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Time to Tilt at Windmills

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Power System – Capacity and Demand

- Long-lived assets in generation & transmission, long planning and construction periods
- Demand can fluctuate dramatically

- Difficult to match the two
- We have been here before – excess capacity for a decade after Moneypoint (1985)
- Cost-plus regulation means excess capacity hurts the cost base pro-cyclically

Demand in the Republic

- Peak demand required just over 5000 MW in 2008
- This level of peak demand will not be reached again until about 2019
- But construction of new capacity has continued at a rapid pace since the

downturn

This has included new wind, of which there is now about 2200 MW

But also 3 new CCGTs, modern gas units.

Surplus Generating Capacity

The new gas units were planned before the bust. There is now 3300 MW of modern gas capacity, plus 880 of peaking plant.

Plus 500 MW of new interconnection to Wales

Plus almost 900 MW at coal-fired Moneypoint

Plus hydro at about 500 MW, plus peat at about 340, plus oil - the total dispatchable is 7400 MW.

Non-dispatchable, mainly wind, adds 2400, grand total 9800, twice peak demand.

Capacity Margin

Power systems need a capacity margin. Dispatchable capacity is now 54% ahead of peak – allowing a small capacity credit for renewables, maybe

60%.

This happened by accident. Nobody ever planned for capacity so far ahead of peak.

Some generators will be expected to eat the losses and some have already done so.

There will be more losses

More Windmills?

Wind turbine construction is subsidised through minimum price guarantees and through under-charging for grid costs.

Eirgrid expect that installed wind capacity under current policy will add at least 1500 MW over the next decade.

There is no system need for more capacity, even if it was dispatchable.

Is more wind the cheapest way to curb emissions?

The Carbon Price

The EU's Emission Trading Scheme has been a predictable, and predicted, failure.

The price, recently about €6 per tonne, should be about

€25 or €30 according to the climate change models. A global tax at this level would be the optimal response.

In the meantime the EU policy of turning Europe into teacher's pet has had no impact on the other pupils.

Irish policy is to be the best pupil in Europe.

Electricity and Gas Costs

Irish gas and electricity costs are amongst the highest in the EU and the gap is increasing.

The expenditure of €4 billion on power infrastructure since 2007 (to meet falling demand) is the main cost driver. Fossil fuel imports account for only one fifth of electricity price.

Displacement of gas generation with domestic and UK coal units has offset increased renewables. Emissions have actually risen.

Irish Energy Policy

It is contrary to the national interest, and pointless in global terms, to incur

substantial economic costs in complying with an EU policy which has failed and will be abandoned.

Further subsidies to Big Wind make neither economic nor environmental sense.

Ireland has done enough in promoting wind technology and should now focus on avoiding further increases in energy costs to business and households.