Combined Rhodders and Burnfoot East WFs electrical losses - in Private Cable

Upper Aluminium section of Private Cable - Losses

Aluminium section resistance in Ohms per km 0.0367 Ohms
Aluminium section route length 5.2 km
Directly buried cable rating = 780Amps

Max generation (MW) 23.1

Generation in %	Generation in MW		Cable current (Amps)	Total resistance in Ohms	cable losses = I^2x R (kW)
100	23.1		425.43	0.19084	34.54
75	17.325		319.07	0.19084	19.43
50	11.55		212.71	0.19084	8.64
25	5.775		106.36	0.19084	2.16
0	0		0	0.19084	0.00

Lower Copper section of Private Cable - Losses

Copper section resistance in Ohms per km 0.05 Ohms
Copper section route length 1.3 km
Directly buried cable rating = 745Amps

Generation in %	Generation in MW		Cable current (Amps)	Total resistance in Ohms	cable losses = I^2x R (kW)
100	23.1		425.43	0.065	11.76
75	17.325		319.07	0.065	6.62
50	11.55		212.71	0.065	2.94
25	5.775		106.36	0.065	0.74
0	0		0	0.065	0.00

Total Private Cable electrical losses

Generation in %	Total losses kW
100	46.30
75	26.05
50	11.58
25	2.89
0	0.00