Loss of entire Detour Lake Project

5.2 SYSTEM CONSTRAINTS

The system voltages for both continuous operation and immediately following a contingency must be within the ranges specified in ORTAC. These are given in Table 5.2 below.

Table 5.2: ORTAC Acceptable System Voltages

	Nominal Bus Voltage	500 kV	230 kV	115 kV	Transformer Stations (eg. 44, 27.6, & 13.8 kV)
Pre-Contingency Voltage Limits	Maximum continuous	550 kV	250 kV	127 kV ¹	106%
	Minimum continuous	490 kV	220 kV	113 kV	98%
Voltage Changes Immediately Following a Contingency	% Voltage change pre-ULTC	10%	10%	10%	10%
	% Voltage change post-ULTC	10%	10%	10%	5%
	Maximum value	550 kV	250 kV	127 kV	112% of nominal
	Minimum value	470 kV	207 kV	108 kV	88% of nominal

¹ From ORTAC¹: "Certain buses can be assigned specific maximum and minimum voltages as required for operations. In northern Ontario, the maximum continuous voltage for the 115 kV system can be as high as 132 kV."

The *Ontario Resource and Transmission Assessment Criteria* requires that all line and equipment loads be within their continuous ratings with all elements in service, and within their long-term emergency ratings with any element out of service. Lines and equipment may be loaded up to their short-term emergency ratings immediately following the contingencies to effect re-dispatch, perform switching, or implement control actions to reduce the loading to the long-term emergency ratings.

In addition to these thermal and voltage requirements, post-contingency power flow constraints exist at Ansonville on the A8K and A9K circuits for the loss of the P502X circuit.

6.0 IMPACT ON THE IESO-CONTROLLED GRID

6.1 STEADY STATE VOLTAGE ANALYSIS

The steady state voltage analysis examined the effect of the Detour Lake Project on the voltage performance of the system during five different contingencies identified in Table 5.1. Loads were modelled as voltage dependent for post contingency pre-ULTC, and constant MVA for pre-contingency and post contingency post-ULTC. A table summarizing the voltage performance of relevant nearby buses for these contingencies is shown in Appendix B.

In the five contingencies studied all voltages remained within acceptable limits, as defined by IESO ORTAC, and have minimal impact on the IESO controlled grid.

6.2 THERMAL ANALYSIS

The thermal assessment determined the impact of Detour Lake on the thermal ratings of the existing transmission facilities. The analysis includes an evaluation of the pre-contingency thermal impact on the 115 kV circuits C2H and C3H before the Detour Lake project is in service (Case A1) and a comparison of the flows on the existing system with Detour Lake project connected (Case A2).

All local area thermal generation was assumed to be in-service for the thermal analysis, while local area hydraulic generation was out of service and Abitibi Canyon generating units G2 and G3 are operating in condenser mode.

A summary of the thermal analysis on transmission lines C2H and C3H is shown in Table 6.1 below. No over current issues were identified.

Table 6.1: Summary of Thermal Analysis

Circuit	Sections		Case A1 (no DG)	Case A2 (with DG)	Current (A)			
	From	To			Case B3 (loss of C2H)	Case B4 (loss of C3H)	Cont. (Amps)	LTE (Amps)
C2H	HUNTA_SS	HUNTA_SS_JC2	109	134	0	196	1090	1410
	HUNTA_SS_JC2	HUNTA_J_C2H	54	67	0	98	500	500
	HUNTA_SS_JC2	GREENWT_J1C2	55	67	0	92	500	500
	HUNTA_J_C2H	GREENWT_J2C2	52	65	0	92	500	500
	GREENWT_J1C2	GREENWT_J2C2	0	0	0	88	500	500
	GREENWT_J1C2	ISLAND_FL_J1	46	60	0	97	500	500
	GREENWT_J2C2	ISLAND_FL_J3	46	60	0	92	500	500
	ISLAND_FL_J1	ISLAND_FL_J3	0	0	0	90	500	500
	ISLAND_FL_J1	C2H_STR51_J1	46	60	0	88	500	500
	ISLAND_FL_J3	C2H_STR52_J2	44	58	0	98	850	1100
	C2H_STR51_J1	C2H_STR52_J2	0	0	0	0	850	1100
	C2H_STR51_J1	CANYON_SS	43	57	0	0	850	1100
	C2H_STR52_J2	CANYON_SS	54	67	0	0	850	1100
C3H	HUNTA_SS	HUNTA_J_C3H	110	163	281	0	1090	1280
	HUNTA_J_C3H	HUNTA_SS_JC3	55	81	139	0	520	520
	HUNTA_J_C3H	GREENWT_J2C3	53	80	139	0	520	520
	HUNTA_SS_JC3	GREENWT_J1C3	55	81	97	0	520	520
	GREENWT_J1C3	GREENWT_J2C3	0	0	94	0	520	520
	GREENWT_J2C3	ISLAND_FL_J4	47	77	140	0	520	520
	GREENWT_J1C3	ISLAND_FL_J2	47	77	136	0	520	520
	ISLAND_FL_J2	ISLAND_FL_J4	0	49	99	0	520	520
	ISLAND_FL_J4	C3H_STR52_J2	45	40	94	0	520	520
	ISLAND_FL_J2	C3H_STR51_J1	47	43	140	0	850	1100
	C3H_STR51_J1	C3H_STR52_J2	0	0	0	0	850	1100
	C3H_STR52_J2	CANYON_SS	44	37	49	0	850	1100
	C3H_STR51_J1	CANYON_SS	44	37	0	0	850	1100

6.3 POWER FLOW CONSTRAINTS

In addition to the voltage and thermal analysis, there are also post-contingency power flow constraints that need to be met.

The combined total real power flows on transmission lines A8K and A9K at Ansonville TS cannot exceed 40 MWs flowing south and 75 MWs flowing north for the loss of the P502X circuit, under Normal L/R operating conditions.

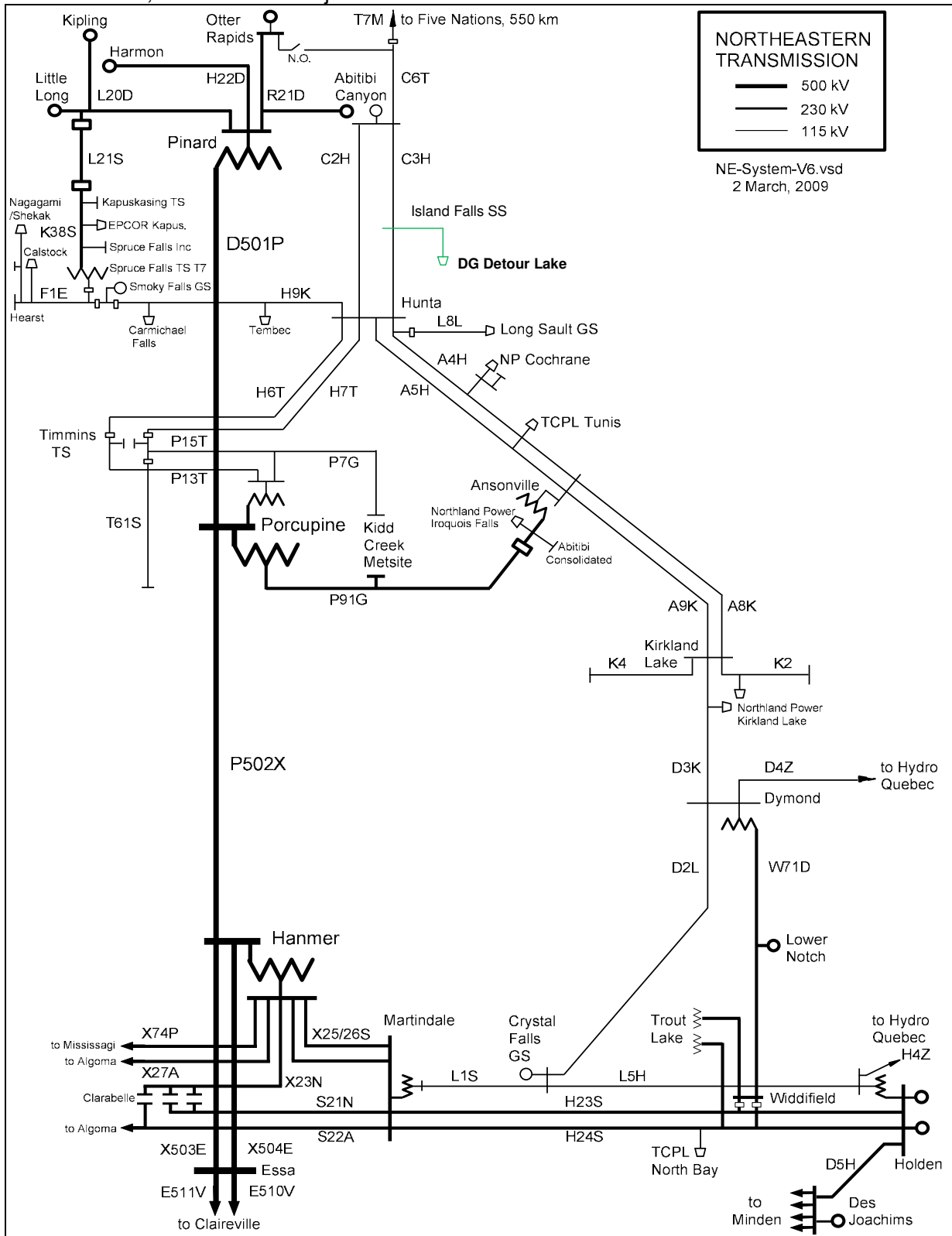
Case B1 (loss of 500 kV transmission line P502X) required the IESO identified loads to be rejected in order to maintain the power flows north within the IESO requirements. The Detour Lake Project loads were not required to be rejected in order to keep the power flows on A8K and A9K within the defined limits.

A summary of the real power flows on transmission lines A8K and A9K are shown in Table 6.2 below. The power flow constraints were not exceeded with the Detour Lake Project remaining connected.

Table 6.2: Monitored Power Flows

Contingency	Circuit	Pre Contingency Flow (MW)	Post Contingency Flow (MW)	Maximum Allowable Flow
Case B1 Loss of P502X	A9K Ansonville TS to Monteith DS	9.4 (North)	20.9 (North)	Combined A8K and A9K not to exceed 40 MW South 75 MW North
	A8K Ansonville TS to Monteith JA8	13.8 (North)	25.5 (North)	

Appendix A1: One Line Diagram of Northeastern Ontario Area
 with Detour Gold, Detour Lake Project

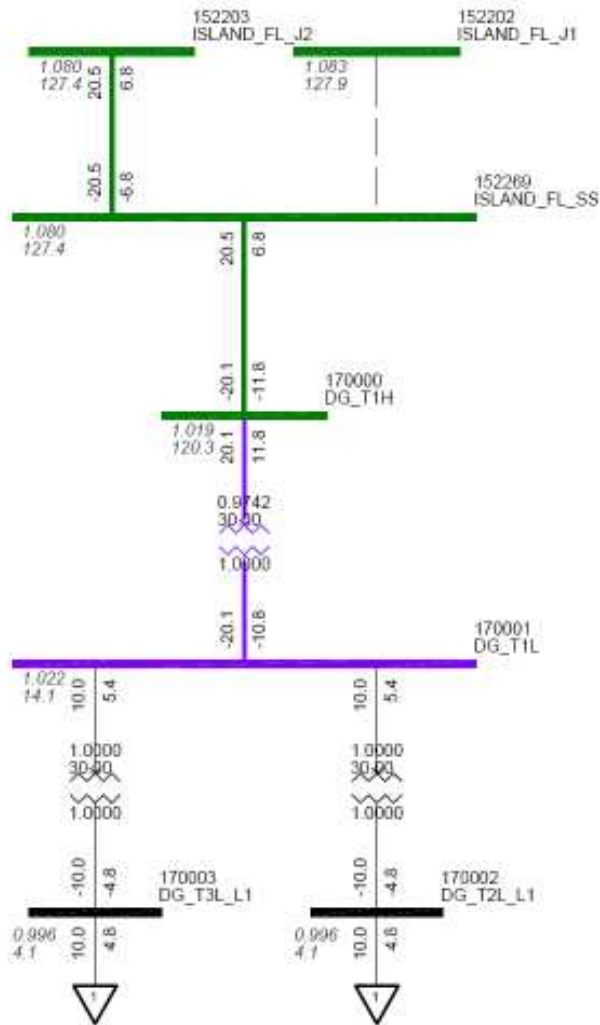


Source: IESO, Scope of Technical Study for Detour Gold 115 kV Connection Scope of Work, Appendix E.

Appendix A2: One Line Diagram of the Detour Lake Project

**DETOUR GOLD CORPORATION
 DETOUR LAKE PROJECT
 ONE LINE DIAGRAM**

2009/10 WINTER LF----- 5_5B5P4D6N0LK16BK4LB4LX11SD1OS
 -406BLIP,3236FABC,3048FETT,-41FN,1041CLAN,728FIO,
 WED, JUL 14 2010 10:08



Bus - VOLTAGE (KV/PU)
 Branch - MW/MVAR
 Equipment - MW/MVAR
 KV: <=5.000 <=15.000 <=132.000 >132.000

APPENDIX B: RESULTS SUMMARY TABLE

**Detour Gold Corporation
Detour Lake Project 115kV Study with 20MW @ 0.9pf Construction Load**

Bus#	Bus Name	Nominal (kV)	IESO Provided System (kV) ¹	Contingency B1: Loss of P502X					Contingency B2: Loss of X503E					Contingency B3: Loss of C2H				
				Pre-Contingency	Post-Contingency				Pre-Contingency	Post-Contingency				Pre-Contingency	Post-Contingency			
				Pre-Contingency (kV)	Pre_ULTC (kV)	Change %	Post_ULTC (kV)	Change %	Pre-Contingency (kV)	Pre_ULTC (kV)	Change %	Post_ULTC (kV)	Change %	Pre-Contingency (kV)	Pre_ULTC (kV)	Change %	Post_ULTC (kV)	Change %
152000	HANMER_TS	500	530.02	529.43	529.05	-0.07	529.60	0.03	529.43	512.15	-3.26	508.97	-3.86	529.43	529.25	-0.03	529.10	-0.06
152001	PINARD_TS	500	538.67	537.67	524.40	-2.47	524.10	-2.52	537.67	525.30	-2.30	523.37	-2.66	537.67	536.90	-0.14	536.70	-0.18
152002	PORCUPINE_TS	500	536.75	535.75	520.80	-2.79	520.50	-2.85	535.75	522.70	-2.44	520.67	-2.81	535.75	535.00	-0.14	534.85	-0.17
152051	ANSONVILLE	220	243.06	242.64	239.03	-1.49	238.92	-1.53	242.64	239.54	-1.28	239.51	-1.29	242.64	242.26	-0.15	242.20	-0.18
152054	HANMER_TS	220	247.76	247.51	247.41	-0.04	247.68	0.07	247.51	240.20	-2.96	238.59	-3.60	247.51	247.41	-0.04	247.37	-0.06
152059	PINARD_TS	220	244.31	243.87	238.08	-2.37	237.95	-2.43	243.87	238.41	-2.24	237.54	-2.60	243.87	243.52	-0.14	243.43	-0.18
152060	PORCUPINE_TS	220	247.43	246.99	242.00	-2.02	242.00	-2.02	246.99	242.00	-2.02	242.00	-2.02	246.99	246.62	-0.15	246.53	-0.19
152206	ANSONVILLE	118.05	126.21	125.96	124.50	-1.16	124.31	-1.31	125.96	124.78	-0.94	124.72	-0.98	125.96	125.63	-0.26	125.59	-0.29
152212	CANYON_SS	118.05	128.92	128.14	127.34	-0.62	127.19	-0.74	128.14	127.34	-0.62	127.26	-0.69	128.14	127.81	-0.26	127.77	-0.29
152261	HUNTA_SS	118.05	127.84	127.07	125.79	-1.00	125.62	-1.14	127.07	125.79	-1.00	125.72	-1.06	127.07	126.30	-0.60	126.24	-0.65
152269	ISLAND_FL_SS	118.05	128.69	127.45	126.48	-0.76	126.30	-0.90	127.45	126.48	-0.76	126.38	-0.84	127.45	126.90	-0.43	126.84	-0.47
152273	KAPUSKAS_TS	118.05	123.27	123.12	123.07	-0.04	122.96	-0.13	123.12	121.62	-1.22	121.27	-1.50	123.12	122.82	-0.24	122.77	-0.28
152279	KIRKLD_LK_60	118.05	125.51	125.44	125.14	-0.24	125.11	-0.26	125.44	124.79	-0.52	124.63	-0.65	125.44	125.32	-0.09	125.30	-0.11
152295	MONTEITH_DS	118.05	125.97	125.73	124.28	-1.15	124.08	-1.31	125.73	124.60	-0.90	124.52	-0.96	125.73	125.43	-0.24	125.39	-0.27
152316	PORCUPINE_TS	118.05	128.59	128.32	125.72	-2.02	125.57	-2.14	128.32	125.56	-2.15	125.69	-2.05	128.32	128.00	-0.25	127.94	-0.29
152319	RAMORE_A9K	118.05	125.90	125.76	125.00	-0.60	124.91	-0.68	125.76	124.87	-0.71	124.76	-0.80	125.76	125.55	-0.17	125.52	-0.19
152341	TIMMINS_K1H6	118.05	128.43	128.14	125.62	-1.97	125.45	-2.10	128.14	125.46	-2.09	125.63	-1.96	128.14	127.81	-0.26	127.74	-0.31
152342	TIMMINS_K23	118.05	127.96	127.67	125.55	-1.66	125.38	-1.79	127.67	125.00	-2.09	125.03	-2.07	127.67	127.34	-0.26	127.27	-0.31
152392	MONTEITH_JA8	118.05	126.09	125.85	124.44	-1.12	124.24	-1.28	125.85	124.72	-0.90	124.65	-0.95	125.85	125.55	-0.24	125.52	-0.26
170000	DG_T1H	118.05		120.28	119.35	-0.77	118.97	-1.09	120.28	119.35	-0.77	119.07	-1.01	120.28	119.76	-0.43	119.60	-0.57
170001	DG_T1L	13.8		14.11	14.00	-0.78	13.95	-1.15	14.11	14.00	-0.78	13.96	-1.07	14.11	14.05	-0.44	14.02	-0.60

Bus#	Bus Name	Nominal (kV)	IESO Provided System (kV) ¹	Contingency B4: Loss of C3H					Contingency B5: Loss of Entire Detour Gold Project				
				Pre-Contingency	Post-Contingency				Pre-Contingency	Post-Contingency			
				Pre-Contingency (kV)	Pre_ULTC (kV)	Change %	Post_ULTC (kV)	Change %	Pre-Contingency (kV)	Pre_ULTC (kV)	Change %	Post_ULTC (kV)	Change %
152000	HANMER_TS	500	530.02	529.43	529.65	0.04	529.75	0.06	529.43	529.95	0.10	530.18	0.14
152001	PINARD_TS	500	538.67	537.67	537.70	0.01	537.80	0.02	537.67	538.80	0.21	539.10	0.27
152002	PORCUPINE_TS	500	536.75	535.75	535.85	0.02	535.90	0.03	535.75	536.85	0.21	537.16	0.26
152051	ANSONVILLE	220	243.06	242.64	242.62	-0.01	242.64	0.00	242.64	243.17	0.22	243.26	0.26
152054	HANMER_TS	220	247.76	247.51	247.59	0.03	247.63	0.05	247.51	247.72	0.08	247.83	0.13
152059	PINARD_TS	220	244.31	243.87	243.87	0.00	243.91	0.02	243.87	244.38	0.21	244.51	0.26
152060	PORCUPINE_TS	220	247.43	246.99	246.99	0.00	247.02	0.01	246.99	247.50	0.21	247.63	0.26
152206	ANSONVILLE	118.05	126.21	125.96	125.86	-0.08	125.86	-0.08	125.96	126.33	0.29	126.37	0.33
152212	CANYON_SS	118.05	128.92	128.14	128.57	0.33	128.59	0.35	128.14	129.30	0.91	129.39	0.98
152261	HUNTA_SS	118.05	127.84	127.07	127.05	-0.02	127.06	-0.01	127.07	128.13	0.84	128.21	0.90
152269	ISLAND_FL_SS	118.05	128.69	127.45					127.45	129.35	1.49	129.43	1.55
152273	KAPUSKAS_TS	118.05	123.27	123.12	122.93	-0.16	122.93	-0.16	123.12	123.36	0.20	123.43	0.25
152279	KIRKLD_LK_60	118.05	125.51	125.44	125.37	-0.06	125.37	-0.06	125.44	125.55	0.08	125.57	0.10
152295	MONTEITH_DS	118.05	125.97	125.73	125.65	-0.06	125.65	-0.06	125.73	126.08	0.28	126.12	0.31
152316	PORCUPINE_TS	118.05	128.59	128.32	128.23	-0.07	128.24	-0.06	128.32	128.66	0.27	128.75	0.34
152319	RAMORE_A9K	118.05	125.90	125.76	125.66	-0.08	125.68	-0.07	125.76	125.97	0.17	126.01	0.20
152341	TIMMINS_K1H6	118.05	128.43	128.14	128.05	-0.07	128.06	-0.06	128.14	128.51	0.29	128.61	0.37
152342	TIMMINS_K23	118.05	127.96	127.67	127.58	-0.07	127.59	-0.06	127.67	128.04	0.29	128.14	0.37
152392	MONTEITH_JA8	118.05	126.09	125.85	125.77	-0.06	125.78	-0.05	125.85	126.20	0.27	126.24	0.31
170000	DG_T1H	118.05		120.28					120.28	131.51	9.33	131.59	9.40
170001	DG_T1L	13.8		14.11					14.11				

 Out of Service by Configuration

1: SVC at Kirkland TS out of service.