



**NuClear News No.12
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1. Nuclear National Policy Statement Late

At a Labour Party Conference fringe event, Martin O’Neil, chairman of the Nuclear Industry Association, criticised the Government for the time it has taken to publish its Nuclear National Policy Statement (NPS). *“There should have been a national policy statement on nuclear and energy by the end of July so the proper consultative process could take place before the events of April and May,”* he said referring to the impending election. It now appears to be accepted in Whitehall that the Nuclear NPS will not be ‘designated’ before the General Election. (1)

Climate change minister David Kidney told a CBI conference in October the Nuclear NPS will be published in early November. The NPS, which will be released for consultation, will list potential sites for new reactors. It is designed to give utilities an indication of the legislative framework they will have to comply with in planning new reactors. (2)

Meanwhile, a third potential nuclear operator has entered the market, taking total proposals for new reactors up to 16GW. A consortium of GDF Suez, Iberdrola and Scottish and Southern Energy has secured an option to purchase land at Sellafield. (3) Scottish Power, owned by Iberdrola, and Scottish and Southern Energy, are desperate not to be frozen out of the new nuclear programme earmarked for England and Wales. (4)

(1) ePolitix.com 29th September 2009 <http://www.epolitix.com/latestnews/article-detail/newsarticle/nuclear-industry-owes-a-lot-to-labour/>

(2) Business Green 22nd Oct 2009 <http://www.businessgreen.com/business-green/news/2251815/exclusive-nuclear-planning>

(3) DECC Press Release 28th Oct 2009

<http://nds.coi.gov.uk/content/detail.aspx?ReleaseID=408007&NewsAreaID=2&HUserID=886,779,890,849,780,684,710,705,765,674,677,767,684,762,718,674,708,683,706,718,674&ClientID=-1>

(4) Guardian 29th October 2009 <http://www.guardian.co.uk/business/2009/oct/28/sellafield-nuclear-energy-scottish-southern>

2. Infrastructure Planning Commission (IPC)

The IPC was launched at the beginning of October, although it won’t be open for business until March 2010. But the Tories have already effectively signed its death warrant by declaring they want to return the balance of power to councils and the Secretary of State. (1) The Conservatives say IPC staff and commissioners would be moved into the Planning Inspectorate in Bristol. Sir Michael Pitt, chair of the IPC, has concerns a merger with the Planning Inspectorate, which processes casework and arranges public inquiries, may be a step backwards towards the *“wasteful and inefficient”* old regime.

Sir Michael claims the notion local authorities will be disempowered is a “clear misunderstanding”. “No local authorities ever made decisions,” he explains. “The ultimate power was always with the Secretary of State. And with the new regime, the process gives local authorities a special status, so their views will fully be taken into account.”

“Before, local authorities and some NGOs would have to appoint their own QCs and pay them throughout these long, drawn-out public inquiries,” he says. “It’s been known for objectors just to give in because of the costs of carrying on fighting. Under the new regime there’s much more emphasis on the pre-application stage. Poor applications will be weeded out early and badly prepared applications substantially improved before they even reach us.”(2)

Friends of the Earth, on the other hand, remains deeply concerned that under the Planning Act 2008, decisions will be made by unelected Commissioners who are unaccountable to the public - making it increasingly difficult for ordinary people to engage in local decision-making. Friends of the Earth’s Planning Advisor, Hugh Ellis, said: “The IPC is an unelected, undemocratic body - the new Commissioners aren’t directly accountable to the people their decisions will affect. It’s going to be very difficult for local people to get their voices heard, especially with key documents being so technical and opportunities to attend inquiries so few. If people are unhappy with the process they’ll have to take the matter to court, which is extremely difficult and costly.” (3)

Hugh Ellis told a Nuclear Free Local Authorities Conference in Liverpool on 9th October that the driving force behind the 2008 Planning Act was that “people are a problem”. Location, technology issues; safety and all other high-level issues will be decided before the National Policy Statements are finalised. In parallel with the expected three month consultation on the Nuclear and other energy NPS’s this autumn, there will also be a Parliamentary Process – a special Select Committee will be set up. Communities and members of the public must exercise the opportunity to comment of the Nuclear NPS and apply to appear before the Select Committee. Once the NPS is designated it will only be issues like the colour of the fence or the position of access roads that will be open to any kind of consultation.

A list of 11 significant energy and transport infrastructure projects was published by the IPC in October which it intends to fast-track through the planning system. The projects include EDF’s plan to build two new reactors at Sizewell, and two at Hinkley Point, along with two stretches of high-voltage transmission lines, totalling 54 miles (86km), linking them to the National Grid. (4)

(1) Independent 23rd October 2009 <http://www.independent.co.uk/news/uk/politics/tories-to-reclaim-power-over-planning-decisions-1807642.html>

(2) Daily Telegraph 5th Oct 2009 <http://www.telegraph.co.uk/finance/newsbysector/constructionandproperty/6259640/Sir-Michael-Pitt-plans-his-fight-to-save-Infrastructure-Planning-Commission.html>

(3) Friends of the Earth Press Release 1st Oct 2009
http://www.foe.co.uk/resource/press_releases/ipc_01092009.html

(4) Times 22nd Oct 2009
<http://business.timesonline.co.uk/tol/business/article6884781.ece>

Telegraph 22nd Oct 2009
<http://www.telegraph.co.uk/earth/earthnews/6400634/Two-nuclear-power-stations-and-five-wind-farms-to-be-considered-by-controversial-new-planning-body.html>

3. Feed-in Disaster

Writing in the Daily Telegraph, Geoffrey Lean says under one “plausible policy scenario” nine million dwellings – about one in three in Britain – could be exploiting “micropower” by 2020, producing as much energy as five large nuclear power stations. Yet the Government is aiming at a modest 870,000, producing just 2% of Britain’s electricity, one sixteenth of the technical potential. (1)

Solar electricity, the most promising of all the technologies, is planned to provide only 0.5%, despite the estimated practicable resource for solar PV being around 266 TWh by 2025 (calculated as electricity generated by the application of PV to all surfaces of available domestic and non-domestic buildings, allowing for 10% non-suitable surfaces and 25% shading). (2) Since current UK demand for electricity is about 370 TWh, this means that about 70% of the UK’s electricity could be generated by photovoltaics.

If dwellings were properly insulated and small-scale renewable technologies were installed,

households could become virtually independent of energy companies, and turn a tidy profit by selling electricity back to the grid. This could reduce the need for large generating stations – whether powered by fossil fuels or nuclear – and simultaneously cut Britain’s carbon emissions. David Cameron’s Conservatives have grasped the concept’s importance, says Lean. *“But it is hated by officials, who loathe the idea of millions of people making decisions instead of them. They have diligently reined it back, by slashing grants, whenever it looked like taking off. And despite last summer’s fanfare, this seems to be happening again”*.

Hopes were high of a rooftop renewable revolution this year after the Government finally agreed to introduce “feed-in tariffs”. But the consultation documents show that rates for generating renewable power have been fixed at a level apparently designed to stop it succeeding.

The government’s ‘Clean Energy Cash Back’ scheme, which is due to open in April 2010 will make a payment for every unit of renewable energy generated over the next 20 years – with a bonus for surplus power exported to the grid. The government expects returns on investment to be in the region of 5 - 7%. But campaigners say the proposals will not generate enough investment to achieve targets. Research by the Energy Saving Trust suggests the proposed payments levels are unlikely to attract sufficient interest from the domestic sector to achieve the low 2% target set, particularly once the cost of loan finance is factored in.

Renewable Energy Association (REA) campaigner Leonie Greene said: *“From the industry’s perspective the scheme is well designed, but the proposed Tariff levels are set too low and applied inconsistently across technologies. It worries the industry that almost every important potential investor we’ve spoken to, from the commercial sector, to social housing providers and community scheme developers, all say the proposed rates are too low,”* she said. REA and Friends of the Earth want the return on investment to be raised to 10% for the first three years of the scheme to ensure a successful start. (3)

The British Wind Energy Association (BWEA) and regional sustainable energy agency, Regen SW, have also called for changes to the rates of subsidy which different projects will receive. The BWEA asked for the proposed sub-15kW wind tariff bands to be strengthened, to maximise the potential for economic and employment growth in the micro-generation wind sector. Alex Murley, head of small systems at BWEA, said: *“Unlike most technologies covered by the FiT - for small wind, the UK has one of the biggest home markets in the world, and a British manufacturing industry that can more than hold its own weight in fast expanding international markets for decades to come. The FiT needs to grasp a rare opportunity to stimulate grass root interest in self generation of green energy, while simultaneously delivering economic and industrial value for money.”* (4)

Andrew Lee of Sharp Energy Solutions says the tariffs are set too low to encourage the high level of initial demand needed to encourage a tipping point in solar PV uptake - and to reduce the price of module production for future years. The cumulative impact of sustained low exchange rates against the Euro, the lack of economies of scale in the UK market and the sheer length of time it will take for the new FIT policy to bed down with regulators, suppliers, industry and crucially customers in 2010/11, all point to the need for a reassessment of the tariff. The Sharp factory in Wrexham produces enough PV modules to power 700,000 houses per year, but only 1% of these are fitted in the UK. (5) Seventeen European countries have successfully adopted feed-in tariffs. Is the UK going to be the first to mess it up? (6)

(1) Telegraph 17th Oct 2009

<http://www.telegraph.co.uk/earth/earthcomment/geoffrey-lean/6349207/Sun-sets-on-the-rooftop-revolution.html>

(2) Renewable Energy and Combined Heat and Power Resources in the UK, Jim Watson, Julia Hertin, Tom Randall and Clair Gough, Tyndall Centre, April 2002.

<http://www.tyndall.ac.uk/sites/default/files/wp22.pdf>

(3) New Civil Engineer 16th Oct 2009

<http://www.nce.co.uk/news/energy/feed-in-tariff-must-be-more-ambitious/5209552.article>

(4) New Energy Focus 15th Oct 2009

http://www.newenergyfocus.com/do/ecco.py/view_item?listid=1&listcatid=32&listitemid=3100§ion=Policy and Business Green 15th Oct 2009

<http://www.businessgreen.com/business-green/news/2251330/wind-industry-wants-feed-tariff>

(5) New Energy Focus 13th Oct 2009

http://www.newenergyfocus.com/do/ecco.py/view_item?listid=1&listcatid=32&listitemid=3088§ion=Solar

(6) Sunday Times 11th Oct 2009 <http://www.timesonline.co.uk/tol/news/environment/article6868821.ece>

4. Risks of something serious happening are far too high.

The risks of something serious happening in Sellafield's old plants are far too high, the Nuclear Installations Inspectorate (NII) has warned. (1) Sellafield has been experiencing problems in the high level waste (HLW) area including corrosion in the cooling coils on the liquid waste storage tanks (2); breakdowns at the three evaporators (3); and problems in the liquid waste vitrification plant, which turns the waste into glass blocks. In July 2008 the NII said replacement tanks should be pursued with the "*utmost urgency*". (4)

Evaporator 'B' was taken out of service in October because of yet another failure of one its internal cooling coils. Under normal circumstances, the process of evaporating the liquid waste produced by Sellafield's two reprocessing plant would be transferred to the site's two other Evaporators A and C, but these aren't working either, so Sellafield has no way of processing (condensing) any liquid waste. But, by way of lucky coincidence, both reprocessing plant are also currently out of action. (5)

Recent research by the Norwegian Radiation Protection Authority (NRPA) looked at a hypothetical accident at the Sellafield HLW tanks. If prevailing northeasterly winds occurred, Norway could have radioactive materials hitting its coastline just 9 hours after an accident. The NRPA looked at scenarios involving an atmospheric release of between 0.1 – 10 % of the total Caesium-137 inventory contained in the tanks. It found that Norway could receive up to 50 times the contamination experienced after Chernobyl. (6) A larger release of 50% of the caesium inventory, which might be caused by a terrorist attack, could kill an estimated two million people and require the evacuation of Glasgow and Liverpool. (7) Campaigners from the Norwegian campaign group, the Neptune Network, held a protest against Sellafield at Westminster at the end of October. (8)

Now the first vital step in tackling the problems associated with Sellafield's High Level Waste has been put out to tender. A contract which relates to 'the design and build of a highly active liquid effluent plant' appeared recently in the Official Journal of the European Journal (OJEU). In a number of phases stretching over the next 8 or 9 years, the contract is believed to be worth up to £1.5bn. (9) So, by around 2018, if all goes according to plan, we should be able to sleep more soundly in our beds.

Meanwhile DECC has published a second discussion paper on what to do with all the plutonium rather pointlessly created at Sellafield. The first, published on 16th July, considered the factors which could be important when judging one potential option for long term plutonium management against another. The second considers the decision methodology and timetable for decision making. DECC says it will launch a formal consultation on plutonium management in the autumn. (10)

And the NDA has decided it will achieve the best value for money for the taxpayer in the future by the continued operation of SMP in pursuance of completing the current campaign of fuel manufacture. Given recent improvements in plant performance and positive discussions with customers the NDA has concluded this is the best course of action. (11) Cumbrians Opposed to a Radioactive Environment (CORE) compared the decision with giving the kiss of life to a corpse. (12)

(1) Whitehaven News 7th Oct 2009 http://www.whitehaven-news.co.uk/news/sellafield_s_risks_are_too_high_nii_span_style_color_red_add_your_comments_span_1_620879?referrerPath=news

(2) See High Level Waste Near Miss, NuClear News No.6 <http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo6.pdf>

HSE Nuclear Newsletter No. 45, September 2009 <http://www.hse.gov.uk/nuclear/nn45.pdf>

(3) Whitehaven News 24th June 2009

http://www.whitehaven-news.co.uk/news/thorp_threats_1_557207?referrerPath=home

(4) HSE Nuclear Newsletter July 2008. p16 <http://www.hse.gov.uk/nuclear/nsn4308.pdf>

(5) CORE Briefing 23rd Oct 2009 <http://www.corecumbria.co.uk/newsapp/pressreleases/pressmain.asp?StrNewsID=268>

Whitehaven News 28th Oct 2009

http://www.whitehaven-news.co.uk/news/sellafield_hit_by_failure_at_evaporator_b_1_629492?referrerPath=news

(6) Consequences in Norway of a hypothetical accident at Sellafield, NRPA, 23rd March 2009. http://www.nrpa.no/archive/Internett/Publikasjoner/Stralevernrapport/2009/StralevernRapport_2009_7.pdf

- (7) Assessing the risk of terrorist attacks on nuclear facilities, POST Report 222, July 2004. p81 <http://www.parliament.uk/documents/upload/POSTpr222.pdf> and Possible Toxic Effects from the Nuclear Reprocessing Plants at Sellafield and Cap de la Hague. European Parliament, Scientific and Technological Options Assessment, November 2001. p45 http://www.europarl.europa.eu/stoa/publications/studies/20001701_en.pdf
- (8) NW Evening Mail 30th October 2009 http://www.nwemail.co.uk/news/barrow/campaign_against_sellafield_1_630810?referrerPath=home
- (9) CORE Press Release 9th October 2009 <http://www.corecumbria.co.uk/newsapp/pressreleases/pressmain.asp?StrNewsID=267>
- (10) DECC 8th October 2009 http://decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/nuclear/issues/plutonium/plutonium.aspx
- (11) NDA 27th October 2009 <http://www.nda.gov.uk/news/sellafieldmoxplant.cfm>
- (12) CORE Press Release 27th October 2009 <http://www.corecumbria.co.uk/newsapp/pressreleases/pressmain.asp?StrNewsID=269>

5. Offshore Wind – Round Three

Round Three (R3) of the Crown Estate licensing awards for offshore wind will take the industry out into much deeper waters, beyond 12 nautical miles. Shortlists have been drawn up and the Crown Estate will soon announce which companies and consortia have been chosen. Nine areas, including the Dogger Bank, acreage off Norfolk and in Scotland the Firth of Forth and Moray Firth, have been designated for development. R3 is a step change for the UK offshore industry, offering developers the chance to build 25GW. Under rounds one and two, which started in 2000, 8GW can be developed. The combined total of 33GW represents more than 10 times what is produced from wind power today. (1)

Barely a year ago there was hardly any mention of offshore wind in Scotland, according to Paul Gardner of Garrad Hassan, author of the Power of Scotland report. (2) Apart from the Solway Firth, waters around the Scottish coasts were thought to be too deep. Now Scotland is recognised as having a huge potential for offshore wind in depths greater than 50 metres. Scotland was ignored in R2, but then received a whopping 6.4GW of potential capacity in February 2009 through the Scottish Territorial Waters Round, which covers waters out to 12 nautical miles. (3) Offshore wind projects off Scotland's shores are now expected to dwarf onshore capacity if the bulk of the proposed sites within Scottish Territorial Waters and Scotland's R3 bids come to fruition. (4)

Scottish Renewables (SR), the voice for the renewables industry in Scotland, estimates that offshore wind development and the predicted wave and tidal developments in Scottish waters by 2020 will deliver carbon reductions equivalent to 30% of Scotland's total emissions, and provide electricity equivalent to 89% of Scotland's demand, but only if constraints to development are removed. Wave and tidal developments are predicted to reach 1GW installed by 2020. (5)

The Carbon Trust has predicted that a successful R3 could propel Britain towards a £70bn wind and wave market supporting 250,000 jobs. *"These technologies are not green 'nice to haves' but are critical to the economic recovery,"* says chief executive Tom Delay. (6)

The plans are doomed to failure, according to the chief executive of Eon, Wulf Bernotat. He said that British politicians needed to stop misleading the public about what was achievable. Plans to build 33 gigawatts of offshore wind power, up from 0.6 gigawatts at present, was impossible, given the necessary investment and relatively short timeframe. (7) But experts from DONG Energy, Centrica and ABB argued at the BWEA Conference that while offshore wind technology is among the most expensive, it is fully feasible to construct sites and can be done quickly and to budget. (8)

(1) Guardian 5th Oct 2009 <http://www.guardian.co.uk/business/2009/oct/05/wind-farms-north-sea>
See also <http://www.thecrownestate.co.uk/round3-announcements> for a list of the nine areas.

(2) The Power of Scotland Renewed by Paul Gardner, FoE(S), WWF, WDM, RSPB, July 2009
Summary: <http://www.wdmScotland.org.uk/documents/PowerofScotlandSummaryFINAL.pdf>
Full Report: http://assets.wwf.org.uk/downloads/powerofscotlandrenewed_full.pdf

(3) Scotsman 16th February 2009. <http://thescotsman.scotsman.com/scotland/Offshore-wind-farm-plans-could.4982658.jp>
Herald 24th Oct 2009

<http://www.heraldScotland.com/business/markets-economy/scotland-s-30bn-offshore-bounty-1.928244>

(4) Review, Scottish Renewables Magazine, September 2009

<http://www.scottishrenewables.com//MultimediaGallery/af73d7de-fd85-46e8-85b7-bca248276d06.pdf>

(5) Scottish Renewables Press Release 29th October 2009

<http://www.scottishrenewables.com/default.aspx?documentid=c3797c9e-94d5-4379-b10f-d87cd16f8e2b>

(6) Carbon Trust 2nd July 2009 http://www.carbontrust.co.uk/News/presscentre/020709_CleanTechRevolution.htm

(7) Times 19th October 2009. http://business.timesonline.co.uk/tol/business/industry_sectors/natural_resources/article6880248.ece

and http://business.timesonline.co.uk/tol/business/industry_sectors/natural_resources/article6880128.ece

(8) New Energy Focus 23rd Oct 2009

http://www.newenergyfocus.com/do/ecco.py/view_item?listid=1&listcatid=32&listitemid=3132§ion=Wind

6. Radioactive Waste problem solved? – as if!

The European Commission's Joint Research Centre (JRC) has published a report on the geological disposal of nuclear waste, which analyses the science, technology and procedures needed across the EU for implementation. (1) Entitled "Geological disposal of radioactive waste: moving towards implementation", the JRC Reference Report identifies no major conceptual or research gaps concerning envisaged host rocks and repository systems (clays, hard rocks and salt), concluding that the technique is technically ripe for implementation. The Press Release says what's needed is regulatory approval and public acceptance – implying the science is all sorted.

The report itself, however, presents an impressive list of gaps in knowledge making it absolutely clear that disposal is a very long way from being 'ripe for implementation'. In particular the report highlights the fact that disposal concepts to date assume waste forms and spent fuel associated with past and current types of reactors. New reactor types with new fuel design will necessitate further research. Higher burn-up fuel (of the type planned for use in new UK reactors) and mixed oxide (MOX) fuels will require new research into new container designs in order to accommodate higher thermal loads and there will be higher risks of radiation-induced embrittlement of structural parts.

Meanwhile, the Committee on Radioactive Waste Management (CoRWM) is about to begin its consideration of the conditioning, packaging, interim storage and geological disposal of higher activity wastes (intermediate level wastes and spent fuel) from new reactors and is calling for evidence. (3)

(1) European Commission JRC Press Release, Geological disposal: technically ripe for implementation, 1st October 2009

http://ec.europa.eu/dgs/jrc/downloads/jrc_091001_newsrelease_geo_disposal_en.pdf

(2) Geological disposal of radioactive waste: moving towards implementation, EU JRC, October 2009.

http://ec.europa.eu/dgs/jrc/downloads/jrc_reference_report_2009_10_geol_disposal.pdf

(3) CoRWM e-Bulletin 36, October 2009. <http://www.corwm.org.uk/Pages/e%20Bulletins/2710%20Final%20e-bulletin%2036%20-%20October%202009.pdf>

7. Low Level Waste Dump Proliferation

The NDA has been consulting on how to manage low-level radioactive waste (LLW). (1) The consultation document sets out a framework for 'flexible' management, and argues earlier policy did not cover large scale decommissioning and site restoration and that options beyond engineered disposal will be critical. The framework allows for development of solutions on a case-by-case basis.

The low-level nuclear waste depository at Drigg in Cumbria could be full in 20 years - one reason the NDA is 'refining' its strategy. And the company which operates the dump – Low Level Waste Repository Ltd (LLWR) - wants to find ways of cutting costs. One proposal it has made to the regulators is to do away with the traditional procedure of placing the waste in various protective membranes, putting it in one of the 10,000 containers, which cost £10,000 each, then covering it in earth and concrete. (2)

According to the Nuclear Free Local Authorities, the so-called flexible approach proposed by the NDA means increasing the amount of wastes going to landfill; lowering standards for site remediation in an attempt to reduce the volumes of waste generated and costs; and an increase in discharges of liquid

radioactive waste into the marine environment, caused by the decontamination of metals earmarked for recycling. (3) “Insiders”, according to The Guardian, have confirmed the NDA’s policy is almost certain to switch to putting more waste in landfill and other sites not used in the past.

The corporate sector is already considering the opportunities of a switch in policy to a wider use of landfill. Leading waste management firms such as the French-owned Sita group and the American company, EnergySolutions, are trying to press ahead with plans to use Cumbrian facilities at Keekle Head and Lillyhall for dealing with nuclear waste from Sellafield and elsewhere. A British firm, Augean, is trying to do the same at King’s Cliffe in Northamptonshire, not far from Peterborough. (4) Sita also plans to increase the amount of radioactive waste buried at Clifton Marsh near Blackpool. (5)

Recent press reports suggest that even Cumbria County Council is not happy about the proliferation of low level waste dump sites and may refuse permission for disposal at Lillyhall and Keekle Head. “*It should not be put in holes and imposed on people around West Cumbria.*” (6) Villagers in Northamptonshire are campaigning against the use of the landfill site at King’s Cliffe for radioactive waste from the nuclear industry. (7)

Curiously the NDA has just extended its consultation, which was due to close on 11th September, to the end of November. (8) It says it wants to reflect the important role that Local Authorities will have regarding the solid low level radioactive waste strategy implementation, and wants to “*specifically encourage further views from Local Authorities in order to develop the best possible strategy for the UK*”. Presumably local authorities haven’t, so far, given the NDA the answer it wants.

(1) UK Strategy for the Management of Solid Low Level Waste from the Nuclear Industry, Consultation Document, NDA, June 2009

<http://www.nda.gov.uk/documents/upload/UK-Strategy-for-the-Management-of-Solid-Low-Level-Radioactive-Waste-from-the-Nuclear-Industry-Consultation-Document-June-2009.pdf>

(2) Guardian 20th October 2009 <http://www.guardian.co.uk/environment/2009/oct/19/nuclear-waste-storage-needs>

(3) Nuclear Free Local Authorities, Radioactive Waste Briefing No.20, 20th Aug 2009

<http://www.nuclearpolicy.info/docs/radwaste/RadWaste20.pdf>

(4) Rutland and Stamford Mercury, 26th June 2009

<http://www.stamfordmercury.co.uk/news/Nuclear-waste-plan-debate.5403763.jp>

(5) Blackpool Gazette 26th June 2009

<http://www.blackpoolgazette.co.uk/blackpoolnews/Residents-34nervous34-over-Fylde-nuclear.5407117.jp>

(6) Whitehaven News 25th August 2009

http://www.whitehaven-news.co.uk/news/nuclear_waste_sites_set_for_thumbs_down_1_600367?referrerPath=news

(7) BBC 23rd October 2009

<http://news.bbc.co.uk/1/hi/england/northamptonshire/8321112.stm>

(8) NDA Web Alert 20th October 2009 <http://www.nda.gov.uk/consultations/>

8. Carbon Floor Price

Following reports (1) that the Government is looking at a ‘floor price’ for carbon or a levy on consumers bills to help support nuclear power, *The Guardian* has revealed that officials have drawn up secret plans to tax electricity consumers to subsidise the construction of new reactors. The planned levy on household bills would add £44 to an annual electricity bill of £500 and contradicts repeated promises by ministers that the nuclear industry would no longer benefit from public subsidies.

The government believes that only by artificially increasing the cost of electricity generated by coal and gas stations through an additional carbon levy on household bills can nuclear become more competitive and encourage new reactors to be built. One European utility executive said: “*New nuclear will not happen without sorting out the carbon price.*” The Office of Nuclear Development (OND) has promised nuclear companies the price of carbon under the EU Emissions Trading Scheme (EU ETS) – now about €13 per tonne – will not be allowed to fall below €30 per tonne, and ideally €40. Officials from the OND have been privately assuring companies that if Copenhagen fails to secure a deal which significantly boosts the market price of carbon, the government will act to do so early next year. (2)

As recently as July the Government insisted the EU ETS was a sufficient market mechanism to provide the long-term price signal for carbon that investors need to build new nuclear power plants.

A DECC spokesperson said “...there are significant risks in attempting to manage the carbon price ... Introducing price caps or floors makes emissions trading a game of betting on the next government intervention in the market.” (3)

The government’s independent committee on climate change has also floated the idea of intervention in the carbon market (4). *The Guardian* said its revelation shows how committed ministers are to ensuring nuclear reactors get built, even if it means consumers have to subsidise them. The government will make its formal response to the committee’s annual report in January, when it is expected to publicly endorse what amounts to a carbon tax. Ministers will argue that the tax will also benefit low carbon generators of electricity such as clean coal and renewables. But nuclear would be the biggest winner.

According to Chris Goodhall in Carbon Commentary, the decision to create a floor price for carbon demonstrates that the full costs of nuclear technology are probably well above today’s wholesale electricity prices. The government’s optimistic noises from 2006 to the middle of this year about the commercial viability of nuclear power have turned out to be wrong. (5) In other words, during the course of 2009 the implied cost of nuclear power has risen from being no worse than competitive with gas and coal (at a zero carbon price) to being €30 (£27) per MWh more expensive. This means the estimated cost of nuclear electricity has jumped from around 3p/kWh to 7-8p/kWh.

Steve Thomas, Professor of Energy Policy at the University of Greenwich, told a seminar at Westminster on 19th October organised by the Nuclear Consultation Group: “*If the government caves in to industry demands for subsidies and guarantees, it will be electricity consumers and taxpayers that will pay huge additional costs.*”

Of course some people might be willing to pay higher electricity bills if they thought it was the best way to tackle climate change, but David Elliott, Emeritus Professor of Technology Policy, from the Open University, warned the seminar “*EDF tell us that a large nuclear programme will be operationally and economically incompatible with the UK renewables programme. Something will be curtailed – either renewables or nuclear. Do we want a renewable or a nuclear future?*” (6)

An economic activity that has external costs, caused by, for example, the emission of carbon dioxide, is imposing those costs on the whole of society. If we are going to go down the road of “internalising” these external costs, by taxing pollution, then we need to make sure nuclear power as well as fossil fuels are paying external costs. (7) [We also need to make sure nuclear power is not receiving any hidden subsidies. (8)] As reported in NuClear News No.11 the nuclear industry has already been disputing the fixed price the Government wants to charge for waste (9) and there is considerable uncertainty about whether sufficient funds will be available when required in 100 years time if we are expecting up to 83% of the cash to come from interest payments dependent on the performance of the stock market over the next century – which is almost totally unpredictable. (10) Radiation Free Lakeland asks if a radiation tax will be imposed on nuclear power. (11)

A consultation on the draft methodology for establishing an indicative fixed unit price for the disposal of intermediate level waste and spent fuel from new nuclear power stations is expected before the end of 2009. This will be followed by the final funded decommissioning programme guidance, in spring 2010. The Government expects operators to request that the Government provide them with a fixed unit price for the disposal of spent fuel at the time they seek approval for their funded decommissioning programme. This will occur alongside the regulators’ licensing and permitting processes. (12)

(1) Nuclear Subsidy? Told you so. NuClear News No. 10. <http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo10.pdf>

(2) Guardian 19th October 2009
<http://www.guardian.co.uk/environment/2009/oct/19/nuclear-tax-on-power-bills>

(3) Nucleonics Week, Vol. 50 No. 28, 16th July 2009

(4) Independent 12th October 2009 <http://www.independent.co.uk/environment/green-living/cars-must-be-electric-says-climate-tsar-1801334.html>

(5) Carbon Commentary 22nd Oct 2009

<http://www.carboncommentary.com/2009/10/22/776#more-776>

(6) Telegraph 19th October 2009

<http://www.telegraph.co.uk/earth/energy/nuclearpower/6369189/Energy-bills-will-have-to-rise-to-pay-for-nuclear-energy.html>

(7) See <http://en.wikipedia.org/wiki/Externality>

(8) See Nuclear Subsidies report by Energy Fair, October 2009.

http://www.mng.org.uk/gh/private/nuclear_subsidies1.pdf

(9) Waste Costs Dispute, NuClear News No.11 <http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo11.pdf>

(10) Nuclear Finance, NuClear News No.9

<http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo9.pdf>

(11) Indymedia 28th October 2009

<http://www.indymedia.org.uk/en/2009/10/440806.html>

(12) House of Lords Hansard 21st Oct 2009, Column WA72

http://www.publications.parliament.uk/pa/ld200809/ldhansrd/text/91021w0001.htm#column_WA72

9. Reactor design problems

With concern expressed by UK and Finnish regulators about the European Pressurised Water Reactor's (EPR's) control and instrumentation systems, and problems in Finland and France where the world's first two EPRs are being built, the focus has been very much on the Areva reactor design. (1) But now problems with the Westinghouse AP1000 design are also beginning to emerge.

The Finnish reactor, Olkiluoto 3, which should have cost €3bn (£2.72bn) and been working this year, will now miss its revised completion date of mid-2012 and will cost at least €5.3bn. (2) In the latest delay, Finland's nuclear safety regulator halted welding on the reactor and criticised poor oversight by the sub-contractor, supplier and TVO. (3) There have been more than 3,000 mistakes in the construction of Olkiluoto-3 to date. (4) Areva has now also admitted that the Flamanville EPR will be delayed two years. (5)

Now the US Nuclear Regulatory Commission has rejected the Westinghouse AP1000 design, because of safety concerns, saying a key part of the reactor may not withstand a tornado, earthquake or even high winds. (6) The first AP1000s are being built in China, and, although they are at an earlier stage than the Finnish reactor, they are on time and budget according to David Bonsor, former BNFL Director and now Chairman of Westinghouse UK. (7) But the NRC has directed Westinghouse to make changes in the reactor design so that its outer shell, which is supposed to protect the reactor's containment structure, is strengthened, because the steel and concrete structure does not meet the design requirements for safety. (8)

Edwin Lyman, senior scientist, Global Security Program, Union of Concerned Scientists (UCS) in Washington said: *"The NRC's rejection of the revised AP1000 shield building is a hopeful sign that it is starting to recognize the major safety risks posed by novel and untested reactor design features and manufacturing approaches."* (9)

The HSE has again warned that the two firms in the running to build reactors must put more resources into dealing with the safety assessment process if it was to be completed on time. Westinghouse, came in for particular criticism for failing to provide a report on external hazards such as flooding. The HSE also criticised it for its "slow progress" in responding to questions on civil engineering design codes. It said: *"We've not seen evidence the civil structure design conforms to the standards we'd expect to be applied to new nuclear construction."* (10)

(1) Design assessment delay, NuClear News No.10 <http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo10.pdf>

(2) Guardian 19th October 2009

<http://www.guardian.co.uk/environment/2009/oct/19/nuclear-power-gas-coal?>

(3) Olkiluoto.info 15th October 2009

<http://www.olkiluoto.info/en/30/3/166/>

(4) Der Spiegel 15th Oct 2009 <http://www.spiegel.de/international/europe/0,1518,655409,00.html>

(5) Easy Bourse 19th Oct 2009 <http://www.easybourse.com/bourse/actualite-financiere/presse-areva-voit-2-ans-de-retard-pour-l-epr-de-flamanville-FR0004275832-746597>

(6) New York Times 15th Oct 2009 http://www.nytimes.com/2009/10/16/science/earth/16nuke.html?_r=3

(7) The Engineer 28th Oct 2009 <http://www.theengineer.co.uk/Articles/313737/Nuclear+option.htm>

(8) AP 15th Oct 2009 <http://www.google.com/hostednews/ap/article/ALeqM5hc6n8iqEyIKVzXyV1ZwW38FZkxxAD9BBOIH84>

See also Physicians for Social Responsibility website: <http://www.psr.org/nuclear-bailout/resources/>

(9) Southern Alliance for Clean Energy Briefing October 2009. http://www.cleanenergy.org/images/position_statements/F-DOE%20loan%20guarantee%20Hill%20briefer102809.pdf

(10) Building 30th October 2009

<http://www.building.co.uk/story.asp?sectioncode=29&storycode=3152061&c=1>

See also Generic Design Assessment Progress Report 1st July 2009 to 30th Sept 2009 <http://www.hse.gov.uk/newreactors/reports/gda-q3-09.pdf>

10. Reactor Costs

Toshiba has told San Antonio City Council in Texas its new twin \$13bn ABWR reactors will cost \$4 billion extra, prompting the Council to postpone a crucial vote on the project's financing until January. (1)

(1) Climate Progress 28th October 2009

<http://climateprogress.org/2009/10/28/toshiba-san-antonio-nuclear-power-plant-expensive-cost/>

11. Pay-as-you-save

The Climate Change Committee has criticized policies intended to reduce carbon emissions from homes by 35% by 2020. The Government is relying too much on the Carbon Emissions Reductions Target (CERT) scheme – which involves companies who sell energy advising customers on how to reduce demand. The Committee says what is needed is a whole house approach with work carried out on a street by street basis. (1)

Paul King, chief executive of the UK Green Building Council, said: *“Homeowners are put off by the high upfront cost of more expensive measures and the hassle of getting reliable information and trustworthy installers. The industry is crying out for strong political leadership.”* (2)

Loans have been promised for energy-saving measures – to be paid back out of savings on energy bills – but ministers are dragging their feet. They accept that the loans must be attached to the home, so that succeeding owners continue repaying out of their savings. But this would require legislation, which they have no plans to introduce. Instead they are setting up four pilot projects, which will not report until 2011 and, without the law change, will not be true trials. (3)

The Scottish Government launched a £2m home energy efficiency loan scheme in October (4) The Association for the Conservation of Energy labelled it as ‘too little, too late’ and said the loan fund should be £70m if it were set at the same per capita rate as Germany’s highly successful ‘Energieeffizient Sanieren’ fund which has saved more than 16m tonnes of CO₂. (5)

Meanwhile ACE has published a report which shows that cutting carbon emissions from Scottish homes could create 10,000 new jobs. “Warm Homes, Green Jobs”, also found that achieving a 42% cut in pollution levels from Scots dwellings by 2020 would provide a £4bn boost to the economy. The study concluded that meeting the targets in the Climate Change (Scotland) Act 2009 would need the installation of over 1.5 million efficient boilers, 1.8 million solar panels, 2.2 million draft-proofing strips and 1.5 million loft insulation packages, as well as smaller numbers of wood fuel boilers and insulation for solid walls. (6)

(1) Guardian 12th Oct 2009 <http://www.guardian.co.uk/environment/2009/oct/12/climate-change-green-britain-vision>

(2) Green Building Council Pay-as-you-save report. 5th August 2009
<http://www.ukgbc.org/site/news/showNewsDetails?id=173>

(3) Telegraph 17th Oct 2009

<http://www.telegraph.co.uk/earth/earthcomment/geoffrey-lean/6349207/Sun-sets-on-the-rooftop-revolution.html>

(4) Scottish Government 8th October 2009

<http://scotland.gov.uk/News/Releases/2009/10/08103328>

(5) ACE Press Release 8th October 2009

http://www.ukace.org/index.php?option=com_content&task=view&id=514&Itemid=1

(6) Warm Homes, Green Jobs: the economic impact of the Climate Change (Scotland) Act in the residential sector. ACE, EAGA, October 2009

[http://www.ukace.org/publications/ACE%20Research%20\(2009-10\)%20-%20Warm%20Homes,%20Green%20Jobs%20\[briefing\].pdf](http://www.ukace.org/publications/ACE%20Research%20(2009-10)%20-%20Warm%20Homes,%20Green%20Jobs%20[briefing].pdf)