

Corruption of Governance – Update No 2

May 2012

DECC has taken to publishing ‘DECC Review’ which is sent to all stakeholders. Review No 4 was published in April 2012. The facts stated in one of its key articles reveal clearly that MPs were given false information in the Overarching National Policy Statement for Energy (EN-1), which was presented to Parliament ‘for approval’ in June last year, and on which MPs voted in July. This set the stage for all future government energy policy regarding anticipated demand for electricity.

The article in DECC Review 4 is entitled ‘Future consumers would not thank us for looking for an energy policy in the bargain basement’. It is written by Ravi Gurumurthy, DECC’s Director of Strategy.

Let’s begin by looking at some statements that the Department’s Director of Strategy makes.

1. Two statements regarding long term demand and the cost of electricity

Statement No 1 regarding future demand for electricity:

‘**All of our main scenarios** for 2050 tell us that we need to plan to meet an increase in demand of **between a third and two thirds** as transport and heating shift onto the electricity grid.’

Statement No 2 regarding the cost of electricity:

‘**No one can yet say for sure** what the relative costs [of the various technologies – ACE] will be decades hence.’

(All the emboldening has been added by us – ACE)

Note that the words that we have emboldened are taken from the article by the Department’s Director of Strategy.

Now compare those two statements with what MPs were told in EN-1 (and elsewhere). It was on the basis of this earlier information (reproduced below) that they voted to support

new nuclear power stations, as was fully documented in our Corruption of Governance (CoG) report¹

What does EN-1 say regarding demand for electricity:

- (i) June 2011 Final Overarching NPS EN-1
 - (a) *'Government analysis of the different Pathways showstotal electricity consumption could double by 2050'*²
 - (b) *'an increased use of electricity ... will outweigh increases in energy efficiency, potentially leading to a doubling of electricity demand by 2050'*³
- (ii) 12th July 2011: (then) Secretary of State for Energy and Climate Change, Rt Hon Chris Huhne MP, presenting the Energy Market Reform White Paper to Parliament tells MPs that *'demand for electricity could double.'*⁴
- (iii) 11th July 2011: (then) Secretary of State for Energy and Climate Change, Rt Hon Chris Huhne MP writes in the Daily Telegraph that *'electricity demand could double by 2050'*
- (iv) White Paper - Planning our electric future July 2011: *'overall demand for electricity may double by 2050'*⁵
- (v) Revised Draft Overarching NPS EN-1 October 2010: *"a doubling of electricity demand...."*⁶

What does EN-1 say regarding the future cost of electricity:

- (i) April 2011: Following the Fukushima accident, and public concern about nuclear safety, the Government Minister responsible for nuclear power, Charles Hendry MP, admitted on Radio 4 that energy security and 80% CO₂ reductions could be achieved without new nuclear power – but claimed that it would cost more⁷.
- (ii) June 2011: Final Overarching National Policy Statement, EN-1, presented to Parliament 'for approval', asserted that 'new nuclear is likely to become the least expensive form of low carbon electricity generation.'⁸

Thus two very plain messages were given to MPs to vote on. 'Government analysis of the different pathways' shows that demand is likely to double and so we need new nuclear power stations to keep the lights on; and it's the cheapest option.

¹ Published on 31st January 2012: on page 9 (re demand for electricity) and page 19 (re the cost of electricity).

² EN-1 June 2011 page 20 para 3.3.14

³ Op. Cit. Para 3.3.28 page 24

⁴ Hansard 12.7.2011 col 178

⁵ 2011 White Paper page 6 para 3 second bullet point

⁶ Para 3.3.14 page 19

⁷ Charles Hendry: The World this Weekend 10th April 2011

⁸ EN-1 June 2011 page 29 para 3.5.8

Now DECC's head of strategy tells us that neither of those two central statements in EN-1, on the basis of which MPs voted to accept EN-1 and new nuclear power, were true, as

- (i) The correct demand figures, according to Mr Gurumurthy are, according to 'all of our main scenarios ... an increase in demand of **between a third and two thirds** and
- (ii) **as regards costs** 'no one can yet say for sure what the relative costs [of the various technologies – ACE] will be decades hence.'

But even his revised demand figure of 'between a third and two thirds' increase, is not correct – according to the very evidence quoted by Mr Gurumurthy. In other words Mr Gurumurthy himself is still inflating possible future demand.

We looked at all of the 'main scenarios' as specified by the government in 'The Carbon Plan'⁹ published by HM Government in December 2011.

- (i) The 'Core Markal' scenario, mentioned above: this showed an increase in electricity demand of almost 25%;
- (ii) High renewables more energy efficiency: this showed an increase in electricity demand of almost 38%;
- (iii) High nuclear less energy efficiency: this showed an increase in electricity demand of almost 54%;
- (iv) High CCS less bioenergy: this showed an increase in electricity demand of almost 29%;¹⁰

In other words neither the statements in EN-1 and elsewhere about a 'doubling of demand' nor Mr Gurumurthy's statement in DECC review No 4 about 'an increase in demand of **between a third and two thirds**' are correct. The real figures are a possible increase in demand of **25% - 54%** - with the 25% being for the scenario that Mr Gurumurthy tells us is 'the most cost effective' scenario. For the avoidance of doubt, we reproduce as Appendix One the electricity demand calculations worked out in the four 'main scenarios' mentioned above.

But even these, (correct as at May 2012), may turn out to be an over-estimate because in March 2012 in DECC Review No 3 DECC announced¹¹ that it is now doing what ACE has been demanding for years – carrying out an 'electricity demand reduction analysis'. The recent Energy Efficiency Deployment Office Call for Evidence announced that this 'will complete its assessment by summer 2012.'

⁹ The Carbon Plan: delivering our low carbon future December 2011

¹⁰ These percentages take 2007 as the base year as used by the Markal modelling. The capacity figures used by Mr Gurumurthy in statement No 3 (quoted below) also seem to use this as the base year.

¹¹ DECC Review No 3 March 2012 page 5

So from the 'doubling' information given to MPs in EN-1; to Mr Gurumurthy's 'one third to two thirds', we have ended up with an increase of 24% - 54%. And even that may well prove to be too much.

2. Statement No 3 regarding capacity requirements

Mr Gurumurthy tells us that 'our most cost-effective scenario (the so-called Markal pathway) ... would result in a balanced electricity generation mix in 2050 with 33GW of nuclear, 45GW of renewables and 29GW of fossil fuel with CCS.'

Let's ignore the 'cost- effective' comment for the moment and just concentrate on those totals. In this pathway there will be a total of 107GW of low carbon electricity generated by 2050. This would ensure energy security and reduce CO2 emissions by 80%.

Now compare this with what MPs were told in EN-1. They were told unequivocally that there was an 'urgent'¹² need for 'at least 113GW of total electricity generating capacity'¹³ by 2025; and that to plan for anything else 'would create an unacceptable risk to the delivery of secure ... energy supplies.'¹⁴

We pointed out in Corruption of Governance (pages 10 and 11) that this was a false summary of the modelling produced in EN-1 and presented without caveats to Ministers and Parliament. Now the Markal analysis, quoted by Mr Gurumurthy in DECC Review No 4 also shows this. He states that Markal estimated a total of 107 GW to be needed by 2050. (We checked the Markal modelling and confirmed this).

The point being that if 107 GW is apparently all that is needed and sufficient by 2050, how can 113 be 'urgently' needed by 2025? Particularly as, according to the Carbon Plan (a statutory report produced by the Government in December 2011¹⁵), the bulk of the government's electrification programme will not happen until the end of the next decade and in the 2030's! Markal shows that after 2025 more electricity will be needed.

Think about this for a moment: EN-1 says we need 113GW by 2025; then further electrification takes place after that date; yet Markal shows that we only need 107GW by 2050.

We stated in Corruption of Governance that the 113GW figures claimed in EN-1 was a fabrication. Mr Gurumurthy, and the Markal modelling carried out by the government further proves this.

3. Mr Gurumurthy's statement re cost-effectiveness

¹² EN-1 page 20 et seq

¹³ Op cit para 3.3.22 page 22

¹⁴ Op cit para 3.3.19 page 21

¹⁵ Presented to Parliament on 1st December pursuant to the Climate Change Act 2008

As noted above, Mr Gurumurthy states that 'core Markal' is the most cost-effective scenario. We have already commented in Corruption of Governance (at pages 19-24) in some depth on the methodology used by the government, but it is important here, too, to put Mr Gurumurthy's claim re the Core Markal model into some perspective.

- (i) DECC itself clearly states that the Markal figures 'should not be confused with the bills households pay for their electricity and heating'¹⁶. This is a very different matter taking into account other factors.
- (ii) As another DECC publication '2050 Costs Calculator Wiki' further explains, the Markal costs are costs 'borne by the economy; they are not bill impacts for consumers'.
- (iii) Of course, costs borne by the economy are important – but Mr Gurumurthy only tells us half the story regarding this matter and Core Markal. For instance the Markal modelling 'does not take into account any of the *benefits* (emphasis in original) associated with the move to a low carbon economy' such as 'investment in the green economy is a strong driver of economic growth and jobs' and 'by 2015 over 1 million people in the UK are expected to be employed in the green economy'.¹⁷ So other Pathways on the Government's Calculator tool that also achieve energy security and 80% CO2 reductions but either with less new nuclear power stations than Core Markal, or none at all, such as
 - a. The Markal Pathway entitled 'High renewables: more energy efficiency' and
 - b. The Pathways by Friends of the Earth, and
 - c. The Pathway by Campaign to Protect Rural England¹⁸

are designated as less cost effective than Core Markal. But as they involve far more 'green economy' measures which are not included in the assessment of costs it is impossible to say whether Core Markal is really the most cost effective option.

- (iv) Finally, as we noted above, the DECC demand reduction project has yet to report. This is investigating the full potential for energy saving – the most costs effective policy according to both the current government and the previous one.¹⁹ Not until those results are known can we say what the most cost-effective policies are with any certainty.

¹⁶ DECC explanatory publication entitled '2050 Calculator updated to include costs: results and methodology

¹⁷ See the DECC explanatory publication referred to in footnote 16

¹⁸ All of these can be seen on the DECC Calculator Tool website

¹⁹ 2003 Energy White Paper pages 16 and 32; former Energy Secretary Chris Huhne MP Hansard 27th July 2010 col 867; Energy Minister Greg Barker MP Hansard 30th June 2010 cols 870 and 872