

Undergrounding

SP Manweb stated that 'The resultant overall cable length for the scenario referred to in the question above, using as much public highway as possible, is 24 kilometres (km).' Yet in its previous statement, SP Manweb stated that undergrounding presented a considerable risk to archaeology and nature. Under roads? The earlier statement is clearly inaccurate and deliberately misleading. Why is it allowed to get away with such tactics?

Costs

In November 2013 an independent report was published by Metsco Energy Solutions Inc (http://landvernd.is/Portals/0/FrettaSkjol/1_Iceland%20UG-OH%20Report_FINAL.pdf) an engineering consulting corporation in Canada. It was commissioned by Landvernd, the Icelandic Environment Association.

The report looked in detail at the comparative costs of overhead and underground 132kv cable, producing figures for 40 years and for 60 years (the expected life of the cable). It concluded that the overall cost ratio of underground compared to overhead is 1.04. This figure is remarkably close to the figures produced by RTE (Reseau de transport d'electricite) in a report 'Case study, Experiences in France' (http://renewables-grid.eu/fileadmin/user_upload/Files_RGI/Martine_Debiez_RTE_Experiences_in_France.pdf) That report stated that the overhead/underground ratio averaged 0.85 for 90 kV and between 1.2 and 2 for 225 kV.

SP Manweb's figures for overhead cabling for the expected 40 years are £38,000,000. Using the ratio of 1.04, the cost of undergrounding should be £39,520,000. This means that undergrounding the whole route would cost only an extra £1,520,000. Yet SP Manweb's figure for undergrounding is £66,900,000. Why is it so far out of touch with everyone else?

Reliability

There are some apparent discrepancies in SP Manweb's figures of failure probability. It quotes 0.03 faults per km for underground. The figures bear a ghostly resemblance to those in the Metsco report. That quotes a figure for underground of 0.03 per 100km, not per km. Which means the figures produced by Metsco, and accepted by Landvernd, are 0.0003 per km for underground. A 24km length of underground cable has a 0.288 chance of a single failure in 40 years. Or put another way, a 24km length of underground cable is likely to have one fault per 138 years. The cost of repairs is shown as high, but this is meaningless if there is statistically little chance of a fault over 40 years.

Change in weather patterns

Giving evidence to the Scottish Affairs Committee in February 2012 (http://www.spenergynetworks.co.uk/userfiles/file/201202_A2_7_SPEN_Evidence_Scot_Affairs_Ctte.pdf) SP Manweb stated 'On 3rd January the Met Office confirmed that we experienced the worst storm in 13 years and equal worst in 44 years, with structural damage to properties, transportation and other utilities wide spread across our area.' This agrees the generally accepted view that weather in the United Kingdom is rapidly deteriorating with storms and heavy rainfall an increasingly

regular fact of life. The Met Office's chief scientist, Dame Julia Slingo warned about the storms raging across Britain. (<http://www.independent.co.uk/news/uk/home-news/uk-weather-climate-change-to-blame-for-storms-hitting-britain-met-office-chief-scientist-warns-9118186.html>) During a press briefing on the storms that hit Southern England in 2014 she advised that the country should be more prepared for similar events in the future.

SP Manweb's figures for maintenance of overhead cabling are based on historic costs. Why has it not factored in the additional expenses certain to be incurred as a result of increased future storms? This is all the more important as the proposed overhead line runs across very exposed countryside, with strong winds from the Denbigh Moors a regular feature of life already, and certain to get worse in the future.