

**HUNTERSTON SITE STAKEHOLDER GROUP
SUMMARY OF KEY POINTS FROM THE FIFTY FIFTH MEETING
HELD ON THURSDAY 5 SEPTEMBER 2019 AT THE WATERSIDE HOTEL, WEST KILBRIDE, KA23 9NG**

Chair's Opening Remarks and Vice Chair Updates and Correspondence

A Socio-Economic Presentation by Caitriona McAuley of North Ayrshire Council had been given to voting members at 11.30 am that day to allow more time for other agenda items. The Chair's report on the NDA Summit on 9/10 July 2019 was circulated with meeting papers. Mrs Holmes updated on a Site End State meeting held on 28 August 2019. The purpose of the meeting was to plan the route of the end state and the meeting was very informative, with examples given. The meeting gave an opportunity for discussion and further and wider consultation is planned for the future.

Actions and Approval of Previous Minutes

The Minutes of the meeting of 6 June 2019 were approved.

North Ayrshire Civil Contingencies – REPIR Presentation – Ms Jane McGeorge

Ms McGeorge gave an overview of the duties placed on EDF Energy and on North Ayrshire Council, as duty holder, in respect of The REPIR 2019 Act, which was laid in Parliament on 27 March, became statute on 22 May 2019 and has an implementation period of 12 months. A Plan must be in place by 22 May 2020.

Hunterston A Site Reports

Hunterston A Report – Mr John Grierson and Mr Ian Warner

The site's Total Recordable Incident Rate (TRIR) remains at zero. The push on Target Zero remains with the Go Home Safe Every Day message. Mental health and wellbeing remains a focus for the Company. On the Critical Path programme, Mr Grierson showed photos of the ponds decommissioning activities and Solid Intermediate Level Waste Encapsulation (SILWE) Plant and explained the Waste projects. Under the Socio-Economic Scheme, £6,895 has been spent to date since April 2019. Mr Grierson encouraged communities to bring forward projects to the Scheme. Mr Warner updated on End State Optimisation. A Technical Group has been established comprising Magnox Ltd, ONR, SEPA, EDF. At a later date, the Local Authority will also be involved. Work is almost complete on the initial technical evaluation. A stakeholder event has been held and a Strategy paper is being prepared.

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

Inspections in the period were rated satisfactory. SEPA is interacting with the site on a request received for a variation which relates to a number of new nominated stacks for the Solid Intermediate Level Waste Encapsulation (SILWE) plant and Interim Storage Facility (ISF) for Intermediate Level Waste (ILW).

NDA Report – Mr John McNamara

Key highlight was the NDA Stakeholder Summit held in July 2019 in North Wales, which focussed on People and Socio Economics. Next year's event is likely to be held in Scotland. A new Socio-Economics Strategy is being consulted on, to be published in January 2020. The NDA's Annual Report and Accounts for 2018/19 have been published.

Update from Scottish Government – Mr Robert Gibson

An update was provided on Hunterston B Reactors; REPIR 2019; Scottish Nuclear Resilience Group; IAEA IRRS visit to UK in October 2019; NDA Strategy IV.

Hunterston B Station Reports

Hunterston B Report – Mr Colin Weir

Following the graphite analysis and submission of the safety case to ONR for Reactor 4, permission was granted by ONR for a return to service on 20 August 2019 and the Reactor was successfully synchronised on 25 August 2019. The safety case for Reactor 3 is still being considered by ONR but if this is successful, it is hoped to return to service in January 2020. Safety remains good with no recordable accidents or environmental events in the period.

ONR Report – Mr Stuart Fannin, Mr Steve Harrison

Two routine Compliance Inspections in the period were graded green. Justification of the Return to Service of Reactor 4 was explained in more detail.

SEPA Report – Mr Keith Hammond

Two inspections in the period identified no contraventions.

Any Other Business

Marine-based decommissioning was asked about and the relationship between Hunterston and Hunterston PARC.

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, available from the Secretariat.

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



Site Stakeholder Group

**HUNTERSTON SITE STAKEHOLDER GROUP
FIFTY FIFTH MEETING HELD ON
THURSDAY 5 SEPTEMBER 2019 at 1.30 PM
AT THE WATERSIDE HOTEL, ARDROSSAN ROAD, WEST KILBRIDE, KA23 9NG**

Present

Magnox Ltd

Mrs Jill Callander (SSG Secretariat)
Mr Richard Gibson (Site Engineering Manager)
Mr John Grierson (Scottish Regional Lead)
Ms Mair Jones (Socio Economic Lead)
Mr Sean Marshall (Magnox Communications)
Mr Andy McDade (Trade Union Rep)
Mr Reuben Phillips (EHSS&Q Manager)
Mr Ian Warner (End State Optimisation Manager)

EDF (Hunterston B)

Mr Colin Weir (Station Director)
Dr Roddy Angus (Acting Station Director)
Ms Fiona McCall (External Comms Manager)
Mr Stuart McGhie SSG Vice Chair (EDF
Trade Unions)
Mr Matthew Pardo (External Comms 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)

Office for Nuclear Regulation

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

North Ayrshire Council

Cllr Robert Barr (Dalry and West Kilbride)
Cllr Todd Ferguson (Dalry and West Kilbride)
Ms Lesley Jeffrey (Ayrshire Civil Contingencies Team)
Cllr Tom Marshall (North Coast and Cumbraes)
Ms Jane McGeorge (Ayrshire Civil Contingencies
Coordinator)
Mr Hugh McGhee (Environmental Health)

SEPA

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

Scottish Government

Mr Robert Gibson

NDA

Mr John McNamara

In Attendance

Sheila Adams (Minutes)
Claire Baguley (Friends of Firth Clyde)
F Bowman (Public)
Anne Carson (Largs Community Council)
Linda Grainey (Local Resident)

Alan Holden (Fairlie Community Council)
David Nairn (Fairlie Community Council)
Wendy McNab (Local Resident)
Peter Roche (NFLA)

Apologies

Mr Angus Cochran-Patrick (Hunterston Estate)
Mr Craig Hatton (Chief Executive, North Ayrshire Council)
Dr Will Munro (Food Standards Scotland)

1. Chairman's Opening Remarks and Declarations of Interest

Mrs Holmes, Chair, welcomed everyone to the fifty fifth meeting of the Hunterston Site Stakeholder Group in Waterside Hotel, West Kilbride. In particular, she welcomed new attendees, Inspector Alison Wilson (replacing Inspector Colin Convery), Lesley Jeffrey (North Ayrshire Council), Robert Gibson (Scottish Government) and welcomed back Steve Harrison (ONR). All present introduced themselves. Mrs Callander read out the apologies, as listed above. There were no declarations of interest. Mrs Holmes advised that the Socio-Economic Presentation by Caitriona McAuley of North Ayrshire Council had been given to voting members at 11.30 am that day to allow more time for other agenda items.

2. Chair and Vice Chair Updates and Correspondence

The Chair's report on the NDA Summit on 9/10 July 2019 was circulated with meeting papers and taken as read. Mrs Holmes updated on a Site End State meeting held on 28 August 2019, hosted by Magnox and involving ONR, SEPA, Scottish Government, NDA, North Ayrshire Council, EDF, Magnox, Community Councils and representatives of the Site Stakeholder Group. The purpose of the meeting was to plan the route of the end state and the meeting was very informative, with examples given. The meeting also gave an opportunity for discussions to take place and further and wider consultation is planned for the future.

3. Actions and Approval of Previous Minutes

The Minutes of the meeting of 6 June 2019 were proposed for approval by Cllr Robert Barr and seconded by Cllr Todd Ferguson.

4. North Ayrshire Civil Contingencies – REPPiR Presentation – Jane McGeorge

Ms McGeorge started her presentation by giving an overview of the duties placed on EDF Energy and on North Ayrshire Council, as duty holder. The REPPiR 2019 Act was laid in Parliament on 27 March, became statute on 22 May 2019 and has an implementation period of 12 months. This is stringent and a Plan must be in place by 22 May 2020. Ms McGeorge described the key dates for implementation activities and the key changes in REPPiR 2019. A Consequence Report is being drawn up and prior information will be available to the public. The Detailed Emergency Planning Zone (DEPZ) is currently 2.4m. The Outline Planning Zone (OPZ) was 20km and is now 30km. Liaison is taking place with neighbouring Local Authorities.

Question and Answer Session

Mr McGhee asked what Prior Public Information means. Ms McGeorge responded that North Ayrshire Council has a duty to inform the public before and after an incident.

Mrs Holmes asked by what means the information would reach the public. Ms McGeorge replied that a Plan would be produced so that the public would know what is anticipated before an incident. During any incident a Public Communications Group would determine what information is



to be distributed and this would be done through the media, social media and websites. Residents within the Detailed Emergency Planning Zone can sign up to PETIS, an emergency telephone system but this is voluntary. Mrs Holmes asked if stable iodine would be available to those within the revised extended DEPZ, if this is what the local authority determines is appropriate and Ms McGeorge confirmed that this was the case.

Mrs Holmes asked if the Outline Planning Zone had an overlap with Faslane. Ms McGeorge was unable to answer this as the Ministry of Defence has not published the Outline Planning Zone for Faslane. Mrs Holmes noted that the Consequences Report has to be available by 22 September 2019 and noted that this is being prepared by EDF's Emergency Planning Team and not at local level. She asked if this report would be available to the public and Ms McGeorge confirmed that the Consequences Report would be available on North Ayrshire Council's website.

Mr Wallace pointed out that the Isle of Cumbrae is surrounded by sea and asked if this would be included in the Detailed Planning Zone. Ms McGeorge was unable to comment on the content of the DEPZ at this stage.

Mrs Holmes thanked Ms McGeorge for attending and presenting to the meeting and opened questions up to members of the audience. She was disappointed to note that Ayrshire and Arran Health Board was not represented at the meeting.

A local resident referred to sirens in war time as an immediate alert and asked if this might be considered as social media is not adequate as an immediate alert reaching a neighbourhood. Ms McGeorge responded that this was not within EDF's remit or hers and encouraged members of the public to sign up to the PETIS Emergency Telephone System.

Another local resident was alarmed that the onus is on the public to find out information and considered that the public should be immediately notified of any radiological release. She was also shocked to learn that only 13 families were in possession of potassium iodate. Cllr Murdoch asked how it would be logistically possible to distribute tablets in the event of an incident. Ms McGeorge responded that stabilising tablets are pre-distributed to residents in the Detailed Emergency Planning Zone on a three yearly cycle. Any further distribution required would be the responsibility of the NHS. Cllr Murdoch reiterated that there are currently only 13 households which possess potassium iodate and considered that this is inadequate and needs more consideration.

A gentleman in the public gallery asked about communication with the public in the event of a power cut or loss of phone lines. Ms McGeorge responded that the Police have a role in this and this question needs further consideration. Cllr Murdoch noted that members of the public were requesting sirens, tablets and further distribution of these in the event of an accident and suggested that this requires more consideration, without the public having to ask. Ms McGeorge clarified that North Ayrshire Council will work with multi-agency partners and the Plan will have to be validated by the ONR.

Mrs Holmes asked Mr Fannin if the ONR had a view on methods of informing the public. Mr Fannin responded that there is an approved Code of Practice, approved by the Health and Safety Executive Board. This provides guidance on default distances for Outline Planning Zones and defines what is required within the Detailed Emergency Planning Zone to rapidly inform the public in an effective way. Within the OPZ this is not required and there is a default mechanism. Mr Fannin added that the approved Code of Practice is Government Policy and is outwith the ONR's and the Local Authority's hands. Mr Gibson added that the Scottish Government has an arrangement in place 365 days a year, 24/7 to respond to a range of incidents, which includes pharmaceutical distribution. Mrs Holmes noted that there is no detail in the Emergency Plan due to

the protected nature of such information.

Cllr Murdoch asked if the approved Code of Practice and Emergency Plans etc were modelled on a Station within its operational life or one operating beyond its operational life and considered that the Civil Contingency Emergency Plan needs to be updated to reflect this. Mr Harrison added that the level of risk has not changed and there is no more likely to be an incident now than there was several years ago.

5. Hunterston A Site Reports

Hunterston A Report – Mr John Grierson

Mr Grierson's report issued with the meeting papers was taken as read. Mr Grierson updated on progress under four main headings – Site News, Care and Maintenance Programme, Socio Economics and Final Thoughts. Gwen Parry-Jones, Chief Executive Officer of Magnox Ltd, was now in post and Mr Grierson had been pleased to welcome her on site. Mr Grierson was pleased to report that the Total Recordable Incident Rate remained at zero and the push on Target Zero remains with the Go Home Safe Every Day message. Themed safety included transport and marking blind spots, and sustainability, with everyone being encouraged to do a little, rather than a few people doing a lot. This also linked to wellbeing, with water bottles being issued to all staff to encourage hydration and reduce the use of single use plastics. Mental health and wellbeing remains a focus for the Company and there are mental health first aiders and employee led wellbeing groups on site. Blood pressure tests have also been offered on site.

The budget position remains similar at £29.4M. The transition from Cavendish Fluor Partnership as Parent Body to Magnox Ltd took place on 1 September 2019 with 37 executives leaving and two remaining in interim roles for continuation. Magnox Ltd has a new and diverse Executive Team, made up of new recruits and promotions. There has been no restructuring on site and only very small fluctuations in employee numbers, with employees sitting at 114, ASW 53 and CSW 31.

On the Critical Path programme, Mr Grierson showed photos of the ponds decommissioning activities and Solid Intermediate Level Waste Encapsulation (SILWE) Plant. The Solid Active Waste Bunker Retrieval (SAWBR) project has faced a challenging three months with Bunker 1 being slower than Bunkers 2 – 5. This was due to a maintenance outage on the Intermediate Level Waste (ILW) plant, resource challenges and an interim fault on the crane but the plant is now back up and running. Under Wet Intermediate Level Waste Retrieval Encapsulation Plant (WILWREP), sludge retention tanks 2 and 3 are finished and Mr Grierson explained the process. There are 12-15 drums left to do where the material is slightly different. Mr Grierson showed photos of the SILWE plant and ILW store which are on the Critical Path programme. The site is meeting its targets on waste operations.

Under the Socio-Economic Scheme, £6,895 has been spent to date since April 2019, £3,770 of which was on under £1k projects and £3,125 on over £1k projects. Largs community is active in securing funds and Mr Grierson encouraged others to bring forward projects to the Scheme. Stakeholder Engagement included photos of Union and Safety representatives and the new Executive Team of Magnox Ltd. Feedback from the Team was that the site is nice and tidy and they had positive interactions with staff. Stakeholder Activity including a visit from Mr Alan Cumming, NDA's Director of Nuclear Operations, work experience students and some visitors from overseas.

End State Optimisation – Mr Ian Warner

Mr Warner updated on progress since the last meeting. A Technical Group has been established comprising Magnox Ltd, ONR, SEPA, EDF. At a later date, the Local Authority will also be

involved. Work is almost complete on the initial technical evaluation. A stakeholder event has been held and a Strategy paper is being prepared.

Mr Warner talked through potential End State Options, which included Current Strategy of removing everything and disposing of it or a new End State, with some Low Level Waste (LLW) remaining on site. This could include engineered disposal facility, disposal in situ, or disposal for a purpose. Mr Warner stressed that this relates to **Low Level** Waste only. The assessment process considers: Could You (technical evaluation); Should You (is it the most sustainable approach); When Would You (tactical considerations). There would be permissioning requirements if there was any change in strategy. Mr Warner showed slides from the Hunterston Stakeholder Workshop.

Mr Warner reiterated that this refers to low hazard waste and everything else will go into boxes and into the Intermediate Level Waste (ILW) store. Current thinking is that a technical case could be made to leave some waste and still meet SEPA requirements but this does not mean that it will be the selected option. There were some concerns from Workshop attendees on the effect on the landscape from the waste and Mr Warner assured members that no decisions have been made yet. He explained the process of a five-year programme to deliver the programme for all sites. Funding resources have to be secured so forward planning is required but the programme can stop at any point in the journey. Mr Warner clarified that this will only refer to Hunterston waste and that no waste will be imported from elsewhere. Mr Warner undertook to give an update at the next Site Stakeholder Group meeting and make the Stakeholder Report available to members. The site is still working to a December 2019 deadline for taking an Options Paper to the NDA for consideration.

ONR Report

Mr Bill Kings was not present at the meeting and the ONR report, circulated with the meeting papers, was taken as read.

SEPA Report – Mr David Stone

The report from SEPA, circulated with the meeting papers, was taken as read. Mr Stone reported on an inspection of the aqueous disposal system to make sure that everything was in working order as disposals are not as frequent in decommissioning. This inspection was graded satisfactory. SEPA has no issues with the Best Practical Means study for pond water which is now being incinerated which is more appropriate.

SEPA is interacting with the site on a request received for a variation which relates to a number of new nominated stacks for the Solid Intermediate Level Waste Encapsulation (SILWE) plant and Interim Storage Facility (ISF) for Intermediate Level Waste (ILW). This is key to the decommissioning of the site and meets Scottish Government policy. SEPA is currently determining the application for Variation, which has no increase in discharge limits, and is consulting with Scottish Government, the ONR and Food Standards Scotland.

SEPA attended the Magnox End State Stakeholder meeting on 28 August and noted that comprehensive guidance has been produced. There is a requirement for Magnox to produce a Waste Management Plan and a Safety Plan will also be expected. SEPA will interact closely with the site and Magnox and regulate robustly.

Questions and Answer Session

Mrs Holmes asked if there is a difference between Low Level Waste and Low Hazard Waste. Mr Warner clarified that Higher Activity Waste needs to go into boxes and be stored. The residue is Low Level Waste. Low Hazard Waste is lower than Intermediate Level Waste levels. Mrs Holmes found it difficult to see how waste could be effectively categorised. Mr Warner explained that it had

to be characterised to be understood. Waste acceptance disposal is required if the waste is to be moved off site.

Mr Warner explained that the waste could be concrete, brick, etc, reduced to rubble or structures left in the ground, which has to meet very strict criteria. The site has a duty to demonstrate that what is left behind is safe. Mrs Holmes asked if Low Level Waste could become High Volume Very Low Level Waste. Mr Stone replied that this is not allowed. Mr Warner added that there are techniques to reduce the level of radioactivity but the site would require a safety case to demonstrate that this is the right thing to do.

Mrs Holmes asked how bleed water in drums is being removed in WILWREP. Mr Grierson responded that the drums are in shielded areas which cannot be done locally and remote removal equipment is required to be installed.

Mrs Holmes asked about the extra stack in the Intermediate Level Waste (ILW) store. Mr Stone responded that the site has a table of nominated stacks and cannot discharge from a stack which has not been nominated. The site has to report and record the Best Practical Means and is requesting one stack for SILWE and one for the ISF and is not increasing potential exposures to the public. This is the subject of a smaller Variation - a larger one would require full public consultation over 18 months.

Mrs Holmes referred to the End State Stakeholder meeting on 28 August and asked about Hunterston B Station using Hunterston A site facilities for a longer period. Mr Stone responded that there had been no discussion with either site on running the Encapsulation Plant in this way. Mr Warner did not believe that there was a need for an Encapsulation Plant. Mr Stone added that eventually Hunterston A site will enter Care and Maintenance and there should be no active management of waste on a Care and Maintenance site. He further added that the site knows what SEPA's expectations are.

A lady in the public gallery requested clarification that the extra stack is for decommissioning and not for waste from other sites. Mr Stone confirmed that there would be no waste from other sites. The lady expressed concern that investigations of waste are required to determine the most appropriate storage and asked why this is not already known. Mr Warner replied that there is a concrete underground vault for operations waste and the site does know what it is but as it is processed, it is characterised for fuller understanding. The lady asked if there is the potential to leave the waste. Mr Warner responded that the waste can only be fully understood when emptied and the only way to know for sure is to take physical examples. Final confirmation of assumptions can only be verified by taking samples.

A gentleman in the public gallery asked for a simple explanation of the length of decommissioning a site. Mr Grierson responded that when Hunterston A started, decommissioning was not at the forefront of minds. Hunterston A will have a heavily shielded store, Chapelcross will have a thinly shielded store as all sites are unique and the funding for these comes from the public purse.

The Chair suspended the meeting at 3.05 pm for a short comfort break.

6. NDA Reports – Mr John McNamara

The NDA monthly update reports, issued with the meeting papers, were taken as read. One of the key highlights was the NDA Stakeholder Summit held in July 2019 in Anglesey, North Wales, which focussed on People and Socio Economics. Feedback is still being collated but so far has been positive. The timing of a July event was criticised as not being good for optimum attendance so this will be reviewed next year and the event is likely to be held in Scotland.

The NDA is currently reviewing its approach to Socio Economics. The NDA primarily oversees the clean-up of nuclear activity but also as a side mission has a remit to ensure sustainable communities post-nuclear, which it does through an NDA Socio-Economic Scheme for larger projects normally over £100K, as well as the Magnox Socio-Economic Scheme which mainly supports lower value community projects. The NDA has a pot of money for long-term sustainable projects and came under criticism from the Government for not supporting strategic projects. A new Socio Economics Strategy is currently being written, the main principle of which will be partnership working. Match funding will always be required and the funds will go towards strategic and long-term sustainability projects, not necessarily energy related. The timescale is very tight, with the production of the Strategy required by January 2020.

The NDA has published its Annual Report and Accounts for 2018/19, which is available on its website. The NDA has received £2.2Bn from the Government. Highlights from the report include Bradwell being the first Magnox site to enter Care and Maintenance. Magnox Ltd became a subsidiary of the NDA on 1 September 2019. Reprocessing has ended at Sellafield and Wylfa has defueled with Calder Hall and Dounreay imminent. The NDA is working on Equality, Diversity and Inclusion and like Magnox, also has a focus on wellbeing and mental health.

Although not applicable in Scotland, Mr McNamara explained the process for Geological Disposal Facility (GDF), which has been reinvigorated and the subject of a White Paper. Radioactive Waste Management (RWM) Ltd is taking forward this process to find a host community in England and Wales.

The NDA Chair, Tom Smith, is stepping down in February 2020. The Department for Business, Energy and Industrial Strategy (BEIS) will carry out the recruitment process for his successor. The NDA's aspiration for 'One NDA', to have closer relationships with its subsidiaries, has been taking place in the background as part of a two-year process. Departments are being restructured and the work of the NDA and subsidiaries aligned to make for more efficiency and effectively working together.

No decision has yet been made on Continuous Reactor Decommissioning to determine if the current strategy is the right one. A decision is expected in December, which will then go before the Government and BEIS. Decommissioning will be site specific and on a rolling programme, with some sites possibly being accelerated. There will not be much in the way of change on any site for the next 3-5 years. Dose rates are much less than people realise but the deterioration of buildings will accelerate. It could potentially cost more to bring people back to site in 60 years than it would to deal with it now.

7. Update from Scottish Government – Mr Robert Gibson

Mr Gibson introduced himself and his background as this was his first meeting. Mr Gibson reported as follows:

Resilient Essential Services Team

The Resilient Essential Services Team works with Scottish Government colleagues, UK Government departments, industry, regulators and responders across all the critical infrastructure sectors, which provide the essential services that the public rely upon to go about their daily business. Its work is to improve the security and resilience of the infrastructure that supports delivery of the essential services.

Hunterston B – Reactors



Site Stakeholder Group

- The team is the point of contact/lead area for security and resilience matters in respect of the civil-nuclear sector in Scotland, which includes briefing and supporting Scottish Government Ministers.
- Whilst the Office of Nuclear Regulation (ONR) is reserved to the UK Government, the engagement and assurance that has been provided by the ONR is welcomed, as the safe operation of nuclear power plants in Scotland remains the Scottish Government's utmost priority.
- Earlier this year Mr Wheelhouse, Minister for Energy, Connectivity and the Islands, met with Dr Fairlie, Independent consultant on radioactivity in the environment, as well as Senior representatives from the ONR and senior representatives from EDF. Scottish Government is continuing to liaise closely with ONR, highlighting concerns raised, and Mr Wheelhouse is due to meet with senior ONR representatives.

Radiation Emergency Preparedness and Public Information Regulations (REPPiR) 2019

- Scottish Government has worked closely with the Department for Business, Energy and Industrial Strategy (BEIS) on the drafting of the regulations and the ONR on the development of the 'Approved Codes of Practice' (ACoP) and 'Guidance' to support duty holder's compliance with the new regulations.
- Scottish Government was pleased to support to Scottish stakeholders by hosting three workshops. The first workshop on the regulations was held on 22 October 2018, this was followed by a workshop on the ACoP / Guidance on 17 May 2019 and most recently a workshop on determination of Detailed / Outlined Emergency Planning Zones (DEPZ / OEPZ) for the Scottish Local Authority duty holders, was held on 31 July 2019.
- Scottish Government is committed to supporting Scottish stakeholders during the REPPiR 2019 implementation period, including engagement in contingency planning, training and exercising.
- Scottish Government officials supported the level 2 Exercise (Aquila) planning and delivery on 12 June, to test the offsite emergency arrangements in place for Hunterston B Power Station, to ensure that it met all of the objectives agreed by the ONR.
- The West of Scotland RRP co-ordinators, who in addition to forming part of the planning team, participated in the exercise itself to provide the initial Scottish Government Liaison Officer (SGLO) response in support of the Category 1 and 2 responders at tactical and strategic levels. They were later augmented by Scottish Government Liaison Officers (SGLOs) from the Scottish Government Resilience Division.
- The interaction of National Government was simulated by officials from the Response and Policy Engagement Team, who ran the Scottish Government Resilience Room (SGoRR) within St Andrews House in Edinburgh.
- A week after the conclusion of the exercise, a structured debrief involving all of the participants, and the ONR, was conducted by the WoSRRP Co-ordination Team. This resulted in an in-depth debrief report being submitted to the ONR as part of their deliberations. This has now been completed, with the conclusion that the demonstration met the requirements of the Radiation Emergency Preparedness and Public Information Regulations.

Scottish Nuclear Resilience Group (SNRG)

- The SNRG was held on 17 May 2019 and was followed immediately by the ACoP / Guidance workshop referred to above.
- The SNRG provides a forum for all civil and defence nuclear stakeholders in Scotland to discuss current matters. Focus at the meeting on 17 May was predominantly on REPPiR 2019 and associated duties.

Scottish Government Radioactive Substances Team

- The Team has been going through a transition in recent months. Charles Stewart Roper has moved to a new post and Ewan Young has retired after 42 years of service. Recruitment is underway to fill both posts and it is hoped to have new members of the team in place for the next Site Stakeholder Group meeting and to resume the Scottish Government's normal level of engagement as soon as possible. As part of the induction of new team members, early meetings with a range of stakeholders will be arranged.
- The Scottish Sites Meeting is planned for 31 October and is going ahead in Conference Room 2, The Scottish Government, Victoria Quay, Leith, Edinburgh EH6 6QQ

IAEA IRRS visit to UK October 2019

- Preparations continue for the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) mission which will be visiting the UK in October 2019.
- The IRRS has been established to strengthen and enhance the effectiveness of national regulatory frameworks for nuclear, radiation, radioactive waste and transport safety whilst recognising the ultimate responsibility of each country to ensure safety in these areas.
- A Senior Officials Group met in July to review preparations by bodies across the UK. Governments and regulators have prepared a substantial volume of evidence for the visit.
- It is understood that the IRRS mission is not expected to visit Scotland but Scottish Government and regulators are participating in the mission's evidence-gathering sessions and have contributed to a number of aspects of the supporting material.

NDA Strategy IV

- The NDA has started initial engagement around development of its Strategy IV and the Scottish Government is considering the key areas it would wish it to cover and how it engages with Scottish stakeholders as part of that process.
- Scottish Government will also be working with NDA to understand how it will be engaging with a wider group of stakeholders in developing the strategy.

Cllr Barr left the meeting at 3.40 pm.

Question and Answer Session

Cllr Marshall asked what the NDA's Socio-Economic budget was for 2018/19, how many sites this covers and how much of this was spent in Hunterston area. Mr McNamara responded that the total budget was £15M for 17 sites, three quarters of which was spent in West Cumbria. Cllr Marshall was concerned at the lack of spend in North Ayrshire. Ms Jones pointed out that the level of spend will also depend on the applications submitted. Mr McNamara added that there are major plans for North Ayrshire in the pipeline which meet the fund criteria. He gave Scrabster Harbour as an illustration, where £5M of a £17M project was committed by the NDA, resulting in 40 jobs and diversification of the area.

Action – Ms Jones to check and circulate Socio-Economic figures for Hunterston A site.

8. Hunterston B Station Reports

Hunterston B Report – Mr Colin Weir

EDF's report, issued with the meeting papers, was taken as read. Mr Weir reported that following the graphite analysis and submission of the safety case to ONR for Reactor 4, permission was



granted by ONR for a return to service on 20 August 2019 and the Reactor was successfully synchronised on 25 August 2019. The safety case for Reactor 3 is still being considered by ONR but if this is successful, it is hoped to return to service in January 2020. Safety remains good with no recordable accidents in the period. Following the 'iAlways' campaign, a focus on safety remains a priority. There were no significant environmental events in the period. Radioactive discharges were below authorised levels.

A multi-agency level two Emergency Arrangements exercise took place on 12 June 2019, lasting eight hours, which was rated as an adequate demonstration.

One of the Station's female Technicians is promoting opportunities in science and engineering through the SmartSTEM's charitable organisation.

Under Company Update, Hinkley point C hit its biggest milestone to date on schedule, with the completion of the base for the first reactor known as 'J-zero'. The final 9,000m³ of concrete was the largest concrete pour in the UK and the base is reinforced with 5,000 tonnes of Welsh steel. EDF Energy has entered into a partnership with NEoT Capital to accelerate the delivery of key infrastructure for electric vehicles. The Station had 480.5 employees at July 2019 and recruitment is ongoing in a number of areas.

ONR Report – Mr Stuart Fannin

The ONR report, issued with the meeting papers, was taken as read. Two Routine Compliance Inspections were carried out in the period, relating to Licence Condition 8 – Warning Notices and a Security Inspection of Backup power and Uninterruptable Power Supply (UPS) arrangements for security systems. Themed inspections were also carried out which typically consist of a team of four people over two days, assessing the capability and effectiveness of EDF's internal regulatory systems. All inspections were graded 'green' with no regulatory action. The ONR found the EDFs Internal Regulatory Team to be robust and effective with a high calibre and capability in the role. This was part of a wider inspection across all EDF sites.

Under Non-Routine Matters, Licence Condition 7 requires licensees to make and implement adequate arrangement for the notification, recording, investigation and reporting of accidents occurring on the site. The Site Inspector reviewed incidents which met the criteria for routine reporting to ONR. Between April and June 2019, three events were reported and these are described in the report, for openness and transparency. Inspections were robust and the results demonstrate that the Station is well-managed and operated.

ONR Presentation – Reactor 4 Return to Service – Mr Steve Harrison

Mr Harrison updated on the presentation given to the June 2019 Site Stakeholder Group meeting. Reactor 3 was shut down in March 2018 and remains shut down while the safety case is considered. Reactor 4 was shut down in October 2018 and was given permission by the ONR to return to service on 20 August 2019 for an operating period of four months. ONR is satisfied that cracking in Reactor 4 will not go beyond what has already been seen in Reactor 3. Mr Harrison confirmed that 28% of the core of Reactor 3 was inspected and 11% of normal level graphite inspection of Reactor 4. Inspections have allowed for a good understanding of the core, of which cracking was expected, but not induced cracking. There is potential for multiple cracked bricks (more than two cracks) but none have been seen to date.

Mr Harrison assured members that a Team of Specialist Inspectors from ONR carried out a very robust and rigorous inspection of the detailed safety case, as well as reading and attending site meetings, and concluded that it is safe for Reactor 4 to return to service for a four month period, as demonstrated by EDF in the safety case. The assessment focussed on whether the Reactor could

fulfil fundamental safety requirements, namely:

- Unimpeded movement of control rods and fuel;
- Direct gas flows to ensure adequate cooling of fuel and core;
- Provide neutron moderation and thermal inertia

Mr Harrison explained the Increase in Operational Allowance (OA) and Currently Established Damage Tolerance Level (CETDL) through improvements to Hunterston B's building model resulting in reduced seismic input to core. There have also been improvements to damage tolerance analysis methods. The original safety case allowed for 350 OA and 700 CETDL. The new safety case allows for 700 OA and 1,331 CETDL. The prediction is 467 over 16.025 terawatt days (four months).

Mr Harrison explained the basis of ONR's decision, which was subject to more rigorous assessment of any other safety case, and the independency and competency of the ONR. The Project Assessment Report has been published and the Detailed Assessment Report will be available at the end of September 2019. Mr Harrison assured members that the Reactor will be monitored post re-starting.

SEPA Report – Mr Keith Hammond

The report from SEPA, issued with the meeting papers, was taken as read. An inspection on 18 June 2019 on Environmental Authorisations (Scotland) Regulations (EASR) on radioactive waste transfers identified no contraventions. Similarly, no contraventions were found during an inspection on resources and radioactive water discharges on 27 August 2019. There were no reportable events during the period.

Question and Answer Session

Cllr Marshall asked how long an injection of nitrogen would hold down a Reactor. Mr Harrison responded that, provided there are no leaks, it should stay there once injected. The Station would also make sure that the primary control rods are not impeded.

Mr Lamb referred to Page 13, Section 9, Table 1, of the Project Assessment Report and asked if these figures are estimates. Mr Harrison explained the two columns and advised that a percentage is inspected then an analysis tool is used.

Ms McGeorge and Inspector Wilson left the meeting at 4.15 pm.

Mr Harrison added that what matters most is the way the channels distort as the core is a series of bricks loosely linked together and there is an expectation that these cracks would open up. On the same table, Mr Lamb referred to the upper limit of 700 cracks and asked if this figure is subject to modification. Mr Harrison confirmed that is correct and the changes in Table 2 are reflective of the safety case. Mr Wallace asked if his understanding that as long as bricks can move and cause adjacent bricks to crack, there is not an issue. Mr Harrison confirmed that the consequence is that the bricks need to open up.

Mrs Holmes acknowledged that the ONR's view that it is safe for the Reactor 4 to return to service and that a significant amount of time and money had gone into the assessment process. She was not reassured that Hunterston B Reactors had the most cracks in the whole of the EDF fleet and that the number started with 300, but the Operational Allowance is now 700, which is not reassuring to be told that this is expected. She asked what would happen when the number reached 700 and if it would be further increased. Mr Harrison explained that what is most

important is if the channel distorts as a consequence of the cracks. Up to 1,331 cracks would not cause that level of distortion as there are margins in the safety case. The cracks only matter in terms of the effect they have on channel distortion.

Mrs Holmes further asked if distortion was anticipated. Mr Harrison responded that distortion is not expected in four months. Mrs Holmes asked if there will be an additional limit next time or if the current limit will stand. Mr Harrison responded that EDF is working on a safety case to go beyond where it currently is. The safety case has not been submitted and has still to be assessed so he was unable to answer this question at this stage. He added that EDF is using a staged approach, with more rigorous tests being carried out to support work in the future. There has never been an expectation that this would be a final safety case.

Mrs Holmes asked when end of life criteria would apply. Mr Weir explained that work is being done now so that EDF can safely predict the end of life and a safe end state. He reiterated that Reactor 4 is now in service for four months and any operating dates will be well within safety limits. Mrs Holmes was horrified that operation may keep on going with more being added to the allowance each time. She considered that there needs to be set criteria that the public can have confidence in. Mr Harrison confirmed that this is being worked on. Mr Fannin added that channel distortion is measured by probe. To get channel distortion, energy has to be going into the core. Mr Harrison confirmed that Reactor 3 has not been assessed for six months and Reactor 4 has been assessed for four months. EDF is working on end of life criteria and is working within safety limits. Mrs Holmes asked about further inspections of Reactor 3. Mr Weir replied that inspection data and core data from 2018 is being used for modelling and analysis data carried on.

Mrs Holmes asked about fuel clad melting. Mr Harrison responded that if there is sufficient debris (20-30 mm), this could result in blocked fuel channels. Currently there is a very low level of debris being generated so blockage is very unlikely. The amount of debris to cause blockage has been looked at and it would take several pieces of debris to end up in the same place for this to happen, which is being monitored. If it did happen, the consequences would be contained within the primary vessel. Consequences are limited and can be detected and the implications are considered. Mr Fannin added that failed fuel does happen at other Stations, for other reasons but with the same consequences.

Cllr Murdoch asked how many safety cases are too many and what is the final safety case. Mr Harrison could not answer this question as he cannot know the conclusion of a safety case until it is fully assessed. If it safe to operate, the ONR legally has to allow EDF to do so. Mr Harrison added that EDF has demonstrated that control rods would shut the Reactor down and nothing can be guaranteed 100% (e.g. plane crashes). He reiterated that the risk has not changed in being able to shut the Reactor down.

A member of the public noted that two Reactors were not operational and therefore cooled down and asked if modelling had been done on repowering to assess the effect on the cracks of the Reactors being returned to service. She asked if four months was enough time to anticipate the impact after a long shutdown period and if nitrogen is immediately available. Mr Harrison advised that cracks are more likely to form when cooling down than warming up and cracks are not expected to form from restarting the Reactor. Mr Weir confirmed that Reactor 4 is operating normally and all rods were taken out as expected when it was started up. Mr Harrison added that nitrogen is a secondary holding down system and the lady asked about testing. Mr Harrison explained that super articulated control rods give several hours to be able to introduce nitrogen. This is necessary and has always been the process. There is an expectation that the control rods would go in. Mr Fannin added that nitrogen is assessed and validated by an Engineer.

In Paragraph 71, Mrs Homes asked about the significance of seismic frequencies to nitrogen plant pipework which resonates at 26 hertz. Mr Harrison explained that different parts of the plant react to different frequencies.

A gentleman from the public noted that the risk of the rods not working was a one in ten million chance. Mr Harrison confirmed that without impacting the core, there is a 1/100,000 year event of all the control rods not going in. He reiterated that the risk has not changed as a result of the cracked bricks.

A lady in the public gallery considered that this was unsubstantiated, non-evidence based assumptions on the condition of the core which is unknown and on which there is insufficient data as only a small sample has been taken and the data has come from modelling. She noted that only 11% had been inspected and the model can only be as good as the data input. She noted that there were 3 cracks in 2015, 7 in 2016, 10 in 2017, 100 in 2018 and considered that if more were inspected, there could be a different result. Mr Harrison clarified that the 28% of Reactor 3 which was inspected is quite a lot and gives a good idea of the rest of the core. He stressed that this is not an assertion but is based on analysis of data and ONR has high confidence in the core state of Reactor 3. It is likely that Reactor 4 is behind Reactor 3 in terms of cracking and there is no reason to expect different behaviour in the core. He reiterated that there are no implications for nuclear safety for the four months of approved operation.

9. Any Other Business

A representative of Friends of Firth Clyde noted the discussion of land-based decommissioning and asked about marine-based decommissioning. She asked if the level of radioactivity within the sediment at Hunterston is mapped and measured and referred to significant proposals by Peel Ports for dredging. She also asked about the relationship between management of Hunterston site and Hunterston PARC.

Mr Cochrane left the meeting at 4.55 pm.

Mr Stone confirmed that SEPA at this time does not have any interaction with the Port development and, as a statutory consultee, SEPA would be consulted on any planning application. He referred to the RIFE (Radioactivity in Food and the Environment) Report, published annually, which takes account of discharges from Hunterston. He noted that Sellafield also has an influence on the west coast. Mr Stone added that environmental monitoring impact is a site requirement and anything discharged under permit is lawfully discharged. If during the planning process dredging takes place, SEPA would ask about the likelihood of any sediments being dredged up. If over a limit, a permit would be required for dredging activities. The Health and Safety Executive would also be consulted. Mr Stone invited the lady to make contact with SEPA directly for more information.

10. Next Meeting – Thursday 5 December 2019

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

Mrs Holmes thanked everyone for attending and closed the meeting at 5.00 pm.