

July 2013

CAVAN-TYRONE & MEATH-CAVAN 400 KV TRANSMISSION CIRCUITS

TECHNOLOGY AND COSTS UPDATE

SUPPLEMENTARY NOTE



880

Table 2-3 HVDC UGC Costs

Item	1⁄4 0	Notes
Total Construction + IDC	953	Refer Column 4, Table 8-23a, page 35
Switchgear + transformers	15	Refer Table 8-23b page 37
Original Capital Cost including Kingscourt	968	
Less AC/DC Converters at Kingscourt	148	Refer Table 8-23 on page 34 - one third of costs of converters
Less Switchgear + transformers at Kingscourt	8	Refer Table 8-23b, page 37
Revised Capital Cost excluding Kingscourt	812	

5. NOTE: It was stated in Section 1.4 of the Addendum that as the aim of the study is to estimate the differences in cost between the transmission circuit technology alternatives, the costs of those elements of the overall project which are common to all options have been intentionally excluded (Refer Paragraph 115, page 36). The above cost estimates should WKHUHIRUH EH FRQVWUXHG DV µZKROH RI SURMHFW¶ FRVW HVV

3 SUMMARY OF COST ESTIMATES

6. The summary cost estimates for the initial capital investment required for each option and HDFK VFHQDULR DUH VKRZQ LQ WKH WDEOHV EHORZ 7KH FR\ million.

Technology Option	Capital Cost	Cost Difference compared to base case
	½ PLOOLR	¼ PLOOLRQ
AC Overhead Line (base case)	160	N/A
AC Underground Cable	905	745
HVDC Underground Cable	970	810

Table 3-1 Original scenario, inclusive of Kingscourt Substation

Table 3-2 Revised scenario, excluding Kingscourt Substation

Technology Option	Capital Cost ¼ PLOOLR	Cost Difference compared to base case 1/4 PLOOLRQ
AC Overhead Line (base case)	140	N/A
AC Underground Cable	880	740
HVDC Underground Cable	810	670

7. From the above tables it can be seen that the deferment of the costs associated with the substation near Kingscourt has had little or no impact on the difference in the initial capital investment between the HVAC OHL option (base case) and the HVAC UGC option. The cost GLIIHUHQFH UHPDLQV LQ WKH UHJLRQ RI ¼ 0