

# Nuclear Free Local Authorities

# briefing



Date: 17<sup>th</sup> October 2014

No.126

Subject: Summary of NFLA Steering Committee, Manchester Town Hall, 3<sup>rd</sup> October 2014

1. **Introduction**

The NFLA Steering Committee meeting was opened by the NFLA Chair, who welcomed all to Manchester Town Hall. The NFLA Chair encouraged members whose own Councils were also in the Mayors for Peace to stay on for the afternoon UK & Ireland Mayors for Peace Working Group meeting.

2. **National NFLA Forum meetings**

The NFLA Secretary provided an overview of the work of the NFLA Forums:

**NFLA English Forum –**

A NFLA English Forum seminar is being held on the 24<sup>th</sup> October in Oxford Town Hall. The seminar will focus on defence nuclear safety, nuclear emergency planning and nuclear non-proliferation issues. Speakers include Peter Burt from NIS, Rebecca Sharkey from ICAN, Nigel Day from Nukewatch and the NFLA Secretary. Registration is open and the flyer has been sent to councillors and interested NGOs.

**NFLA Scotland Forum –**

The NFLA Scotland Forum will hold a business meeting and a special seminar on the 31<sup>st</sup> October in Perth City Chambers. The business meeting will discuss all major Scottish nuclear policy / energy policy matters. The seminar is focusing on issues around nuclear decommissioning, community energy, radiation contamination and the safety of transporting radioactive materials by road, rail and sea. Speakers include Eann Sinclair from the Caithness and North Sutherland Regeneration Partnership, John Boocock and Tor Justad from the group Highland Against Nuclear Transport, the NFLA Scotland Policy Advisor and the NFLA Secretary. Registration is open and the flyer has been sent to councillors across Scotland and interested NGOs.

**NFLA Welsh Forum –**

The NFLA Secretary and the NFLA Welsh Forum Co Chair were amongst the speakers at a special 'counter summit' looking at NATO and nuclear weapons policy, which was held in Cardiff County Hall on the 31<sup>st</sup> August. Around 200 people attended this event.

The NFLA Welsh Forum will be holding a seminar on the 7<sup>th</sup> November in Cardiff City Hall. The seminar will focus on new nuclear build issues at Hinkley Point and Wylfa, Welsh radioactive waste policy, a Welsh delegation visit to affected areas around Fukushima and post NATO counter summit matters. Registration is open and the flyer is being sent to councillors and interested NGOs.

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### **NFLA All Ireland Forum –**

Major local government reorganisation in the Republic of Ireland and Northern Ireland has seen a significant change in the number of Councils and around 70% new councillors across the island. The NFLA Secretary is working with existing councillors and new councillors to clarify Forum membership.

A request has been made to Dublin City Council to host the next NFLA All Ireland Forum meeting on the 14<sup>th</sup> or 21<sup>st</sup> November. It is being considered shortly by the Council's Strategic Environment Committee. If it is not possible to host the meeting in Dublin, Fingal County Council has offered to host it. The seminar will consider the NFLA's submission to the Irish Government's Green Paper on Energy, a critique of the RPII report on the impact of a UK new nuclear programme and Irish local authorities and energy policy. A business meeting will also be organised. Further details will be provided to NFLA All Ireland Forum contacts and the flyer will be sent to all councillors in Ireland.

### **NFLA AGM and CNFE AGM -**

The 2014 UK and Ireland NFLA Annual General Meeting, Steering Committee and Annual Policy Seminar will be held on the 28<sup>th</sup> November in Edinburgh City Chambers. The AGM will elect a Steering Committee Chair and approve all key reports and the NFLA Service Plan. The seminar will look at key nuclear policy trends in 2015. Provisional speakers that have been invited to speak at the Annual Policy Seminar include Kate Hudson from CND, Richard Dixon from Friends of the Earth and Rob Edwards from the Sunday Herald. Further details will be sent to NFLA members shortly.

The NFLA has also been invited to attend the first AGM and a special seminar of the Cities for a Nuclear Free Europe (CNFE) network. This will be held on the 4<sup>th</sup> and 5<sup>th</sup> of December in Vienna City Hall. It will bring a number of German, Austrian and other European cities to Vienna to talk about their individual energy policy, as well as formalising the Network. The Steering Committee agreed that the NFLA Chair and NFLA Secretary should attend the AGM as it seen as an important and useful networking opportunity, given the already useful value of its work this year.

***Agreed: To note the report and encourage NFLA members to attend Forum meetings and the NFLA AGM. To approve that the NFLA Chair and NFLA Secretary attends the CNFE AGM.***

### **3. Nuclear new build**

The NFLA Secretary provided an update on a wide range of issues around the proposed development of new nuclear power stations.

#### ***Proposed new build at Hinkley Point and European Commission inquiry -***

Media reports suggest that the European Commission will formally approve the UK's strike price deal with EDF for the construction of new nuclear reactors at Hinkley Point. The reports notes leaks from the Competition Commissioner's office, Joaquin Almunia, that he is minded to recommend the deal, despite it potentially infringing on the European internal market. The final decision has to be ratified by a Commission meeting on October 8th.

The NFLA Secretariat co-operated in the development of a letter by the Vienna-led Cities for a Nuclear Free Europe (CNFE) to Mr Almunia which sought to clarify why the Commission has changed its view on UK new nuclear build so quickly. It has also emerged that the Austrian Government has said they would legally challenge a Commission decision to approve the UK Government – EDF deal. A legal challenge could delay the final decision by at least a year. The NFLA Chair, on the request of CNFE, has written to the Republic of Ireland Government's Energy Minister seeking its view on the Commission's deliberations and whether it would support the Austrian Government with a legal challenge. The NFLA Secretariat has also sent a letter of concern to members of the Commission to consider carefully the Competition Commissioner's final report on the UK – EDF deal.

### ***Chinese utilities interested in Bradwell site -***

A report in the Sunday Times claims that the Bradwell nuclear site in Essex has emerged as the favoured site for a new Chinese-built and designed nuclear plant. Two Chinese energy utilities – China General Nuclear Power Corporation (CGNPC) and China National Nuclear Corporation (CNNC) – have already agreed to finance as much as 40% of the Hinkley Point new reactors in a deal with the UK Government and EDF. The two Chinese utilities also want to develop their own nuclear designs in the UK. In late June, the Chinese and UK Prime Ministers signed an agreement to allow them to do that.

The two possible Chinese reactors that could be developed are derivatives of European and American designs. The Sunday Times report suggests the Chinese utilities have had preliminary talks with the nuclear regulators about submitting one of the reactor designs through the Generic Design Assessment process.

### ***Generic Design Assessment (GDA) of Hitachi's ABWR design -***

In late August, the Office for Nuclear Regulation (ONR) and the Environment Agency reported that they have concluded an initial high-level assessment of Hitachi's Advanced Boiling Water Reactor design, which is proposed for Wylfa and Oldbury. No regulatory concerns have to date been found by the regulators. The next more detailed analysis of the designs has begun in September.

### ***Sellafield Moorside progress -***

The consortium led by Toshiba, which is seeking to develop as many as 3 new nuclear reactors at a site close to Sellafield has recommenced on-site assessment, as it seeks to speed up development of the site. It is expected to also recommence with the ONR its AP-1000 design through the GDA process.

In a new report on the impact of Moorside, the group Radiation Free Lakeland estimates the new nuclear site planned would require 9.6 acres of land for the reactors, and an additional 15 acres for huge cooling towers. They argue it would be one of the largest nuclear developments in Europe, in close proximity to the older decommissioned plants at Sellafield.

### ***Small modular nuclear reactors -***

In one of his last roles as an Energy Minister, Michael Fallon reported to Parliament that the UK Government was in the early stages of considering the feasibility of small modular nuclear reactors (SMRs). A National Nuclear Laboratory feasibility study is being developed, providing initial recommendations on the economic, technical and commercial case for SMRs.

A SMR is a reactor producing a capacity of no more than 300 MW. It was also mooted by the Republic of Ireland Government as a potential replacement for a gas powered fire station at Moneypoint in County Clare, within its energy policy green paper. In the UK, the Parliamentary Energy and Climate Change Select Committee is undertaking an inquiry into SMRs. The three companies seeking to develop SMRs called within the inquiry for greater co-operation between UK and US nuclear regulators to develop a more seamless licensing and approvals regime. It takes around 4 years under the generic design assessment process for larger nuclear reactor designs to be approved.

SMRs are seen as an attractive proposition by parts of the nuclear industry as it could allow mass production of major components that can be shipped for quick assembly, rather than the more expensive custom designed components required for larger reactors. As well as significant cost savings, proponents of SMRs also argue they would be inherently safer than larger, conventional nuclear reactors.

A report by the Union of Concerned Scientists (UCS) challenges the economics of SMRs. The UCS report argues that, though SMRs may be potentially cheaper than conventional reactors, it does not mean they are actually more cost effective. Economies of scale dictate that, all other things being equal, larger reactors will generate cheaper power. SMR proponents suggest that mass production of modular reactors could offset economies of scale, but a 2011 Power Engineering study concluded that SMRs would still be more expensive per kWh than

current reactors. Even if SMRs could become more cost-effective than larger reactors due to mass production, this advantage will only come into play when many SMRs are in operation. It is unlikely that enough utilities would invest in SMRs until they can produce competitively priced electric power - a 'catch 22' type scenario.

There would also be serious safety concerns to consider. For example, most designs for SMRs call for weaker containment structures. Safety regulations would have to be diluted somewhat to make SMRs more cost effective. To generate significant power, multiple SMRs may be required, which may present increased risks than a single large reactor, particularly if other costs are reduced, such as the amount of support staff or safety equipment. Proponents of SMRs have also suggested the designated emergency planning zone (DEPZ) could be significantly reduced to as little as 1000ft, allowing them to be built nearer populated areas. The lessons of Fukushima, in which radiation levels high enough to trigger evacuation or long-term settlement were measured at as much as 20 to 30 miles from the accident, suggest a quite different safety scenario.

#### **World Nuclear Industry report notes continued decline of nuclear power -**

The independently produced World Nuclear Industry Report 2014 notes that, across the world, nuclear power remains in serious decline. The report notes that it is generally being out-competed for investment by renewable energy technologies. The report notes that, of 67 new nuclear reactors under construction around the world, 49 of them have encountered significant construction delays (from several months to several years), including 21 of 28 reactors being built in China. The report notes that in 2013 alone China turned on 16 GW of wind energy, compared to just 4.7 GW of nuclear energy over the period 2009 - 2013.

The report notes that there are now 388 operating nuclear reactors in the world in 2014 with a combined capacity of 333 GW. This is 50 fewer reactors than in 2002. Nuclear power's share of global power generation has declined from a 1996 high of 17.6% to a 2013 share of 10.8%. Nuclear power's share of global commercial primary energy production has also declined from the 2012 low of 4.5%, a level last seen in 1984, to a new low of 4.4%.

***Agreed: To note the report. To continue to monitor these developments and co-operate with CNFE in raising legitimate concerns over new nuclear build in England and Wales.***

#### **4. Radioactive waste management**

The NFLA Secretary outlined the key issues NFLA is involved with in relation to UK / Scottish Government policies on radioactive waste management.

#### ***UK Government publishes White Paper on radioactive waste policy -***

In July the UK Government published a White Paper – “Implementing Geological Disposal” in response to a wide range of comments on how to relaunch its policy of developing a deep underground radioactive waste repository. This follows the decision of Cumbria County Council to not go forward with shortlisting sites in the county for such a repository in early 2014.

There are a number of new proposals by the Government in the White Paper:

- That “deep geological disposal” – development of a deep underground repository – in England or Wales remains UK Government radioactive waste policy for the management of high and intermediate level radioactive waste.
- The Radioactive Waste Management Ltd (RWM), formerly the Radioactive Waste Management Division (RWM) of the Nuclear Decommissioning Authority (NDA), would develop a national screening process based on known geological information for England and Wales.
- The UK Government will convene a community representation working group to address the issues around effective community engagement and representation with regards to a deep underground radioactive waste repository.
- The final decision on siting a repository will require a “*test of public opinion that demonstrates community support for development at a specific site.*”
- The development of a repository will go through the Government's National Infrastructure Planning (NIP) process.

The NFLA Secretariat issued a media release on the White Paper, which can be found on the NFLA website. The NFLA Chair was also asked to comment on the White Paper by the Environment Editor of 'The Guardian'.

The NFLA Secretary will be attending the next meeting of the DECC NGO Forum on the 9<sup>th</sup> October. This will include full discussion of the White Paper in the presence of Baroness Verma, the Minister responsible for UK radioactive waste policy.

RWM are attending the NDA National Stakeholder Dialogue meeting, which is taking place at the Marriott Forest of Arden Hotel, close to Birmingham, on the 28<sup>th</sup> – 30<sup>th</sup> October. RWM are planning a full day event on the 30<sup>th</sup> to allow for further discussion of the White Paper. The meeting agreed to approve that the NFLA Chair attend this meeting in the absence of the NFLA Secretary, who would be at the NFLA Scotland Forum meeting.

### **Sellafield PRISM plant and plutonium update**

The UK Government has an official policy of seeking to reprocess the largest stockpile of weapons usable plutonium in the world. It has tasked the NDA with considering how this can be undertaken. The UK has 140 tonnes of plutonium, over half the world's existing stockpile. The NDA are currently considering two types of possible fast breeder reactors that could do this – the Canadian Candu reactor and the GE Hitachi PRISM reactor.

In August, GE Hitachi announced it was combining with the Spanish utility Iberdrola towards developing two proposed PRISM reactors for the Sellafield site. NDA has initially concluded that the PRISM reactors are 'credible options' to reprocess plutonium. It should be noted that, despite offering the PRISM design around the world, there are currently no orders for it.

GE Hitachi advocates the PRISM reactors could provide the following processes:

- conversion of the separated plutonium into a sodium-bonded Uranium / Plutonium / Zirconium metal fuel using Direct Electrolytic Reduction, pyroprocessing and metal casting techniques;
- irradiation of this metal fuel in PRISM reactors, in a burn rather than breed mode; and
- storage of the spent fuel pending disposal (no recycle of spent fuel, in line with current UK new nuclear build assumptions).

The most obvious problem with PRISM reactors is that they do not eliminate the nuclear waste that has built up at Sellafield – they simply change it. The other major concern is whether PRISM spent fuel is suitable for storage in a deep waste repository or would require further processing – creating another waste stream.

### ***Dalgety Bay and Dounreay matters -***

In July, it was confirmed that the Ministry of Defence would pay an estimated £10 million for the clean-up of radioactive particles from the beach at Dalgety Bay in Fife. Local MP and former Prime Minister Gordon Brown welcomed this resolution and called on the MOD to deliver an accelerated timetable to clean-up the site quicker than the four years it anticipates it will take.

There was widespread acceptance of the MOD's remediation report from SEPA, the local Community Council and Fife Council. It is partially due to the considerable pressure on the MOD from the local community, Fife Council and assistance from the NFLA that this matter is finally being dealt with properly.

In reference to Dounreay, the NFLA Secretary has been liaising with Shetland Island Council and Western Isles Council over concerns that the NDA are seeking to send a large amount of radioactive material, bound for Sellafield, by sea. The material is currently being transported by rail, but the NDA want to send the less hazardous materials now by ship. The NFLA and KIMO issued a media release of concern which is on the NFLA website.

A representative from the Caithness and North Sutherland Regeneration Partnership will speak at the NFLA Scotland Forum meeting in Perth about nuclear decommissioning at Dounreay and how to transform a nuclear dependent community into a renewable energy centre of excellence. Representatives from the group Highland Against Nuclear Transport will also speak around their concerns over the transportation of radioactive materials from Dounreay to Sellafield.

***Update on NuLEAF and SCCORS -***

NuLEAF (Nuclear Legacy Advisory Forum) are holding their AGM and next business meeting in London on the 15<sup>th</sup> October. The meeting will discuss its policy stance towards the UK Government White Paper. The NFLA Secretary and NFLA Chair will be attending this meeting.

The SCCORS (Scottish Councils Committee on Radioactive Substances) Secretariat is still seeking another Council to take over from North Ayrshire. The NFLA Secretariat is aware that Edinburgh City Council is in the final parts of the process in taking over the Secretariat.

***MOD Submarine Decommissioning Project (SDP) / Rosyth site decommissioning -***

The NFLA Secretary attended an August meeting in Bristol of the SDP sub-group, which is taking forward the next stage of consultation – the shortlist of sites that will host intermediate level radioactive waste from dismantled submarines.

It is anticipated that a public consultation on this part of the dismantling project will be published in November. There will be local and two national workshops – one in Glasgow and one in Birmingham. The NFLA Secretary is involved in advising on the development of this consultation process.

***Agreed: To note the report. To approve that the NFLA Chair attends the NDA Stakeholder Dialogue in Birmingham.***

**5. Mayors for Peace update**

The NFLA Secretary outlined progress in NFLA's co-operation with the Mayors for Peace and its campaigns on the nuclear weapons issue.

**International Mayors for Peace development and plans for 2014/15 -**

As of September 1<sup>st</sup> 2014, 6276 towns and cities were members of Mayors for Peace in 160 countries.

One of the main partner organisations of Mayors for Peace is the US Conference of Mayors, which represents US cities over 10,000 residents. At its Annual Conference, the organisation adopted a resolution encouraging the United States Government to work in 'good faith' in nuclear disarmament forums. The resolution was put forward by Vice President City Akron, Ohio and co-sponsored by the Mayors of 26 US member cities. It was formally adopted.

In early August, the cities of Hiroshima and Nagasaki held their Annual Peace Ceremonies in memory of those killed by the atomic bombings of their cities 69 years ago. Many UK and Ireland members of Mayors for Peace held similar ceremonies on either August 6<sup>th</sup> or August 9<sup>th</sup>. Notable ceremonies took place in Manchester, London, Birmingham, Glasgow, Edinburgh, Dundee, Leeds, Bradford, Sheffield, Paisley, Aberdeen, Dublin, Cardiff, and at the National Eisteddfod in Llanelli.

August 2015 is the 70<sup>th</sup> anniversary of the atomic bombings, and preparations are beginning within an important 12 months for the Mayors for Peace. Planning is taking place for a number of events and projects, including:

- In December 2014 there will be the third International Conference on the Humanitarian Consequences of Nuclear Weapons taking place in Vienna. Mayors for Peace will seek to participate and hold side events within it. A Mayors for Peace 2020 Vision Campaign Board meeting will be held on December 6<sup>th</sup>.

- In April 2015, the city of Ypres will be holding a three day conference commemorating the centenary of the first use of chemical weapons. This will be a high profile conference looking at new ways to resolve conflict and the role of towns and cities within it. Mayors for Peace will have a primary role with organising it.
- In late April / early May 2015 there will be the five-yearly Review Conference of the Nuclear Non-proliferation Treaty at the United Nations HQ in New York. Mayors for Peace intend to have a large delegation at the Conference. This is a difficult date in the UK with a general election on May 7<sup>th</sup>.
- In August 2015, there is the expectation of major events to commemorate Hiroshima Day and Nagasaki Day. Mayoral elections take place in both cities in April, so it is not clear yet what specific events will take place.
- In November 2015, the Executive Conference of Mayors for Peace will take place in Ypres.

The Secretary General of Mayors for Peace is continuing to seek to develop a long list of 'Lead Cities' of Mayors for Peace, who will be asked to try and develop national chapters of Mayors for Peace. Manchester has accepted its invitation. The Secretary General has recently had agreement from Fremantle and Wellington to become 'Lead Cities', and has also had discussions with Sarajevo, Vienna and Rome City Councils.

#### ***Mayors for Peace UK and Ireland development -***

There are 78 UK members and 12 Republic of Ireland members of Mayors for Peace. However, major reorganisation of local government in the Republic of Ireland means that 9 of its 12 members need to be reviewed as town councils are incorporated within county councils.

Manchester City Council is hosting a meeting of the UK and Ireland Mayors for Peace Working Group with the formal aim of establishing a UK and Ireland Mayors for Peace Chapter, which will meet twice a year. The meeting is being chaired by the Lord Mayor of Manchester and takes place on the afternoon of the 3<sup>rd</sup> October.

#### ***Hiroshima ginkgo trees peace seeds project -***

As noted in previous reports, the city of Hiroshima has been developing a project of offering seeds from second generation A-bomb damaged trees, and peace flames from its eternal peace flame, to Mayors for Peace members.

In early September, the NFLA Secretary received from Hiroshima a package of 10 ginkgo seeds. They have been given to Hulme Garden Centre in the south of Manchester for planting and nurturing, and a formal civic event at the garden centre is being planned on November 5<sup>th</sup> with the Lord Mayor taking 'ownership' of the saplings on behalf of the city. A schools competition is also being developed to encourage peace education through the project – successful schools will monitor the progress of the growth of each sapling before they are then transferred to the schools. Some saplings are also being planned for city centre locations, such as a reconstituted Peace Gardens.

The seeds are taken from a 'mother' tree which stands in the Shukkeien Garden 1,370 metres from the hypocenter of the atomic bombing. The tree is said to be over 200 years old. Its trunk slanted due to the impact of the atomic blast, but the tree lived through the fires after the atomic bombing, and even today spreads out large branches. Hiroshima puts forward the seeds as symbols of peace and regeneration, and they are offering seeds to Mayors for Peace members to use as a local symbol of peace.

Seeds are being initially offered to Executive Cities of Mayors for Peace, but the NFLA Secretary has ascertained from Hiroshima that there is limited budget and availability for other UK and Irish Mayors for Peace / NFLA members to receive seeds, as capacity allows. Member authorities need to let the NFLA Secretary know of their interest, which will then be passed on to Hiroshima.

***Agreed: To note the report and encourage involvement with the UK and Ireland Mayors for Peace Working Group.***

## 6. **Nuclear Weapons and defence nuclear safety update**

The NFLA Secretary provided an overview of various issues relating to the nuclear weapons disarmament debate and defence nuclear safety matters.

### ***International Conference on Humanitarian Consequences of Nuclear Weapons and NPT Review Conference May 2015 -***

With frustrating stalemate at the May 2014 Nuclear Non-Proliferation Treaty (NPT) Preparatory Conference, NGOs and non-nuclear weapon states are concentrating their efforts on developing momentum through the separate International Conferences on the Humanitarian Consequences of Nuclear Weapons. The third of these conferences will be hosted by the Austrian Government in Vienna on December 8<sup>th</sup> and 9<sup>th</sup> 2014.

Major disarmament NGOs are focusing on the Vienna conference as providing a distinctive voice from non-nuclear weapon states prior to the NPT Review Conference in late April / early May 2015. The Mayors for Peace and ICAN-UK will be represented at the Vienna Conference. ICAN are organising a major international gathering prior to the conference in order to ensure a large number of young activists will be present at the main conference, lobbying governments.

### ***Unfold Zero – UN International Day to Abolish Nuclear Weapons, September 25<sup>th</sup>-***

The NFLA Secretariat was approached by the Basel Peace Office / Unfold Zero initiative in mid August to be a co-sponsoring NGO to a formal event launching the first anniversary of the decision by the United Nations to hold an annual day for the 'Total Elimination of Nuclear Weapons'. This is being held at UN buildings in Geneva. As the request to co-sponsor the event involved no financial commitment, the request was approved through delegated authority by the NFLA Chair, in discussion with Forum Chairs.

'Unfold Zero' is an initiative established by the NGO's Prague Vision, PNND, Basel Peace Office, Mayors for Peace 2020 Vision Campaign and the Aotearoa Lawyers for Peace. Its main aim is for promotion of the UN event this September and on an annual basis. A NFLA media release was developed to support the event.

### ***Trident Commission final report -***

The NFLA Secretariat noted its disappointment with the conclusions of the final report<sup>th</sup> of the Trident Commission in a media release and in a joint letter published in the Guardian. The report focused on three pivotal questions:

- Should the United Kingdom continue to be a nuclear weapons state?
- If so, is Trident the only or best option for delivering the deterrent?
- What more can, and should, the United Kingdom do to facilitate faster progress on global nuclear disarmament?

The NFLA responded in detail to the early stage of the Trident Commission's report, arguing that the UK should move to a more determined policy of nuclear disarmament. However, the Commission's key conclusion argued that the UK should retain and renew its nuclear deterrent, despite the considerable cost of renewing and operating Trident. This conclusion is based on what the Commission sees as the ongoing national security needs of the UK to a series of credible threats, and its responsibility to the NATO Alliance.

### ***RUSI report on alternatives to Faslane in the event of Scottish independence -***

A mid August report by the defence policy think-tank, the Royal United Services Institute, argued that there would be no insurmountable technical or financial obstacle to relocating the Trident nuclear missile base to England or Wales out of an independent Scotland. The report also argues that any local opposition might delay relocation, but it would not stop it. The favoured site the report recommended would be Plymouth Devonport. The report estimates such a move from Faslane to Devonport would cost around £3.5 billion. Milford Haven was discounted in the report because of the large number of LPG facilities at the port, and Falmouth was considered too expensive an option for conversion in comparison to Devonport (though it remains a possible location if the finance could be found for it).

Despite this, the report admits that the larger population around Devonport would create a much higher risk ratio in the event of an accident or malicious incident at the site.

#### ***NFLA report on Trident replacement and the 2015 UK election -***

The NFLA Secretariat is compiling a NFLA Policy Briefing considering its engagement with the UK and global nuclear weapons issue over the past 12 months and looking to how this debate may change in the next 12 months, and how NFLA can seek to influence the debate. The Policy Briefing is being developed to consider the ramifications of the Scottish independence 'no' vote and the likelihood of nuclear weapons and Trident replacement being an issue in the 2015 UK general election debate. The report also considers the 'nuclear free' policy of the Republic of Ireland Government and the expectation of the 2015 NPT Review Conference.

#### ***President Obama approves renewal of secret UK – USA nuclear weapons agreement -***

In early July, it was disclosed in the United States that a treaty which allows the transfer of nuclear weapons technology between the USA and the UK has been given senior approval for renewal for a further ten years. The extension of the US-UK Mutual Defence Agreement (MDA) was formally approved at a signing ceremony behind closed doors in Washington. President Obama has now written to the US Congress requesting its support for an amendment which will extend the treaty.

The UK Parliament has been notified of the amendment to extend the MDA in the near future. In contrast to the full, open and transparent arrangements in the USA, there is no obligation for the UK Government to obtain Parliamentary approval for ratification of the treaty. A number of MPs have signed an Early Day Motion calling for a debate on plans to extend the MDA.

#### ***AWE Aldermaston and Devonport Dockyard stay under 'special measures' by nuclear regulator for a second year -***

The Annual Report of the Office for Nuclear Regulation (ONR) has confirmed that the Aldermaston nuclear weapons facility and Devonport nuclear submarine facility will remain on a list of nuclear sites requiring an enhanced level of regulatory attention. This is the second year running the facility is listed as a safety priority.

The facilities are listed as two of just seven out of 36 nuclear sites in the UK which will require an "enhanced level of regulatory attention" over the year ahead. The ONR Annual Report notes that AWE Aldermaston is currently under investigation for two apparent breaches of the law:

- a failure to comply with instructions for radioactive waste management;
- for allowing "shortfalls" to arise in the operability and availability of fire detection systems at the site.

The ONR report notes that the Aldermaston facility requires additional attention because it houses a range of ageing facilities and because of concerns about "the timeliness and quality of periodic reviews". The report also states that a number of safety cases for the site "do not meet expectations", and it highlights the additional regulatory effort needed to manage the major building programme currently underway at Aldermaston to enable the factory to manufacture new nuclear weapons. The report notes that AWE's safety performance has remained level, rather than improved, over the last year.

The ONR report also notes that the Royal Navy's Devonport dockyard, which maintains the UK's nuclear powered submarine fleet, requires enhanced attention for the second year running as well. The ONR note safety performance at Devonport has improved. However, the ONR continues to highlight concerns over Devonport's "ageing facilities", as well as "a very busy submarine maintenance programme", and enforcement action taken on "occasions where written instructions required for safe operation were breached".

#### ***Investigation into power outage at Derby nuclear submarine reactor plant -***

An investigation is taking place into a power outage incident which interrupted electricity supply to the Rolls Royce Derby factory which prepares reactor fuel for the Royal Navy's fleet of

nuclear powered submarines. The incident, which took place earlier this year at the Derby site, was reported to the ONR but was not publicly announced by the company.

According to the ONR report, the off-site power supply feeding the plant, which manufactures fuel modules containing highly enriched uranium for the nuclear powered submarines, was “interrupted and subsequently became intermittent”. The report notes that the incident “affected on-site services”, including ventilation extraction systems used to help contain radioactive contamination, and an emergency muster of some of the staff working at the site took place. ONR has stated that no radiation dose to site workers or radioactive release to the environment took place as a result of the incident. The ONR report also mentions that in “several instances” over the reporting period routine inspections of radiological protection and supply chain management arrangements identified that safety requirements were “not adequate”. ONR intends to monitor progress in addressing the issues and if necessary will take formal enforcement action to ensure that action is taken by Rolls Royce to address concerns.

Rolls Royce has also pleaded guilty to seven charges of breaching health and safety and environmental legislation at Derby Crown Court around the management of radiation exposure risks. Two radiographers and two welders came into contact with radioactive material. It was found that radioactive material from a testing system had inadvertently not been sent back to a sealed safety container, but had in fact fallen from the system into the component being tested. It was also found that radiation alarms on the workers were either switched off or were not working. It was only coincidence that alerted the staff to the radiation spill. This could have meant it remaining undetected for some time. Sentencing of Rolls Royce over this breach is expected imminently.

***Emergency arrangements at Barrow nuclear submarine shipyard “below standard”-***

The ONR has written to BAE Systems demanding improvements in emergency arrangements with accounting for, and providing shelter for, personnel at the shipyard in the event of a radiation emergency. The ONR has also highlighted the need for changes to safety management systems, after concluding that such arrangements at the Barrow Trident nuclear submarine shipyard are “below standard”. These flaws in emergency arrangements were discovered following an 'Indigo 13' emergency exercise which took place at Barrow in July 2013, and a demonstration of the shipyard’s mustering arrangements in December 2013.

***Agreed: To note the report and welcome upcoming NFLA Briefings on these issues.***

**7. Fukushima and civil nuclear safety**

The NFLA Secretary provided a report on progress with civil nuclear safety and the safe control and decommissioning of the damaged reactor site at Fukushima, Japan.

***Temporary closure of EDF reactors at Heysham and Hartlepool -***

In August EDF confirmed that, as a precaution, they had temporarily closed down four nuclear reactors – two at Heysham and two at Hartlepool. This followed EDF receiving updated test results indicating a “structural problem” with the boiler spine at Heysham 1 nuclear reactor, which had been initially identified in November 2013. The boiler, which is one of eight in the reactor, had been put out of service since then. Following more detailed inspections, which only began in June 2014, EDF decided to switch off both reactors at Heysham 1 and two more of the same design at Hartlepool, given the similarities of reactor design.

Further tests indicated cracks have been found in the boiler spine, necessitating EDF to inform the Office for Nuclear Regulation (ONR) that the four reactors would need to remain closed for a longer time, perhaps as late as December 2014. Such a design fault is a serious matter. As Steve Thomas, Professor of Energy Policy at the University of Greenwich notes, it is possible that an explosion and serious contamination could happen if the boiler spine fails and water enters the reactor vessel. He added: “Given the safety consequences, it does seem very strange that there was a nine-month gap before announcing the shutdowns.” He said ONR should explain why it had permitted reactors of the same design to keep generating after being

informed of the safety problem. "The regulator should not be in any way concerned about costs to EDF or even the risk of the lights going out."

The NFLA raised these points in two media releases which were picked up in the national and local media. A major concern for the NFLA is the lack of information provided to the local Community Liaison Council at Heysham as to the seriousness of this issue. With planned maintenance work also in place at Dungeness and Hunterston, over a quarter of the UK's nuclear power capacity was out of action for a period of time.

#### ***ONR NGO Forum being held in Manchester -***

The NFLA is hosting the next meeting of the ONR NGO Forum in Manchester Town Hall on the 10<sup>th</sup> November. The meeting will look at issues of concern to NGOs around all aspects of nuclear safety - including ageing nuclear reactors, generic design assessment, fuel element debris from nuclear reactors and nuclear emergency planning.

#### ***Fukushima update -***

As noted at the last Steering Committee meeting, TEPCO have implemented a major construction project to develop 'ice walls' to try to cool the stricken Fukushima reactors, and contain the continuing problem of contaminated water on the site. It was reported in mid September that TEPCO were still having major problems in constructing the pipes that would pipe water into the facilities which would then be frozen. The "ice wall" is intended to freeze soil around reactor buildings Nos. 1 to 4 using coolant, circulating within 30-meter-long pipes, to block the flow of groundwater into the reactor buildings. The ice wall is planned to stretch for about 1.5 kilometres. Out of 1,545 pipes scheduled for installation to create the ice wall, drilling work has only been completed for about 400 pipes. The Japanese Government and TEPCO plan to start freezing the soil towards the end of March 2015, and to maintain the ice wall for seven years.

Leakage of highly contaminated water into the sea is another problem that is becoming increasingly alarming. According to the 'Japan Times' newspaper, in areas around sea walls near the turbine buildings of the Nos. 1 to 4 reactors, structures destroyed by the massive tsunami remain as they were 3½ years ago. The removal of debris containing radioactive substances has been inadequate, with radiation levels still relatively high.

In addition, the Japanese Government and TEPCO announced a plan in August to construct 42 "subdrain" wells near the turbine buildings and five wells near sea walls to pump up contaminated groundwater, and discharge it into the harbour of the plant after purification. TEPCO expects leakage of radioactive strontium to be reduced to one-fortieth of the current 4.8 Becquerels a day if contaminated water is pumped out from the subdrain wells and pits after construction of the walls is completed. This water continues to leak into the Pacific Ocean and possibly into local watercourses.

On a national level, there remains growing pressure from the Japanese Government to restart some of the nuclear reactors closed after the Fukushima disaster. Since 2013, Japan has been 'nuclear free' with no operating reactors. The Japanese nuclear regulator has approved for 2 reactors to reopen at Ohi, but they may still be some months away from opening due to local discontent. Others are mooted for 2015. A ferocious debate continues in Japan over the reopening of nuclear sites.

The Secretariat of the 'Mayors for a Nuclear Power Free Japan' has been in touch with NFLA and is seeking regular ongoing contact with the NFLA and with the CNFE Secretariat.

#### ***Fukushima study tour -***

For the past year, the NFLA Secretariat has been co-operating with the Swiss based environmental NGO, Green Cross International. Inspired by former Soviet President Mikhail Gorbachev, which is its patron, this group is involved across many issues of the climate change debate.

In August 2013, Green Cross organised a study tour to Japan to see the damage of Fukushima and develop co-operation with Japanese groups. NFLA was invited to attend this, but separate attendance at the Mayors for Peace Conference in Hiroshima precluded it. In early September 2014, Green Cross informed the NFLA Secretary that they had raised additional funds to invite him and the NFLA Chair to go on the 2014 Study Tour, which will take place on the 1<sup>st</sup> – 9<sup>th</sup> October. However, the rescheduling of the NFLA Steering Committee to the 3<sup>rd</sup> October had precluded the opportunity to take up this very generous offer.

The NFLA Secretary negotiated that the two places be transferred to allow the environmental issues journalist Rob Edwards and the North West MEP Julie Ward to attend. Both have been asked to speak about their experience at future NFLA meetings. Four members of Welsh NGOs – People Against Wylfa B, CND Cymru, Greenpeace Cymru and the Welsh Language Society – have raised funds to also be part of this study tour.

***Agreed: To note the report.***

## **8. Alternatives to nuclear energy**

The NFLA Secretary provided a report on developments in pursuing effective alternatives to nuclear power.

### ***NFLA Policy Briefing on Local Authority Energy Service Companies -***

In late August, the NFLA Secretariat published a detailed Policy Briefing on how Councils can develop more comprehensive energy policies, including the creation of arms-length Energy Service Companies (ESCOs). The report has been warmly welcomed by Environmental Policy officers in Manchester, and by some of the main organisations noted in the report. It has also been welcomed by officers in Vienna City Council. The Policy Briefing takes NFLA policy further forward by not just saying the type of energy policy it is in favour of – renewable energy, microgeneration and energy efficiency – but that local government could potentially be a key future player in the national electricity market across the British and Irish Isles.

The NFLA Secretary will profile the report at NFLA Forum meetings in Oxford, Perth, Cardiff and Dublin.

### ***Irish Government Green Energy Paper -***

In late July, the NFLA submitted a full submission to the Republic of Ireland Government's Green Paper considering the future development of energy policy and how it could reduce its dependence on fossil fuels.

A major part of the NFLA submission explained why the Government would be mistaken in considering the potential development of a small modular nuclear reactor at a site in Moneypoint, County Clare, to replace an existing coal fired power station. Apart from going against official Irish Government policy, the NFLA submission notes such a move would be retrograde in terms of developing renewable energy, would be overly expensive and a highly risky policy change to make.

### ***Capacity Markets and Contracts for Difference approved by the European Commission -***

In late July, the European Commission approved (under state aid rules) two major UK Government schemes that would fundamentally reform the UK electricity market – the Electricity Capacity Market and the Contracts for Difference.

The UK Government sees the Capacity Market as the primary route to stimulate the levels of investment required to ensure security of supply. The Government is planning that traditional generators, such as gas plants, will go from running almost constantly at base load to a role that will eventually serve to back up renewables, and in its view, new nuclear. To do this, they will need some form of payment to assist them remaining economic to operate, rather than only being paid when they are producing energy. The capacity market is therefore designed to help ensure that there is always enough generating capacity to meet peak demand, by providing such predictable payments to capacity providers. The plan is to implement this new market structure by the end of 2014.

DECC are also funding a £20 million pilot project to see whether and how energy demand reduction (EDR) measures, resulting in what are called 'negawatts', could be part of the capacity market, or whether other mechanisms, such as an electricity efficiency feed-in tariff (FiT), might be more suitable. Demand Side Response (DSR) measures (shifting demand away from peak periods rather than reducing it permanently) and energy storage will all be eligible to participate in the pilot.

The UK has significant electricity saving potential, but current policies are not exploiting this sufficiently. By 2030, if such potential was actually realised, government figures estimate conservatively that almost 39 TWh, around ten per cent of the country's total electricity demand, could be reduced. A new analysis by the Green Alliance, for example, suggests that peak load could be reduced by 6.4GW – which would be equivalent to what is planned for the new nuclear reactors at Hinkley Point C and Sizewell C. Their report draws on experience from the United States to show how the capacity market could work to promote energy saving and how the Government's pilot scheme needs to be improved.

The Contracts for Difference (CfD) are the UK Government's new system for supporting low-carbon electricity. In each case they provide a guaranteed 'strike price' for each unit of electricity generated. Seven large projects were offered early CfD's in May and regular auctions for other projects will begin in the autumn. Under the CfD system the plan is that, by 2017, all large-scale renewables will have to compete for subsidies.

However, in June the UK National Audit Office (NAO) reported that early CfD's had been allocated "*without price competition*". These early allocations already account for 58% of the total budget for renewables support. There are real concerns of limited resources for other schemes. Under the CfD scheme, only £50m per year will be available for onshore wind and solar until 2020, with £155 million for offshore wind. The Solar Trade Association noted that the £200 million/yr ceiling placed on subsidies to renewable energy from autumn 2014 is tiny compared to the £80bn guaranteed to the nuclear industry under a similar contract struck by the government, if it is approved by the European Commission. It said: "The message the government is sending out today is clear. It is backing nuclear and other more expensive renewables over value-for-money solar. This is an absurd decision that will ultimately hit energy bill payers across Britain. Solar is already cheaper than offshore wind; it will soon be cheaper than onshore wind, and it stands a realistic chance of being cheaper than gas by the end of the decade. But this is only achievable with stable government support and a level playing field."

Despite the real concerns over choking off expansion of the solar industry, the CfD budget also represents a cut of around 50% in the amount of onshore wind which will be installed. Since 2010 the installation rate has been around 1000 MW (1GW) per year. With just £50 million per year of extra money allocated for new projects for what are called 'mature' technologies such as onshore wind and solar farms, there will only be enough money for around 500 MW of onshore wind to be deployed each year until 2020 – a total of just 2500 MW.

#### ***Update on shale gas -***

Studies by the British Geological Survey have found significant areas of England, Scotland and Wales have potentially large amounts of shale gas and shale oil. The BGS estimates that there are 1,300 trillion cubic feet of shale gas in the north of England and 4.4 billion barrels of shale oil in the south. This compares to an estimate of around 80 trillion cubic feet of shale gas in central Scotland and six billion barrels of shale oil. However, the amount of oil and gas which could be commercially recovered is expected to be "substantially" lower. The BGS suggests more exploratory drilling would be required to ascertain levels of commercial shale gas and oil.

In late July, the UK Government opened bidding for shale gas licences. One company who has shown interest in bidding for them is Ineos, who own the Grangemouth Refinery. Other energy players like Total, Shell and BP are also expected to consider bidding for licenses. The environmental, geological and radiological issues over fracking still remain, amidst concerns the Government may dilute the powers local authorities can have in determining shale gas

applications. Land in national parks may be exempt from shale gas drilling sites, but there are many other sensitive nature sites that would also be at environmental risk.

The UK Government are also currently consulting upon changes to the trespass law which would facilitate fracking for oil and gas, and also for geothermal energy extraction. A joint report by the NGO Scientists for Global Responsibility and the Chartered Institute for Environmental Health raises concerns over major shortcomings in regulatory oversight regarding local environmental and public health risks. It is concerned the deep budget cuts in local government will also mean planning applications are not considered with sufficient vigour.

***Agreed: To note the report. To disseminate the ESCO report widely.***

#### **9. Low level radiation and health issues**

The NFLA Secretary provided a short report on progress with issues relating to low level radiation and health.

##### ***British Journal of Cancer publish report on cancer rates around Dounreay and Sellafield -***

A recently published statistical report has considered childhood cancer rates around the Dounreay and Sellafield sites. The report, jointly undertaken by a scientific team from Oxford University and Newcastle University, found no statistical difference in cancer incidence from 1991-2006 between those living near the Sellafield and Dounreay nuclear power plants and the general population. But the study did confirm the raised risks of cancer, particularly leukaemia, already reported for earlier time periods before 1990.

The study was funded by the Department of Health and was endorsed in an Oxford University media release by Cancer Research UK. In the absence of COMARE's full study on both sites, which has still to be done, this report follows a trend of Government funded reports which argue that there is no specific statistical evidence for increased cancers in the Sellafield and Dounreay areas.

##### ***Independent critique of the report by Dr Ian Fairlie -***

An independent critique of the Oxford / Newcastle report was undertaken by Dr Ian Fairlie, a former member of the CERRIE (Committee Examining Radiation Risks of Internal Emitters), in conjunction with Dr Alfred Korblein.

Dr Fairlie argues that a closer reading of the Oxford / Newcastle report actually does show that proximity to the two nuclear power plants has higher childhood cancer rates. Focusing on Seascale, but noting that similar extrapolations could be undertaken for Dounreay, Dr Fairlie argues the figures from the study suggest the leukaemia risk is 7.4-times greater than the control area, and for all malignancies, the risk is 3.3 times greater than the control area. Dr Fairlie claims the research is selective with promoting the evidence.

Dr Fairlie's critique highlights the difficulties in coming to any firm conclusions on the effects of low level radiation on human health. It also shows the high level of politicisation of this debate. An ongoing discussion is taking place in the DECC NGO Forum, which the NFLA Secretary attends, around seeking to have a more detailed discussion with members of COMARE (the Committee on Medical Aspects of Radiation in the Environment) and independent critics of it.

***Agreed: To note the report.***

#### **10. Nuclear emergency planning and nuclear materials transportation**

The NFLA Secretary provided a report of his work on nuclear emergency planning issues.

##### ***DECC NGO Forum sub-group on nuclear emergency planning: progress and update -***

The NFLA Secretary met with other NGO representatives, DECC, ONR and Environment Agency staff at a special workshop on 2<sup>nd</sup> September. This considered the content of a chapter on 'Warning and Informing' the public in the event of a nuclear incident at a fixed nuclear site or as nuclear materials are transported. The chapter would be added to the 'Consolidated

Guidance' booklet. This is a Government publication provided as a practitioner's guide to emergency planners for dealing with nuclear based emergencies. As a result of this special meeting taking place, the next sub-group meeting has been moved to the 12<sup>th</sup> November.

***NFLA nuclear emergency planning / security policy briefing -***

The NFLA Secretary is in the process of developing a detailed update of issues and concerns in nuclear emergency planning, nuclear security and from the Fukushima disaster. It is hoped to have this report ready for approval at the NFLA Steering Committee meeting in late November.

***Nuclear transportation concerns -***

A key and ongoing concern of the NFLA has been the safety and security of transporting nuclear materials by road, rail and sea. The recently published NFLA briefing raising concerns over marine transportation of nuclear materials has led to meetings with CND, the RMT trade union and recently with the Secretary General and staff of the International Maritime Organisation (IMO) – an Executive agency of the United Nations.

The useful meeting with the IMO clarified the national and international arrangements for dealing with marine incidents containing nuclear materials. It also shed some light on the lack of significant detail around marine nuclear incidents in national emergency plans, and that the IMO has to rely on national governments for improvements in this area.

These issues remain relevant after it had emerged that the NDA and the Dounreay site owners were actively considering moving the 'exotic fuels' from the site to Sellafield by sea, to reduce the number of rail transports. The NFLA Secretary has provided material to Western Isles Council, Shetland Island Council and the pressure group Highland Against Nuclear Transport (HANT) prior to planned meetings on the proposed shipments with the NDA and the Dounreay site owners.

***Nuclear convoy FOI request highlights significant number of safety incidents -***

A Freedom of Information response from the Ministry of Defence to 'Nukewatch' has noted 70 individual safety incidents involving nuclear weapon road convoys were recorded by it over the period between July 2007 to December 2012. 56 of these were classed as 'engineering incidents' and the remaining 14 as 'operational incidents'.

Brake failures, vehicle breakdowns, false alarms, and map-reading errors are among the safety incidents noted in the response – the 'Sunday Herald' developed a detailed article on this response, which included a comment from the NFLA Scotland Convener.

Nukewatch have noted that convoys were regularly re-routed or delayed to avoid road traffic accidents, severe weather, or heavy congestion on the route ahead, and on one occasion in March 2012 a convoy was re-routed "due to proximity of low flying" at a MoD establishment.

As a result of these concerns, the NFLA Secretary has invited Nukewatch to speak at the NFLA English Forum seminar in Oxford to highlight these matters in detail.

***Agreed: To note the report.***

**11. Date of next NFLA Steering Committee meeting**

The next Steering Committee meeting is planned for ***Friday 28<sup>th</sup> November in Edinburgh City Chambers from 10am – 12pm.*** It will also include the Annual General Meeting of the NFLA and its Annual Policy Seminar.