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Q1: TCLC has been a necessary step in stopping SOs from cashing in through the failure of their technology to deliver useful generation capacity. Paying in excess of £200 /MWh of energy NOT generated usefully (in the right place at the right time in the right quantity) is a major failing of current wind and solar technology.

Q2:

Q3: Preventing a boom in money for nothing at the expense of research into more useful energy sources.

Q4: Yes. All intermittent and unreliable sources of energy that are characterised by non-dispatchable delivery and low average capacity factors should be included. Their inherent faults of design lead to a tendency to massively over-specify the nameplate capacity of the generator to counter the low average capacity factor. This then leads to highly volatile generation output which is uncontrolled and destabilises the grid as a whole. The grid was designed as a tree, with heavy load bearing trunks with the generator sources on it and progressively thinner branches and twigs for the loads. Installing large and volatile generators on the twigs turns the design of the grid on its head and risks damage.

Q5: I support it. The continued growth in wind and solar needs to be tempered by making the SOs take responsibility for their inadequate technology. The cost of curtailment revenue loss when their generation is not required or desired should be fed back into their cost modelling to promote projects where their output does not destabilise the local or regional grid.

Q6: The TCLC should be extended until such time as storage systems are developed to allow wind and solar generators to fully buffer their output to smooth out the volatility of their generation. With solar there is a lower storage capacity requirement as the solar storage will necessarily be drained at night each day. Wind SOs may require much more storage capacity to capture sustained periods of over generation and trickle feed it to the grid. Otherwise, such storage may quickly become over-run and then wind SOs would demand curtailment payments again. Renewable generator operators need to weigh in their cost modelling the balance of storage cost against just accepting curtailment revenue losses. To balance the situation, a higher price per MWh of reliable, dispatchable, predictable energy generation from buffered sources would be paid. The market adjusts to this by itself, as stored energy that can be released when spot prices are high automatically favours buffered renewables (as it does for pumped hydro).

Q7: There is benefit in continuing with the TCLC to push the renewable energy industry to mature into a truly useful source of energy and play its part in the UK energy mix. The risk is that the investment in money and pure R&D to arrive at that situation deters short term investment.

Q8:

Q9: I do not see TCLC and REMIT being at odds. The purpose of TCLC should be to protect the grid from harm (over generation resulting in hot spots and the need for reinforcement when the loads in the area do not warrant it). Ultimately, TCLC should be used to steer the new technologies towards more rounded solutions that take account of the actual needs of the grid and its customers.

Q10: