THE CHEAP ENERGY CAMPAIGN

INCREASE IN ELECTRICIY COSTS BY 2030

According to a recent study by Gordon Hughes [i] total generation costs, including emission trading scheme permits, capacity payments and system balancing under the Net Zero system will be £58.9 billion, versus a total of £34.1 billion under the current (2024) system. Every element of the total cost will be substantially higher for the Net Zero system.

Expressed per unit of total demand, the total generation cost will increase from £104 per MWh to £179 per MWh, an increase of 72%.

The total generation cost only accounts for about one half of electricity bills. Predicting what will happen to the other half, which covers network charges and supplier costs, is very difficult, because network operators are expected to invest heavily to extend and upgrade both transmission and distribution networks. Ofgem has squeezed the permitted rate of return on capital for networks at recent price reviews. However, operators will not agree to increase their investments, nor will they be able to raise the necessary finance, unless they are allowed a higher real return on capital. In consequence, the big uncertainty concerns how much network charges must rise to fund the investment in electricity networks assumed in the National Energy System Operator's (NESO) Clean Power 2030 study.

What is certain is that the network and supply component of electricity bills will increase alongside rising total generation costs.

The only way in which electricity bills will fall is by a sleight of hand, such as transferring energy levies to gas bills or providing budgetary subsidies which are eventually paid for taxpayers. Such measures do not reduce any of the costs but merely transfer them to different headings. A summary of costs is set out in the table below.

Since the total number of households in the UK is 28.4m this increase in costs of £24.8bn by 2030 equates to £873 per household even before

we add in the costs of upgrading the transmission and distribution networks.

Table 1: Summary of system generating costs in 2030

	Total costs		Unit costs	
	2024 system	Net Zero system	2024 system	Net Zero system
	£ bn	£ bn	£/MWh	£/MWh
System generation cost	28.9	42.1	88	128
Emissions permit costs	1.1	2.0	3	6
Capacity payments	1.1	7.4	3	22
System balancing costs	3.0	7.4	9	22
Total generation cost	34.1	58.9	104	179

Author's estimates. All values in 2024 prices.

[i] : https://www.netzerowatch.com/all-papers/hughes-system-cost-2030