Industry Radiological Protection Coordination Group (IRPCG)

2023/ Q1 Meeting Minutes

Date: 19 April 2023 **Meeting No.:** 2023/Q1

Location: Sellafield Ltd

Attendees:

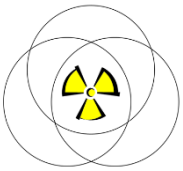
Pete Thompson	PT	Dounreay, a division of Magnox Ltd.	[Chair]
Juliet Porter	JP	Sellafield Ltd	[Secretary]
Karen Beach	KB	Tradebe	
Jim Bishop	JB	Sellafield Ltd	
Matt Castle	MCa	EDF, SZC	
Michael Cunningham	MCu	Nuclear Waste Services	
Amit Desai	AD	AWE	
Emma Dunne	ED	Devonport	
David Edwards	DE	Urenco	
Ian Goldsmith	IG	Magnox	
Andrew Horlock	AH	Rolls Royce	
Christopher Jones	CJ	AWE	
Andrew Laker	AL	Cyclife	
Claire Stephens	CS	EDF NNB	
Vicky Talbot	VT	Sellafield Ltd	
Robin Wells	RW	DSTL	
Guy Wilson	GW	EDF – Generation	

Opening Remarks

PT welcomed everyone and thanked members for attending.

The House safety messages were delivered regarding fire, toilets, escorting duties, etc.

A Safety Message was also discussed around the resurgence of Covid-19 in some parts of the country, which may pose a risk to different aspects of our businesses. CJ added that it doesn't necessarily need to be covid. It is good practice to stay off if you are carrying something which could be spread.



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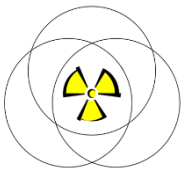

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Dounreay is now a division within the corporate organisation of Magnox Limited. Magnox Limited will be going through a rebranding process to more reflect its future operating model, with the extant sites, Dounreay and the Advanced Gas Reactors.

Skills Gap/ HP Surveyor/ Ladder of Progression

PT introduced this topic and highlighted that the NDA had done work on a Project Management (PM) career pathway recently. They were now focussing on Radiation Protection (RP) and it would be good if we could use this momentum to enhance the future supply of Health Physics capability. CJ added that the defence side were focussing on the same two areas, that is PM and HP. PT said that the two cohorts needed to speak, as we all need to all be talking as one for this. AH said that there was a government group, that he has been working with on this with respect to defence nuclear skills and they feed into the NSSB. CJ added that it was important that we are pulling in the same direction. As long as we recognise what is unique to our area, but ensure the overlap is collaborative, then we are going in the same direction. GW asked if there is a steering group, as EDF are involved in some of the groups but not all of them. PT said at some point we may need to draw/ map out the groups and who feeds in where/ where the collaboration is. There were a lot of groups, and we need to make sure that they are appropriately directed.

Main roles that we have resourcing issues with are Health Physics Surveyors, so it would help to have an agreed role profile.

IG said that he didn't think that the role profile will address the problems. We need to recruit and train people. He was concerned that we don't actually have an influence over the people. If they have a vacancy within Magnox, it tends to be filled. They get a number of graduates through, but they need more money and freedom around recruitment and getting people into the profession. AH said that the same was true for RR and they are training their own undergraduates. He proposes to utilise the radiation physics teams qualification, which is based on nuclear engineering, physics, instruments etc. Then have placements for technicians and undergraduates throughout their four-year training course. Even if they don't go into RP, they will have a good grounding in the skills. AH is asking for two people every three years. They will be given more focused/ grounded HP/ RP training. Rolls Royce are struggling to recruit and he recognises that they need to start looking in house.

JB said that we needed to bring in the supply chain companies somewhere, as they don't have sites and don't always contribute to the training. Sellafield losses a number of people to the contracting world.

IAEA set the standards, but it is for us to ensure we have the people to go on the training. GW added they could also shine a light on the career and publicise it. He felt that there was something here that we need to be doing. PT added if we have elements to feed into this, so we must ensure that we don't miss the boat. The NDA group has resource and funding to put into this publicity part.

PT went through the role profile a page at a time.

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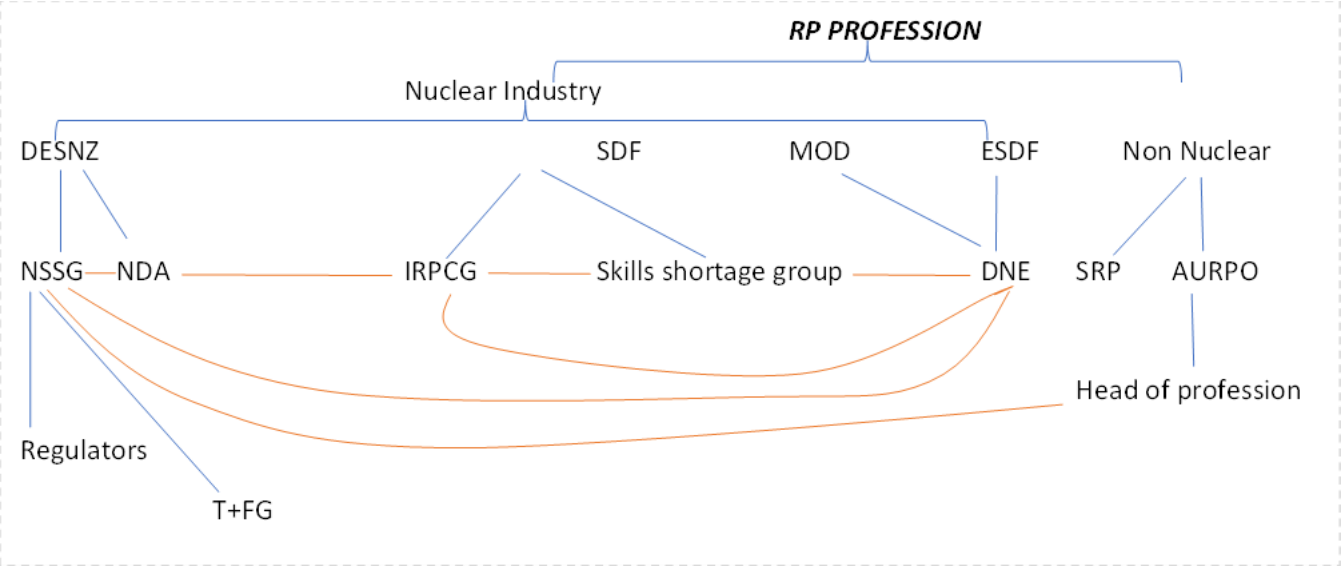
Different groups under RP profession

Discussion was held around the different groups looking at skill shortages within the RP profession.



DESNZ: Department for energy security and net zero
NSSG: Nuclear skills strategy group

SDF has a skills shortage group which meet quarterly. The NSSG sent out a survey on present and future resource demands, but unfortunately not all members had responded. It was a slightly long winded survey and may not sent everyone. PT requested that people do fill it in. GW added if it was sent in word, it would be easier to fill in. DE requested he was included in the distribution.

The focus is currently on Health Physics Surveyors and supervisors, but dosimetrists are also in short supply. There isn't as large of a demand, but it is quite specialist and there are small numbers.

Great British Nuclear (GBN) have no play on this at the moment, but this may change. Gwen Parry-Jones will be interim CEO (interim) and their focus is on delivering new nuclear. GBN sits under DESNZ, but doesn't cover the collective. That is, it doesn't cover defence, or the decommissioning side (NDA), and the NDA doesn't cover everything either.

The Enterprise safety directors Forum (ESDF) also has an interest in these skill scarcities.

ARC Documents for Comment

James Rigby (NNL, ARC) provided a remote brief on the introduction to ARC and the ARC good practice guides. The documents shared with members, are two chapters that will form the basis of a larger alpha good practice guide. The guide will be a single document, that ties

together the existing documents and good practice. They have been brought to this group for initial comment. Ultimately the goal is to get the technical endorsement of the two chapters ahead of them being published.

It was mentioned there may need to be a comment that they are good practice guides and that reading them doesn't make a person competent. The group agreed that they were happy to be the endorsers for the chapters, when they are complete.

The document "RP Design" seems to have a lot with respect to shielding, when a design focus would be on containment for alpha and the glovebox forum may be better placed help with this. If the section is called shielding it would be fine, but as it is IRPCG would expect some information on containment.

ED asked if there would be anything on radon. There is a link with respect to instrument compensation for radon, which may be worth mentioning.

VT also commented on the mention of Am-241 and Uranium in the introduction, but very little mention later in the guide. It either needs more information, or exclusion from the introduction. It could be phrase as, "The focus of the guide is on management of plutonium and its risk".

It was questioned whether there had been any ONR involvement. JR said that the ONR were a sponsor, but they were not involved in the technical detail. Members highlighted that in our good practice guides, we have a disclaimer that the guide is not to be regulated across.

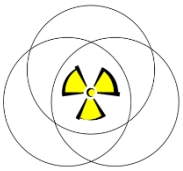
JR has been requested to send the good practice guides contents across, so the group can see the context. The only other concern is where the good practice guide will sit, as current discussion is centred on them being housed on the NDA hub. There was a feeling from some members, that the NDA hub isn't as widely used as it was previously.

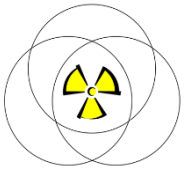
Site aspects

AWE – The main focus is new buildings that will be required moving forwards. The current forecast is for resource requirements to go up by 20 - 30% due to increased workload. There had been two ONR inspections recently, one was an RPE intervention and one for a Uranium facility. They wanted to see how AWE were implementing good practice guide. AWE hasn't done this completely yet aside from gap analysis and this was explained to the inspector but wanted to undertake the intervention anyway. They found generally well-established arrangements.

AWE has recently moved to a model where some areas are handed over under CDM to a contractors, that is contractors in control of areas, etc. This is leading to. AWE classified persons then needing passbooks to enter their own sites. Some sites do this, but you can apply for exemption. Similar conversations were going on with some Magnox areas. PT added it may be a useful topic for future agenda; CDM, nuclear installations act, IRRs etc.

DSTL - DSTL will be joining AWE and HSE seem relatively relaxed about the arrangements.





Tradebe – A criticality enforcement letter was issued, due to having graphite on site in excess of the operational safety case allowance. The enforcement action is to rectify this.

EDF Generation - Sizewell B is having outage. This is an extremely large outage, partly due to things reduced in scope in 2020 outage. There is also some stress corrosion outage work. The collective dose prediction is 700 person-mSv across the outage. This estimate includes the fifty contract Health Physics surveyors, including a number from oversees.

Rolls Royce - A huge amount of work is coming online and a large amount of growth. There is a massive increase in facilities across Rolls Royce's sites, including a new chemical plant, new product assembly building, and a number of other buildings expanding. Intricacies of this introduces a number of fingerprints. Consideration is being given to expanding both licensed sites.

It is known that the increase in work is coming (17 – 22 submarines to be built, 10 for Australia), but timescales aren't clear yet. One area of interest is, how are we sure we are retaining or growing the correct experience? Rolls Royce do not want inexperienced people training inexperienced people.

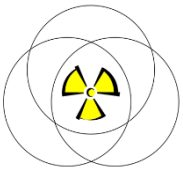
Rolls Royce have recently had an LC 32, 33 and 34 inspection, which was rated green. There was also a recent general principles inspection (IRRs regulations 8 – 13) and one area looked at was RPE. It would appear that operators are still not doing maintenance on RPE and this has been included in a report. There is some frustration following the regulatory visit, as they remarked 'we won't be back until x because you're a low risk site' which doesn't help with the safety culture on site. An IRR 17 inspection is planned for 2024.

Urenco – They have three Health Physics Monitor apprentices. They advertised locally, with pretty low requirements. Some significant work has been carried out without radiation protection / Health Physics controls really considered. This has resulted in employing more people. The alignment of the three businesses is still ongoing.

Cyclife – AL said that the only answer really for Health Physics Surveyors is to grow your own resource, as it will remain cheaper in the long run. Cyclife have just commissioned a C3 purpose built alpha facility, mainly paid for by AWE, to deal with legacy tanks. Details of SMEs on iCam alarms for alpha dominant fingerprints, and help with this would be good. VT will pass on some details. GW asked for the details to be passed to him as well. DE also offered some help. They have fully digitised the survey procedure, with surveys themselves also being done digitally. This permits an easy dashboard and indication of trends, etc. It could be used elsewhere, if anyone else wanted information on this – some have tablets, but most written in notebooks and then entered on a PC later.

CJ added that AWE were working with Los Alamos on remote readout probes.

Magnox – The focus is on procurement exercises that are coming to a conclusion. They are looking to invest in instruments, buy a lot of EPDs (true doses). A safety review is coming up and they are looking to rationalise across the sites. They have recruited one individual.



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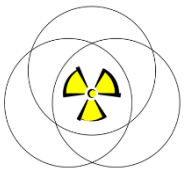

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EDF SZC – There are three permits now in place under EA. In terms of the site, there is a lot of fields and environmental mitigations in place. They do not intend to have any sources on site for a long time, that is until they start looking at construction and radiography sources. They are looking at implementing some radon management procedures.

Sellafield - Retrievals from the silos has started. They are currently looking at the radiological risk assessment format. GW has done this recently and will share his work. The first application under the new RPA 2000 scheme has completed its approval route. There has been a couple of instances where items have left controlled areas and gone offsite. ONR transport are aware, so there may be more scrutiny in future.

They have Divers going into the ponds, but the future influenced by contractual agreements. Twenty-three skips have retrieved from the silos. A longstanding ONR gamma monitor issue has been closed out. New jigs and standards have been put into use. The Sentinal units / containers are now obsolete. Sellafield have bought the drawings so that they can maintain their own units, but are not offering this service elsewhere. C365 has been used for digitization of surveys, uploaded to tablets, and then tracked and logged. Not complete yet, but Sellafield are looking to run a pilot next month. It is a proprietary piece of kit.

There is a competition for the Sellafield radiometric services, that is currently supplied by cavendish. EPDs are an interesting challenge, with mark 2s V10 or less no longer being serviced. There is a twelve month lead time on any repairs and > 12 month lead time on new equipment. This has been shared with ONR, but Thermo has reduced their influence in UK, a lot goes through Phoenix. Sellafield has committed to buy some of the Mirion EPDs to move away from Thermo's. Thermo have announced that there will be no more CM11s and they will not be offering a replacement. Ludlum UK are going to be sole supplier of Ludlum equipment, as Bill Pycko has retired.

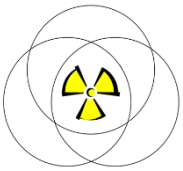
LLWR – LLWR are struggling with Health Physics resources. They are buying it in, as they don't have monitor employees. They have lost a number to other sites, or due to retirement, and this is impacting delivery. Contractor organisations cannot supply everything needed. DE said that it feels like it needs some strategic thinking. If we grow our own, then we lose them to contractors. AL has used degree apprenticeships from Energus, a local university employs them and Cyclife pay the wages (they study at the university one day a week, or one week in four).

LLWR are trying to procure Chlorine sources and struggling with this (DP6 check sources). AL said that Cyclife may have some and will get in touch.

Devonport - BN05 is coming to the end of its base maintenance period. Another one is due for maintenance and BN06 due in soon. A lot of CDM work on the horizon. There has also been a change in RP inspector.

Arrangements for Benchmarking visit

Information on the following day's benchmarking visit at Sellafield was provided. There would be a discussion/presentation about the on-going remediation projects (diving project).



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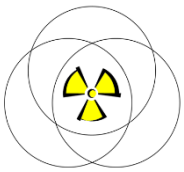

Following this there will be a walkround of MSSS with the deputy operations manager and RPA. The day will conclude with a visit around the Fuel Handling Plant (FHP).

Future Arrangements

Urenco in Q2, AWE in Q3 and a hotel in Q4.

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