UK Project Management Round Up



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INTRODUCTION

This has been a quiet month as far as projects are concerned. The main news remains the Horizon debacle but no one is blaming the Project Manager (more about this later). The Association for Project Management, on the other hand, has been busy and there is some news on the energy front.

GOOD NEWS

Not all readers will feel this is good news but the idea of reducing carbon emissions is always important. The latest here in UK comes from DRAX. Situated in the North Yorkshire countryside, DRAX is a major fossil fueled power station that has been trying



Drax Power Station

Image: www.gov.uk

to be less polluting in recent years. First steps were to convert four of its units from coal-fired generation to burning biomass wood pellets in order to qualify for renewable energy subsidies on the basis that trees absorb carbon as they grow, offsetting the carbon emitted when they are burnt. This attracted some £617 million from energy billpayers in 2023 but was seen by many as sailing close to the wind as the fuel primarily ships in from North America, so the idea has long been controversial.

¹ How to cite this report: Shepherd, M. (2024. UK Project Management Roundup, *PM World Journal*, Vol. XIII, Issue II, February 2024.

The latest wheeze is to convert at least one of the coal-fired generating units to socalled BECCS, or bioenergy with carbon capture and storage, by 2030. According to the Draz Group press release, they plan to spend billions of pounds on building facilities to capture and store carbon emissions from two of its four biomass units.

Carbon capture and storage works by capturing carbon dioxide where it is generated – sites such as oil refineries, chemical plants and fossil fuel driven plants. We reported on the process last year but as a reminder, it is illustrated below.



Capturing it at source is claimed to p[event releasing it into the atmosphere and contributing to climate change. The planned carbon capture units will remove eight million tonnes of carbon from the atmosphere each year, according to Drax Group. The power plant would then become carbon-negative.

Nuclear Power Expansion

Similarly ambiguous in terms of environmental credibility is notion that UK fuel problems can be reduced by the rapid deployment of small modular reactors (SMRs). These form part of the Government's roadmap for innovation and the latest news is that Ministers hope a fleet of SMRs will help to quadruple energy capacity over the next 25 years. This will reduce the nation's carbon footprint as well as ensuring we are not at risk of fuel inflation and overseas threats as our energy security would be assured.

Currently, there are five nuclear power stations in UK, generating about 6GW in total which provides power to about 13 million homes. All these reactors are nearing the end of their economic lives. Replacements are under construction at Hinkley Point in Somerset and Sizewell in Suffolk. Such plants are expensive to build and take

decades to complete (see further reporting below for an update). Ministers want to begin work quickly on another large plant alongside Hinkley Point C and at Sizewell. The plan is then to increase capacity by 3GW to 7GW every five years from 2030.

So far, eight sites are approved for nuclear power: Bradwell in Essex, Heysham in Lancashire, Hartlepool, Hinkley Point, Oldbury in Gloucestershire, Sellafield in Cumbria, Sizewell and Wylfa on Anglesey. Even if a new plant is built on each site, this will give only 14GW of capacity, meaning other sites will be needed for the rest. As a result, SMRs will be allowed almost anywhere outside built-up areas as ministers relax planning rules to allow a "reawakening" of atomic electricity.



Small modular reactors are seen as crucial to filling the gap. Standard designs would allow factory-made plants to be built that are far easier and cheaper to build than conventional plants. Lower cooling demands might also enable reactors that produce 70 to 50 per cent less power than large-scale plants to be able to be built inland, using rivers and lakes or even cooling towers instead of sea water. The nay-sayers remark that no SMRs have been deployed in their attempts to pour cold water on the scheme but there is a great deal of expertise in the manufacture and use of very small-scale reactors in nuclear powered submarines.

BAD NEWS

> New Nuclear. One of the drivers for interest in SMRs is the seemingly unending bad news concerning Hinkley C, currently the only new nuclear power plant being built in UK. We have an apparently unending stream of bad news about both schedule and cost at the Somerset site. There were 8 reports in one broadsheet in January and an op ed on why we can't build reactors in UK. This is centred on the latest estimate developers EDF which shows that it is likely that the site will not start

generating power until 2030, and then at only half capacity. A report in The Times claims that at best, the first reactor would start generating power by 2029. There is no official estimate for the second unit.



The delays means that the budget for the plants' two new reactors has now been set at between £31 billion and £35 billion, depending on when the plant is completed, up from a previous estimate of between £25 billion and £26 billion in the last EDF update in 2022. Worryingly, this colossal total is at 2015 prices which exclude the impacts of inflation, which increases the price of both materials and labour. In today's money, the potential cost of Hinkley Point C comes in at £46

billion, up from the original estimate of £18 billion. This provides ammunition for the nuclear sceptics and places the government in a tricky position as the new plant could generate enough electricity to power six million homes, which would go a long way towards filling the gap as EDF's existing fleet of ageing British nuclear plants come up for decommissioning.

One reason for cost and schedule escalation is design change. It seems we do not learn the lessons of old nuclear – the original reactors were built to different designs, leading to a lack of standardisation and the inevitable increase in costs. EDF claim that Britain's more stringent rules meant making some 7,000 changes in the design, requiring 35 per cent more steel and 25 per cent more concrete than originally planned.

EDF has pioneered construction standardisation, and their French reactors are built to a fairly standard design. Even this is not fool proof as this can leave the design open to common mode failure. Look at the number of reactors shut down because of problems with the reactor vessels. Critics also point to construction problems at Olkiluoto 3 in Finland. Despite the use of European pressurized water reactor (EPR), design which is what is being built at Hinkley, the plant came in more than 12 years behind schedule.

➤ HS2 Fallout. The rail industry is also between a rock and a hard place. Despite slamming the door on the Northern Extension between Birmingham and Manchester, the southern end is still under construction. The latest blow to the mega project takes the form of train length. Cancellation of the northern leg involves re-routing the north bound trains via the existing West Coast Mainline which means that HS2 trains will be 60m shorter than the Avanti trains already running on the route. They are also unable to tilt, meaning they must travel more slowly around bends, thus failing to meet one of

the original objectives, to increase capacity between the north and the south, relieving pressure on the west coast mainline, which is full. The reason why the HS2 trains have reduced capacity is the track configuration which prevents the new, non-tilting carriages from being useable.

APM NEWS

The Association for Project Management (APM) got off to a good start both technically and from a governance point of view. On the technical front, APM has launched a new Competence Framework for Project Managers in the Built Environment in England in collaboration with the Chartered Institute of Building (CIOB) and the Royal Institution of Chartered Surveyors (RICS). They have also announced new Trustee appointments and introduced their new President.



APM's first news of 2024 was their announcement of two new Trustees. APM elects most of its Trustees but also appoints some from outside the world of PM in order to bring a wider perspective to their governance. **David Cox** is the Director of Digital and Technology at the Chartered Institute of Personnel and Development (CIPD). He started his career in utilities, working across the water, electricity and gas sectors in a variety of international roles, focusing predominately on business change and technology transformation. He then moved into global education and publishing, holding senior roles within Pearson, from running

partnerships in the Middle East, through to global customer service transformations and new product launches for universities. He holds an MBA from the Open University. David said: "I'm excited to accept this role as a member of APM's Board of Trustees. I'm passionate about advocating the people-centric elements of successful project and programme delivery, and I hope to use my position on the Board of APM to benefit the entire project profession.

Michelle Richmond has been a Director at the Institution of Engineering and Technology (IET) since 2006. Her professional career started with Siemens Plessey Radar, and she has more than 10 years' experience of programme management of complex military and commercial projects, working for companies, such as Nokia, Matra Marconi Space and Ubinetics. In addition to her new Trustee role with APM, she is a Non-Executive Director on the Micro:Bit Education Foundation and the SFIA (Standard for the Information Age) Foundation. She is a Chartered Engineer and Fellow of the IET and an Honorary



Associate of the Engineering Council. She was awarded an MBE in 2019 for services to engineering. She said: "I'm passionate about professional recognition for

technicians, engineers and project managers, so I'm greatly looking forward to supporting APM's ongoing work to advance the art, science and theory of project management."



The other major announcement from APM is that **Dr Yvonne Thompson** CBE will become President in July when current President, **Sue Kershaw**, who has served in the role since 2019, steps down. Dr Thompson's professional background includes roles as Music Editor of *Root* magazine, Managing Director of marketing and PR company ASAP Communications, and President of the European Federation of Black Women Business Owners. In addition, she is a founding member of radio station Choice FM. She has four Fellowships including from Kings College London, along with honorary doctorates from London Metropolitan University and the University of Plymouth. She is also a Deputy Lieutenant of Greater London and a successful author, speaker and influencer.

The competence framework was developed by Working Group 10 – Project Managers in response to the changes introduced in the Building Safety Act 2022. This act was a partial response to the horrific Grenfell Fire in June 2017 when some 72 people died - easily the worst residential fire in the UK since World War 2. The Act became law in October 2023 and introduces new responsibilities and systems related to specific roles and specialisms within the building and construction industry. New practices to raise levels of competence, building safety and consistency are also introduced. These place a legal duty on anyone in the wider construction and building industry to ensure those employed or appointed by them are competent, or are supervised by someone who is competent. This is where competences come into play. Overarching competences are defined by the Competence Steering Group (CSG); a group set up in the immediate aftermath of the Grenfell fire by the Ministry of Housing, Communities and Local Government, Build UK, the Construction Industry Council and Construction Products Association and the National Fire Chiefs' Council. More detail and resources to support changes to the building control process are set out on the Gov.UK website.

HORIZON. Regular readers will be all too well aware of the debacle of Horizon, the Post Office accounting package designed and built by ICL which was then owned by Fujitsu. Those seeking a full account of the scandal are directed to Wikipedia whare there is a very good (and up to date), if long, report on Wikipedia (<u>https://en.wikipedia.org/wiki/British_Post_Office_scandal</u>)

Accusations and blame have been flung about indiscriminately but little has been said about the project implications. The major issue to my mind is how the software was tested and released. The rollout began in 1999 so was well in the Agile era. Nowadays, we are used to incomplete software releases (just look at the number of updates you are asked to perform on any platform from Apple) but at the end of the last century software releases were tested. So the question arises, was the testing adequate – clearly not or the flawed system would presumably not have been rolled out. Who was responsible for designing the test regime? Were the tests actually carried out, what results were obtained, how were they verified.

It must be recalled that we are talking about a non-safety critical system so testing would not have been as thorough as that needed for, say, controlling a nuclear reactor. As it happened, all path testing for Sizewell was successfully completed in the mid 1990s.

Are we looking at a technical project management failure, a broader governance failure or just simple negligence? When we look at other software failures, at some German car manufacturers for instance, there were clear failures of project management. Falsification of testing was involved and there was no challenge from Project Managers. It is naive to claim the PMs would be risking their jobs. How can we claim any degree of professionalism when such failures happen on our watch?

CLOSING REMARKS

Usually, I finish with reports of projects related to conservation. This month, there is little to report as most wildlife charities are holding their annual meetings and summing up their activities over the past 12 months. Rewilding seems to have been the major theme for most of these bodies and if we keep up this, the whole country will be wild and we will be back to where we were in the 14th Century! My local wildlife conservation body has taken action on 3 farms, turning them from marginally viable businesses into more biologically diverse areas. It is a slow process, taking years rather than months but it is needed so let's hope they keep up the good work!

About the Author



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Miles Shepherd is an executive editorial advisor and international correspondent for PM World Journal in the United Kingdom. He is also managing director for MS Projects Ltd, a consulting company supporting various UK and overseas Government agencies, nuclear industry organisations and other businesses. Miles more than 30 years' experience on a variety of projects in UK, Eastern Europe and Russia. His PM experience includes defence, major IT projects, decommissioning of nuclear reactors, nuclear security, rail and business projects for the UK Government and EU. His consulting work has taken him to Japan, Taiwan, USA and Russia.

Past Chair and Fellow of the Association for Project Management (APM), Miles is also past president and chair and a Fellow of the International Project Management Association (IPMA). He was, for seven years, a Director for PMI's Global Accreditation Centre and is past Chair of the ISO committee developing new international standards for Project Management and for Program/Portfolio Management. He is recently stepped down as Chairman of the British Standards Institute project management committee. He was involved in setting up APM's team developing guidelines for project management oversight and governance.

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