Energy Review Update Issue 3 (interim). 24th April 2006

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1. Energy Review public consultation closes

The last week of the Energy Review consultation period saw the publication of a string of responses from nuclear utilities, which might give some clues as to how likely reactors are to find private finance. Submissions will eventually be available on the DTI website, unless a request for confidentiality has been made, but only those submitted in January and February are currently available. [1]

The French generating company, EdF, which owns London Electricity, has offered to build ten new nuclear power stations, provided that the price of the electricity generated is guaranteed for years to come and there is a fast track the licensing and planning process for any new plants. [2]

EdF and Eon, the German nuclear company that owns Powergen, could join forces with RWE, the German owners of nPower, to build new reactors in Britain. A deal might involve the acquisition of all or part of the 65% of British Energy's equity that is likely to be sold by the UK government. The utilities think that new reactors might be more acceptable if built under the aegis of a British company. Under the terms of its restructuring agreement BE cannot pursue new nuclear acquisitions for the next four years, but would be free of these in time for any new build applications.

Mike Parker, the Chief Executive of BNFL, says the energy review, as well as the waste and licensing processes, must result in firm government and public support for new nuclear construction: "An amber light is not enough. Only a green light" can provide the climate needed to support launching a new reactor project. "Otherwise investors will sidestep the UK." [3]

[1] Submissions to the consultation should eventually be available on the DTI website, but at the time of writing only those submitted in January and February were available.

http://www.dti.gov.uk/energy/review/responses.shtml

[2] Channel 4 News 12th April 2006

http://www.channel4.com/news/special-reports/special-reports-storypage.jsp?id=2164

[3] Nucleonics Week 6th April 2006 Vol. 47 No. 14

2. Scientists say 'no thanks' to new reactors

Plans to resurrect nuclear power have been dealt a damaging blow by 40 of Britain's leading energy and climate scientists. Engineers, experts and academics from Glasgow, Edinburgh, London, Oxford and Cambridge have forcibly told the Prime Minister that building more nuclear reactors is not the solution to global warming. Nuclear power is "a limited, inflexible, expensive and potentially dangerous energy source which creates unique problems", they say. Alternatives including greater energy efficiency and renewable sources are more likely to deliver safe, secure and climate-friendly energy. [1]

[1] Sunday Herald 9th April 2006 http://www.sundayherald.com/55029 Letter to Tony Blair signed by 40 scientists, dated 10th April 2006 http://www.sgr.org.uk/climate/letter TonyBlair NucPower 10apr06.html

3. NII risks second failure at THORP plant-BNG prosecution looming

One year after a series of alarming errors resulted in 18,000 litres of highly radioactive dissolved spent fuel leaking in the THORP reprocessing plant at Sellafield, Greenpeace has published a report which exposes how the current plan to reopen THORP is an 'engineering 'bodge' which risks compromising safety. [1] The publication comes as it was revealed that the plant's operators will be prosecuted over the accident.

The emergency closure of the plant occurred on 21 April 2005. For the past year nuclear fuel has been stored on site at Sellafield. It's not yet clear if and when THORP will reopen, but indications from the Nuclear Decommissioning Authority are that storage capacity at Sellafield could run out in the near future (one to two years from now) leading to serious problems for the nuclear industry. A report prepared for Greenpeace by nuclear engineer John Large castigates the option proposed by the NDA for reopening the plant.

The leak which closed the plant had been going on for nine months before it was detected. British Nuclear Group's (BNG) Board of Inquiry into the THORP accident has stated that there is a risk that the plant could fail again, even if the Board of Inquiry recommendations are implemented. A tank intended for future reprocessing, were the plant to reopen, could be subject to the same failures as the infrastructure which caused the original leak. The operators want to reopen the plant this summer.

John Large's report explains that properly engineered solutions could take up to three years to implement. The NDA has claimed that if it does not reopen the plant it will face mounting problems because of the amount of foreign and UK spent nuclear fuel stored in THORP's receipts and storage unit. Continued closure could even impact on the operation of British Energy reactors which continue to send spent fuel to Sellafield on a weekly basis.

The nuclear industry is anxious to reopen the plant because it's worried about the prospects for spent fuel storage if it doesn't clear the backlog. What's most worrying is that the operators never had a plan B for this situation. They always assumed THORP would operate smoothly. Now it appears they're prepared to risk the same scenario again with a questionable reopening plan. Greenpeace has called for all documents relating to the accident and safety case to be

released for public scrutiny as soon as possible. As it is, information is currently being withheld because of pending legal action.

Secrecy currently surrounds the conditions under which the Nuclear Installations Inspectorate (NII) would allow THORP to reopen. The NII has not released the 49 conditions which it has imposed on British Nuclear Group (BNG) before it can reopen the plant. It is unbelievable that THORP could be allowed to operate again without the public knowing exactly what conditions the inspectors have imposed or what the consequences of a second failure might be.

The Nuclear Decommissioning Authority, which owns THORP, has refused to fully disclose the cost of the accident, despite repeated requests under Freedom of Information legislation by Greenpeace. BNG has been unable to provide sound financial costings for the non-restart options for THORP

Despite its refusal to detail the costs of the THORP'S closure, the NDA has put in an insurance claim for lost revenue and repair costs and stated it estimates losses will amount to £50m - significantly less than the Greenpeace report estimate of £575m.

Meanwhile, although not officially announced yet, the Guardian reports that BNG will be prosecuted for breaches of health and safety regulations following the accident. [2]

[1] "leak of radioactive liquor in the feed clarification cell at BNG THORP Sellafield: Review of the management and technical aspects of the failure and its implications for the future of THORP, Large Associates, 13th April 2006, Greenpeace International.

http://www.greenpeace.org.uk/MultimediaFiles/Live/FullReport/7592.pdf

[2] Guardian 20th April 2006

http://business.guardian.co.uk/story/0,,1757011,00.html

4. Chernobyl legacy – more cancer deaths than nuclear agency claims

The World Health Organisation's (WHO's) International Agency for Research on Cancer (IARC) in Lyon has now published its report on the cancer burden in Europe from Chernobyl. [1] The Agency predicts the number of cancer deaths will be between 6,700 and 38,000, probably around 16,000. This is four times the prediction made last September by the International Atomic Energy Authority (IAEA), and WHO - the Chernobyl Forum – which predicted 4,000 cancer deaths in total. A report published by Greenpeace International, on the other hand, predicts 93,000 cancer deaths, [2] and anothyer report for the European Greens predicts between 30,000 and 60,000. [3]

The Greenpeace report involved work by 52 respected scientists and includes information never before published in English. It also looks into the ongoing health impacts of Chernobyl and concludes that radiation from the disaster has had a devastating effect on survivors; damaging immune and endocrine systems, leading to accelerated ageing, cardiovascular and blood illnesses, psychological illnesses, chromosomal aberrations and an increase in foetal deformations.

The Chernobyl Forum also claimed that, apart from thyroid cancer, there were very few serious health effects. But Linda Walker of Chernobyl Children's Project says regular visitors to Belarus cannot fail to be aware of the many health problems which seem to be more acute in the contaminated parts of the country. Babies with disabilities or genetic disorders, or who develop serious diseases in their early months; blood disorders in children which are normally only seen in the elderly; heart disease and respiratory problems in children are widespread;

osteoporosis is seen in small children; children who do not grow, still looking like toddlers into their teens; babies born with missing or twisted limbs; and breast cancer among young women is a major problem. But little or no research is being conducted into these issues. The Chernobyl Children's Project is calling for unbiased, independently funded research. [4]

[1] http://www.iarc.fr/ENG/Press Releases/pr168a.html

[2] Greenpeace International 18th April 2006

http://www.greenpeace.org/international/news/chernobyl-deaths-180406

 $\underline{http://www.greenpeace.org/raw/content/international/press/reports/chernobylhealthreport.pdf}$

BBC 18th April 2006

http://news.bbc.co.uk/1/hi/world/europe/4917526.stm

[3] European Greens Press Release 6th April 2006

http://www.greens-efa.org/cms/default/rubrik/6/6270.greensefa_org@en.htm

New Scientist 6th April 2006

http://www.newscientist.com/article/mg19025464.400-how-many-more-lives-will-chernobylclaim.html

[4] Linda Walker writing in the Guardian 31st March 2006

http://www.guardian.co.uk/comment/story/0,,1743406,00.html

and letter to The Independent 12th April 2006

http://comment.independent.co.uk/letters/article357213.ece

http://www.rememberchernobyl.org

5. Former Ministers call for IAEA reform

Ten former European Environment Ministers, including Michael Meacher, have called on Secretary-General Kofi Annan and the International Atomic Energy Agency (IAEA) Director Mohamed ElBaradei to reform the Agency's mandate and withdraw its promotion of nuclear technology.

The former Ministers highlight the contradictory roles the IAEA plays in the international arena. On one hand, the IAEA is tasked with stopping the spread of nuclear weapons and providing technical assistance to support the nuclear disarmament process. On the other, the IAEA's mandate promotes the dangerous myth of peaceful nuclear power. The former environmental ministers call on the UN to propose amendments to the IAEA statute at the forthcoming IAEA Board of Governors and General Conference in mid September.

Greenpeace International Press Release 12th April 2006 http://www.greenpeace.org/international/press/releases/former-environmental-ministers

6. Risk of flooding of nuclear site dampens new build plans?

Sir Anthony Cleaver, chairman of the Nuclear Decommissioning Authority has warned that rising sea levels would rule out many sites for a new generation of reactors. Coastal erosion makes it unlikely that many have a life of 50 to 60 years." The NDA's strategy manager, Terry Selby, named Dungeness in Kent as one trouble spot and said the situation at Sizewell in Suffolk was only "potentially a bit less dramatic".

Guardian 31st March 2006

http://business.guardian.co.uk/story/0,,1743462,00.html

7. Committee on Radioactive Waste Management nears the end of the beginning – hunt for a dump site begins!

CoRWM's draft recommendations are expected to emerge at its next plenary session to be held in Brighton on $25^{th} - 27^{th}$ April 2006. [1] There will then be a period of further public consultation before the final report is delivered to Government in July.

Committee chair, Gordon MacKerron, says the main dilemma is choosing between the improved storage of radioactive material, which assumes that Britain will still be politically stable 100 years from now, and an early commitment to deep underground disposal, which means the waste would be out of reach of any future technological advances. He said: "There is very likely to be some mixture of options in our recommendations. It would be very surprising if one size fitted all from now on." [2]

The CoRWM process and the Energy Review are inextricably linked in some people's eyes. MacKerron asks: is it right to commit Britain to creating more radioactive waste while we have yet to find an acceptable, long-term solution for handling the material that already exists?

The Committee has produced an updated statement on the new reactor build issue which says that if new reactors were built "significant practical issues would arise, including the size, number and location of waste management facilities" and that the social, political and ethical implications (for example the creation of further burdens on future generations) of a deliberate decision to create more nuclear wastes need to be considered.

- [1] http://www.corwm.org/content-777
- [2] Sunday Times 2nd April 2006

http://www.timesonline.co.uk/printFriendly/0,,1-528-2113960-1187,00.html

[3] http://www.corwm.org/pdf/1593.1%20-%20New%20build%20statement.pdf

8. Scotland holds the line

JACK McConnell issued a defiant warning that he would decide on new nuclear power stations for Scotland, and he would not be swayed by Westminster or by lobbying from his own Labour movement. This followed a resolution at the Scottish Trades Union Congress to support a new generation of nuclear power stations. McConnell insisted that the decision on whether Scotland should have a new generation of nuclear stations would not be influenced by political considerations. Planning decisions had to be taken purely on planning grounds, he said. Scotland's powers under the Electricity Act, have to be used very carefully indeed and that is "why we await the [CoRWM] report on nuclear waste." [1] A new expert study for local authorities, by energy consultancy, Garrad Hassan, says that the Scotland could meet its future energy needs by replacing nuclear power with wind and other renewables. [2]

[1] Scotsman 13th April 2006

http://thescotsman.scotsman.com/politics.cfm?id=561362006

[2] Sunday Herald 16th April 2006

http://www.sundayherald.com/55224

Garrad Hassan report

http://robedwards.typepad.com/robedwardsinfo/files/GarradHassan.pdf

9. Finland – not an example for the UK to follow

In the game of nuclear spin, Finland is a very important component. Finland has much to teach the rest of Europe, says the Telegraph, because building a fifth nuclear plant gained a narrow majority in Parliament in 2002, and is expected to be in operation around 2009. [1]. In

fact construction is already nine months behind schedule. [2] Satu Hassi, Finland's former environment minister says once the decision had been made, the country lost interest in alternative energy sources. [3]

David Howarth MP, Liberal Democrat energy spokesperson, in a letter to the Guardian points out some of the problems. To begin with, the plant's financing is riddled with covert state subsidies. The plant's French state-controlled suppliers received massive export guarantees and the project benefited from German and Swedish state support. A bank 50% owned by the state of Bavaria financed the deal at a cheap rate of interest (2.6%). Finland has not solved the problem of nuclear waste, merely persuaded the inhabitants of a particular location to allow further investigations to be carried out. If these scientific tests show the site is not suitable, it will not be allowed to proceed. If the British government is to be believed when it says that nuclear power here will receive no subsidies, the Finnish example does not help the nuclear industry's case. [4]

[1] Telegraph 4th April 2006

http://www.telegraph.co.uk/opinion/main.jhtml?xml=/opinion/2006/04/04/dl0402.xml&sSheet=/portal/2006/04/04/ixportal.html

http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2006/04/04/wfinland04.xml&sSheet=/news/2006/04/04/ixworld.html

[2] Guardian, FT 24th April 2006

http://business.guardian.co.uk/story/0.,1759765,00.html

[3] Guardian 14th April 2006

http://www.guardian.co.uk/climatechange/story/0,,1753905,00.html

[4] Guardian 18th April 2006

http://www.guardian.co.uk/letters/story/0,,1755555,00.html

10. Environmental Audit Committee – sheds light on sustainable energy future

The House of Commons Environmental Audit Committee has concluded that new nuclear stations will be of little or no short-term use in filling an anticipated electricity 'generation gap' in Britain, and crucial questions of security, cost and effectiveness remain unanswered. The committee raise concerns over the risk of terrorist attacks, but also focus on the full costs of nuclear generation, such as the disposal of waste and decommissioning. [1] It says the economic viability of new nuclear plants has not been proved. [2]

The report, entitled "Keeping the lights on", said the answer lay in building many more gaspowered electricity plants and boosting production from sources of renewable energy like wind and waves. "Over the next 10 years, nuclear power cannot contribute either to the need for more generating capacity or to carbon reductions as it simply could not be built in time," the report said. [3]

The select committee report even questioned the need for the present Energy Review. It concludes: "We remain convinced that the vision contained in the [2003] white paper – with its focus on energy efficiency and renewables as the cornerstones of a sustainable energy policy – remains correct" [4]

[1] Guardian 14th April 2006

http://politics.guardian.co.uk/labour/story/0,,1753952,00.html

[2] FT 15th April 2006

http://news.ft.com/cms/s/677874aa-cc1c-11da-a7bf-0000779e2340,_i_rssPage=247a7efa-c8dc-11d7-81c6-0820abe49a01.html

[3] Reuters, 16th April 2006

http://today.reuters.co.uk/news/newsArticle.aspx?type=topNews&storyID=2006-04-15T230422Z 01 L15727525 RTRUKOC 0 UK-NUCLEAR-BRITAIN.xml

[4] The Business 16th April 2006

 $\frac{\text{http://thebusinessonline.com/Stories.aspx?Parliament\%E2\%80\%99s\%20nuclear\%20sceptics\%20make}{\%20a\%20stand\&StoryID=3EE8DB13-9BFA-4748-A02F-6B7C8E91FDED\&SectionID=F3B76EF0-7991-4389-B72E-D07EB5AA1CEE}$

The report "Keeping the Lights on" is available at: http://www.publications.parliament.uk/pa/cm200506/cmselect/cmenyaud/584/584i.pdf

11. British Energy waste row

The Department of Trade and Industry (DTI) has attempted to stifle a mounting row over the cost of nuclear waste liabilities at British Energy, weeks after it was unable to explain its accounting policies. In claiming to have used the correct figures all along, the DTI failed to explain why it had taken three weeks to answer a query raised by the Public Accounts Committee (PAC) and why its top official was unable to give the Commons an immediate response. The issue is important because the government wants to sell its stake in BE.

The dispute broke out on March 27 when Sir Brian Bender, the DTI's permanent secretary, and Hugo Robson, the director of the DTI's shareholder executive, were questioned about the use of a "discount rate" in assessing the cost to BE of dealing with its waste liabilities. Helen Goodman and other MPs on the PAC asked why the DTI had not used the normal discount rate set out for public bodies in the Treasury's green book.

Sir Brian and Mr Robson could not explain this. If the green book had been followed the cost of the liabilities would have been far higher than the £5.3bn figure used by the DTI. The level of liabilities was assessed in February this year at £5.3bn, but the DTI had since admitted that the figure was calculated using a historic discount rate of 3.5%.

Yet the Treasury green book that governs such public sector liabilities says 3.5% rate should only be used for the first 30 years with 3% and 2.5% being used over a longer period. This would increase the costs of waste disposal. BE's liabilities run beyond 80 years. Asked about this, Sir Brian apologised for not coming up with an answer. Sir Brian had already admitted that the £5.3bn liabilities - up £1bn on the last estimate - could rise even higher.

Guardian 18th April 2006

http://business.guardian.co.uk/story/0,.1755587,00.html
Uncorrected Oral Evidence to the Public Accounts Committee 27th March 2006
http://www.publications.parliament.uk/pa/cm200506/cmselect/cmpubacc/uc1025-i/uc102502.htm

12. Pre-Licensing of new reactor designs

The Welsh Anti Nuclear Alliance (WANA), Greenpeace and the Nuclear Free Local Authorities are calling for full public involvement in the process of assessing the safety of new nuclear power station designs. The current attempt to place consideration of the safety of new nuclear power station designs beyond public scrutiny will not work. It will guarantee heavy opposition at the specific site stage. Those Local Authorities and populations prejudiced by non-disclosure of detailed information on safety and excluded from its scrutiny at a public inquiry, are unlikely to go away. The stakes for our system of Government could not be higher. [1]

The HSE has issued a discussion document which reviews the pre-licensing process for potential new reactors. Comments are invited by 28th April.[2]

- [1] Welsh Anti-Nuclear Alliance Press Release 11th April 2006
- [2] HSE review of the pre-licensing process for potential new build of nuclear power stations, 27th March 2006. http://www.hse.gov.uk/consult/condocs/energyreview/discussion.htm