



Site Stakeholder Group

HUNTERSTON SITE STAKEHOLDER GROUP FORTY SEVENTH MEETING HELD ON THURSDAY 2 MARCH 2017 AT 1.30 PM AT LAURISTON HOTEL, ARDROSSAN

Present

Magnox Ltd

Mrs Jill Callander (SSG Secretariat)
Mr Richard Gibson (Engineering Manager, Hunterston A)
Mr Martin Grafton (Closure Director, Hunterston A)
Mr John Grierson (Scottish Regional Lead)
Mr Sean Marshall (Magnox Communications)
Mr Reuben Phillips (EHSS&Q Manager, Hunterston A)

EDF (Hunterston B)

Dr Roddy Angus (Technical Support Manager)
Mr David McAllay
Ms Fiona McCall (External Communications
Manager – Generation (Scotland))
Mr Stuart McGhie (Trade Union Rep)
Mr Colin Weir (Station Director)

Community Council Representatives

Mr Drew Cochrane (Cumbrae CC)
Mrs Rita Holmes – SSG Chair (Fairlie CC)
Mr John Lamb – SSG Vice Chair (West Kilbride CC)
Mr Phil Lonsdale (Cumbrae CC)

ONR

Dr Ian Bramwell (Hunterston B)
J Debanic (Hunterston B)
Mr Ryan Maitland (Hunterston B)
Ms Vik Winspear-Roberts (Hunterston B)

North Ayrshire Council

Cllr Alan Hill (North Coast and Cumbraes)
Cllr Elizabeth McLardy MBE (Dalry and West Kilbride)
Cllr Tom Marshall (North Coast and Cumbraes)

SEPA

Mr Keith Hammond (Hunterston B)

NDA

Mr Bill Hamilton (Head of Communications)

CNC

Mr Anil Mandor (Hunterston B)

In Attendance

Mrs Sheila Adams (Minutes)
Mr Ronald Gilchrist (Greenway Training)
Ms Marie Girvan (Balfour Beatty)
Miss Linda Grainey (Public, Largs)
Cllr Ronnie Ogilvie (Chapelcross SSG, Chair)
Cllr Craig Peacock (Chapelcross SSG, Vice Chair)
Mr Alan Rice (Public, Saltcoats)
Mr Peter Smith (Stirling University)
Mr Graham Wallace (Cumbrae CC)

Apologies

Cllr Robert Barr (North Ayrshire Council, Dalry and West Kilbride)
Mr Angus Cochran-Patrick (Hunterston Estate)
Mr Gareth Dew (TU Representative, Hunterston A)
Dr Hazel Henderson (Public Health, NHS Ayrshire and Arran)
Mr William Jack (NFU)
Ms Jane McGeorge (Ayrshire Civil Contingencies Team)
Mr Hugh McGhee (Environmental Health, North Ayrshire Council)
Mr Mark Raffle (Programme Manager Scottish Sites, NDA)
Mr Adam Stackhouse (SEPA, Hunterston A)
Mr David Orr (EHSS&Q Inspector, Hunterston A)
Mr Robin Turner (Scottish Government Rural Payments and Inspections Directorate)
Mr Ewan Young (Scottish Government Directorate for Environment and Forestry)

1. Chairman's Opening Remarks and Declarations of Interest

Mrs Holmes, Chair, welcomed everyone to the forty-seventh meeting of the Hunterston Site Stakeholder Group in the Lauriston Hotel, Ardrossan. All those present introduced themselves. The apologies, as listed above, were read out. There were no declarations of interest. Mrs Holmes welcomed the Chair and Vice Chair of Chapelcross Site Stakeholder Group, Cllr Ronnie Ogilvie and Cllr Craig Peacock, to the meeting as observers.

Mrs Holmes advised that there was a change in the usual format of the Agenda and Hunterston A reports would be heard first. Under Any Other Business, Mr Sean Marshall will provide feedback on the External Stakeholder Survey which took place at the end of 2016. In addition, Mr Peter Smith of Stirling University will explain the Habits Survey being undertaken in the local area.

2. Site Stakeholder Group Membership Update

Mrs Holmes gave a warm welcome to new members: Mr Drew Cochrane, replacing Mr Douglas MacFarlane as the representative of Largs Community Council and Mr Phil Lonsdale, replacing Mr Frank Corcoran as the representative of Cumbrae Community Council. Mrs Holmes thanked both Mr Corcoran and MacFarlane for their attendance, support and input to the Site Stakeholder Group over many years.

Mrs Holmes noted that Mr Kenneth Gibson MSP and Mrs Patricia Gibson MP had indicated that they would like to become members of the SSG. This would require a vote to be taken by the voting members and if they are accepted as members, an amendment to the Constitution would be required to reflect this. **Action – SSG Secretariat to arrange a meeting to discuss.** Mr Gibson and Mrs Gibson were not present at this meeting. Mrs Holmes welcomed CNC Unit Commander, Mr Anil Mander, who takes over from Mr Alan MacRae at Hunterston B. She informed members that Mr David Orr had taken over from Mr Paul Buckley as EHSS&Q Inspector at Hunterston A.

Mrs Holmes thanked Mr Martin Grafton who was attending his last meeting as Site Closure Director and welcomed Mr John Grierson who will be Site Closure Director for both Hunterston A and Chapelcross sites. Mrs Holmes also thanked Mr Ryan Maitland from ONR for his attendance and input at meetings and welcomed Ms Vik Winspear-Roberts who will take over the post on 1st April.

2. Chair and Vice Chair Updates and Correspondence

Mrs Holmes had attended an ONR / NGO Forum meeting in London as a representative of Ayrshire Radiation Monitoring Group. Mrs Holmes and Mr Lamb had attended monthly briefing meetings with Mr Grafton and Mr Marshall at Hunterston A.

In terms of forthcoming meetings, on 3 March, the Chair and Vice Chair will attend the Scottish Councils Committee on Radioactive Substances (SCCORS) meeting in Edinburgh on behalf of the Site Stakeholder Group and on 6 March they will attend a Radioactive Substances Workshop in Edinburgh on the joint proposals by SEPA/Scottish Government for an Integrated Authorisation Framework. They will attend a site visit in Renfrew on 22 March to see the new SILWE test facility before it is moved to site at Hunterston. The Chair and Vice Chair will attend the Scottish Nuclear Sites meeting in Edinburgh on 23 March.

3. Actions and Approval of Previous Minutes

Action 01 – Mrs Callander had made contact with Melanie Anderson, North Ayrshire Council Secretariat, who had confirmed that Cllr Alex Gallagher is North Ayrshire Council's representative on SCCORS with Mr Scott McKenzie as the Officer Representative. Status – closed.

Action 02 – The Chair's notes on the pre consultation meeting in respect of the joint SEPA/Scottish Government consultation on proposals for an Integrated Authorisation Framework had been circulated in an email on 25 January 2017. The consultation is open till 12 April 2017 and a formal response on the consultation has been sent on behalf of the SSG. Status – closed.

Action 03 – The Secretariat will liaise with Ms Fiona McCall, EDF Energy, and circulate potential dates to members for a site visit to Hunterston B Station to demonstrate the virtual reality technology. This will also be done again in May after the elections for the benefit of new Elected Members. Status – carried forward.

Action 04 – A presentation by Mr Hammond, SEPA, on the variation authorisation was on the meeting agenda. Status – closed.

Action 05 – Photographs of the inside of the reactors were provided in the meeting report on the agenda. Status – closed.

Amendments to Minutes –

Page 2, Item 2, last paragraph, last sentence – Hunterston B should read Hunterston A: 'An ONR presence will be retained at Hunterston A site due to its long-term storage of Intermediate Level Waste (ILW).'

Page 4, Mr Maitland's report, second paragraph, second sentence – Ms Jane McGeorge, Ayrshire Civil Contingencies Team, had requested that this be amended to read: 'The exercise tested the Strategic Coordination Centre, as well as the predetermined Media Briefing Centre at HMS Gannet and the onsite Emergency Control Centre.'

With these amendments, the Minutes of the meeting of 1 December 2016 were proposed for approval by Mr John Lamb and seconded by Cllr Tom Marshall.

4. Hunterston A Site Reports

Hunterston A Report – Mr Martin Grafton

The Site Closure Director's report, circulated with the meeting papers, was taken as read. Mr Grafton highlighted the main points in the report.

Mr Grafton was pleased to report that excellent safety performance continues, with it being 34 months since the last Lost Time Accident (LTA) on site. There had been two minor first aid injuries and the Magnox Safety Campaign, Target Zero, continues. There has also been a site campaign since the beginning of the New Year encouraging individual responsibility which has been well received by the workforce.

Under Decommissioning progress, Bays 4 and 6 in the Pond project are now complete and sludge retrieval equipment has now been set up in Bay 8, the biggest bay. The Solid Active Waste Bunker Retrieval (SAWBR) project has reached 522 packages of waste being safely recovered. Bunker 3 is expected to be complete in July 2017.

A routine inspection of Licence Condition 21 of the Wet Intermediate Level Waste Retrieval and Encapsulation Plant (WILWREP) identified issues with the standards and disciplines shown in the completion of some commissioning records. Safety was not compromised and the site was able to demonstrate sound testing within two weeks of the inspection. Following the active ventilation system commissioning, the retrieval pump manipulator active commissioning was successfully completed and permission granted to proceed with the first active package. The first active drum was retrieved, encapsulated and transported to the ILW store on 31 January 2017.

The Solid Intermediate Level Waste Encapsulation Plant (SILWE) equipment is largely complete and being tested at an integrated test facility at Renfrew. This is expected to be brought to site in summer 2017 with active commissioning beginning in late spring 2018.

Mr Grafton confirmed that this is his last meeting as Site Closure Director as the two Closure Director posts at Hunterston and Chapelcross are being combined. Mr John Grierson, Scottish Regional Lead and Chapelcross Site Closure Director, will take over at Hunterston on 1 April 2017. A handover is in place now and Mr Grafton reported to SSG members that Mr Grierson is a very experienced Closure Director who is well able to cope with the demands of both sites.

The Government's Pension Reform and the cap on redundancy payments continues to concern Magnox employees and regular updates are provided to personnel as these become available.

SEPA's assessment of environmental performance in 2016 was recorded as excellent. Safety contingency arrangements were demonstrated to the ONR and Magnox assessors in November 2016. Permission for the adoption of new arrangements is expected from ONR in March 2017.

A list of site visits and key dates was included in the report and Mr Grafton was pleased to host visits from The Japan Atomic Power Company and Patricia Gibson MP and Kenneth Gibson MSP.

Mr Grafton concluded his report by expressing his pleasure at leading the site over the last 2¹/₂ years and pride in the excellent safety record and progress made with decommissioning. He was also pleased with the number of awards to beneficial projects through the Magnox Socio Economic Fund and will miss the Site Stakeholder Group meetings.

ONR Report –

Mr Eales was not present at the meeting and the ONR report for the period October – December 2016, circulated with meeting papers, was taken as read.

SEPA Report – Mr Adam Stackhouse

Mr Stackhouse was not present at the meeting and no report had been provided in advance of the meeting.

Questions and Observations

Mrs Holmes asked if the Wet Intermediate Level Waste Retrieval and Encapsulation Plant (WILWREP) had been painted as it looked different in the photos in the report. Mr Grafton confirmed that it had not been painted and is just the same but the photos were taken from a different angle.

Mrs Holmes asked about radiological safety of the sludge retrieval in the pond area and asked who undertakes the work in this uncomfortable work area. Mr Grafton replied that there are both Contractors and employees here. The highest individual dose was received by a Contractor but this was well within the permission levels.

Mrs Holmes asked where the Emergency Control Room would be situated when the site comes out of REPPIR (Radiation (Emergency Preparedness and Public Information) Regulations 2001. Mr Grafton clarified that this is on site, on the top floor of the first building on the left.

Cllr Ogilvie asked what communications exist between Hunterston A and EDF at Hunterston B. Mr Grafton confirmed facilities were examined when he started in post to ensure that the best use was made of sharing facilities, information and resources. The sites share communication on emergency arrangements and shared systems such as water and high voltage. Hunterston B Station is trying to extricate itself from Hunterston A real estate so that it will become self-sufficient.

Mr Rice referred to page 7 of the report and asked about the liquid discharges. Mr Phillips responded and advised that tritium comes from water in gas and gaseous discharges come from the reactor vessels. Assessments are made of what goes into the atmosphere.

As a representative of the public and local community, Miss Graineey thanked Mr Grafton and his workforce and noted that it was good to have open communication and community representation at Site Stakeholder Group meetings.

To mark his leaving and as a token of appreciation of his work, Mrs Holmes presented Mr Grafton with a gift on behalf of the Site Stakeholder Group, for which Mr Grafton thanked the Group.

5. NDA Report – Mr Bill Hamilton

The report from the NDA was circulated with the meeting papers and was taken as read. Mr Hamilton confirmed that a consultation period will run until 21 April following negotiations between the Government, NDA and national Trade Unions on the Pensions Reform affecting public sector and nuclear industry employees. He believed that the current proposals are the best outcome achievable by negotiation and are less disadvantageous to the workforce.

There is no update since the last meeting on the Court Case against EnergySolutions EU but some news is expected in the next couple of months.



The NDA is under new leadership in the shape of Mr Tom Smith as Chairman and Mr David Peattie as Chief Executive Officer from 1 March 2017.

The NDA will organise a Stakeholder Summit in September 2017 which is expected to be a different format of event with two representatives from each Site Stakeholder Group invited to tour Sellafield and the Lakes Distillery, which will be part funded by the NDA Socio Economic Fund. Mr Hamilton advised that he had met with Kenneth Gibson MSP in Edinburgh who will be unable to attend all the Hunterston Site Stakeholder Group meetings but hopes to attend when appropriate. Mr Hamilton asked that the SSG Secretariat liaise with Mr Gibson on appropriate meetings and perhaps consider changing the day of the meeting to a Friday to facilitate his attendance.

Mr Hamilton added his personal thanks and best wishes to Mr Grafton.

Questions and Observations

Mrs Holmes asked Mr Hamilton to pass on the congratulations of Hunterston Site Stakeholder Group to Mr Adrian Simper on being awarded an OBE.

Miss Grainey commented that she would be pleased to see MSPs attend occasional Site Stakeholder Group meetings. Mr Marshall added that an appropriate meeting might be the one in June or September depending on the dates when the Scottish Parliament is in recess.

6. Update from Scottish Government

Mr Young was unable to attend the meeting but had forwarded his report, which was tabled.

Euratom

The Scottish Government is committed to maintaining protection of the environment and human health to robust international standards where it has devolved responsibility, including for radioactive substances, where some standards are currently set in Directives under the Euratom Treaty. It is looking to the UK Government to ensure the same for reserved matters. It shall continue to work, including in cooperation with the other three administrations in the UK, to assess the impacts of exiting from the Euratom Treaty, and to mitigate any negative effects on Scotland. As this is a constantly evolving item, the Scottish Government recommends checking its website and in particular the news page for the latest updates: <http://news.gov.scot>.

Scottish Government Higher Activity Waste Implementation Strategy

The Scottish Government published its Higher Activity Waste Implementation Strategy in December 2016. The Scottish Government would like to thank the Hunterston Site Stakeholder Group for its patience and valuable contributions during the development of the Strategy. The Strategy, along with Hunterston SSG and other helpful responses to the 2015 consultation have been published on the Scottish Government's website. Key features of the Strategy include an illustrative long-term timeline and a new Research Statement. The Research Statement commits the Scottish Government and delivery partners to review international concepts and emerging technologies, whilst making best use of the radioactive waste knowledge sharing R&D networks. As part of this work, it will seek advice from its Chief Scientific Adviser and the Committee on Radioactive Waste Management. The Strategy also commits the Scottish Government to working closely with business development partners and Skills Development Scotland to help review and enhance Scotland's decommissioning capabilities. The Scottish Government will continue to work with the NDA, RWM, Scottish Councils Committee on Radioactive Substances and other partners to help ensure local authorities, site stakeholder groups and other community groups are engaged effectively as the higher activity waste management work, outlined in Phase 1 of the strategy,



progresses. The Scottish Government continues to welcome any feedback from Hunterston SSG on the published Implementation Strategy.

Scottish Nuclear Sites Group

This Group next meets on 23 March 2017 and is expected to receive an update on how the Scottish Government is addressing the way forward in respect of Euratom and its possible implications to the nuclear industry and associated areas. Roseanna Cunningham, the Cabinet Secretary for Environment, Climate Change and Land Reform will also attend the first part of the meeting at the request of the Chairs of the Site Stakeholder Groups (SSG's). Each of the three Chairs are being given the opportunity to ask one question each of the Cabinet Secretary.

Questions and Observations

Mrs Holmes was concerned that the UK leaving Europe also meant exiting Euratom which may remove some bureaucracy but could also reduce safety regulations. Mr Hamilton reassured Mrs Holmes that the UK Government would have to put comparable regulations in place. Dr Bramwell added that the ONR will have to comply with the decision of the UK Government but systems and processes will be put in place to safeguard safety regulations. Mr McGhie asked if the Site Stakeholder Group should be lobbying the UK Government to ensure that the same standards are put in place going forward. Mr Hamilton replied that there will be an opportunity at the Scottish Nuclear Sites meeting to raise this issue with Roseanna Cunningham, Cabinet Secretary for Environment, Climate Change and Land Reform.

7. Hunterston B Station Reports

Hunterston B Report – Mr Colin Weir

The Station Director's report, circulated with the meeting papers, was taken as read. Mr Weir summarised the main points in the report.

The ONR had approved the Periodic Safety Review for Hunterston B after extensive review and assessment. This was a lot of work but an opportunity for the Station to demonstrate safety standards and confirms that safety standards were met which is a good result. The current lifetime expectation of Hunterston B remains at 2023.

An interim outage of Reactor 3/TG7 in January 2017 was very successful with excellent safety. Mr Weir put the keyway root cracks into perspective by comparing the size of the 0.5mm crack against a 0.75mm pen tip. The Station rolled out its 'Safe Start 2017' campaign in January using virtual reality technology. The Station's safety record of almost 9 years since the last Lost Time Incident is phenomenal. 2016 was the Station's best year for industrial safety performance with only 13 accident book entries.

Like Hunterston A site, SEPA's assessment of environmental performance in 2016 was recorded as excellent. There were no significant environmental or radiological events to report during the reporting period.

Under Company Updates, Mr Weir reported that the First Minister, Nicola Sturgeon, had opened EDF's new centre for Energy Renewables in Edinburgh.

Site Stakeholder Group members had previously been invited to the site to look at the keyway root cracks in person and potential dates for further visits are 29 March pm, 3 April am, 18 April pm.

Action – SSG Secretariat to circulate dates to SSG members

ONR Report – Mr Ryan Maitland

Mr Maitland advised that this would be his last visit to Site Stakeholder Group meetings which he had enjoyed attending and he thanked the Chair for her challenges and honesty.

The ONR report was circulated with the meeting papers and was taken as read. Mr Maitland reported that the final quarter of 2016 had consisted of straightforward business. In terms of non-routine matters, a follow-up inspection took place into an event in October regarding the unavailability of two 50V battery chargers. ONR Specialists were satisfied that the appropriate actions were taken. In an industrial safety incident just before Christmas, a pipe hanger spring support had sheared, falling approx 30 ft into the turbine hall, close to where personnel were working. Both the Station and the ONR had carried out investigations and the ONR was broadly satisfied with the measures taken and would follow this up.

Licence Instrument no 555 regarding a boiler tube failure safety case was issued in November 2016. This is the last step in a series of problems from 10-12 years ago with boilers.

Mr Maitland clarified the approval of Licence Condition 15 which provides for a further ten year of operations. This does not mean that the ONR has underwritten generation for the next ten years but rather that in consideration of operations, decommissioning and defueling, it has accepted the Station's processes and believes that sufficient justification has been provided to support the continued operations until the next Periodic Review on or before 31 January 2027. A similar assessment of Hinkley was carried out, with the same outcome.

In terms of the graphite safety case, Mr Maitland assured Site Stakeholder members that the ONR will continue to challenge EDF at every stage as part of its requirement to make annual inspections of Reactor 3. Significant investment has been made into research and development technologies since concerns were first raised 10-12 years ago. Significant improvements have been made in engineering resilience since 2006 with the reactor strengthened with twelve additional super articulated rods installed. The outcome of the last graphite core inspection of Reactor 3 showed three further keyway root cracks and two full height cracks. These were inspected by ONR before the Reactor went back to service.

SEPA Report – Mr Keith Hammond

Mr Hammond's report, issued with the meeting papers, was taken as read. Mr Hammond reported that meetings have begun with EDF at corporate level in respect of decommissioning. As reported by Mr Weir, the outcome of SEPA's Compliance Assessment Scheme inspection was 'excellent' for 2016 for three of four licences. The fourth was rated as 'good' due to the contravention of its pH limit.

Mr Hammond reiterated the consultation period until 12 April of the joint SEPA/Scottish Government proposals for an Integrated Authorisation Framework.

Questions and Observations

Mrs Holmes thanked Mr Weir for offering site visits to demonstrate the virtual reality technology which will be very useful, particularly for new members.

Mrs Holmes thanked Mr Maitland for clarifying the situation on the graphite core inspection and for his input at SSG Meetings. Mrs Holmes wished him well in his new appointment.

8. Presentation from Hunterston B

Mr Hammond gave a powerpoint presentation which explained the RSA93 Authorisation Variation in respect of Hunterston B Station (attached for information).

Questions and Observations

Mr Cochrane asked if the 20 consignments per year would be moved by train or lorry. Mr Hammond confirmed this would be by lorry.

Mr Lamb asked if it was transferred by a specialist contractor. Mr Hammond confirmed that this is the case but transport regulations are the remit of the ONR.

Mrs Holmes clarified that Intermediate Level Waste (ILW) can be transferred from Torness to Hythe or from Hunterston to Hythe but not between the two sites.

Mr Rice asked if oily waste / sludge went overseas then came back to Hythe for incineration. Mr Hammond replied that theoretically this could happen but it was unlikely to be considered 'the best practical means'. Mr Rice asked what is sent abroad. Mr Hammond responded that metals might go to Sweden for smelting. Mrs Holmes asked what is particular to the Low Level Waste that goes to Sellafield. Mr Hammond advised that this might go to Sellafield for super compaction then to Hythe.

Mr Rice left the meeting at 3.00 pm.

Miss Grainey recalled that there was very strong objection to the application for variation and asked for a working description of Low Level Waste, Intermediate Level Waste and High Level Waste and the respective degrees of hazard. Mr Hammond responded that the industry definition would be meaningless to the general public. In general terms, Low Level Waste can go into a Low Level Waste Repository but Intermediate Level Waste could not. He noted that most countries do not differentiate between Low and Intermediate Level Waste. The degree of hazard depends on many different factors and cannot be answered in a sweeping statement. The Care and Maintenance period allows for decaying.

Miss Grainey asked about the rationale behind the Scottish Government's policy of storing waste 'near surface, near site' and whether it was safer to move the waste elsewhere. Mr Hammond confirmed that it was the current administration's policy for storage and waste disposal to be stored 'near site', as opposed to south of the border where waste will be stored in Geological Disposal Facilities.

Mrs Holmes thanked Mr Hammond for the very informative presentation.

Cllr Tom Marshall advised that he was one of a few members who went to see the presentation of the keyway root cracks on site and suggested it worthwhile for members to take up this offer.

Cllr McLardy asked ONR if the technology existed to examine the cracks. Dr Bramwell confirmed that technology is available but the recommendation in the Periodic Safety Review is that inspections are undertaken more frequently. Further advanced technology would allow for more inspections as there would be more opportunities for inspection if the process was not as onerous. Cllr McLardy referred to hairline cracks from top to bottom and asked what would happen next. Mr Weir responded that if there was a hair line crack from top to bottom (very unlikely) it would not



Site Stakeholder Group

impact on the overall core distortion. Cllr McLardy asked if the bricks around the cracks are under more pressure. Mr Weir clarified that the cracks relieve the pressure on stress and therefore the release of stress does not increase the pressure. Dr Bramwell added that any cracks in place can potentially affect the ability to shut down the Reactor but ONR is confident that there is no impact on the ability to shut down the Reactor and will continue to inspect results to ensure that there is no impact on the operation until the next inspection event.

Mrs Holmes asked if boiler failure could affect this. Mr Weir confirmed that a safety case had been done in the event of boiler failure and there was protection for boiler failure which would have no impact on the core bricks.

Mr Weir clarified that a seismic event was the only thing which could affect the tolerable level of cracks. The likelihood of a seismic event, which has never happened to date, is 1/10,000 years. Dr Bramwell added that a safety case had been accepted that the level of distortion during a seismic event would not affect a shut down and a seismic event would be tolerated. Mr Lamb asked the highest level of seismic event which could be tolerated. Mr Weir replied 0.14G which is above the highest level experienced in the west of Scotland. He added that a model made at Bristol University to test seismic events withstood 1,000 cracks before there was any possibility of distortion.

Mrs Holmes asked if there might be some cracks which have not been detected because they start at a part of the reactor not seen on the core. Dr Bramwell replied that keyway root cracks will crack quickly and would not go undetected for any length of time. Ten cracks have been identified so far from 6,000 bricks. There was some discussion on exact numbers and percentages of cracked bricks. Dr Bramwell considered that the percentage is not helpful and confirmed that the safety case allows for 350 single cracked bricks. Mr Weir added that in layers 3, 4, 5 and 6 there are 1,750 bricks. All layers are inspected but layers 3-6 are the ones which are expected to crack. Cllr Tom Marshall calculated that 7 bricks of 1,750 in Reactor 3 are cracked which is less than 1%.

Mr Maitland further explained that the EDF is looking at the number of cracked bricks but the important point is the potential to cause distortion and interact. There is no appropriate evidence of cracks opening up and interacting. Continued inspections should provide continued assurances. Cllr McLardy asked what kind of assurance EDF provides. Mr Maitland replied that all reports, images and photographs are inspected. Cllr McLardy pointed out that inspections are not physical but made from reports and in reading documents from 2006 she noted that studies indicate that some bricks may have passed stress reversal. Dr Bramwell explained that stresses in graphite bricks can change and stress reversal happened some time ago in some bricks which are now keyway root cracks. Cllr McLardy asked what the limit is on the number of cracked bricks before the core performance is impaired. Dr Bramwell reiterated that the EDF has demonstrated that 350 cracked bricks would have no effect. Cllr McLardy referred to reports on cracks from 11 years ago but members are now being told that the cracks are acceptable. Mr Weir reminded members that in the last 11 years there has been significantly more research, understanding and knowledge and did not accept that EDF does not understand the situation. He assured members that understanding, engineering, academics and science have advanced greatly since 2007 and the safety case will always be to a tolerable level, which would not be affected by a seismic event. Dr Bramwell added that sound projections need to be underpinned by inspections and the Periodic Safety Review requires EDF to continue to underpin its operation of the Station by regular inspections.

Mr Maitland put this into perspective by reminding members that the core is inspected every three years. Reactor 3 is shut down every 12 months and all results are analysed. Inspections have increased from three yearly to annually and the Reactor does not return to service until all results



are inspected. This significant increase in inspections will be sustained going forward. £1.5M has been spent by the ONR on independent research and technical specialists.

Mr Lamb noted that Hunterston has the longest live core in existence and projections are theoretical and precautions are being taken through increased surveillance. Mr Weir added that there are routine inspections of routine operations and movements, including the control rods.

Mrs Holmes asked if the accumulation of carbon dust was a fire hazard. Mr Weir confirmed that it was not.

Cllr McLardy referred back to an ONR report which stated that the route of the keyway root cracks was uncertain. Dr Bramwell reiterated that this related to projections and plant inspections are necessary to underpin predictions.

Cllr Hill left the meeting at 3.40 pm.

Miss Graineey disagreed that there had not been an increase in the size and number of cracked bricks. She referred to a report dated 2015 and asked why the cracks were not being monitored as it would appear that mechanisms are inadequate. She was concerned that a Periodic Safety Review in 2013 predicted that keyway root cracking would be found in 2019 but this was observed in 2015. Dr Bramwell responded that keyway cracking was predicted towards the end of life. The bricks have started to degrade and it was known that this would happen. The amount of cracking has no impact on the ability to safely shut down the Reactor. If the cracks developed to an extent where the Reactor could not be properly and safely shut down, operation would not be allowed to continue. Miss Graineey asked what level would be deemed unsafe. Dr Bramwell reiterated that the EDF had been asked to develop a safety case and identify end of life features and indicators. Miss Graineey asked why the public is being scared by numbers if the amount of cracking is so insignificant. Dr Bramwell responded that some of the cracking has been there for some time and the level of cracking is based on inspections. He did not know the exact number off hand but of the statistical analysis of the total number of bricks, the margin was well below that which would affect operation. Miss Graineey considered that Site Stakeholder Group members and Elected Members should know the numbers. Miss Graineey considered that full investigations should be carried out to give assurances based on evidence and not representative samples. Dr Bramwell repeated that the operation of the Reactor is safe. Miss Graineey suggested that the Site Stakeholder Group should demand inspections more frequently than annually when cracked bricks are increasing in number and size.

From industrial experience, Cllr Tom Marshall considered that EDF was very fair in its reporting and suggested that anyone with concerns should take up the invitation to visit the site and see the model of the core as people may not know where the keyway is. Cllr Marshall added that with the cracks less than 1mm and from safety measures seen on site over the years and the assurance of professionals in increasing inspections, he was comfortable with the position. Mrs Holmes added that ONR specialists are 99.9% confident in their projections and all shutting down the Reactor would do is confirm what is already known, that there are seven confirmed keyway cracks and three full height cracks. The core has been inspected for the last 15 years, with 10% of bricks inspected each time, with images and reports of previous inspections analysed.

Mrs Holmes thanked Dr Bramwell, Mr Maitland and Mr Weir for their input on this discussion.

9. Any Other Business

Stakeholder Survey 2016 Results – National and Scottish Results – Mr Sean Marshall

Mr Marshall reminded members of the survey issued in December 2016 to Site Stakeholder Group members and key stakeholders through Magnox website, social media and e-newsletter circulation. He tabled slides of the results of the survey (attached for information), which had achieved a good return rate. Mr Marshall ran through the slides, summarising the results. Mr Hamilton informed members that the NDA would hold a meeting with Magnox representatives to look at the survey results and other matters, with a view to drafting new guidelines for Site Stakeholder Groups.

Habits Survey – Mr Peter Smith

Mr Peter Smith addressed members to explain the Habits Survey being undertaken around the Largs area in early April and June, by the University of Stirling, on behalf of SEPA, as part of its regulatory responsibility. This Environmental Monitoring project is carried out every five years and consists of face-to-face interviews with members of the public and 2,000 postal surveys, to investigate the types of activities people do in the area both on land and in the water and along the shoreline. The ensuing report is made publicly available on SEPA's website.

Hunterston C – Mr Stuart McGhie

Mr McGhie referred to a positive story in the Largs and Millport News on 15 February 2017 regarding a new-build station known as Hunterston C. This is positive news in terms of job creation but in reality there will be a gap between the decommissioning of Hunterston B and the start of Hunterston C. Mr McGhie referred to the economic effect on North Ayrshire of job losses and socio economics. Mrs Holmes did not consider the Site Stakeholder Group to be the most appropriate forum for taking this forward and suggested that, as at Hinkley, there should be a separate forum for discussion on this subject. Cllr Marshall noted that it is the policy of the North Ayrshire Conservative Party to welcome new nuclear build at Hunterston and hoped that this would be in the Local Plan with Elected Members pushing to ensure that North Ayrshire Council address the gap. Cllr McLardy added her support for a Hunterston C Station.

Mr Marshall noted from the perspective of Hunterston A site, a Steering Group was set up to help mitigate the impact of closure on the local economy. Opportunities should be looked at on the Hunterston peninsula. Mr Hamilton added that new build is fascinating but is an aspiration and efforts should be concentrated on the regeneration of the local economy. The community around Hunterston has not been as advanced in its thinking as some and the NDA remains open to suggestions and funding requests but cannot do it alone. Mr Hamilton gave the example of Wick Harbour, near Dounreay, which the NDA contributed £1m funding to build a storm gate which created 200 jobs. He confirmed that the NDA has the will, power, money and connections but has to work in partnership with others.

Mr Hamilton advised that the Stakeholder Summit in September will focus on socio economics and showcase successful projects, funding advice and maintaining and growing the local economy. He encouraged local groups to come together and work with Mr Marshall to get a Steering Group going again. It was agreed that a Hunterston Economic Sub Group should be re-established, following the local government elections in May.

Mr McGhie agreed that a way forward was required to replace the 60 years of safe generation at



Site Stakeholder Group

Hunterston. Mrs Holmes added that this should be not just on the Hunterston peninsula but across North Ayrshire.

10. Next Meeting – Thursday 1 June 2017

The date of the next meeting was confirmed as Thursday 1 June 2017 in the Lauriston Hotel, Ardrossan, at 1.00 pm for 1.30 pm.

Mrs Holmes closed the meeting closed at 4.25 pm.