

# MINUTES OF THE ANNUAL GENERAL MEETING OF THE SIZEWELL A & B STAKEHOLDER GROUP (SSG).

HELD AT SAXMUNDHAM MARKET HALL, 29 HIGH STREET,  
SAXMUNDHAM IP17 1AF ON THURSDAY 19<sup>TH</sup> JULY AT 7.00PM.

## IN ATTENDANCE

Ms Marianne Fellowes	-	Co-opted Member, SSG Chair
Mr Pete Wilkinson	-	Co-opted Member, SSG Deputy Chair
Dr Carolyn Barnes	-	Economic Development and Regeneration Officer, Suffolk Coastal District Council
Miss Kerry Byrne	-	Minute Taker
Cllr Freda Casagrande	-	Leiston-cum-Sizewell Town Council
Mr Philip Fahey	-	Sizewell Environment Agency (EA) Inspector
Ms Janet Fendley	-	Suffolk Friends of the Earth
Mrs Tracey Finn	-	SSG Secreteriat, Magnox
Mr Tom Griffith-Jones	-	Co-opted Member
Ms Pat Hogan	-	Sizewell Residents Association
Mr Paul Morton	-	Sizewell B Station Director, EDF
Mr Allen Neiling	-	Sizewell A (SZA) Closure Director, Magnox
Cllr Peter Palmer	-	Aldeburgh Town Council
Mr Steve Payne	-	Regional Communications Lead, Magnox
Cllr Russ Rainger	-	Suffolk County Council / Snape Parish Council
Mrs Niki Rousseau	-	Community Liaison Officer, EDF
Mr Colin Tait	-	Sizewell B inspector, Office for Nuclear Regulation (ONR)
Mr Colin Tucker	-	Sizewell B Staff Representative, EDF
Mr Chris Wheeler	-	Co-opted Member

## MEMBERS OF THE PUBLIC

Jackum Brown  
Joan Girling  
Jenny Kirtley  
Mike Taylor

## CHAIRS OPENING COMMENTS

3770 Chair welcomed all attendees provided domestic arrangements and asked all speakers to speak clearly and consider others as the venue did not have any audio equipment.

### 1. WELCOME, APOLOGIES FOR ABSENCE AND DECLARATIONS OF INTEREST

3771 Apologies for absence were received from:

- Trevor Branton – Co-Opted Member
- Cllr William Howard – Leiston-cum-Sizewell Town Council
- Cllr Maureen Jones – Aldringham-cum-Thorpe & Knodishall Parish Councils
- Andy Osman – Head of Emergency Planning, Suffolk Joint Emergency Planning Unit
- Victoria Thomas – Sizewell B EA Inspector, Phil Fahey present as EA representative
- Rowland Cook – Sizewell A ONR Inspector, Colin Tait present s ONR representative
- Cllr Geoff Holdcroft – Suffolk Coastal District Council

3771 Chair asked that all members (existing and new) complete a declaration of interest form.

## **2. SIZEWELL B REPORTS**

### **2a. Paul Morton – Station Director, EDF**

#### **3772 Safety and compliance**

Sizewell B (SZB) has the leading safety performance in the EDF fleet. During the reporting period there were no lost time injuries, nuclear reportable incidents or environmental incidents. There are currently 539 staff members including 16 apprentices, three trainees and three industrial placements. EDF are proud that in the last several years there has been a 50/50 gender split in the apprentice intakes. They have 250 year round contracting partners, varying depending on projects.

#### **3773 Company news**

Sizewell B is the company's only Pressurised Water Reactor. There are a number of Advanced Gas Cooled Reactors (AGRs), some of which are coming to the end of their expected life (from around 2023 to 2030). EDF are considering the end of life of these assets. The two coal fired stations only have a couple of years left in their lifecycle. Only a few years ago the coal fired power stations were part of the UK's base load; however, the stations are no longer run continuously due to changes in the mix of power sources and decarbonising the power industry. There are also two gas storage sites holding high pressure gas beneath the ground. They store gas for peaks in demand at times when the grid requires it. There is a single gas station which is relatively new and was commissioned in 2013. EDF has 34 windfarms and this is an area in which they are growing rapidly. They are predominantly inland windfarms at present on a small scale. The Blyth off-shore windfarm has just been completed off the coast of Northumberland which incorporates new technology. Traditionally the turbine masts go into the sea bed, however these turbine masts use floating concrete rafts which are tethered to the seabed by cables. This is planned to be used extensively around the French coast. This method is a cheaper and more environmentally friendly way of producing windfarms. EDF has created a battery storage facility (49MW) which is currently the largest in Europe. The battery can provide power for approximately 28 minutes. This system is designed to provide power during times of demand when the system is struggling. For example, when there is wind generation which the grid doesn't need, the batteries are charged. The battery can then be used either when there isn't any wind generation or when additional power is required. The technology is currently subsidised by the government as it is not commercially viable. However, the funding was provided by the government to prove the technology. The battery energy storage system consists of 22 shipping containers stacked on West Burton Gas Turbine Site. They are interconnected by cabling and are modular which makes them quick to assemble and versatile to use. Most countries are trying to prove this technology. Batteries are an expensive way to store energy but are effective.

#### **3774 Turbine Generator one repair**

Over the August bank holiday weekend a repair of the Turbine Generator one tube heater defect is scheduled. This repair is estimated to take around 6 days to complete. Although the outage of the turbine has been declared, it may be possible for the turbine to remain in service during the repair. Turbine Generator two will be unaffected.

#### **3775 Sizewell beach steelwork**

During storms earlier in the year, WWII beach defences were exposed. Over the last couple of weeks these have been removed (following consultation with appropriate stakeholders) due to

safety concerns. Some of these have been donated to the Long Shop Museum in Leiston to be displayed.

**3776 Attracting young people into engineering**

STEM ambassadors from SZB have been visiting local schools and colleges, in particular to promote females in Engineering. It was reiterated that SZB are proud of their equal gender split in their apprentice intakes. EDF have been using Virtual Reality equipment to give visitors and young people the opportunity to experience what it looks like within the reactor. This was used as part of the event in Newmarket where 250 thirteen to sixteen year old students took part.

**Questions to SZB**

**3777** Janet Fendley asked which schools attended the event in Newmarket. Niki Rousseau explained that it is an annual event organised by Connect Education and Business which had previously been held in Norfolk and Suffolk. This year it was therefore organised in Newmarket, near Cambridgeshire to the west of Suffolk. Schools from these areas including Luton and Bury St Edmunds attended. Paul Morton added that there are numerous other STEM events held throughout the year at a variety of locations.

**3778** Peter Palmer asked why compressed air cannot be stored in the ground. Paul Morton recalled that there is a place in Germany which makes use of this technology to power turbines. He added that this was capable of short duration power and required considerable civil engineering. The geological conditions for creating this storage must either be easily mined or easily dissolved and away from ground water storage to prevent cross contamination.

**3779** Mike Taylor asked whether EDF have any plans to increase the burn up rate in the reactor for fuel which will be stored within the dry cask store at SZB. He also asked of the regulator what their plans are for introducing higher burn up rate fuel into the dry casks from wet storage. Paul Morton stated that there is a mix of fuel assembly in each dry fuel cask. There is a limit on each dry fuel cask and the heat loading of each fuel assembly is calculated to ensure that it meets these limits. The fuel spends years in the cooling pond and a mixture of ages of fuel can be put into the same dry fuel cask. Some heat in the fuel assembly is required to create convection to dry. There is no risk from a nuclear perspective and they are passively safe. Paul Morton asked to clarify the question regarding burn up rate and asked if this was with reference to the capacity of fuel held in the dry fuel store. Mike Taylor asked if the planned burn up rate (measured in MWd/te) for new build which is relatively higher than at SZB will use the same dry cask system and will this storage be safe. Colin Tucker responded that SZB have been slowly increasing the burn up limit by small amounts since the fuel and fuel cladding designs have improved. SZB has a 72000 MWd/te peak fuel pellet burn up rate limit. There is no fuel assembly burn up limit. This puts SZB in the middle of the pack for Stations in Europe. This is not considered to be a heavy burn up rate compared to others. The cask safety case written was therefore written to include these limits and there is no fuel at SZB that cannot go into the casks. The key in loading a fuel flask is to aim for the middle of the allowable range so that it remains within the safety case limit but is not too low. If the temperature is too low this can cause difficulties in monitoring as there is not a significant temperature differential and in the longer term this has the potential to give rise to stress corrosion cracking. The aim is for 20kW total per cask load. SZB had a significantly higher predicted burn up rate in its early days. However, the last figures seen didn't show a marked difference between SZB and other European Pressurised

water Reactors (EPR). The fuel assemblies are longer for SZB but there is no reason a similarly designed cask could not be used for new build (although SZB are not involved in the design of the new plant). Colin Tait added that there are clear units set for fuel irradiation and heat loading in the casks which are frequently monitored. If changes are required, a safety case would be submitted to the regulator for review.

3780 Mike Taylor asked if EDF have any involvement with the Interconnector Project which links the National Grid to the continent. Paul Morton responded that he was not aware of any involvement from EDF.

3781 Chair noted that Scottish Energy is planning to place windfarm infrastructure at Friston which is close to Sizewell. She had attended the Nuclear Decommissioning Authority (NDA) Stakeholder Summit last week and made a plea to national government/Business Energy and Industrial Strategy (BEIS) for national infrastructure projects to work together. Chair understands that EDF are not in a position to be able to allocate land to the project. However, local communities and councils do not want projects to make use of amenity land and greenfield sites. She therefore requested that EDF take this concern back through their boards for discussion to facilitate joint working. Paul Morton is aware that conversations are taking place about land outside of the SZB boundary. He agreed that he will take this back to EDF. Pat Hogan asked EDF to keep in mind that Sizewell residents should also be considered as they do not want any further industrial development in the area. Chair clarified that this was about reusing already industrialised areas and subsequently directed the same request to Allen Neiling of SZA.

**Action: Paul Morton to contact relevant persons within EDF regarding land allocation for Friston Windfarm.**

**Action: Allen Neiling to contact relevant persons within Magnox regarding land allocation for Friston Windfarm.**

3782 Chair asked for an update on when the Operational Safety Review Team (OSaRT) report was going to be available. Niki Rousseau and Paul Morton confirmed it is now available. The report was included in EDF's presentation at the last Site Stakeholder Group meeting and can be found on the International Atomic Energy Agency (IAEA) website. Niki had previously emailed the link to all members, however she was happy to provide this again via email if required.

<https://www.gov.uk/government/publications/operational-safety-osart-mission-to-sizewell-b-nuclear-power-station-follow-up-report>

3783 Jenny Kirtley asked what impact a 'hard Brexit' is thought to have on SZB. Paul Morton said the primary concern is what will replace the EURATOM Agreement with regards to the movement of nuclear materials between countries. Colin Tucker attended a meeting in London held by the ONR and BEIS on the proposed replacement for the EURATOM Agreement. Consultation began this week on the new regulations, a report for which is available on the BEIS website. Colin Tait has read the document and feels that it summarises the issues very well. Paul Morton continued that the nuclear industry is international and workers from countries such as America, France, and South Africa move around servicing reactors and nuclear components. This free movement of trained people is critical.

<https://www.gov.uk/government/consultations/nuclear-safeguards-regulations>

3784 Chair noted that the ONR had previously stated that they felt a March 2019 deadline would be too tight to implement the required changes, she asked if this remains their position. Colin Tait responded that the Nuclear Safeguard Bill has now been passed and consultations released. The ONR have undertaken lots of work to recruit sufficient inspectors to deliver the new regime, which they have now completed. Chair asked who would be funding this extra resource to which Colin Tucker replied that this was part of the ongoing discussion. Chair voiced concern that as a result of leaving the EU, the UK wouldn't have as much influence on the nuclear industry. Also, that some assets are jointly owned and so would need to be bought (e.g. equipment at Sellafield). Colin Tait confirmed that EURATOM owns some electronic and IT equipment to enable its work. The ONR have placed a contract for procurement of a replacement system. IAEA are the key group to influence and the ability to participate within this group continues.

## **2b. Colin Tait – Site Inspector, ONR**

3785 Colin gave a summary of the report for the last quarter (January – March 2018) and stated that the next quarterly report will be available shortly. Colin has undertaken a series of observations at SZB in relation to control and supervision; including personnel undertaking their work, evaluating shift handovers, shift briefings and log keeping, all expectations were met during these observations. He has also spent time in the field observing staff in industrial plant areas. He noted that standards and procedural adherence were at a good standard. Adequacy is judged against licence conditions as well as IAEA standards. SZB merited an overall green rating. Colin has also completed a large number of system based inspections which were all to standard. These are summarised within his report and had been discussed at the last SSG meeting. Colin noted that all Nuclear Licensees have a duty to report an array of occurrences which may happen on a Nuclear Site. One of his key duties is to follow up on reports of minor events made to the ONR and decide the safety significance. During his April inspection he followed up on a report made by SZB where a level instrument fitted to water tanks had been affected by the cold weather at the end of winter. As part of his assessment to consider the safety implications he spoke to a number of people and viewed records and documents. It was deemed that EDF responded to the event correctly and had applied the appropriate corrective actions which also prevent a recurrence. Colin was satisfied that the event was of low safety significance and then discussed one minor opportunity for improvement that was identified which EDF have responded to positively. This opportunity was captured as a good practice from other sites. EDF have committed to a benchmark study as a result of this feedback.

## **Questions to ONR**

3786 Peter Palmer stated that one of the things he used to tell people was that “instruments can be wrong”. He asked what checks and regimes are in place on probes and instruments. Colin Tait responded that this is an important part of nuclear safety and that there are a number of instruments providing information. These instruments can all be looked at to gather information to make a decision and there is not reliance on a single instrument to measure an important parameter. Peter asked if Colin Tait believed in the “odd man out principle”. Colin Tait reiterated that he felt it was important to rely on more than one instrument. Colin Tucker advised that all of the nuclear safety significant instruments have mandatory maintenance routines and calibration routines and that these are specified in EDF technical specifications which the ONR have sight of. Colin Tait stated that in the example for the aforementioned tank event, there are a total of eight instruments which highlight the redundancy on this type of plant.

- 3787 Chair said that learning was available from other sites in regards to the discussion on the cold weather event. She asked about how learning is shared between sites and asked if the risks from the extended period of hot weather had been considered and had any learning been shared. Paul Morton talked about the importance of shared learning and that there was a specific department to deal with this. Sharing of learning is a mandatory requirement. There are many levels of assurance taking place including independent audits, internal audits and the ONR inspector. In the case of the example being discussed, lessons were learnt and a device was fitted to this level instrument to protect it; however, a defect was experienced. SZB had taken the learning from this self-declared and self-investigated event. They have also now completed the repair work to return the instrument to service. Colin Tait added that there is a concept of seasonal readiness and that there is an established approach to this. Colin Tait was raising an opportunity to enhance the arrangements. Chair asked to confirm that there was therefore no risk from the hot weather, other than human error. Colin Tait said that the plant design took this into account and was designed to cope with extreme weather conditions.
- 3788 Chair asked whether there was anything further to report which has occurred since the first quarterly report had been issued. She noted that the date of the next ONR report being issued should be considered when planning the date of the next SSG meeting so that up to date information is available.
- 3789 Colin Tait then commented on a demonstration exercise of emergency arrangements which took place last month at SZB. Each year they are required to demonstrate their capability to respond to events which may be reasonably expected to occur on the site. The scenario was extremely challenging and included a number of plant faults at the same time as a security incident. The scenario was approved by ONR prior to the exercise. The exercise was observed by six ONR inspectors, including security specialists. They observed effective communication and positive command and control. EDF personnel were observed to work well with emergency services. The ONR's overall conclusion was this exercise was a 'satisfactory demonstration of arrangements' (Colin Tait noted that this is the legal requirements definition and means that the station performed well and the ONR consider that if this were a real event, the station would have coped admirably).
- 3790 Janet Fendley asked whether personnel were aware of the exercise to which Colin Tait responded that they were. Paul Morton clarified that they were aware that an exercise was taking place but not what the scenario entailed. Both Paul Morton and Colin Tait commented that the response to alarms etc. was genuine and that the exercise created a high pressure situation. Colin Tait stated the importance of maintaining the secrecy of the scenario prior to the event so that what the inspectors see is a representative test of the arrangements. Chair asked whether the local emergency services were involved in the exercise. Colin Tait and Paul Morton confirmed that they were and that depending on the scenario different emergency services would be involved. This exercise included fire and rescue, ambulance and bomb disposal. Paul Morton stated that exercises can also be useful training for the emergency services.

**2c. Victoria Thomas – Environment Agency (EA)**

- 3791 Victoria Thomas had sent her apologies and questions were welcomed for Phil Fahey (EA Inspector for SZA) but none were forthcoming.

### **3. SIZEWELL A REPORTS**

#### **3a. Allen Neiling – Closure Director, Magnox**

##### **3792 Safety and compliance**

July marks one year without a reportable incident at SZA. The last injury was caused when a person was using a grinder, his face mask and dust mask did not sit flush to his face, this created a path for grit to enter his eye. His eye was flushed and small fragments removed with a magnet, this constitutes medical treatment which is therefore reportable. Learning from this event has influenced use of different Personal Protective Equipment (PPE). There have been no environmental events at SZA in the reporting period. Two small suspected fuel fragments have been found within the cooling pond, no further finds are expected. If confirmed as fuel fragments these will be treated as Intermediate Level Waste (ILW).

##### **3793 Plant and structures programme**

Significant demolition activities have taken place at SZA in the last year. Demolition activities for the National Grid Sub Station have begun. National Grid lease the land from SZA and manage this area, they are funding the demolition project including hazard removal and demolition. Asbestos removal is due to complete in the next 4-5 months and demolition is due to complete by March 2019. This creates an opportunity for re-use of land, though it remains in SZA site licence boundary. High level discussions are taking place between land-owners regarding re-use of the land.

##### **3794 Ponds programme**

Divers have demobilised, completing their schedule of work Seven weeks ahead of target. Approximately 100 tonnes of redundant handling equipment have been size reduced and segregated into baskets ready for retrieval. The next phase of work is retrieval of this equipment as well as Fuel Element Debris (FED), Miscellaneous Activated Components (MAC) and Miscellaneous Contaminated Items (MCI). As items are removed they will be washed down and placed into shielded containers prior to leaving site. Some of the waste will be transported to the Interim Storage Facility at Bradwell for storage prior to a GDF being available. Drain down of the ponds is scheduled to begin January 2019 following waste retrieval. During drain down the walls will be washed to decontaminate them and a final de-sludging of the ponds will be required.

##### **3795 Waste projects**

The major work package for Waste programmes is retrieval of FED from the FED Vaults. There are six vaults in total, three of which contain FED. The initial enabling works have begun which include design and construction of a FED retrieval system. The vault construction is concrete tanks over clad with concrete panelling. These panels have been removed due to safety concerns with degradation of the fixings. Although there was corrosion found no immediate safety risk was present. Exterior cladding will be re-installed as secondary containment. There has been issue in getting value for money with the quotes provided for construction of the FED overbuilding. Extended procurement and verifications with the NDA have now been completed and a contract is to be issued this week.

##### **3796 Asset care**

Asbestos remediation, cladding and roof repairs continue to be ongoing. The security fence upgrade work around the Cooling Water area will be visible from the beach in the coming weeks. The fencing will be removed from the beach side and a construction area will be in place. The site

will remain secure and a Temporary Security Plan is in place.

**3797 Socio-economics**

One new request has been made within the last month for a local sports team, this has been approved. Allen asked for more requests. Magnox are happy to have approved a request for £361,000 for a project by the Long Shop Museum in Leiston. This is contingent on the remaining funds being secured. Cllr Russ Rainger added that the power stations have a good relationship with the STEM programmes and museum. He recognises that the funding request does not fit with the funding profile for a site at SZA's stage of decommissioning. The promissory funding from Magnox is supporting the request for the remaining funding from The National Lottery. Achievement of complete funding will allow the museum to expand itself as a visitor and community facility. Chair added that she is pleased the NDA and Magnox recognise the need for social-economic funding when a generating site remains in the local area.

**Questions to SZA**

**3798** Pat Hogan said that she was disappointed to not see reference to the offshore structures or buoys in the presentation. Allen apologised that it took longer than expected to award contract for the resolution of this issue. He was only made aware of the resolution days prior to the SSG meeting which is why it was not included in his presentation. Pat asked that future presentations included care and maintenance of items at sea. The damaged buoy will be replaced and at the same time both buoys will be positioned closer to the structures. Communications regarding this matter are being made direct to Sizewell residents via Steve Payne of the Communications Team.

**3799** Peter Palmer asked with regards to the demolition of the National Grid building, is there any transformer oil or contamination with PCBs present. Allen said that the oil was removed from the building years ago by National Grid. There was PCB contamination but this has subsequently been removed and verified as such. Peter then asked if there is any contamination of concrete which Allen replied there is not believed to be.

**3800** Tom Griffith-Jones asked in relation to Allen's earlier statement that MAC is the most active material on site, which will be packaged and transported to Bradwell, what is the categorisation of this waste. Allen said that there is no high activity waste at SZA and that MAC is characterised as ILW. Tom thought that the storage at Bradwell was Low Level Waste (LLW) and Allen clarified that the storage facility at Bradwell is for ILW. SZA is expected to generate 11-15 packages of waste which will be stored at Bradwell.

**3801** Chris Wheeler asked what the expected decommissioning date is for the [FED] vaults. Allen recalled that the vaults will be empty by 2022 but was uncertain of the exact timeframe. The schedule will involve designing, building and commissioning of the FED overbuilding followed by removal of waste. The vaults are filled with de-mineralised water used for shielding of the waste. The water will be processed through SZA Effluent Treatment Plant, after which the inside of the vaults will be washed down and the sludge removed. These works are expected to be completed by the Ponds Team. Chair asked whether once the cleaning had been completed, if the vaults would be demolished to ground level. Allen responded that the vaults will remain with the Reactor Safe Store until Final Site Clearance. Chair believed that the vaults were not included in the three box model. Allen explained that the Reactor Building, Ponds and Vaults are interconnected and removal of one

affects the other(s). The contaminated concrete structures will remain which pose very little risk. Chair queried the reason for emptying the vaults and whether this was in relation to the condition of the vaults [concrete cladding]. Allen explained that the driver is removal of LLW from SZA. He clarified to Chair that the FED is LLW going to LLW Repository and not ILW to Bradwell. There is expected to be a small quantity of ILW in the FED vaults but this will be segregated during retrieval. Chair noted that this would create local employment for a number of years. Chris Wheeler asked if the work was to make the vaults physically secure for the longer term. Allen explained that it is for safety during construction of the overbuilding, this work removes the risk of concrete cladding falling. Chair asked for a visual representation at the next SSG meeting to help with understanding.

3802 Janet Fendley asked whether the ILW from the Ponds is to be literally shipped to Bradwell. Allen explained that it will be transported by road. Janet also asked whether asbestos cladding was being put back onto the building. Allen explained that the cladding isn't and won't be asbestos, it was concrete and will be replaced with industry available metal cladding. Chair asked whether the EA and ONR were involved in consultation on the material used for cladding which Phil Fahey confirmed there was no need. She added that they (EA and ONR) would voice concern if there was any. Colin Tait agreed that if there was a significant safety hazard the ONR would intervene. Allen added that Rowland Cook has observed the project.

3803 Jenny Kirtley raised concerns regarding water and sludge in the ponds and what is done with it. Allen explained that it is radioactively contaminated with Caesium, Strontium and Americium. The water goes through SZA Effluent Treatment Plant and is then discharged to sea meeting the site's discharge criteria. The sludge does not go to sea but remains contained in a tank. This will be recovered by vacuum into a container and then dried before being sent to the Bradwell store. Jenny asked whether the discharge to sea was via a pipe. Allen confirmed that the discharge was made via a discharge line and followed up by stating that the discharge point was below the outfall off-shore structure.

3804 Peter Palmer stated that he assumes there is a process of precipitation/ flocculation/ coagulation/ filtering/ settling. Allen responded that the effluent is filtered through Sand Pressure Filters (SPFs) to remove particulate as required by the Environmental Permit. Phil Fahey commented that samples are required to be taken by SZA pre and post discharge of the effluent and that as far as reasonably practicable particulate is removed. There are limits on pH and radioactivity levels which must also be met and these are analysed in the pre-discharge sample before the discharge is permitted from the tanks. Jenny Kirtley asked where the radioactivity goes when it is so difficult to get rid of. Allen responded that the radioactivity goes into the filters and that the filters will then be disposed of in the future as part of the Sand and Sludge Project. This will be completed once the bulk of water is removed from the site. The sand from the SPFs will be vacuumed out in the same way as the sludge before being dried and packaged for transport to Bradwell.

3805 Joan Girling asked about the FED end state going to Bradwell. Allen commented that there is only a very small proportion (less than 1%) of what is in the FED vaults which will be going to Bradwell (one package) with the rest going to the LLW Repository (LLWR) as LLW. Joan asked whether the sludge was going to remain on site. Allen reiterated that the sludge would be going to Bradwell in three or four packages. The remaining ILW packages will be the sands from the filters which are of a larger volume. Allen also reiterated that all of these packages will be transported overland. Joan asked for confirmation of what will actually remain on site. Allen responded that during Care and

Maintenance there will be no ILW on site and there will be no packaged LLW. It is not possible to say there won't be LLW on site as the graphite core in the reactors will remain until Final Site Clearance. Joan asked about waste staying on site and a retrieval system. Allen replied that the FED has to be retrieved and that the retrieval system will be going within the FED overbuilding. Retrieval will result in approximately 1500, 200 litre drums of LLW for disposal to LLWR and one package of ILW to Bradwell. Joan asked what the predicted water use will be during the retrieval process [FED vault decontamination] and during decontamination of the ponds. Allen replied that the ponds will be washed down with the pond water initially. Some demineralised water may be used for a final wash down of the pond but this will be a very small quantity. Allen clarified the meaning of demineralised water and how the site sources this by tanker as the site historically produced its own but the plant degraded and was beyond economic repair. Joan asked where in the North Sea the discharge point is. Allen reiterated that the discharge point is below the outfall off-shore structure (SZA). He believed this to be the northern structure, furthest from the shore. Joan asked for clarification over where the discharge points are for SZA and SZB and where the planned discharge points are for SZC as she did not know. Joan does not know whether SZA still makes discharges (both of active effluent and sewage). Allen stated that active effluent discharges are made every month. Chair commented that the sewage discharges are made separately.

**Action: SZA and SZB to provide information on where their discharge points are for active effluent and treated sewage.**

- 3806 Chair asked whether the demolition rubble from the National Grid demolition will be stored and reused on site. Allen replied that this will be managed in a similar way to the Administration Building demolition. He said that he is currently working on a plan to deposit this material and that the site is liaising with the EA. Phil Fahey commented that material reuse will be carried out under the CL:AIRE Code of Practice and that local area team experts from the EA will be engaged. The Code of Practice sets a protocol to ensure that there is no environmental harm from the activities. Allen stated that he would like to deposit the material as soon as possible to create space and reduce hazards. Phil discussed that the Site will be producing a Materials Management Plan detailing an assessment of how the material will be disposed of and what the hazards are.
- 3807 Peter Palmer asked a further question regarding how waste is segregated from the FED vaults. Allen stated that an inertial separation machine utilising eddy currents on a table will be used. This is being developed at Hinkley Point A Site where they have a larger amount of waste to deal with.
- 3808 Mike Taylor asked whether increased airborne radioactive emissions are anticipated as a result of these operations. Allen responded that in general no increase is expected, however SZA will be monitoring more discharge points. This will be within SZAs Environmental permit which states what must be monitored. Phil Fahey added that as more work is taking place on site, there is the possibility of disturbing more radioactivity held within buildings. The operator uses filters for discharges to air on any vent plant and these discharges are monitored and sampled to assess radioactivity levels. For example, the Ponds Building has a ventilation plant where the air goes through filters and is monitored so that it is known what is coming out. These results are reported to the EA and are well below the permitted levels. Allen reiterated that more points will be monitored but that it is not expected that larger quantities of radioactivity will be discharged. Phil has asked SZA to monitor the discharge systems.

**3b. Rowland Cook – Site Inspector, ONR**

3809 Rowland Cook had sent his apologies and questions were welcomed for Colin Tait (ONR Inspector for SZB) but none were forthcoming.

**3c. Philip Fahey – Environment Agency**

3810 Phil stated that there are no compliance issues with SZA to discuss and welcomed any questions.

**Questions to EA**

3811 Jenny Kirtley asked about coastal erosion during the last winter. Phil Fahey stated that Victoria Thomas had already fielded a reply to this question. Paul Morton was asked whether the erosion last winter was worse than usual. Paul raised the removal of the WWII defences discussed earlier in the meeting and Chair commented on erosion at Thorpeness but went on to say that she knows the impact on the coast is monitored regularly by the Sizewell sites and would provide the report to Jenny.

3812 Pete Wilkinson commented that he had seen a billboard saying that the GDF was a 'safe way of dealing with radioactive waste' and that it was not because it's not known whether it's safe or not. Pete had objected to this and sent letters to the EA. Pete requested clarification over whether this statement had been amended to reflect that there are uncertainties, or if the sign has been removed. Phil Fahey did not know the status of this request and agreed that he would find out. Chair went to an interesting and helpful EA and ONR presentation at the National Stakeholder NDA Summit which discussed their regulatory role in the GDF. Chair has asked for this presentation which could be sent out to SSG members. She felt the presentation provided assurance that the EA and ONR want a strong regulatory role and want to engage early with communities to provide information and education about the advantages and concerns (of the GDF). Chair hopes that this will include all communities, not just those around the host site. Tom Griffith-Jones hopes that when information is given, the Scottish GDF plan is also shared as he feels their above ground approach is more sensible. He believes that the 'irretrievable approach' for England and Wales is due to cost. Colin Tucker responded that it was explained to him a number of years ago that it's easier to construct a structure which is then backfilled. This decision is based on stability of containment, not cost. He went on to say that by backfilling the structure would be protected from internal collapse which could damage waste packages. There is a direct safety benefit from this approach; the negative is that the waste is not retrievable. He noted that the conversation may have moved on since. Chair confirmed that though a decision has not been made things may have changed. She asked that the conversation is held for when Radioactive Waste Management (RWM) are present and noted that there would be monitoring and inspection costs associated with a retrievable waste facility. Pete Wilkinson added that if the waste was retrievable then it would become underground storage, not disposal which would be a change in government strategy.

**3d. Bill Hamilton – Head of Stakeholder Relations, NDA**

3813 GDF

Bill agreed that discussion between the SSG and RWM would be beneficial but noted that this would only be possible once the government have made an announcement (expected later in 2018) regarding the GDF.

3814 Leiston Museum

Bill was part of the NDA committee that approved the £361,000 Long Shop Museum promissory funding. He paid credit to Haf Morris for their presentation, Jonathan Jenkin of the NDA for his

contributory work, and to Cllr Russ Rainger for producing a clear and successful business case.

3815 Power generation

Bill referenced Paul Morton's presentation which detailed some of the different types of power generated in the UK. Bill noted that the NDA support a range of activities in wind, tidal and wave generation, though public awareness of this is only delivered at larger NDA events. An example was given of a presentation at this year's National NDA Stakeholder Summit which shared a scheme in North Wales where micro-power is generated downhill. Local villagers buy shares in this micro-power generation which sees profits return to the local community.

3816 Decommissioning milestones

Bill has been with the NDA 13 years and is pleased to see Site Directors around the UK discussing decommissioning activities underway which were still concepts when he began. Bradwell Site will be the first of the Magnox fleet to enter into Care and Maintenance, this will happen by the end of 2018. The Thermal Oxide Reprocessing Plant (THORP) at Sellafield will close by the end of 2020. This will mean that Sellafield, which is the NDA's largest and most expensive site will no longer be a commercially operating station. Sellafield will instead be a large series of decommissioning plants, with storage plants and some conditioning.

3817 Brexit

The NDA have a senior member of staff working full time with the government to produce a proposal for a regulatory safeguards regime following Brexit. From the discussions held he is satisfied that in terms of policy framework, the new safeguards will mirror EURATOM.

3818 Magnox Contract

The new operating model for the Magnox estate has recently been announced. The Magnox fleet will be run as a wholly owned subsidiary of the NDA. They will not be run by a Parent Body Organisation. Magnox Limited as a company and 99% of the workforce will remain. There will be a new team of Senior Executives and a new board put in place between now and the end of the Cavendish Fluor contract in August 2019. The NDA will begin with recruitment of a new Managing Director, followed by other senior positions. The workforce and trade unions are involved and it is an open, transparent recruitment process. Stand downs will be held at all Magnox sites with senior NDA members in attendance to explain the changes further and to answer any questions. An email inbox has been created to field questions relating to the change in the Magnox contract.

3819 Holliday Inquiry

The inquiry is an independent review run by Steve Holliday. The inquiry looks into the award of the Magnox decommissioning contract by the NDA and its subsequent termination. This is a complex process and though it isn't known when the final report will be published, it's believed that investigations are near completion.

3820 Reports

The NDA's Business Plan has been published on their section of the Gov website. This provides a high level insight into projects 2018-2021.

<https://www.gov.uk/government/consultations/nuclear-decommissioning-authority-business-plan-2018-to-2021>

The NDA's Annual Report and Accounts has also been published for the last financial year.

<https://www.gov.uk/government/publications/nuclear-decommissioning-authority-annual-report-and-accounts-2017-to-2018/nda-annual-report-and-accounts-2017-to-2018>

3821 NDA Stakeholder Summit

The summit provides an opportunity to network with people with a common interest in the NDA and what it does, as well as hear from senior voices from the NDA, industry, government and those involved in delivering the NDA's mission. The summit includes interactive sessions and workshops to learn from best practice and to understand more about the issues affecting the NDA and the nuclear decommissioning sector. In attendance were over 200 delegates from sites, Local Authorities, Non-Governmental Organisations (NGOs), Site Licenced Companies (SLCs) and over 40 delegates from communities across Europe. Early anecdotal feedback of the event has been positive, official feedback is awaited.

3822 Continuous Reactor Dismantling

A report is being presented to the NDA board next month on the principle of continuous reactor dismantling (the possibility of dismantling Magnox Reactors rather than going into the Care and Maintenance Phase). If the board approves the concept of continuing reactor dismantling it will only apply at a small number of sites. If approval is given in principle they will publish their report and ask for comment. The NDA would engage with Stakeholders and other groups to discuss what the criteria should be for selecting sites for continuous reactor dismantling.

3823 Nuclear Regulation Changes

There may potentially be changes to Nuclear Regulations for sites at the end of their decommissioning lives. BEIS have carried out a consultation and they would need to find parliamentary time if they wish to move forward in considering proposed changes. As Brexit approaches it could be a challenge to secure parliamentary time.

**Questions to NDA**

3824 Peter Palmer asked if there is still foreign owned reprocessed fuel in the country. Bill replied that there is a small quantity at Sellafield which is due to go through the THORP reprocessing plant. THORP will cease to reprocess regardless of whether the waste scheduled for reprocessing there has done so. He explained that there is an ongoing programme of repatriation for waste and materials which will be returned to the country of origin. Peter asked when the programme would complete which Bill was unsure of.

3825 Tom Griffith-Jones wanted a more comprehensive answer to a question he posed to Jonathan Jenkins at the previous SSG meeting regarding ownership and responsibility of waste.

**Action: NDA to clarify who owns what waste, when ownership changes and what determines this.**

3826 Mike Taylor questioned what the plan is for spent fuel produced after THORP closes, and who pays. Bill explained that THORP won't close by the end of 2018, it will cease reprocessing. At this time its use will be re-scoped. The ponds will be used to store spent fuel when they arrive at Sellafield from

EDF stations. He believed the contractual arrangements would remain the same. Mike asked whether the ponds would have enough capacity. Bill explained that there are cleared detailed plans looking at the volume of materials and capacity at Sellafield which regulators are engaged in. He offered an example that he and Danny Fox, Senior NDA Executive in charge of the Strategy Team for Nuclear Materials recently attended a Theme Overview Group (TOG) meeting on spent fuel. Regulators were present at the meeting and the plan for THORP following cessation of reprocessing was discussed, including agreement on storage. Colin Tait added that the spent fuel strategy from Advanced Gas-cooled Reactor (AGR) materials had been developed over many years.

3827 Pete Wilkinson asked whether 'THORP 2' had been ruled out. Bill noted that Alex Chisholm stated at the National NDA Stakeholder Summit that THORP remains the biggest UK generator for Japanese Yen for UK PLC. Chair acknowledged that there is debate whether THORP is value for money but asked for conversations to remain focussed on matters affecting the local area at this meeting. She noted that inviting Adrian Simper, Strategy and Technology Director, NDA to attend another SSG meeting would be considered.

3828 Chair noted her concerns on the affect the change in operating model would have on staff, as the Cavendish Fluor (CF) personnel would be returning to their own companies. She added that senior management set the culture and these staff members won't be retained. She understood that there will also be an early reduction in some posts due to a change in projects. Bill stated that it is unknown what people (CF employees) will do, they are free to apply for the positions if they desire. There is a large team focussed solely on making the transition work. This team is comprised of NDA, Magnox, Consultants and Contractors to ensure a broad view. Nigel Lowe, Head of the Transition Programme ran a workshop at the National NDA Stakeholder Summit. Chair will circulate the presentation which details the plans for moving through transition. Bill reiterated that the change applies to a small number of people and he is certain that the positions will be filled by "top people". Bill added that retention of Suitably Qualified and Experienced Persons will be ensured, this could mean keeping some staff in position for longer until suitable replacements are available.

#### **4. REVIEW AND AGREE THE FOLLOWING PREVIOUSLY CIRCULATED**

##### **4a. Minutes of the last meeting held on 19<sup>th</sup> April 2018**

3829 No corrections or questions were noted. Positive comment was given on the quality of the minutes.

##### **4b. Other matters arising from minutes and action tracker or correspondence received**

3830 There are a plethora of matters to review, these need prioritising which will be done by the Chair and Deputy Chair. Chair asked for others to share their view on priorities so that this can be considered. She stated that the SSG has a role to help galvanise local Parish and Town Councils. Chair added that a letter could be sent through the SSG to BEIS asking government to take a rounded view on energy projects within the area. When all the reports from the National NDA Stakeholder Summit are available they will be shared with the SSG.

##### **4c. Sub group meeting on BEIS GDF consultation on 27<sup>th</sup> June 2018**

3831 This meeting was attended by the Chair and Peter Palmer. A number of different consultations have been held and feedback given.

## **5. REVIEW OF CONSTITUTION AND MEMBERSHIP/DECLARATIONS OF INTEREST**

3832 Following issue of the NDA's guidance a sub-group meeting was held to review the constitution and no changes were made. It's felt that the NDA should continue their commitment to providing SSG support, in the way of a Secretariat. Chair reminded that all members (existing and new) need to complete a declaration of interest form, she emphasised the importance of signing the data protection section as well as providing contact details. It was clarified that only members must complete the forms as Officers declare their interest within their own organisations. Though Officers do not need to complete the declaration forms provided it was noted as beneficial to complete the contact details section for ease of communication.

## **6. CHAIRMAN'S REPORT (Including notes from the NDA National Stakeholder Summit)**

3833 The National NDA Stakeholder Summit was opened by the NDA Chair and CEO, their presentation included NDA highlights, achievements, and concerns following the Magnox competition. Chair noted that there were interesting presentations regarding the nuclear legacy at Berkeley. She added that Penny Ride, Berkeley [Stakeholder Group] Chair had achieved her ambition to have a redundant building made available to a local college for training. The Summit was based in the main hall at this facility. The first day's presentations included the role of research and development and Bradwell's story into Care and Maintenance. Chair added that SZA will be looking after Bradwell in Care and Maintenance and feels local people will want to gain an understanding of this. Bradwell representatives noted their interest at the event to have a joint meeting with the Sizewell SSG to understand their views. There was also a presentation on emptying of voids at Sellafield which is a challenging process. Chair attended workshops on the role of the regulator in the GDF presented by the EA and ONR, and on socio-economics as well as Nigel Lowe's workshop on the transition of the Magnox operating model. The latter included the Mentor Mon project referenced by Bill Hamilton. She was inspired by the local community's achievements and noted that they own part of the sea bed. The man leading the project began 13 years ago at the age of 19. Chair has asked County & District Councils for a joint meeting to look at a vision for the local area. She noted that there has been talk of waiting for Sizewell C (SZC) funding but feels that consideration should be given now on what the vision is for the area, if SZC happens or not. She added that the Long Shop Museum is the first sizeable sum to be spent in the area. Aled Morris-Jones, Chair of [SSG] Chairs spoke about the role of SSGs and how they engage with local communities. NUClear LEgacy Advisory Forum (NULEAF) representatives were present at the summit. Chair took this opportunity to discuss differences between NULEAF and the SSG's work and the potential for joint work in the future. Gavin Stevenson of Dumfries and Galloway Council gave a presentation. Professor Jim Al-Khalili delivered a captivating presentation on how the atom is split and who split it.

## **7. MEMBERSHIP**

### **7a. Welcome new individual members representing Town/Parish, District & County Councils**

3834 Chair welcomed Cllr Freda Casagrande of Leiston-cum-Sizewell Town Council.

### **7b. Confirmation of co-opted members**

3835 All co-opted members on the committee will stand again for the coming year. This is not a year where the chairmanship or deputy chairmanships are reviewed. However, if there are any concerns they can still be voiced.

3836 Joan Girling noted her disappointed that there are a number of Parish and Town Councils which are not represented or do not have attending representatives. She commented that she believes it has been a year since Theberton, East Bridge or Middleton were represented and asked for the Chair to write to the Parishes again. Chair replied that Tracey Finn, SSG Secretariat records attendance at SSGs, Chair will go through this with Tracey and write to all Parish & Town councils expressing the disappointment at their missed opportunities to attend and participate. Joan asked whether Parish Councils can have representatives that aren't Councillors. Chair replied that it depends on individual Council's constitutional guidance. She added that she is aware of some Councils sending Subject Matter Experts (SMEs). All representatives have a duty to deliver the information back to their associated organisations. Representatives don't have the power to make decisions. Chair confirmed that the SSG will consider the option of non-councillors representing Councils if the associated Council agreed to this and nominated a representative. Chair will include this within her letter.

## 8. ANY OTHER BUSINESS

3837 Chair thanked all for their attendance and gave a reminder that the declaration of interest forms must be completed.

**NEXT MEETING:** Thursday 4<sup>th</sup> October 2018 at 9.30am, Riverside Centre, Stratford St Andrew.

### Glossary:

AGR	Advanced Gas-cooled Reactor
CL:AIRE	Contaminated Land: Applications in Real Environments
GDF	Geological Disposal Facility
HLW	High Level Waste
ILW	Intermediate Level Waste
LLW	Low Level Waste
NDA	Nuclear Decommissioning Authority
ONR	Office for Nuclear Regulation
OSaRT	Operational Safety Review Team
VLLW	Very Low Level Waste