

NFLA Policy Briefing No. 230



Date: 31 March 2022

Subject: Developments and NFLA Progress Report, March 2022

1. Introduction

This paper outlines the work of the NFLA Secretary and recent developments within the civil nuclear industry, renewable technology, and in connection with Mayors for Peace and nuclear disarmament in March.

This is the second monthly report prepared for NFLA member authorities and supporters as Bulletins rather than a single report for the next SC in May.

The big domestic news is of course the Prime Minister's roundtable summit with developers, operators, and financiers in the nuclear industry and his unwelcome 'game changing' declaration that 25% of Britain's future energy needs will be met via new nuclear. Internationally, the potential 'gamechanger' remains the Ukraine tragedy.

2. The work of the NFLA Secretary

2a. Consultation and Lobbying: The Secretary has compiled and sent a comprehensive FOI question set on the preparedness of Local Resilience Forums to respond to an accident involving a nuclear weapons convoy in England and Wales. When responses are back, a briefing will be compiled for members with an update on the excellent work already done on this subject by the previous secretary.

A similar activity will be undertaken in future through NFLA Scotland.

Letters were sent to:

1. the Chancellor of the Exchequer in advance of the March Mini Budget calling for a massive public investment in retrofitting insulation to Britain's homes to reduce energy consumption and customers' bills
2. the Secretary of State for Business calling for the Rural Community Energy Fund to be extended and expanded to become a National Community Energy Fund, to support start-up costs for new innovative community energy and energy efficiency projects prior to public share offerings
3. DEFRA Minister Rebecca Pow calling for a reversal in the 900% proposed increase in water abstraction fees proposed for hydropower schemes in England, which the British Hydropower Association say will kill off new small projects
4. Prime Minister Boris Johnson asking him to convene a second energy roundtable with UK renewable energy sector representatives, as he did with nuclear.

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We have also endorsed a report to the UN Human Rights Council challenging the incompatibility of Britain retaining a nuclear weapons arsenal with its legal obligation to uphold the 'right to life' and also a letter of appeal to the Japanese Government calling upon it to refrain from dumping over a million tons of contaminated water from Fukushima into the ocean.

The NFLA Secretary has accepted an invitation, as did his predecessor, to join the Nuclear Consulting Group. NCG comprises leading academics and experts in the fields of environmental risk, radiation waste, energy policy, environmental sustainability, renewable energy technology, energy economics, political science, nuclear weapons proliferation, science and technology studies, environmental justice, environmental philosophy, particle physics, energy efficiency, environmental planning, and participatory involvement. NFLA Policy Advisor Pete Roche is also a member. The Secretary does not profess to be either an 'academic or expert' in this field, but having access to people who are will assist him in his work for the NFLA. <https://www.nuclearconsult.com/>

2b. Media

In March the Secretary has issued the following media releases:

- Nuclear Free Local Authorities back international challenge to UK nuclear weapons policies in UN Human Rights Council – 30 March
- Will the sea have them? Nuclear Free Local Authorities event to highlight threat of rising sea levels and coastal erosion to Britain's nuclear plants – 30 March
- NFLA calls on Prime Minister to urgently convene 'green' roundtable to talk renewables – 24 March
- Environment Agency's outrageous fee hike 'pours cold water' on future small hydro schemes in England – 22 March
- The energy crisis is now, new nuclear will be (at least) twenty years too late – 21 March
- NFLA seeks new National Community Energy Fund to drive People Power – 17 March
- New nuclear in Wales is not the answer to climate change and energy crisis and would be 'a tempting target in time of war', says Welsh NFLA – 16 March
- 'It's common sense': NFLA Chair calls on Chancellor to Insulate Britain – 14 March
- Eleven years on and impact of Fukushima still felt in Japan – 10 March
- NFLA marks fifth anniversary of Aberystwyth Declaration for 'green, nuclear free Wales' – 7 March
- Under Threat: NFLA endorses call for international action to safeguard Ukrainian reactors in firing line – 2 March

A newsletter will be released at the end of March.

All these materials can be found on the NFLA website.

Former NFLA Secretary Sean Morris kindly continues to maintain the Twitter and Facebook accounts, and reports that interaction with NFLA social media has significantly increased since the start of the Ukraine conflict. Facebook has over 330 followers and Twitter 611, and we are following 1235 other accounts.

2c. **Briefings**

In March the Secretary has issued the following briefings:

- NFLA Policy Briefing 229, 229a, 229b, 229c and 229d: Updates on the Ukrainian Nuclear Power Plants
- NFLA Policy Briefing 224a: Update on the Russian Nuclear Freighter Sevmorput

These briefings can be found on the NFLA website.

2d. **Meetings, Seminars and Webinars**

For information, the Nuclear Free Wales event on 23rd Feb the Secretary spoke at had around 20 attendees.

In March the Secretary has attended the following formal meetings:

- The Mayors for Peace European Chapter Officers Group – 2 March – and Board – 25 March
- NuLeaf Pre-meeting – 7 March – and Steering Board – 9 March
- BEIS NGO Forum – 10 March
- ONR NGO Forum – 17 March
- NDA Radioactive Waste Management Exchange – 29 March

On 3 March, NFLA participated in a joint webinar with CND and Nukewatch titled **‘Nuclear convoys: do you know that nuclear warheads could be driving through your town’**. The event was chaired by CND General Secretary Dr Kate Hudson. Speakers included Juliet Macbride from Nukewatch, Councillor David Blackburn, NFLA Chair, and Rob Edwards, investigative journalist from The Ferret and author of the excellent (and frightening) Nukes of Hazard report

69 participants joined the call, 800 have since watched on Facebook Live Stream and 120 watched the You Tube footage. For those of you who were unable to you can still catch it at <https://www.youtube.com/watch?v=mqRVbrvjnVA>

Links to an NFLA report on this subject and the Nukes of Hazards can be found below:
<https://www.nuclearpolicy.info/news/nfla-briefing-wide-range-large-number-nuclear-transports/>
<https://cnduk.org/wp-content/uploads/2018/02/Nukes-of-Hazard.pdf>

For anyone wishing to know more about the work of Nukewatch in monitoring nuclear weapons convoys their website is at <https://www.nukewatch.org.uk/>

See also Section 2a for a related activity.

The Secretary spoke on civil nuclear power and the Ukraine situation as the keynote speaker at the Calder Valley Peace Group AGM on 8 March. This was attended by 10 people.

The Secretary also visited the Theddlethorpe GDF and Search Area Exhibition held at Mablethorpe Community Hall in Lincolnshire on 26 March. On 29 March, he had a tour of the proposed site with the Chair of the Guardians of the East Coast group, which is opposed to the development. The location is a former gas terminal site, which lies only 200 yards away from the Haven holiday camp at which the Secretary stayed. On 30

March, he met GOTEC members and local Councillors from the Mablethorpe and Theddlethorpe Parish Councils. On 31 March, he met East Lindsey District Councillors for the Mablethorpe Ward.

The activists and Councillors are interested in working in partnership with NFLA on the campaign and in exploring local council membership of NFLA.

Below: Photos taken of the Theddlethorpe gas terminal by the Secretary.



Other introductory meetings have been held with Close Capenhurst (2/3), Friends of Manchester Peace Gardens (2/3), Save the Severn Estuary Group (3/3), Stop Hinkley (23/3), PAWB/CADNO (23/3), and Labrats (31/3).

3. *New nuclear power developments*

3a. *Large nuclear reactors*

Hinkley Point C: From 8 – 10 March, an application for a judicial review by the campaign group, Save the Severn Estuary, was heard at the High Court. The group comprises Welsh activists and members of Stop Hinkley. The action had been crowdfunded, which included an opportunity to purchase a downloaded previously unreleased single by Welsh group Super Furry Animals; a former band member Ciaran Cian being prominent in the campaign.

The High Court hearing focussed on EDF Energy's licence to dredge and dispose of mud in the Severn Estuary. The licence for dredging and disposal of mud at a site off Portishead was approved by the Marine Management Organisation (MMO) in August last year. The MMO's revised licence permits the dredged material to be deposited in the Severn Estuary Marine Protection Area near to a site of special scientific interest, Portbury Wharf Salt Marsh. Previously it was being dumped at Cardiff Grounds close to Cardiff - and EDF faced separate legal action over this in 2018.

Save the Severn Estuary contended that the MMO acted unlawfully in amending an existing licence rather than issuing a separate one, believing the MMO did not have the statutory power to include dumping in the licence, failed to examine the potential impact of the dredging on marine life, and ignored a less harmful method of waste disposal. They also believed the mud to be contaminated.

Around 540,000m³ of material is being removed to make way for Hinkley's cooling water intake tunnels in the Bristol Channel. The tunnelling programme at the nuclear power station started in September 2019. There are two 3.5km intake tunnels and one 1.8km outfall tunnel.

Main dredging and disposal of mud at the licensed disposal site at Portishead has already been completed, but further maintenance dredging will still be required this spring.

But a High Court judge dismissed their case on all grounds. EDF dubbed the decision “good news” for thousands of workers at the site. It was granted permission for the latest mud dumping by England’s Marine Management Organisation (MMO) in August. At a two-day hearing this month, judge Mr Justice Holgate said he considered the claimant’s approach “to involve an impermissible gloss” on the relevant legislation and that “there was nothing unlawful in the MMO’s decision”.

<https://www.newcivilengineer.com/latest/high-court-challenge-of-hinkley-point-c-dredging-begins-08-03-2022/>

<https://www.burnham-on-sea.com/news/activists-lose-bid-to-stop-hinkley-point-c-dumping-mud-in-bristol-channel/>

French energy giant EDF has revealed it will have to announce new delays and cost overruns for its Hinkley Point C nuclear plant project in the UK. The latest setback follows conflict in Ukraine, supply chain disruption and inflationary pressures. EDF last updated its construction schedule in January 2021, when it said the UK’s first new nuclear plant to be built in decades would be delayed by six months to June 2026. It revealed costs would rise by an additional £500m to £23bn. Originally, the plant was expected to open in 2025 and had a construction budget of £18bn.

In response, Stop Hinkley spokesperson Roy Pumfrey said: “With the cost of the UK’s biggest white elephant rapidly approaching £30bn and the completion date now likely to be 2027 or even later, it should be obvious to everyone that even Hinkley Point C is not going to be any help with the current cost of living crisis and given the carbon emissions during construction, any carbon savings will be too late to tackle the climate emergency.”

<https://www.cityam.com/edf-announces-another-delay-to-hinkley-point-c-nuclear-plant/>

Meanwhile in Finland, Hinkley’s sister the ‘much delayed’ EPR plant at Oikilouto-3 has finally begun test reactions but will not be at full power until July. The plant was due to come onstream in 2009.

<https://www.reuters.com/world/europe/finland-starts-much-delayed-nuclear-plant-brings-respite-power-market-2022-03-12/>

Sizewell C: The UK Government has now taken a 20% stake in the £20 billion project, matched by EDF, whilst the remaining 60% would be financed by private equity

sourced through investment bankers. The former Chinese investors CGN have been displaced. The new company will be chaired by Stephen Billingham, previously finance director of British Energy, the group that owned Britain's operational fleet of nuclear reactors before it was bought by EDF in 2008. The Planning Inspectorate (PINS) has now submitted its report to the UK government with its recommendations for the future of the Sizewell site.

<https://eurasianimes.com/china-after-its-nuclear-power-company-gets-blacklisted-uk-usa/>

<https://www.ft.com/content/95524dfc-6503-48c7-85ad-a116bdf2c9ed>

<https://www.eadt.co.uk/news/business/new-appointment-to-sizewell-c-project-8727964>

Sizewell C could very well result in a significant rise in consumer fuel bills because consumers will be expected to pay directly for what the Government's own figures say is a high likelihood of extensive cost overruns. The Government will expose consumers to protect corporate investors from suffering the losses themselves so making the project more attractive to private investors. This is under the so-called Regulated Asset Base (RAB) method of funding Sizewell C.

<https://100percentrenewableuk.org/energy-consumers-face-huge-hidden-cost-overflow-bill-to-protect-corporate-investors-in-sizewell-c>

EDF's application to East Suffolk Council for permission to conduct soil mixing and ground anchor trials on the Sizewell C site has been "called in" by the Secretary of State for Levelling Up, Housing and Communities (Michael Gove) after Theberton Eastbridge Parish Council challenged the lack of an Environmental Impact Assessment. This means EDF's application cannot be determined until Mr Gove decides whether an EIA is needed.

The NFLA registered its strong objection to the late-stage application.

Bradwell B: At a recent meeting of the Office of Nuclear Regulation (ONR) NGO Forum, it was confirmed that although the Chinese generator CGN had paid the ONR's full costs for concluding a Generic Design Assessment of their UKHP2 100 reactor, which were in excess of £35 million, the ONR was 'not deploying significant resource' to the project and were instead maintaining a 'watching brief'. The Secretary got the distinct impression there would be little, or no, progress with the current project given how the geo-political landscape has been transformed since inception.

3b. Small Modular Reactors

Rolls Royce has been busy using the energy insecurity generated by the Ukraine conflict to lobby government ministers to speed up the approval process for the unproven SMR technologies. The Telegraph reported that 'Government sources said that Rolls's product is new and has no prototypes, so must go through exhaustive safety checks.'

<https://www.telegraph.co.uk/business/2022/03/12/rolls-royce-fights-speed-rollout-mini-nuclear-reactors/>

At a recent meeting of the Office of Nuclear Regulation (ONR) NGO Forum, it was confirmed that the Department of Business Energy and Industrial Strategy (BEIS) has asked the ONR to begin the Generic Design Assessment of the Rolls Royce design. This will start on 1 April. The GDA will require significant resource from the applicant,

who will be required to cover the salaries of the 20-25 inspectors engaged on the process.

<https://news.onr.org.uk/2022/03/request-to-begin-small-modular-reactor-design-assessment/>

The Thames Freeport could be a location for a Rolls Royce SMR. Alan Shaoul, UK chief finance officer of DP World, said: "There's three or four very large projects that have been talked about, for which the freeport has been shortlisted as a potential site. Most of them are confidential but to give an example, Rolls Royce has proposals for a site interested in hosting their modular nuclear reactors, small nuclear reactors. They want high-end manufacturing facilities. This is very early stage but it's things like that."

<https://thurrock.nub.news/n/nuclear-reactors-for-london-gateway-site-in-thurrock-bosses-talk-up-freeport-possibilities>

- 3c** **Fusion Reactors:** France's nuclear regulator has ordered ITER, an international fusion energy project, to hold off on assembling its gigantic reactor until officials address safety concerns. This month, the ITER Organization was expecting to get the green light to begin to weld together the 11-meter-tall steel sections that make up the doughnut-shaped reactor, called a tokamak. But on 25 January, France's Nuclear Safety Authority (ASN) sent a letter ordering a stoppage until ITER can address concerns about neutron radiation, slight distortions in the steel sections, and loads on the concrete slab holding up the reactor. ITER staff say they intend to satisfy ASN by April so they can begin to weld the reactor vessel by July.

<https://www.science.org/content/article/french-nuclear-regulator-halts-assembly-huge-fusion-reactor>

4 **Existing nuclear power stations**

Dungeness B: At a recent meeting of the Office of Nuclear Regulation (ONR) NGO Forum, a report was presented on the status of defueling. The safety case for defueling not expected until mid-2023. Defueling could take 8-10 years. The reactor core is bigger than other AGRs with more fuel. The design incorporates a single fuel route rather than 2-3 as is common in other reactor designs and this creates 'constraints and bottlenecks' in removing the spent fuel. Another issue that will increase delay is the limited availability of nuclear waste flasks as demands from Dungeness will compete with those from other AGRs being decommissioned at the same time. Whilst demands from those plants have been planned and allowed for, their closures being scheduled, the demand arising from Dungeness which closed unexpectedly early (the closure date was reported as 2028 in 2017) have not.

Heysham 2: At this same meeting, it was reported that the first cracking of a graphite keyway has been observed. In an NFLA briefing this is described as a 'very specific and more concerning form of cracking. The keyway is a slot that holds each graphite brick to the adjacent brick, the bricks underneath and the bricks on top. These keyways...are acknowledged to be the limiting factor in the life of these reactors'.

For more details about the significance of key ways please see Section 5 of this report: <https://www.nuclearpolicy.info/briefings/nfla-policy-briefing-164-nuclear-plant-life-extensions-the-risk-of-a-lifetime/>

Hinkley Point B: At this same meeting it was confirmed that the plant will close in July 2022.

5. **Radioactive Waste**

- 5a. **Protest over Drigg Near Surface Nuclear Waste Facility:** Campaign group Lakes against Nuclear Dump (LAND) picketed the Mid-Copeland Community Partnership drop-in at Drigg to discuss the possible GDF with residents. Campaigners were protesting plans to develop a new Near Surface Nuclear Waste Facility. 16 boreholes 120 metres deep have already been drilled at the Low-Level Waste Repository at Drigg.



Lakes Against Nuclear Dump say “The Nuclear Industry are looking for somewhere to dump their hot wastes in deep and not so deep silo’s. The West Cumbrian Coastal Plain on the edge of the Lake District is squarely in the frame once again. On Friday we will be showing opposition to this plan and handing out information exposing the fact that 16 boreholes 120 metres deep have already been drilled at the Low Level Waste Repository to look at the possibility of Near Surface Disposal of Intermediate Level Wastes. The Near Surface Disposal Plan for Intermediate Level wastes is say the industry being looked at in order to “co-locate” with the Geological Disposal plan for High Level wastes. Near Surface Disposal would be delivered far faster – within 10 years according to the nuclear industry. Twenty five years ago the rejected plan for geological disposal was limited to low and intermediate level wastes, now it is for High Level Nuclear wastes. Its fairly obvious that nuclear wastes would migrate even faster from a shallower grave. The Community Partnership is a farce.”

A spokesperson for Nuclear Waste Services said: “NDA’s strategy, which was subject to consultation, makes a commitment to explore the technical feasibility of near surface disposal as an option for managing some of the UK’s radioactive waste.

"There are many potential treatment and disposal routes for different types of radioactive waste and this study is separate from ongoing activities to find a suitable site for a Geological Disposal Facility.

"Any future decisions about whether and where to construct a near surface disposal facility would be subject to both a government consultation on policy and the usual town and country planning processes that also provide opportunity for statutory and public consultation."

<https://www.whitehavennews.co.uk/news/19994346.environmental-activists-protest-drigg-nuclear-waste-disposal-facility/>

<https://mariannewildart.wordpress.com/2022/03/09/driggs-nuclear-waste-drop-in-show-opposition-to-the-plan-for-multiple-dumps-earliest-to-be-delivered-in-a-decade/>

5b. Geological Disposal Facility

Nuclear Waste Services, part of the Nuclear Decommissioning Authority, have published their GDF Annual Report for 2020 – 21 in which (on page 13) they reveal their eye-watering estimation of costs:

'The cost of design and early construction to get a GDF ready to receive waste could be in the range of £4-£12bn (figures in 2017/18 monetary values). At this early stage, the total whole life cost of the programme, including the design, construction, operation, and closure of a GDF up to 150 years from now, is estimated to be in the region of £20-£53 billion.'

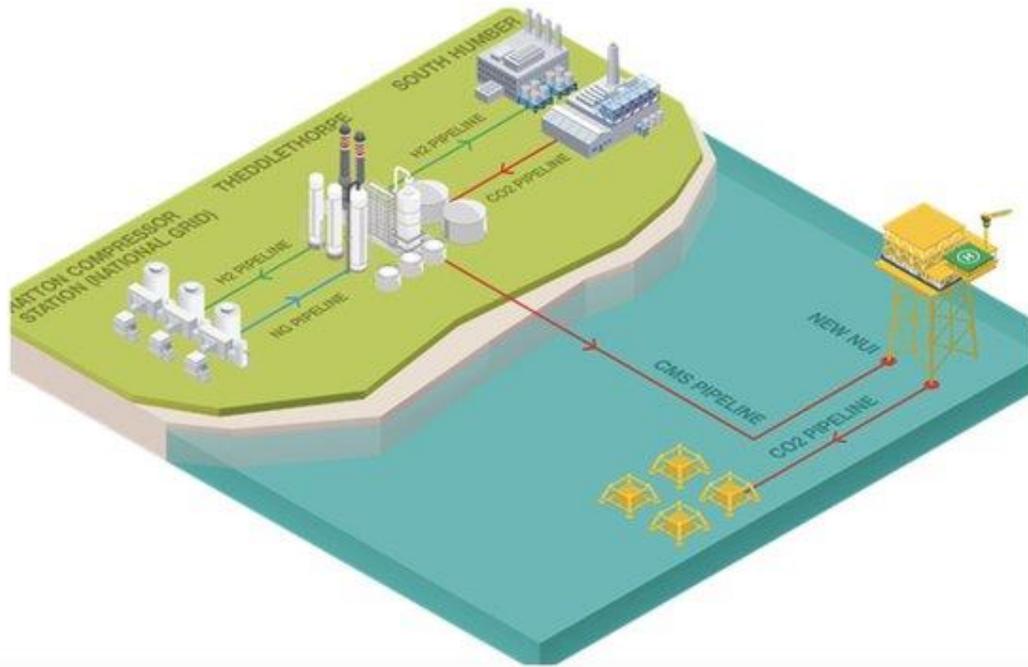
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1057186/GDF_Annual_Report_2020_21.pdf

Theddlethorpe, Lincolnshire: See 2d for the Secretary's visit to meet with GOTEC campaigners and to view the NWS exhibition.

Councillors in Lincolnshire County Council's Environment and Economy Committee called for those behind a geological disposal facility (GDF) to work with plans for a blue hydrogen facility and a carbon storage and transfer facility using the former Conoco Theddlethorpe Gas Terminal site.

The DelpHYnus project submitted to the UK's Oil and Gas Authority by Neptune Energy would see a combined carbon capture and blue hydrogen generation facility and would be linked to facilities in the South Humber Industrial area, a new off-shore facility in the North Sea, and the Hatton Compressor Station.

The 1.8GW hydrogen production plant would meet 36% of the UK's target capacity by 2030. The V Net Zero project from Harbour Energy would look to use an area in the southern North Sea – known as the Rotliegend gas field, Viking and Victor – connected to Immingham and the Theddlethorpe Gas Terminal to store 11 million tonnes of CO₂ by 2030.



<https://www.lincolnshireworld.com/news/environment/two-further-major-proposals-are-on-the-table-for-theddlethorpe-3590942>

Mid-Copeland, West Cumbria: See 5a.

Blackburn: The billionaire Issa brothers, owners of ASDA, are looking to develop a site where nuclear waste may be buried. The Monte Blackburn Ltd property subsidiary has taken a legal option on part of a 94-acre countryside site on the edge of Blackburn, near the M65's Junction 5. Campaigners believe radioactive waste was dumped down old mineshafts on the land between Belthorn and Guide in the 1950s. Blackburn with Darwen Council included the green belt site in its draft local plan as ideal for commercial and job-creating development.

<https://www.lancashiretelegraph.co.uk/news/19950109.blackburns-issa-brothers-eye-nuclear-waste-development-site/>

- 5c. New Waste Plant planned for Springfields:** Plans to jointly develop a state-of-the-art advanced materials treatment facility in the UK have been announced by Westinghouse Electric Company and Perma-Fix Environmental Services. To be built at Westinghouse's Springfields site, the facility will expand waste treatment capabilities for the European nuclear market. The new facility will incorporate the Perma-Fix Bulk Processing Unit (BPU), a large, refractory lined oven designed to treat a wide range of low and intermediate-level radioactive materials. Perma-Fix - established in 1990 - owns and operates three nuclear licensed and authorised radioactive waste treatment facilities in the USA that currently treat more than 50,000 metric tonnes per year.

<https://www.world-nuclear-news.org/Articles/New-UK-waste-treatment-facility-planned>

6. ***Nuclear Safety:***

Fukushima: Japan's Supreme Court has ruled that victims of the Fukushima disaster should be paid compensation for the tragedy. In a first decision of its kind, the court said that Tokyo Electric Power (Tepco) should pay 1.4 billion yen (\$12m or about £9.1m) in damages to about 3,700 residents whose lives were upended by the nuclear disaster in 2011. The damages cover three of more than 30 class-action lawsuits filed against the company. The compensation will average to about 380,000 yen (\$3,290) per plaintiff, public broadcaster NHK reported.

<https://www.independent.co.uk/asia/japan/fukushima-nuclear-disaster-japan-court-damages-b2028441.html>

Taishan-1: Records reveal that Unit 1 of Taishan Nuclear Plant experienced 428 hours of unplanned shutdowns because of “human factors” in its first year of operation in 2018, a record high for the nuclear reactors in mainland China that began operating in the past decade. This may reflect a lack of worker training.

Out of 36 nuclear reactors that began operating in mainland China in the past decade (2011 to 2020), three were found to have had unplanned full outages due to human factors within their first year of operation.

<https://hongkongfp.com/2021/11/06/factwire-records-show-human-factors-caused-428-hours-of-unplanned-shutdowns-in-chinese-nuclear-reactors-first-year/>

At the ONR NGO Forum, it was reported that British regulators last had contact with the Chinese regulator and operator in late January, and that further contact has been delayed but is expected next month. ONR is also in contact with regulators in France and Finland where similar reactors are being built or are in the process of being brought on-line. One issue identified at Taishan is that there occurred cracking in the fuel assemblies. It was reported that as the fuel assemblies for Hinkley Point C have not yet been ordered then changes in design can be implemented to reflect the findings at Taishan.

Ukraine: Please see NFLA Briefings No. 229, 229a, 229b, 229c and 229d.

7. ***Political***

7a. ***UK and Devolved Governments***

Parliamentarians pre-empt PM with call for much more nuclear: MPs and Peers from the Nuclear All Party Parliamentary Group (APPG) have published a roadmap that calls for 15GW of new nuclear generation by 2035 and 30GW by 2050. The five-point plan asks for a commitment to both large-scale plants as well as small modular reactors (SMRs), as well as a plan to reclassify nuclear power as “green energy” so it can benefit from the Green Financing Framework

<https://www.theengineer.co.uk/nuclear-roadmap-calls-for-15gw-by-2035/>

Prime Minister's nuclear industry roundtable: After calling for a “series of big new bets” on nuclear energy, Prime Minister Boris Johnson hosted a roundtable at Downing Street on 21 March with nuclear energy representatives to discuss how to ‘accelerate rapid progress in securing new nuclear capacity’. They discussed the ‘benefits’ of scaling up investment, removing barriers facing development (i.e. finance and

regulation), and building a skilled workforce and supply chains to support the UK nuclear industry.

Organisations who attended included: Nuclear Industry Association, Aviva Investors, Balfour Beatty, Bechtel Group Incorporated, EDF Energy, GE Hitachi Nuclear Energy, L&G, MACE, NAMRC, Nuclear Power Jacobs, NuScale, Rolls Royce, Rothesay Life, Westinghouse Electric Company, Urenco, and USS.

Johnson subsequently called for 25% of Britain's electricity to be delivered by nuclear.

<https://www.telegraph.co.uk/politics/2022/03/14/cannot-go-like-west-must-end-dependence-vladimir-putin/>

The government have announced a £120 million Future Nuclear Enabling Fund to address barriers faced by new operators seeking entry into the market' A £75 million Nuclear Fuel Fund will also be created to be used alongside private sector co-investment to preserve and develop the UK's fuel production capability.

<https://questions-statements.parliament.uk/written-questions/detail/2022-03-02/133181#:~:text=The%20Government%20announced%20a%20%C2%A3120%20million%20Nuclear%20Enabling%20Fund,the%20UK's%20fuel%20production%20capability.>

At the NEIS NGO Forum it was announced that the Treasury will be consulting on classing nuclear as a green fuel for the purposes of taxonomy, as has already been done in the EU. The NFLA will of course be opposing this development as it did to similar proposals in Europe. In the Chancellor's Spring Statement he announced that VAT will be scrapped on home energy-saving measures such as insulation, solar panels and heat pumps

Government urges public to apply for Green Heat funding: The UK Government is calling on households and businesses to apply for up to £288m in funding for green solutions such as heat pumps, solar and geothermal energy, through the Green Heat Network Fund. The next phase of funding is open and will last for three years, with applications open from 14 March 2022. The funding is expected to fund the delivery of an estimated 9.7 million tonnes of carbon savings by 2050. The Green Heat Network Fund is the successor to the government's Heat Networks Investment Project (HNIP). The Project has provided more than £250m since 2018.

https://www.edie.net/news/8/Government-issues--288m-clean-heat-fund/?fbclid=IwAR25XfMoJUuLMwu32yYx1g_UKZNhcV5emilrSKQ3mzJUavQlxywQ64Sxnqw

MOU between UK and Belgium over energy island: British and Belgian energy ministers signed a memorandum of understanding which could see both countries work together to build another renewable energy island in the North Sea. Already connected by the 1GW Nemo Link interconnector since the beginning of 2019, the UK and Belgium's expanded partnership will explore the possibility of a second interconnection, connected to a North Sea energy island. The new link would allow power to be exchanged directly between the two countries and new wind farms can also be connected to it.

<https://reneweconomy.com.au/plans-emerge-for-another-renewable-energy-island-to-power-europe/>

New appointment to Cwmni Eginio: The Welsh Government has appointed Alan Raymant as the new permanent boss of Cwmni Eginio, the nuclear power company set up by the Welsh Government in 2020 to explore the possibility of building a new SMR reactor in Trawsfynydd. Raymant, a former Chief Operating Officer for Horizon Nuclear Power, replaces Mike Tynan, who was Cwmni Eginio's interim boss.

<https://nation.cymru/news/welsh-minister-reveals-new-permanent-ceo-of-state-owned-nuclear-company/>

8 Commercial, Regulatory and Statutory

- 8a. **EDF:** The French Competition Authority fined EDF 300 million euros accusing the French company of abuse of a dominant position and seventeen years of anti-competitive practice since the opening of the market to competition for companies in 2004, until 2021.

<https://www.lefigaro.fr/societes/l-autorite-de-la-concurrence-inflige-une-amende-de-300-millions-d-euros-a-edf-20220222>

EDF is busy checking auxiliary cooling circuits, or RRAs, at its 56 domestic reactors.

Reports suggest a problem with the RRAs which depressurise the cooling water in the primary circuit of a reactor in the event of an emergency shutdown of the unit.

EDF is already investigating cracks on piping on the safety injection (SIS) circuits of a number of units, with at least 11 reactors affected so far.

This has forced EDF to reduce its nuclear production target for 2022 to 295-315 TWh, the lowest since 1991. It has also lowered its target for 2023 to 300-330 TWh.

<https://www.montelnews.com/news/1299687/edf-confirms-new-safety-checks-on-french-reactors>

- 8c. **ONR:** The Secretary attended his first NGO Forum. Some comments from the meeting are previously recorded in Sections 3b and 4.

A report was received from the Safety Managers Forum about the recent publication of the Good Practice Guidelines for Site Stakeholder Groups. A consultation has now been concluded, to which the NFLA submitted a comprehensive report, and the findings will be considered at a meeting of a Site Safety Forum in April, after which a final version will be produced.

It was also confirmed that cyber security for nuclear plants was under review in a move that no doubtless relates to the increased risk from Russia following the outbreak of conflict in Ukraine.

- 8d. **Nuleaf:** A meeting was held on 9th February to inform members on the plans for decommissioning the current fleet of AGR stations. The NFLA Secretary joined the meeting which was well attended, and Nuleaf extended an invitation to its colleagues in the Scottish Councils Committee on Radioactive Substances (SCCORS). The note of the meeting and the presentation slides are available at:

<https://www.nuleaf.org.uk/meetings-events/other-meetings/>

At the March 9 AGM, Councillor David Moore of Copeland District Council was elected Chair and Councillor Mike Caswell of Sedgemoor District Council was elected Vice-Chair. Councillor Sean Chaytor, Hull City Council, was reaffirmed as joint Vice-Chair from NFLA.

It was also proposed that constitution be changed:

*'3. Nuleaf's remit encompasses all aspects of the management of the UK's nuclear legacy. This includes the implications for legacy nuclear sites and waste management of any developments that are likely to impact on that management, **including proposals for new energy generation, transmission and storage infrastructure.**'*

As this appears to endorse Nuleaf moving into new areas of work concerning the location of SMRs and fusion on former nuclear sites, something some pro-nuclear Nuleaf representatives have called for in recent events and meetings, NFLA delegates proposed an amendment to limit new energy generation to 'non-nuclear'. Unfortunately, other delegates did not support the proposal, and the original proposal was overwhelmingly carried.

Given the Prime Minister's declaration that 25% of Britain's energy needs will be met by new nuclear it is likely that we shall soon see proposals for many of these sites.

The NFLA requested future discussion items / briefings on UK nuclear submarine decommissioning and on renewable energy project on decommissioned NDA sites. These are now being arranged and it is hoped that a visit to the submarine docks at Rosyth can also be made later this year.

9. Renewable technologies and climate emergency

World's biggest offshore windfarm nearing operation: A story from late December, I have only just picked up on.

When fully operational, Hornsea 2's 165 8 MW Siemens Gamesa wind turbines will be capable of generating 1.32 GW of clean electricity – taking the title of 'world's largest operating offshore wind farm' from its sibling project Hornsea 1. Together, the two projects will be capable of providing enough power for well over 2.3 million homes.

First power on Hornsea 2, which is located 89 km off the UK's east coast, was achieved after its offshore substation (OSS), the world's largest offshore AC substation, and reactive compensation station (RCS), were installed in late October 2021. Since that time, Ørsted and its partner companies have been working hard to commission and energise the wind farm in preparation for its anticipated operational date in 2022.

Once Hornsea 2 is completed, power will be transferred from the 165 wind turbines via 373 km of array cables to the OSS and RCS, reaching the national grid via 390 km of offshore and 40 km of onshore export cables which terminate at the onshore substation in Killingholme.

A further two projects in the Hornsea Zone are also underway with Hornsea 3 receiving a Development Consent Order in December 2020 and Hornsea 4 currently going through the planning process. Collectively, the projects would make a significant contribution to the UK government's target of achieving net-zero by 2050.

<https://orsted.com/en/media/newsroom/news/2021/12/20211220460511>

Second Norfolk windfarm receives ministerial approval:

The Business Secretary has finally given the go-ahead to the second of two large offshore windfarms that will power up to 4m UK homes, after a legal challenge stalled development for a year. Swedish renewables firm Vattenfall will now develop the Norfolk Vanguard project I alongside the Norfolk Boreas windfarm which had already received approval. Both are located off the Norfolk coast.

Work on the windfarms, located almost 30 miles off the coast, is now expected to begin in 2023 and would “help to cement and maintain East Anglia as a UK renewable energy powerhouse” that could support thousands of jobs in the local area, according to Vattenfall.

<https://www.theguardian.com/environment/2022/feb/11/business-secretary-approves-vast-offshore-windfarm-norfolk-vanguard>

Actors object to East Anglian wind farms: Dame Joanna Lumley, Ralph Fiennes and Griff Rhys Jones have objected to two proposed wind farms off the coast of East Anglia in a letter to The Times.

ScottishPower Renewables (SPR) said its planned East Anglia One North and East Anglia Two offshore wind farms would generate enough electricity to power more than 1.4 million UK households.

Underground cables would transport the electricity to onshore substations, with decisions on whether to grant development consent to the two applications due by March 31.

Protestors suggest ‘split decision is suggested, to continue building wind turbines but to pivot to offshore integrated cabling to brownfield sites’.

<https://www.independent.co.uk/business/joanna-lumley-raises-concerns-over-offshore-wind-farm-plans-in-joint-letter-b2024752.html>

Octopus Renewables to double wind output: Octopus Renewables has reached four new deals to ramp up wind power generation across the continent, including a joint venture to develop nine onshore wind farms across Scotland and Wales in the next 5-10 years with specialist developer Wind 2 Limited. These will have a potential combined capacity of approximately 570 MW.

Octopus already manages 745 MW of wind assets, and the deals will boost its wind generation portfolio by 690 MW of capacity (or an extra 90%) over the next decade. Once developed, the wind farms could power almost half a million European homes.

<https://www.cityam.com/octopus-boosts-wind-power-capabilities-with-four-new-european-deals/>

Irish winds blow good for energy: A breezy February helped the island of Ireland set a new record by meeting almost 60 per cent of its electricity demand with wind energy. On an average month wind energy meets between 20 and 40 per cent of demand and is generally higher during winter months due to stormy conditions. In February, wind met 59 per cent of energy demand across the island, and 53.4 per cent in the Republic. Barry McMullin, engineering professor at Dublin City University, said this was a “milestone” for wind production in the energy system.

<https://www.thetimes.co.uk/article/februarys-ill-winds-blow-everyone-some-good-with-record-energy-provision-across-ireland-dmj50q568>

More plans for offshore wind in Ireland: ESB has applied for a foreshore licence for site investigation works in an area offshore Ireland where it plans to build a wind farm with an installed capacity of between 700 MW and 800 MW.

The site is located to the south of County Waterford and to the southeast of County Cork. There, ESB plans to build its Helvick Head Offshore Wind project, one of five offshore wind farms the Irish company is looking to bring to realisation in Ireland.

The wind turbine array area is approximately 10 kilometres from the coast at its nearest point and the potential export cable corridors extend from the array site to the shore where cable(s) will landfall, somewhere around Cork Harbour or Dungarvan Harbour.

<https://www.offshorewind.biz/2022/03/04/irish-offshore-wind-developer-starts-work-on-800-mw-project/>

EDF eyes up prospects for Scottish wind farm: EDF Renewables UK is exploring the potential to create a new 100MW wind farm called Dunside on moorland owned by Roxburghe Estates in the Lammermuir Hills in Berwickshire, Scotland.

Surveys and assessments, to be undertaken during 2022, will examine the potential to develop the project, which is also expected to create significant investment in community projects across the local area.

<https://renews.biz/76087/edf-renewables-scopes-100mw-scottish-wind-farm/?fbclid=IwAR1qxTpbmEjkzqFUDIXs0KImEZQmeTe5qHt1wzi01PtR-nOZhSAUbDxz4HE>

English hydro schemes under threat from fees hike: Community schemes to produce electricity from local running waters face being shut down after the Government increased application costs up to nine times for new hydro-electric power projects in England.

Hydropower projects will have to pay the Environment Agency as much as £13,392 to get a licence from April, up from the previous cost of £1,500. The hike could threaten small hydropower endeavours who may not be able to raise the extra funds, according to the EA's own assessment of the impact of the price rise, which was announced this week.

"The agency is actively slamming the final nail in the coffin of an important renewable energy source which should be a key focus for the government as energy prices soar," said Simon Hamlyn, the chief executive of the British Hydropower Association.

The NFLA has written to DEFRA Minister Rebecca Pow seeking a reversal of the increase.

<https://www.telegraph.co.uk/news/2022/03/12/community-hydropower-schemes-face-shut-new-13000-licencing-costs/>

New hydro project launches in Ayr: The Nethermills Hydro Scheme, on the banks of the River Ayr, was officially unveiled to the public on 1 March. The £1m scheme is the fulfilment of a long-held ambition of non-profit firm, Auchincruive-based Energy Agency Renewables. A single four-bladed Archimedes screw, measuring four meters in diameter, will generate energy from the fast-flowing river. The scheme will supply up to 83kW of green electricity to neighbouring Ayrshire College.

<https://www.dailyrecord.co.uk/ayrshire/new-1m-hydro-scheme-unveiled-26349949>

You wait ages, and two tidal schemes come along at once: Plans for a £590m tidal lagoon in North Wales are forging ahead following two milestone developments. Mostyn SeaPower Ltd, a subsidiary of the Port of Mostyn, revealed they are now going out to tender for review of the initial design and costings for the scheme. It would create 300 construction jobs and employ 35 people during its operational life of over 100 years.

They have also embarked on a second year of ecological surveys of the priority species of fish, birds and mammals in the Dee Estuary. A review is also being held into the layout and position of the lagoon wall and to assess advances in turbine technology.

<https://www.insidermedia.com/.../tidal-energy-scheme...>

Two Welsh councils are teaming up to breathe new life into a £7 billion tidal lagoon project. The green energy project looked dead in the water, but has now taken a step closer thanks to millions of pounds of investment, and renewed commitment from Denbighshire County Council and Conwy County Council,

The proposed tidal lagoon was backed by Denbighshire County Council last month after a motion was put forward by councillors.

The motion followed a prompt by Welsh Government, encouraging local authorities to work with the private sector on sustainable energy.

The scheme could involve a 19-mile barrage with underwater turbines able to change the tide, creating around 5,000 construction jobs across Conwy and Denbighshire.

Both Conwy and Denbighshire county councils are now looking at ways in which such a scheme could be financed, together with private companies.

<https://nation.cymru/news/welsh-councils-team-up-to-bring-7bn-tidal-lagoon-project-back-to-life/>

Case for £30 billion Severn tidal barrage 'urgent and compelling': Backers of a £30 billion tidal energy barrage across the Severn Estuary say the case is now 'both urgent and compelling'.



The Great Western Power Barrage envisages a concrete embankment across the Severn Estuary in which turbines are installed to generate electricity from the tide.

The proposed location is from Lavernock Point, just south of Cardiff, to near Hinkley Point in Somerset.

<https://www.punchline-gloucester.com/articles/aanews/case-for-30-billion-pound-severn-tidal-barrage-urgent-and-compelling>

Mocean Energy: Wave energy company Mocean Energy has raised £730,000 in equity funding to accelerate the commercial roll-out of its technology. It secured the investment from existing funders, including angel syndicate Equity Gap, Old College Capital – the University of Edinburgh’s in-house venture investment fund – and Scottish Enterprise. The funds will advance its Blue Star wave machine, which last year was tested at the European Wave Energy Centre (EMEC) in Orkney.

<https://www.current-news.co.uk/news/wave-energy-company-mocean-energy-raises-730k>

Trio of solar schemes receive planning approval: Anesco has received planning permission for three UK solar farms, with the company expecting to agree new development and construction partnerships with investors later this year. The three solar farms form part of Anesco's 600MW pipeline of new solar and storage projects that are at the planning and ready-to-built stage, with part of this pipeline to be sold to Gresham House through a 200MW ground mount solar development and construction partnership, which was signed in January 2021. The transaction is worth over £100 million.

<https://www.solarpowerportal.co.uk/news/anesco-granted-go-ahead-for-three-solar-pv-sites-amid-growing-investor-interest>

Water Lilies micro-grid housing project: Water Lilies, an innovative housing development in northwest Bristol, consists of 33 high-end eco self-build homes that share a garden and community facilities. The development boasts an integrated smart energy system that combines solar energy generation, central battery storage, electric vehicle charging and air-source heat pumps to create sustainable homes that put people and the planet first.

in 2020, Bristol Energy Cooperative raised £2 million in a public share offering via Ethex and the Water Lilies microgrid was just one of the projects to benefit from this finance, which funded the grid-scale battery for the microgrid.

The Water Lilies project is now well-advanced now, with the battery and much of the microgrid infrastructure in place. This is a first for the UK and is leading the way in demonstrating the opportunities for sustainable community housing. The first residents are expected to arrive later this year.

A video of the development can be seen here

<https://www.youtube.com/watch?v=q1iqdU2nB-8>

Northumberland plan gives green light to onshore wind: Many ‘much needed’ North East renewable energy projects could be created if the Northumberland Local Plan is adopted at the end of March. The plan will identify sites suitable for wind turbines up to 40 metres high to the tip of the blade to enable the development of more farm sized micro wind turbines across the county.

<https://bdaily.co.uk/articles/2022/03/02/north-east-renewable-energy-projects-await-greenlight-from-council>

New biomethane plant near Bristol: A new facility capable of refuelling up to 80 heavy goods vehicles (HGVs) with biomethane each hour has opened in Avonmouth, near Bristol. The facility, developed and operated by CNG fuels, hosts 14 high-speed biomethane refuelling dispensers, which is thought to make it the largest facility of its kind in the world. It is located near the M4/M5 and will dispense only biomethane produced using food waste.

The fuel, CNG Fuels has pledged, will always comply with the requirements of the Department for Transport’s Renewable Transport Fuel Obligation (RTFO) scheme. Overall, CNG Fuels is touting a reduction in emissions from HGV journeys of up to 90%, when it compares its biomethane with diesel. It has been forecast that the refuelling station will help businesses to reduce emissions from HGV fleets by up to 70,000 tonnes annually.

<https://www.edie.net/news/16/Decarbonising-transport---World-s-largest-biomethane-refuelling-station-opens-in-UK/>

Huge solar farms faces opposition: A proposed new £600m solar farm in eastern England – covering an area eight times bigger than Hyde Park in central London – faces opposition over claims it would be a “blight” on the countryside. The scheme, which would provide power for up to 100,000 homes, will cover nearly 2,800 acres near Newmarket, more than 10 times bigger than any scheme built to date in Britain. It is one of more than 900 solar farms in the planning pipeline to help provide green energy. Campaigners say the Sunnica energy farm, which will span several villages in Suffolk and Cambridgeshire, will change the unique character of a vast area of countryside shaped by farming and horseracing. Suffolk county council said last week it would not support the scheme in its current form.

<https://www.theguardian.com/environment/2022/mar/05/light-or-blight-anger-rises-at-plan-for-britains-biggest-solar-farm>

Have boiler will travel: Many people around the world don't have easy access to hot water. But an engineer in Scotland has designed a simple portable device that heats water using just the power of the Sun. He believes it could reduce emissions and improve the quality of life for millions of people.

<https://www.bbc.co.uk/news/av/stories-60617154>

Scottish homes powered by hydrogen pilot: An ambitious target of using hydrogen to partly power homes in the UK within three years has been set by the National Grid. On the east coast of Scotland, a small neighbourhood is playing a key role in this energy revolution.

From next year, about 300 homes in Buckhaven, and Methil, in the area of Levenmouth, will be powered by green hydrogen gas in a project called H100. Customers will be offered free hydrogen-ready boilers and cookers in the scheme, which will initially last five and a half years.

<https://www.bbc.co.uk/news/business-60241966>

No Eigg on their faces: CANNY residents on a Scottish island powered almost entirely by renewables are now paying less for energy than mainland householders hit by rocketing bills because of the rise in fossil fuel prices. Until recently, the islanders on Eigg were paying more for their energy than those on the national grid but the tables have turned after the price of oil and gas soared.

<https://www.thenational.scot/news/20023838.forget-big-city-lights-scots-islanders-eigg-paying-less-energy/>

9. ***Mayors for Peace and nuclear disarmament:***

Revised dates for the 1 Meeting of the States Parties to the Treaty on the Prohibition of Nuclear Weapons: The official dates for the Meeting of States Parties (1MSP) will now be 21-23 June 2022 in Vienna. Austria will also host an international conference on the humanitarian impacts of nuclear weapons on the 20th June. ICAN will also be holding a full in-person conference on 18-19 June.

Dates finally announced for NPT Rev Con: The dates for the 10th review conference of the states' parties to the UN Nuclear Non-Proliferation Treaty have finally been confirmed as 1-26 August at the United Nations Building in New York. However, given the acrimony that will exist between the nuclear weapon armed states following the conflict in Ukraine (assuming it will be resolved before then), it must be questioned how much progress can realistically be made.

Welsh Senedd votes for nuclear disarmament and peace in Ukraine: In some positive news, the Welsh Assembly (or Senedd) passed a resolution on Ukraine (10 March), which includes as Point 7:

'Acknowledges that this conflict increases the risk of a nuclear war and the fear of nuclear war amongst people in Wales and beyond, and therefore calls on all states, including the nuclear states to sign and ratify the United Nations Treaty on the Prohibition of Nuclear Weapons which came into force in January 2021, and which would prevent such a threat in future.'

The resolution was passed 26 For, 13 Abstain and 13 Against; 52 votes in total.

In response, CND Cymru Vice-Chair Brian Jones said: “*We welcome the Senedd’s support for the Treaty on the Prohibition of Nuclear Weapons. As serious as the situation is in Ukraine, it will become infinitely worse if nuclear weapons are used. The only long-term way to prevent the use of nuclear weapons is through a worldwide ban on nuclear weapons.*”

60th state ratifies Treaty on the Prohibition of Nuclear Weapons: On 24 March, the Côte d’Ivoire deposited its instrument of ratification for the Treaty on the Prohibition of Nuclear Weapons (TPNW), becoming the 60th state party – and the 11th African state to join. The treaty will enter into force for Côte d’Ivoire on 21 June, 2022 - the opening day of 1MSP.

Here is an article about Côte d’Ivoire’s ratification:

https://www.icanw.org/cote_d_ivoire_ratifies_tpnw

Trident replacement: CND reports that work on new warhead seems to be at very early stage, with a Warhead Delivery Team having been set up. The MOD’s Defence Equipment Plan has highlighted that the core production capability at Rolls Royce is massively over-budget, and in general there are wider warning signs in the document. The MOD believes “the large number of new programmes will be challenging to deliver”. The MOD has approved the warhead programme and we are likely to see basic details, including some element of budget, soon.

10. ***Forthcoming events with links:***

7pm Monday 4 April 2022

Nuclear power: not fit for purpose?

CND webinar organised by CND’s Trade Union Group.

Nuclear power is increasingly marketed as part of the solution to the climate crisis and there is considerable support for it from trade unions. In fact it’s dirty, dangerous, expensive, won’t help with our climate problems, and there are far more jobs in renewables.

Register: <https://cnduk.org/events/nuclear-power-not-fit-for-purpose-cnd-webinar/>

6pm Wednesday 6 April 2022

Will the sea take them? The impact of rising sea levels and coastal erosion on Britain’s nuclear infrastructure – a special NFLA webinar

NFLA is hosting a webinar about the potential impacts of climate change on coastal nuclear infrastructure. The event will consider how climate change impacts (eg. sea-level rise, extreme weather) could affect both civil and military nuclear sites in the UK.

More details can be found at <https://britishpugwash.org/event-climate-change-and-coastal-nuclear-infrastructure/>

The link to register with Zoom can be found at <https://us02web.zoom.us/meeting/register/tZUkd-iorT8vHd2WjDuCLawx0enGAbeMIPfy>

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