

BC HYDRO

T&D SYSTEM OPERATIONS

OPERATING ORDER 5T-10

RATINGS FOR ALL TRANSMISSION CIRCUITS 60 KV OR HIGHER

Supersedes 5T-10 issued 20 September 2018

Effective Date: 26 September 2018

Review Year: 2022

APPROVED BY: *Original signed by:*

Martin Hon
Specialist Engineer
T&D System Operations

| Denotes Revision

1.0 GENERAL

1.1 Intent and Scope

This operating order defines the operating limits of all transmission circuits. The continuous operating limit of a circuit is the minimum of either the maximum continuous rating of equipment at the substation (e.g. sectionalizing switches, bus, etc.), or the overhead or underground conductor ratings. A temporary overload capability may exist for some individual circuits. Ratings for all transmission circuits 60kV and above are found in Appendix 1.

When an outage of a Level III or IV circuit causes the remaining Level III or IV circuit to be radially connected to a generation source or IPP above 25 MW, that remaining circuit is automatically raised to Level II. Further information is found in:

- OO 1J-11 - Power System Operation – Authority and Responsibility
- OO 1T-53 - Implementation of BC Hydro Generation LOBs Commercial Management System by BC Hydro.

1.2 Policy and Process

The review and update of 5T-10 is the responsibility of the T&D System Operations (TDSO) General Manager and the responsibility is delegated to the Operations (Ops) Planner. The Ops Planner is to provide recommendation for signing by the TDSO Specialist Engineer (delegated by the TDSO General Manager). The Ops Planner will work with the PM and/or AIM-AS to ensure the rating is confirmed and updated in 5T-10.

All ratings can be reviewed by Asset Investment Management, Asset Sustainment (AIM AS) which includes staff within the Lines Strategy and Standards or Stations/P&C Strategy and Standards departments. In addition to circuit conductor/clearance ratings, AIM-AS (Stations/P&C) will review for any protection changes/recommendations or equipment limitations and provide updated ratings, and/or drive PN changes, as necessary.

A Commissioning Notice to Energize (CNE) can be used to confirm ratings of new or updated circuits because it confirms that the technical specifications and operations requirements have been reviewed and accepted by a Professional of Record.

The Real Time Operations (RTO) System Control Manager (SCM) can temporarily de-rate the circuit rating prior to receiving new rating confirmation from AIM-AS or CNE, but not increase circuit ratings.

A Transmission Line Plant Alteration document (PA) without an associated CNE will **not** be used to verify ratings, only to confirm assets are in service (as built).

Subsequent to the revision of 5T-10, the following operating tools need to be updated:

- EMS alarms update: CPC and RTS SCADA teams are notified by distribution list when 5T-10 is updated. Analog alarm and warnings settings are updated accordingly.
- Other operating order update requirements: Ops Planner must confirm and remove ratings from other orders and cite the reference to 5T-10, and prepare for signing by the responsible BC Hydro manager.

1.3 Circuit Rating

The overall rating of a circuit is determined by taking the most restrictive rating between Protection (CT), Disconnect, and Conductor (cable or overhead) ratings associated to the same circuit. Where a circuit has taps, the distribution of the loading on the segments of the circuit, and the locations of the telemetry must be considered. During a contingency, for instance, the source end may reverse with the receiving end, and different line sections will be limiting. If taps exist for a circuit, and segment information is NOT provided, then

the circuit limitation is based upon the minimum of all the segments, and tap loading does not have to be considered.

The overload rating of a cable is dependent on variable factors, such as soil resistivity, load factor (assumed as 80%), duration of load, loading prior to emergency, etc., which can fluctuate widely in individual cases. The overload rating of underground cables are intended as a guide only and must be applied with discretion.

Winter ratings apply during November to April and summer ratings apply during May to October. For overhead conductors, the summer ratings assume that the sun is shining on the conductor and the winter ratings do not. For cable ratings, different ground temperatures are assumed for summer versus winter.

1.4 Conductor Temperature Limitations

Severe overloading of transmission conductors may cause permanent damage, through annealing of the steel and/or aluminum strands. A conductor that is nominally rated 590 A, if subjected to a current of 1200 A, will reach a temperature of 300°C. Within 12 minutes, the aluminum portion will lose 40% of its strength. This same conductor at 1000 A would reach 200°C and will lose 10% of its strength in 12 minutes. Overloads of these magnitudes must be reduced quickly to avoid permanently damaging the conductors.

Dependent upon the type of aluminum, significant loss of strength can begin at conductor temperatures as low as 60°C. However, most 'typical' conductors show no loss of strength until the 80°C – 90°C range is reached. For high steel content conductors, the limit may be higher, depending upon the amount of steel content. The conductor type and normal temperature are an indication of the temperature at which the limiting conductor can be operated continuously.

1.5 Clearance Limitations

Overhead sections of transmission circuits are required to meet minimum clearances for safety between conductor to ground and conductor to underbuilt circuits. Conductor sag and tension affect clearances, which are further influenced by factors such as conductor temperature, conductor creep, wind, and ice loading. For operating purposes, the conductor temperature at which the maximum allowable sag occurs will be used to determine the clearance limitation. This limitation is NOT to be exceeded without additional clearance monitoring procedures in place (see exceptions, Section 2.3).

1.6 Normal Rated Capacity

The rating of a transmission circuit is dependent upon ambient temperature that is normally defined to be 30°C ambient for summer and 0°C ambient for winter.

Overhead transmission circuit ratings may be adjusted by the actual ambient air temperature. The ambient air temperature must be picked as a maximum assumed to occur at any point in the circuit at the time. Ambient assumptions should be revisited should temperatures rise appreciably.

Pro-rating is acceptable for temperatures extending 10°C higher and lower than the Summer and Winter rating temperatures given in Appendix 1. This results in a valid pro-rated temperature range of -10°C to 40°C. For temperatures beyond this range, contact the appropriate Transmission Operation Manager. Note that both the normal and overload values can be pro-rated by this calculation.

Do NOT pro-rate when a circuit rating section is composed of both cable and overhead components, with different components limiting at different times.

When the loading on any of the cable circuits exceeds the Normal ratings, the SCM must be notified, so that the appropriate manager can investigate and advise on the validity of the overload rating for each particular case. Duration of overload loading is not to exceed a total of 100 hours in any twelve consecutive months.

2.5 5L29 / 5L31 Cable Ratings

OO 7T-40 details the overload ratings with shore end cooling available and not available. OO 7T-40 also details the overload RAS scheme settings that will operate shedding to protect the cable portion from overloads. Real-time cable temperatures for sections of 5L29 / 5L31 can be monitored in the Areva EMS.

3.0 CIRCUIT RATING TABLES

Conductors shown in the rating table in Appendix 1 are the LIMITING conductors. Other conductors in this circuit may have equal or greater rating than the one shown.

Abbreviations and Definitions Used in Circuit Rating Tables:

DS	Disconnect Switch
CT	Current Transformer
IR	Impedance Relay
O/C	Over Current Relay
WT	Wave Trap
PN	Protection
CB	Circuit Breaker
SCOIP	Solid Core Oil Impregnated Paper
LPOF	Low Pressure Oil Filled
SCOF	Self-Contained Oil Filled
Single Breaker Closed CT Rating:	Line is being fed by a single circuit breaker from the station end.

* Ending verification from asset manager

4.0 REVISION HISTORY

Revised By	Revision Date	Summary of Revision
Eric Desjardins	08 June 2018	<ul style="list-style-type: none"> • Sections 1.1, 1.6 and 3.0 – referenced new document 5T-10 Attachment 1. • Appendix A – removed. • Appendix B – removed and placed into new 5T-10 Attachment 1 separate document. • 5T-10 Attachment 1 – made circuit section terminal nomenclature consistent throughout document; cleaned up comments column.
Eric Desjardins	16 July 2018	<ul style="list-style-type: none"> • 5T-10 Attachment 1: <ul style="list-style-type: none"> ○ 60L338 – updated switch rating ○ 60L128 – revised upgraded conductor ratings ○ Updated various I/R and O/C protection settings ○ Added various circuit DS and WT ratings
Eric Desjardins	12 September 2018	<ul style="list-style-type: none"> • 5T-10 Attachment 1: <ul style="list-style-type: none"> ○ Removed 60L74 CDL to CDL_TAP section ○ Removed 60L74 CDL_TAP to WRK_TAP section ○ Split 60L61 in two section for new BRB station tap ○ Removed 60L283 duplicate entry ○ Removed 1L241 duplicate entry ○ Updated Various 138kV DS and WT ratings
YLC	20 September 2018	<ul style="list-style-type: none"> • 5T-10 Attachment 1 <ul style="list-style-type: none"> ○ Updated 1L274 (NTL to LCC tap) thermal rating
YLC	26 September 2018	<ul style="list-style-type: none"> • Re-combined separate 5T-10 Attachment 1 with main 5T-10 document. • Appendix 1 – revised 60L128 conductor temperature; revised 1L274 (NTL to LCC tap) thermal ratings.

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L7	BAL TAP-3	BAL TAP-6	135 mm ACSR PARTRIDGE	75		440		555								
60L7	BAL	BAL TAP-6	#2 Cu WELD	75		215		290								
60L8	PKL	BAL TAP-2	242 mm ACSR HAWK	75		630		810								
60L8	RUS	BAL TAP-2	201 mm AACSR	50		380		585				1200 CT				
60L8	BAL TAP-2	BAL TAP-4	322 mm ASC ORCHID	75		730		940								
60L8	BAL TAP-4	MLN	523 mm ASC BLUEBELL	90		1145		1388								
60L8	BAL TAP-4	BAL TAP-5	135 mm ACSR PARTRIDGE	75		440		555								
60L8	BAL	BAL TAP-5	#2 Cu WELD	75		215		290								
60L8	BAL TAP 5	GLT TAP	242 mm ACSR HAWK	90		713		864								
60L8	GLT TAP	GLT	135 mm PARTRIDGE	90		493		594								
60L9	WNK	WNK TAP	135 mm ACSR PARTRIDGE	75		440		555				400 O/C			PN LIMIT	
60L9	RUS	WNK TAP	135 mm ACSR PARTRIDGE	75		440		555								
60L9	RUS TAP	BAL TAP	242 mm ACSR HAWK	75		630		810								
60L9	RUS TAP	WNK TAP	135 mm ACSR PARTRIDGE	75		440		555								
60L10	WAH	WAH TAP	135 mm ACSR PARTRIDGE	75		440		555				584 IR				
60L10	KEN	WAH TAP	135 mm ACSR PARTRIDGE	75		440		555								
60L10	WAH TAP	BBR TAP	135 mm ACSR PARTRIDGE	75		440		555								

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L10	SZM	BBR TAP	135 mm ACSR PARTRIDGE	75		440		555								
60L10	HOP	BBR TAP	135 mm ACSR PARTRIDGE	75		440		555								
60L10	BBR	SZM	135 mm ACSR PARTRIDGE	75		440		555				150 CT			PN LIMIT	
60L11	BND	SFU TAP	3/0 Cu	75		400		510				1200 CT	800			
60L11	SFU	SFU TAP	135 mm ACSR PARTRIDGE	75		440		555								
60L11	IOC	SFU TAP	3/0 Cu	75		400		510				1200 CT				
60L12	SFY	MIS TAP	242 mm ACSR HAWK	90	125	731	906	880	1018			1200 CT			PN LIMIT - WINTER	
60L12	(202.3m)*		322 mm ORCHID 37/0 ASC			730		940							•SHOWS HOW MUCH CONDUCTOR (IN METRES) FROM SFY OUT. (90°C)	
60L12	CBN	MIS TAP	524 MM Bluebell ASC 90	90		1151		1393				1200 CT				
60L12	MIS	MIS TAP	524 MM Bluebell ASC 90	90		1151		1393				1200 CT				
60L13	ALU	SFY	1/0 Cu	75		245		325				200 CT			PN LIMIT	
60L13	(314.2m)*		322 mm ORCHID 37/0 ASC			830		1010							•SHOWS HOW MUCH CONDUCTOR (IN METRES) FROM SFY OUT. (90°C)	
60L14	SVD	Str 08-09	524 MM Bluebell ASC	90		1151		1393								
60L14	Str 08-09	MIS TAP	242 mm ACSR HAWK	90	125	731	906	880	1018							
60L14	MIS	MIS TAP	524 MM Bluebell ASC	90		1151		1393								
60L14	CBN	MIS TAP	524 MM Bluebell ASC	90		1151		1393								
60L15	RUS	SFY	152 mm Cu	90		660		790				1200 CT				

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L15	(431.8m)•		322 mm ORCHID 37/0 ASC			830		1010							•SHOWS HOW MUCH CONDUCTOR (IN METRES) FROM SFY OUT. (90°C)	
60L16	LB1	LB2	3/0 Cu	75		400		510				300 CT				PN LIMIT
60L17	BND	PFD TAP	152 mm Cu	75	110	580	770	740	880			722 IR				PN LIMIT
60L17	COK	PFD TAP	322 mm ORCHID 37/0 ASC	125	130	830	1050	1020	1205			2000 CT				
60L17	IFM	PFD TAP	244 mm ASC COSMOS	90	105	710	790	850	910							
60L17	IFM	NRG	244 mm ASC COSMOS	60	90	490	680	700	830							UNDERBUILD
60L17	NRG	PFD	244 mm ASC COSMOS	60	70	490		700	750							UNDERBUILD
60L17	PFD	GSP	244 mm ASC COSMOS			610	875	780	980							
60L17	GSP	Str 11/19	135 mm ACSR PARTRIDGE			440		555								
60L17	Str 11/19	Str 14/12	886 MM ² XLPE U/G CABLE	90		808		855								OVERLOAD RATINGS BY REQUEST AT TIME OF OCCUR-RENCE.
60L17	Str 14/12	NWR	244 mm ASC COSMOS			610	870	780	980			800 CT				
60L18	COK	CQM	152 mm Cu	75	110	580	770	740	880			1341 IR				
60L18	CQM	ESC	152 mm Cu	75	110	580	770	740	880							
60L18	ESC	MRG	19/8 Cu WELD	85		420		515								PITT RIVER XING
60L18	MRG	HNY TAP	3/0 Cu	75	110	400	530	510	600							
60L18	HNY TAP	HNY	100 Kcmil Cu			669	875	707	930						CABLE 200 HRS OVERLOAD	
60L19	SFY	HNY TAP	3/0 Cu	75	110	400	530	510	600			822 IR				

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L19	(451.4m)•		322 mm ORCHID 37/0 ASC			830		1010							•SHOWS HOW MUCH CONDUCTOR (IN METRES) FROM SFY OUT. (90°C)	
60L19	HNY TAP	HNY	100 Kcmil Cu			669	875	707	930						CABLE 200 HRS OVERLOAD	
60L20	SON	PAV TAP	1-266.8 MCM Partridge ACSR	70		400		525		567		600 CT				
60L20	PAV TAP	PAV	1-66.4 MCM Sparrow ACSR	50		114				202					15A fuse	
60L20	PAV TAP	CLL TAP	1-266.8 MCM Partridge ACSR	70		400		525		567						
60L20	CLL TAP	CLL	1-266.8 MCM Partridge ACSR	88		485		588		492					15A fuse	
60L20	CLL TAP	CRQ	1-266.8 MCM Partridge ACSR	70		400		525		567		400 CT				
60L20 Overall	SON	CRQ	1-266.8 MCM Partridge ACSR	70		400		525		567		400 CT				PN - WINTER
60L21	SON	CRQ	1-266.8 MCM Partridge ACSR	90		493		590		627		592 IR			Ambient > 30°C to be expected	
60L21	WDN	WDN TAP	1-266.8 MCM Partridge ACSR	127		616		691		717					Ambient > 30°C to be expected	
60L21	WDN TAP	BRT	1-266.8 MCM Partridge ACSR	90		493		590		627		600 CT			Ambient > 30°C to be expected	
60L21 Overall	SON	BRT	1-266.8 MCM Partridge ACSR	90		493		590		627		592 IR			Ambient > 30°C to be expected	PN WINTER
60L22	LAJ	TXL TAP	1-477.0 MCM Hawk ACSR	50		380		640		708		600 CT				
60L22	TXL TAP	TXL	1-477.0 MCM Hawk ACSR	50		380		640		708					- 600kva transformer 2 phase 25A fuses on disconnect	
60L22	TXL TAP	BRT	1-477.0 MCM Hawk ACSR	50		380		640		708		600 CT				
60L22 Overall	LAJ	BRT	1-477.0 MCM Hawk ACSR	50		380		640		708		600 CT				PN WINTER
60L23	SFY	HNY TAP	152 mm Cu	75	100	580	770	740	880			1024 IR				

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L23	(359.2m)*		636 ORCHID 37/0 ASC			730		940							•SHOWS HOW MUCH CONDUCTOR (IN METRES) FROM SFY OUT.	
60L23	HNY TAP	HNY	100 Kcmil Cu			669	875	707	930						CABLE 200 HRS OVERLOAD	
60L26	COK	BND	152 mm Cu	75	125	580	830	740	930			1125 IR				
60L27	SPG	K11	329 mm CABLE			710	890	755	950			1200 CT				
60L28	SPG	GDK	380 mm CABLE			670	805	715	855			1200 CT				
60L29	CRQ	CCW TAP	1-266.8 MCM PARTRIDGE ACSR	75		427				604		400 CT				PN
60L29	CCW TAP	CCW	1-266.8 MCM PARTRIDGE ACSR	90		493				627						
60L29	CCW TAP	AFT TAP	1-266.8 MCM PARTRIDGE ACSR	75		427				604						
60L29	AFT TAP	AFT	1-266.8 MCM PARTRIDGE ACSR	90		493				627						
60L29	AFT TAP	SBR	1-266.8 MCM PARTRIDGE ACSR	75		427				604						
60L30	GDK	K11	329 mm CABLE			670	760	715	805			1200 CT				
60L31	ING	AWT TAP	242 mm ACSR HAWK	105	125	810	905	940	1020			2000 CT	800			DS LIMIT
60L31	AWT TAP	AWT	135 mm ACSR PARTRIDGE	90		505		605								
60L31	AWT TAP	ANN TAP	242 mm ACSR HAWK	105	125	810	905	940	1020							
60L31	DVM	ANN TAP	242 mm ACSR HAWK	105	125	810	905	940	1020							
60L31	ANN TAP	TII	19/8 Cu WELD	75		490		515								
60L31	TII	60D5L31	19/8 Cu WELD	75		500		525				2000 CT			Normally open at 60D5L31	

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L32	KI1	WCF TAP	322 mm ACSR GOOSE	75	125	750	1080	965	1200			2000 CT				
60L32	WCF TAP	Str 09/04A	330 mm CABLE			642	728	692	782						CABLE	200 HRS OVERLOAD
60L32	Str 09/04A	BBS	322 mm ASC ORCHID	75	125	750	1080	965	1200							
60L32	NAC TAP	SEE	253 mm ² CABLE			460	530	485	560						BASED ON 265 AMPS PRELOADING	
60L32	#3 SW	ANN	19/8 Cu WELD	75	90	490		515				1200 CT				ANNACIS CHANNEL XING
60L32	#3 SW	BBS	322 mm ACSR GOOSE	75	125	440	620	555								
60L33	SEA	YVR	322 mm ACSR GOOSE	75		750		960								
60L35	BND	NEL	322 mm ACSR GOOSE	75	90	750	870	960	1050			1200 CT				
60L35	NWR	NWR TAP	ORCHID	90		845		1020					1200			
60L36	BND	NEL	242 mm ACSR HAWK	117	135	630	870	810	1050			1200 CT				
60L37	KI2	KI1	322 mm ACSR GOOSE	90		870		1050				1500 CT				FRASER RIVER XING
60L38	KI2	KI1	322 mm ACSR GOOSE	90		870		1050				1500 CT				FRASER RIVER XING
60L39	HPN	LOH	322 mm ACSR GOOSE	75	125	750	1080	965	1220			1200 CT				PN LIMIT - WINTER O/L
60L39	LOH	BMP TAP	322 mm ACSR GOOSE	75	125	750	1080	965	1220							
60L39	BMP	BMP TAP	135 mm ACSR PARTRIDGE	75	125	440	620	555	700							
60L39	BND	BMP TAP	322 mm ASC ORCHID	75	125	730	1050	940	1180			1200 CT				
60L40	HPN	LOH	322 mm ACSR GOOSE	75	125	750	1080	965	1220			2000 CT				

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L40	BND	LOH	322 mm ASC ORCHID	75	125	730	1050	940	1185			1200 CT	800		DS LIMIT	
60L41	KI1	RSR	177 mm CABLE			170		170				2000 CT			CABLE	
60L42	KI2	LF1	135 mm ACSR PARTRIDGE	75		440		555				1500 CT	600			
60L43	KI2	SEA TAP	685 mm ACSR COLUMBINE	75		1165		1505				1500 CT			PN LIMIT - WINTER	
60L43	RIM	SEA TAP	322 mm ACSR GOOSE	75		750		965								
60L43	SEA	SEA TAP	330 mm O/F CABLE			605		660							CABLE	
60L44	KI2	SEA TAP	685 mm ACSR COLUMBINE	75		1160		1505				1500 CT			PN LIMIT - WINTER	
60L44	RIM	SEA TAP	322 mm ACSR GOOSE	75		750		965								
60L44	SEA	SEA TAP	330 mm O/F CABLE			605		660							CABLE	
60L45	KI2	KI1	322 mm ACSR GOOSE	90		870		1050				1500 CT			FRASER RIVER XING	
60L46	KI2	KI1	322 mm ACSR GOOSE	90		870		1050				1500 CT			FRASER RIVER XING	
60L47	ALZ	TMO TAP	470 mm 37/0 ASC	75		900		1190				1200 CT				
60L47	TMO TAP	TMO	135 mm ACSR PARTRIDGE	75		440		555								
60L47	TMO TAP	SMW	322 mm ASC ORCHID	75		730		940								
60L47	SMW	ABT	322 mm ASC ORCHID	75		730		940								
60L48	ALZ	TMO TAP	470 mm 37/0 ASC	75		900		1190				880 O/C			PN LIMIT	
60L48	TMO TAP	SMW	322 mm ACSR GOOSE	75		750		960								

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L58	DPT TAP	WTL TAP	322 mm ASC ORCHID	75		730		940								
60L58	WTL	WTL TAP	322 mm ASC ORCHID	75		730		940								
60L58	DPT	WTL TAP	250 mm O/F CABLE			590		610							CABLE	
60L59	ARN	ARN TAP	685 mm ASC COLUMBINE	75		1160		1505				1200 CT				
60L59	ARN TAP	TSW TAP	322 mm ASC ORCHID	75		730		940								
60L59	TSW	TSW TAP	322 mm ASC ORCHID	75		730		940								
60L59	DPT TAP	TSW TAP	322 mm ASC ORCHID	75		730		940								
60L59	ARN TAP	CAN TAP	636 MCM ASC ORCHID	90		845		1010		1070						
60L59	CAN TAP	CAN	135 mm ACSR PARTRIDGE	75		440		555								
60L59	CAN TAP	TLB TAP	322 mm ASC ORCHID	90		845		1010		1070						
60L59	TLB TAP	TLB	636 MCM ASC ORCHID	90		845		1010		1070						
60L59	TLB TAP	LNH TAP	322 mm ASC ORCHID	75		730		940								
60L59	LNH TAP	LNH	135 mm ACSR PARTRIDGE	75		440		555								
60L59	LNH TAP	BCI	135 mm ACSR PARTRIDGE	75		440		555								
60L60	NEL	NWR	HAWK / ORCHID	90	125	730	905	879	1020			1200 CT	1200		UNDERBUILD	
60L60	NWR TAP 60L60	NWR TAP 60L17	477 MCM, ASC COSMOS			610	870	780	980			1200 CT	1200			
60L61	WLT	BRB TAP	322 mm ASC ORCHID	90	125	847	1051	1020	1182			2000 CT	1200			

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L61	NVR	BRB TAP	322 mm ASC ORCHID	90	125	847	1051	1020	1182			1200 CT	800			
60L62	NVR	SWP TAP	322 mm ASC ORCHID	90	125	847	1051	1020	1182			2000 CT	800			
60L62	SWP	SWP TAP	322 mm ASC ORCHID	75		730		940								
60L62	SWP	JRI	135 mm ACSR PARTRIDGE	75		440		555								
60L62	SWP TAP	LCS TAP	524 mm BLUEBELL	90	125	847	1051	1020	1182							
60L62	LCS TAP	LCS	135 mm ACSR PARTRIDGE	90		492		601		635			1200			
60L62	LCS TAP	WLT	322 mm ASC ORCHID	90	125	847	1051	1020	1182			1200 CT	1200			
60L63	NVR	JRI TAP	322 mm ACSR GOOSE	90	125	870	1080	1050	1220			1200 CT				
60L63	JRI TAP	JRI	266.8 MCM ACSR Partridge	90		500		590		630			1200 (T-Line switch)			
60L63	JRI TAP	VDK TAP	322 mm ACSR GOOSE	90	125	870	1080	1050	1220							
60L63	VDK TAP	VSD TAP	322 mm ACSR GOOSE	90	125	870	1080	1050	1220							
60L63	VSD TAP	NOR	322 mm ACSR GOOSE	90	125	870	1080	1050	1220			1200 CT	2000			
60L64	WLT	CAP	322 mm ACSR GOOSE	75		777		965				1200 CT	1200			
60L65	CYP	HCT TAP	604 mm ACSR GRACKLE	75		1100		1505				1200 CT	1200		DS Limit - Winter	
60L65	HCT TAP	JLN	322 mm ASC ORCHID	75		730		940	1090			2000 CT	1200			
60L66	GLR	CPS TAP	322 mm ASC ORCHID	75		730		940				1200 CT	800		DS Limit - WINTER	
60L66	CPS TAP	CPS	253 mm Cu CABLE			540		570					1200			

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L66	CPS TAP	CAP	322 mm ASC ORCHID	75		730		940				1200 CT	800		DS Limit- WINTER	
60L67	NEL	SCP	HAWK / ORCHID	90		730		879				2000 CT			UNDERBUILD	
60L67	SCP	RO2	322 mm ASC ORCHID	90		845		1021				1200 CT			UNDERBUILD	
60L68	CKY	MAM TAP	322 mm ASC ORCHID	90		845		1021				1200 CT			CONDUCTOR RATING @ 500' ELEVATION	
60L68	MAM TAP	UMH TAP	322 mm ASC ORCHID	90		845		1021				700 IR	800		CONDUCTOR RATING @ 500' ELEVATION	
60L68	UMH TAP	SQH	135 mm ACSR PARTRIDGE	75		440		555								
60L69	HSB	LBY	135 mm ACSR PARTRIDGE	90		500		600				600 CT				
60L69	LBY	PTO	135 mm ACSR PARTRIDGE	90		500		600								
60L69	PTO	FRI TAP	135 mm ACSR PARTRIDGE	90		500		600					1200			
60L69	FRI	FRI TAP	135 mm ACSR PARTRIDGE	50		267		450					1200			
60L69	FRC	FRI TAP	135 mm ACSR PARTRIDGE	90		500		600								
60L69	BTA TAP	FRC TAP	322 mm ASC ORCHID	90		845		1020				839 IR			PN	
60L69	BTA	BTA TAP	4/0 ACSR PENGUIN	90		425		510								
60L69	SQH	BTA TAP	322 mm ASC ORCHID	90		845		1020				839 IR	800		DS LIMIT	
60L70	CKY	MAM TAP	322 mm ASC ORCHID	75		730		940				1200 CT				
60L70	FMC TAP	MAM TAP	322 mm ASC ORCHID	75		730		940								
60L70	SQH	FMC TAP	135 mm ACSR PARTRIDGE	75		440		555				800 CT	800			

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L71	ING	AWT TAP	242 mm ACSR HAWK	105	125	810	905	940	1020			2000 CT	800		DS LIMIT	
60L71	AWT TAP	AWT	135 mm ACSR PARTRIDGE	90		500		600								
60L71	AWT TAP	ANN TAP	242 mm ACSR HAWK	105	125	810	905	940	1020			2000 CT	800		DS-LIMIT	
60L71	ANN TAP	ANN	242 mm ACSR HAWK	105	125	810	905	940	1020			1200 CT	800		DS LIMIT	
60L71	ANN TAP	SEE TAP	477 kcmil	105	125	810	905	940	1020						- Open at 60D3L71	
60L71	SEE TAP	SEE	253mm ² Cable			460	530	485	560						- BASED ON 265 AMPS Pre-loading	
60L72	MAM TAP	MAM	322 mm ASC ORCHID	50		433		744		829		600 CT			Taps to 60L68, 60L70 PN WINTER LIMIT	
60L73	ING	SRY TAP	470 mm 37/0 ASC	90	125	1050	1320	1300	1510			1333 O/C			PN LIMIT - WINTER O/L	
60L73	SRY	SRY TAP	#2 Cu WELD	75		215		290								
60L73	SRY TAP	WRK TAP	886mm ² Cu XLPE Cable	90		910		960								
60L73	WRK TAP	60RJ1L73	636 MCM ASC ORCHID	90	125	800		1018	1180						WRK tap to 60D1L73	
60L73	WRK TAP	WRK	636 MCM ASC ORCHID	90	125	800		1018	1180							
60L74	ING	SRY TAP	470 mm 37/0 ASC	90	125	1050	1320	1300	1510			1333 O/C			PN LIMIT - WINTER O/L	
60L74	SRY	SRY TAP	#2 Cu WELD	75		215		290								
60L74	SRY TAP	NKL TAP	322 mm ASC ORCHID	90	125	845	1050	1020	1180						O/L 300 HRS MAX	
60L74	NKL	NKL TAP	636 MCM ASC ORCHID	90	125	800		1018	1180							
60L74	WRK TAP	NKL TAP	636 MCM ASC ORCHID	90	125	800		1018	1180							

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L74	WRK TAP	WRK	636 MCM ASC ORCHID	90	125	800		1018	1180							
60L75	CVN	SHL	135 mm ACSR PARTRIDGE	75		440		555				800 CT	1200			
60L76	HPN	CVN	3/0 Cu	75		400		510				800 CT				
60L77	NWR	RO2	322 mm ASC ORCHID	75	125	730	1050	940	1185			1200 CT				
60L79	ING	SCT TAP	470 mm 37/0 ASC	75	125	1070	1335	1295	1505			1374 IR			PN LIMIT - WINTER O/L	
60L79	SCT	SCT TAP	242 mm ACSR HAWK	75		630		810								
60L79	PKL	SCT TAP	242 mm ACSR HAWK	90	125	730	905	880	1020							
60L80	ING	SCT TAP	470 mm 37/0 ASC	90	125	1070	1335	1295	1505			1374 IR			PN LIMIT - WINTER O/L	
60L80	SCT	SCT TAP	242 mm ACSR HAWK	75		630		810								
60L80	PKL	SCT TAP	242 mm ACSR HAWK	90	125	730	905	880	1020							
60L82	RUS	Str 08-07	242 mm ACSR HAWK	90	125	731	906	880	1018							
60L82	Str 08-07	SVD	524 MM Blue blel ASC	90		1151		1393								
60L83	KTG	SNY	397.5 MCM IBIS	88		635		815								
60L85	K11	Str 02/19	322 mm ACSR Goose	75	125	750	1080	965	1200							
60L85	Str 02/19	Str 03/01	650 MCM CABLE	75		749	873	820	953					Cable	200 HRS overload	
60L85	Str 03/01	Str 09/4A	322 mm ACSR Goose	75	125	750	1080	965	1200							
60L85	Str 09/4A	BBS	322 mm ACSR Goose	75	125	750	1080	965	1200							

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L87	KTG	SNY	397.5 MCM IBIS	90		645		820						1600		
60L89	CYP	HSB	4/0 ACSR PENGUIN	75		370		470				800 CT				
60L90	WLT	DCV TAP	685 mm ASC COLUMBINE	90		1355		1645				2000 CT	1200			DS LIMIT
60L90	DCV	DCV TAP	330 mm O/F CABLE			605		670							CABLE	
60L90	NXC TAP	DCV TAP	470 mm 37/0 ASC	90		1070		1295								
60L90	NXC	NXC TAP	322 mm ACSR GOOSE	90		870		1050								
60L90	ERW	NXC TAP	470 mm 37/0 ASC	90		1070		1295								
60L91	WLT	NXC	322 mm ASC ORCHID	75		730		940				2000 CT	800			DS LIMIT – WINTER
60L92	WLT	DCV	322 mm ASC ORCHID	75		730		940				480 O/C	800			PN LIMIT
60L93	ALZ	WAH TAP	322 mm ASC ORCHID	75		730		940				826 IR				PN LIMIT – WINTER
60L93	CHK	WAH TAP	322 mm ASC ORCHID	75		730		940				600 CT				PN LIMIT
60L93	WAH TAP	KEN TAP	242 mm ASC COSMOS	75		610		780								
60L93	KEN	KEN TAP	135 mm ACSR PARTRIDGE	75		440		555								
60L93	WAH	KEN TAP	242 mm ASC COSMOS	75		610		780				584 IR				PN LIMIT
60L94	ALZ	CHK	322 mm ASC ORCHID	75		730		940				720 O/C				PN LIMIT
60L95	WAH	HOP	322 mm ASC ORCHID	75		730		940				584 IR				PN LIMIT
60L97	NOR	JLN	322 mm ACSR GOOSE	75		750		960				1200 CT	800			DS Limit- Winter

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L98	CKY	Str. 12-06 (CTN)	266.8 MCM, 26/7, ACSR, Partridge	90		500		600							Approach circuit to Culliton Creek IPP up to Structure 12-06 (CTN-1)	
60L99	CYP	HCT TAP	604 mm ACSR GRACKLE	75		1120		1440				1600 CT	1200			DS Limit- Winter
60L99	HCT TAP	GLR	322 mm ASC ORCHID	75		730		940				1200 CT	800			DS LIMIT – WINTER
60L99	HCT TAP	HCT	322 mm ASC ORCHID	75		730		940								
60L100	MLN	NKL TAP	135 mm ACSR PARTRIDGE	75*		440		555								
60L100	NKL TAP	60RJ1L73	524 mm ASC BLUEBELL	90		1030									NKL tap to 60D1L73	
60L100	NKL	NKL TAP	886mm ² Cu XLPE Cable	90		910		960								
60L128	PVO	LCW	2/0 Quail	90		331		383		405		600 CT				
60L129	GCL	LBH	266.8 MCM Partridge	50		505		601		635		500 CT		1200		PN
60L205	VNT	WDS	1-#1 COPPER 7/0	70		242				331		400 CT				
60L208	VNT	WWD	4/0 ACSR PENGUIN	50		230				420		400 CT				PN LIMIT – WINTER
60L208	WWD	MTE	4/0 ACSR PENGUIN	50		230				420						
60L209	SAM	FCO TAP	1-#1 COPPER 7/0	70		239				384		800 CT				
60L209	FCO TAP	FCO		50											Customer Owned; -50A Fuse	
60L209	FCO TAP	SCM	1-2/0 QUAIL ACSR	70		259				363						
60L210	MON	NDR TAP	1-2/0 QUAIL ACSR	50		175				312		300 CT				PN LIMIT – WINTER
60L210	NDR TAP	NDR	1-2/0 QUAIL ACSR	50		175				312						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L210	NDR TAP	NAK	1-2/0 QUAIL ACSR	50		175				312						
60L218	ILL	WHN	1-636.0 MCM ORCHID ASC	90		828				1060		600 CT			PN	
60L219	WHN	PIN	1-636.0 MCM ORCHID ASC	90		828				1060		600 CT			PN	
60L223	MCA	MCK TAP	1-266.8 MCM PARTRIDGE ACSR	90		490				627		300 CT			PN Limit	
60L223	MCK TAP	GSM	1-266.8 MCM PARTRIDGE ACSR	90		490				627						
60L225 / L13	KCL	SLC	2-927.2 37/0 – ASC	90		2093		2547		2690		2000 CT			Fortis L13 Limit = TFR O/L @ KCL @ 168 MVA (1400A) Ambient >30°C to be expected	
60L227 / L13	KCL	SLC	2-927.2 37/0 – ASC	90		2093		2547		2690		2000 CT			WKP L12 Limit = TFR O/L @ KCL @ 168 MVA (1400A) Ambient >30°C to be expected	
60L270	KBY	SKU TAP	1-211.6 MCM Penguin ACSR	70		349		455		490		800 CT				
60L270	SKU TAP	SKU	1-211.6 MCM Penguin ACSR	50		231		380		424		800 CT				
60L270	SKU	CRS	1-167.7 MCM Pigeon ACSR	90		367		440		465		800 CT				
60L270	SKU TAP	CRC TAP	1-211.6 MCM Penguin ACSR	70		349		455		490		800 CT				
60L270	CRC TAP	CRC	1-211.6 MCM Penguin ACSR	50		231		380		424		800 CT				
60L270	CRC TAP	CNL TAP	1-211.6 MCM Penguin ACSR	70		349		455		490		800 CT				
60L270	CNL TAP	CNL	1-266.8 MCM Partridge ACSR	90		490		590		627		800 CT				
60L270	CNL TAP	FMT TAP	1-211.6 MCM Penguin ACSR	70		349		455		490		800 CT				
60L270	FMT TAP	FMT	1-211.6 MCM Penguin ACSR	90		425		511		540		800 CT				
60L270	FMT TAP	INV TAP	1-266.8 MCM Partridge ACSR	70		403		528		570		800 CT				

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L270	60L271 tie point	60L271	1-636.0 MCM ORCHID ASC	90		828		1003		1060		800 CT			Tie located in Invermere STA. 1200A DS	
60L270	INV TAP	ATH TAP	1-636.0 MCM Orchid ASC	90		828		1003		1060		800 CT				
60L270	ATH TAP	ATH	1-636.0 MCM Orchid ASC	90		828		1003		1060		800 CT				
60L270	ATH TAP	INV	1-636.0 MCM Orchid ASC	90		828		1003		1060		800 CT				
60L270 Overall	KBY	INV		70		349		453		490		800 CT				
60L271	INV	ATH TAP	1-636.0 MCM ORCHID ASC	70		629				957		522 IR				PN Limit
60L271	ATH TAP	ATH	1-636.0 MCM ORCHID ASC	50		433				829						
60L271	ATH TAP	60L270 tie point	1-636.0 MCM ORCHID ASC	70		629				957						
60L271	60L270 tie point	RDM TAP	1-266.8 MCM PARTRIDGE ACSR	70		401				567						
60L271	RDM TAP	RDM	1-266.8 MCM PARTRIDGE ACSR	50		265				492						
60L271	RDM TAP	SPN TAP	1-266.8 MCM PARTRIDGE ACSR	70		401				567						
60L271	SPN TAP	SPN	1-266.8 MCM PARTRIDGE ACSR	50		265				492						
60L271	SPN TAP	PSN TAP	1-266.8 MCM PARTRIDGE ACSR	70		401				567						
60L271	PSN TAP	PSN	1-266.8 MCM PARTRIDGE ACSR	50		265				492						
60L271	PSN TAP	GDN	1-266.8 MCM PARTRIDGE ACSR	70		401				567						
60L272	KHS	GDN	477 MCM HAWK ACSR	90		730		879		925		1200 CT	1200			
60L281	NTL	SPD TAP	1-636.0 MCM ORCHID ASC	50		435				822		600 CT				PN Limit – WINTER

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L281	SPD TAP	SPD	1-636.0 MCM ORCHID ASC	50		435				822						
60L281	SPD TAP	Str 18/07	1-636.0 MCM ORCHID ASC	50		435				822						
60L281	Str 18/07	FNE	636 kcmil Orchid ASC	50		435				822				* Terminates at FNE 60D21		
60L281	Str 18/07	60D3L281	636 kcmil Orchid ASC	50		435				822						
60L281	Str 18/06	FNE	266 kcmil Partridge	75		427				583				* Terminates at FNE 60D22		
60L281	Str 18/06	60D3L281	266 kcmil Partridge	75		427				583						
60L281	Str 17/11	Str 18/06	PARTRIDGE	75		427				583						
60L281	Str 16/11	Str 17/11	PIGEON 3/0 ACSR	75		324				433						
60L281	Str 0/16	Str 16/11	1/0 COPPER 7 STR.	75		293				395						
60L281	ELK	Str 0/16	1-3/0 PIGEON ACSR	75		324				433						
60L283	CBK	FST TAP	1-636.0 MCM ORCHID ASC	50		435				822	1200 CT				PN Limit - WINTER	
60L283	FST TAP	FST	1-266.8 MCM PARTRIDGE ACSR	50		265				488						
60L283	FST TAP	MVL TAP	1-636.0 MCM ORCHID ASC	50		435				822						
60L283	MVL TAP	MVL	1-636.0 MCM ORCHID ASC	50		435				822						
60L283	MVL TAP	KBY	1-636.0 MCM ORCHID ASC	50		435				822	600 CT				PN Limit - WINTER	
60L284	CBK	SPL TAP	1-927.2 MCM 37/0 ASC	50		545				1041	959 IR				PN Limit - WINTER	
60L284	MYE TAP	MYE	#2 Copper	50		141				248						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L285	NTL	SPD	1-636.0 MCM ORCHID ASC	50		435				822		800 CT			PN Limit – WINTER	
60L287	ELK	CFE	1-2/0 QUAIL ACSR	50		175				312		100 IR			PN Limit	
60L288	Str 0/4	EV1	1-3/0 PIGEON ACSR	75	75	336	336			438	438					
60L288	Str 0/4	NTL	1-3/0 PIGEON ACSR	90	90	340	340	403	403	426	426					
60L289	CBK	BRM TAP	1-266.8 MCM PARTRIDGE ACSR	50		265				488		1041 IR				
60L289	BRM TAP	ABN TAP	1-266.8 MCM PARTRIDGE ACSR	50		265				488						
60L289	ABN	ABN TAP	1-266.8 MCM PARTRIDGE ACSR	50		265				488						
60L290	ELK	WIN	1/0 ACSR RAVEN	50		150				270		600 CT				
60L292	NTL	CMO TAP	1-266.8 MCM PARTRIDGE ACSR	50		265				488		800 CT				
60L292	CMO TAP	CMO	1-266.8 MCM PARTRIDGE ACSR	50		265				488						
60L292	CMO TAP	CNT TAP	1-#2 SPARROW ACSR	50		115				201						
60L292	CNT TAP	CNT	1-#2 SPARROW ACSR	50		115				201						
60L292	CNT TAP	CRW	1-266.8 MCM PARTRIDGE ACSR													
60L294	ABN TAP	WIN TAP	1-266.8 MCM PARTRIDGE ACSR	50		265				488						
60L294	WIN TAP	ELK	1-266.8 MCM PARTRIDGE ACSR	50		265				488		600 CT				
60L295	SPL	SPL TAP	1-927.2 MCM 37/0 ASC	50		545				1041		706 IR			PN Limit – Winter	
60L295	SPL TAP	JOE	1-636.0 MCM ORCHID ASC	50		435				822		800 CT			PN Limit – Winter	

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L298	JOE	KBY	1-636.0 MCM ORCHID ASC	50		435				822		600 CT			PN Limit – Winter	
60L299	CBK	JOE	1-927.2 MCM 37/0 ASC	50		545				1041		800 CT			PN Limit – Winter	
60L300	SCK	MTP TAP	322 mm ASC ORCHID	90		850		970		1020						
60L300	MTP TAP	GVL TAP	322 mm ASC ORCHID	90		850				1020						
60L300	GVL	GVL TAP	135 mm ACSR PARTRIDGE	90		493				625						
60L300	MTP	GVL TAP	322 mm ASC ORCHID	90		850				1020			1200			
60L300	MTP TAP	MGT TAP	322 mm ASC ORCHID	90		848		1016		1073						
60L300	MGT	MGT TAP	107 mm ACSR PENGUIN	50		230				380						
60L300	GBW TAP	MGT TAP	322 mm ASC ORCHID	90		848		1016		1073						
60L300	GBW	GBW TAP	322 mm ASC ORCHID	50		450				760						
60L300	GBW TAP	WQL TAP	107 mm ACSR PENGUIN	50		230				380						
60L300	WQL	WQL TAP	135 mm ACSR PARTRIDGE	50		280				450						
60L300	BLW TAP(306)	WQL TAP	107 mm ACSR PENGUIN	50		230				380						
60L301	HMH	AIN TAP	135 mm ACSR PARTRIDGE	50		265		441				549 IR				
60L301	AIN TAP	AIN	1-2/0 QUAIL ACSR	90		317		379		401					BCH Portion only.	
60L301	AIN TAP	SMH TAP	135 mm ACSR PARTRIDGE	50		265		441		492					Ambient > 30°C to be expected	
60L301	SMH TAP	SMH	135 mm ACSR PARTRIDGE	50		265		441		492						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L301	SMH TAP	CLN TAP	135 mm ACSR PARTRIDGE	50		265		441		492					Ambient > 30°C to be expected	
60L301	CLN TAP	CLN	135 mm ACSR PARTRIDGE	50		265		441		492					Ambient > 30°C to be expected	
60L301	CLN TAP	CRQ	135 mm ACSR PARTRIDGE	50		265		441		492					Ambient > 30°C to be expected	
60L301 Overall	HMH	CRQ	135 mm ACSR PARTRIDGE	50		265		441		492		400 CT			Ambient > 30°C to be expected	PN – WINTER
60L302	SCK	TWT	322 mm ASC ORCHID	50		450				760		1200 CT				
60L302	WWL	TWT	322 mm ASC ORCHID	50		450				760						
60L302	WLM	WWL	322 mm ASC ORCHID	50		450				760		600 CT	600			PN & DS – WINTER
60L303	BLW	WPN TAP	322 mm ASC ORCHID	90		850				1020		640 O/C				PN
60L303	WPN TAP	SSQ TAP	135 mm ACSR PARTRIDGE	90		500				600						
60L303	SSQ	SSQ TAP	135 mm ACSR PARTRIDGE	90		500				600						
60L303	WPN	SSQ TAP	135 mm ACSR PARTRIDGE	90		500				600						
60L303	CBP TAP	WPN TAP	322 mm ASC ORCHID	70		675				960						
60L303	CBP TAP	WWQ TAP	322 mm ASC ORCHID	90		850				1020						
60L303	WWQ	WWQ TAP	135 mm ACSR PARTRIDGE	90		500				600						
60L303	CBP	WWQ TAP	322 mm ASC ORCHID	90		850				1020						
60L303	CBP TAP	QNL	322 mm ASC ORCHID	60		580				830		400 CT	600			PN & DS
60L306	BLW	BLW TAP	322 mm ASC ORCHID	90		850				1020		640 O/C				PN

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L306	QNL River Crossing		332 mm ACSR GOOSE	90						1044						
60L306	BLW TAP	WFQ TAP	322 mm ASC ORCHID	90		850				1020		600				
60L306	WFQ	WFQ TAP	135 mm ACSR PARTRIDGE	90		493				625						
60L306	QNL	WFQ TAP	322 mm ASC ORCHID	90		850				1020		400 CT			PN	
60L308	SCK	WLM	322 mm ASC ORCHID	50		460				780		533 O/C			PN – WINTER	
60L309	WLM	NWE	470 mm 37/0 Orchid ASC	90		828		1003		1060		600 CT	600		PN & DS	
60L310	SCK	GBR	636 MCM ASC ORCHID	90		828				1060						
60L327	WSN	WSN TAP	322 mm ASC ORCHID	50		450				760		762 IR			PN - WINTER	
60L327	BVY	WSN TAP	322 mm ASC ORCHID	50		450				760		709 IR			PN – WINTER	
60L329	TAC	TAC TAP	322 mm ASC ORCHID	90		828				1060		600 CT			PN	
60L329	TAC TAP	NLV TAP	107 mm ACSR PENGUIN	70		347				488			1200			
60L329	NLV	NLV TAP	135 mm ACSR PARTRIDGE	90		493				625						
60L329	NLV TAP	VDF TAP	107 mm ACSR PENGUIN	70		347				488						
60L329	VDF	VDF TAP	107 mm ACSR PENGUIN	70		347				488						
60L329	VDF TAP	60L358 TIE D/S	135 mm PARTRIDGE	70		401				567			600			
60L329	TAC TAP	PLT TAP	135 mm ACSR PARTRIDGE	70		401				567						
60L329	PLT	PLT TAP	135 mm ACSR PARTRIDGE	70		401				567						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L329	PLT TAP	60L341 TIE D/S	135 mm ACSR PARTRIDGE	70		401				567			1200			
60L330	WSN	PVW	322 mm ASC ORCHID	50		450				760		667 O/C			PN - WINTER	
60L331	WSN	PCA-PGG	322 mm ASC ORCHID	90		850				1020		800 O/C		PGG de-commissioned (no load)	PN - WINTER	
60L331	PCA	PCA-PGG	322 mm ASC ORCHID	90		850				1020		1200 CT	800	PGG de-commissioned (no load)	DS	
60L331	PCA-PGG	PGG	135 mm ACSR PARTRIDGE	90		500				600				PGG de-commissioned (no load)		
60L332	WSN	PVW	322 mm ASC ORCHID	90		850				1020		800 O/C			PN	
60L332	NOS	PVW	322 mm ASC ORCHID	90		850				1020						
60L332	PCA	NOS	322 mm ASC ORCHID	90		850				1020		1200 CT	800		DS	
60L336	WSN	BCM TAP	322 mm ASC ORCHID		128	850	1045			1020	1175	1200 CT	1200	CDR O/L LIMIT @ 128 C - 300 hrs		
60L336	BCM	BCM TAP	322 mm ASC ORCHID		128	850	1045			1020	1175			CDR O/L LIMIT @ 128 C - 300 hrs		
60L336	FMC TAP	BCM TAP	322 mm ASC ORCHID		128	850	1045			1020	1175		800	CDR O/L LIMIT @ 128 C - 300 hrs	DS	
60L336	FMC TAP	FMC	135 mm ACSR PARTRIDGE	90		500				600						
60L336	FMC TAP	CRD	322 mm ASC ORCHID		128	850	1045			1020	1175	1200 CT		CDR O/L LIMIT @ 128 C - 300 hrs		
60L337	WSN	WSN TAP	322 mm ASC ORCHID	50		280				450		200 O/C	1200		PN	
60L337	CNG	WSN TAP	135 mm ACSR PARTRIDGE	50		280				450		200 O/C			PN	
60L337	UFR	CNG	135 mm ACSR PARTRIDGE	50		280				450						
60L338	WSN	BCM TAP	322 mm ASC ORCHID		128	850	1045			1020	1175	1200 CT	1200	CDR O/L LIMIT @ 128 C - 300 hrs 60D4L338 Rating: 1200		

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L338	BCM	BCM TAP	322 mm ASC ORCHID		128	850	1045			1020	1175				CDR O/L LIMIT @ 128 C - 300 hrs	
60L338	BCM TAP	HCR TAP	322 mm ASC ORCHID		128	850	1045			1020	1175				CDR O/L LIMIT @ 128 C - 300 hrs	
60L338	HCR	HCR TAP	135 mm ACSR PARTRIDGE	90		493				625						
60L338	HCR TAP	FMC TAP	322 mm ASC ORCHID		128	850	1045			1020	1175		936		CDR O/L LIMIT @ 128 C - 300 hrs 60D1L338 Rating: · 936A at 30C ambient · 1088A at 10C ambient	
60L338	FMC	FMC TAP	135 mm ACSR PARTRIDGE		128	500				600						
60L338	CRD	FMC TAP	322 mm ASC ORCHID			850	1045			1020	1175	1200 CT	800		CDR O/L LIMIT @ 128 C - 300 hrs	DS
60L339	BLW	DKY	135 mm ACSR PARTRIDGE	50		280				450		160 O/C				PN
60L339	CLB	DKY	135 mm ACSR PARTRIDGE	50		310				500						
60L339	CLB	WSN TAP	170 mm ASC TULIP	50		310				500						
60L340	CRD	NWP	322 mm ASC ORCHID	90		830				1010		587 O/C			CDR RATING @ 90 C	PN
60L341	FSR	GLN	135 mm ACSR PARTRIDGE	50		280				450		391 IR				PN – WINTER
60L341	FSR	FSS	135 mm ACSR PARTRIDGE	50		280				450						
60L341	PLT	FSS	135 mm ACSR PARTRIDGE	50		280				450						
60L342	PGP	CRD	N/A			N/A				N/A		400 O/C				
60L343	PGP	CRD	201 mm ACSR IBIS	90		635				810						
60L344	TAC	VDF-TAC	322 mm ASC ORCHID	90		828				1060		701 IR				PN
60L344	VDF-TAC	FM2	107 mm ACSR PENGUIN	57		280				447						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L345	HSK	CRD	135 mm ACSR PARTRIDGE	90		493				625		160 O/C				
60L346	ICP	CRD	N/A			N/A				N/A		480 O/C				
60L347	ICP	CRD	N/A			N/A				N/A		480 O/C				
60L348	BCC	CRD	N/A			N/A				N/A		480 O/C				
60L351	WSN	BVY-PGG	322 mm ASC ORCHID	50		450				760		707 IR			PGG de-commissioned (no load)	PN – WINTER
60L351	BVY	BVY-PGG	4-316 mm ACSR	50		450				760		880 IR			PGG de-commissioned (no load)	
60L351	PGG	BVY-PGG	322 mm ASC ORCHID	50		450				760					PGG de-commissioned (no load)	
60L352	GLN	EKO	477 MCM ACSR Hawk	90		725				925						
60L354	BVY	FHS TAP	322 mm ASC ORCHID	50		450				760		1200 CT				
60L354	FHS	FHS TAP	322 mm ASC ORCHID	50		450				760						
60L354	CHF	FHS TAP	322 mm ASC ORCHID	50		450				760						
60L357	BVY	PCA TAP	322 mm ASC ORCHID	90		828				1060		2000 CT				
60L357	PCA	PCA TAP	322 mm ASC ORCHID	127		1050				1190		1200 CT	800			DS
60L357	FHS	PCA TAP	322 mm ASC ORCHID	127		1050				1190						
60L358	BVY	IPR	135 mm ACSR PARTRIDGE	50		280				450		660 IR				
60L358	VDF	IPR	135 mm ACSR PARTRIDGE	50		280				450						
60L359	TFP	FM2	135 mm ACSR PARTRIDGE	61		360				535						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L383	SKA	TER	322 mm ASC ORCHID	50		450				760		578 IR	800		PN – WINTER	
60L383	TER	TSC	135 mm ACSR PARTRIDGE	50		280				450			800			
60L383	KAL	TSC	135 mm ACSR PARTRIDGE	50		280				450			800			
60L390	RUP	DIL	107 mm ACSR PENGUIN	50		230				380		80 O/C (dir)		800	PN	
60L390	DIL	GRR	107 mm ACSR PENGUIN	50		230				380						
60L390	GRR	BRL TAP	107 mm ACSR PENGUIN	50		230				380						
60L390	BRL	BRL TAP	350 MCM CN-XLPE	50		340				340						
60L390	FLS	BRL TAP	107 mm ACSR PENGUIN	50		230				380			800			
60L391	RUP	OFD	322 mm ASC ORCHID	49		430				745		1200 O/C				
60L392	RUP	PED TAP	322 mm ASC ORCHID	50		450				760		587 O/C			PN – WINTER	
60L392	PED	PED TAP	322 mm ASC ORCHID	50		450				760						
60L392	PRG	PRG TAP	322 mm ASC ORCHID	50		450				760						
60L392	SKL TAP	PED TAP	322 mm ASC ORCHID	50		450				760			800			
60L392	SKL	SKL TAP	322 mm ACSR GOOSE	50		460				780			1200			
60L392	PRG TAP	SKL TAP	322 mm ASC ORCHID	50		450				760			800			
60L392	RTI	PRG TAP	322 mm ASC ORCHID	50		450				760			800			
60L393	RUP	OFD	322 mm ASC ORCHID	49		430				745		400 O/C			PN	

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
60L394	SKA	KAL	242 mm ACSR HAWK	50		390				650		587 O/C				PN - WINTER
60L395	RUP	RPG	322 mm ASC ORCHID	80		754		949		1010		1200 CT				
1L10	VIT	SHA TAP	397.5 MCM IBIS	90		648				780		1440 IR				
1L10	SHA TAP	SHA	477 MCM HAWK	90	125	725	885			925	1040					
1L10	GOW	SHA TAP	397.5 MCM IBIS	71		520				735						
1L11	VIT	KSH TAP	397.5 MCM IBIS	90		648				780		1083 IR				
1L11	KSH TAP	KSH	477 MCM HAWK	90		725				925						
1L11	GOW	KSH TAP	397.5 MCM IBIS	71		520				735						
1L12	GOW	GTP	477 MCM HAWK	90		725				925		800 CT				PN - WINTER
1L14	VIT	KSH TAP	477 MCM HAWK	88		725				925		1725 IR @ VIT				
1L14	KSH TAP	KSH	477 MCM HAWK	88		725				925						
1L14	KSH TAP	SHA TAP	477 MCM HAWK	88		725				925						
1L14	SHA TAP	SHA	477 MCM HAWK	90		725				925			600			
1L14	SHA TAP	GTP	477 MCM HAWK	90		725				925		745 IR @ GTP				PIK x GOW is 2xCrane @ 150C
1L18	ARN	EBT	477 MCM HAWK	50		375		642		714		1085 IR @ ARN	600			
1L18	EBT	TBY	455 MCM G/F BICC 138			460		530		530		1200 CT				
1L18	TBY	GLS TAP	477 MCM HAWK	50		375		642		714		1200 CT				

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L18	GLS TAP	GLS	477 MCM HAWK	90		713		684		912		1200 CT				
1L18	GLS TAP	MTG	477 MCM HAWK	50		375		642		714		1200 CT				
1L18	MTG	MBO	455 MCM G/F BICC 138			460		530		530		1200 CT				
1L18	MBO	SAL TAP	477 MCM HAWK	50		375		642		714		1200 CT				
1L18	SAL TAP	SAL	477 MCM HAWK	50		375		642		714		1200 CT				
1L18	SAL TAP	VIT	477 MCM HAWK	50		375		642		714		1200 CT	1200	800	1D12 at SAL rated 800A	
1L18 Overall	ARN	VIT	477 MCM HAWK	50		375		530		530					1L18 Overall: OH limit summer, UG winter	
1L31	CKY	WFR	438 mm ACSR SPEC. 42/7	49		515		915				800 CT	1200			PN LIMIT – WINTER
1L31	WFR	BOX TAP	470MM(SQ)37/0 ASC	49		260		440								
1L31	BOX TAP	GIB	135 mm ACSR PARTRIDGE	49		260		440				800 CT	1200			
1L31	BOX TAP	BOX	336.4 MCM 26/7 Linnet ACSR	90		572				689						
1L32	SEC	GIB	135 mm ACSR PARTRIDGE	90		504		601		635		800 CT	600	800		GIB 1D21 WINTER
1L33	SAY	GPT	235 mm ACSR/1.25 " STEEL SPEC.	90		504		601		635						
1L33	FVW	GPT	135 mm ACSR PARTRIDGE	90		504		601		635						
1L33	POW	FVW	135 mm ACSR PARTRIDGE	90		504		601		635			600			
1L35	MSA	PHR	135 mm ACSR PARTRIDGE	90		490		590				800 CT	1200			
1L35	SEC	PHR	135 mm ACSR PARTRIDGE	90		490		590				800 CT	1200	800		

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L35	MSA tie point	SEC tie point	135 mm ACSR PARTRIDGE	90		493		594					1200		NEW TIE SWITCH	
1L37	MSA	AGAMEM. SOUTH	267 MCM ACSR PARTRIDGE	90		504		601		635		800 CT				
1L37	AGAMEM. SOUTH	AGAMEM. NORTH	470 MCM ACSR 54/37			10		10		10					AGAMEMNON CHANNEL Crossing Rating reduced to support charging current only. Study required to support load current.	
1L37	AGAMEM. NORTH	JERVIS SOUTH	267 MCM ACSR PARTRIDGE	90		504		601		635						
1L37	JERVIS SOUTH	JERVIS NORTH	235 mm ACSR/1.25 " STEEL SPEC.			10		10		10					JERVIS INLET Crossing Rating reduced to support charging current only. Study required to support load current.	
1L37	JERVIS NORTH	SAY	267 MCM ACSR PARTRIDGE	90		504		601		635		735 IR @ SAY				
1L44	SEC	SCG TAP	135 mm ACSR PARTRIDGE	90		490		590		637		800 CT		800	Ambient > 30°C to be expected	
1L44	SCG TAP	COM	135 mm ACSR PARTRIDGE	90		490		590		637		800 CT	600	800	Ambient > 30°C to be expected; CT LIMIT at COM IS DERIVED FROM (1L45 CT 400A + COM GS CT 400A) 600A DS rating is 1D1L44	
1L48	SAY	GPT	275 mm AACSR SPEC.	90		848		1036					1200			
1L48	FVW	GPT	470 mm 37/0 ASC	82		975		1220						1200		
1L48	FVW	POW	470 mm 37/0 ASC	90		1050		1275						1200		
1L55	HLD	HVC TAP	1 – 636.0 MCM ACSR GOOSE	90		851	--			1091	--	800 CT	800			PN LIMIT
1L55	HVC TAP	HVC	1 – 636.0 MCM ACSR GOOSE	90		851	--			1091	--					
1L55	HVC TAP	CCD TAP	1-266.8 MCM PARTRIDGE ACSR	49		254	--			488	--					
1L55	CCD TAP	CCD	1-266.8 MCM PARTRIDGE ACSR	90		493	--			627	--					
1L55	CCD TAP	LLD	1-266.8 MCM PARTRIDGE ACSR	49		254	--			488	--					
1L55	LLD	STL	1-266.8 MCM PARTRIDGE ACSR	49		254	--			488	--					

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L101	JHT	DMR	397.5 MCM IBIS	88		625				805		1041 IR	800			
1L101	CMX TAP	CMX	926.7 MCM ASC 37/0	90		1065				1375						
1L101	OYR TAP	OYR	397.5 MCM IBIS	90		635				810						
1L102	JHT	PUN	397.5 MCM IBIS	90		635				810		1200 CT		800		
1L102	CBL TAP	CBL	397.5 MCM IBIS	50		320				645				800		
1L102	CMX TAP	CMX	926.7 MCM ASC 37/0	90		1065				1375						
1L103	JHT	ICG TAP	397.5 MCM IBIS	90		635				805		1121 IR @ JHT				
1L103	ICG TAP	EFM	1272 MCM NARCISSUS	93		1308				1667		1172 IR @ EFM			Narcissus limit at 220hr/year	PN
1L103	ICG TAP	ICG	1272 MCM NARCISSUS	93		1308				1667		1562 IR @ ICG				PN - WINTER
1L104	JHT	ICG TAP	397.5 MCM IBIS	90		635				805		1121 IR @ JHT				
1L104	ICG TAP	EFM	1272 MCM NARCISSUS	93		1308				1667		1172 IR @ EFM			Narcissus limit at 220hr/year	PN
1L104	ICG TAP	ICG	1272 MCM NARCISSUS	93		1308				1667		1562 IR @ ICG				PN - WINTER
1L105	DMR	PAL	397.5 MCM IBIS	88		625				805		800 CT	800	800		PN LIMIT – WINTER
1L106	PUN	DMR	397.5 MCM IBIS	88		625				805		1200 CT	800			
1L109	VIT	PVO	927 MCM ASC 37/0	91		1060				1355		2000 CT	800			
1L109	PVO	HWW	397.5 MCM IBIS	71		520				735			600			
1L109	SWN TAP	SWN	397.5 MCM IBIS	90		650		780		820						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L110	JPT	NFD	1272 BITTERN	70		1069				1529		480 O/C	1200		PN LIMIT	
1L112	JPT	HWD TAP	336.4 MCM LINNET	90		570				730		400 O/C				
1L112	HWD TAP	NEX TAP	336.4 MCM LINNET	90		570				730						
1L112	NEX TAP	IPH TAP	336.4 MCM LINNET	90		570				730						
1L112	IPH TAP	HMC	336.4 MCM LINNET	90		570				730						
1L112	IPH TAP	IPH	336.4 MCM LINNET	90		570				730						
1L112	NEX TAP	NEX	336.4 MCM LINNET	50		304				571						
1L114	DMR	PAL	397.5 MCM IBIS	88		625				805		800 CT			PN LIMIT – WINTER	
1L115	DMR	JPT	397.5 MCM IBIS	90		635				810		1200 CT	600			
1L115	PVL TAP	PVL	397.5 MCM IBIS	50		337				635						
1L115	QLC TAP	QLC	397.5 MCM IBIS	90		635				810						
1L116	DMR	JPT	397.5 MCM IBIS	90		635				810		1200 CT	600			
1L116	PVL TAP	PVL	397.5 MCM IBIS	50		337				635			800			
1L116	QLC TAP	QLC	397.5 MCM IBIS	90		635				810						
1L117	JHT	LDR	715.5 MCM STARLING	90		925				1185		1200 CT	800			
1L118	JHT	LDR	715.5 MCM STARLING	90		925				1185		1200 CT	800	1200		
1L119	JHT	DMR	397.5 MCM IBIS	90		635				810		10 76 IR	800			

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L119	CBL TAP	CBL	397.5 MCM IBIS	50		320				645						
1L119	OYR TAP	OYR	397.5 MCM IBIS	90		635				810		426 IR				
1L119	BKB TAP	BKB	397.5 MCM IBIS	90		650		780				500 CT				
1L120	SCA	GLD	397.5 MCM IBIS	91		640				815		600 CT	600	800	PN	
1L121	LDR	SCA	397.5 MCM IBIS	95		660				830		1200 CT	600	800		
1L122	VIT	PVO	927.2 MCM ASC 37/0	91		1060				1355		800 CT	800	800	PN	
1L122	PVO	HWW	397.5 MCM IBIS	71		520				735			600			
1L122	LDY TAP	LDY	397.5 MCM IBIS	88		625				805				800		
1L123	JPT	HWW	397.5 MCM IBIS	82		591				781		800 CT				
1L123	HWD TAP	HWD	927.2 MCM ASC 37/0	90		1050				1350						
1L124	JPT	HWW	397.5 MCM IBIS	71		520				735		1200 CT	600			
1L125	KGH	KTS	927.2 MCM ASC 37/0	50		540				1050		800 CT	800	1200	KGH CT ratio 800-5 KTS CT ratio 800-5	
1L125	PML TAP	PML	927.2 MCM ASC 37/0	90		1050				1350						
1L127	PAL	GCL	336.4 MCM LINNET	60		395		565		617			600	1200		
1L128	JPT	HWW	397.5 MCM IBIS	71		520				735			600			
1L130	KGH	JUL	397.5 MCM IBIS	50		349				580		500 CT			PN WINTER	
1L130	MRH TAP	MRH	1/0 RAVEN	50		150				272						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L131	GLD	TSV	397.5 MCM IBIS	82		585				780		814 IR @ GLD	800	800		
1L131	CMH TAP	CMH	266.8 PARTRIDGE	90		495				630						
1L134	GLD	GRP	397.5 MCM IBIS	50		337				635		1200 CT	800			
1L136	KGT	KGH	397.5 MCM IBIS	90		635				810		500 CT				PN
1L137	KGH	PHY	397.5 MCM IBIS	90		635				810		754 IR @ PHY		1200		PN
1L138	VIT	HWW	397.5 MCM IBIS	82		591				781		800 CT				
1L138	LDY TAP	LDY	397.5 MCM IBIS	88		625				805						
1L138	MHY TAP	MHY	397.5 MCM IBIS	88		880				1090						
1L138	SWN TAP	SWN	397.5 MCM IBIS	90		650		780								
1L139	VIT	CFT	397.5 MCM IBIS	90		635				810		1200 CT	800			
1L140	VIT	CFT	397.5 MCM IBIS	90		635				810		2000 CT	1200			
1L141	PHY	CSS	954 kcmil 54/7 ACSR Cardinal	90		1071				1361		500 CT	1200		CSS Revenue Meter CT is 500-5 A. 1D1L141 is rated 1200 A.	PN
1L142	ASH	GCL	336.4 MCM LINNET	60		395		565		617		600 CT	600	400	ASH 600A CT limitation	PN WINTER
1L143	JOR	SOO TAP	636 MCM GOOSE	90		850				1090		800 CT		800		PN
1L143	SOO TAP	SOO	636 MCM GOOSE	90		850				1090		800 CT		800		PN
1L143	SOO TAP	CLD TAP	636 MCM GOOSE	90		850				1090		800 CT		800		PN
1L143 Overall	JOR	CLD	636 MCM GOOSE	90		850		1033		1090		800 CT		800		PN

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L146	CLD TAP	CLD	636 MCM GOOSE	90		850				1090						
1L146	CLD TAP	GOW	636 MCM GOOSE	90		850				1090						
1L146 Overall	CLD	GOW	636 MCM GOOSE	90		850		1033		1090						
1L152	JPT	NFD	1272 MCM BITTERN	70		1069				1529		600 CT			PN	
1L157	GLD	KTS	927.2 MCM ASC 37/0	50		540				1050		1103 IR @GLD		1200	GLD CT ratio 1200-5 KTS CT ratio 800-5	
1L157	BVC TAP	BVC	636 MCM ORCHID	90		832				1007						
1L201	VNT	LU2 TAP	1-336.4 MCM LINNET ACSR	62		411				625		941 IR @VNT		800		
1L201	LU2 TAP	LU2	1-336.4 MCM LINNET ACSR	62		411				625						
1L201	LU2 TAP	TIL TAP	1-336.4 MCM LINNET ACSR	62		411				625						
1L201	TIL TAP	TIL	1-336.4 MCM LINNET ACSR	90		571				728						
1L201	TIP TAP	MON	1-336.4 MCM LINNET ACSR	62		411				625		565 IR @MON	600	800		
1L202	VNT	LU2 TAP	1-336.4 MCM LINNET ACSR	62		411				625		400 CT		800	PN	
1L202	LU2 TAP	LU2	1-336.4 MCM LINNET ACSR	62		411				625						
1L202	LU2 TAP	MON	1-336.4 MCM LINNET ACSR	62		411				625						
1L203	SVA	HLD	1-477.0 MCM HAWK ACSR	90		723		866		915		800 CT	800		HLD 1D24 WINTER	
1L204	SVA	TMT TAP	1-477.0 MCM HAWK ACSR	90		714				912		800 CT	600		1D1L204 and 1D2L204 DS Limit	
1L204	TMT TAP	TMT	1-266.8 MCM PARTRIDGE ACSR	90		493				627			600			

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L204	TMT TAP	DUG	1-477.0 MCM HAWK ACSR	90		714				912			600		1D3L204 DS Limit	
1L205	SVA	HLD	1-266.8 MCM PARTRIDGE ACSR	90		497		593		627		800 CT	800A	800	Pipeline crossings Access to Vehicle clearance only.	
1L206	SVA	BKL	1-477.0 MCM HAWK ACSR / 1250 MCM CWC	90		714 (O/H) 755 (U/G)				886 (O/H) 915 (U/G)		800 CT	800			O/H
1L209	VVW	LF2 TAP	1-336.4 MCM LINNET ACSR	70		472				658		800 CT	600			
1L209	LF2 TAP	LF2	1-336.4 MCM LINNET ACSR	49		292				566						
1L209	LF2 TAP	CHS	1-336.4 MCM LINNET ACSR	70		472				658			600			
1L209	CHS	STO	1-336.4 MCM LINNET ACSR	70		472				658			600			
1L209	STO	SAM	1-336.4 MCM LINNET ACSR	70		472				658			600			
1L210	BKL	TOK TAP	1-266.8 MCM PARTRIDGE ACSR	90		493				627		432 IR @ BKL	800			PN
1L210	TOK	TOK TAP	1-266.8 MCM PARTRIDGE ACSR	90		493				627						
1L210	TOK TAP	HFY TAP	1-266.8 MCM PARTRIDGE ACSR	90		493				627						
1L210	HFY	HFY TAP	1-266.8 MCM PARTRIDGE ACSR	49		254				488						
1L210	HFY TAP	BAR TAP	1-266.8 MCM PARTRIDGE ACSR	90		493				627			600		1D1L210 DS Limit	
1L210	BAR	BAR TAP	1-266.8 MCM PARTRIDGE ACSR	90		493				627						
1L210	BAR TAP	DFD TAP	1-266.8 MCM PARTRIDGE ACSR	88		484				622			600		1D3L210 DS Limit	
1L210	DFD	DFD TAP	1-266.8 MCM PARTRIDGE ACSR	90		493				627						
1L210	DFD TAP	BLP TAP	1-266.8 MCM PARTRIDGE ACSR	88		484				622						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L210	BLP	BLP TAP	1-266.8 MCM PARTRIDGE ACSR	50		254				488						
1L210	BLP TAP	CLW TAP	1-266.8 MCM PARTRIDGE ACSR	88		484				622						
1L210	CLW	CLW TAP	1-266.8 MCM PARTRIDGE ACSR	88		484				622						
1L210	CLW TAP	VBY TAP	1-266.8 MCM PARTRIDGE ACSR	88		484				622		600		1D4L210 DS Limit		
1L210	VBY	VBY TAP	1-266.8 MCM PARTRIDGE ACSR	50		254				488		600				
1L210	VBY TAP	TMM TAP	1-1-266.8 MCM PARTRIDGE ACSR	49		254				488		600		1D5L210 and 1D6L210 DS Limit		
1L210	TMM	TMM TAP	1-266.8 MCM PARTRIDGE ACSR	49		254				488						
1L210	AVO	TMM TAP	1-266.8 MCM PARTRIDGE ACSR	49		254				488		600				
1L211	AVO	BLU TAP	1-266.8 MCM PARTRIDGE ACSR	88		484				622		600 CT	600		PN WINTER	
1L211	BLU	BLU TAP	470 MCM 37/0 ASC	91		506				1351						
1L211	BET	BLU TAP	443 MCM ACSR CRANE	91		1052				1347		600	1200	1D2L211 DS Limit		
1L212	VLM	REG	1-266.8MCM Partridge ACSR	50		254				488						
1L214	VNT	VVW	1-336.4 MCM LINNET ACSR	60		395				617		678 IR @ VVW	600			
1L218	VNT	RVS TAP	1-336.4 MCM LINNET ACSR	90		571				728		699 IR @ VNT				
1L218	RVS TAP	RVS	1-336.4 MCM LINNET ACSR	90		571				728						
1L218	RVS TAP	ARM	1-336.4 MCM LINNET ACSR	90		571				728						
1L218	ARM	END	1-336.4 MCM LINNET ACSR	90		571				728		600				

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L218	END	SAM	1-336.4 MCM LINNET ACSR	90		571				728			600			
1L219	VVW	DUG	1-477.0 MCM HAWK ACSR	90		710		830		880		800 CT	800		PN Winter	
1L219	KWD TAP	KWD	1-477.0 MCM HAWK ACSR	90		710		830		880		300 CT			PN	
1L225	BET	ABA TAP	SP-37/0 ASC 927.2 MCM	90		1076				1295		300 CT	2000	1200	PN	
1L225	ABA TAP	VLM	470 MCM 37/0 ASC	91		1055				1351						
1L241	VVW	BKL	1-477.0 MCM HAWK ACSR	90		725				923		800 CT		800	@ 1000' elevation PN	
1L242	VVW	DUG	1-477.0 MCM HAWK ACSR	90		714				923		800 CT				
1L243	NIC	HLD	1-477.0 MCM HAWK ACSR	90		714				923			800			
1L244	NIC	BDM TAP	1-477.0 MCM HAWK ACSR	90		710		840		920		800 CT	1200		PN Winter	
1L244	BDM TAP	BDM	1-477.0 MCM HAWK ACSR	90		710				920						
1L244	BDM TAP	WBK	1-477.0 MCM HAWK ACSR	90		710		840		920			800			
1L246	WGS	MON	1-396.7 MCM Ibis ACSR	88		623		766		804		800 CT	800		PN Winter	
1L249	MR2	MIG	1-477.0 MCM HAWK ACSR			740		875		924		800 CT @MR2			PN Winter	
1L251	NIC	SOO	135 mm ACSR PARTRIDGE	90		490		590		627		800 CT			½ Circuit built as 1L252 with PRI tap at str> 2/6 (1L252 numbering) Ambient temp >30°C to be expected	
1L254	HLD	MR2	477kcmil 26/7 Hawk ACSR	90		730				924						
1L274 (777L)	NTL	LCC TAP	135 mm ACSR PARTRIDGE	75		424		537		575		600 CT	600		Ambient temp >30°C to be expected Reference SOO 7T-17 – Limit at NTL 2x50 MVA transformer.	
1L274 (777L)	LCC TAP	LCC	135 mm ACSR PARTRIDGE	90		493		590		627		600 CT			Ambient temp >30°C to be expected	

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L358	BMT	STR 47/2 (KIS tap)	171 mm ACSR MERLIN	90		559		674		701		800 CT				PN Winter
1L359	FNG	RAINBOW LAKE (ALBERTA)	1-477.0 MCM HAWK ACSR	100		770		970						400		
1L360	GMS	TAY	171 mm ACSR MERLIN	90		560				675		800 CT				
1L360	SCX TAP	SCX	Linnet 26/7 336.4 MCM ACSR	90		560		674		728						
1L361	GMS	CWD	171 mm ACSR MERLIN	90		559		674		701		600 CT	600	800	CWD 138kV bus is rated for 600 A	DS Winter
1L364	GMS	PPS TAP	171 mm ACSR MERLIN	90		570		682		721		983 IR	1200			
1L364	PPS	PPS TAP	171 mm ACSR MERLIN	49		290				495						
1L364	PPS TAP	FOX TAP	171 mm ACSR MERLIN	90		570		682		721						
1L364	FOX TAP	FOX	171 mm ACSR LINNET	90		570				725						
1L364	FJN	FOX TAP	171 mm ACSR MERLIN	90		570		682		721		800 CT	800			
1L365	SVY	MWN	135 mm ACSR PARTRIDGE	50		280				450		600 CT	800			
1L365	MWN	FRH	135 mm ACSR PARTRIDGE	50		280				450						
1L365	KDS	FRH	135 mm ACSR PARTRIDGE	50		280				450		754 IR				
1L366	MFE	TBN	135 mm ACSR PARTRIDGE	49		265				440		800 CT	800			
1L366	FCC	TBN	136 mm ACSR PARTRIDGE	49		265				440						
1L367	FJN	SLO TAP	171 mm ACSR MERLIN	82		520				650		800 CT	1200	800		
1L367	SLO	SLO TAP	171 mm ACSR MERLIN	50		300				500			1200			

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L367	SLO TAP	TAY	171 mm ACSR MERLIN	82		520				650		800 CT	1200			
1L368	MFE	PRS	135 mm ACSR PARTRIDGE	60		350				495		800 CT	800			
1L368	PRS	FFI	135 mm ACSR PARTRIDGE	60		350				495		800 CT				
1L371	FJN	TXB	171 mm ACSR MERLIN	82		520				650		213 O/C		800	PN	
1L373	KDS	MFE	135 mm ACSR PARTRIDGE	95		510				610		1200 CT	800	1200		
1L374	GMS	PPS	171 mm ACSR MERLIN	90		560				675		1200 IR @ GMS	1200			
1L374	FJN	PPS	171 mm ACSR MERLIN	90		560				675		800 CT	600		Single Breaker Closed DS Rating: 600A - FJN 1D1CB2, FJN 1D2CB2	
1L374	SCX TAP	SCX	Linnet 26/7 336.4 MCM ACSR	90		560		674		728						
1L375	TAY	MCM TAP	171 mm ACSR LINNET	90		560		674		728		800 CT	1200			
1L375	MCM	MCM TAP	171 mm ACSR LINNET	90		560		674		728		800 CT				
1L375	MGP	MCM	171 mm ACSR LINNET	90		560		674		728		800 CT				
1L375	NGL	MCM TAP	171 mm ACSR LINNET	90		560		674		728		800 CT				
1L375	FBC	NGL	171 mm ACSR LINNET	90		560		674		728		800 CT				
1L375 Overall	TAY	MGP	171 mm ACSR LINNET	90		560		674		728		800 CT				
1L377	DAW	TAY	171 mm ACSR MERLIN	90		567				717		2000 CT	800		PN - WINTER	
1L381	AYH	EWL TAP	135 mm ACSR PARTRIDGE	75		430				545		637 IR @ AYH	600	800		
1L381	EWL TAP	MEZ TAP	135 mm ACSR PARTRIDGE	75		430				545						

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L381	MEZ TAP	LNT	135 mm ACSR PARTRIDGE	75		430				545		410 IR @ LNT		800		
1L384	GLN	BRN TAP	135 mm ACSR PARTRIDGE	50		280				450		800 CT	800	600		
1L384	BRN	BRN TAP	135 mm ACSR PARTRIDGE	50		280				450						
1L384	TPY	BRN TAP	135 mm ACSR PARTRIDGE	50		280				450			600	600		
1L385	TKW	SRS	135 mm ACSR PARTRIDGE	50		280				450		1200 CT	2000			
1L387	SKA	Str 65/03	623.8MCM Peace 48/7	49		417		709		792		511 IR @ SKA		800		PN
1L387	Str 65/03	AYH	135 mm ACSR PARTRIDGE	49		265				440				800		PN
1L390	TPY	BAB	135 mm ACSR PARTRIDGE	50		280				450		300 CT	800			PN - WINTER
1L391	HUS	HML	135 mm ACSR PARTRIDGE	90		490				595		734 IR	1200			
1L392	HZN	SRS	135 mm ACSR PARTRIDGE	88		485				590		107 O/C @ SRS	800			PN
1L393	HUS	EQU TAP	135 mm ACSR PARTRIDGE	49		255				440		160 O/C @ HUS	800			PN
1L393	EQU	EQU TAP	135 mm ACSR PARTRIDGE	49		255				440						
1L393	NHS	EQU TAP	135 mm ACSR PARTRIDGE	49		255				440						
1L396	TKW	HUS	135 mm ACSR PARTRIDGE	90		503		583		618		729 IR @ TKW	800			
1L398	HUS	TPY	135 mm ACSR PARTRIDGE	49		255				440		300 CT	1200			PN - WINTER
1L402	LNT	WNR TAP	135 mm ACSR PARTRIDGE	75		430				545						
1L402	WNR TAP	STW	135 mm ACSR PARTRIDGE	75		430				545		50 O/C		600		PN

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
1L402	WNR TAP	WNR	135 mm ACSR PARTRIDGE	50		280				450		200 CT			PN	
2L1	FCN	RBW	403 mm ACSR CONDOR	50		505		884		985		1200 CT @FCN	1200			
2L1	PEM	RBW	403 mm ACSR CONDOR	50		505		884		985						
2L1	PEM	BRT	403 mm ACSR CONDOR	50		505		884		985		1200 CT @BRT		800	Wavetrap limit – winter	
2L1 Overall	BRT	FCN	403 mm ACSR CONDOR	50		505		884		985				800	Wavetrap limit – winter	
2L2	TIS	RBW TAP	2-795.2 MCM Drake ACSR	50		1020		1780				1500 CT			PN & DS LIMIT–WINTER	
2L2	RBW	RBW TAP	1-927.2 - 37/0 ASC	90		1047		1274		1345						
2L2	CKY	RBW TAP	1-927.2 - 37/0 ASC	90		952		1200							RBW to Tower 85/3 2-DRAKE, Tower 85/3 to CKY 1-927.2 – 37/0 ASC	
2L2 Overall	TIS	CKY	1-927.2 - 37/0 ASC	50		952		1200				1200 CT	1200		Major portion of 2L2 is Drake conductor. However, 1-927.2 – 37/0 ASC is limiting factor. PN & DS LIMIT - WINTER	
2L3	WLT	HPN	403 mm ACSR CONDOR	90		995		1210				2000 CT	1200		DS LIMIT - WINTER	
2L4	ING	CAM TAP	403 mm ACSR DRAKE	90	108	990	1150	1220		1350		2000 CT				
2L4	CAM	CAM TAP	403 mm ACSR DRAKE	90	108	990	1150	1220		1350		2000 CT				
2L4	KI2	CAM TAP	403 mm ACSR DRAKE	90		990		1220				2000 CT				
2L5	FCN	CKY	403 mm ACSR CONDOR			505		884					1200			
2L6	ING	SYH	2-443 mm ACSR CRANE	90	130 (150)	2084*	2670 (2900)	2540	2998 (3192)	2682	3108* (3288)	2000 CT	1600		130°C Overload Limits: 300 hr/year 150°C Overload Limits: 50 hr/year Single Breaker Closed DS rating: 1600A - ING 2D1CB5, 2D2CB5	
2L6	SYH	ARN	2-443 mm ACSR CRANE	90	130 (150)	2084*	2670 (3288)	2540	2998 (3192)	2682	3108* (3288)	2000 CT	1600		130°C Overload Limits: 300 hr/year 150°C Overload Limits: 50 hr/year Single Breaker Closed DS rating: 1600A - ARN 2D1CB10, 2D2CB10, 2D2CB11	

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
2L9	CKY	LYN	403 mm ACSR CONDOR	90		980		1193				1200 CT @CKY	1200			
2L10	ING	ARN	403 mm ACSR DRAKE	54		585		933		1026		2000 CT	1200			
2L11	WLT	BUT	441 mm AACSR SPEC.	66		840		1160				2000 CT	1200		BURRARD INLET @ 66°C	
2L12	CKY	CMS	403 mm ACSR DRAKE	63*		712		1009		1006		1145 IR	1200	1200		
2L13	CKY	CYP	465 mm ASC SPEC.	75		899		1167				1200 CT	1200			
2L14	CYP	WLT	403 mm ACSR DRAKE	75		850		1102				1200 CT	1200			
2L17	LYN	WLT	403 mm ACSR CONDOR	90		980		1193				2000 CT	1200			
2L19	BRT	BR1	403 mm ACSR DRAKE	50		508		891		993		211 O/C	800		Single Breaker Closed DS Rating: 800A - BRT 2D1CB3, BRT 2D1CB4	PN Limit
2L20	CSQ	MPT	1600 mm ² XLPE cable			719	1687	916	1819	916	1819				Cable 216 HRS OVERLOAD	Steam pipe crossing, Richards and Georgia
2L22	MDN	WHY	403 mm ACSR DRAKE	90		989		1200		1270		1200 CT @WHY	1200			PN & DS LIMIT - WINTER
2L27	ING	WHY	403 mm ACSR DRAKE	90		989		1200		1270		2000 CT	1200			DS LIMIT - WINTER
2L29	PSY	PSY TAP	Bittern	90		1301		1591		1671		1200 CT	1200		Customer owned circuit and BCH operated circuit PSY Wavetrap 1250A	CT LIMIT
2L29	ETR	ETR TAP	Bittern	90		1301		1591		1671		1200 CT	1200		Customer owned circuit and BCH operated circuit ETR Wavetrap 1000A ETR 2CB1 1200A	WAVE TRAP LIMIT
2L29	MTC	MTC TAP	Bittern	90		1301		1591		1671		1200 CT	1200		Customer owned and BCH operated circuit MTC Wavetrap 400A MTC 2CB 1200A	WAVE TRAP LIMIT
2L31	MUR	CSQ	1266 mm P/T Cable			650	900	830	1070	830	1070	2000 CT	1200		CABLE 300 HRS OVERLOAD	Steam pipe crossing, intersection of Dunsmuir and Hamilton
2L32	HPN	CSQ	1266 mm O/F Cable			1070	1260	1230	1410	1230	1410	2000 CT	1200		CABLE 100 HRS OVERLOAD Single Breaker Closed DS Rating: 1200A - HPN bus breaker DS ratings	
2L33	HPN	CSQ	1600 mm ² Cu O/F Cable			1250	1500	1250	1500	1250	1500	2000 CT	1200		CABLE 200 HRS OVERLOAD Single Breaker Closed DS Rating: 1200A - HPN bus breaker DS ratings	(ASSUMES 750A PRELOAD)

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
2L38	MDN	COK	2-443 mm ACSR CRANE			2050	2930	2560	3240			3000 CT @COK	3000			
2L39	COK	NEL	1200 mm Cu (PPLP) O/F CABLE			950	1250	950	1250	950	1250	2000 CT	1200		CABLE 200 HRS OVERLOAD	
2L40	BUT	BND	438 mm ACSR 42/7	90		1020		1260				2000 CT				
2L40	BND	NEL	1200 mm Cu (PPLP) O/F CABLE			950	1250	950	1250	950	1250	2000 CT	1200		CABLE 200 HRS OVERLOAD	
2L41	BRT	TIS	2-795.2 MCM DRAKE	50		1020		1780				1500 CT	1200	800	-Wavetrap limit	
2L44	MPT	SPG	1600 mm ² XLPE cable			1173	1883	1245	1968	1245	1968		2000		Cable 216 HRS OVERLOAD	
2L45	SPG	CSN	633 mm O/F Cable			665	810	825	920	825	920	2000 CT	1200		CABLE 100 HRS OVERLOAD	
2L47	MSA	HSP	470 mm 37/0 ASC	49		530		940				1200 CT		1200		
2L48	MSA	SAY	275 mm AACSR SPEC.	90		848		1036					1200		JARVIS INLET	
2L49	MDN	HPN	441 mm AACSR SPEC.	66		840		1160				2000 CT	1200		BURRARD INLET	
2L50	BUT	MUR	633 mm O/F Cable			710	850	840	960	840	960	2000 CT			CABLE 100 HRS OVERLOAD	
2L51	COK	BND	1393 mm O/F Cable			1075	1537	1247	1713	1247	1713	2000 CT			CABLE 300 HRS MAXIMUM OVERLOAD DURATION PER YEAR	
2L51	HPN	BND	1393 mm O/F Cable			1089	1543	1259	1718	1259	1718	2000 CT	1200		CABLE 300 HRS MAXIMUM OVERLOAD DURATION PER YEAR Single Breaker Closed DS Rating: 1200A - HPN bus breaker DS ratings	DS - OVERLOAD + WINTER
2L52	MDN	COK	2-443 mm ACSR CRANE	88		2050	2930	2560	3240			2000 CT @COK	2000		DS - WINTER	
2L53	MUR	MAN	583 mm O/F Cable			580	700	705	815	705	815	2000 CT			CABLE 100 HRS OVERLOAD 15 MIN. EMERGENCY = 1300A	
2L54	MDN	BUT	2-443 mm ACSR CRANE	88		2050	2930	2560	3240			2000 CT @BUT	2000		DS - WINTER	
2L55	MAN	CSN	633 mm O/F CABLE			665	845	825	990	825	990	2000 CT	1200		CABLE 100 HRS OVERLOAD	

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
2L56	ING	CAM TAP	403 mm ACSR DRAKE			1000		1220				2000 CT	1200			
2L56	CAM	CAM TAP	403 mm ACSR DRAKE			1068		1293				2000 CT	2000			
2L56	MAN	CAM TAP	633 mm O/F CABLE			665	845	825	990	825	990	2000 CT			CABLE 100 HRS OVERLOAD	
2L57	ING	SYH	403 mm ACSR DRAKE	54		585		933		1026		2000 CT	1200			
2L57	SYH	ARN	403 mm ACSR DRAKE	54		585		933		1026		2000 CT				
2L58	KI2	STV	403 mm ACSR DRAKE	71		830		1090				2000 CT	2000			
2L61	MDN	BUT	2-443 mm ACSR CRANE	88		2050	2930	2560	3240			2000 CT @BUT	2000		PN & DS LIMIT - WINTER	
2L62	STV	ARN	DRAKE / Cable	71		830		1000	1100	1000	1100	2000 CT			O/H SUMMER; CABLE WINTER	
2L63	ING	ARN	2-443 mm ACSR CRANE	90	130 (150)	2084*	2670 (2900)	2540	2998 (3192)	2682*	3108 (3288)	2000 CT	2000		Conductor rating only. Circuit terminates in a 2000 A disconnect at ARN. 2300 A max at low ambient. 130° C Overload Limit:: 300 hr/hour 150°C Overload Limit: 50 hr/hour	
2L64	KI2	SPG	633 mm O/F Cable			605	755	765	875	765	875				Cable 100 Hours O/L	
2L74	ING	FLW	2-403 mm ACSR DRAKE	75		1700		2204		2358			2000		Single Breaker Closed DS Rating: 2000A - ING Bus Breaker DS rating	
2L75	FLW	MLN	2-403 mm ACSR DRAKE	75		1700		2204		2358		3000 CT	2000		MLN 2D25: 2000A DS WINTER	
2L76	MLN	MLE	2-403 mm ACSR DRAKE	75		1700		2204		2358		2000 CT	1200		MLN 2D24: 2000A MLE 2D21: 1200A DS	
2L77	CBN	ALZ	2-403 mm ACSR DRAKE	75		1700		2204		2358		2000 CT	1600		Single Breaker Closed DS Rating: 1600A - ALZ 2D1CB4 DS - WINTER	
2L78	ALZ	ROS	2-403 mm ACSR DRAKE	75		1700		2204		2358		2000 CT	2000		DS - WINTER	
2L79	MLE	CBN	2-403 mm ACSR DRAKE	75		1700		2204		2358		2000 CT	1200		WT	
2L86	HMH	KLY	403 mm ACSR DRAKE	80		899		1137		1211		800 CT @HMH	1200	1200	PN	

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
2L90	KLY	BRT	403 mm ACSR DRAKE	55		510		890		993		1200 CT	800		Single Breaker Closed DS Rating: 800A - BRT 2D2CB1, BRT 2D1CB1	
2L91	KLY	BRT	403 mm ACSR DRAKE	50		510		890		993		1176 IR				
2L92	KLY	SVA	1-927.2 MCM 37/0 ASC	49		512				1940		800 CT @SVA	1200			PN – WINTER
2L93	KLY	SVA	1-927.2 MCM 37/0 ASC	49		512				1940		800 CT @SVA	1200			PN – WINTER
2L94	SCK	KLY	470 mm ASC 37/0	50		537		942		1050		800 CT @SCK	1200			PN – WINTER
2L95	SCK	RBF	470 mm ASC 37/0	50		510		942		993		800 CT	1200			PN – WINTER
2L95	River Crossing		403 mm ACSR DRAKE	50						890						
2L96	WSN	BLW	470 mm ASC 37/0	65		770		1020		1120		800 CT @BLW	1200			
2L97	WSN	SVY	470 mm ASC 37/0	80		950				1180		1200 CT	1200	1200		
2L97	Fraser River Crossing		403 mm ACSR DRAKE	80						1180						
2L99	SKA	MIN	685 mm ASC COLUMBINE	43		450		905		1075		1200 CT @MIN				
2L100	MIN	Permanent Line Cut	685 mm ASC COLUMBINE	90		1325				1620		1200 CT	1200			PN & DS
2L101	RUP	SKA	1-1192.5 MCM – Grackle ACSR	50		640		1145		1275		400 CT @RUP	800	800	CDR RATING @ 66 C	PN
2L102	SKA	BQN	SP-2303.5 kcmil 91/0 ASC	90		1812				2352		1200 CT @BQN	650		Conductor rating is station slack spans. Rest of the line is 1590 kcmil 45/7 ACSR Lapwing: (90C, 2989A 30C, 3868A 0C) SKA 2LRX22 rating: 1500A BQN series cap rated at 650 A	Series Capacitor
2L103	MIN	KIT	685 mm ASC COLUMBINE	49		632		1175		1316		1200 CT	1600			PN WINTER
2L105	MIN	EUR	685 mm ASC COLUMBINE	50		670				1190		1200 CT	2000			PN – WINTER

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
2L112	NLY	BDY	1-875.2 MCM CRANE ACSR	90		1042		1270		1341		1128 IR		1200	Ambient > 30°C to be expected	PN – WINTER
2L113	CBK	NTL	1-875.2 MCM CRANE ACSR	90		1042		1270		1341		800 CT @NTL	1200	1200	Ambient > 30°C to be expected	PN
2L123	SAT	DMR	2303.5 MCM ASC 91/0	80	121	1636	1810			2233	2670	3000 CT	3000		Future 5L23. • SAT to 0/1 = 1X2303.5 MCM ASC 91/0 SPECIAL • 0/1 to 17/3 = 4X666.9 MCM ACSR 24/7 MICA • 17/3 to 60/1 = 4X666.9 MCM ACSR 24/5 MICA • 60/1 to DMR = 1X2303.5 MCM ASC 91/0 SPECIAL	
2L123	HWW TAP	HWW	SP-2303.5 MCM 2 bundle Crane 874.5 MCM	90		2100		2568				3000 CT	2000			
2L125	SAT	VIT	2 x 874.5 MCM CRANE	90	150	2085	2900			3289		2000 CT	3000		Overload limit at 20 hr/year	DS
2L126	SAT	PIK	2303.5 MCM ASC 91/0	80	90	1637	1810			2233	2350	2000 CT			Future 5L21. Overload limit at 220 hr/year • SAT to 0/1 = 1X2303.5 MCM ASC 91/0 SPECIAL • 0/1 to 9/2 = 4X666.9 MCM ACSR 24/5 MICA • 9/2 to 24/1 = 4X648.2MCM ACSR 26/7E SPECIAL • 24/1 to 47/1 = 4X666.9 MCM ACSR 24/5 MICA • 47/1 to 48/2 = 4X648.2MCM ACSR 26/7E SPECIAL • 48/2 to 53/5 = 4X666.9 MCM ACSR 24/5 MICA • 53/5 to 53/5B = 2X874.5MCM ACSR 54/7 CRANE • 53/5B to PIK = 1X2303.5 MCM ASC 91/0 SPECIAL	PN – WINTER
2L128	SAT	DMR	2303.5 MCM ASC 91/0	80	150	1637	1810			2233	2930	3000 CT	3000		Future 5L25. • SAT to 0/1 = 1X2303.5 MCM ASC 91/0 SPECIAL • 46/2 to 95/2 = 4X666.9 MCM ACSR 24/5 MICA • 95/2 to DMR = 1X2303.5 MCM ASC 91/0 SPECIAL	
2L128	HWW TAP	HWW	SP-2303.5 MCM 2 bundle Crane 874.5 MCM	90		2100		2568				3000 CT	2000			DS
2L129	ARN	EBT	1590 kcmil 45/7 ACSR	100		1619		1925				2000 CT @ARN	1600		Single Breaker Closed DS Rating: 1600 A - ARN Bus Breaker DS rating	
2L129	EBT	TBY	1600mm2PPLP Cable			1549		1549		1549					Strait of Georgia Length: 24.3 km NOTE: When one pump station OOS Circuit Section De-rated to 658 A (Summer and Winter)	
2L129	TBY	MTG	230 kV 1590 kcmil 45/7 ACSR	100		1619		1925							Str. 35/00R to 37/2R and 39/2R to 39/99R Length -3.0 km	

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
2L129	Montague Harbor Crossing		766 kcmil T26 ACCR	200		1619		1925							Str 37/2R to 39/2R Length 1.94 km	
2L129	MTG	MBO	1600mm2PPLP Cable			1549		1549		1549					Trincomali Channel Length - 3.96 km	
2L129	MBO	VIT	1590 kcmil 45/7 ACSR	100		1618		1925				2000 CT @VIT			Str 44/00R to 54/4R and 56/1R to 65/4R Length - 20.97	
2L129	Sansum Narrows Crossing		766 kcmil T26 ACCR	200		1618		1925							Str 54/4R to 56/1R Length 1.76 km	
2L130	SAT	VIT	2 x 874.5 MCM CRANE	90	150	2085	2900			2682	3289	2000 CT	3000		Overload limit at 20 hr/year	PN
2L131	PIK	KTG	927.2 MCM ASC 37/0	80	90	972	1068			1301	1365	1200 CT @KTG			Overload limit at 220 hr/year	PN
2L132	PIK	KTG	927.2 MCM ASC 37/0	80	90	972	1068			1301	1365	1200 CT @KTG			Overload limit at 220 hr/year	PN
2L142	HSY	GTP	630 SQMM XLPE cable			824	967	913	1060	913	1060		1200		Overload Limit at 200 hr	
2L143	HSY	ESQ	2750 MCM P/O CW&C230			1133	1609			1204	1677	2000 CT			Overload rating at 100 hr	DS - OVERLOAD + WINTER
2L144	PIK	GOW	2303.5 MCM ASC 91/0	80	90	1637	1810			2233	2350	2000 CT	1200		Overload limit at 220 hr/year	DS
2L145	PIK	BNT	2303.5 MCM ASC 91/0	80	90	1637	1810			2233	2350	2000 CT	2000		Overload limit at 220 hr/year	DS - WINTER
2L145	BNT	ESQ	2000 MM(SQ) O/F CW&C230			1032	1330			1091	1373	1200 CT @ESQ			Overload rating at 100 hr	PN - OVERLOAD
2L146	GOW	HSY	1250 MCM O/F CW&C230			735	1141			870	1280	2000 CT	1200		Overload rating at 100 hr (interim)	Distribution duct bank crossing the circuit at the intersection of the Interurban Road and Wilkinson St.
2L154	DMR	GLD	927.2 MDM ASC 37/0	80	90	972	1040			1301	1350	1651 IR @DMR	1200	1200	Overload limit at 220 hr/year	
2L170	SAT	PIK	2303.5 MCM ASC 91/0	80	90	1637	1811			2099	2227	2000 CT			Future 5L20 Overload limit at 220 hr/year • SAT to 0/1 = 1X2303.5 MCM ASC 91/0 SPECIAL • 0/1 to 34/4 = 4X666.9 MCM ACSR 24/5 MICA • 34/4 to 34/4B = 2X874.5MCM ACSR 54/7 CRANE • 34/4B to PIK = 1X2303.5 MCM ASC 91/0 SPECIAL	PN - WINTER
2L221	SEV	SEL	2-875.2 MCM CRANE ACSR	80	99	1900	2350	2400	2650	2556	2788	2000 CT	2000		Ambient > 30°C to be expected	DS - OVERLOAD + WINTER

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
2L222	SEV	SEL	2-875.2 MCM CRANE ACSR	80	99	1900	2350	2400	2650	2556	2788	2000 CT	2000		Ambient > 30°C to be expected	DS - OVERLOAD + WINTER
2L240	ACK	SAM	1-927.2 MCM 37/0 ASC	90		1045				1345		1200 CT @SAM	1200	1200		DS - WINTER
2L253	REV	ILL	1-927.2 MCM 37/0 ASC	90		1045				1345		300 CT	1600	1200		WT - WINTER
2L255	ACK	VNT	1-875.2 MCM CRANE ACSR	91		1053				1277		1200 CT	1200			DS - WINTER
2L256	ACK	VNT	1-874.5 MCM CRANE ACSR	91		1053				1277		1200 CT	1200	1200		DS - WINTER
2L258	CBK	INV	1-927.2 MCM 37/0 ASC	92		1062				1357		800 CT	1200	1200		DS - WINTER
2L259	INV	KHS	926.7MCM SP-926.7 ACSR	90		1070		1280		1350		500 CT	2000	1200	Portion of circuit is also 1033.5 MCM BLUEBELL ASC	PN
2L263	VNT	LEE	1-927.2 MCM DRAKE ACSR	100	125	1063	1230	1276	1405	1325	1449	1200 CT	1200		Ratings from Fortis (Line L72). One span is BCH owned at VNT	DS - OVERLOAD + WINTER
2L264	VNT	LEE	1-927.2 MCM DRAKE ACSR	100	125	1063	1230	1276	1405	1325	1449	1200 CT	1200	1200	Ratings from Fortis (Line L74)	DS - OVERLOAD + WINTER
2L265	NIC	WW	1-927.2 MCM 37/0 ASC	90		1045				1345		800 CT @VWV	1200			PN
2L277 / L71	WAN	NLY	1-1271 MCM Narcissus ASC			929		1197		1250		1200 CT		1600		PN Winter
2L277 / L71	NLY	BDY	1-1272 MCM Pheasant ACSR	80		1200		1440		1550		1200 CT		1600		PN
2L288 / L79	KCL	BTS	1-927.2 MCM DRAKE ACSR			851		1022		1105		1200 CT				
2L289 / L82	BTS	SEL	1033.5 MCM Bluebell ASC	91		1130		1350		1425		2000 CT				
2L290 / L81	ALH	BTS	1-SP-926.7 45/7 ACSR	91		1070		1280		1350					Limiting Section	
2L293	NLY	SEL	1-875.2 MCM CRANE ACSR	91		1053		1277		1347		1879 IR @NLY			* Ambient > 30°C to be expected	
2L294	NLY	CBK	1-875.2 MCM CRANE ACSR	91		1053		1277		1347		1200 CT	1200	1200	* Ambient > 30°C to be expected 1200A CT limit exists at CBK and NLY	

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
2L295	SEL	KCL	1-927.2 MCM DRAKE ACSR	91		997		1209		1276		2000 CT			Ratings shown based upon standard conditions. Original design based on operation at ambient 40°C summer, approx. 940A * Ambient > 30°C to be expected	
2L299	SEL	KCL	1-927.2 MCM DRAKE ACSR	91		997		1209		1276		2000 CT			Ratings shown based upon standard conditions. Original design based on operation at ambient 40°C summer, approx. 940A * Ambient > 30°C to be expected	
2L307	BLW	QRP	470 mm ASC 37/0	90		1050				1275		1500 CT @BLW	1200			DS
2L308	GMS	DKT	470 mm ASC 37/0	91		1055				1280		2000 CT	2000	2000		
2L309	DKT	SNK	470 mm ASC 37/0	91		1055				1280		2000 CT	2000	800		800 A Line trap
2L312	SLS	SNK	470 mm ASC 37/0	90		1055				1280		2000 CT				
2L313	SNK	MKT	470 mm ASC 37/0	91		1055				1280		2000 CT @SNK				
2L314	DKT	DKW	1033.5 MCM Bluebell ASC	80		940		1160		1255					Customer owned and BCH operated circuit	
2L315	TLR	QTY	795 MCM ACSR DRAKE	90		964		1127		1199		1200 CT	1200		Customer owned and BCH operated circuit Single Breaker Closed DS Rating: 1200 A - TLR bus breaker DS rating	
2L315	Murray River Crossing		680-T19a ACCR	90		894		1045		1111		1200 CT	2000		Customer owned and BCH operated circuit	
2L320	KDS	KMS	330.6 mm(sq) 19/0 AAAC - Elgin.	75		729				980		643 IR @KDS				PN
2L322	BLM	TLR	470 mm ASC 37/0	91		1055				1280		1200 CT	1200			PN - WINTER
2L323	QNT	TLR	470 mm ASC 37/0	91		1055				1280		1200 CT	1200			PN - WINTER
2L329	SGB	BMT	2-26/7 ACSR DRAKE	75		1664				2217		2000 CT	2000		BMT 2D22 – 2000A SGB 2D23 – 2000A Dual Circuit Structures	DS – WINTER PN - WINTER
2L330	SLS	LAP	470 mm ASC 37/0	90		1055				1280		2000 CT				
2L333	SGB	BMT	2-26/7 ACSR DRAKE	75		1664				2217		2000 CT	2000		BMT 2D23 – 2000A SGB 2D22 – 2000A Dual Circuit Structures	DS – WINTER

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
2L337	MKT	TLR	470 mm ASC 37/0	91		1055				1280		2000 CT	1200	1200	TLR 2WT6 - 1200 A TLR 2D26 - 1200 A	DS - WINTER
2L340	SLS	SGB	2-26/7 ACSR DRAKE	75		1628				2217		2000 CT	2000		SLS 2D28 - 2000A SGB 2D30 - 2000A Dual Circuit Structures	DS - WINTER
2L342	SLS	SGB	2-26/7 ACSR DRAKE	75		1628				2217		2000 CT	2000		SLS 2D23 - 2000A SGB 2D29 - 2000A Dual Circuit Structures	DS - WINTER
2L352	SCK	HMH	470 mm ASC 37/0			1047		1270		1345		800 CT	1200			PN & DS
2L353	GLN	TAC	470 mm ASC 37/0	91		1055				1280		300 CT @ TAC		1200		PN - WINTER
2L354	BLW	RBF	470 mm ASC 37/0			537		942		993		1200 CT	1200	1200		
2L374	BQN	TAT	2B SP-648.2 kcmil 26/7	90		1736				2228		1200 CT	2000		BQN 2D25 - 2000A TAT 2D21- 2000A	PN - WINTER
3L2	BRT	UHT	2-403 mm Drake ACSR	50		960		1782		1970		1200 CT	1200	2000		DS - WINTER
3L3	WAH	ROS	2-403 mm Drake ACSR	50		1016		1782		1985		600 CT	2000			PN
3L5	UHT	ROS	2-403 mm Drake ACSR	50		960		1782		1970		1200 CT	2000			PN - WINTER
3L13	BRT	BR2	2-403 mm Drake ACSR	50		1016		1782		1985		800 O/C	1200		Single Breaker Closed CB rating: 1200 A - BRT 360kV CBs rating	PN
3L14	BRT	BR2	2-403 mm Drake ACSR	50		1016		1782		1985			1200		Single Breaker Closed CB rating: 1200 A - BRT 360kV CBs rating	
3L15	BRT	BR1	2-403 mm Drake ACSR	50		1016		1782		1985		800 O/C	1200		Single Breaker Closed CB rating: 1200 A - BRT 360kV CBs rating	PN
3L16	BRT	BR1	2-403 mm Drake ACSR	50		1016		1782		1985			1200		Single Breaker Closed CB rating: 1200 A - BRT 360kV CBs rating	DS WINTER
5L1	GMS	KDY	4-316 mm AACSR PEACE	60	69	2150	2500	3130	3370	3415	3628	3000 CT	3000		Overload Limit: 500 hr/year Single Breaker Closed CT Rating	KDY RESTRICTION - 2300 A
5L1	KDY	WSN	4-316 mm AACSR PEACE	60	69	2150	2500	3130	3370	3415	3628	3000 CT	3000		Overload Limit: 500 hr/year Single Breaker Closed CT Rating	KDY RESTRICTION - 2300 A
5L2	GMS	KDY	4-316 mm AACSR PEACE	60	69	2150	2500	3130	3370	3415	3628	3000 CT	3000		Overload Capability: 2425A for 14 hours; 3565A for 10 minutes; 4620A for 1 second Single Breaker Closed CT Rating	KDY RESTRICTION - 2300 A

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
5L2	KDY	WSN	4-316 mm ACSR PEACE	60	69	2150	2500	3130	3370	3415	3628	3000 CT	3000		Overload Limit: 500 hr/hour Single Breaker Closed CT Rating	PN - WINTER
5L3	PCN	KDS	4-316 mm AACSR PEACE	60	69	2150	2500	3130	3370	3415	3628	3000 CT	3000		Overload Limit: 500 hr/hour Single Breaker Closed CT Rating	PN - WINTER
5L4	GMS	PCN	4-316 mm ACSR PEACE			2500		3450		3734		3000 CT	3000		Single Breaker Closed CT Rating	
5L7	KDS	WSN	4-316 mm ACSR PEACE			2500		3450		3734		3000 CT	3000		Overload Capability: 2300A Single Breaker Closed CT Rating	KDY RESTRICTION - 2300 A
5L11	WSN	KLY	4-316 mm ACSR	65		2500		3320		3551		3000 CT	3000		Single Breaker Closed CT Rating MLS normal rating = 1950 A Winter conductor ratings based on Cottonwood River crossing	MLS RESTRICTION - 1950 A
5L12	WSN	KLY	4-316 mm ACSR PEACE	65		2500		3450		3734		3000 CT	3000		Overload capability: 2145A for 8 hours in a 12 hour period Single Breaker Closed CT Rating	MLS RESTRICTION - 1950 A
5L13	WSN	KLY	4-470 mm ACSR 45/7	69		3385		4568		4920		2500 CT	3000		Overload Capability: 2633A for ½ hour in a 6 hour period Single Breaker Closed CT Rating	MLS RESTRICTION - 1950 A
5L29	MSA	TIR	1600 mm O/F Cable	49		1260 1535		1260 1535		1260 1535		3000 CT	3000		Overhead Limit 49°C, summer: 1634 A, Winter: 2838 A Single Breaker Closed CT Rating	1260 A WITHOUT SHORE COOLING 1535 A WITH SHORE COOLING
5L29	TIR	DMR	1600 mm O/F Cable			1260 1535		1260 1535		1260 1535		1500 CT	3000		Overhead Limit 49°C, summer: 1634 A, Winter: 2838 A Single Breaker Closed CT Rating	1260 A WITHOUT SHORE COOLING PN 1500 A WITH SHORE COOLING
5L30	CKY	MSA	4-313 mm AACSR	91		3238		3901		4071		3000 CT	3000		Emergency operation utilizing 2L9/1L31 and 230 kV (see 5L30-T06-B2) for either 5L30 or 5L32 is limited by thermal rating of 1L31: 261 A summer, 441 A winter at 49°C Single Breaker Closed CT Rating	PN LIMIT
5L31	MSA	TIR	1600 mm O/F Cable			1260 1535		1260 1535		1260 1535		3000 CT	3000		Overhead Limit 49°C, summer: 1634 A, Winter: 2838 A Single Breaker Closed CT Rating	1260 A WITHOUT SHORE COOLING 1535 A WITH SHORE COOLING
5L31	TIR	DMR	1600 mm O/F Cable			1260 1535		1260 1535		1260 1535		1500 CT	3000		Overhead Limit 49°C, summer: 1634 A, Winter: 2838 A Single Breaker Closed CT Rating	1260 A WITHOUT SHORE COOLING PN 1500 A WITH SHORE COOLING
5L32	CKY	MSA	4-313 mm AACSR	91		3238		3901		4071		3000 CT	3000		Emergency operation utilizing 2L9/1L31 and 230 kV (see 5L30-T06-B2) for either 5L30 or 5L32 is limited by thermal rating of 1L31: 261 A summer, 441 A winter at 49°C Single Breaker Closed CT Rating	DS LIMIT
5L40	ING	CBN	4-316 mm ACSR PEACE	65		2495		3448		3734		3000 CT	3000		Single Breaker Closed CT Rating	DS LIMIT - WINTER

Transmission Circuits Information			Conductor Ratings (A)									Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
5L41	CBN	KLY	4-623.6 MCM Peace ACSR (2-1655 MCM Cottonwood ACSR)	65 (74)		2500		-3320		-3551		3000 CT	3000		Ambient >30°C to be expected CHP Continuous RMS Rating: 1900A CHP Overload Capabilities: 2090A for 8 hours in 12-hour. 2565 A for ½ hour in a 6 hour period 2850 A for 10 minutes in a 2 hour period <u>Single Breaker Closed CT Rating</u>	CHP CONTINUOUSRESTRICTION - 1900 A CHP Temporary ovaerload capability available as specified.
5L42	CKY	KLY	4-316 mm ACSR PEACE	60	69	2150	2500	3130	3370	3415	3628	3000 CT	3000		Both Peace 5005 ACSR (69°C) and Peace ACSR (65°C) limit due to ground clearance limitations. Peace 5005 ACSR shown as limiting conductor due to operational time limits at 69°C. 69°C Overload Limits: 500 hr/ year CRK Continuous RMS Rating: 2180A CRK Overload Capabilities: 2398 A for 8 hours in 12-hour. 2943 A for ½ hour in a 6 hour period 3270 A for 10 minutes in a 2 hour period <u>Single Breaker Closed CT Rating</u>	PN LIMIT WINTER (CRK RESTRICTION - 2180 A)
5L44	MDN	ING	4-316 mm ACSR PEACE	63		2500		3470		3743		3000 CT	3000		Rated at 500 ft elevation, normal (i.e. not super-clear) sun conditions as are found in low altitude conditions. Eq standard full sun, super-clear conditions are Summer: 2470A, Winter: 3393A <u>Single Breaker Closed CT Rating</u>	DS LIMIT WINTER
5L45	CKY	MDN	4-316 mm ACSR PEACE	60	69	2150	2500	3130	3370	3415	3628	3000 CT	3000		Overload Capability: 500 hr/ year <u>Single Breaker Closed CT Rating</u>	DS LIMIT WINTER
5L51	ING	Str 0/0	SP-2303.5-91/0	71*		2990		3800		4060		3000 CT	3000		Ratings shown at standard conditions, 500 ft elevation. <u>Single Breaker Closed CT Rating.</u>	DS LIMIT WINTER
5L51	Str 0/0	Str 13/4	4-316mm ACSR PEACE	77*		2990		3800		4060					Ratings shown at standard conditions, 500 ft elevation. <u>Single Breaker Closed CT Rating.</u>	
5L51	Str 13/4	US Border	1193MCM ACSR Bunting	68*		2990		3800		4060					Ratings shown at standard conditions, 500 ft elevation. <u>Single Breaker Closed CT Rating.</u>	
5L52	ING	CUSTER W	4-303 mm 48/7 ACSR	54		2990		3770		4020		3000 CT	3000		Ratings shown at standard conditions, 500 ft elevation. Requires R/W enforcement, as clearances do not meet CSA or BCH standards for some usage. <u>Single Breaker Closed CT Rating</u>	DS LIMIT WINTER
5L61	WSN	GLN	4-316 mm ACSR PEACE	55		2000		3140		3734		3000 CT	3000		<u>Single Breaker Closed CT Rating</u>	DS LIMIT WINTER
5L62	TKW	GLN	4-316 mm ACSR PEACE	55		2000		3140		3734		3000 CT	3000		<u>Single Breaker Closed CT Rating</u>	DS LIMIT WINTER
5L63	SKA	TKW	4-316 mm 5005 ACSR PEACE	57		2000		3035		3340		3000 CT	3000		<u>Single Breaker Closed CT Rating</u>	DS LIMIT WINTER

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
5L71	MCA	NIC	4-338mm 5005 AACSR MICA	60	91	2265	3370	3302	4072	3603	4302	3000 CT	2000		Ambient > 30°C to be expected Overload Limits: 200 hr/year Single Breaker Closed CT Rating SYA continuous rating: 3000A SYA Overload Capabilities: 3300 A for 8 hours in 12 hour 3750 A for 1 hours in 8 hour 4050 A for 30 minutes in 6 hour 4500 A for 10 minutes in 2 hour Single Breaker Closed DS rating: 2000 A - NIC 5D1CB8, 5D1CB18, 5D2CB18	DS LIMIT
5L72	MCA	NIC	4-338mm 5005 AACSR MICA	60	91	2265	3370	3302	4072	3603	4302	3000 CT	2000		Ambient > 30°C to be expected Overload Limits: 200 hr/year Single Breaker Closed CT Rating SYA ratings: same as 5L71 Single Breaker Closed DS rating: 2000 A - NIC 5D1CB3, 5D1CB13, 5D2CB13	DS LIMIT
5L75	REV	ACK	4-338mm 6101 AACSR MICA	75	91	2870	3370	3302	4072	3965	4302	3000 CT	3000		Ambient > 30°C to be expected Overload Limits: 500 hr/year Single Breaker Closed CT Rating	DS LIMIT WINTER and OVERLOADING
5L76	NIC	ACK	4-338mm 5005 AACSR MICA	60	91 (101)	2265	3370 (3540)	3302	4072 (4284)	3965	4302 (4491)	2589 IR	2000		Ambient > 30°C to be expected 91°C Overload Limits: 200 hr/year 101°C Overload Limits: 100 hr/year Single Breaker Closed DS rating: 2000 A - NIC 5D1CB4/14, 5D2CB4/14	DS LIMIT
5L77	REV	ACK	4-338mm 5005 AACSR MICA	60	91	2265	3370	3302	4072	3603	4302	3000 CT	3000		Ambient > 30°C to be expected Overload Limits: 200 hr/year Single Breaker Closed CT Rating	DS LIMIT WINTER and OVERLOADING
5L79	NIC	ACK	4-338mm 22/7E ACSR	91		3501		4238		4522		2589 IR	2000		Ambient > 30°C to be expected Single Breaker Closed CT Rating Single Breaker Closed DS rating: 2000 A - NIC 5D1CB6/16, 5D2CB6/16	DS
5L81	ING	NIC	4-316 mm Peace 5005 AACSR	60	84	2153	3000	3130	3715	3415	3943	3000 CT	2000		*Ambient >30°C to be expected * 84°C overload limits: 100 hr/year AMC Continuous Rating: 2120 A AMC Overload Capabilities: -2332 A for 8 hours in 12 hour period -2862 A for 30 minutes in a 6-hour period -3180 A for 10 minutes in a 2-hour period Single Breaker Closed CT Rating Single Breaker Closed CB rating: 2000 A - NIC 5D1CB4, 5D1CB14	AMC CONTINUOUS RESTRICTION - 2120 A AMC Temporary overload capability available as specified
5L82	MDN	NIC	4-338 mm Mica 5005 AACSR	60	79	2265	3000	3302	3800	3603	4054	3000 CT	2000		AMC Ratings: Same as 5L81 *79°C Overload Limits – 50 hr/year Single Breaker Closed CT Rating Single Breaker Closed CB rating: 2000 A - NIC 5D1CB18, 5D2CB18	AMC CONTINUOUSRESTRICTION - 2120 A AMC Temporary overload capability available as specified.
5L83	MDN	NIC	2-2303.5, 91/ASC	90		3721		4497		4747		3000 CT	3000		RYC Continuous Rating: 3000 A (5BP1, 5CB1, 5CX1, CTs) Conductor rating is station slack spans. Rest of line is 4-926.7,45/7 ACSR and AACSR (90C, 4098A 30C, 4918A 10C, 5195 0C)	RYC – 3000A

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation	
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT			
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over						
5L87	KLY	NIC	4-338 mm Mica 5005 ACSR	91		3540		4284		4522		3000 CT	2000		*Ambient >30°C to be expected GUI Continuous Rating: 2400 A GUI Overload Capabilities: -2640 A for 8 hours in 12 hour period -3240 A for 30 minutes in a 6-hour period -3600 A for 10 minutes in a 2-hour period Single Breaker Closed CT Rating Single Breaker Closed DS rating: 2000 A - NIC 5D1CB1/11, 5D2CB1/11	GUI CONTINUOUS RESTRICTION - 2400 A GUI Temporary overload capability available as specified.	
5L91	SEL	ACK	4-338mm 5005 ACSR MICA	60	91	3540	3370	4284	4075	4522	4302	3000 CT	3000		Ambient > 30°C to be expected Overload Limits: 500 hr/year Single Breaker Closed CT Rating	PN	
5L92	SEL	CBK	4-338mm 6101 AACSR MICA	75		2870		3700		3965		2589 IR	3000		Ambient > 30°C to be expected Single Breaker Closed CT Rating	PN	
5L94	CBK	BNS	4-316 mm Peace 5005 AACSR	60	75 (102)	2052	2720 (3358)	3045	3510 (3966)	3416	3759 (4274)	2959 IR	3000		One section of the line is strung with Peace 5005-type conductor (1.7 km). Replacing this section with type 6101 would restore the circuit to 90°C rating and for a longer period. Power transfer is currently limited to 1200 MW (47°C Summer), within ratings, as per agreement with TransAlta. Some field checks would also be required for the high altitude section. Ratings shown at 6000 ft at location for type Peace 5005 ACSR conductor. 102°C rating for Peace 5005 shown would match that of SP-648.2 MCM 26/7E, ACSR/EHSS conductor under standard rating (300 MVA) at 2500 ft., 90°C operating temp for which the line is designed 75°C Overload Limits: 500 hr/year 102°C Overload Limits: 50 hr/year Single Breaker Closed CT Rating	PN LIMIT WINTER	
5L96	SEL	VAS	4-328mm 26/7E AACSR	91		3506		4241		4475		3000 CT	3000		Ambient > 30°C to be expected Single Breaker Closed CT Rating	DS	
5L98	VAS	NIC	4-328mm 26/7E AACSR	91		3506		4241		4475		3000 CT	2000		Ambient > 30°C to be expected Single Breaker Closed CT Rating Single Breaker Closed DS rating: 2000 A - NIC 5D1CB5/15, 5D2CB15	DS	
DC1 (DC1L3)	ARN	TBT	2x795.0 MCM Drake AACSR	65.6		1604		2060		2229							
DC1	TBT	GNO	400/650mm2 SCOIP CABLE			600	660	600	660	660	660				Cable sea/shore sections (Cable 1, 2, 3) Converter capacity shown elsewhere Overload 2 hr in a 24 hr period		
DC1 (DC1L5, L6, L7)	GNO	PKR	1x1273.6 MCM Sansum AACSR	65.6		986		1367		1457					Montague Harbour		
DC1	PKR	TRN	400/650mm2 SCOIP CABLE			600	660	600	660	660	660				Cables sea/shore sections (Cable 6,7,8) Overload 2 hr in a 24 hour period		
DC1 (DC1L1)	TRN	VIT	1x1273.6 MCM Sansum AACSR	102		1446		1703		1760					Sansum Narrows		

Transmission Circuits Information				Conductor Ratings (A)								Equipment Rating (A)			Comments	Limitation
Circuit	Circuit Section Terminals		Conductor	Conductor Temp (°C)		Summer (30°C)		Winter (10°C)		Winter (0°C)		PN	DS	WT		
	A	B		Norm	Over	Norm	Over	Norm	Over	Norm	Over					
DC1 Overall	ARN	VIT	400/650mm2 SCOIP CABLE			600	660	600	660	660	660				Cables sea/shore sections Overload 2 hr in a 24 hour period	
Sansum Narrows DC1/DC2 Electrodes	VIT	SNE	1x927.2 37/0 – ASC	88		1050		1279		1333						
Metallic Return LN1	ARN	BBE	1x927.2 37/0 – ASC	88		1050		1279		1333						
Metallic Return LN1	TRN	Str 37/14	477 MCM Hawk ACSR	130		926		1032		1054						
Metallic Return LN1	Str 37/14	Str 38/1	1x1273.6 MCM Sansum AACSR	48		612		1151		1289					Overload Max 2 hr every 24hrs	
Metallic Return LN1	Str 38/1	VIT	477 MCM Hawk ACSR	130		926		1032		1054						
LN1 Overall	TRN	VIT	Cable / Overhead			612		1032		1054			1200		Varying sections limit	
DC2 (DC1L4)	ARN	CPT	2x795.0 MCM Drake ACSR	65.6		1604		2060		2229						
DC2	CPT	GNO	400/650mm2 LPOF CABLE			900	950	900	950	900	950				Cable sea/shore sections (Cable4,5) Overload 50 hrs/year – Lifetime 2400 hrs	
DC2 (DC1L8, L9)	GNO	PKR	1x1273.6 MCM Sansum AACSR	110		1524		1765		1817					Montague Harbour	
DC2 (DC1L8, L9)	Str 27/1	PKR	2x795.0 MCM Drake ACSR	65.6		1604		2060		2229						
DC2	PKR	TRN	400/650mm2 LPOF CABLE			900	950	90	950	900	950				Cables sea/shore sections (Cable 9,10) Overload 50 hrs in a year- Lifetime: 2400 hrs	
DC2 (DC1L2)	TRN	VIT	1x1273.6 MCM Sansum AACSR	102		1446		1703		1760					Sansum Narrows	
DC2 Overall	ARN	VIT	Cable / Overhead			900	950	900	950	900	950				Cables sea/shore sections Overload 50 hrs/year – Lifetime 2400 hrs	
Metallic Return LN2	ARN	TBT	477 MCM Hawk ACSR	130		926		1032		1054						