

Energy Review Update Issue 4.

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1. CoRWM says deep dump will take decades – meantime waste must be in robust stores

The Committee on Radioactive Waste Management (CoRWM) finalised its draft recommendations to the government at a plenary meeting in Brighton in the last week in April. This draft will now go out for further public consultation ahead of a final report in July. Although the Committee said geological disposal is the most secure option to manage UK radioactive waste in the long-term, it argued that the creation of suitable facilities "may take several decades" and robust interim stores must be built in the meantime.

There may not be sufficient agreement to implement geological disposal at the present time, and there may be technical difficulties in siting or community concerns could make it difficult, or even impossible, to make progress at a suitable site.

CoRWM, therefore, recommended that a programme of interim storage must play an integral part in the long-term management strategy as a contingency. These stores need to be robust against the risk of delay or failure in the repository programme, and due regard should be paid to security, particularly against terrorist attacks; ensuring the longevity of the stores themselves; and minimising the need for repackaging of the wastes; and avoiding the unnecessary transport of wastes.

CoRWM recommends a commitment to an intensified programme of research and development aimed at reducing uncertainties at a generic and site-specific level in the long-term safety of geological disposal, as well as better means for storing wastes in the longer term. A commitment to ensuring that flexibility in decision-making within the implementation process leaves open the possibility that other long-term management options could emerge as practical alternatives.

CoRWM is not recommending any particular sites, but suggesting that the government now needs to begin a process of selecting them. Community involvement in any proposals for the

siting of long term radioactive waste facilities should be based on the principle of volunteerism. Gordon Mackerron said "communities that are willing to be involved will have to be better off than they were before". This was interpreted by *Metro News* as "bribes to take nuclear waste".

CoRWM's chairman, Gordon MacKerron, stressed that its recommendations should not be seen as a green light for new stations. "We don't believe that anything we say is in any way endorsing new build," he says. "The public assessment that should apply to any future new build proposals should build on the CoRWM process, and will need to consider a range of issues including the social, political and ethical issues of a deliberate decision to create new nuclear wastes".

Papers prepared for CoRWM by "security specialists" have warned that:

"It is our unanimous opinion that greater attention should be given to the current management of radioactive waste held in the UK, in the context of its vulnerability to potential terrorist attack. We are not aware of any UK Government programme that is addressing this issue with adequate detail or priority, and consider it unacceptable for some vulnerable waste forms, such as spent fuel, to remain in their current condition and mode of storage."

Friends of the Earth and Greenpeace remain opposed to the deep dumping of nuclear waste. Jean McSorley of Greenpeace said:-

"CORWM is recommending we bury radioactive waste in a big hole in the ground somewhere in the UK. This is an environmental time bomb for future generations because the waste will inevitably degrade and leak. The least dangerous option would be to keep the waste on the reactor sites in accessible storage."

She continued: *"The fundamental lesson must be not to create any more of this dangerous waste which poses such environmental and security nightmares for up to one million years. That means Tony Blair should not propose building any new nuclear reactors."*

See CoRWM press release <http://www.corwm.org.uk/content-1038>
Draft Recommendations <http://www.corwm.org/pdf/None%20-%20CoRWMs%20Draft%20Recommendations%2027%20April.pdf>
New Scientist 26th April 2006
<http://www.newscientisttech.com/article/dn9060-bury-your-nuclear-waste-uk-advised.html>

2. CoRWM and the Scottish Parliamentary Elections

CoRWM's Draft Recommendations could have most political impact in Scotland. The Scottish Executive Partnership Agreement, which is a joint statement of policy by the two coalition parties in the governing coalition – Labour and the Liberal Democrats states that:-

"We will not support the further development of nuclear power stations while waste management issues remain unresolved."[1]

But the definition of "resolved" remains unclear. According to *The Scotsman*, First Minister, Jack McConnell will do everything he can to put off a decision on new nuclear power stations for Scotland until after next May's elections. McConnell says he wants to wait for the final CoRWM report which is due in July and, after that, he wants a "period of reflection" to consider the issue, a period which could last months. Sources close to Mr McConnell made it clear afterwards that this "period of reflection" will probably extend into early next year, allowing him to avoid the issue until after next year's Holyrood elections. [2]

Scottish Environmentalists said the report must not be used by government as a pretext for new reactors. Dr Richard Dixon, director of WWF Scotland, said: "*The vague possibility of a hole in the ground, at an unknown site, in 70 years, is hardly a green light.*" [3] Indeed Gordon Mackerron was specifically asked at his Brighton Press Conference if he thought CoRWM's recommendations had resolved the problem of nuclear waste. His answer was "no".

[1] <http://www.scotland.gov.uk/library5/government/pfbs-00.asp>

[2] Scotsman 28th April 2006

<http://thescotsman.scotman.com/politics.cfm?id=634292006>

[3] Herald 28th April 2006

<http://www.theherald.co.uk/politics/61007-print.shtml>

3. Energy Review: consultation or nuclear spin?

The Energy Review Consultation closed in 14th April after receiving 4,500 responses including 800 from businesses and organisations. The DTI is now analysing the responses. The comments will all be put on the web site. [1] Submissions received in January and February are already available; those received in March will be up by mid May and the rest soon after. A statement on the Energy Review is expected in week of 17th July.

According to a Whitehall source quoted in *The Guardian* [2] a meeting convened by Tony Blair at Chequers in September 2005 gave an unofficial green light to nuclear power. It is widely suspected that a decision has effectively been made to go for a new generation of nuclear power already - a huge victory for the nuclear industry, which has been employing a sophisticated multimillion-pound public relations campaign to win its case.

Roger Higman, Climate Campaigner at Friends of the Earth, says FoE commissioned a former Number 10 staffer to look at what was actually going on inside Whitehall and there's no doubt that the Energy Review was promoted by a small clique of four or five civil servants and the Government's Chief Scientist David King. "*There is an enormous amount of work the Government would have to do*", says Higman, "*no reactor design that is likely to be built has been licensed in this country. No reactor is commercial. There are no plans for dealing with the waste we have already got, let alone the waste we would create in addition. So the biggest fear is that this whole thing is a distraction and that the Government plans for nuclear will turn out on analysis to be thin air and they won't do the things they need to do in terms of energy efficiency and renewables to tackle climate change.*"

[1] <http://www.dti.gov.uk/energy/review/responses.shtml>

[2] Guardian 3rd May 2006

<http://society.guardian.co.uk/societyguardian/story/0,,1765788,00.html>

Article by Andy Rowell - one of the editors of www.NuclearSpin.org

4. NII risks second failure at THORP plant– BNG to be prosecuted.

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. [2]

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.

[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] Health and Safety Executive Press Release 3rd May 2006. "HSE to prosecute British Nuclear Group following leak at Sellafield plant".

<http://www.hse.gov.uk/press/2006/e06052.htm>

Guardian 20th April 2006

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

5. Sellafield plutonium and uranium fuel Plant performs even worse than expected

Energy Review Update No.2 reported that the Sellafield MOX Plant was only expected to produce 8 of the 12 assemblies it was scheduled to manufacture in the financial year to 31st March 2006. In fact it has only produced 4. BNG blamed equipment reliability problems.

Platts Nuclear News Flashes 20th April 2006.

NDA SMP Update 16th February 2006

[http://www.nda.gov.uk/News--SMP_Update_\(1403\).aspx?pg=1403](http://www.nda.gov.uk/News--SMP_Update_(1403).aspx?pg=1403)

6. Tories may drop support for nuclear

The Conservative Party may drop its long-standing support for nuclear power according to *The Independent*. David Cameron has accused Tony Blair of prejudging the Government's energy review in favour of a new generation of nuclear power stations.

The Tories are conducting a wholesale review of their energy policy, which will reach conclusions this summer. Officials say the party leadership has "a completely open mind" and its traditional support for nuclear power will count for nothing. If the Tories oppose more nuclear plants, Mr Blair would look isolated, with Liberal Democrats and many Labour MPs hostile.

Independent 19th April 2006

<http://news.independent.co.uk/uk/politics/article358566.ece>

7. Ken says the answer is to decentralise

Meanwhile, London Mayor, Ken Livingstone, says the energy debate has been asking the wrong question. It has centred on whether or not we should replace fossil fuel and nuclear power stations with new large, centralised reactors. What we should be doing is reducing total energy use. The answer, he says, is to decentralise.

Two-thirds of the energy inputted into our power stations is simply wasted - either as heat ejected through the cooling towers, or in transmitting electricity from rural power stations to cities and towns. Only a third, or less, of your household fuel bill reflects the cost of the energy you have used - the rest is subsidising waste.

By decentralising we would be generating energy closer to where it's needed and reusing heat created as a by-product of electricity generation to warm and cool buildings, instead of pumping it out into the atmosphere. Carbon emissions would be cut, along with fuel bills.

Guardian 19th April 2006

<http://society.guardian.co.uk/comment/story/0,,1756095,00.html>

8. Keep Wales Nuclear Free

A petition, backed by Labour and Liberal-Democrat MPs and signed by thousands of people has been presented to Downing Street with the aim of keeping Wales "nuclear-free". [1]

A new Early Day Motion (No. 2106) calls for a renewable energy consensus in Wales built around a common goal of achieving a sustainable energy economy, developing a more efficient decentralised energy network and investing in energy efficient technologies. [2]

[1] e-politix, 18th April 2006

<http://www.epolitix.com/EN/News/200604/f42a0f6f-035f-4b59-b406-081034dbbfb1.htm>

BBC 18th April 2006

<http://news.bbc.co.uk/1/hi/wales/4916402.stm>

[2] EDM No.2106:

<http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=30612&SESSION=875>

9. Nuclear power undermines sustainable energy

A report by Warwick Business School for the Green Alliance examines the impact a new nuclear programme would have on the rest of the UK's liberalised electricity market which provides 80% of the UK's electricity, and 92% of the UK's broader energy market. In particular it looks at the impact on moves towards a more decentralised, sustainable energy system.

The report concludes that new nuclear power will not contribute to the UK's energy policy goals and will actively limit the UK's ability to meet its climate change targets. At best, the current fleet of nuclear power plants will be replaced, but will undermine development of other low carbon technologies. There will not be sufficient development of renewables, demand reduction technologies and energy system change to transform the other 80% of the electricity generation market (or 92% of broader energy) into a low carbon energy system.

At worst a decision to promote new reactors might not necessarily result in existing stations being replaced because of cost or public opposition, but the decisions stalls the development of a low carbon energy system.

New Nuclear Power: Implications for a Sustainable Energy System, Catherine Mitchell and Bridget Woodman, Warwick Business School, Green Alliance March 2006.

<http://www.wbs.ac.uk/downloads/multimedia/enclosures/new-nuclear-power.pdf>

10. New European Reactors?

The new German/French European Pressurised Water Reactor (EPR) being built at Olkiluoto in Finland is now nine months behind schedule, rather than the six reported in Energy Review Update No.3. The company at the heart of the €3bn project, Teollisuuden Voima Oy (TVO), said the start-up date to produce electricity was likely to slip from 2009 to 2010 due to safety scares about the quality of concrete and steel forgings for the plant. [1]

Meanwhile around 20-30,000 people demonstrated in Cherbourg on 16th April against Electricite de France's (EdF) plans to build an EPR at nearby Flamanville. The event drew numerous personalities, including three former environment ministers. [2] Despite this, the EdF Board approved the plan on 4th May. The company said the reactor is expected to cost €3.3bn, an increase of 10% compared with the Finnish reactor. Completion of the reactor is scheduled for 2012.

Yet, even France could phase out nuclear power and achieve low carbon emissions according to a new report from the US-based Institute for Energy and Environmental Research (IEER). The report says French greenhouse gas emissions are actually rising despite the fact that 75-80% of French electricity is nuclear generated, mainly because of emissions from the transportation sector and the use of oil and natural gas for heating. Existing resources are devoted disproportionately to nuclear energy to the detriment of other sources. The use of plutonium as a fuel in 20 nuclear reactors in France alone gets about \$1 billion per year in subsidies. [4]

[1] Guardian, FT 24th April 2006

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

[2] Nucleonics Week Volume 47, Number 16, 20th April 2006

[3] Platts Nuclear News Flashes 4th May 2006

[4] Low-Carbon Diet without Nukes in France, IEER, 2006 <http://www.ieer.org/reports/energy/france/>

11. What if Chernobyl happened here?

The greatest part of the radioactive fallout from the Chernobyl accident fell on the three countries nearest the reactor - Ukraine, Belarus and western Russia - more than 150,000 square kilometres - an area the size of England, Wales and Northern Ireland. Between five and nine million people were affected. Belarus received 70 per cent of the fallout, affecting more than 3,600 towns and villages, 2.5 million people and a quarter of farmland and forests.

The Observer 23rd April 2006

<http://observer.guardian.co.uk/world/story/0,,1759370,00.html>

A dynamic map which shows the possible effects of a major accident at a UK nuclear power station, is available at: <http://www.no2nuclearpower.org.uk/Chernobyl-UK.php>