



Interview with Humphrey Cadoux-Hudson, Managing Director of EDF Energy, Nuclear New Build, May 2011.

As part of the Industry Leaders interview series, YGN Vice Chair Robert Thorn talks to Managing Director of EDF Energy, Nuclear New Build, Humphrey Cadoux-Hudson.

Mr Cadoux-Hudson started his career studying engineering and management at Manchester University, after which, he joined the accountancy firm, KPMG and later the UK electricity company Seeboard which EDF acquired in 2002. He was part of the acquisitions team with Vincent de Rivaz that acquired British Energy.

He was appointed Managing Director of Nuclear New Build for EDF Energy in 2008. In this role, Mr Cadoux-Hudson is overseeing the development of four nuclear reactors in the UK focussing on building two nuclear reactors near the existing sites at Hinkley Point B and Sizewell B.



How does your current role impact the industry?

“At present, there is no industry for nuclear new build in the UK; there is for the existing stations and decommissioning, we are in the business of creating the industry. We are creating the legal framework that allows new nuclear to be built, we have made a lot of effort to put that in place and also to ensure that the market framework is in place, to create a revenue stream.

“There is still a huge amount of work to do to get the reactor design approved, from the qualification of components, through design and procurement of parts to construction. We still have a lot to do to create an efficient and productive construction site and have to remember that we will have a total of 20,000 people come through the site at Hinkley Point C during that phase, with a maximum of 6,000 people at any one time. We have to ensure that these people are adequately skilled, trained and inducted on our sites to ensure that we have an effective and efficient work force during construction.”

How do you see the nuclear industry changing over the next 10 years and where do you see the biggest growth area for new recruits?

“I would like to think that the most exciting area of the industry is the challenges that new build has to offer but in reality, having spent time with Andy Spurr and his team in the Existing Nuclear business, I have to say that they also have extraordinary engineering challenges with very innovative and committed teams looking to sort out issues on the existing fleet. Although I’ve not been close to it, I am sure that the same could be true with decommissioning.

“One of the joys of working within engineering is that challenges come along and that the engineering community creates solutions and I’m sure that this will be true out of the back of the events that happened at Fukushima and the terrible circumstances that unfolded before our eyes at Daiichi.

“There are a lot of difficult engineering challenges ahead allowing young engineers to work on real products after undertaking a structured training programme and a great deal of opportunity within new build, operation of nuclear power stations and decommissioning.”

What impact do you see the new build programme having on decommissioning?

“Although at present we are at the pre-construction phase, we are recruiting graduates to be placed in new build and the existing fleet. There are opportunities for secondments to France, new build, and Barnwood but in reality we are training and recruiting people to become trained nuclear engineers which is a benefit for the



whole industry, giving people experiences of the phases of the project and different cultures within new build and existing nuclear will ultimately be a great education for our engineers.

“It is extremely important that the UK develops a long term disposal facility and that we have a clear path to safely store long term waste. Given the events of Fukushima, I am sure there will be an increased focus at Hinkley Point C on the construction and engineering of waste storage facilities and the spent fuel ponds.”

The UK is now increasing the programme for research and development, how do you think the industry can help develop R+D become an international centre for excellence?

“R+D is a very broad topic from pure research which has no immediate application to resolving problems with the boiler closure units at Hartlepool and Heysham. It is clear that Existing Nuclear has a great talent for sorting these problems out together with their supply chain..”

“EDF in France has a large R+D centre and we are making more of an effort to ensure that a proportion of that activity is focused on the UK, indeed we have a number of people from EDF R+D involved directly in UK projects.

“Looking forward to the future on construction, we are faced with problems on constructability, how to improve efficiency and how to solve difficult construction problems. I have a real wish to see a site developed near to Hinkley Point that can develop and improve construction techniques.

“It is important for companies like ours to ask ‘how can I improve what I am doing’ and if as a company you’re not putting resources into improving, then as a company you are constrained to the status quo.”

What does your company do to encourage and educational programme in schools?

“In terms of Science Technology Engineering Mathematics (STEM), we have a programme on engaging and encouraging schools, we also have The POD (<http://www.jointhepod.org>), which is a great programme that is hugely successful in engaging schools especially in the area of energy efficiency.

“It is important that we engage schools to ensure that pupils understand that they can have an exciting and successful career in engineering. A key area is that as a company we need to give suitable career advice and that very few members of the public have access to good careers advice outside of their own direct experience.

“This is clearly an issue that we are right as a company to address. Career advice in schools is one of the key pillars of the training and skills agenda for EDF Energy. I would encourage everyone to contact their old schools and colleges to promote their career because as a pupil you need to talk to people who have experience.”



How would you convince a student or graduate to join your area of expertise?

“We are starting on a voyage that will lead to building a Nuclear Power station, an extraordinary result. I've now walked over the Flamanville, Olkiluoto, and Taishan nuclear sites and I can confirm that a new nuclear power station in construction is an awesome sight.



“When you look at the detail of the design, you realise that it is a function of collective activity. It is an honor to lead the project but in reality, it is hundreds of bright people who have engaged together to design, construct and operate an extraordinary machine. I think being part of that is a great pleasure and I hope that the sense of teamwork, that we are all in it together sharing in the success, is a tangible part of the culture of the project.

“I fully believe that we have to successfully encompass people here, people in France, people in R+D, people at Barnwood and our supply chain companies to mould the different stakeholders who have a clear common purpose. I

think that one of the greatest joys in business, life in general is to be part of a successful team and know that you are contributing to the overall success of that team.

What does your company do to attract and retain younger staff?

“Starting the first job, is a very difficult step. You have to make a clear choice and to be passionate enough to get through interview because it is very competitive to get into a good job just as there is a lot of competition between companies to recruit the best. We want the best people to come to us and once you are in we invest heavily in the training and development of staff in order to retain them within the company.

“I know that the way young people communicate with each other is different from my generation and invariably there is a culture clash coming into a company environment, but we need to think harder about how we integrate young people into the business.

“As part of the transition, we offer a structured training scheme, good care with sponsors or mentors with whom people can discuss problems, and above all we have an exciting and successful enterprise that you can be part of.”

What do you think is the best advice you can give a developing member of the industry?

“You need to understand that people in my position want to see problems understood and resolved and that in my view, enthusiasm and passion are great attributes. They are the glue that binds people together and you have to find ways to be enthusiastic which can at times be difficult. I know, I can tell you that there were some boring moments during my accountancy training!

“It is extremely important that you are able to find within yourself, the ability to be enthusiastic about everything that you come into work to do, because it spills out into everyone around you and it allows you to make that extra effort.

“Never underestimate the amount and extent that you should actively learn about the business, the environment outside the position you are in. If you imagine yourself into a more responsible position you need to have learned what it takes to do that job, so spend a little bit of time thinking about the responsibilities of the job of people you work for and make sure you understand how you can help them do their job better.”



Have you heard of the YGN and all the activities that we do?

“I am aware of the YGN and have spoken to various people about it but I’ve not had much engagement with it at present. I think in particular for people coming into the industry, it is clear that during the first few years of your career, you need additional support during”

How can we support your company and you support us in the future?

“We need to increase support within the Qube and it’s important that the YGN give companies feedback on how we can improve, so that we can make a difference. It is important that we have an alternative route to support new members to the industry.

“I like the idea of the YGN and would like to create links within new build especially as we have a number of graduates in France and it is fantastic that they could have a network where they can have additional support outside of the company. We can improve and promote the YGN to the younger members of the company.”