Merin Joseph

From: Andy Frew <a.frew@ntlworld.com>
Sent: 19 October 2022 19:38
To: Maye, Donna; Maye, Donna
Subject: Best New Entrant Net Cost of New Entry (BNE CONE) Consultation Andy Frew

Dear SEM Committee

Best New Entrant Net Cost of New Entry (BNE CONE) Consultation

The ground has shifted in energy supply, so that we should re-set a course to rapidly reduce the consumption of fossil gas, but also of imported fossil oil.

This is likely to include measures to:

1. Rapidly expand wind and solar energy production, also to produce Hydrogen for industry
2. Expand regional transmission grid capacity
3. Complete and possibly increase electricity interconnections to the rest of Europe
4. Reform electricity tariffs to support electrification of heat via the use of electric heatpumps
5. Provide incentives to reflect the higher cost of capital for lower carbon installations on the demand side
6. Displace the use of fossil fuels for combustion, using electric heat pumps, often with thermal storage at different scales
7. Control boiler/ heat pump'Hybrids' to utilise the cheapest and lowest carbon power for heating unimproved buildings
8. With the aid of Smart metering and dynamic load controls , to reform electricity tariffs to achieve the above
9. Use the highest peak wind outputs for heat directly as available, using resistance heating/ existing immersions (Energycloud etc)
10. Increase our ability to store power in different battery types for use later

All the above point to an increasing demand for electrical power, but better produced by CCGT rather than OCGT plant, with less 'load following' needed on the island.

There will be new demands for synchronous generation to release wind energy for new applications.

It seems that we must stop treating power demand as an "exogenous variable" incapable of being varied, when we must and can now match more of it to an expanded and dynamic renewable and lower carbon supply. e.g. Using the lowest carbon power for industrial processing and feedstock production.

We can also consider a need to export power to France for cooling at times.

I do not understand your papers fully, but to be considering funding OCGT plant today looks dated and dangerous, could lead towards stranded assets.

I recall considering in 2009 that it was worthwhile in carbon terms to use gas in CCGT instead of OCGT plant to displace the use of heating oil for heating hot water tanks.

I am unsure about the scope of the costings. e.g. How cabling to a power station is costed, if the elasticity of power demands when displacing gas & oil burning has been considered.

A recent UK Office of Budget Responsibility paper projects that high fossil fuel prices are likely to persist, and this is consistent with increased LNG supply.

If the market for efficiently produced power were increased, by coupling heat and power markets effectively, could capacity payments be reduced?

As above, I do not understand your papers fully and how they would be applied, but hope that you will consider the new and challenging context fully.

And that new OCGT and piston engined installations are minimised.

Good Luck

Andy

Andrew Frew BSc

https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal

In the UK policy values for carbon for home heating were increased to reflect the difficulty in making cuts in this sector.

https://obr.uk/overview-of-the-july-2022-fiscal-risks-and-sustainability/