

**MINUTES OF THE MEETING OF THE  
SIZEWELL A & B STAKEHOLDER GROUP (SSG)  
HELD AT  
SIZEWELL SPORTS AND SOCIAL CLUB,  
KING GEORGE'S AVENUE, LEISTON IP16 4JX  
ON THURSDAY 9<sup>TH</sup> JANUARY 2020 AT 09:30**

**MEMBERS**

Ms M Fellowes	- Co-opted Member, <i>SSG Chair</i>
Mr P Wilkinson	- Co-opted Member, <i>SSG Deputy Chair</i>
Cllr S Betson	- Leiston-cum-Sizewell Town Council
Cllr G Bickers	- Suffolk Association of Local Councils
Mr T Branton	- Co-opted Member
Mr J Carey	- Sizewell A Staff representative
Ms J Fendley	- Suffolk Friends of the Earth
Mr M Freeman	- Sizewell Residents Association
Mr W Howard	- Co-opted Member
Cllr M Jones	- Aldringham-cum-Thorpe & Knodishall Parish Councils
Cllr P Palmer	- Aldeburgh Town Council
Cllr R Rainger	- Suffolk County Council
Mr C Tucker	- Staff Representative, Sizewell B
Mr C Wheeler	- Co-opted Member

**IN ATTENDANCE**

Mrs M Barnes	- Communications, EDF Energy
Mr P Berenguier	- French Nuclear Safety Authority
Cllr J Bond	- East Suffolk Council
Mr I Cuthbert	- Closure Director, Magnox
Mr D Gregory	- Inspector (Sizewell B), ONR Operating Nuclear Reactors Inspection Team
Mr R Lee	- Inspector (Sizewell B), Environment Agency Inspection Team
Ms M McInnes	- Economic Development and Regeneration, East Suffolk Council
Mr J McNamara	- Head of Stakeholder Relations, Nuclear Decommissioning Authority
Mr E Osondu	- Environment Agency
Mr P Reynolds	- Inspector (Sizewell A), Environment Agency Inspection Team
Mr J Rogers	- Inspector (Sizewell A), ONR Operating Nuclear Reactors Inspection Team
Mrs N Rousseau	- Community Liaison Manager Sizewell B, EDF
Mr S Verrall	- Engineering Manager, Sizewell B, EDF
Ms D Ward	- Comms Lead, Magnox
Mr J Yates	- Acting Station Director, EDF
Mr E Anckorn	- Minute taker, Ubiquis
Mrs T Finn	- SSG Secretariat

**MEMBERS OF THE PUBLIC**

Ms J Kirtley  
Mr M Taylor  
Mr P Chandler  
Mrs B Chadwick  
Ms S Seabrook

Mr R Baldock

## **APOLOGIES FOR ABSENCE AND DECLARATIONS OF INTEREST**

4151 Apologies for absence were received from:

- Pat Hogan, Sizewell Residents Association
- Cllr David Bailey, Leiston-cum-Sizewell Town Council
- Cllr Craig Rivett, East Suffolk Council
- Carolyn Barnes,
- Lisa Chandler

4152 Cllr Graham Bickers was welcomed as a member and Paul Morton had temporarily taken secondment from Sizewell B.

## **2. SIZEWELL B REPORTS**

### **2a. John Yates (Acting Station Director, EDF)**

4153 Mr Yates outlined that there had been no lost time due to injuries to staff, no nuclear reportable incidents and no environmental incidents during the period. EDF was looking for four new apprentices at Sizewell B, which was a fantastic opportunity for local young people. An open day had been held at Sizewell visitor centre for over 50 potential new starters.

4154 Planning permission had been granted for the Sizewell B Relocated Facilities, subject to the signing of the S106 agreement. There was no intention to start work until the judicial review had been completed, but EDF was preparing to commence work in 2020.

4155 Cllr Betson asked whether there had been a further review of the relocation of facilities to the redundant Sizewell A site. Mr Yates responded that there were discussions with Sizewell A and Sizewell B was looking to use the land in time for its programme, but planning permission was in place if the Sizewell A land could not be used.

4156 Mr Freeman asked whether the simulators could be moved elsewhere, given the local community's concerns over the loss of Coronation Wood. The Chair noted that it also applied to the visitor's centre, because Bridgewater visitor's centre was on the high street. Mr Yates responded that there was no change in philosophy from the previous meeting, but EDF would try to mitigate the concerns as much as possible. The Chair suggested submitting a formal request for Sizewell A to be decommissioned at an earlier date.

4157 Cllr Bickers asked whether the intention was to use sufficient land from Sizewell A to facilitate the preservation of Coronation Wood. Mr Yates replied that using land from Sizewell A would not avoid removing plants from Coronation Wood, but would allow Sizewell B not to build on Pillbox Field.

4158 The Chair asked what the plan was to mitigate noise and visual issues from the dry fuel store. Mr Yates replied that he was not fully briefed, having taken over a week ago. The details should be in the planning application.

4159 Mr Freeman observed that Coronation Wood had been part of the dry fuel store planning application, in terms of providing visual and noise shielding. Cutting down Coronation Wood and putting a hard surface in Pillbox Field would only make the noise issues worse and would also create visual issues. The Chair stated that the

- SSG would ask formally that Mr Yates contact somebody to say that the philosophy needed to be reassessed.
- 4160 Mr Branton suggested that a replacement for Coronation Wood could be planted in the same sightline nearer to Leiston with a greater environmental benefit than Coronation Wood.
- 4161 The Chair asked whether the Environment Agency could take an action to support Mr Freeman with regard to increased noise. Mr Lee replied that noise and visual issues were outside the Environment Agency's remit and it was a matter for the local authority.
- 4162 **ACTION:** To contact Morag McInnes with regard to noise and visual concerns.
- 4163 Mr Wheeler noted that the Scottish Power East Anglia projects were being pursued as separate DCO applications and had been accepted by the planning inspectorate, despite objections from the local community due to the onshore consequences in Friston and the vicinity of Leiston that could never be mitigated and the precedent that would be set for other projects. Mr Wheeler suggested that the SSG register as an interested party with the planning inspectorate to submit a relevant representation, which would be used to determine the agenda for the hearings.
- 4164 Some CION assessments had been extracted from National Grid under the terms of the Environmental Information Regulations, although he had not received all the information he believed he was entitled to, which had been escalated to the ICO. National Grid had said that cable routes to the Sizewell site would have impacts on the Suffolk Coast AONB, but a precedent had been set by Galloper and Greater Gabbard and careful routing would minimise potential impacts. The obligations of economy, efficiency, coordination and respect for the environment under the Energy Act 1989 might not have been fully complied with, which had been communicated to Ofgem. Further investigation had uncovered that Scottish Power had wanted to reopen the Broad Sea to Bramford route, but National Grid had blocked it and he questioned how it was more efficient to dig up new land.
- 4165 National Grid Ventures was not certain that permission to build the Nautilus Project in the area would be received and alternatives existed to digging up the area and further cables being brought ashore. It had also just come to light that neither the ONR nor the Emergency Evacuation Planner for the county had been consulted on the implications for the Scottish Power projects.
- 4166 It was agreed that the SSG would register as an interested party. Mr Gregory stated that the ONR had not initially been consulted on the Scottish Power projects, but had subsequently been consulted. The conversation with Andy Osman was ongoing and a response had not been provided yet.
- ACTION:** Daniel Gregory to contact the ONR's land use and planning staff regarding the Scottish Power projects.
- 4167 Mr Wilkinson commented that the emergency plan for the area included Sizewell B and potentially Sizewell C, in addition to Scottish Power, and it was time to recognise as a group that the entire issue of energy on the Suffolk coast needed to be discussed, as it was impossible to talk about Sizewell B without talking about Sizewell C. The Chair stated that she agreed that there was a disconnect, because the EDF New Build Forum was a separate entity, but the SSG had always had the ability to talk about Sizewell C issues when they impacted on Sizewell A and B. The view that the SSG should be able to openly discuss matters as the DCO for Sizewell C drew closer could be reflected back.
- 4168 Mr Wilkinson asked whether Mr Yates agreed that emergency planning was in complete disarray, in terms of how it was being reviewed and the international

standards being ignored by BEIS and Suffolk County Council. Mr Wilkinson asked what EDF's commercial attitude was to emergency planning and where there should be interaction between EDF, the community and regulators in the nuclear field. Mr Yates responded that EDF was compliant with its site licence and regulatory requirements.

4169 Mr Tucker noted that he had been part of Sizewell B's emergency plans since 1999 and they were not in disarray. The emergency plans were practised a dozen times a year in exhaustive exercises and Sizewell B was prepared to deal with an event should one happen.

4170 Mr Taylor stated that the ONR and HSE guidance said that, given the large hazard potential associated with operating power reactors, there was the expectation that a minimum geographic extent for detailed emergency planning would be nominated by the operator consistent with international standards and guidance produced by the IAEA, which as he understood it was 3 to 4 kilometres. A 1 kilometre geographical area was unjustified and imprudent for emergency planning and instead a 3 to 4 kilometre area including Leiston and the surrounding villages would be a prudent starting point.

**ACTION:** To obtain a response from Andy Osman regarding the emergency planning area.

4171 Mr Yates observed that the emergency planning had been deemed to be satisfactory by the ONR and EDF believed that it had a good site plan. Mr Wilkinson noted that he had said that the emergency planning was in disarray because it was impossible to implement in the case of an extensive offsite incident. Mr Wheeler commented that there was no coordination with the projects happening in the area. The Chair stated that the SSG would attempt to progress discussions with the relevant authorities outside of the meeting.

**2b. Daniel Gregory (Site Inspector, Office for Nuclear Regulation)**

4172 Daniel Gregory highlighted that the ONR had focused on the management of safety and operations post-outages during the quarter.

4173 The Chair noted that there was an item about stakeholder engagement in the report that talked about how to communicate radiation risk and it was quite interesting that the SSG had asked to be involved in the discussion around the DPZ and what information was given to local people, but the SSG's comments had not been taken into account.

**ACTION:** Daniel Gregory to ask the emergency preparedness and response team whether there was a forum where DPZ and radiation risk communication issues could be discussed.

4174 Mr Wilkinson asked for the ONR's view of the longevity of the dry fuel casks. Mr Gregory replied that the dry fuel casks had a 100-year lifespan. Mr Tucker noted that the 100-year case was an aspiration that was subject to review every 10 years. Mr Wilkinson asked what would happen if the next review was unsatisfactory. Mr Gregory responded that the licensee would have to develop an alternative solution.

4175 Mr Wilkinson asked what would happen to the dry fuel casks after 100 years if there was no repository. Mr Gregory replied that the plan was to have a GDF. Mr Wilkinson stated that it was unwise to produce radioactive waste for which there was no long-term agreed solution. The Chair noted that current government policy gave permission for the nuclear industry to explore new build without a long-term solution for the waste of spent fuel from nuclear production, so the question went back to national government.

- 4176 Mr Gregory noted that from a legislative point of view the ONR needed to ensure that the site could store its waste safely for as long as necessary. Mr Wilkinson commented that, as a regulator, the ONR's position should be to tell the government that it was acting in a dangerous way. Mr Gregory stated that he did not feel there was a significant risk that the fuel could not be stored safely for 100 years.
- 4177 Cllr Palmer asked what fleet-wide corrosion issues EDF had been managing. Mr Gregory replied that significant corrosion had been found at Dungeness, which had prompted an investigation of corrosion across the nuclear fleet EDF operated. Trenches had been opened up to examine concealed pipework for corrosion, which had not revealed any significant issues at Sizewell.
- 4178 Ms Fendley asked when the Sizewell B dry fuel store would be inspected. Mr Yates replied that there was a series of regular inspections and the 10-year review would require the safety case to be reviewed in its totality. Mr Tucker noted that the 10-year period began from the first cask being loaded into the dry store, which had been two years ago. The casks were continuously monitored by a monitoring system and Sizewell B had a corrosion simulator, which could be examined on a regular basis. If it was discovered that 100 years was not achievable the process was reversible, in terms of taking the casks back to the fuel building and repackaging them.
- 4179 The Chair asked what would happen if the B site had been decommissioned by the time it was discovered that 100 years was unachievable. Mr Gregory replied that the licence holder would be responsible. Mr Wilkinson asked what would happen if EDF did not exist when it was discovered that 100 years was unachievable. Mr Gregory replied that there was a liability arrangement with the government. Mr Gregory noted that one of the requirements was that the organisation had sufficient financial capability to maintain existence going forward.
- 4180 Mr Taylor asked whether it could be made clear that the storage was subject to the caveat of a 10-year licence. The design life of the cask had originally been talked about as being 25 years and 100 years was an aspiration rather than a fact. Mr Gregory replied that design life was always subject to a periodic safety review.
- 4181 Cllr Bickers commented that EDF promoted nuclear power and its carbon footprint, but no credibility was given to having a permanent solution for nuclear waste. The Chair stated that EDF could not claim nuclear power was carbon neutral, because they did not know what the long-term storage solution was for nuclear waste. Cllr Bickers noted that there was a massive carbon footprint associated with the construction of Sizewell A, B and C.
- 4182 Cllr Palmer questioned whether the dry fuel store would continue for 100 years without the benefits communities had from a long-term nuclear storage facility, as he did not remember there being a discussion about the 100-year storage. The Chair noted that East Suffolk Council had decided to cover the dry fuel store under a small S106 agreement, which had just been for the construction of a building because the industry regarded spent fuel as an asset of zero benefit rather than waste.
- 4183 Ms Fendley observed that mining should be included in the nuclear industry's carbon footprint as well. Mr Tucker noted the environmental impact assessments were available on EDF's website and the calculations included mining, conversion, enrichment, operation of the power station, storage of fuel and final waste disposal. The CO<sub>2</sub> allowance for waste disposal was very pessimistic and the operation of the power station took approximately six months to offset the CO<sub>2</sub> produced during construction, compared to two and a half years with offshore wind power.

4184 Ms Kirtley asked how Sizewell would be protected from rising sea levels. Mr Gregory replied that the site was considering sea and flooding defences, which would include walls and other engineering measures.

**2c. Richard Lee (Environment Agency)**

4185 Richard Lee highlighted that, although noise from the power station was not generally in the Environment Agency's remit, noise from the conventional combustion plant would be. The audit of the surveillance by the operator's Internal Nuclear Assurance function in October illustrated that EDF took a very strong role in ensuring that it complied with its permit. There had been a minor technical non-compliance with no environmental impact.

4186 Mr Wheeler noted that the Drinking Water Inspectorate stated that tritium in the environment was mainly of man-made origins and extremely mobile. The Environment Agency report in relation to Sizewell A had noted that there had been a small rise in tritium discharged in the aqueous effluent and it had been stated that there was no mechanism by which tritium discharged to sea water could enter drinking water, which he questioned.

4187 Mr Wheeler asked whether everything possible was being done to limit the levels of tritium being discharged into the environment by nuclear facilities. Mr Lee responded that the regulation of tritium in drinking water was a matter for the Drinking Water Inspectorate and typically tritium levels in drinking water in the UK were around 10 Becquerels per litre, which was at the limit of detection. Essex and Suffolk Water routinely monitored tritium in drinking water in the Saxmundham supply zone and the works feeding the Saxmundham supply zone, and had not been able to find tritium at the limit of detection, so there was no suggestion that local levels were escalated.

4188 Mr Wheeler commented that his concern was that the tritium in the environment had no known safe level. Mr Wheeler asked whether everything possible was being done to limit discharges of tritium. Mr Lee replied that the discharges of tritium from Sizewell B were significantly less than the permitted limit, so Sizewell B was doing its best to minimise tritium discharges.

4189 Cllr Palmer asked whether the Environment Agency and the Drinking Water Inspectorate communicated with each other. Mr Lee replied that there would be communication if there was an incident that led to tritium levels in drinking water becoming escalated. Cllr Palmer asked whether a leak into the water would be identified. Mr Lee replied that there would be evidence in the discharges from the station or from the periodic assessments of the level of tritium in the ground around the station. The Chair noted that the issue was that there was no evidence on the impact of tritium at very low levels. Mr Tucker noted that tritium had a very short biological half-life of hours to days.

4190 The Chair asked what tritium would do to the body. Mr Tucker replied that it would be a dose of radiation. Tritium was produced naturally and there was no tritium-free water in the world. The Chair asked why there was a limit on what was discharged. Mr Tucker replied that it was a precautionary principle to not increase the level of radiation in the environment. The Chair stated that the issue was that there was no proof that tritium was not harmful and her concern was the industry's lack of acknowledgment of the unease.

4191 Mr Wilkinson noted that steam venting from Sizewell B contained tritium and discussions in the forum in the past had been about where the tritium was deposited. Mr Lee noted that tritiated water would go to the same places as water vapour or water droplets. The tritium levels in the steam from Sizewell B were below the limit of detection.

4192 Mr Wilkinson stated that the industry did not know what the effects were of ingestion over a long period of time, because most of it was guesswork. Mr Lee noted that the permits were based on the best available scientific evidence. Mr Wilkinson commented that the regulatory bodies could argue that discharges should not be made until the effects were identified and the regulators' failure to support NGOs was why regulators were seen as enablers for the nuclear industry rather than defenders of the environment.

4193 Ms Fendley asked what the half-life of tritium was. Mr Lee replied that it was approximately 12.3 years. Mr Wheeler noted that somebody who was regularly drinking tritiated water would continuously be exposed to tritium. The discharges were difficult to detect because it was difficult to detect the energy coming out of tritium atoms when they decayed rather than because of the quantity of tritium atoms, but the impact of tritium inside the body was unknown.

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

#### **3a. Ian Cuthbert (Closure Director, Magnox)**

4194 Mr Cuthbert reported that there had been no accidents or injuries since the last report. Recent safety campaigns included environmental sustainability and transport safety. A demonstration exercise had been carried out that had led to 24/7 shift operations being removed. Bradwell had been shut down in 2019 and had been reopened by the team led by Lisa Ford. The team carried out maintenance of Bradwell on occasion and the next planned inspection of Bradwell would be in September.

4195 The National Grid building had been demolished and removed from site and the porta-cabins would be removed. His understanding was that Sizewell B would need to relicence the area. There were some underground tunnels that would need to be filled in and the fences for both sites would need to be reconfigured, but Magnox and NDA Legal were working to transfer the land. The sample results were awaited and, once the samples had been confirmed as clear, the land would transfer back into the ownership of Magnox/NDA.

4196 The ponds were now completely drained, including all the sludge and activated components. Three fuel slivers had been removed from the ponds so far. The ponds programme was not finished, as the walls had to be stabilised to ensure there was no further contamination. The Fix It Now team's asbestos work would continue in 2020 and would grow significantly in the next couple of years. The town's water supply to the site would be changed in 2020. Work examining the outside condition of the boiler houses was ongoing and 73 areas of concrete spalling had been removed. The netting of the SAB building would be carried out, with a start date the following week.

4197 The strategy for all Magnox sites was being assessed and the NDA had given Magnox a larger amount of money that year. Sizewell A had been successful in obtaining funding to commence the isolation of the turbine hall in preparation for demolition in around 2022. The asbestos programme in the boilers would commence that year and would continue over the next three or four years. Magnox had started to remove and sell redundant equipment from the site, with the money going back into the NDA. Mr Cuthbert was presenting a new structure to trade union reps the following week and he hoped to have it in place for 1 April. There would not be any compulsory redundancies or severances and the majority of the new structure would be a reconfiguration of the site structure.

4198 His lead team would be meeting to look at the infrastructure of the site moving forward, for example waste facilities. The scraping of the concrete floor of the

National Grid building had caused noise issues on a Sunday, which he guaranteed would not happen again. He encouraged socio-economic applications to be submitted to Haf Morris.

- 4199 The Chair asked what the footprint of the National Grid substation had been and whether it was similar to what a National Grid substation would need to be for Scottish Power use. Mr Cuthbert replied that he did not know off the top of his head.
- 4200 Mr Taylor asked whether Mr Cuthbert could confirm that he would take advice from local organisations with regard to netting, in order to avoid bird nesting sites being netted. Mr Cuthbert responded that the netting he was talking about was across the admin building, which would prevent nesting and birds pecking the roof of the admin building. No work would be carried out that would affect bird nests in other buildings. The Chair asked whether RSPB advice had been sought. Mr Cuthbert replied that he believed so, but he could check with the Head of Environment.
- 4201 Ms Fendley asked whether money would be received for the scrap metal from the National Grid substation. Mr Cuthbert replied that Magnox had not owned the building, but generally speaking there would be income from the scrap metal, which would offset the cost of demolishing the building. Ms Fendley asked what had happened to the rubble. Mr Cuthbert replied that National Grid had removed the rubble from the Sizewell A site.
- 4202 Mr Wilkinson noted that there had been a great deal of concern about low-level contaminated scrap metal going back into the system. Mr Wilkinson asked whether the scrap metal from the substation was below low level contamination. Mr Cuthbert replied that all the waste from the National Grid building had been out of scope for free release. Mr Wilkinson asked what level of contamination free release waste was. Mr Cuthbert replied that he could not remember, but he would reply to Mr Wilkinson that afternoon.
- 4203 Cllr Palmer asked whether there had been any contamination events caused by leaky transformer oil. Mr Cuthbert replied that he was not aware of any and he hoped that the survey came back clear, but if it did not National Grid would be responsible for addressing any contamination.
- 4204 The Chair asked what the status was of the additional unexpected waste items that had been identified after Bradwell had gone into care and maintenance. Mr Cuthbert responded that a number of items of waste, such as scaffold boards, had been wrapped and were still in the safe store at Bradwell.
- 4205 Mr Wilkinson asked what the miscellaneous activated items had been, other than the three fuel slivers. Mr Cuthbert replied that the majority had been springs from the fuel elements. Mr Wilkinson asked where the items were stored. Mr Cuthbert replied that they would eventually be stored in cast iron drums at Bradwell. The Chair noted that a few years ago the SSG had been told that the packaging of ILW would not take place at Sizewell A. Mr Cuthbert noted that a review of all Sizewell's waste was being carried out before the end of February. Currently all the waste was stored within the Sizewell A reactor area and once the Advance Vacuum Drying System was installed, which was two years away, the waste would be packaged and would go to the storage facility at Bradwell. The Chair noted that she was attending a meeting on 23 January in London, so any questions could be raised to her.
- 4206 Mr Wheeler asked whether there were dates for the removal of the offshore rigs. Mr Cuthbert replied that there were not, but the executive review was looking at the lifetime plan for the end of February.

4207 Cllr Palmer asked what end state had originally been specified. Mr Cuthbert responded that the end state was to return the site to brownfield. He was unable to say what the end state for Sizewell A would be, but he hoped to be in a better position to say once the executive review had taken place and the NDA had produced its forward business plan. The Chair asked how the public could influence the end state. Mr McNamara replied that there was a full plan for public consultation on end states. The Chair noted that the end states presentation had mentioned a date of 2023 for when the NDA would approve the end states for Magnox sites. There was local appetite for more to be released at Sizewell A because of the demands being made of the area for brownfield sites.

**3b. John Rogers (Site Inspector, Office for Nuclear Regulation)**

4208 Mr Rogers highlighted that he had inspected the maintenance and testing programme, which had been deemed to be adequate. He had gone on site tours to get to know the Sizewell A site and it appeared to him that the site was well-managed. The buildings generally appeared to be in good condition and he was pleased to see that work had been done to remove concrete spalling, in order to remove some of the more immediate hazards.

4209 His major concern was the removal of materials from site. There was still some work to be done on the ponds buildings, but the major items had been removed. There was no major safety issue, but there were materials stored everywhere around Sizewell A, which indicated a loss of control, and he had given Ian Cuthbert an action to remove the materials. The emergency exercise on 6 November had been very well-managed and it had been clear that the local fire brigade was familiar with the site.

4210 Cllr Betson observed that the mean gender pay gap across ONR had only been reduced from 27% to 25%, which was unacceptable. Mr Rogers noted that the paragraph in the report was about corporate news, so it was not his opinion or something he was involved in, but the figure was moving in the right direction, albeit not quickly enough.

4211 Mr Howard asked how graphite onsite was being addressed. Mr Rogers replied that graphite was monitored, but he was not familiar with the 10-year periodic safety review for Sizewell A. Mr Cuthbert noted that the graphite was in reasonable condition and the reactor dismantling would include graphite.

4212 The Chair noted that the graphite was safe where it was, but there was a question of whether it was feasible to remove graphite or whether there was a storage solution. Mr Cuthbert stated that it was possible to remove the graphite, but the storage, disposal and removal was something the government was responsible for. Mr Rogers noted that graphite had been removed from the reactor at Sellafield, so it was technically achievable, but storage was the major question. The graphite could not be left onsite indefinitely, but could be left for the care and maintenance period. The Chair observed that if they waited too long staff knowledge and information would be lost.

**3c. Peter Reynolds (Environment Agency)**

4213 Mr Reynolds reported that he had visited the site once since being appointed to examine waste management arrangements and he had been happy with what he had seen. The ponds work was largely complete, but the Environment Agency would continue to monitor the work going forward to ensure the waste was suitably managed and the impact was minimised. He would look to familiarise himself with the site and discuss the plan for decommissioning the site in the years ahead.

4214 The Chair asked whether the FED would be treated the same as the ILW. Mr Reynolds replied that the best available techniques were still being worked on. The site would only know for sure what the distribution was when recovery began, so the Environment Agency would discuss what plans and contingency measures were in place. Mr Cuthbert noted that a review of waste would be carried out that year, and he expected that the FED would be stored in segregation and the majority of the FED would not fall into the ILW category. The Chair asked what the wording change with the CEAR had been. Mr Reynolds replied that he would have to provide a written reply.

**ACTION:** Peter Reynolds to provide a written reply regarding the CEAR wording revisions.

4215 Ms Kirtley asked whether the water from the ponds had all been discharged into the North Sea. Mr Cuthbert replied that the water had been treated and discharged. Ms Kirtley asked whether the public were told when discharges would take place. Mr Cuthbert responded that Sizewell A had a permit to discharge that it had to abide by, but any discharges would not have been reported to the public. Ms Kirtley asked whether the discharged water was completely safe. Mr Cuthbert replied that the water had been discharged within Sizewell A's permit limits.

4216 Ms Kirtley questioned whether the permit limits were safe. Mr Reynolds noted that there would be no significant adverse effect from discharges up to the permitted limit and the discharges were below the permitted limit. The Chair asked whether the permitted limit took into account an individual fish swallowing a large amount of pond water by chance and a local person eating the fish, as opposed to a presumption that the discharge would be spread across the seabed. Mr Reynolds responded that the models were based on averages. Ms Kirtley asked whether fish were tested locally. Mr Reynolds replied that the environmental monitoring programme included monitoring of fish, crustaceans and molluscs.

4217 Mr Branton asked about the seasonal effect of discharges. Mr Reynolds replied that pressure changes caused movement of air in and out of the reactors and, as water vapour content increased in the air, there would be a slight increase in the tritium conferred into the air. The Chair asked whether the discharges were worse in wet weather. Mr Reynolds replied that there tended to be a slight increase in warm weather. Mr Branton asked whether the seasonal effect was primarily related to tritium variations. Mr Reynolds confirmed that it was.

4218 Cllr Palmer asked whether there had not been a standardised reporting system previous to the BSSD. Mr Reynolds replied that there had been a standardised document previously and the new document was just an update. Mr Wheeler asked where he could find details on the annual permitted limits. Mr Reynolds replied that there were specified limits in the permits.

**ACTION:** Peter Reynolds to circulate links to the permits.

4219 Mr Wilkinson stated that the monitoring programme monitored in the wrong places and only monitored approximately 40% of radionuclides discharged. There was likely to be uranium in the pond water, given spent fuel silvers had been found, and the Environment Agency must monitor the radioactivity of the water. Mr Reynolds noted that the discharges were filtered, which should pick up particles.

**ACTION:** Peter Reynolds to provide a list of what radionuclides were monitored.

4220 Ms Fendley observed that discharges from the pond were released at high tide and the tide went towards Southwold when it went out. She asked whether people in Southwold knew about the discharges. The Chair noted that strontium-90 had been found on the beach at Southwold and, as a result, the Environment Agency had

implemented additional monitoring. Mr Reynolds noted that there was quarterly monitoring and nothing above minimum detectable amounts had been identified since the first quarter of 2017.

4221 Cllr Palmer asked about the process for taking a representative sample. Mr Cuthbert replied that samples were taken at various points of the tank and analysed and some samples were kept for review by the Environment Agency. A flow proportional sample was carried out while discharging.

4222 Cllr Palmer asked how the pre-discharge sample was taken. Mr Cuthbert replied that the sample was taken from the recirculation of the tank. Cllr Palmer asked where Magnox discharged from the tank. Mr Cuthbert replied that the samples were taken from the bottom of the tank. The Chair asked whether the regime changed if a trend was found. Mr Reynolds replied that the site operator would be asked to investigate an increasing trend.

4223 Ms Jones asked whether discharges would be stopped if a problem was identified. Mr Reynolds replied that, if the discharge was identified as breaching the permit, the site would be expected to stop discharging and, if it was found retrospectively, enforcement action would be taken. The impact of the small articles that might not be discovered would be fairly low, so the discharges should be safe.

4224 Mr Wilkinson observed that the Environment Agency oversaw the discharge of materials into water when they did not know the effect on human health. The Chair stated that she was sure Mr Reynolds would take back the comments he had heard and there needed to be a debate as to tolerances of low levels of radiation and the impact on human health.

4225 Mr Verrall stated that a huge amount of science and engineering went into the control of discharging and it had been subject to extensive review and regulation, so he would like to give a short presentation on discharging at a future meeting. The Chair stated that the SSG would welcome a presentation, but the concern was still that a limit had been set and anything below the limit was fine.

4226 Cllr Palmer questioned how the approval state was reached, because if anything went wrong the only answer was retrospective. Mr Verrall noted that the in-line monitoring during discharge was linked to an automatic protection system at Sizewell B, which would shut the discharge down if elevated activity was identified and the limit was set at such a level to ensure that anything being discharged was well below limits on total activity. The Chair asked whether the same technology was in place at Sizewell A. Mr Cuthbert replied that there was monitoring that would shut down discharges.

### **3d. John McNamara (NDA)**

4227 Mr McNamara highlighted that the NDA's business plan for 2020-23 had been published on the government's website and there was a consultation, which he could circulate the contact details for. The NDA's stakeholder survey was going live and some emails had been sent out, which would help to shape how the NDA communicated with stakeholders.

4228 The NDA and Magnox had been jointly working on whether care and maintenance was the optimal way forward for Magnox sites or whether continuous reactor decommissioning would be more beneficial, which would be reviewed and consulted on with the SSG.

### **4. Magnox Site End States (John McNamara, NDA)**

4229 Mr McNamara outlined that there would be a Magnox review of what the regulatory and environmental regimes would be regarding end states, which the local

community was a key part of. The Chair observed that the discussion was hypothetical without a GDF to take the waste away.

4230 Mr McNamara highlighted that Sizewell A was now entering a period of decommissioning and care and maintenance or continuous reactor decommissioning. The community was central, because it was about the community's future. He suggested that Ian Warner could give the presentation at a future SSG meeting. The Chair noted that she might organise a separate meeting to discuss end states.

4231 Mr McNamara highlighted that the new regulation was a BEIS initiative to streamline and further define the journey to the final stages of decommissioning. The ONR would step back at the appropriate time and the Environment Agency would become the principal regulator. The plan would cover all Magnox stations and would require NDA and government approval, along with full consultation with the community.

4232 Cllr Palmer asked whether any previous end state obligations still applied. Mr McNamara replied that new legislation would be introduced to undertake a review of the chronology. It had always been assumed that most sites would return to greenfield, but it was clear through community consultation that different communities had different wishes for the future of sites.

4233 Ms Fendley stated that it was alarming that activity could continue for hundreds of years. Mr McNamara noted that there were issues that had to be discussed and they were not definitively set. The Chair observed that materials from Sizewell B would be some of the last to go to the GDF because of the extended live generation of Sizewell B.

4234 Mr Howard noted that he had taken part in talks with the government and the industry looking towards the end of decommissioning, but it seemed that no notice had been taken of the conclusions of the reports. Mr McNamara stated that the government would have to take the lead, but public consultation would be part of the process. He acknowledged that the industry could do more, but the industry was trying to do more through continuous reactor decommissioning to speed up decommissioning in a safe manner with less impact on the environment.

4235 The Chair stated that, if the public indicated how they wanted their money spent, the government would not necessarily act in that way and the public did not feel empowered by their local representatives that their views were acted upon. Mr Wilkinson commented that the government would not listen and the NGO movement had been unable to influence the discussions. Engagement involved seeing the impact of discussions coming out in policy, which did not happen. The Chair stated that the SSG would like to be proved wrong, in that the consultation would be effective and take account of what the public said.

## **5. MATTERS ARISING FROM MINUTES AND ACTION TRACKER**

### **5a. Minutes of the previous meeting**

4236 Mr Branton had provided one correction to the minutes, which the Chair would take forward.

### **5b. Other matters arising from minutes and action tracker or correspondence received**

4237 Actions tracker:

- Daniel Gregory had provided the information relating to paragraph 4115.
- Richard Lee would contact PHE about the tritium found in domestic water.

- Magnox end states had been discussed in the meeting and there would be a separate meeting.

4238 Richard Lee stated that if there was more he could provide on tritium he could pursue the matter further, but he would need a clear question. Mr Wheeler stated that the proposed presentation would be a good way forward.

**ACTION:** To have a presentation on tritium entering water supplies at a future meeting.

## **6. CHAIRMAN'S REPORT**

4239 The Chair noted that she and Peter Wilkinson were attending a Magnox end states meeting in London on 23 January.

## **7. ANY OTHER BUSINESS**

4240 There being no other business, the meeting was closed.

**Next Meeting:**

DRAFT