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**Nuclear Free Local Authorities, Scotland.**  
**Nuclear Briefing March 2007.**

**1.0 New Nuclear Monitor**

- 1.1 The government's decision to back new nuclear reactors has been declared illegal in the High Court. The government will now have to conduct a new, fuller consultation. Mr Justice Sullivan agreed with Greenpeace, who brought the case, that the energy review was not the 'fullest public consultation' the government had promised in the 2003 energy white paper.
- 1.2 Mr Justice Sullivan said the consultation was "seriously flawed and that the process was manifestly inadequate and unfair" because insufficient information had been made available for consultees to make an "intelligent response". The court heard that the government failed to present clear proposals and information on key issues surrounding a new generation of nuclear power stations, such as dealing with radioactive waste and financial costs. Greenpeace and other groups were also denied the opportunity to comment on relevant documents which the government failed to disclose.<sup>1</sup>
- 1.3 Tony Blair said he would push on regardless: "This won't affect the policy at all".<sup>2</sup> Alistair Darling told parliament the white paper, which he had hoped to publish in March would be postponed until May and a final decision on whether to build a new generation of reactors put back from July until the autumn. The white paper will be published alongside a new consultation, "endeavouring to meet the court's requirements".<sup>3</sup> This will bring together the evidence and analysis collected since the energy review began in November 2005.<sup>4</sup> Planning and licensing reforms to accelerate the construction of new plants would go ahead as planned. Mr Darling said that "counter views" would be taken into consideration but, given the government was backing new nuclear plants, it was not possible for it to "stand back and say: 'We don't have any views.'"<sup>5</sup> The view in Whitehall was that a further consultation, while a setback, need not lead to big delays.<sup>6</sup>
- 1.4 New UK reactors would be the first in the world to be privately financed in a liberalised market. To rise to this challenge companies and their banks will need to be confident there is public acceptance and some political certainty. In its handling of the hurried consultation, the

<sup>1</sup> Greenpeace Press Release 15<sup>th</sup> Feb 2007.

[http://www.greenpeace.org.uk/climate/climate.cfm?ucidparam=20070215133454&CFID=712028&CF\\_TOKEN=90306941](http://www.greenpeace.org.uk/climate/climate.cfm?ucidparam=20070215133454&CFID=712028&CF_TOKEN=90306941)

<sup>2</sup> BBC 15<sup>th</sup> Feb 2007, [http://news.bbc.co.uk/1/hi/uk\\_politics/6364281.stm](http://news.bbc.co.uk/1/hi/uk_politics/6364281.stm)

<sup>3</sup> Independent 23rd Feb 2007 <http://news.independent.co.uk/business/news/article2296891.ece>

BBC 22nd Feb 2007 [http://news.bbc.co.uk/1/hi/uk\\_politics/6387063.stm](http://news.bbc.co.uk/1/hi/uk_politics/6387063.stm)

<sup>4</sup> FT 22nd Feb 2007 <http://www.ft.com/cms/s/b1d11dd4-c268-11db-9e1c-000b5df10621.html>

<sup>5</sup> FT 15th Feb 2007

[http://www.ft.com/cms/s/76c6d25c-bce5-11db-90ae-0000779e2340\\_i\\_rssPage=34c8a8a6-2f7b-11da-8b51-00000e2511c8.html](http://www.ft.com/cms/s/76c6d25c-bce5-11db-90ae-0000779e2340_i_rssPage=34c8a8a6-2f7b-11da-8b51-00000e2511c8.html)

<sup>6</sup> FT 16th Feb 2007 <http://www.ft.com/cms/s/3416de94-bd34-11db-b5bd-0000779e2340.html>

government has made that harder to achieve.<sup>7</sup> Nevertheless, EDF Energy, the French-owned company that expects to be the first to build a new nuclear power station in Britain, welcomed government reassurance that nuclear "could make a "potentially significant contribution to security of supply and reducing carbon emissions".<sup>8</sup>

- 1.5 The Health and Safety Executive (HSE), Environment Agencies and Office for Civil Nuclear Security (OCNS) have published new guidance for the assessment of generic designs for any new nuclear power stations that may potentially be built in the UK.<sup>9</sup> The guidance provides advice on the processes needed to be followed and information that will be required by the regulators.<sup>10</sup> HSE says the new process will ensure that generic reactor design assessments are conducted in an open and transparent manner involving stakeholders, and the public. At the end of the generic assessment, HSE will provide a view on the acceptability of a new nuclear power station design. If an application is made to build this design of reactor at a specific site, HSE will follow its existing licensing process but, in addition, would take full account of the generic assessment work that has been carried out.
- 1.6 Meanwhile HSE is locked in negotiations with the Treasury to bust the civil service pay scale to entice nuclear experts to vet a new generation of reactors. The Nuclear Installations Inspectorate (NII) is to start a major recruitment process in an attempt to hire dozens of nuclear scientists and stop a brain drain to the private sector.<sup>11</sup>
- 1.7 The government has chosen one of the UK's top public and private finance experts, KPMG director Dr Tim Stone, as a senior advisor - a role some have termed the government's "nuclear tsar". He will be leading the development of arrangements to ensure the private sector meets the full decommissioning and waste management costs associated with potential nuclear new build.<sup>12</sup> Stone is widely regarded as one of the pioneers of the private finance initiative. Stone is also expected, according to the *Sunday Times* to comment on whether government action to set a price for carbon could make nuclear power price- competitive against fossil fuels.<sup>13</sup>
- 1.8 All the current reactors are on the coast, chosen for remoteness and guaranteed access to cooling water. A Met Office report, commissioned by British Energy, concludes future power plants will need to be further inland and may need added protection, because of rising sea-levels, increased wave height and increased storm surge height.<sup>14</sup> Rather oddly, British Energy issued a press release about the report in January, but will not be publishing the report until later this month.
- 1.9 Greenpeace commissioned the Flood Hazard Research Centre, at Middlesex University, to examine the four existing nuclear sites in England considered likely to be earmarked for new reactors. These were Hinkley Point in Somerset, Dungeness in Kent, Sizewell in Suffolk and Bradwell in Essex. The study concluded that all the sites are at risk from significant sea level rises and storm surges in the future, and therefore are not suitable locations for new reactors.

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<sup>7</sup> FT Editorial 16th Feb 2007 <http://www.ft.com/cms/s/67b43f68-bd1f-11db-b5bd-0000779e2340.html>

<sup>8</sup> FT 23rd Feb 2007 <http://www.ft.com/cms/s/5cd554aa-c2e3-11db-9e1c-000b5df10621.html>

<sup>9</sup> The coordinated guidance can be found at: <http://www.hse.gov.uk/nuclear/reactors/index.htm>

<sup>10</sup> Environment Agency 15th Jan 2007

[http://www.environment-agency.gov.uk/news/1676230?lang=\\_e&region=&projectstatus=&theme=&subject=&searchfor=&topic=&area=&month=](http://www.environment-agency.gov.uk/news/1676230?lang=_e&region=&projectstatus=&theme=&subject=&searchfor=&topic=&area=&month=)

<sup>11</sup> ABC Money 19th Jan 2007 <http://www.abcmoney.co.uk/news/1920078869.htm>

<sup>12</sup> DTI Press Release 22nd Jan 2007

<http://www.gnn.gov.uk/Content/Detail.asp?ReleaseID=258299&NewsAreaID=2>

<sup>13</sup> Sunday Times 28th Jan 2007 <http://www.timesonline.co.uk/newspaper/0..176-2569433.00.html>

<sup>14</sup> BBC 24th Jan 2007 <http://news.bbc.co.uk/1/hi/sci/tech/6292973.stm>

Existing sites in Scotland, such as Torness and Hunterston, are thought to be less threatened than those in the south of England, so this will put even more pressure on whichever Party runs the Scottish Executive after May to allow new reactors to be built. Dr Loraine McFadden from Middlesex Flood Hazard Research Centre said: "Having undertaken this review of existing data, it is hard to escape the conclusion that the most sensible approach would be to reject all nuclear new-build within the dynamic coastal environment."<sup>15</sup>

- 1.10 Another former environmentalist has been expressing support for nuclear power. Patrick Moore, who describes himself as a founder member of Greenpeace has written in the Independent and Express.<sup>16</sup> In fact Moore has not been involved with Greenpeace for twenty years and has recently been receiving funding from the US Nuclear Energy Institute.<sup>17</sup>
- 1.11 The Business magazine reported that EON (owners of PowerGen) and RWE (owners of nPower) the German power giants, are on the point of striking a deal with Westinghouse, to work together on Britain's next generation of nuclear power stations. The companies will submit a joint application for a licence for Westinghouse's AP1000 reactor design. The deal could then be extended to include joint applications for a licence for a particular site and eventually stretch to constructing a new power plant in a consortium. The white paper is expected to trigger licence applications from the world's leading nuclear power plant designers: France's Areva, which designs the European pressurised reactor; Westinghouse; GE Energy; and Atomic Energy of Canada.<sup>18</sup>
- 1.12 The International Energy Agency says Britain must not go ahead with a new generation of nuclear power stations until it has a "clear and robust" plan in place for dealing with the twin problems of decommissioning and waste treatment. It also said that any new nuclear programme must be funded entirely from the private sector, without any government subsidy or market intervention. It said the Government's current proposals for dealing with issues such as planning and construction, long-term waste management and guidance for potential financial backers were "too vague to provide the required certainty".<sup>19</sup>

## 2.0 Nuclear Waste

- 2.1 CoRWM has been working on the three areas which the Government requested advice on in preparation for its own consultation in the summer. These are (1) communities and volunteering; (2) partnerships between the host community and the Implementing Body, and (3) a staged decision making processes for implementing a voluntarism/partnership approach up to the point at which the availability of a potential site is confirmed and detailed characterisation can begin. CoRWM is due to deliver this advice by the end of April, but is only one of a number of organizations reporting to the Government on these subjects.
- 2.2 CoRWM is reconvening of the citizens' panels on 17 and 24 March. The Committee has also been discussing the terms of reference for its successor body. The draft terms of reference would give the new body a limited role and would not allow it to provide the sort of independent overseeing role CoRWM felt was necessary.

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<sup>15</sup> 'The impacts of climate change on nuclear power stations sites'; commissioned by Greenpeace and authored by Middlesex University Flood Hazard Research Centre.

<http://www.greenpeace.org.uk/floodingreport>

<sup>16</sup> Independent 15th Feb 2007 <http://comment.independent.co.uk/commentators/article2271624.ece>

<sup>17</sup> See [http://www.nuclearspin.org/index.php/Patrick\\_Moore](http://www.nuclearspin.org/index.php/Patrick_Moore) and PR Watch 12th Mar 2007

<http://www.prwatch.org/node/5833>

<sup>18</sup> The Business 21st Feb 2007

<http://thebusinessonline.com/Document.aspx?id=D15F0182-2990-4426-A78D-8E9C06A21D3F>

<sup>19</sup> Independent 2nd March 2007 <http://news.independent.co.uk/business/news/article2318799.ece>

- 2.3 Up to two-thirds of the UK landmass, with granite rock, clay or rock salt, is suitable for housing a deep underground nuclear waste repository according to a report from a group of scientists. They met at a Loughborough University seminar in November sponsored by Nirex, the NDA, the British Geological Society and others. The scientists said there are no insurmountable problems to a deep repository.<sup>20</sup>
- 2.4 A new public consultation has been started on the policy for conditioning intermediate level radioactive waste at licensed nuclear sites. Under review is the joint guidance from the Health and Safety Executive, and the Environment Agencies. The guidelines need revision to take account of the NDA's new responsibility for providing a deep geological waste repository.<sup>21</sup>

### 3.0 Nuclear Decommissioning Authority

3.1 The DTI says it has set the budget for the Nuclear Decommissioning Authority for 2007/08 at a level which will allow the Authority to operate with a budget of some £2.47 billion.<sup>22</sup> This actually represents a small increase on the current financial year's budget, which was itself an increase on the 05/06 budget. So, basically the Treasury has agreed to make up the shortfall caused by the accident at THORP, rather than see decommissioning contractors laid off.<sup>23</sup>

3.2 Meanwhile, British Nuclear Group (BNG) has admitted that there will be yet more delay to the re-opening of THORP.<sup>24</sup> Although BNG received consent to restart operations from the NII in January, BNG says checks on downstream equipment associated with the liquid high level wastes are not now expected to be completed until 'the middle of 2007'. The downstream equipment responsible for the further delay is Evaporator C in which the highly active liquors from reprocessing are processed prior to storage in the High Level Waste tanks.<sup>25</sup> THORP has been closed since a leak was discovered in April 2005.

3.3 In the NDA's Lifetime Plan for Sellafield, THORP operations are due to finish in March 2011. With some 4000 tonnes of contracted fuel (Overseas and BE) still to be reprocessed by that date, THORP faces the impossible challenge of reprocessing at a rate of well over 1000 tonnes per year if the contracts are to be fulfilled. The plant has averaged around 550 tonnes per year since it commenced operations in 1994.

3.4 A report into the THORP leak has criticised management after "serious" breaches in regulations. By the time the facility was shut down in April 2005, 83,000 litres of acid containing uranium and plutonium had already escaped from a broken pipe, over the previous 8 months, undetected. NII said significant failings at the plant included staff ignoring alarms. BNG was fined £500,000 last year after it pleaded guilty to breaching the Nuclear Installations Act 1965. In a 28-page report, NII made a total of 55 recommendations and actions for company improvements. It highlighted a lack of a "questioning attitude" or "challenge culture" at the company. It added: "The company fell well below the standard required by the licence conditions and these breaches amounted to serious offences."<sup>26</sup>

<sup>20</sup> <http://www.lboro.ac.uk/departments/cm/research/LTNWM/UK%20Long%20Term%20Nuclear%20Waste%20Management%20Report.pdf>

<sup>21</sup> <http://www.hse.gov.uk/nuclear/wastemanage.htm>

<sup>22</sup> DTI Press Release 22nd Feb 2007

<http://www.gnn.gov.uk/Content/Detail.asp?ReleaseID=266471&NewsAreaID=2>

<sup>23</sup> NDA Statement 22<sup>nd</sup> Feb 2007. [http://www.nda.gov.uk/News--Statement\\_on\\_NDA\\_Budget\\_2007\\_8\\_-\\_22\\_February\\_2007\\_\(2225\).aspx?pg=2225](http://www.nda.gov.uk/News--Statement_on_NDA_Budget_2007_8_-_22_February_2007_(2225).aspx?pg=2225)

<sup>24</sup> See CORE Briefing No. 01/07 <http://www.corecumbria.co.uk/>

<sup>25</sup> Guardian 29th Jan 2007 <http://business.guardian.co.uk/story/0,,2000858.00.html>

<sup>26</sup> BBC 24th Feb 2007 <http://news.bbc.co.uk/1/hi/england/cumbria/6392283.stm>

3.5 In a scathing editorial, the Whitehaven News asked if we are doomed to repeat the mistakes of the past. The NII said "there has been a failure to learn from previous incidents." How often have we heard this? The Mox data falsification scandal involved workers who were supposedly "bored". Sellafield, for one, needed to keep its proverbial nose clean after that. It failed to do so. It seems you can have the world's most sophisticated nuclear technology, safety and fail-safe systems - but you can't legislate for human error. Re-training of staff had to be carried out following the Mox fiasco and it's been same again with Thorp. There are no excuses.<sup>27</sup>

3.6 The Magnox reprocessing plant has also been closed for a few months and is due to re-open during March. The B205 plant also had problems with an evaporator used to process effluents from reprocessing. Small traces of radioactivity were detected in cooling water from the evaporator.<sup>28</sup>

3.7 NM Rothschild has drawn up a shortlist of bidders for Britain's Magnox nuclear sites that includes four US companies and none from Britain. The four US bidders selected to go through to the final rounds are Jacobs, Fluor, CH2M Hill and Energy Solutions. Buying the ten Magnox sites, will cost about £80m, analysts believe. The successful bidder will also get a dowry of two or three years' work cleaning up those Magnox plants that are being decommissioned.<sup>29</sup>

3.8 The security firm Group 4 Securicor has emerged as a surprise bidder in the Government's plan to privatise Sellafield. Seven groups have submitted pre-qualification questionnaires to the NDA. Group 4 has some experience in the nuclear sector it owns a security contractor at a number of American nuclear sites. Several consortia have also formally approached the NDA about buying Sellafield. One is made up of Britain's Amec, Areva of France and America's Washington Group. Another consortia includes Serco plus Bechtel and BWX Technologies. Babcock International is also on the list, as is Fluor, Energy Solutions and CH2M Hill.<sup>30</sup>

## 4.0 Terror

4.1 The US Nuclear Regulatory Commission says nuclear operators should not be expected to stop terrorists from crashing an airliner into a reactor, instead they should focus on limiting radioactive releases and public exposure from any such airborne attack.<sup>31</sup>

4.2 After 9/11, the NRC ordered a "top to bottom" review of nuclear security. As the review progressed, it issued orders and advisories requiring plant owners to implement security upgrades and changes. On January 29, 2007, the NRC's Commissioners voted 5-0 to revise regulations to formally codify all the orders and advisories. Curiously though, the revisions to the regulations explicitly assume that aircraft will not be used in future attacks on nuclear power plants.<sup>32</sup>

<sup>27</sup> Whitehaven News Editorial Comment 1 March 2007

<http://www.whitehaven-news.co.uk/comment/viewarticle.aspx?c=670&id=471497>

<sup>28</sup> Whitehaven News, 1 March 2007

<http://www.whitehaven-news.co.uk/news/viewarticle.aspx?id=471540>

<sup>29</sup> Telegraph 10th March 2007

<http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2007/03/10/cnuclear10.xml>

<sup>30</sup> Telegraph 12th March 2007

<http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2007/03/12/cngroup412.xml>

<sup>31</sup> Guardian 29th Jan 2007 <http://www.guardian.co.uk/us/latest/story/0,,-6379119,00.html>

<sup>32</sup> See Union of Concerned Scientists website: NRC ignores threat of air attack on nuclear plant. [http://www.ucsusa.org/clean\\_energy/nuclear\\_safety/nrcs-revised-security.html](http://www.ucsusa.org/clean_energy/nuclear_safety/nrcs-revised-security.html)

## 5.0 British Energy

5.1 British Energy says it is continuing to look for partners to develop new build nuclear power stations, despite the government's High Court defeat.<sup>33</sup> All existing sites are strong contenders for new nuclear build, because they benefit from links with the electricity grid and a local community dependent on the jobs,<sup>34</sup> and BE is evaluating all sites it owns for their potential for new reactors.<sup>35</sup> BE is willing to partner fellow energy groups, construction companies, even businesses with a high demand for electricity.<sup>36</sup> Hinkley and Sizewell are probably favourites for new reactors, and there might well be two under construction at the same time.<sup>37</sup> The Company says it has received a good response to its invitation – some from companies you would expect, some you wouldn't.<sup>38</sup>

5.2 BE has now applied for permission to reopen Hinkley B, after six months of repair work. The station was closed in September last year for repairs to cracked pipes in the boiler system. The NII is expected to make its decision by the end of March.<sup>39</sup> The Stop Hinkley group has called on the NII to reject the application saying the station should be shut down.<sup>40</sup>

5.3 But the pipe repairs at Hunterston will take a little longer and should be completed by mid-March. However other work on reserve feed water tanks was already planned for April so this will be brought forward to avoid a "double outage". BE has asked the NII for permission to run both plants at only 70% capacity when they do restart. It is still looking into when the units can safely return to full output.<sup>41</sup>

5.4 33 safety incidents were investigated at Torness in 2005, including four emergency shutdowns and incidents involving damaged or faulty safety equipment. The list was released to Alan Beith, the Liberal Democrat MP for Berwick-upon-Tweed, in response to a PQ. Beith says many people will be surprised to discover that there were so many. According to independent nuclear engineer John Large, some of the incidents could have been serious. If undetected, they might have caused injury to workers or, in the worst circumstances, triggered a radiation release. Previously it was reported that 230 incidents at Torness occurred between June 2000 and June 2005, compared with 59 at Hunterston.<sup>42</sup>

<sup>33</sup> Interactive Investor 15th Feb 2007

<http://www.iii.co.uk/news/?type=afxnews&articleid=5978245&subject=economic&action=article>

<sup>34</sup> Bloomberg 30th Jan 2007

[http://www.bloomberg.com/apps/news?pid=20601072&sid=aGsaaDdCU\\_5I&refer=energy](http://www.bloomberg.com/apps/news?pid=20601072&sid=aGsaaDdCU_5I&refer=energy)

Independent on Sunday 11th Feb 2007

<http://news.independent.co.uk/business/news/article2258766.ece>

<sup>35</sup> Telegraph 8th March 2007

<http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2007/03/08/cxbloom08.xml>

<sup>36</sup> Independent 14th Feb 2007

[http://news.independent.co.uk/business/analysis\\_and\\_features/article2268122.ece](http://news.independent.co.uk/business/analysis_and_features/article2268122.ece)

<sup>37</sup> Guardian 14th Feb 2007 <http://business.guardian.co.uk/story/0,,2012400.00.html?gusrc=ticker-103704>

<sup>38</sup> Reuters 5th March 2007

[http://investing.reuters.co.uk/news/articleinvesting.aspx?type=allBreakingNews&storyID=2007-03-05T124838Z\\_01\\_L05642875\\_RTRIDST\\_0\\_BRITISHENERGY-PARTNERS.XML](http://investing.reuters.co.uk/news/articleinvesting.aspx?type=allBreakingNews&storyID=2007-03-05T124838Z_01_L05642875_RTRIDST_0_BRITISHENERGY-PARTNERS.XML)

<sup>39</sup> BBC 5th March 2007 <http://news.bbc.co.uk/1/hi/england/somerset/6421157.stm#>

<sup>40</sup> Western Morning News 10th March 2007

<http://www.thisisdevon.co.uk/displayNode.jsp?nodeId=143663&command=displayContent&sourceNo=143637&contentPK=16847154&folderPk=83098&pNodeid=143738>

<sup>41</sup> Herald 14th Feb 2007 <http://www.theherald.co.uk/business/news/display.var.1190783.0.0.php>

<sup>42</sup> Sunday Herald 4th March 2007 [http://www.robedwards.com/2007/03/fears\\_over\\_nucl.html](http://www.robedwards.com/2007/03/fears_over_nucl.html)

Sunday Herald 4<sup>th</sup> December 2005 [http://www.robedwards.com/2005/12/over\\_200\\_abnorm.html](http://www.robedwards.com/2005/12/over_200_abnorm.html)

## 6.0 Dounreay

6.1 Only about 100 jobs will disappear this year at Dounreay after all. Originally up to 500 jobs, out of a total workforce of 2,200, were threatened as a result of the NDA's financial crisis. The budget for Dounreay clean-up for the forthcoming year (07/08) has been set at approximately £150 million - an increase on the current year's funding,<sup>43</sup> but £20m less than originally asked for<sup>44</sup>. This is £11m more than indicated to UKAEA in November and a lot better than some of the scenarios that they were asked to plan for. UKAEA said it allows the Company to maintain the momentum in accelerated decommissioning and remain on target to complete work by 2033.

6.2 The nature of decommissioning and greater efficiencies that come through experience inevitably mean a reduction in manpower requirements, according to UKAEA – hence the 100 job losses. Projections for a 2033 completion date show a reduction in the site workforce by about a quarter by 2012.

6.3 UKAEA has received planning permission to construct a £100m plant to deal with the most hazardous radioactive waste at Dounreay. Three buildings, covering an area the size of a football pitch, will be built. The largest is the intermediate level waste cementation plant and store, designed to immobilise and encapsulate more than 30 years' worth of intermediate level liquid waste from fast reactor reprocessing and provide for its secure storage. Construction is due to begin in 2008 and 120 jobs should be created. It is expected to take four years to build and commission, allowing waste treatment to be completed by 2017. It is also planned to take parts of reactor components and subject them to cementation.<sup>45</sup>

6.4 UKAEA has started drilling up to 400 boreholes to isolate the notorious waste shaft and allow a cocktail of radioactive and chemical materials to be removed. If all goes according to plan, the project could be completed within 20 years.<sup>46</sup> A specially developed grout will be injected through the boreholes into any fracture in the surrounding rock, creating a giant containment barrier around the shaft. Some 12,000 tonnes of concrete have already been poured to create a working platform at the top of the shaft. UKAEA described this as “one of the biggest clean-up challenges in the world”. Remotely operated equipment will perform the actual withdrawal of the shaft's contents, which will be treated in new purpose-built plants.

6.5 UKAEA admitted it does not know what is in the shaft. A number of small drums at the bottom of the shaft, which originally contained sodium, present a problem. These were dumped in 1959 but nobody knows whether they are intact or not. It is hoped that the sodium, which can explode if wet, has actually leaked out. There was unsupervised fly-tipping into the shaft and workers firing rifles into it to sink polythene bags floating on water, with no regard to the shaft's hazardous contents. Retrieved waste will be put through a shredder which is capable of cutting a car engine block. The liquid and solid wastes would be separated, encased in cement and stored in drums.<sup>47</sup>

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<sup>43</sup> UKAEA Press Release 23<sup>rd</sup> Feb 2007 <http://www.ukaea.org.uk/news/2007/23-02-07.html>

<sup>44</sup> John O Groat Journal 23<sup>rd</sup> Feb 2007 [http://www.johnogroat-journal.co.uk/news/fullstory.php/aid/1675/Doom\\_and\\_gloom\\_allayed\\_by\\_Dounreay\\_settlement.html](http://www.johnogroat-journal.co.uk/news/fullstory.php/aid/1675/Doom_and_gloom_allayed_by_Dounreay_settlement.html)

<sup>45</sup> Herald 23rd Jan 2007 <http://www.theherald.co.uk/news/news/display.var.1139758.0.0.php>  
Scotsman 23rd Jan 2007 <http://thescotsmen.scotsman.com/uk.cfm?id=116182007>

<sup>46</sup> Scotsman 25th Jan 2007 <http://thescotsmen.scotsman.com/scotland.cfm?id=128482007>

<sup>47</sup> Herald 25th Jan 2007

[http://www.theherald.co.uk/search/display.var.1145249.0.noone\\_knows\\_what\\_is\\_left\\_in\\_the\\_dounreay\\_waste\\_shaft.php](http://www.theherald.co.uk/search/display.var.1145249.0.noone_knows_what_is_left_in_the_dounreay_waste_shaft.php)

6.6 In January UKAEA was charged under the Radioactive Substances Act for offences stretching back more than 40 years. They relate to the disposal of radioactive waste at a landfill dump on the site between 1963 and 1975. The UKAEA was also accused of releasing nuclear fuel particles from the site into the surrounding area between 1963 and 1984.<sup>48</sup> When the case reached Wick Sheriff Court, UKAEA plead guilty to the charges<sup>49</sup> and was fined a total of £140,000.<sup>50</sup>

6.7 On 12<sup>th</sup> March 2007, the 90<sup>th</sup> piece of nuclear fuel was found on Sandside Beach. This was the 12<sup>th</sup> particle so far this year, compared with 19 found in the whole of 2006. The rate at which radioactive particles are being found has increased substantially, and the proportion of particles considered by the Dounreay Particles Advisory Group to be relevant to public health has also increased. The Risk Assessment published in the third DPAG Report (2006) needs updating, as it was based on data available only to April, 2004. Clearly, the risk of a member of the public encountering a relevant particle at Sandside is now very significantly greater – possibly up to ten times - than estimated by the DPAG. (DPAG said the risk was only 1 in 80 million).<sup>51</sup>

6.8 Whilst some of the increase in particle finds might be due to improvements in monitoring equipment and area coverage, Dr Philip Day, technical advisor to Sandside Estate, says the increase may also reflect an underlying change in the environmental pattern of behaviour, which is leading to larger, more radioactive, particles appearing at Sandside. Such a trend, if it continues, would necessarily change the risk assessment for the beach. The most radioactive particle found on the beach so far was found on 15<sup>th</sup> February 2007. It had an activity reading of 500,000 Becquerels.<sup>52</sup> SEPA apparently reviewed whether to close off Sandside beach to the public after this particle was found, but decided against the idea.<sup>53</sup> The preferred option for dealing with hot spots in the environment around Dounreay should be announced by the UKAEA in May.

6.9 UKAEA could be facing another legal action for failing to store radioactive waste safely after an incident in which a worker was contaminated with plutonium. The NII has served two improvement notices the Company, obliging it to remedy the problem. Inspectors are also considering sending a report to the procurator fiscal. A worker was found to have accidentally inhaled plutonium while decommissioning an old fuel-processing laboratory on January 12 last year. Subsequent investigations uncovered half a dozen contaminated lead bricks left on a shelf nearby. According to one of the notices issued by the NII, the bricks were stored "without adequate levels of containment", and lacked any labelling.<sup>54</sup>

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<sup>48</sup> John O' Groat Journal 26th Jan 2007 [http://www.johnogroat-journal.co.uk/news/fullstory.php/aid/1496/UKAEA\\_charged\\_over\\_waste\\_management\\_practices.html](http://www.johnogroat-journal.co.uk/news/fullstory.php/aid/1496/UKAEA_charged_over_waste_management_practices.html)

<sup>49</sup> Rob Edwards 6th Feb 2007 [http://www.robedwards.com/2007/02/forty\\_years\\_on\\_.html](http://www.robedwards.com/2007/02/forty_years_on_.html)

<sup>50</sup> John O'Groat Journal 16th Feb 2007 [http://www.johnogroat-journal.co.uk/news/fullstory.php/aid/1627/%A3140.000:\\_Dounreay\\_pays\\_price\\_for\\_years\\_of\\_pollution.html](http://www.johnogroat-journal.co.uk/news/fullstory.php/aid/1627/%A3140.000:_Dounreay_pays_price_for_years_of_pollution.html)

Guardian 16 Feb 2007

<http://www.guardian.co.uk/nuclear/article/0,,2014437,00.html?gusrc=rss&feed=11>

Independent 16th Feb 2007 <http://news.independent.co.uk/uk/legal/article2274487.ece>

<sup>51</sup> Sandside Estate Press Release 22<sup>nd</sup> Feb 2007

<http://www.sandsideestate.com/pressRelease.asp?releaseId=565> and 13<sup>th</sup> March 2007

<http://www.sandsideestate.com/pressRelease.asp?releaseId=567>

<sup>52</sup> Herald 17th Feb 2007 <http://www.theherald.co.uk/news/news/display.var.1200537.0.0.php>

<sup>53</sup> John O Groat Journal 28<sup>th</sup> Feb 2007. [http://www.johnogroat-journal.co.uk/news/fullstory.php/aid/1697/Beach\\_closure\\_ruled\\_out\\_by\\_pollution\\_agency.html](http://www.johnogroat-journal.co.uk/news/fullstory.php/aid/1697/Beach_closure_ruled_out_by_pollution_agency.html)

<sup>54</sup> Sunday Herald 28th Jan 2007

[http://www.sundayherald.com/news/heraldnews/display.var.1152848.0.nuclear\\_plant\\_faces\\_action\\_after\\_worker\\_contaminated.php](http://www.sundayherald.com/news/heraldnews/display.var.1152848.0.nuclear_plant_faces_action_after_worker_contaminated.php)

6.10 Dounreay Stakeholder Group held a special meeting on the February 15 to consider all the evidence from the recent consultation on the Dounreay Site End State. The meeting discussed the merits of spending £138 million to remove radioactive contamination and allow more of the site to be de-licensed - or leave the radioactivity in the contaminated land to decay naturally. The local trades council support early de-licensing. Twenty-three responses were submitted to the consultation, mostly supporting the early release of land. While no decision was made at the meeting, the DSG will now consider all the information with a view to finalising a recommendation at its meeting on March 14 to be submitted to the NDA by the end of March.<sup>55</sup>

6.11 Plans for a new low-level waste facility at Dounreay are being delayed by up to 18 months by SEPA. The UKAEA has applied to Highland Council for planning permission but SEPA says it needs the extra time to scrutinise the proposal properly. It needs the time for a detailed assessment of the first issue of the Environmental Safety Case before it can give its response to the council.<sup>56</sup> SEPA points out that this is the first application in the UK for a modern waste facility.<sup>57</sup>

## 7.0 Trident

7.1 THE Prime Minister, senior civil servants and military commanders would all be imprisoned for threatening to use nuclear weapons under controversial new laws proposed at the Scottish Parliament yesterday. Michael Matheson, the SNP MSP, launched a bill that would make it illegal for anyone to prepare or command a nuclear attack under Scottish law. This would make it impossible for the Westminster government to maintain Trident, the arsenal of nuclear warheads currently based on the Clyde.<sup>58</sup>

7.2 The government's decision to replace Britain's nuclear submarine fleet is "highly premature", an expert from the United States told the House of Commons Defence Select Committee in January. Richard Garwin, an architect of the first hydrogen bomb, questioned a claim that work must start soon on replacing the ageing Vanguard-class subs.<sup>59</sup>

7.3 Britain appears to have changed its nuclear doctrine and narrowed the set of circumstances under which it would contemplate using nuclear weapons. Des Browne, defence secretary, said Britain's nuclear arms "should not be used for anything other than deterring extreme threats to our national security". The country would not use them to coerce or provoke others, or use them as part of military conflict, he said.<sup>60</sup> But they could be used against a "rogue state" which sponsored a nuclear terror attack on vital UK interests.<sup>61</sup> Some MPs believe the government's new "insurance policy" against nuclear blackmail may put the UK in breach of the 1968 non-proliferation treaty.<sup>62</sup> The House of Commons Defence Select Committee warned against any "lowering of the threshold" for launching Britain's nuclear

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<sup>55</sup> See [http://www.ukaea.org.uk/sites/dounreay\\_end\\_state.htm#decision](http://www.ukaea.org.uk/sites/dounreay_end_state.htm#decision)

<sup>56</sup> SEPA report to the Dounreay Stakeholder Group, March 2007.

<http://www.dounreaystakeholdergroup.org/display.php?doc=280>

<sup>57</sup> For information about the UKAEA application to build a low level radioactive waste disposal facility at Dounreay, see <http://www.ukaea.org.uk/radioactivity/dounreay/llw/index.htm>

<sup>58</sup> BBC 9<sup>th</sup> Jan 2007 [http://news.bbc.co.uk/1/hi/scotland/highlands\\_and\\_islands/6243639.stm](http://news.bbc.co.uk/1/hi/scotland/highlands_and_islands/6243639.stm)

<sup>59</sup> Guardian 24th Jan 2007 <http://www.guardian.co.uk/guardianpolitics/story/0,,1997190,00.html>

<sup>60</sup> FT 26th Jan 2007

[http://www.ft.com/cms/s/0059c3a8-ace2-11db-9318-0000779e2340,\\_i\\_rssPage=34c8a8a6-2f7b-11da-8b51-00000e2511c8.html](http://www.ft.com/cms/s/0059c3a8-ace2-11db-9318-0000779e2340,_i_rssPage=34c8a8a6-2f7b-11da-8b51-00000e2511c8.html)

<sup>61</sup> Metro 6th Feb 2007 [http://www.metro.co.uk/news/article.html?in\\_article\\_id=36329&in\\_page\\_id=34](http://www.metro.co.uk/news/article.html?in_article_id=36329&in_page_id=34)

<sup>62</sup> Guardian 7th Feb 2007 <http://politics.guardian.co.uk/homeaffairs/story/0,,2007376,00.html>

weapons. The committee said that the Government's deliberate ambiguity over exactly when it would mount a nuclear strike should not be a cloak for widening the circumstances in which nuclear weapons would be used.<sup>63</sup>

7.4 The Committee also said the offer to cut the number of nuclear warheads in Britain's arsenal when replacing the Trident system was an empty gesture with no clear military or legal significance.<sup>64</sup> And proposals to maintain the deterrent are not necessarily legally justifiable.<sup>65</sup>

7.5 The real cost of maintaining and replacing the Trident nuclear weapons system over the next 50 years could top £100 billion. A new analysis of projected spending based on official figures suggests that the cost of buying and operating a successor to Trident will be around £70bn. Added to that, there is the £30bn it will cost to keep the existing warheads in service until 2023. This contrasts with the £15bn-20bn highlighted by Blair and other ministers as the cost of buying a replacement to Trident.<sup>66</sup>

7.6 The constituents of both the Chancellor and the Scottish Secretary are heavily opposed to renewal of Britain's nuclear deterrent, according to a poll. The survey of people in Kirkcaldy and Paisley, represented at Westminster by Gordon Brown and Douglas Alexander, was carried out for Greenpeace.<sup>67</sup>

7.7 Claims that Britain cannot expect other countries to refrain from developing nuclear weapons if it upgrades its Trident missile system have been dismissed by the Government. Armed Forces Minister Adam Ingram said claims by Mohammed El Baradei, who leads the International Atomic Energy Agency, that the West risked losing its moral authority when criticising states such as Iran were "wrong."<sup>68</sup>

7.8 CND published a response to the PLP Brief "Maintaining the UK's Nuclear Deterrent".<sup>69</sup>

7.9 A regional exchange of relatively small nuclear weapons could plunge the world into a decade-long "nuclear winter", destroying agriculture and killing millions, according to a new study.<sup>70</sup>

7.10 Government plans to replace the £65bn Trident nuclear weapons system face a legal challenge in the High Court that could force a re-think of Britain's policy on its nuclear deterrent. Lawyers for the anti-nuclear campaign group the Nuclear Information Service (NIS) have warned ministers that a new nuclear weapons facility would contravene international law. Backed by a legal opinion from the international law expert Michael Fordham QC, the NIS also claims the Government is in breach of its legal duty to adequately

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<sup>63</sup> BBC 7th March 2007 [http://news.bbc.co.uk/1/hi/uk\\_politics/6424045.stm](http://news.bbc.co.uk/1/hi/uk_politics/6424045.stm)

<sup>64</sup> Scotsman 7th March 2007 <http://thescotsman.scotsman.com/politics.cfm?id=361542007>

<sup>65</sup> View London 7th March 2007

[http://news.viewlondon.co.uk/MPs\\_question\\_nuclear\\_deterrent\\_legality\\_18081020.html](http://news.viewlondon.co.uk/MPs_question_nuclear_deterrent_legality_18081020.html)

<sup>66</sup> Sunday Herald 11th Feb 2007

[http://www.sundayherald.com/news/heraldnews/display.var.1185412.0.replacing\\_trident\\_system\\_to\\_cost\\_100bn.php](http://www.sundayherald.com/news/heraldnews/display.var.1185412.0.replacing_trident_system_to_cost_100bn.php)

See CND Briefing, "The Cost of British Nuclear Weapons" March 2007

<http://www.cnduk.org/pages/binfo/Costs07.pdf>

<sup>67</sup> Herald 23rd Feb 2007 <http://www.theherald.co.uk/politics/news/display.var.1213882.0.0.php>

<sup>68</sup> Guardian website 26th Feb 2007 <http://www.guardian.co.uk/uklatest/story/0,,-6440619,00.html>

<sup>69</sup> Response to the PLP Brief "Maintaining the UK's Nuclear Deterrent", CND 15<sup>th</sup> Feb 2007

<http://www.cnduk.org/pages/binfo/plpresponse.pdf>

<sup>70</sup> New Scientist 1st March 2007

<http://environment.newscientist.com/article/dn11287-nuclear-winter-may-kill-more-than-a-nuclear-war.html>

consult on its proposals.<sup>71</sup>

7.11 William Walker, Professor of International Relations says the government envisages new Trident submarines being introduced in the late 2020s and operating into the 2050s. Over the same period, it is likely either that Scotland will become an independent state or that the Union will survive through a more extensive devolution of powers to the Scottish parliament. This is a safe prediction given the strength of forces impelling greater political autonomy north and south of the border. Nowhere does the white paper consider these changes and their implications. They matter because the government's proposals would perpetuate the basing of all British nuclear weapons in Scotland (there are none in England). Tens of billions of pounds could be spent providing a nuclear deterrent for a state that no longer exists, or a deterrent that could become increasingly unreliable and even inoperable under devolution.<sup>72</sup>

## 8.0 Miscellaneous

8.1 Scottish Power will be holding an EGM to decide whether to approve its takeover by Spanish utility Iberdrola in Glasgow on 30 March 2007, now that the European Commission has approved the deal. Although much of the media focus has been on how well Scottish Power will fit with Iberdrola, because both companies are extremely involved with the promotion of wind power – Iberdrola claims to be the world's leading wind company – the Spanish utility is also part owner of seven nuclear reactors in Spain. The Company is also a member of the World Nuclear Association and the Spanish Nuclear Industry Forum, and has links with the American nuclear lobby group – the Nuclear Energy Institute. Together with Alstom, Iberdrola has just won a contract to modernise Mexico's Laguna Verde nuclear power station. Scottish Power has not demonstrated any great enthusiasm for new nuclear reactors in Scotland, and says it does not believe there needs to be any major programme of nuclear construction announced as a result of the Energy Review. It would be unfortunate if Iberdrola's purchase of Scottish Power meant the utility joined other UK utilities in lobbying for a nuclear renaissance.<sup>73</sup>

8.2 The European Commission published a series of energy review documents in January that used many of the nuclear industry's arguments on why nuclear power can contribute to dealing with climate change, in an attempt to influence the debate across Europe about whether or not to begin new reactor construction. On the other hand, they only recommended the establishment of a High Level Group on Nuclear Safety and Security which effectively kicks the issue into the long grass.

8.3 Scotland was reported to be on the brink of a power crisis at the end of January after a coal-bearing conveyor belt collapsed at Longannet. Emergency legislation was rushed through the Scottish Parliament to allow power station to burn gas as well as coal. The Longannet shutdown triggered a "nightmare scenario" because Hunterston B nuclear station is also currently shut down.<sup>74</sup>

8.4 THE NHS is set to appeal to the House of Lords in a last-ditch attempt to stop the publication of child leukaemia statistics. Officials in the NHS Common Services Agency (CSA) have opted not to accept a court of session ruling which ordered the body to hand over

<sup>71</sup> Independent 9th March 2007 <http://news.independent.co.uk/uk/legal/article2341376.ece>

<sup>72</sup> FT 9th March 2007

[http://www.ft.com/cms/s/flcd0ad2-cd9f-11db-839d-000b5df10621.Authorised=false.html?\\_i\\_location=http%3A%2F%2Fwww.ft.com%2Fcms%2Fs%2Fflcd0ad2-cd9f-11db-839d-000b5df10621.html&\\_i\\_referer](http://www.ft.com/cms/s/flcd0ad2-cd9f-11db-839d-000b5df10621.Authorised=false.html?_i_location=http%3A%2F%2Fwww.ft.com%2Fcms%2Fs%2Fflcd0ad2-cd9f-11db-839d-000b5df10621.html&_i_referer)

<sup>73</sup> <http://www.nuclearspin.org/index.php/Iberdrola>

<sup>74</sup> Scotland on Sunday 28th Jan 2007

<http://scotlandonsunday.scotsman.com/scotland.cfm?id=145612007>

the secret data. The legal move is the first time a public body has taken a freedom of information (FoI) dispute to the UK's final court of appeal. The saga began when a researcher for Green MSP Chris Ballance, asked the CSA in January 2005 for records of leukaemia in under-15s in Dumfries and Galloway. He wanted to know if there were any cancer hotspots next to the Chapelcross nuclear plant or the Dundrennan military range. There have long been suspicions that clusters of the potentially fatal blood cancer could have been caused by radioactive pollution.<sup>75</sup>

8.5 Nicol Stephen told his party's Scottish conference in Aviemore that he wanted to turn Scotland into the renewable energy powerhouse of Europe. A Scottish energy bill would be published in September containing plans for 100% of electricity to be generated from renewables by 2050.<sup>76</sup> The Deputy First Minister later announced a £13m funding package to allow a number of marine energy devices to be tested at the European Marine Energy Centre on Orkney.<sup>77</sup>

8.6 Half of the world's energy needs in 2050 could be met by renewables and improved efficiency, according to a new study commissioned by Greenpeace. It said alternative energy sources, such as wind and solar, could provide nearly 70% of the world's electricity and 65% of global heat demand. Following a "business as usual" scenario would see demand for energy double by 2050, the authors warned.<sup>78</sup>

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<sup>75</sup> Sunday Herald 4th Feb 2007

[http://www.sundayherald.com/news/heraldnews/display.var.1168479.0.nhs\\_defiant\\_on\\_publishing\\_chi\\_ld\\_leukaemia\\_figures.php](http://www.sundayherald.com/news/heraldnews/display.var.1168479.0.nhs_defiant_on_publishing_chi_ld_leukaemia_figures.php)

<sup>76</sup> BBC 17th Feb 2007 <http://news.bbc.co.uk/1/hi/scotland/6370379.stm>

<sup>77</sup> Scottish Executive Press Release 20th Feb 2007

<http://www.scotland.gov.uk/news/releases/2007/02/20091751>

<sup>78</sup> BBC 25th Jan 2007 <http://news.bbc.co.uk/1/hi/sci/tech/6298467.stm>

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