



**NuClear News No.10  
September 2009**

1. Design Assessment Delay
2. Energy Security – ideal opportunity for joined up thinking?
3. Nuclear Subsidy? – told you so.
4. Welsh Justification Challenge
5. Protests Mount
6. Finnish Reactor Dispute
7. Any fool can pour a cup of tea into the ocean, but a thousand wise men cannot pull it out again.
8. Nuclear Status
9. Flying pigs are still pigs, not angels
10. CSP moves forward

**1. Design Assessment Delay**

A string of issues are delaying the Generic Design Assessments (GDA) being carried out on new reactor types by the Health and Safety Executive (HSE) and Environment Agency. (1) The GDA process is due to be completed around mid-2011, but if there are delays the whole new reactor programme will be delayed. Without the GDA coming to fruition, no building can take place, and delays will affect confidence throughout the supply chain.

An overdue risk assessment of a 9/11-style terrorist attack on a British nuclear power plant is just one issue that could cause delays. Bad-tempered meetings between HSE staff and nuclear industry executives are also to blame for slow progress according to *The Daily Telegraph*. (2) The joint regulators say in their quarterly progress report: *“although we have seen improvements in the timeliness, and quality of [Requesting Party] RP responses to [Technical Question] TQs, in some areas their responses have not allowed the issue to be resolved to our satisfaction”*. (3)

Completing the GDA assessment by June 2011 will be a *“significant challenge”*. Both reactor designs being assessed, Areva’s EPR and the Westinghouse AP1000, are still awaiting vital information from both French and US security services relating to terrorist attacks using aircraft. The information is being delayed by security clearance procedures. A key analysis and assessment phase is late starting as a result.

A meeting between UK inspectors and American executives from the US-based Westinghouse to discuss “human factors” relating to the power stations, including design of a control room, was also highlighted. *“Our assessment has not made good progress due to an initial lack of NII [Nuclear Installations Inspectorate – part of HSE] nuclear regulatory resources and where a very recent meeting with Westinghouse has clarified less than we had hoped for.”*

Concerns over the EPR’s control and instrumentation systems - first raised by the Finnish regulator STUK (4) – have also been raised by HSE, because the EPR design breaks an important UK principle of maintaining a separation between control systems and safety systems.

A number of other issues were highlighted by the quarterly report relating to the Westinghouse design. On radiation protection the report says: *“Our assessment has not made good progress due to an initial lack of NII nuclear regulatory resources.”* On the structural integrity of the proposed stations the report said: *“We are having some difficulty in arriving at an agreed way forward on our expectations for demonstrating the integrity of the highest reliability components, such as the reactor pressure*

vessels.”

Mike Tynan, chief executive of Westinghouse UK has insisted its talks with nuclear regulators were progressing well. He admitted there had been “issues” with Westinghouse and Areva, and the regulators, but denied meetings had been “bad-tempered”. (5) *“While there’s still an awful lot of work to be done we feel very positive that our design is going through the GDA process in the right way.”* Westinghouse has launched a website to support its bid to get its AP1000 reactor design approved by the UK’s nuclear regulators. (6)

Meanwhile, the HSE has awarded engineering consultancies Frazer-Nash and Praxis a contract to provide independent advice on certain safety aspects of new reactor designs. Their review will focus on control and instrumentation aspects of the designs, including the reactor protection systems. The findings will help determine the extent to which the reactors can meet the UK’s stringent Safety Assessment Principles and licensing requirements. (7) In June The Guardian reported that the NII had taken on a number of specialist contractors to support its assessment teams and improve project management capability, partly as a response to staff shortages at the inspectorate. (8) Interestingly Frazer-Nash is currently looking for a team leader for its nuclear business unit, a nuclear physicist and a nuclear consultant. (9) Not much point in taking on consultants to ease staff shortages if those consultants are then competing to recruit nuclear safety specialists.

(1) See News in Depth: “Generic Design Assessment” [http://www.no2nuclearpower.org.uk/news/id\\_gda.php](http://www.no2nuclearpower.org.uk/news/id_gda.php)

(2) Telegraph 17th Aug 2009

<http://www.telegraph.co.uk/finance/newsbysector/energy/6039424/Security-is-part-of-a-significant-challenge-to-UKs-energy-programme.html>

(3) Generic Design Assessment Progress Report, 1st April 2009 – 20th June 2009, HSE and Environment Agency,

<http://www.hse.gov.uk/newreactors/reports/gda-q2-09.pdf>

(4) See “The Emperor has no Pressure Vessel”, NuClear News No.7

<http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo7.pdf>

(5) Lancashire Evening Post 20th Aug 2009 <http://www.lep.co.uk/businessnews/Nuclear-boss-blasts-rows-rumours.5571650.jp>

(6) <https://www.ukap1000application.com/>

Lancashire Evening Post 12th Aug 2009

<http://www.lep.co.uk/businessnews/Website-to-boost-nuclear-bid.5545072.jp>

(7) Process Engineering 3rd September 2009. <http://www.processengineering.co.uk/Articles/312880/HSE+commissions+safety+review+of+new+nuclear+reactors.htm>

(8) Guardian 26th June 2009

<http://www.guardian.co.uk/environment/2009/jun/26/nuclear-power-stations>

(9) [http://www.fnc.co.uk/Careers/Vacancies/tabid/88/language/en-GB/Default.aspx#NBU\\_mentor](http://www.fnc.co.uk/Careers/Vacancies/tabid/88/language/en-GB/Default.aspx#NBU_mentor)

## 2. Energy Security – ideal opportunity for joined up thinking?

A report (1) commissioned by Gordon Brown, from former energy minister Malcolm Wicks, says the UK needs to more than double the amount of electricity generated by nuclear power, as well as boosting renewables, energy efficiency and gas storage to guarantee energy security. This would take the percentage of electricity generated by nuclear reactors up to around 35 – 40% by 2030. Wicks says this would help improve future energy security by decreasing reliance on imported gas. (2)

The Department of Energy and Climate Change said: *“We’ve never set a number on the amount of nuclear we want, but nor have we ever set a cap. We think 40 per cent of electricity could be low carbon by 2020, including the first new nuclear and beyond that it will have to play a significant role if we’re to all but decarbonise electricity by the middle of the century.”* The government will publish a formal response in due course, following a consideration of the report’s recommendations. (3)

Greenpeace dismissed the report as *“a dangerous distraction from the real solutions to climate change and energy security”*. Liberal Democrat Shadow Energy and Climate Change Secretary Simon Hughes attacked Wicks’s report as *“...an attempt to scare the British public into accepting new nuclear power stations, but energy security does not have to mean capitulation to massive nuclear subsidies. Britain needs a massive expansion of renewable energy that builds on the advantage of our natural resources.”* (4)

Wicks said the government should consider setting out how much power should be generated from different sources to avoid Britain becoming too reliant on relatively cheap gas-fired power plants, which the market tends to build when left to decide. *“This would be a significant move away from the ‘market knows best’ orthodoxy, but might be justified on energy security grounds.”* (5)

With a particular focus on increasing the share of electricity provided by nuclear, Wicks recommends that: *“Government should take the opportunity to make a strong and clear statement on the need for new nuclear power plants in the forthcoming National Policy Statement for Nuclear.”* Implementation of the new Planning Act is an *“ideal opportunity”* for Government to show that it can act in a decisive, joined up way. Successful delivery of this planning reform will allow applications to build new nuclear power stations to be considered and concluded more rapidly, with greater efficiency and in a more inclusive manner. (6)

On other energy sources Wicks says the target of 15% renewable energy use in the UK by 2020 is ambitious – achieving anything more would be unrealistic - and coal will remain a large part of the future energy mix, so the UK should focus on developing and demonstrating CCS technology and its own coal reserves in ‘a clean way’ through the use of innovative technologies.

Wicks say energy efficiency must be the start of any kind of response to the energy security problem, yet there is not a single mention of combined heat and power (CHP) in the 130 page report, nor any mention of micro-CHP. Pöyry Energy Consulting, in a report commissioned by Greenpeace, showed that industries across the UK could generate as much electricity as 10 nuclear power stations and halve gas imports by installing or extending combined heat and power (CHP) plants. (7) Micro combined heat and power (micro-CHP) boilers could replace conventional domestic central heating boilers, and produce electricity as well as hot water for heating. By 2020, we could have the equivalent of ten new reactors powered by micro CHP. (8)

Wicks notes that over 80% of electricity in France comes from nuclear power plants. *“This means that aside from uranium France is much less dependent on overseas markets for its security of supply than the UK will be in the future, less exposed to movements in fossil fuel prices”.*

The problem is this is not true. France launched its first large series of nuclear reactors as a reaction to the 1973 oil shock – but three decades later per capita consumption of oil is higher than in non-nuclear Italy, nuclear phase-out Germany or the EU on average – hardly proof of an enviable level of oil independence. Even before the recession, the National Housing Agency (ANAH) found that ‘three million French are cold in winter.’ France’s nearly exclusive focus on (nuclear) energy supply has eroded access to affordable energy services. Electric space heating was heavily promoted and now equips three-quarters of new housing, in particular multi-family homes. Electric heat is not just inefficient but is also very costly for the user and creates daily peak loads in the winter which in turn leads to increasing use of old oil- and coal-fired power plants and to significant power imports. (9)

Wicks also fails to mention renewable gas. Recent work by the National Grid company shows that gas from waste could heat almost half UK homes. (10) Renewable gas from landfill sites and sewage works provides 1% of the UK’s gas at present, but an extra £10 billion investment could increase that to between 5 and 18%.

Amazingly several scenario-based studies show that going down the nuclear route could, rather counter intuitively, increase dependence on gas imports. One “nuclear growth scenario” from the Massachusetts Institute of Technology (MIT), which suggests a global growth in nuclear capacity up to 1,000GW by 2050 shows that an expansion of nuclear capacity doesn’t necessarily reduce fossil fuel consumption. Despite a tripling of installed nuclear capacity, because electricity demand increases almost as fast, fossil fuel consumption in the electricity sector continues increasing. (11)

Two reports published in 2006 by PB Power, which looked at the role of decentralised energy in London (12) and Edinburgh (13), showed that, despite the use of natural gas for CHP stations, and the increased use of gas in power stations, overall gas consumption is around 15% lower by 2025 in a highly decentralised energy scenario compared with a centralised high nuclear scenario.

Clearly moving towards a more decentralised energy system with a focus on energy efficiency and the use of combined heat and power is liable to provide a much more effective way of improving energy security than building new nuclear reactors.

- [http://www.decc.gov.uk/Media/viewfile.ashx?FilePath=What%20we%20do/Global%20climate%20change%20and%20energy/International%20energy/energy%20security/1\\_20090804164701\\_e\\_@@\\_EnergysecuritywicksreviewBISR3592EnergySecCWEB.pdf&filetype=4](http://www.decc.gov.uk/Media/viewfile.ashx?FilePath=What%20we%20do/Global%20climate%20change%20and%20energy/International%20energy/energy%20security/1_20090804164701_e_@@_EnergysecuritywicksreviewBISR3592EnergySecCWEB.pdf&filetype=4)
- (2) Scotsman 6th August 2009 <http://news.scotsman.com/latestnews/Britain-must-have-39atomic-ambition39.5528010.jp>
- (3) ePolitix 5th August 2009  
<http://www.epolitix.com/latestnews/article-detail/newsarticle/call-for-more-nuclear-energy/>
- (4) Fair Home 9th August 2009  
<http://www.fairhome.co.uk/2009/08/09/wicks-presents-nuclear-distraction/>
- The Ecologist 5th August 2009 [http://www.theecologist.org/News/news\\_round\\_up/298235/uk\\_urged\\_to\\_triple\\_nuclear\\_power.html](http://www.theecologist.org/News/news_round_up/298235/uk_urged_to_triple_nuclear_power.html)
- (5) Reuters 5th Aug 2009 <http://uk.reuters.com/article/idUKTRE5742OQ20090805?rpc=401&>
- (6) Nuclear Engineering International 7th August 2009. <http://www.neimagazine.com/story.asp?sectionCode=132&storyCode=2053781>
- (7) Securing Power: Poyry report for Greenpeace: Summary. [http://www.greenpeace.org.uk/files/pdfs/climate/industrialCHP\\_summary.pdf](http://www.greenpeace.org.uk/files/pdfs/climate/industrialCHP_summary.pdf)
- (8) Nuclear Energy and Micro-CHP. Micro-CHP blog, 10th January 2008.  
<http://microchp.blogspot.com/2008/01/nuclear-energy-and-micro-chp.html>
- (9) What France got wrong, by Mycle Schneider, Nuclear Engineering International 26th August 2009. <http://www.neimagazine.com/story.asp?storyCode=2053958>
- (10) Half Britain's Homes could be Heated by Renewable Gas, National Grid Press Release, 2nd February 2009. <http://www.nationalgrid.com/uk/Media+Centre/PressReleases/02.02.09.htm>
- (11) The Future of Nuclear Power, Massachusetts Institute of Technology 2003. <http://web.mit.edu/nuclearpower/pdf/nuclearpower-full.pdf>
- See pages 26 & 27 of Smith B, Insurmountable Risks, IEER 2006.
- (12) PB Power, Powering London into the 21st Century, Greenpeace UK and the Mayor of London, March 2006.  
<http://www.greenpeace.org.uk/files/pdfs/migrated/MultimediaFiles/Live/FullReport/7474.pdf>
- (13) PB Power, Powering Edinburgh into the 21st Century, Greenpeace UK, WWF Scotland and City of Edinburgh Council, November 2006. <http://www.greenpeace.org.uk/files/pdfs/migrated/MultimediaFiles/Live/FullReport/8056.pdf>

### 3. Nuclear Subsidy? – told you so.

According to both *The Times* (1) and *The Telegraph* (2) energy companies have told the Government their pledge not to use public aid to fund the £40 billion rollout of new nuclear power stations is no longer realistic. There is a consensus in the industry that without help new reactors will not be built. One option being discussed is a levy tacked on to household fuel bills, another is to set a “floor price” for carbon.

The Government has pledged not to subsidise new nuclear plants, but industry sources say talks have begun on how to devise “a subsidy by another name” that would allow the government to stand by its promise of no direct taxpayer support.

One option under discussion is to set a “floor price” for carbon permits that coal and gas generators have to buy to cover their emissions. EDF supports this idea. (3) Another option is for consumers to pay a levy on their energy bills, similar to the “renewables obligation”. Ministers are currently preparing a new Energy Bill that will create another “obligation” on bills, to pay for new “clean coal” technology. Sources in the energy industry confirmed there had been talks about lobbying for a nuclear levy to be added to the Bill.

Clearly most options for supporting low carbon and nuclear energy will hit consumers in their pockets, but John Large, an independent consultant on nuclear energy, estimates that supporting new nuclear power stations would cost households “significantly more” than the £15 charged to subsidise renewables.

The Department for Energy and Climate Change insisted that there is no plan to set a “floor price” for carbon, saying that carbon prices will rise when the supply of permits is restricted next year.

Other subsidies announced recently include Government funding of around £10m to Rolls Royce, (4) working with Areva, (5) for the construction a factory for manufacturing nuclear power station components. Rolls-Royce noted that the new component plant will have “strong links”

with the Nuclear Advanced Manufacturing Research Centre (NAMRC), announced by the UK government in July, in which the company will be the leading industrial partner. The NAMRC is expected to open in 2011. (6)

The Government has pledged around £15 million to set up NAMRC. The centre will house 30 industrial partners as well as leading universities in the nuclear field, and is intended to provide “*a focal point for the UK supply chain’s response to the increasing global market for nuclear power*”. In addition, the Manufacturing Advisory Service (MAS) will receive £4 million to expand services to the nuclear sector. The MAS will advise companies outside the nuclear sector on how they can supply to it with an emphasis on the rigorous quality assessment processes in the industry. (7)

Taxpayers could also be forced to provide commercial insurance cover to the nuclear industry. Private insurers are refusing to offer full coverage against the risk of a Chernobyl-style nuclear accident. The situation has arisen because of rules contained in an international agreement signed by the UK in 2004 will force nuclear operators to broaden the type of insurance cover they have in place. Insurance will need to cover claims for loss of life, personal injury and damage to or loss of property for up to 30 years from the date of an incident, rather than the current 10 years, and the amount of cover must increase to £620m from the current £140m per site. (8)

(1) Sunday Times 16th August 2009 [http://business.timesonline.co.uk/tol/business/industry\\_sectors/utilities/article6797809.ece](http://business.timesonline.co.uk/tol/business/industry_sectors/utilities/article6797809.ece)

(2) Daily Telegraph 18th August 2009

<http://www.telegraph.co.uk/news/newsttopics/politics/6044394/Consumers-to-pay-for-new-nuclear-power-plants.html>

(3) See New Nukes – New Subsidies? NuClear News No.9 <http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo9.pdf>

(4) Bloomberg 28th July 2009

<http://www.bloomberg.com/apps/news?pid=20601102&sid=aX0kFsaWb4KI>

(5) Business East Midlands 29th July 2009

<http://www.thisisbusiness-eastmidlands.co.uk/news/Flying-green-going-nuclear-Firm-sets-intention-corner-critical-markets/article-1203673-detail/article.html>

(6) World Nuclear News 28th July 2009

<http://www.world-nuclear-news.org/newsarticle.aspx?id=25701&terms=Rolls+Royce>

(7) Professional Engineering 29th July 2009 <http://www.profeng.com/archive/archive+2009/2213/22130004.htm>

(8) Times 9th Sept 2009

[http://business.timesonline.co.uk/tol/business/industry\\_sectors/natural\\_resources/article6826650.ece](http://business.timesonline.co.uk/tol/business/industry_sectors/natural_resources/article6826650.ece)

#### 4. Welsh Justification Challenge

The Welsh Environment Minister Jane Davidson has thrown down the gauntlet to the UK Government by calling for a public inquiry into plans for new nuclear reactors, which include one nominated site in Wales. (1)

European Council Directive 96/29/Euratom of 13 May 1996 (the Basic Safety Standards Directive) makes Justification a requirement of EC law and requires that all new classes or types of practice resulting in exposure to ionizing radiation are Justified in advance of being first adopted or approved by their economic, social or other benefits in relation to the health detriment they may cause. In other words “*no practice involving exposure to ionizing radiation should be adopted unless it produces sufficient benefits to the exposed individuals or society in general to offset any health detriment it may cause*”. (2)

In order to satisfy this regulatory test the Government must carry out a Justification Exercise (3) So far this has involved the Nuclear Industry Association submitting an application on behalf of those utilities interested in building new reactors in June 2008, followed by a consultation exercise run by the Department of Energy and Climate Change (DECC), which closed on 25th March 2009. A further consultation on the Government’s proposed decision document is expected this autumn.

Under the Justification Regulations, the Justifying Authority (which in this case is DECC) has the power to hold an inquiry or other hearing if it appears expedient to do so. As we reported in NuClear News No.7 the Government has been under increasing pressure to hold such an inquiry. (4)

Now, in a letter to Hugh Richards of the Welsh Anti-Nuclear Alliance, the Welsh Environment Minister, Jane Davidson has said that she is prepared to support his call for a public inquiry. She says she has carefully considered the points raised in the Government consultation and *"I have written to the DECC Minister supporting a public inquiry for the proposed new nuclear reactors on the grounds of concerns over the safety and security of the management of future radioactive waste."*

(1) Western Mail 14th August 2009

<http://www.walesonline.co.uk/news/welsh-politics/welsh-politics-news/2009/08/14/jane-davidson-calls-for-public-inquiry-into-nuclear-power-91466-24439694/>

(2) See the Government's consultation document: "The Justification of Practices Involving Ionising Radiation Regulations 2004: Consultation on the Nuclear Industry Association's Application to Justify New Nuclear Power Stations. Volume 1: Consultation Document.

[http://www.berr.gov.uk/energy/sources/nuclear/whitepaper/actions/justification/page45386.html/](http://www.berr.gov.uk/energy/sources/nuclear/whitepaper/actions/justification/page45386.html/sources/nuclear/whitepaper/actions/justification/page45386.html)

(3) See Justifying the Unjustifiable: <http://www.no2nuclearpower.org.uk/ground/unjustifiable.php>

(4) Justification Pressure, NuClear News No.7

<http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo7.pdf>

## 5. Protests Mount

Following reports in NuClear News No.9 that contractors for Eon were planning to start drilling preparatory bore holes on 3rd August at Oldbury in Gloucestershire, villagers living nearby staged a five-hour protest to prevent contractors getting on to the land. Residents of Shepperdine, near Thornbury, blocked the access road to a field near the existing Oldbury plant until they were finally asked to move by police.

When contractors from Hydrock arrived with lorries, they found their way blocked by about 13 residents occupying the lane leading to a field that has already been turned into a compound. The protestors said they had two concerns at this stage – whether permission had been given by the British Geological Survey (BGS) for the drilling to take place and whether South Gloucestershire Council had given the all-clear for the compound and parking area to be created, but *"ultimately, we don't want a new nuclear power station here"*.

Meanwhile, members of Blackwater Against New Nuclear Group (BANNG) took to the water in a flotilla to protest about plans to build a nuclear power station at Bradwell on the Essex coast. Andy Blowers, BANNG's chairman, said the two-hour sailing "vigil" had been a big success, with 16 boats joining the fleet and dozens of people signing the group's petition.

Residents of Braystones near Egremont in Cumbria, which has been identified by the Government as a possible site for a new nuclear reactor, have launched a website – [toxiccoast.com](http://toxiccoast.com). The website promises to *"show the pro-nuclear propaganda to be the pack of lies and half-truths that it is"*. (3)

None of this quite matches the 50,000 who protested in Berlin on 5th September against Germany possibly reversing the decision to abandon nuclear power, and instead extend the life of its nuclear power plants. The marchers, backed by 400 tractors, demanded that Germany stick to its commitment to close all nuclear plants by 2020 and also called for the closure of a radioactive dump at Gorleben in eastern Germany. Opinion polls show 59% of Germans are opposed to extending the life of reactors. (4)

(1) Bristol Evening Post 4th Aug 2009 <http://www.thisisbristol.co.uk/news/Villagers-stage-Oldbury-anti-nuclear-protest/article-1222138-detail/article.html>

Ruscombe Green 10th Aug 2009 <http://ruscombegreen.blogspot.com/2009/08/new-nuke-protest.html>

(2) East Anglian Daily Times 10th Aug 2009 <http://www.eadt.co.uk/content/eadt/news/story.aspx?brand=EADOnline&category=News&tBrand=EADOnline&tCategory=xDefault&itemid=IPED09%20Aug%202009%2019%3A07%3A35%3A000>

(3) Carlisle News & Star 11th Aug 2009 [http://www.newsandstar.co.uk/news/website\\_launched\\_to\\_fight\\_west\\_cumbria\\_nuclear\\_power\\_station\\_plan\\_1\\_596715?referrerPath=home/news\\_star\\_search\\_results\\_page\\_2\\_1962](http://www.newsandstar.co.uk/news/website_launched_to_fight_west_cumbria_nuclear_power_station_plan_1_596715?referrerPath=home/news_star_search_results_page_2_1962)

(4) Morning Star 6th Sept 2009

<http://www.morningstaronline.co.uk/index.php/news/world/50-000-join-Berlin-anti-nuclear-rally>

## 6. Finnish Reactor Dispute

The dispute surrounding the enormous financial losses from Olkiluoto reactor project in Finland deepened when the French nuclear giant Areva published its half-year results. Areva threatened to freeze construction if Finnish utility, TVO, does not agree to share some of the cost. The latest estimate of construction costs reached €5.5 billion, which compares to the price of €2.5 billion originally presented to Finnish public and politicians.

If TVO has to foot a part of the extra bill from Olkiluoto, it can pass the entire cost on to its shareholders, more than half of which are Finnish publicly owned companies. If the company manages to leave all of the costs with Areva-Siemens, they will ultimately be paid for by French and German taxpayers.

Olkiluoto Info 31st Aug

<http://www.olkiluoto.info/en/13/3/164/>

World Nuclear News 1st Sept 2009 [http://www.world-nuclear-news.org/C\\_Areva\\_talks\\_tough\\_on\\_OL3\\_0109092.html](http://www.world-nuclear-news.org/C_Areva_talks_tough_on_OL3_0109092.html)

## 7. Any fool can pour a cup of tea into the ocean, but a thousand wise men cannot pull it out again. (Chinese saying)

The Nuclear Industry Association (NIA) says it has started interviewing utilities, scientists and consultants on the best way to deliver an underground nuclear waste facility, which is likely to be built near Sellafield in Cumbria. Mark Higson, chief executive of the government's Office for Nuclear Development, is said to be pressing for urgent progress on the £15bn facility in advance of a new reactor construction programme. NIA says it has not decided how it would use the research but industry sources said it would feed into official nuclear waste strategy, due out in the autumn. (1)

Meanwhile the Nuclear Free Local Authorities (NFLA) has responded to the latest consultation from the Committee on Radioactive Waste Management (CoRWM) on Research and Development for interim storage and geological disposal of higher activity wastes. (2) NFLA call on CoRWM to accept the possibility that it may never be possible to have sufficient confidence in computer models of the risks involved in burying radioactive waste in a deep repository. It says CoRWM's comments on the storage of waste, particularly high-level liquid waste stored at Sellafield, lack the required sense of urgency. Nor does CoRWM highlight the problems associated with plans to bury spent fuel from proposed new nuclear reactors. NFLA calls on CoRWM to recommend that no justification decision is taken on building new reactors until research on the disposability of high burn-up fuel is carried out and subjected to a public inquiry. (3)

Rather intriguingly CoRWM's consultation document says "*an option related to the long-term management of SF (spent fuel) that is rapidly gaining favour is dry storage ...*" - the alternative put forward by Friends of the Earth at the 1977 THORP inquiry - and "*Without demonstrating that geological disposal of AGR SF is feasible, AGR fuel strategies are incomplete*".

The Nuclear Decommissioning Authority (NDA) has been consulting on how to manage low-level radioactive waste (LLW). (4) The NDA sets out a framework for the flexible management of LLW, and argues that earlier policy did not cover large scale decommissioning and site restoration and that waste management options beyond engineered disposal will be critical. The framework allows for development of solutions on a case-by-case basis.

In its submission, the NFLA argues the so-called flexible approach means increasing the amount of wastes going to landfill; pressure to lower standards for site remediation in an attempt to reduce the volumes of waste generated and their associated disposal costs; pressure to allow increases in discharges of liquid radioactive waste into the marine environment, as a consequence of the decontamination processes for metals earmarked for recycling. NFLA says any proposed strategy must be based on a clear set of environmental principles; setting a boundary on the amount of waste to be dealt with – in other words cancelling proposals for new reactors; and extensive consultation in an open and transparent manner. (5)

A number of sites are already considering opportunities to dispose of waste to facilities other than Low Level Waste Repository near Drigg. But recent press reports suggest that Cumbria County Council is expected to refuse permission for low level waste disposal at Lillyhall and Keekle Head on the grounds that it does not want to see a proliferation of nuclear waste disposal sites. "*It should not be*

*put in holes and imposed on people around West Cumbria.”(6)*

(1) Building 14th August 2009

<http://www.building.co.uk/story.asp?sectioncode=29&storycode=3146763&c=1#ixzz0QWYYwnUU>

(2) Consultation Draft: CoRWM report to Government: Report on national research and development for interim storage and geological disposal of higher activity radioactive wastes and management of nuclear materials. CoRWM July 2009. <http://www.corwm.org.uk/Pages/Current%20Publications/2543%20-%20CoRWM%20RD%20Report%20Consultation%20Draft%2027%20July%2009.pdf>

(3) Radioactive Waste Policy Briefing No. 21. NFLA September 2009

<http://www.nuclearpolicy.info/docs/radwaste/RadWaste21.pdf>

(4) UK Strategy for the Management of Solid Low Level Radioactive Waste from the Nuclear Industry, 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>

(5) Radioactive Waste Briefing No. 20. NFLA August 2009

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

(6) Whitehaven News 20th August 2009. [http://www.whitehaven-news.co.uk/news/nuclear\\_waste\\_sites\\_set\\_for\\_thumbs\\_down\\_1\\_600367?referrerPath=news/](http://www.whitehaven-news.co.uk/news/nuclear_waste_sites_set_for_thumbs_down_1_600367?referrerPath=news/)

## 8. Nuclear Status

Nuclear will continue to decline according to the latest “The World Nuclear Industry Status Report 2009”, and at this point there is no obvious sign that the international nuclear industry could turn the decline into a promising future. Commissioned by the German Federal Ministry of Environment, Nature Conservation and Reactor Safety, the report’s authors, Mycle Schneider, Steve Thomas, Antony Froggatt and Doug Koplow, give facts on the nuclear power plants in operation, under construction and in planning phases throughout the world. They also assess the economic performance of past and current nuclear projects including Calvert Cliffs, Flamanville and Olkiluoto.

World Nuclear Industry Status Report 2009

[http://www.bmu.de/files/english/pdf/application/pdf/welt\\_statusbericht\\_atomindustrie\\_0908\\_en.pdf](http://www.bmu.de/files/english/pdf/application/pdf/welt_statusbericht_atomindustrie_0908_en.pdf)

Nuclear Engineering International 27th Aug 2009 <http://www.neimagazine.com/story.asp?sectioncode=132&storyCode=2053966>

## 9. Flying pigs are still pigs, not angels

In what must go down as one of the quotes of the decade, Marianne Birkby of Radiation Free Lakeland has pointed out that even if nuclear reactors were shown to be carbon free – *“flying pigs are still pigs, not angels”*. (1) In support she quotes Dr Ian Fairlie, writing in *Medicine, Conflict and Survival* about recent studies of childhood cancer near nuclear reactors in Germany. He concludes *“The KiKK study and its implications raise difficult questions, including whether vulnerable people, in particular, pregnant women and women of child-bearing age, should be advised to move away from nuclear facilities. Another question is whether local residents should be advised not to eat produce from their gardens or wild foods, as the food pathway is the largest contributor to local doses.”* (2)

(1) Carlisle News and Star 4th Sept 2009

[http://www.newsandstar.co.uk/opinion/letters/where\\_is\\_the\\_nuclear\\_inquiry\\_1\\_607935?referrerPath=opinion/ross\\_brewster](http://www.newsandstar.co.uk/opinion/letters/where_is_the_nuclear_inquiry_1_607935?referrerPath=opinion/ross_brewster)

(2) Fairlie, Ian (2009) ‘Childhood cancers near German nuclear power stations: hypothesis to explain the cancer increases’, *Medicine, Conflict and Survival*, 25:3, 206 – 220

<http://www.informaworld.com/smpp/content~db=all?content=10.1080/13623690902943396>



## 10. CSP moves forward

To supply all the electricity Europe needs would, in principle, mean capturing just 0.3% of the light falling on the Saharan and middle eastern deserts, in an area smaller than Wales. Knowing this, a group of German industrial giants in July launched what may be the world's largest solar project. The long-planned partnership of 20 finance and energy companies led by Munich Re, and including E.ON, Siemens and Deutsche Bank, plans to build new African Concentrated Solar Plants (CSP). The plan dubbed Desertec hopes ultimately to provide 15% of Europe's electricity needs, and aims to figure out how this can be done within the next two to three years.

Prospect Magazine 27th Aug 2009

<http://www.prospectmagazine.co.uk/2009/08/hello-sunshine/>