

# **SAFE ENERGY E-JOURNAL No.56**

## **August 2012**

*The content of this e-journal was for the most part originally prepared for Nuclear Free Local Authorities and is reproduced, as adapted, with their permission but without liability for its contents.*

This briefing does not deal with the UK Government's proposed new reactor programme. For an update on the so-called "facilitative actions" see here:

<http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo43.pdf>

### **1. Scottish Parliamentary Matters**

The Scottish Parliament's Economy, Energy and Tourism Committee carried out an inquiry into whether renewable targets are achievable. Launched in January 2012, the Committee will consider a draft report after the summer recess in September. Scottish Renewables – the Renewable Industry Trade body, WWF Scotland and FoE Scotland all gave evidence on 14<sup>th</sup> March. (1)

#### **100% Renewable Electricity**

All three agreed that we can meet the 100% target set by the Scottish Government for 2020, and by doing so achieve a massive reduction in carbon emissions from the power sector, create thousands of jobs and establish a major new export sector, which would export power, technology and skills. Meeting the target would also contribute to the development of communities across Scotland. Finally, it would reverse our growing dependence on energy imports, which in turn would protect consumers from further increases in gas prices. Today there are 7 gigawatts (GW) of renewable electricity projects operational, under construction or consented; another 4 GW awaiting planning permission and 17GW in the pipeline – a total of nearly 30GW. The current target to generate the equivalent of 100% of Scotland's own electricity demand from renewables equates to 16GW. (2)

The Government is also committed to enabling local and community ownership of at least 500 MW of renewable energy by 2020.

#### **Renewable Heat**

The Scottish Government is committed to a largely decarbonised heat sector by 2050 with significant progress by 2030. The current target of meeting just 11% heat demand with renewables by 2020 is clearly not sufficient to significantly reduce emissions in line with the 2030 milestone. Heat accounts for almost half of Scotland's carbon emissions, more than half of Scotland's energy use and 60% of energy costs for Scotland's households. A move to renewables for heating could pull many people out of fuel poverty especially as a third of all homes in Scotland are off the gas grid. WWF Scotland believes that at least 14% of the heating requirement for Scotland's homes should come from renewables by 2020 compared with about 5.5% under the current plans (with the rest of the 11% target coming from the industrial and commercial sectors).

High ambitions for renewable heat are unlikely to be met without a substantial contribution from district heating as well as domestic scale renewable heat. However, there are significant barriers to delivering schemes under current market conditions. The planning system is not generally friendly towards these types of complex projects. We need to do quite a bit to make them happen. Over the next ten to twenty years we will need to see a massive role out of district heating infrastructure. In one scenario developed by Element Energy 350, 000 Scottish dwellings need to be connected to

renewables fed district heating by 2030. This is roughly equivalent to half the households in Dundee, Aberdeen, Edinburgh and Glasgow.

### **Local Energy Companies**

On 29<sup>th</sup> March 2012 the Greens brought forward a debate in the Scottish Parliament on local energy companies. Patrick Harvie MSP said the transformation in our energy system will require a huge amount of work with the private sector playing a central role. But there is a case for keeping a share of this new, growing industry in the hands of the public and communities, and the Scottish Government needs to take a more proactive approach to ensure this happens. This would generate revenue for public services and build public support for an important industry that can be made to serve the common good. (3)

Local Authorities have the power to be transformative by establishing decentralised energy and heat networks. We need serious political momentum behind the decentralised energy and heat movement. Local authorities are best placed to lead on that by investing in low-carbon and passive housing with microrenewables to achieve a long-term energy supply for the community. With the power of the public sector, we could generate energy. There are some examples of local government trying to develop models such as Aberdeen Heat and Power, which is a not-for-profit company that was set up by Aberdeen City Council 10 years ago. The carbon emissions from the buildings involved have been reduced by about 45%, and typical fuel costs to tenants have been reduced by more than 50%. A local energy company could promote energy efficiency, develop new technologies, produce and supply energy and acquire and hold interests in other companies e.g. by setting up a joint-venture company.

The renewable energy investment fund (REIF), which was announced on 22<sup>nd</sup> March will have elements of district heating and community renewables within its remit. (4) Alongside the REIF, Energy Minister Fergus Ewing also announced a further £2 million support for community renewables for 2012-13.

The Scottish Futures Trust (SFT) and COSLA have been working to highlight examples of public sector involvement in renewables and the main commercial structures for local authorities to take forward schemes. (5) The "*Report on the Commercial Aspects of Local Authority Renewable Energy Production*" gives a raft of advice on the appropriate commercial structure for a project, procurement contracts and tendering, as well as the use of frameworks for the design, installation, operation and maintenance of renewables facilities. A paper by Respublica called "*Re-energising Our Communities: Transforming the energy market through local energy production*" shows how communities can work together to produce energy for the common good. (6)

### **Fuel Poverty**

The Economy, Energy and Tourism Committee published a report on fuel poverty in February. There were an estimated 658,000 households in fuel poverty in Scotland in 2010, equivalent to 28% of all households. This figure could be as high as 900,000 by the end of 2011. The Scottish Government has a statutory commitment "to eradicate fuel poverty, as far as is reasonably practicable, by November 2016".

A key issue for the Committee was the real or imagined barriers that are preventing people from accessing the Scottish and UK Government schemes that are available to help reduce fuel poverty, and possible solutions to overcome these obstacles. The Committee found that there are a variety of reasons why people do not access the schemes, such as free insulation, on offer. One reason is a breakdown of trust between the public and the energy companies leading to a lack of take-up for energy efficiency offers. One method suggested by a number of witnesses to tackle the lack of trust was through the use of trusted intermediaries such as home helps.

A key area of concern is bringing the private sector housing up to an acceptable standard. Kevin Christie of Aberdeen City Council told the Committee that one way of achieving this was through the introduction of a Scottish housing quality standard for private rented property.

At neither Scottish nor UK level are we seeing the necessary funding to tackle fuel poverty. A combined budget of at least £200 million per annum from public and private sources for fuel poverty measures is the level recommended as necessary by Energy Action Scotland to meet the 2016 fuel poverty target in Scotland. It may cost upwards of £16 billion by 2020 to bring Scottish homes up to the standards required to meet the emissions targets set by the climate change legislation. (7)

- (1) <http://www.scottish.parliament.uk/parliamentarybusiness/28862.aspx?r=6914>
- (2) WWF Submission, March 2012  
[http://www.scottish.parliament.uk/S4\\_EconomyEnergyandTourismCommittee/Inquiries/WWF\\_Scotland.pdf](http://www.scottish.parliament.uk/S4_EconomyEnergyandTourismCommittee/Inquiries/WWF_Scotland.pdf)
- (3) Official Report 29<sup>th</sup> March 2012  
<http://www.scottish.parliament.uk/parliamentarybusiness/28862.aspx?r=6941&mode=pdf>
- (4) Scottish Government Press Release 22<sup>nd</sup> March 2012  
<http://www.scotland.gov.uk/News/Releases/2012/03/renewableenergyinvestmentfund22032012>
- (5) Scottish Futures Trust Report on Commercial Aspects of Local Authority Renewable Energy Production. August 2011 (but only just put on the web)  
<http://www.scottishfuturestrust.org.uk/docs/646/Report%20on%20the%20Commercial%20Aspects%20of%20Local%20Authority%20Renewable%20Energy%20Production.pdf>
- (6) <http://respublica.org.uk/item/Re-energising-Our-Communities-Transforming-the-energy-market-through-local-energy-production->
- (7) Economy Energy and Tourism Committee report on Fuel Poverty, 22<sup>nd</sup> Feb 2012  
[http://www.scottish.parliament.uk/S4\\_EconomyEnergyandTourismCommittee/Inquiries/eeR12-01.pdf](http://www.scottish.parliament.uk/S4_EconomyEnergyandTourismCommittee/Inquiries/eeR12-01.pdf)

## **2. Nuclear Plant Life Extensions**

The Scottish Government's Electricity Generation Policy Statement (1) (EGPS), published on 5<sup>th</sup> March 2012 makes clear the 100% renewable electricity target does NOT mean that Scotland will be 100% dependent on renewables. Renewable generation will be backed up with thermal generation progressively fitted with carbon capture and storage – ensuring Scotland's future electricity needs can be met without the need for new nuclear power stations. While "*existing nuclear power stations should be phased out as they reach the end of their safe operating lives*" this doesn't preclude extending the life of existing stations.

EDF Energy announced in February that it expects to extend the operating lives of all 14 of its UK advanced gas-cooled reactors (AGRs) – four of which are in Scotland - by an average of seven years. EDF said it: "*...has completed a further technical review of the potential life limiting plant areas. Subject to the necessary formal reviews and approvals in due course, EDF Energy is now expecting an average of 7 years across all of the Advanced Gas Reactor (AGR) stations.*"

The UK Office for Nuclear Regulation (ONR) does not have a formal decision-making process on life extensions. Instead it is considered when each reactor undergoes its periodic safety review every 10 years. ONR will tell the nuclear operator what modifications it needs to make to keep the station running, then the operator decides whether implementing the required changes is economic. (2) ONR says it is working with EDF Energy to extend the life of its nuclear power stations and that it is "*content for the plants to continue to operate*", as long as they pass regular safety tests. (3)

EDF says it will decide by 2013 whether to extend the life of Hunterston B (and its sister station Hinkley B) beyond the current 2016 closure date. (4) The decision will hinge on the commercial viability of the plants after the safety review by ONR. It has been pointed out at Westminster that Electricity Market Reforms will give existing nuclear reactors a windfall of at least £1bn through the carbon floor price. (5)

- (1) Electricity Generation Policy Statement, 5<sup>th</sup> March 2012  
<http://www.scotland.gov.uk/Resource/0038/00389294.pdf>
- (2) i-Nuclear 16<sup>th</sup> February 2012 <http://www.i-nuclear.com/2012/02/16/urgent-and-speedy-action-still-needed-on-uk-new-build-despite-edf-plant-life-extension/>
- (3) Guardian 22<sup>nd</sup> May 2012 <http://www.guardian.co.uk/environment/2012/may/21/nuclear-reactor-reeve-energy-plans-doubt>
- (4) Bloomberg 22<sup>nd</sup> May 2012 <http://www.bloomberg.com/news/2012-05-22/edf-to-decide-on-whether-to-extend-u-k-reactors-lives-by-2013.html>
- (5) See Westminster Manoeuvres, NuClear News No. 31  
<http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo31.pdf>

### 3. Dounreay

#### **Radioactive particles on beaches**

Since 1983 almost 500 radioactive particles have been found on three local beaches near the Dounreay nuclear facility in Cailthness and the Dounreay foreshore. More than 200 of these have been found on the publicly accessible Sandside beach. A particle found on Sandside beach in February was reported to be possibly the most radioactive yet. The Dounreay website shows that the particle in question is still undergoing analysis, but if the initial findings are confirmed it could turn out to be the first “significant” particle found on that beach. (1)

“Significant” particles are classed as those with a radioactivity greater than a million Becquerels of caesium 137. According to Dounreay Site Restoration Ltd (DSRL), such particles could cause visible effects within a few hours if kept in stationary contact with skin and “serious ulceration” after one to two weeks. In this case the particle had an unusual chemical make-up with most of the radioactivity coming from strontium rather than caesium. (2)

A spokesman for DSRL said it was the first time a particle classed as significant - the highest classification in terms of radioactivity - had been found on the beach, although many had been found on the seabed and foreshore at Dounreay as well as on the site itself. Despite this the Scottish Environment Protection Agency still felt that public access to the beach should continue, given the current level of monitoring carried out and the number of finds to date. (3)

Although Sandside beach is publicly accessible, it is privately owned. Now the owner, Geoffrey Minter faces bankruptcy after fighting various legal battles over recent years related to the radioactive contamination of his land. He says he faces losing his 10,000-acre estate after a panel set up by the government to assess financial compensation only awarded him a fraction of the amount he believed he was due. The value of his land has declined as a result of the particle find, and he has spent tens of thousands of pounds on legal fees fighting his case over the last 14 years. (4) The Sandside Estate was put on the market in June for £2.45 million, but without the beach. (5)

A friend of Minter, who bought the estate in 1990, said the panel’s decision had been “devastating” for him and his family. *“This has been a shameful business. First, Dounreay pollutes Sandside beach with hundreds of radioactive particles. Then it drags its feet over reaching a fair settlement and clean-up plan, then it eventually bleeds Geoffrey dry and drives him into bankruptcy.”*

- (1) DSRL Press Release 20<sup>th</sup> Feb 2012 <http://www.dounreay.com/news/2012-02-20/dsrl-informs-sepa-of-potentially-significant-particle-find>  
Herald 21st Feb 2012 <http://www.heraldscotland.com/news/home-news/highly-radioactive-particle-found-on-dounreay-beach.16812181>
- (2) John O Groat Journal 22nd Feb 2012 <http://www.johnogroat-journal.co.uk/News/Hottest-radiocative-spot-so-far-turns-up-at-Sandside-21022012.htm>
- (3) Scotsman 21st Feb 2012  
[http://www.scotsman.com/news/environment/major\\_radioactive\\_find\\_at\\_dounreay\\_beach\\_1\\_2128558](http://www.scotsman.com/news/environment/major_radioactive_find_at_dounreay_beach_1_2128558)

- (4) Scotland on Sunday 8<sup>th</sup> April 2012 <http://www.scotsman.com/news/scottish-news/top-stories/scots-laird-facing-ruin-after-dounreay-nuclear-blast-1-2222849>
- (5) Scotsman 29<sup>th</sup> June 2012 <http://www.scotsman.com/lifestyle/heritage/highland-estate-in-dounreay-radiation-row-up-for-sale-1-2383156>

## Radioactive particles on the seabed

Radioactive particles were also discovered on the seabed in 1997. As a result a fishing ban was implemented to prevent the removal of fish, crustaceans and molluscs in an area of 2km (1.2 mile) radius centred on the disused Dounreay discharge point near where the highest density of particles has been detected. The particles lie in a "plume" on the seabed spread over an area equivalent in size to that of 600 Olympic swimming pools. The fragments are thought to be the source of nuclear material found on nearby beaches. Originating from the reprocessing of nuclear fuel, they were pumped into the sea up to 50 years ago.

Underwater clean-up started in August 2008, targeting a 60-hectare area of seabed where the most hazardous particles are found. By the end of 2011, more than 1800 particles had been removed from the seabed. Of these, 395 were deemed "significant" in terms of their potential health effects. (1) The clean-up operation can only take place during the summer months. It was resumed again in May this year for the third consecutive year. (2) By the end of 2012 it is hoped that all 60 hectares will have been covered by the underwater detection and retrieval system. (3) Up to 8<sup>th</sup> July 2012 a further 173 particles were recovered, ten of which were significant. (4)

Worryingly SEPA has decided to give up on its aim of returning the seabed to a "pristine condition". The Agency has admitted that the contamination will never be completely cleaned up. To do so, it said, could cause "more harm than good". SEPA opted instead to encourage remediation "as far as is practically achievable" but to abandon any hope of removing all the radioactive pollution from the seabed. (5)

Now Dounreay's experience of cleaning-up of radioactive particles from the seabed could help Japan deal with its earthquake-hit Fukushima nuclear plant. Dounreay staff have travelled to Japan to offer advice on their clean-up effort. (6)

- (1) Particle Clean-up DSRL website, accessed August 2012 <http://www.dounreay.com/particle-cleanup>
- (2) STV 1st May 2012 <http://news.stv.tv/highlands-islands/305593-work-resumes-to-remove-nuclear-fuel-from-seabed-close-to-dounreay/>
- (3) DSRL 29<sup>th</sup> May 2012 <http://www.dounreay.com/news/2012-05-29/particle-recovery-work-resumes-offshore>
- (4) Particles Progress Report January to July 2012 [http://www.dounreay.com/UserFiles/File/Particle%20-%20review%20of%20local%20beach%20monitoring/DSG\\_2012\\_C059\\_Particles%20progress%20report%20Jan%20to%20July%202012.pdf](http://www.dounreay.com/UserFiles/File/Particle%20-%20review%20of%20local%20beach%20monitoring/DSG_2012_C059_Particles%20progress%20report%20Jan%20to%20July%202012.pdf)
- (5) Guardian 21st September 2011 <http://www.guardian.co.uk/environment/2011/sep/21/scottish-nuclear-leak-clean-up?CMP=EMCENVEM1631>
- (6) Scotsman 5th June 2012 <http://www.scotsman.com/news/environment/dounreay-nuclear-clean-up-experts-to-advise-japan-1-2337921>

## Waste Transports to Cumbria

**NB.** Spent fuel from nuclear reactors, whether at Dounreay, Torness or Hunterston, is not officially defined as "waste" – because it supposedly contains "useful" plutonium and unused uranium.

The Nuclear Decommissioning Authority (NDA) published a Credible Options Study for consultation in February. This covered a second batch of nuclear materials at Dounreay referred to as 'exotics', which the Authority would clearly prefer to transfer to Sellafield. (1) The NFLA responded to the consultation in March. (2)

An earlier proposal to move “breeder material” by train from Dounreay to be reprocessed in the old Magnox reprocessing plant at Sellafield was approved last November. (3) Trains were expected to start moving over the summer. (4) Forty-four tonnes will be moved in about 40 journeys between Scotland and Cumbria over a four or five year period. (5) NFLA responded to the consultation on this proposal in August 2011. (6) This material formed the uranium-238 blanket in the Prototype Fast Reactor at Dounreay, so it is not thought to be terribly radioactive, but there is concern the plutonium formed by the neutron bombardment of the uranium could be a prime target for theft. The NDA says the exact timing of the trains and security measures will remain confidential.

Nuclear engineer John Large condemned these proposed transports. He said: “*We’re talking about bomb-grade material that would be a target for terrorists. It is also fuel from an experimental reactor which will have got broken up and will have been in storage in an uncertain condition. It will be very difficult to inspect it before it is transported and the only safeguard is based on their assumption that they would not encounter an accident with a big enough impact to break open the flask.*” (7)

But this breeder material represents only half of the stock of nuclear fuel Dounreay would like to get rid of. (8) If this new proposal is approved a total of around 100 tonnes of material including plutonium and bomb-grade highly enriched uranium would be transferred from Dounreay to Sellafield. (9) Transporting it to Sellafield will take between 30 to 60 train journeys during a six year period beginning in 2014/15 while treating the material on site will mean the construction of suitable facilities, which would take between eight and 10 years to build. (10)

HIGHLAND councillors have agreed that if "exotic" nuclear fuel material is to be moved from Dounreay to Sellafield, it should be transported by rail rather than road. But they also want any money saved in sending it to the Cumbrian plant, rather than building a new facility at Dounreay, to be invested in Caithness. (11)

Construction is already under way of a rail terminal at Georgemas Junction, Halkirk, to allow the first 44 tonnes of nuclear material to start leaving Dounreay later this year. (12)

- (1) NDA 7<sup>th</sup> February 2012 <http://www.nda.gov.uk/news/exotics-dounreay.cfm>
- (2) NFLA March 2012  
[http://www.nuclearpolicy.info/docs/radwaste/NFLA\\_RWB\\_33\\_Dounreay\\_exotic\\_fuels.pdf](http://www.nuclearpolicy.info/docs/radwaste/NFLA_RWB_33_Dounreay_exotic_fuels.pdf)
- (3) STV 21st November 2011 <http://news.stv.tv/scotland/highlands-islands/281153-trains-will-transportnuclear-fuel-from-dounreay/>
- (4) BBC 21st Nov 2011 <http://www.bbc.co.uk/news/uk-scotland-highlands-islands-15825467>
- (5) Carlisle News and Star 22<sup>nd</sup> Nov 2011 <http://www.newsandstar.co.uk/news/nuclear-fuel-to-be-taken-by-train-through-cumbria-from-scotland-1.899495?referrerPath=/news-round-up-1.50001>
- (6) See [http://www.nuclearpolicy.info/docs/radwaste/NFLA\\_RWB\\_29\\_Dounreay\\_report.pdf](http://www.nuclearpolicy.info/docs/radwaste/NFLA_RWB_29_Dounreay_report.pdf)
- (7) John O Groat Journal 23<sup>rd</sup> November 2011 <http://www.johnogroat-journal.co.uk/News/Green-light-for-transfer-of-spent-nuclear-fuel-from-Dounreay-22112011.htm>
- (8) DSRL 21<sup>st</sup> Nov 2012 <http://www.dounreay.com/news/2011-11-21/nda-to-begin-returning-fuel-to-uk-stocks>
- (9) STV 8<sup>th</sup> February 2012 <http://news.stv.tv/highlands-islands/296866-activists-blast-nuclear-waste-disposal-plan/>
- (10) New Civil Engineer 10<sup>th</sup> February 2012 <http://www.nce.co.uk/news/energy/dounreay-sets-out-options-for-exotics-nuclear-material/8626195.article>
- (11) BBC 14<sup>th</sup> March 2012 <http://www.bbc.co.uk/news/uk-scotland-highlands-islands-17371838>
- (12) BBC 20<sup>th</sup> March 2012 <http://www.bbc.co.uk/news/uk-scotland-highlands-islands-17444384>

## **Nuclear Dustbin**

Scottish ministers have been forced to agree to foreign waste being stored in Scotland rather than being sent back to its country of origin. Up to 450 cubic metres of waste – equivalent in size to three double-decker buses – which arose from spent nuclear fuel reprocessing contracts Dounreay carried out for Italy, Belgium, Australia and Germany will remain at Dounreay rather than being sent back as

originally expected. The countries which sent material to Scotland are entitled to receive their waste in a form that meets their own transport and storage safety standards. And they are not willing to accept cement drums. Instead, most are expected to demand vitrified waste – the material turned into glass and sealed in stainless steel canisters, which is produced at Sellafield. This is known as “waste substitution”. (1)

- (1) STV 21<sup>st</sup> March 2012 <http://news.stv.tv/highlands-islands/301233-fears-dounreay-could-become-worlds-nuclear-dustbin/>

### **Clean-Up Costs**

THE cost of decommissioning and cleaning up Dounreay has been halved and the site will be cleared about 40 years earlier than planned, according to the NDA. A contract worth between £1.5 billion and £2 billion, has been awarded to the Babcock Dounreay Partnership, a consortium of Babcock International Group, CH2M Hill and URS. This will accelerate the clean-up and demolition of the nuclear site. The work had been expected to cost about £4 billion and take until 2063 but is now scheduled for completion between 2022 and 2025. (1) (2)

The NDA says it is competition for the decommissioning contract which has brought down the cost. The appointment of a new consortium, the Babcock Dounreay Partnership, marks the culmination of a two-year process. In 2000 the site restoration was set out in a 60-year plan, costing 4.3bn. This was reduced in 2007 to 2.9bn, with completion in 2032. (3)

- (1) Sunday Times 1<sup>st</sup> April 2012 [http://www.thesundaytimes.co.uk/sto/news/uk\\_news/scotland/article1007479.ece](http://www.thesundaytimes.co.uk/sto/news/uk_news/scotland/article1007479.ece)
- (2) DSRL 2nd April 2012 <http://www.dounreay.com/news/2012-04-02/gone-by-2025--new-cleanup-team-sets-out-vision-for-site-closure>
- (3) Scotsman 7th July 2012 <http://www.scotsman.com/news/environment/quick-clean-up-of-dounreay-set-to-save-taxpayers-1bn-1-2398558>

### **Low Level Waste Dump**

What have been described as the two biggest man-made holes in Caithness are being dug to store tonnes of low-level radioactive waste from Dounreay. The larger of the two vaults involves the excavation of about 200,000 cubic metres of rock. The stores, being constructed at a cost of £100m, are separated by a spine of rock nine metres wide at the top. The waste will include paper, rags, tools, glass, concrete and clothing contaminated by radioactivity. Once inside the store it will be monitored for 300 years. After that period of time the radioactivity will have decayed by 95%. (1)

The Scottish Environment Protection Agency (Sepa) has now published a draft authorisation to govern the disposal of low-level radioactive waste in the vaults once built. Sepa will consult the public over the plan, which has been criticised by some nearby residents. (2) The consultation closes on 29<sup>th</sup> August. (3)

- (1) BBC 6th July 2012 <http://www.bbc.co.uk/news/uk-scotland-highlands-islands-18728165>
- (2) Herald 7<sup>th</sup> July 2012 <http://www.heraldscotland.com/news/home-news/dounreay-waste-to-be-stored-in-vaults.18080552>
- (3) DSRL 6th July 2012 <http://www.dounreay.com/news/2012-07-06/draft-authorisation-issued-for-waste-disposal>

## **4. Hunterston**

- Allegations that scores of fire safety lapses could trigger a serious accident at Hunterston B are under investigation by the ONR. The station's former fire safety officer, Maxwell Lyall, has warned that numerous flaws in fire doors, seals and other critical safety measures could

lead to loss of life and leaking radioactivity in the event of a fire. He has accused contractors of cutting corners and putting public safety at risk.

Sunday Herald 13th May 2012 <http://www.heraldscotland.com/news/environment/fire-safety-risk-to-nuclear-plant.17574728>

- Salt-Lake City based company, Energy Solutions, which owns Magnox Ltd. - the company which is decommissioning both Hunterston A and Chapelcross - is planning to sell off its non-US subsidiaries. EnergySolutions has the contract to be the Parent Body Organisation for the Magnox Site Licence Company until mid 2014. But the NDA has already started the competition process to decide who should run it after that. Several US firms are preparing to bid for the contract. The US giants Bechtel, Fluor, URS and Jacobs are understood to be mulling bids. EnergySolutions could also bid, having already done the preparatory work. (1) So one way or another a different American company will probably be in charge at Hunterston A and Chapelcross before too long. (2) If Energy Solutions is sold before the end of the current contract, the NDA must be satisfied with the new owner.

- (1) Independent 23<sup>rd</sup> April 2012 <http://www.independent.co.uk/news/business/news/union-fury-as-us-firms-eye-nuclear-work-7669063.html>
- (2) Reuters 17<sup>th</sup> July 2012 <http://in.reuters.com/article/2012/07/17/britain-nuclear-energysolutions-idINL6E8IHLAT20120717>

## 5. Torness

EDF Energy was criticised in May after it kept quiet following the shutdown of one of two nuclear reactors at Torness. The nuclear operator was criticised for maintaining a “culture of secrecy” after no news or details of an “automatic trip” were published. EDF Energy said the decision to halt energy production at reactor two at Torness was unplanned but insisted there was no cause for concern. The company said an investigation had been launched and the reactor would remain offline until the completion of routine maintenance work. (1) The reactor shut on 13<sup>th</sup> May, but no explanation was offered until members of the Local Liaison Committee received a letter on 15<sup>th</sup> May. (2)

- (1) Click Green 15<sup>th</sup> May 2012 <http://www.clickgreen.org.uk/news/national-news/123500-edf-slammed-after-unexpected-nuclear-power-plant-shutdown.html>
- (2) Rob Edwards 15th May 2012 <http://www.robedwards.com/2012/05/torness-nuclear-reactor-shut-down-by-electrical-fault.html>

## 6. Chapelcross

Chapelcross in Scotland was one of the world's earliest nuclear power plants, with four 49 MWe units operating from 1959 and 1960 until 2004. Reactor 3 became the first unit to be fully defueled in April with the removal of all of its 9245 fuel elements, (1) and reactor 4 shortly after. (2) The spent fuel is shipped to Sellafield. The defuelling program for the site remains on course for completion by June 2013.

- (1) World Nuclear News 18th April 2012 [http://www.world-nuclear-news.org/WR-Three\\_milestones\\_for\\_UK\\_projects-1804127.html](http://www.world-nuclear-news.org/WR-Three_milestones_for_UK_projects-1804127.html)
- (2) BBC 3rd May 2012 <http://www.bbc.co.uk/news/uk-scotland-south-scotland-17937372>

## 7. Renewable Shorts

- Industry body Scottish Renewables has launched an online portal which pulls together figures from a range of sources into a single report. The portal demonstrates that current generators, with a total capacity of 4.9 gigawatts (GW), generated 13,735 gigawatt hours (GWh) of

electricity in 2011. It suggests a further 12GW could be generated by projects that are already in the pipeline, although the majority of them are stuck in the planning stage.

Herald 11<sup>th</sup> August 2012 <http://www.heraldscotland.com/politics/political-news/scotland-in-line-to-meet-electricity-demand.18543990>

- Scottish Renewables says the industry has attracted funding worth £2.8bn to Scotland since 2009. 57% of the total was investment in onshore wind power, 21% offshore wind, with solar, biofuel, wave and tidal power making up the rest.

BBC 11th Aug 2012 <http://www.bbc.co.uk/news/uk-scotland-scotland-business-19207505>

## **8. Submarine Decommissioning**

NFLA published its response to a Government consultation on nuclear submarine dismantling in February. (1) It said the reactor compartments from redundant nuclear-powered submarines should be stored "intact", rather than being cut up.

- (1) See [http://www.nuclearpolicy.info/docs/radwaste/NFLA\\_RWB\\_No\\_31\\_SDP.pdf](http://www.nuclearpolicy.info/docs/radwaste/NFLA_RWB_No_31_SDP.pdf)

## **9. Radioactive Contamination**

A dozen sites across Scotland suspected of being contaminated by radioactive waste from past military or industrial activities have been named by the Scottish Environment Protection Agency (Sepa). One is the Ministry of Defence firing range at Dundrennan on the Solway Firth, where depleted uranium tanks shells have been tested. Others are former air force, army and naval bases around the country where radium used to make dials glow in the dark has been dumped, as at Dalgety Bay in Fife.

There are also former radium factories in Wishaw and Balloch, as well as beaches contaminated by the Dounreay nuclear plant in Caithness. There have been reports about the sites before, but this is the first time that Sepa has identified them all as potentially contaminated.

To date the only site where further actions have been required has been Dalgety Bay. There, the public has been barred from a section of the foreshore since last October and the harvesting of shellfish has been prohibited since May.

### **Sites suspected of radioactive contamination**

Ministry of Defence firing range, Dundrennan, Kirkcudbright, Dumfries and Galloway  
Former Defence Aviation Repair Agency, Almondbank, Perth and Kinross  
Royal Artillery Range, RAF Benbecula, Western Isles  
Former air base, RAF Edzell, Angus  
Former air base, RAF Kinloss, Forres, Morayshire  
Former air base, RAF Machrihanish, Mull of Kintyre  
Royal Marines base, RM Condor, Arbroath, Angus  
Former army luminising depot, Forthside, Stirling  
Former radium plant, Gowkthrapple, Wishaw, North Lanarkshire  
Boatyard on site of an old radium works, Balloch, Dunbartonshire  
Former military aircraft base, Dalgety Bay, Fife  
Beaches near the Dounreay nuclear complex, Caithness

At RAF Kinloss Environmental reports, known as Land Quality Assessments, prepared for the Ministry of Defence (MoD) show the authorities have been aware of "*potential human health and*

*environmental risks*" since at least 2004. The documents also suggest that radiological contamination could extend to land which was sold and is no longer part of the base. It is believed that more than 1,000 aircraft were dismantled at Kinloss after the end of WWII. Instruments coated with "glow in the dark" paint containing radium were burned and buried at the site. (2)

- (1) Sunday Herald 29<sup>th</sup> July 2012 <http://www.robedwards.com/2012/07/agency-names-12-scottish-sites-suspected-of-radioactive-contamination.html>
- (2) BBC 18th May 2012 <http://www.bbc.co.uk/news/uk-scotland-north-east-orkney-shetland-18122594>