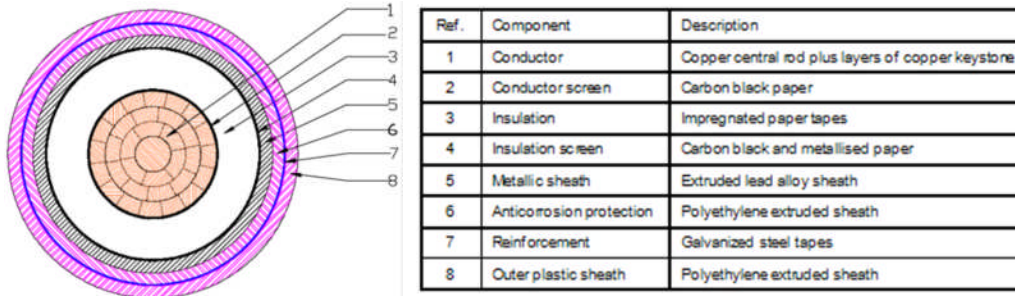


Exhibit 3

**Northern Pass Project
Diagrams of Cross-Section of Underground Cables**

Exhibit 3 – Technical Design of Cross Section Underground Cables (Sheet 1 of 2)

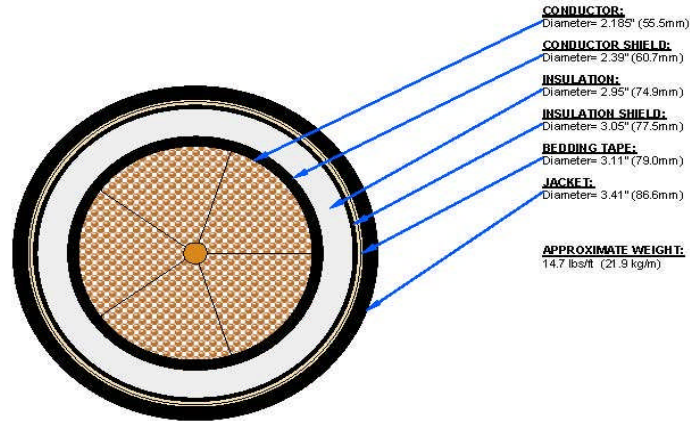
HVDC Cable – 300 kV – 2000 mm² – Mass Impregnated Cable



Component	Thickness - mm	Diameter - mm
Conductor		50.1
Conductor screen		51.1
Insulation MI paper	14	79.1
Insulation screen		80.3
Lead sheath	3.0	86.3
Polyethylene sheath	2.8	91.9
Binder tape		92.7
Steel tape		93.9
Binder tape		95.5
Polyethylene sheath	4.3	104.1

Exhibit 3 – Technical Design of Cross Section Underground Cables (Sheet 2 of 2)

**XLPE insulated, earthing cable with segmental Copper conductor, LLDPE jacket
2000 mm² Segmental Copper Cable**



Construction:			
Conductor	Class B segmental compacted Copper conductor Nominal cross-sectional area Number of segments Number of strands per segment (1 center wire) Approximate diameter	3945 kcmil 5 61 2.185 inches	2000 mm ² 55.5 mm
Conductor Shield	[2]Semi-conducting tape applied helical intercalated [2]Semi-conducting tape applied helical intercalated [1]Extruded semi-conducting thermoset Minimum point thickness	50% overlap 50% overlap 30 mils	 0.76 mm
Insulation	Extruded cross-linked polyethylene compound Minimum point thickness Minimum average thickness Maximum eccentricity (Tmax-Tmin)/Tmax	265 mils 310 mils 12%	6.7 mm 7.9 mm
Insulation Shield	[1]Extruded semi-conducting thermoset Minimum point thickness Maximum point thickness	40 mils 100 mils	1.02 mm 2.54 mm
Bedding	[2]Water swellable semi-conducting tape applied helical intercalated [2]5 mils Copper tape applied helical intercalated	50% overlap 50% overlap	
Jacket	Extruded black linear low density polyethylene compound Minimum point thickness Maximum point thickness	125 mils 185 mils	3.18 mm 4.70 mm
Complete Cable	Approximate diameter Approximate weight	3.41 inches 14.7 lbs/ft	86.7 mm 21.9 kg/m
Marking:			
Marks of Origin	Emboss or indent print on the outer sheath: manufacturer, type of insulation, insulation thickness, conductor size and material, year of manufacture at intervals of not more than three feet. Length marking		
Mechanical Data:			
	Minimum bending radius Maximum pulling tension (with pulling eye)	61 inches 31,560 lbs	1.55 m 14,315.4 kg

Notes:

1. All dimensions are nominal and subject to manufacturing tolerances
2. Drawings are not to scale