



**NuClear News No. 15
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1. National Policy Statements

Apparent errors in the consultation process for siting nuclear power stations have opened up the possibility of legal challenges, according to *Planning* magazine. (1) The Planning Act (2008) imposes strict statutory consultation requirements at every level. These apply equally to government bodies and private developers. Ministers are obliged to give councils an opportunity to comment on publicity requirements for proposed projects in their vicinity. Adjoining authorities must also be consulted. This means the list of consultees is lengthy – in the case of nuclear sites it includes 110 authorities.

Through a series of Freedom of Information requests *Planning* magazine has ascertained that no more than 20 authorities have been involved in discussions. All Chief Executives were asked if they would like to be kept informed on nuclear siting, but planning lawyers say this is unlikely to be sufficient to discharge the government’s duty under the act. South Gloucestershire Council did respond suggesting changes to the consultation process, but were ignored. Bristol City Council is considering opposing nearby nuclear proposals (Hinkley and Oldbury) and requesting further consultations in its area. A spokesperson for lawyers Bircham Dyson and Bell said “*Given that this is the only chance the public have of expressing a view it is important that the letter of the act is followed.*” (2)

The chances of a judicial review, according to lawyers Mills and Reeve, now seems quite high because the Department of Energy and Climate Change (DECC) has not complied with the 2008 Act. Friends of the Earth (FoE) has written to Ed Miliband warning him that designating any of the energy National Policy Statements (NPSs) at this stage would be unlawful. Flaws in the strategic environmental assessment procedure are among the issues detailed in their letter. Phil Michaels, the FoE lawyer says consultation was insufficient and the alternatives were inadequately explored and the policies poorly justified.

FoE says it is also supported by conservation groups, the WWF and RSPB. FoE said it believed the NPSs, which Infrastructure Planning Commission (IPC) will use to block or approve applications, would result in Britain

“locking-in” to a high-carbon energy infrastructure. It said the IPC should have to directly take into account the carbon emissions resulting from individual applications. (3)

Planning magazine concludes “DECC now has a choice. It can cross its fingers and hope that it escapes what seems an almost inevitable legal challenge. Or it can admit that errors have been made in the process and start again.”

Meanwhile, planners have also condemned the timing of the House of Commons Energy and Climate Change Committee (ECCC) investigation into the NPSs. Evidence sessions are being held before the deadline for consultation responses imbalancing the process. Former Committee on Radioactive Waste Management member, Professor Andy Blowers, told *Planning* “Local people feel that the process is there simply to get these power stations built and that they are being out-gunned. The document is vast and almost incomprehensible. My general impression of the consultation is that it is a farce”. (4)

Claims made in *The Times* that taxpayers money was being wasted by the IPC, because the Government has yet to finalise the NPSs and that the Tories will scrap it anyway if they win the general election (5) were based on a misconception, according to lawyers Bircham Dyson and Bell. It is not true to suggest that applications cannot be made to the IPC until the relevant NPS has been finalised. In fact all applications for nationally significant infrastructure projects will have to be made to the IPC from 1 March. It will decide applications once the relevant NPS is finalised. Before then the IPC will report to the Secretary of State, who will make the decision on the application. It is true that publication of the first NPSs was delayed, but the date that the IPC starts up is independent of this, and in fact last year it was brought forward from 1 April to 1 March. (6) Secondly, Bircham Dyson Bell now suggests that the Tories may not abolish the IPC, but simply make the Secretary of State the final decision maker, even after the NPSs have been completed. (7)

(1) Wilding, M. Process errors exposed, *Planning* 29th January 2010.

<http://www.planningresource.co.uk/inDepth/ByDiscipline/Policy/login/979902/>

(2) Wilding, M. Government faces consultation rerun, *Planning* 22nd January 2010

<http://www.planningresource.co.uk/news/ByDiscipline/Policy/login/978463/>

(3) *Guardian* 22nd January 2010. <http://www.guardian.co.uk/business/2010/jan/21/green-challenge-government-nuclear-plans>

(4) Scotland, M. Nuclear committee procedure blasted, *Planning* 22nd January 2010.

<http://www.planningresource.co.uk/news/ByDiscipline/Policy/login/978445/>

(5) *Times* 28th January 2010 <http://www.timesonline.co.uk/tol/news/politics/article7005417.ece>

Response from Sir Michael Pitt, *Times* 1st February 2010

<http://www.timesonline.co.uk/tol/comment/letters/article7010212.ece>

(6) Bircham, Dyson Bell, Blog 29th January 2010

<http://www.bdb-law.co.uk/blog/90-times-attacks-infrastructure-planning-commission-based-misunderstanding>

(7) Bircham, Dyson Bell, Blog 3rd February 2010

<http://www.bdb-law.co.uk/blog/93-latest-conservative-position-planning-act-2008-npss-and-ipc>

2. Select Committee Examination of the National Policy Statements

Oxford University professor of energy policy, Dieter Helm, told the Energy and Climate Change Committee (ECCC) that the Energy National Policy Statements (NPSs) are “incoherent”, “amazingly complicated”, “badly written” and wide open to judicial review. He said the new system of NPSs is too complex and a shake-up of the existing planning system would have been more effective. A much simpler alternative would be to fast-track the whole planning system. He added that NPSs do not have a democratic endorsement, and can be withdrawn at any time. This uncertainty could discourage investment. Helm warned that the NPSs would be too easily changed by government ministers. (1)

Hugh Ellis, the Chief Planner at the Town and Country Planning Association told the ECCC that “*the whole issue of public engagement around the NPSs needs to be re-examined and thought out systematically and also properly resourced*”. (2) He said he would be extremely surprised if there were not four or five legal challenges to the NPS process. The former FoE Planner said we are about to approve one of the most significant programmes of new infrastructure that the country has seen for 40 years. It will pass through the public without any proper consultation. That means the level of public protest we can expect when applications come in is extremely high.

The Sustainable Development Commission (SDC) said the very traditional approach to community engagement was a disappointment. The series of workshops across the country have not been particularly well-attended. The Government

missed an opportunity to use organisations skilled in effective community engagement. NPSs have been in a drafting stage or have been thought of as a concept for around two years. Instead of just a 12-week public consultation, if there had been engagement with wider communities over that entire two-year period, we could have had much stronger and more robust documents which people would have bought into. (3) James Greenleaf of the SDC told MPs that after Greenpeace brought forward its judicial review on the energy review, the DTI approached the SDC about an engagement process which would meet the Aarhus Convention requirements, but that was not taken forward.

Greenleaf was also asked (Q135) about the Government's statement that it is satisfied effective arrangements will exist for nuclear waste and, therefore, the IPC need not consider the issue. He said SDC are very sceptical - the *Managing Radioactive Waste Safely* White Paper does not represent sufficient tangible progress if you compare that to countries, such as Finland, where they have identified the sites, started the construction of a research laboratory, got three years' worth of testing and they expect to be operational by 2020. We need to be sure we are starting practically on a process that means a repository will be in place - just having documentation in a White Paper doesn't cut the mustard. The Government should have actually identified the sites. There is still a question about whether the sites that are selected would actually be suitable for the waste ... "*we do not seem to be far enough down the road in terms of tangible progress to make the assumption that the waste repositories will be in place*".

Friends of the Earth, RSPB, CPRE and WWF expressed concern that the NPSs are basically failing to deliver on the aspirations of the Climate Change Act, and there is a risk they will lock the UK into high carbon infrastructure. (4)

Greenpeace told the Committee there are something like 1600 pages that somebody would have to read, to actually have an idea of what was going on at, say, Sizewell, and comparing it with somewhere else like Bradwell. The fundamental problem Greenpeace has with the NPS is that there are gaping holes around very significant issues such as spent nuclear fuel from new build. The IPC will be forced to accept effectively the promises of the nuclear industry that they will at some point find a way of safely dealing with spent nuclear fuel on site. "*That is an extraordinary assumption for the IPC to have to make*", said campaigner Ben Ayliffe. (5)

Professor Andy Blowers of the Nuclear Consultation Group expressed the view to MPs that the consultation process is very flawed. He said the documents, particularly the nuclear ones, are tendentious, vague and poorly integrated. The whole process is completely unmanageable. There is a colossal amount of documentation. It is very, very difficult to navigate and select and understand. If you look at the documents and read them seriously you can see they are designed to achieve an objective and that objective is to get something like ten sites up and running as fast as possible. At the point where communities are asked to communicate their feelings major decisions have already been taken. If you look at the sources for all the material they are basically technical, industrial consultants who are in the nuclear game who are writing the stuff. This consultation "*is a complete travesty*".

Professor Blowers, who was a member of the first Committee on Radioactive Waste Management, pointed out that 4 former CoRWM members have written (6) to the Secretary of State expressing concern about a serious misrepresentation of CoRWM's recommendations. He said "*it is unknowable whether effective arrangements will be in place*". There are three reasons for this. One is the scientific, in that the recommendation was for deep disposal after a long period of research and development and on storage. No such research and development has been undertaken and the science is being heavily contested at the moment. (See below) Secondly, there is no guarantee that a community with a suitable site will volunteer and thirdly you cannot piggyback new waste onto legacy waste because it raises different issues about inventories, about the ethical nature of creating something that is not necessary which has implications for future generations, and there are technical issues to do with high burn-up fuels.

Local campaign groups gave the Committee a damning verdict on Government engagement with local communities. (7) Dr Carl Clowes of Pobl Atal Wylfa B (PAWB) expressed concern about the remit of the IPC not including the increased radioactive nature and disposability of waste generated by new reactors. On the location of the Wylfa site Dr Clowes remarked that it was near an RAF base and could be the subject of a terrorist attack and it did not appear that any consideration had been given to how to evacuate the site and the surrounding area in the event of an emergency. (8)

Jim Duffy of Stop Hinkley said he had concerns about the consultation process, including the timing, poor advertising and remote location of the public meetings around the Hinkley site. Furthermore, Mr Duffy expressed concern that the consultation on NPS would close before a medical study on the potential health risks was published.

Marianne Birkby, of Radiation Free Lakeland said as a wildlife artist she has to take out £5 million worth of public liability insurance just to be able to set foot in a show field, for example the County Show in Cumbria. There may be 30 artists at that show. Their insurance is far greater than the public liability that Sellafield has to pay for its high level waste tanks.

- (1) New Civil Engineer 28th Jan 2010
<http://www.nce.co.uk/5213433.article>
- (2) Uncorrected transcript of evidence given by Hugh Ellis on 6th January 2010
<http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenergy/uc231-i/uc23102.htm>
- (3) Uncorrected transcript of evidence given by the Sustainable Development Commission on 13th January 2010.
<http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenergy/uc231-ii/uc23102.htm>
- (4) Uncorrected transcript of evidence given by FoE, CPRE, WWF and RSPB on 13th January 2010.
<http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenergy/uc231-ii/uc23102.htm>
- (5) Uncorrected transcript of evidence given by Greenpeace, FoE and the Nuclear Consultation Group on 13th January 2010
<http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenergy/uc231-iii/uc23102.htm>
- (6) Letter from Gordon Mackerron, Pete Wilkinson, Andy Blowers and Mary Allan to Ed Miliband, dated 20th November 2009
http://www.no2nuclearpower.org.uk/news/CoRWM1_Letter_201109.pdf
- (7) The Ecologist 29th January 2010
http://www.theecologist.org/News/news_round_up/406876/uk_government_nuclear_consultation_farcical_say_locals.html
- (8) Uncorrected evidence given by groups local to the proposed nuclear sites on 27th January 2010.
<http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenergy/uc231-vii/uc23102.htm>

3. Planning Application Timetable

A revised schedule of dates by when the IPC expects to receive planning applications to construct new nuclear power plants and other infrastructure projects has been published. The first application is expected to be received from EDF Energy in early August to build a plant at Hinkley Point in Somerset. The second, also from EDF Energy would be for Sizewell in Suffolk in June 2011. Horizon Energy, which is Eon and RWE are expected to apply for permission to build at Wylfa on Anglesey and Oldbury in Gloucestershire in November 2011.

Two applications for power line projects are expected, one of which is for a new 26 km overhead power line related to the new Sizewell plant, and another is for 60km of power lines from Bridgwater to Seabank related to Hinkley.

If EDF Energy submits the application for the two-unit Hinkley Point C plant on 2nd August as planned, this would mean that approval for the plant could come around mid-2011. EDF plans to begin preparing the site before the end of 2010, pending separate local permission. Subject to a favourable outcome from the Health and Safety Executive's assessment of the Areva EPR design in June 2011, construction of the plant could start in early 2012. The plan is for the first reactor to operate before the end of 2017, with the second following about 18 months later.

World Nuclear News 2nd Feb 2010

http://www.world-nuclear-news.org/NN-Planning_request_for_UK_plant_due_in_August-0202105.html

IPC programme of projects and applications 29th January 2010

<http://infrastructure.independent.gov.uk/wp-content/uploads/2010/01/ProgrammeofProjects-29-Jan1.pdf>

4. Environmental Statements

EDF Energy published its Environmental Assessment Scoping Report for Hinkley C in January 2010. It sets out the proposed content, methodologies and key issues to be included in the Environmental Impact Assessment (EIA) and the resulting Environmental Statement (ES) to be submitted with the application. This is accompanied by a request to the IPC for a Scoping Opinion, which will set out what the IPC thinks should be included in the ES.

For Oldbury and Wylfa the IPC has already issued its Scoping Opinions. There are links to the Scoping Reports and Scoping Opinions on the IPC's Programme of Anticipated Projects chart. (1)

The IPC has two roles in the EIA process at the pre-application stage, 'screening' and 'scoping'. Screening is deciding whether a project needs EIA, and scoping is deciding, if it does, what the ES should cover. Asking the IPC for a scoping opinion is voluntary, however - the promoter is at liberty to decide what should go into its ES. It is of course safer to ask the IPC for its opinion as to what the ES should contain. Planning Lawyers, Bircham Dyson Bell say that the scoping opinions for Oldbury and Wylfa are essential reading for anyone preparing an ES for a project coming before the IPC. (2)

(1) IPC programme of projects and applications 29th January 2010 <http://infrastructure.independent.gov.uk/wp-content/uploads/2010/01/ProgrammeofProjects-29-Jan1.pdf>

(2) Bircham, Dyson Bell Blog 11th January 2010

<http://www.bdb-law.co.uk/blog/83-news-infrastructure-planning-commission-publishes-scoping-opinions>

5. View on the Ground

A campaign to get the Dungeness site re-instated on the list of possible sites for new reactors seems to be gaining ground. The Nuclear Industry Association (NIA), in its memo to the Energy and Climate Change Committee says all the nominated sites “*have the potential to have an impact on internationally designated sites [of ecological importance] so it is not clear why the Dungeness site alone should be excluded on this discretionary criterion*”. (1)

Shepway District Council has protested to the government against the exclusion of Dungeness. It argues that ministers have misinterpreted both environmental restrictions and evidence on the impact on the local economy. Like the NIA the council argues that it is “*premature to conclude that the direct loss of vegetated shingle habitat cannot be adequately compensated and that Natural England’s objections cannot be addressed*”. (2)

Natural England’s submission to the Energy and Climate Change Committee supported the decision to exclude Dungeness from the list of sites “*due to the extreme difficulty associated with mitigating and compensating for the environmental impacts on a rare, internationally important shingle habitat.*”

Meanwhile, RWE npower have been accused of causing property blight at the Braystones and Kirksanton sites in Cumbria, following the company’s declaration that it had no specific plans and was scrapping its current agreements to supply power to the national grid from the “potentially suitable” sites. Letters dropped through residents’ letter boxes in the two areas on 2nd February telling them of the twist in development. But RWE’s announcement has been criticised for being ambiguous and confusing. (3)

The Lake District National Park Authority has warned that siting new reactors at Braystones and Kirksanton would have a serious impact on the area’s tourism industry. A report setting out the authority’s response to consultation on the nuclear NPS argues that plans for reactors on the greenfield sites are not acceptable. (4) And Cumbria County Council has said it will oppose the two sites because it is not convinced the benefits of development would outweigh the costs. (5)

(1) Uncorrected transcript of evidence given by NIA and NDA on 20th January 2010

<http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenergy/uc231-v/uc23102.htm>

(2) Local Government Chronicle 3rd Feb 2010

<http://www.lgcplus.com/news/environment/call-to-rethink-dungeness-nuclear-site/5011103.article>

(3) Whitehaven News 3rd Feb 2010

http://www.whitehaven-news.co.uk/news/energy_firm_accused_of_housing_blight_1_668063?referrerPath=news/1.343462

(4) Planning Resource 29th January 2010

<http://www.planningresource.co.uk/news/ByDiscipline/environment/login/979914/>

(5) New Civil Engineer 28th January 2010

<http://www.nce.co.uk/news/energy/greenbelt-nuclear-station-opposed/5213511.article?referrer=RSS>

6. Nuclear Subsidies

President Obama’s proposed budget for 2011/11 will seek a total of \$54 billion in loan guarantees for nuclear power. This would require a \$36 billion increase over the existing \$18.5 billion for nuclear loan guarantees, none of which has been issued yet. And while the loan guarantee proposal cheered some pro-nuclear senators, it has not garnered their support for comprehensive, bipartisan clean energy and climate change legislation. (1)

None of the four contenders for a loan guarantee inspire confidence: all have “rising cost estimates, delays related to reactor designs, and credit downgrades,” according to Taxpayers for Common Sense. (2) One of the four may be withdrawn by the utility proposing it, NRG Energy. The project was supposed to be a joint venture with San Antonio’s

municipal utility, but the latter is having second thoughts due to enormous estimated cost increases that would bring the project from the initial \$5.4 billion to at least \$17 billion. (3)

All of this puts a question mark over the UK Government's persistent claims that it will not subsidise new reactors. Lord Hunt, minister of state at the Department of Energy and Climate Change, reiterated on January 21st in a Guardian web discussion that "*Taxpayers' money is not going into nuclear power stations.*" But the Government is still leaving the door open for intervention in the carbon market. "*We recognise that a strong carbon price is necessary to promote all forms of low-carbon energy,*" said Hunt. (4)

EDF have been quick to assure the Government that it will not need subsidies to build new reactors. Professor of Energy Policy at Greenwich University, Stephen Thomas, says "as the expected economics of new nuclear deteriorates, it is becoming clear that what the government and EDF *believe constitutes a subsidy is very different to the usual definition.*" (5)

The UK government confirmed in 2009 that it is sticking to the cost estimates on which it based its forecast that nuclear was cost-effective with an average carbon price of €36. It assumes that plants could be built for only £1,250/kW or about \$2,000/kW, compared with the expected costs in the US of around \$5,000/kW, and the cost of Olkiluoto is expected to be the same. It also assumes that the real cost of capital would be only ten per cent.

Nuclear finance will only make sense with subsidies, says Thomas. One suggestion is setting a floor price for carbon of €40, adding about 10% to average electricity bills. That might provide a profitable price for nuclear generated electricity, but it would represent a substantial distortion of the market and is not in line with the Government and European Commission view that there are significant risks in attempting to manage the carbon price.

Now the National Audit Office (NAO) has cast doubt over whether new reactors can be built without public subsidies. The NAO points out that if EDF cannot pay for all the clean up costs, the Government is still liable. Amyas Morse, head of the NAO, said the sale of British Energy was designed to put the responsibility for a new generation of reactors in private hands, but there is no guarantee the Government will not have to step in at some point to help pay for the massive building and clean up costs. (6)

(1) Climate Progress 1st Feb 2010

http://climateprogress.org/2010/02/01/obama-nuclear-error-nuclear-loan-guarantee/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+climateprogress%2FICrX+%28Climate+Progress%29

(2) Taxpayers for Common Sense 29th January 2010

http://www.taxpayer.net/resources.php?category=&type=Project&proj_id=3130&action=Headlines%20By%20TCS

(3) Southern Alliance for Clean Energy, No Good Nuclear Candidates for Loan Guarantees 3rd February 2010

http://www.cleanenergy.org/index.php?/Press-Update.html?form_id=8&item_id=161

(4) Guardian 20th Jan 2010

<http://www.guardian.co.uk/environment/blog/2010/jan/20/lord-hunt-nuclear?showallcomments=true#start-of-comments>

(5) Thomas, S. Blair's nuclear dream faces financial meltdown. Parliamentary Brief, January 2010.

<http://www.parliamentarybrief.com/articles/1/new/mag/77/1037/blairs-nuclear.html>

(6) Telegraph 22nd January 2010

<http://www.telegraph.co.uk/earth/earthnews/7046958/National-Audit-Office-raise-prospect-of-public-subsidies-for-nuclear.html>

The Ecologist 22nd Jan 2010

http://www.theecologist.org/News/news_round_up/402780/nuclear_power_may_still_need_taxpayer_help_says_watchdog.html

7. Small-scale energy plans lack ambition

Unveiling the new so-called feed-in tariffs (FITs) paid to people, communities or businesses who generate electricity from solar panels, wind turbines or other renewable sources, energy secretary Ed Miliband said the government still only intended that the sector would supply 2% of the country's electricity by 2020 – the same figure he proposed last summer. Some technologies such as solar photovoltaic panels on household roofs will get a higher feed-in tariff, and, importantly, all tariffs will be uprated with inflation each year. But large-scale community wind turbines will get a lower tariff than proposed last year, leaving the overall level of support to the industry little changed. The FITs for new projects will be held at the current rates for two years but then cut by 8.5%, more than originally planned. (1)

The Nuclear Free Local Authorities told the North West Parliamentary Committee that, because replacing nuclear reactors will save only around 4% of the UK's carbon emissions, we need to be absolutely sure they won't negatively

impact on dealing with the other 96%. Investing in new reactors could well divert investment from other low carbon technologies and energy efficiency measures. Building new reactors has a high opportunity cost - the cost of forgoing the alternative outcomes that could have been purchased with the same money. The economy of North West England would be able to achieve far more if money spent on new nuclear reactors were instead spent on energy efficiency and renewables. (2)

NFLA also told the Energy and Climate Change Committee that local authorities were still waiting for the “step change” in policies and programmes to deliver energy efficiency promised in the 2003 Energy White. (3) Local authorities were encouraged to take the lead, acting as catalysts for change. Some local authorities have indeed been carrying out some innovative climate change strategies, but without central government support these schemes will never be ambitious enough or at the scale required to meet carbon abatement targets. It is very difficult to avoid the conclusion that the worst fears of the Sustainable Development Commission, expressed in 2006, have, in fact been realised, and that re-launching the UK nuclear programme has required “a substantial slice of political leadership”. Political attention has been shifted and undermined efforts to pursue a strategy based on energy efficiency, renewables and Combined Heat and Power (CHP).

NFLA told MPs the arguments in the Draft Overarching NPS for Energy (EN-1) on energy efficiency and decentralised energy as alternatives to new large scale electricity generation are weak and vague. The document claims that energy efficiency savings are likely to be limited and offset by increases in the use of electricity for heating and transport. It also claims that decentralised and community energy systems are ‘unlikely to lead to significant replacement of larger-scale infrastructure’. Only 4GW is expected to be generated by small-scale renewables – around 2% of electricity demand compared with the 12% which the European Photovoltaic Industry Association expects to be able to provide with just solar PV across Europe, and the 15% of the country’s electricity production which could come from so called “embedded generation” according to the National Grid. Unlike nuclear, energy efficiency and renewables are not encouraged to aim high.

(1) Guardian 2nd Feb 2010

<http://www.guardian.co.uk/environment/2010/feb/01/government-renewables-feed-in-tariff>

(2) NFLA submission to the North West Parliamentary Select Committee 5th January 2010

<http://www.nuclearpolicy.info/docs/consultations/NWSelectCommitteeresponse.pdf>

(3) NFLA submission to the Energy and Climate Change Committee, 14th January 2010

http://www.nuclearpolicy.info/docs/consultations/NFLA_E&CC_Select_Comm_resp.pdf

8. Nuclear Waste makes National Policy Statements ‘not fit for purpose’.

A group called the Nuclear Waste Advisory Associates (NWAA), in a memo to the Energy and Climate Change Committee, said the Government’s confidence that effective arrangements to dispose of waste from new reactors will exist is premature. (1) NWAA is an independent group which aims to provide information and advice on the risks posed by radioactive waste, and support to decision makers, stakeholders and communities involved in its management. Membership includes former members of the Committee on Radioactive Waste Management and several members who worked for environmental organisations during the Public Inquiry into Nirex’s application to build a Rock Characterisation Facility (RCF) in Cumbria.

The memorandum examines the evidence for the Government’s assertion that effective arrangements will exist for waste produced by new reactors, and concludes that the issue of dealing with nuclear waste already created (legacy waste) is far from resolved. Furthermore, the Environment Agency’s view is that further research cannot be relied upon to resolve the outstanding issues. This means that Government cannot assume that waste produced by new reactors can be safely disposed of in a deep geological disposal facility. Therefore the assumption that adequate arrangements for the long term management of radioactive waste from new reactors will exist when required is unfounded and therefore renders the NPS invalid at this point in time.

The group cites numerous studies - including some by Nirex, the direct predecessor of the NDA’s Radioactive Waste Management Division (RWMD), the Environment Agency and the European Union Joint Research Council - in support of its argument that the science associated with the geologic disposal of nuclear waste is not mature enough for implementation.

Nuclear Waste Advisory Associates submission to the Energy and Climate Change Committee 15th January 2010.

[http://www.nuclearwasteadvisory.co.uk/uploads/6130MemorandumforNuclearWasteAdvisoryAssociates\[Final\].doc](http://www.nuclearwasteadvisory.co.uk/uploads/6130MemorandumforNuclearWasteAdvisoryAssociates[Final].doc)

9. Radiation and Health Row

Simon Jenkins writing in *The Guardian* caused a bit of a storm by favourably reviewing a book called *Radiation and Reason*, by Wade Allison. Jenkins said the book attacks “*the obsessive safety levels governing nuclear energy [which] overstate the true risk, in Allison’s view, by up to 500 times, thus rendering nuclear prohibitively expensive and endangering the combat of global warming.*” (1) There was also a second *Guardian* story a few days later. (2)

In response Dr Ian Fairlie said there is no safe dose of radiation. The linear no-threshold (LNT) theory is used by all the world’s radiation authorities – the UN Scientific Committee on the Effects of Atomic Radiation, the International Commission on Radiological Protection, the Health Protection Agency, etc – to estimate risks at low doses. It presumes that risks decline proportionately as you lower the dose all the way down to zero, and that the only dose with no effect is zero mSv.

There is evidence, said Fairlie, that exposures to residents near nuclear facilities cause them harm. For example, a recent German government study found large increases in leukaemia (220%) and embryonal cancer (160%) among children living near all German nuclear reactors. Its results are supported by many other worldwide studies into child leukaemias near nuclear reactors. (3) The study (called KiKK, the German acronym for child leukaemias near nuclear reactors – *Kinderkrebs in der Umgebung von Kernkraftwerken*) is covered in more detail in a briefing by Dr Fairlie for CND. (4)

Meanwhile, *The Guardian’s* Environment Editor, John Vidal, reported that the children’s cancer hospital in Minsk, Belarus, and at the Vilne hospital for radiological protection in the east of Ukraine, are both reporting highly unusual rates of cancers, mutations and blood diseases linked to the Chernobyl nuclear accident 24 years ago. But proving that infant mortality hundreds of miles from the stricken nuclear plant has increased 20-30% in 20 years, or that the many young people suffering from genetic disorders, internal organ deformities and thyroid cancers are the victims of the world’s greatest release of radioactivity, is impossible. (5)

The UN’s World Health Organisation and the International Atomic Energy Agency claim that only 56 people have died as a direct result of the radiation released at Chernobyl and that about 4,000 will die from it eventually. The International Agency for Research on Cancer, another UN agency, predicts 16,000 deaths from Chernobyl; an assessment by the Russian academy of sciences says there have been 60,000 deaths so far in Russia and an estimated 140,000 in Ukraine and Belarus. Meanwhile, the Belarus national academy of sciences estimates 93,000 deaths so far and 270,000 cancers, and the Ukrainian national commission for radiation protection calculates 500,000 deaths so far.

(1) *Guardian* 7th January 2010

<http://www.guardian.co.uk/commentisfree/2010/jan/07/nuclear-power-weapons-radiation-defence>

(2) *Guardian* 10th January 2010

<http://www.guardian.co.uk/environment/2010/jan/10/nuclear-power-irrational-fears>

(3) *Guardian* 20th January 2010

<http://www.guardian.co.uk/commentisfree/2010/jan/20/evidence-nuclear-risks-not-overrated>

(4) CND 22nd January 2010

http://www.cnduk.org/images/stories/briefings/nuclear_power/ian_fairlie_kikk_cancer_increase_summary.pdf

(5) *Guardian* 10th January 2010

<http://www.guardian.co.uk/environment/2010/jan/10/chernobyl-nuclear-deaths-cancers-dispute>

10. Scottish Waste Consultation

The Scottish Government has launched a consultation (1) into proposals for managing higher activity waste in Scotland. Scottish Government policy since June 2007, in contrast to England and Wales, has been to support the long-term management of higher activity in long-term near surface, near site storage facilities so that waste is monitorable and retrievable and the need for transporting it over long distances is minimal. But new proposals, although not returning to deep geological disposal, abandon the storage only commitment and appear to prioritise near surface, near site disposal over storage. (2)

The policy does *not* cover spent fuel from nuclear reactors operating in Scotland, because this is not officially classified as waste, and there is no high level waste (HLW). Waste at Dounreay, which was until recently classified as HLW, has now cooled down sufficiently to allow it to be reclassified as Intermediate Level Waste (ILW).

Around 25% of the waste in question could not be disposed of in near-surface disposal facilities, and would need to be stored until there are further technological developments. The other 75% which might be eligible for disposal includes contaminated metals (14%), activated metals (15%) and graphite (45%). The Near Surface Disposal Facilities on Land for Solid Radioactive Waste – Guidance on Requirements for Authorisation (Near Surface GRA) produced by the Environment Agencies will provide guidance on the approach the regulators will take to applications for an authorisation to dispose of waste. This says *shorter-lived or less radiotoxic intermediate level waste (ILW)* might be suitable for disposal. (Short-lived means radionuclides with a half life up to around 30 years, and probably includes caesium-137 with a half-life of 30.1 years). But the regulators might also allow disposal of ‘less radiotoxic’ long-lived ILW. 80% of the graphite is long-lived, for example, and although the NDA is looking at treating this graphite to see if it is possible to remove some of the main contaminants (Chlorine 36 and Carbon 14) this work is at an early stage.

The ability to retrieve the waste would be a requirement of any proposal for a near surface disposal site. The important distinction between ‘disposal’ and storage in this context is that there is ‘no intention to retrieve’ the waste.

The proposals are also very keen on the ‘waste hierarchy’ which means contaminated metal ‘recycling’ will be encouraged despite the conflict with the ALARA (As Low As Reasonably Achievable) principle because of the radioactive discharges to the environment inherent in the decontamination process.

Low level waste is not included in this consultation, but Scotland’s National Planning Framework (3) states that a low level waste disposal facility, in addition to the one at Dounreay, will be needed in the South of Scotland for radioactive waste.

(1) There are three consultation documents:-

(a) Scotland’s Higher Activity Radioactive Waste Policy Consultation 2010

<http://www.scotland.gov.uk/Resource/Doc/298914/0093253.pdf>

(b) Environmental Report 2010

<http://www.scotland.gov.uk/Resource/Doc/298929/0093254.pdf>

(c) Supplementary Information 2010

<http://www.scotland.gov.uk/Resource/Doc/298942/0093255.pdf>

(2) Sunday Herald 17th January 2010

<http://www.robedwards.com/2010/01/ministers-drop-ban-on-dumping-nuclear-waste-in-scotland.html>

(3) National Planning Framework for Scotland 2, Scottish Government, June 2009, para 172

<http://www.scotland.gov.uk/Resource/Doc/278232/0083591.pdf>

11. Generic Design Assessment

The UK nuclear regulators are still experiencing “long delays” and “poor quality” responses from Westinghouse and Areva to technical queries on their reactor designs, the AP1000 and EPR, respectively. (1) In the latest quarterly report, covering the last quarter of 2009, the Health and Safety Executive says it expects the pace of assessments to accelerate over the next few months “*and we foresee a large increase in technical interactions and questions during the first half of 2010.*” It said “*improvements are required from both Requesting Parties [vendors]*” in responding to HSE requests for information.

For the EPR the instrumentation and control system issue remains unresolved. And the safety qualification of the shield building on the AP1000 remains an issue. (2)

Meanwhile Westinghouse has dropped engineer Rolls-Royce as its key advisor on UK nuclear safety as it struggles with the Generic Design Assessment process. It has appointed Serco as its lead consultant after its UK ambitions “*fell into disarray*”, according to *The Daily Mail*. Westinghouse has fallen well behind Areva’s EPR in the vetting process. Kevin Allars, the director of new nuclear build design assessment at the HSE, told the Daily Mail that Westinghouse has recently been taking steps to raise its game, including appointing Serco as its consultant. But he admitted Westinghouse has been slow to provide the masses of information he needs to assess its design, meaning its AP1000 reactor is trailing in Areva’s wake. (3)

(1) 4th HSE/EA Quarterly Report on Generic Design Assessment, 1st Oct to 31st Dec 2009 4th Feb 2010. (See para 6)

<http://www.hse.gov.uk/newreactors/quarterly-updates.htm?ebul=newreactor/4-Feb-2010&cr=1>

(2) See “Reactor Problems”, NuClear News No.13

<http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo13.pdf>

(3) Daily Mail 22nd January 2010

<http://www.dailymail.co.uk/money/article-1245401/Rolls-Royce-dumped-Westinghouse.html>

12. Sellafield Incident

An investigation has been launched by Sellafield Ltd into another incident involving the loss of coolant water to the site's High Level Waste tanks – the second such incident within ten months. The loss of coolant to the tanks' highly radioactive inventory of liquid wastes occurred on Friday 22nd January – and follows a similar loss in April 2009. *The Whitehaven News* said that 4 of the site's 21 storage tanks were affected and that the loss of cooling water lasted for 30 minutes. The loss of coolant in the April '09 accident lasted several hours

CORE Briefing 28th Jan 2010

<http://www.corecumbria.co.uk/newsapp/pressreleases/pressmain.asp?StrNewsID=275>

Whitehaven News 28th Jan 2010

http://www.whitehaven-news.co.uk/news/sellafield_water_worries_span_style_color_red_add_your_comments_span_1_665366?referrerPath=news

13. Uranium Mining Regulation

NuClear News No.14 reported that the Government's Regulatory Justification decision is only required to take account of activities in the UK, and doesn't need to take account of the detriments directly attributable to the mining and milling of uranium, although DECC claims that it has done. (See below)

The Sunday Times has now reported on “*a silent land grab*” unfolding around the globe. After decades as a forgotten commodity uranium is hot property again. Agents for companies such as French government-controlled Areva, are fanning out across the globe to gain access to uranium ore. Many of the new mining areas are virtually unregulated. A recent investigation in Niger uncovered radioactive shovels on sale in the local market in Arlit, a company town next to Areva's mine there. The country is the world's sixth-largest producer and has ambitions to move up the rankings. It employs only three nuclear inspectors to keep watch on the industry. “*Getting a mine going in Texas takes two bookshelves full of authorisations,*” said one commentator. “*In Niger you give a shovel to a guy on \$2 a day and you're mining uranium.*” (1)

In November Greenpeace found high radiation contamination levels in the streets of the village of Akokan, Niger, near an Areva Uranium Mine. (2) And in Brazil Brazilian Nuclear Industries (INB) was fined \$1 million for covering up a leak of radioactive liquid at its uranium mine at Caetité, in November 2009. This is the same mine where Greenpeace found drinking water contaminated with high levels of uranium in 2008. (3)

(1) Sunday Times 31st January 2010

http://business.timesonline.co.uk/tol/business/industry_sectors/natural_resources/article7009629.ece

(2) Greenpeace Nuclear Reaction 26th November 2009

http://weblog.greenpeace.org/nuclear-reaction/2009/11/areva_nuclear_scandal_greenpea.html

(3) Greenpeace Nuclear Reaction 30th November 2009

<http://weblog.greenpeace.org/nuclear-reaction/brazil/>

14. Justification – to hold an inquiry or not to hold an inquiry

The Department of Energy and Climate Change (DECC) held a Regulatory Justification Consultation Event on January 19th. It was emphasised at this event that Justification looks at the practice from end to end, i.e. from the manufacture of fuel through to the disposal of waste. The Regulations only require practices that occur in the UK to be examined, but, to the extent that information was available, DECC claims to have looked at the mining of uranium.

Government officials said, on the issue of whether or not to hold an inquiry on Justification, that people should consider, if there were to be an inquiry or other hearing, what would that contribute to the quality of decision-making.

In response it was pointed out that the evidence used to produce the draft Justification decision documents has not been tested in an open forum and fully scrutinised.

DECC officials said there is extensive global evidence on how radioactive waste can be managed from nuclear power stations on an interim basis and kept safe and secure until such time as it goes into a repository. It is Government policy that there will be a route for disposal of radioactive waste from new nuclear power stations – it expects that will be geological disposal. The process for identifying a site for a geological disposal facility is advanced. We are at the point where we have a number of communities that are interested in participating in hosting such a facility. Some of those present thought this meant DECC was pre-empting the Environment Agency's duty to assess and authorise a radioactive waste repository and shows that DECC is biased and cannot be trusted to determine the justification question. It should go to an inquiry.

A transcript of the event and the slides used are available at

http://www.decc.gov.uk/en/content/cms/consultations/reg_just_cons/reg_just_cons.aspx