

The Highland Council, Cairngorms National Park Authority & Scottish Natural Heritage Undergrounding of Extra High Voltage Transmission Lines

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Appendix 7 – Capital Cost Data Provided

COST DATA PROVIDED BY SUPPLIERS						
DESCRIPTION	Source	Supplier A			Supplier B	SAGEM
	Insulation technology Circuits	Fluid-filled single	Fluid-filled double circuit	0	XLPe double	XLPe Double
	Rating	2cables/phase, 2500mm ² (3620A, 5000MVA post fault)	2500mm ² (3620A, 5000MVA post fault)	0	2cables / phase, 2500mm ² , ()	2 cables / phase, 1200mm ² , Alu
DESCRIPTION	Unit	Rate (£)	Qty	1km Route Total (£)	Rate (£)	Aalborg installed cost (excluding terminations) Rate (£) (assuming Kroner/£ = 10:1)
Supply and Delivery of 400 kV Cable	/cable km	525,000	6	3,150,000	305000	
Supply and Delivery of Accessories						
Outdoor Sealing Ends	Each	63,000	12	756,000		
Straight Joints	Each	16,000	12	192,000	35000	
Plinth Mounted Tanks c/w pipes,gauges	Each	7,500	24	180,000		
Link Boxes c/w strand	Each	15,000	12	180,000		
Link Pillars c/w strand	Each	24,000	4	96,000		
Stop Joints	Each	86,000				
TOTAL				4,554,000		
Installation of cables						
including design, management, site sup, excavation, C.B.S. surround, cable cover Test and backfill.						
Grassland (machine dig after top soil lift) Installation of cables	Circuit Meter Run (3 cable group) Meter / run	310	2,000	620,000		
Total				620,000		
Joint Bay supply and construct	Each	20,000	4	80,000		
Installation of Joints and Terminations						
Outdoor Sealing Ends inc.scaffold	Each	35,000	12	420,000		
Straight Joints	Each	22,500	12	270,000	5000	
Plinth Mounted Tanks c/w pipes,gauges	Each	6,000	24	144,000		
Link Boxes c/w strand	Each	4,500	12	54,000		
Link Pillars c/w strand	Each	3,500	4	14,000		
Stop Joints	Each	35,000				
Total		106,500		902,000		
TOTAL				6,156,000		2,280,000

OHL INFORMATION						
DESCRIPTION	Source	SHETL			SAGEM	ABB
	Circuits	double	single	single	double	double
	Rating	3620A, 5000MVA post fault			2 x 700mm ² ACSR	400kV double circuit
	Unit	Rate (£)	Rate (£)		Rate (£) (assuming Kroner/£ = 10:1)	Rate (£) (assuming Kroner/£ = 10:1)
Design supply and construct double circuit OHL	1km	750,000			390,000	500,000
Accomodation works	1km	300,000				
Outdoor Sealing Ends	one double circuit SEC	583,000	450,000	387,000		
Cable ancillaries	one double circuit termination	368,000	368,000	323,000		

N.B. all costs refer to 400kV