

**HUNTERSTON SITE STAKEHOLDER GROUP  
SUMMARY OF KEY POINTS FROM THE FIFTY FOURTH MEETING  
HELD ON THURSDAY 6 JUNE 2019 AT THE WATERSIDE HOTEL, WEST KILBRIDE, KA23 9NG**

**Chair's Opening Remarks and Vice Chair Updates and Correspondence**

Other than routine monthly meetings on site, the Chair and Vice Chair had attended the NDA SSG Chair's meeting in London in April 2019. Updates were received from each site and it was beneficial to have face-to-face discussion with Mr Tom Smith, NDA Chairman and Mr David Peattie, NDA Chief Executive.

Mrs Holmes wished Mr Charles Stewart-Roper from the Scottish Government's Radwaste Team well as he has moved to a new role working on Brexit. Mr Ewan Young has announced his retirement and members wished him well.

**Actions and Approval of Previous Minutes**

The Minutes of the meeting of 7 March 2019 were approved. The four actions from the meeting were discharged.

**Hunterston A Site Reports**

**Hunterston A Report – Mr John Grierson and Mr Hugh Richards**

The site's Total Recordable Incident Rate (TRIR) remains at zero. The site has passed five years without a Lost Time Accident and was congratulated on this achievement. The site passed a significant milestone with the production and export of the 1000th waste package to the Intermediate Level Waste (ILW) store. The site is pleased to have a number of Mental Health First Aiders to try and remove this stigma in the workplace. The Critical Path Diagram now shows a different picture as it moves to the Solid Intermediate Level Waste Encapsulation (SILWE) Plant. Mr Grierson showed a video which was shown at the Magnox Leadership Conference and gives a flavour of the extent of work being done across the Magnox estate. Mr Richards recapped and updated on End State Optimisation. An End State Development Event will be arranged to elicit wider stakeholder views on 28 August 2019.

**ONR Report**

Mr Kings was not present at the meeting and the report provided in advance, with the meeting papers, was taken as read.

**SEPA Report – Mr David Stone**

An inspection in May 2019 in relation to the Environmental Authorisations (Scotland) Regulations (EASR) permit focussed on the site's environmental monitoring programme and a review of the application of Best Practicable Means.

**NDA Report**

Mr McNamara was not present at the meeting and the report provided with the meeting papers, was taken as read.

**Update from Scottish Government**

There was no Scottish Government update due to Mr Young's retirement. The Secretariat has requested that a representative from the Scottish Government attend future meetings.

**Hunterston B Station Reports**

**Hunterston B Report – Dr Roddy Angus**

The inspection campaign has been completed and the safety case for Reactor 4 is with ONR for assessment. The Station has received many visitors with two public open sessions and meetings with MSPs at Holyrood and members of the Scottish Councils' Committee on Radioactive Substances (SCCORS) group. Under Safety and the Environment, there has been a big safety campaign around risk perception entitled 'I Always'.

**ONR Report – Mr Stuart Fannin, Mr Steve Harrison**

Mr Fannin confirmed that most of the intervention inspections at Hunterston B Station have revolved around the outage to establish outage activities, confirmation that equipment is properly maintained and fit for purpose and assess conventional health and safety practices. All inspections in the period were graded green. Mr Harrison gave a presentation on the graphite keyway root cracks and answered a number of questions on this subject.

**SEPA Report – Mr Keith Hammond**

Highlights from the report include the variation issued to the Station's deemed permit, which is a milestone for SEPA and all Stations are now fully compliant with the new Regulations. SEPA's Nuclear Sector Plan was published on 15 May 2019. An inspection in April on liquid discharges did not identify any contraventions.

**Any Other Business**

Mr Allan Rice no longer sits on Saltcoats Community Council and a new representative is awaited.

Mr Graham Wallace has replaced Mr Phil Lonsdale as representative of Cumbræ Community Council.

A number of questions were asked by members and members of the public in attendance and further detail on these can be found in the full Minutes of the meeting.

**Next Meeting – Thursday 5 September 2019 at 1.00 pm for 1.30 pm at The Waterside Hotel, West Kilbride.**

There will be three presentations at the next meeting: Ms Jane McGeorge, Ayrshire Civil Contingencies Coordinator – REPPiR Regulations; Ms Catriona McAuley, North Ayrshire Council – Socio-Economics; SEPA representative – Presentation on Guidance on Requirements for Release of Nuclear Sites from Radioactive Substances Regulation (GRR).

**HUNTERSTON SITE STAKEHOLDER GROUP  
MINUTES OF FIFTY FOURTH MEETING HELD ON  
THURSDAY 6 JUNE 2019 AT 1.30 PM  
AT THE WATERSIDE HOTEL, ARDROSSAN ROAD, WEST KILBRIDE, KA23 9NG**

**Present**

**Magnox Ltd**

Mrs Jill Callander (SSG Secretariat)  
Mr John Grierson (Scottish Regional Lead)  
Mr Sean Marshall (Magnox Communications)  
Ms Johan Milliken (HNA Trade Union Rep)  
Mr Reuben Phillips (EHSS&Q Manager)  
Mr Hugh Richards (Principal Waste Consultant)  
Ms Anna Tyler-Revell (Project Manager)

**Community Council Representatives**

Mr Drew Cochrane (Largs CC)  
Mrs Rita Holmes – SSG Chair (Fairlie CC)  
Mr John Lamb (West Kilbride CC)  
Mr Graham Wallace (Cumbrae CC)

**North Ayrshire Council**

Cllr Robert Barr (Dalry and West Kilbride)  
Cllr Todd Ferguson (Dalry and West Kilbride)  
Cllr John Glover (Kilwinning)  
Mr Hugh McGhee (Environmental Health)

**In Attendance**

Mrs Sheila Adams (Minutes)  
Ms Anne Carson (Largs CC)  
Mr Ian Dippig (Public)  
Mr Ronald Gilchrist (Public)  
Cllr Ian Murdoch (North Coast and Cumbraes)

**Apologies**

Mr Angus Cochran-Patrick (Hunterston Estate)  
Mr Craig Hatton (North Ayrshire Council)  
Mr William Jack (National Farmers Union Scotland)  
Mr Bill Kings (ONR, Hunterston A)  
Cllr Tom Marshall (North Coast and Cumbraes)

**EDF (Hunterston B)**

Dr Roddy Angus (Acting Station Director)  
Ms Sue Fletcher (Senior External Comms Manager)  
Ms Fiona McCall (External Comms Manager)  
Mr Stuart McGhie – SSG Vice Chair (EDF  
Trade Unions)

**ONR**

Mr Stuart Fannin (Hunterston B)  
Mr Steve Harrison (Head of Assessment)

**SEPA**

Mr David Stone (Hunterston A)  
Mr Keith Hammond (Hunterston B)

**Ayrshire Shared Services**

Ms Jane McGeorge (Ayrshire Civil  
Contingencies Coordinator)

Mr Alan Holden (Fairlie CC)  
Ms Wendy McNab (Public)  
Mr Allan Paterson (Public)  
Mr Bob Simpson (Ex Scottish Nuclear)

Mr John McNamara (NDA)  
Dr Will Munro (Food Standards Scotland)  
Mr Ian Warner (Magnox)  
Mr Ewan Young (Scottish Government)

**1. Chairman's Opening Remarks and Declarations of Interest**

Mrs Holmes, Chair, welcomed everyone to the fifty fourth meeting of the Hunterston Site Stakeholder Group in the Waterside Hotel, West Kilbride. All those present introduced themselves.

Mrs Holmes gave a special welcome to Mr Steve Harrison, ONR's Head of Assessment, and Mr Hugh Richards, Principal Waste Consultant, Magnox. There were no declarations of interest. The apologies, as listed above, were read out. Mr Bill Hamilton's replacement at NDA, Mr John McNamara was unable to attend the meeting due to another pressing commitment but offered to meet with and update the Chair and Vice Chair. Mr Ian Warner sent apologies and Mr Hugh Richards will do a presentation on his behalf. The ONR met with North Ayrshire Councillors on 3 June 2019 regarding Reactor Safety Cases assessment for Hunterston B and Mrs Holmes was pleased to have ONR representatives present at the Site Stakeholder Group meeting.

## **2. Chair and Vice Chair Updates and Correspondence**

The Chair advised that other than the normal monthly update and Socio-Economic meetings with Hunterston A site, she and the Vice Chair had attended the NDA SSG Chair's meeting in London on 8 and 9 April. Each site gave updates and Hinkley Station was particularly interested in the keyway root cracks issue as Hinkley and Hunterston Stations are similar in age and construction. The decommissioning of the EDF's Advanced Gas-cooled Reactors will be up to EDF itself, not the NDA. Other discussion included Dungeness A as a degrading asset in need of urgent attention, the cancellation of Wylfa C and the unemployment situation there and the issues surrounding the preparation of Hinkley C, including the amount of environmental destruction and the inadequacy of the infrastructure to cope with the huge increase in heavy traffic through small villages. Other updates included the NDA's decommissioning of a 'lead site' and the Government's search for a host community for the Geological Disposal Facility. The Chairs present appreciated the face-to-face interaction with Mr Tom Smith, NDA Chairman and Mr David Peattie, NDA Chief Executive.

Mrs Holmes wished Mr Charles Stewart-Roper from the Scottish Government's Radwaste Team well as he has moved to a new role working on Brexit. The last Scottish sites meeting did not take place. Mr Ewan Young who represented Scottish Government at Site Stakeholder Group meetings and was Secretary of the Scottish Government Radwaste Team for ten years has announced his retirement and while wishing Mr Young well in his retirement, members were saddened by this news as Mr Young showed commitment, openness, honesty, support, advice, effective liaison and cheer. The Scottish Sites Forum is unique in the UK and gives access to representatives of the Scottish Civil and MOD nuclear sites in Scotland, as well as to the Committee on Radioactive Waste Management (CoRWM), Scottish Councils Committee on Radioactive Substances (SCCORS), SEPA and ONR.

## **3. Actions and Approval of Previous Minutes**

The Minutes of the meeting of 7 March 2019 were proposed for approval by Mr John Lamb and seconded by Cllr Robert Barr.

All actions from the previous meeting had been discharged:

SSG Secretariat and NDA to liaise and facilitate Socio Economic Sub Group meeting of Site Stakeholder Group.

Mr Hamilton had forwarded emails regarding potential project funding to the SSG Secretariat for onward transmission to North Ayrshire Council Elected Members.

SSG Secretariat has liaised with SEPA regarding a future presentation on GRR - on Agenda for September Site Stakeholder Group meeting.

Timed slots for each Agenda item to be trialled at the next meeting – as per meeting Agenda.

#### 4. Hunterston A Site Reports

##### **Hunterston A Report – Mr John Grierson, Mr Hugh Richards**

Mr Grierson's report issued with the meeting papers was taken as read. Mr Grierson was pleased to report that the Total Recordable Incident Rate remained at zero and five years has now passed without a Lost Time Accident. This is extremely pleasing but the site cannot afford to be complacent. The site marked the significant achievement of the production and export of the 1000th waste package to the Intermediate Level Waste (ILW) Store by providing all employees with a token of appreciation.

There is still a stigma in society over mental health, so the site is pleased to have a number of Mental Health First Aiders to try and remove this stigma in the workplace. Leaflets placed around the site are being taken by staff and the Mental Health First Aiders are having discussions with staff. Employee led well-being groups have been established at Hunterston A and Chapelcross sites and Mr Grierson is pleased to see both groups gaining momentum.

SEPA carried out a number of inspections under the requirements of the Radioactive Substances Permit from which the Compliance Assessment was graded 'Excellent'. From 1 April 2019, the site is regulated under the Environment Authorisations (Scotland) Regulations 2018, which replaces the Radioactive Substances Act 1993.

The annual budget for the year is £30.8 million, which last year was £34 million. The Magnox Transition will see the Cavendish Fluor Partnership contract finish on 31 August 2019 with a new Magnox Ltd Executive Team of 37 in place from 1 September 2019. Nine of this number are promotions within the business. The first visits on site by the Executive Team will begin in July. Ms Gwen Parry-Jones OBE has been appointed Chief Executive Officer of Magnox Ltd.

The Critical Path Diagram now shows a different picture as it moves to the Solid Intermediate Level Waste Encapsulation (SILWE) Plant. Mr Grierson showed photographs of the completed work in the ponds. The Water Treatment Plant is creating a healthy level of work in deplanting. Under the Solid Active Waste Bunker Retrieval (SAWBR) project, Bunkers 5, 4, 3 and 2 which contained graphite material are complete and work is now underway in Bunker 1 to remove fuel element debris. This involves the same equipment but not the same process throughout. Between eight and nine packages per week were being removed but the number in Bunker 1 will be lower. The Sludge Retention Tank 2 under the Wet Intermediate Level Waste Retrieval and Encapsulation Plant (WILWREP) is complete and material in Tank 1 is now being agitated. One of the crane ropes was defective and rendered the crane out of service for two weeks until it was fixed. The second and last robot in the Solid Intermediate Level Waste (SILWE) Plant is now finished and work is being carried out on the grout plant with integration of various pieces of plant. The Low Level Waste (LLW) being received is generally metallics which are being disposed of through the authorised routes.

Due to escalated costs, the contract with Spencers for the weather envelope to the Reactor Buildings has been terminated by mutual agreement and they will finish on site this week. In terms of asset care, the cradle rail on top of the Reactor Buildings 1 and 2 is the highest scoring degraded asset. The front sections have been removed from these Reactor Buildings. A Project Plan is being prepared to request funding to take the structures down.

Under Socio Economics, £3,250 has been spent to date in the new financial year. Mr Grierson described some of the stakeholder engagement and charity fundraising events on site. The site has also hosted visitors from Japan and some from Germany that morning. The UK is seeing an increase in foreign countries sending delegations to visit nuclear sites in the UK.

Mr Grierson finished his presentation by showing the Magnox Decommissioning Delivery video which was shown at the Magnox Leadership Conference and gives a flavour of the extent of work being done across the Magnox estate.

#### End State Optimisation

Standing in for Mr Ian Warner, Mr Richards, End State Technical Lead, recapped and updated on progress since the previous meeting (see attached slides).

SEPA formally published the Guidance on Requirements for Release of Nuclear Sites from Radioactive Substances Regulation (GRR) in July 2018. This is awaiting a slot in Parliament to be ratified as a Bill but there is an assumption that it will be approved. The GRR was trialled in Winfrith and Trawsfynydd in 2016/17. Mr Richards explained the new SEPA permit conditions which took effect in April 2019. Ongoing radiological assessment work is being carried out by specialist consultants to understand potential radioactivity doses to the public.

Mr Richards summarised the Current Plan for areas of site not needed for long-term storage of Intermediate Level Waste (ILW). The end state has to be suitable for the next planned use. The next planned use is assumed to be non-nuclear. The Plan forms a good basis for the NDA to understand the potential cost but there has been no attempt to assess whether this is the optimised situation. The optimised end state will be a balance between different factors. Mr Richards showed a diagram listing the negative impacts of removing less radioactivity from site balanced against the negative impacts of removing more radioactivity from site.

A new End State Group for Hunterston A held its inaugural meeting on 3 June 2019. The members of this Group comprise: NDA; Magnox; EDF as neighbouring site; regulators SEPA and ONR; North Ayrshire Council (at the appropriate time). The Group will meet three or four times per year if required and feed back to Site Stakeholder Group meetings. The Group will deal with the technical and regulatory issues as well as informing wider stakeholder engagement. A planned End State Development Event will be arranged to elicit wider stakeholder views to inform End State Strategy Development, including what factors are most important for assessing alternative End State Strategies. Invitees will include End State Group members; Site Stakeholder Group members; and other local stakeholders. The event will be preceded by a briefing pack being issued to inform invitees in advance. This is likely to be a whole day event, provisionally scheduled for 28 August 2019. Mr Richards summarised the main points of the envisaged next steps towards the Event and the process of participation.

#### **SEPA Report – Mr David Stone**

The SEPA Report, issued in advance of the meeting, was taken as read. Mr Stone apologised for being unable to attend the last meeting and provided an update on inspections since the last meeting.

An inspection in May 2019 in relation to the Environmental Authorisations (Scotland) Regulations (EASR) permit focussed on the site's environmental monitoring programme and a review of the application of Best Practicable Means. Following an inspection of the process, some minor recommendations were issued and SEPA was pleased to see the Environmental Authorisations Technical Note 2 being used. SEPA also attended site meetings to discuss technical issues such as the Best Practicable Means of managing an aqueous waste stream. There are a number of nominated discharge points in the Solid Intermediate Level Waste (SILWE) plant and the site is proposing to include new discharge points, which will not increase the overall site limit and will optimise future operations. SEPA has had early engagement and has not found anything contentious in the technical issues looked at to date but will discuss further when the Site's Management Plan is produced.

### **ONR Report**

Mr Kings was not present at the meeting and the report provided in advance, with the meeting papers, was taken as read.

### **Question and Answer Session**

Cllr Barr congratulated Mr Grierson and Hunterston A site on five years with no lost time accidents, which is an excellent achievement, particularly in the nuclear industry.

Mr Cochrane asked if the issues with the Contractor and the weather envelope were purely financial. Mr Grierson explained the procurement process to appoint Contractors. The Contractor appointed was the most expensive but cost is not the only consideration, references were taken up and previous jobs were visited. The costs of the access system were lower but the Contractor then had to change to a new Sub Contractor and use scaffolding not previously budgeted for which increased the price significantly. While the site could have held them to the contract to deliver as tendered, this is not good practice and the termination of the contract was mutually agreed. Mr Cochrane asked how this affected the timescale of work. Mr Grierson advised that this puts the job back by 18 months as another procurement process will be required.

Mr Lamb recapped on the three phases of the Solid Intermediate Level Waste Encapsulation (SILWE) Plant being integrating things together, non-active commissioning then active commissioning and asked where the first packages would come from. Mr Grierson replied that this is not yet known and while it could be from Bunker 1 this cannot be confirmed at this stage.

In the absence of Mr Kings, Mrs Holmes asked Mr Fannin to advise on Operating Rule 1. Mr Grierson responded that this relates to the oxygen system in Bunker 1 and controlling the environment in the bunker. The breakthrough has been completed so this is no longer needed. Mr Fannin added that as the risk of fire is now lower, the Operating Rule has been removed.

Mr Lamb referred to the End State and asked how this fits with the Scottish Government's Higher Activity Waste Strategy. Mr Richards clarified that the End State would not be looking at Higher Activity Waste but Low Level Waste, such as concrete, rubble, etc. Mr Lamb referred to Compound 7 at Hunterston A which is a sealed compound under SEPA regulations indefinitely. Mr Richards responded that this assumes a decision by SEPA in 80 years' time and is a SEPA compliance issue but there is not high level contamination or vast volumes.

Mrs Holmes asked Mr Stone for further information on the novel aqueous waste stream. Mr Stone explained that there was an ingress of contaminated water when the pond was decommissioned. This was not discharged to sea as was originally proposed and the route was reviewed. This relates to 20 cubic metres maximum which is currently stored on site as liquid waste. As the liquid includes PVA it cannot go through the normal process and is being stored on site until a decision is made.

### **5. NDA Report**

Mr McNamara was not present at the meeting but there was a written report included with the meeting papers and Mr McNamara had offered to respond to any questions sent to him.

### **6. Update from Scottish Government**

Due to Mr Young's retirement, Mrs Callander had contacted the Scottish Government to request that a representative attends future meetings.

## 7. **Hunterston B Station Report – Dr Roddy Angus**

The Hunterston B Station report, issued with the meeting papers, was taken as read. The inspection campaign has been completed and the safety case for Reactor 4 is with ONR for assessment. The Station has received many visitors with two public open sessions and meetings with MSPs at Holyrood and members of the Scottish Councils' Committee on Radioactive Substances (SCCORS) group to help them understand the current situation.

Under Safety and the Environment, there has been a big safety campaign around risk perception entitled 'I Always'. The World Association of Nuclear Operators (WANO) has been on site as part of a four-year programme. The Chief Executive of EDF, Simone Rossi, and Managing Director, Brian Cowell, have been on site to touch base with staff while the Reactors have been out of service and reaffirm their commitment to Hunterston B Station. Stakeholder interaction includes a musical workshop with Stanley Primary School in Ardrossan. In Company news, spending with south west businesses by Hinkley Point C has reached £1 billion and 6,500 jobs have been created so far. Reactor 3 at Hinkley Point B returned to service on 5 June 2019.

### **ONR Report – Mr Stuart Fannin**

The ONR report included in the meeting papers was taken as read. Mr Fannin confirmed that most of the intervention inspections at Hunterston B Station have revolved around the outage to establish outage activities, confirmation that equipment is properly maintained and fit for purpose and assess conventional health and safety practices. All inspections in the period were graded 'Green'. ONR is satisfied that the outage activities are being carried out in line with the Outage Plan and procedures are being followed. Reactor 3 is being properly maintained with final activities still to be carried out before a return to service is authorised by ONR. An exercise is planned in respect of Licence Condition 11 on emergency arrangements in October 2019. A security inspection was carried out on the intruder detection system which was satisfactory. Non-routine events have been reported indicating a very good reporting culture at the Station. The most significant of these is included in the report, regarding a loss of forced cooling to Reactor 3 during the outage when the electrical supply to the gas circulators was lost resulting in a loss of forced circulation to the reactor for a short period (10-15 minutes) whilst supplies were re-established. This is being thoroughly investigated and as the Reactor had been shut down for a year there were no adverse effects. Safety was maintained as it would take 60 hours before contravening the operating rule but this is a learning experience. The operation was not adequately risk assessed as a single point of vulnerability. Under Regulatory Activity, there have been no Improvement Notices or Prohibition Notices issued. Mr Fannin referred to the Enforcement letter mentioned at the last meeting with regard to the contravention of Health and Safety in respect of Working at Height in relation to the louvre events. Mr Fannin has noticed a significant improvement since then and is pleased to see the shift in performance.

### **SEPA Report – Mr Keith Hammond**

The written report from SEPA, issued with the meeting papers, was taken as read. Highlights from the report include the variation issued to the Station's deemed permit, which is a milestone for SEPA and all Stations are now fully compliant with the new Regulations. SEPA's Nuclear Sector Plan was published on 15 May 2019. SEPA has attended several meetings at the Station. An inspection in April on liquid discharges did not identify any contraventions.

### **ONR Presentation – Steve Harrison, Head of Assessment**

Mr Harrison apologised to Councillors who had already seen his presentation earlier in the week but he was giving the same presentation given to North Ayrshire Council earlier in the week, for consistency. Mr Harrison summarised the position with Reactor 3 (shut down in March 2018) and Reactor 4 (shut down in October 2018), pending acceptable safety cases to return to service. For Reactor 3, EDF inspected 28% of bricks and project that there are approx. 377 keyway route cracks across the reactor, above the operating limit of 350. For Reactor 4, EDF inspected 11%

and project that there are approx 209 keyway route cracks across the reactors, below the limit of 350.

ONR is satisfied that Hunterston B is a well-run Station and that EDF did the right thing by shutting down the reactors for a longer period for inspection and analysis, focussing on safety and protecting workers and the public. The cracking was anticipated but has happened earlier and quicker than expected. The induced cracking was not anticipated. Inspections have indicated the potential for multiply cracked bricks, although none have been observed to date. Mr Harrison assured members that the Reactors will not be returned to service until the ONR is fully satisfied with EDF's safety cases. A decision on Reactor 4 is anticipated in June 2019, which is an extension of the existing case. The safety case for Reactor 3 has not been submitted yet and is more extensive with different presentation to Reactor 4. Mr Harrison described what a safety case is and how the ONR will reach a decision. He reassured members that the ONR is involved in ongoing intensive interaction with the site and attending technical meetings and is not just sitting waiting on the safety case to be presented. Reports will be published in due course on ONR's website. Mr Harrison described ONR's independency and competence. If and when the Reactors are returned to service, post re-start monitoring will also take place.

### **Question and Answer Session**

Mrs Holmes noted that 11% of bricks on Reactor 4 had been inspected and 28% of bricks on Reactor 3 and asked how the public knew that this was sufficient. Mr Harrison replied that until now 10% has been a good indication statistically. With Reactor 3 it was clear that the number of cracks was higher than expected and agreed with EDF that the percentage of the bricks to be inspected would be increased. Mr Harrison pointed out that the number of cracks declared to the ONR is a projection and not the actual number of cracks observed. For Reactor 4, similar movements would be expected and 10% is in line with expectations. Mr Fannin added that the numbers are the same for Reactor 3 from both 11% and 28%. Mr Harrison advised that sophisticated modelling is used and ONR is confident that 10% gives a fair indication of the level of cracking. He assured members that estimates are not guesstimates but based on detailed analysis and the safety cases recognises some uncertainty in the numbers and allows for this. Mrs Holmes thought that it was necessary to work within a margin and asked why there are concerns about 377 cracked bricks if the limit is 700. Mr Harrison further explained that there is a large margin to allow for remedial works. 700 is the operational limit and EDF is expected to work within this limit and the operating limit is well below what is considered safe but as this is part of the Operating Rule it has to be thoroughly investigated. Mrs Holmes asked if all the bricks could be cracked and it would still be considered safe. Mr Harrison responded that this is not part of the safety case. He stressed that the operating allowance for Reactor 4 is 700 but Reactor 3 is not known yet because the safety case has not been submitted. In any case, the bricks are loosely keyed together. Mr Cochrane pointed out that NASA uses modelling before sending spaceships into space and suggested that members listen to the experts to what is a case of perspective and mind-set.

Mr Lamb asked what the authorised duration for Reactor 4 would be before re inspection is required. Mr Harrison advised that operational levels have not yet been decided. This is currently four months and if an alternative is not stipulated it will continue to be four months. Mr Lamb asked Dr Angus if a four-month window of operation is adequate. Dr Angus responded that the Station has to operate under the safety case and this decision will set the ground rules for the rest of the fleet going forward as an understanding of the Reactors is necessary. Mr Lamb asked if decommissioning is still scheduled for 2023 and Dr Angus confirmed that this was the case.

Mrs Holmes asked if the electrical fault in the Control Room which had not been identified for 20 minutes was considered serious. Mr Fannin confirmed that this was the case and that appropriate

measures had been put in place to investigate etc. Mrs Holmes acknowledged that that Hunterston B Station is regarded as the best in the fleet. Dr Angus added that, due to the procedure only being required once in eleven years, this was a key opportunity for the fleet to obtain learning from it. This was a result of human performance and not ageing.

Ms Milliken asked if the Reactors being out of service had impacted on staffing numbers. Dr Angus confirmed that the outages were planned maintenance and staffing numbers had been maintained. Certain works must be carried out and staff numbers are not expected to reduce even with more frequent inspections.

Cllr Murdoch noted that the meeting with North Ayrshire Council was confidential. He noted that that the consultations which took place in EDF's Visitor Centre attracted 12 people and considered that EDF should have gone out to the public rather than asking the public to go to the Visitor Centre. Cllr Murdoch referred to the Dr Fairlie Report that it is not safe for the Reactors to return to service. He acknowledged that the ONR has tight regulations and that EDF has to submit a safety case but noted concerns from members of the public and asked how the ONR knows what is happening inside a Reactor. Mr Harrison noted that Dr Fairlie had formed views as a Scientist / Biologist but is not a specialist on graphite or Advanced Gas-cooled Reactors. Graphite specialists have almost 20 years knowledge and a good understanding of graphite behaviour towards end of life. The shrinkage is more on the inside than outside and this causes stresses which results in cracks. There is a good understanding of when this will be through the projections but large margins are built in to overcompensate for any uncertainty.

Cllr Murdoch stressed that he is not anti-nuclear or anti-Hunterston but the Station is 12 years beyond its original lifespan and members of the public are concerned. Mr Harrison understood the public concerns and reiterated that EDF has to demonstrate that it is safe to restart. He added that operators around the world, not just in the nuclear industry, rely on modelling, testing and analysis. Cllr Murdoch said that public perception is that the Reactors will return to service. Mr Harrison stressed that there has been no indication of this given whatsoever and that EDF will be the first to be told by ONR as EDF is submitting the safety case.

A lady in the public gallery asked how much experience there is from the rest of the world and how Hunterston compares. Mr Harrison responded that Advanced Gas Cooled reactors using graphite are unique to the UK, with most other countries having Pressurised Water Reactors. Operational experience can be taken from elsewhere but graphite reactors of this design are unique to the UK nuclear environment. While Mr McGhie would like to see the Station restart production from an employment perspective, he urged members to await a decision from ONR and trust it to take the right direction.

Mr Holden referred to graphite cracking and radiation effects and the difference between inner and outer channels. He asked if the warming up and cooling down caused concerns in respect of repeated temperature changes. Mr Harrison replied that some bricks may only crack on reduction of temperature. When the Reactor is shut down, it maximises the number of bricks cracked due to the cool down.

Ms Carson referred to the keyway cracks and asked if these can transmit to bricks above or below and if the additional load would be enough to crack other bricks. She suggested that the Station life had been extended to the limit and questioned if the risk in operating for another couple of years was worth it. Mr Harrison explained doubly and multiply cracked bricks and again stressed that the Station will not restart until the ONR has decided if it is safe to operate.

Cllr Murdoch asked how the public could have confidence when the expected number of cracked bricks has gone beyond 350 to 377. Mr Harrison explained that graphite cracking is now better

understood than it was previously. He reiterated that boundaries are not being pushed to the limits and there is still a large margin in the safety case. The analysis is pessimistic and based on a 1/10k year seismic event.

Mrs Holmes asked Dr Angus about a meeting on 25 March and asked if this was relevant to all sites and is an indication that discussions are taking place regarding EDF decommissioning itself. Dr Angus responded that defueling would come before decommissioning and stressed that no decisions have been made. Mr Stone added that SEPA and the Environment Agency are engaging with the nuclear industry and that new sites now need a Plan before even being built.

## **8. Any Other Business**

Mrs Callander advised that Mr Allan Rice is no longer a representative of Saltcoats Community Council and notification of a new representative is awaited.

Mr Graham Wallace will replace Mr Phil Lonsdale as representative of Cumberae Community Council.

Flyers to advertise the next meeting will be circulated to members for distribution around communities rather than placing an advertisement in the press as a trial to see if this has more impact on attendance.

## **9. Next Meeting – Thursday 5 September 2019**

The date of the next meeting was confirmed as Thursday 5 September 2019, at 1.00pm for 1.30pm, at the Waterside Hotel, Ardrossan Road, West Kilbride, KA23 9NG.

Mrs Callander advised that the next meeting will include three presentations:

- Ms Jane McGeorge, Ayrshire Civil Contingencies Coordinator – REPPiR Regulations
- Ms Catriona McAuley, North Ayrshire Council – Socio Economics
- SEPA representative – Presentation on Guidance on Requirements for Release of Nuclear Sites from Radioactive Substances Regulation (GRR)

Mr Cochrane proposed a vote of thanks for the Chair.

The Chair closed the meeting at 3.58 pm.