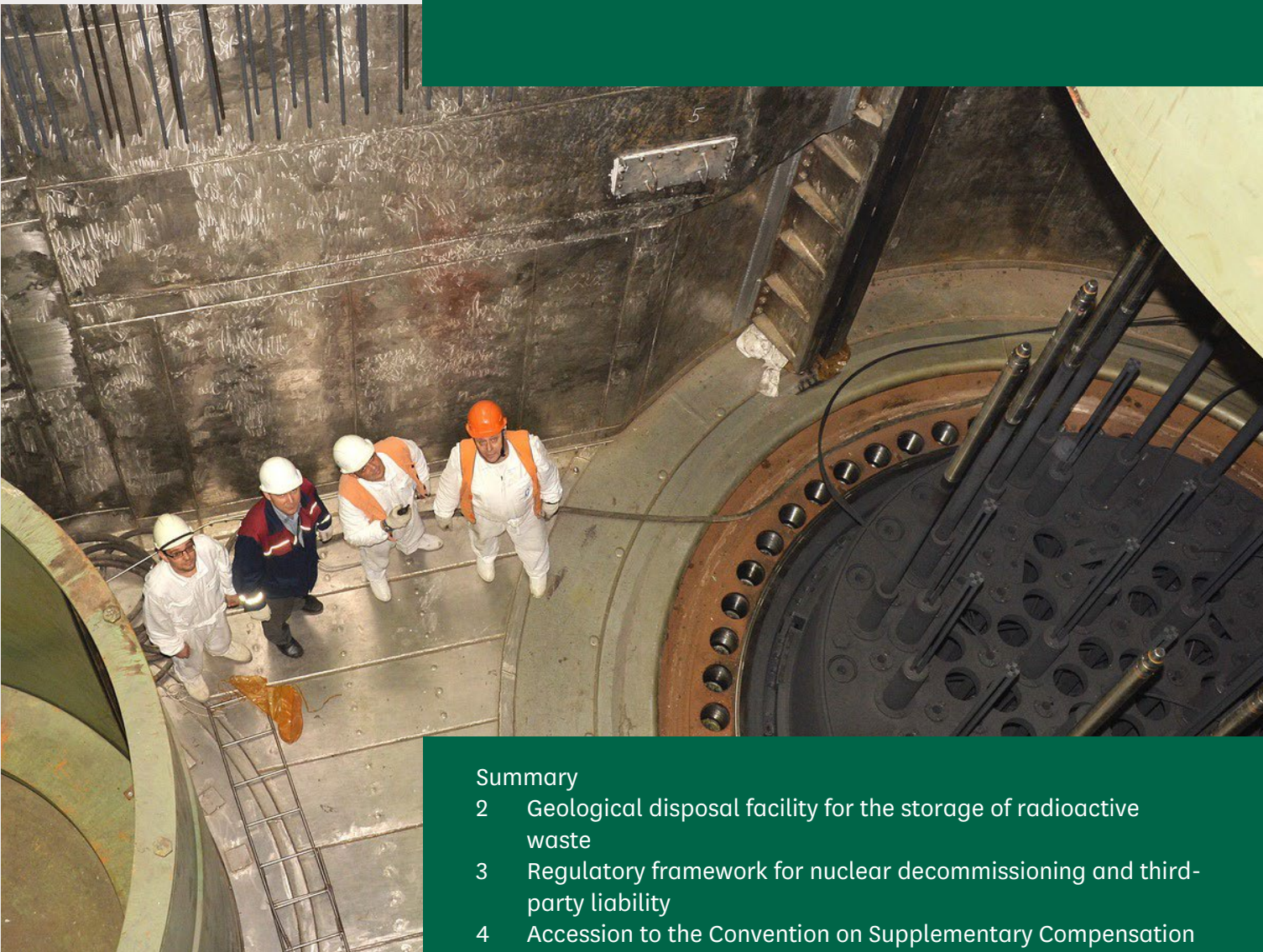


Research Briefing

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By Louise Smith,
James Mirza Davies,
Lauren Nickolls

Energy Bill 2022-23, part 13: Provisions on civil nuclear regulation



Summary

- 2 Geological disposal facility for the storage of radioactive waste
- 3 Regulatory framework for nuclear decommissioning and third-party liability
- 4 Accession to the Convention on Supplementary Compensation for Nuclear Damage
- 5 Civil Nuclear Constabulary
- 6 Nuclear decommissioning authority pensions reform

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Summary

The Government's [Energy Bill 2022-23](#) contains provisions covering a wide range of energy-related policy areas. The bill started in the House of Lords and is expected to have its second reading in the Commons on 9 May 2023.

This briefing covers the bill's provisions relating to nuclear regulation. These provisions would regulate a potential under-the-seabed geological disposal facility for radioactive waste, amend regulation for nuclear sites where the risk of radiation is low (in line with existing international standards), and allow the UK to join a UN convention on providing compensation to victims of nuclear incidents. Provisions would also enable the Civil Nuclear Constabulary to provide a wider range of policing services beyond the civil nuclear sector and make changes to the Nuclear Decommissioning Authority pension scheme.

Library briefings covering other measures in the bill can be found online from the [Energy Bill \[HL\] 2022-23 research briefing page](#).

The clause numbers in this briefing refer to the bill as brought from the Lords, [bill 295 2022-23](#) (PDF).

1.1

Nuclear energy regulations in the bill

Nuclear energy regulations and related policies appear in several places in the bill:

- **Part 3, chapter 3** contains provisions to confirm the exclusion of fusion energy facilities from nuclear site licensing requirements (analysis of this provision is in the [Library briefing on the Energy Bill – New Technologies](#)). These provisions were not amended at any stage in the House of Lords.
- **Part 13, chapter 1** contains clauses on civil (non-military) nuclear sites. None of these clauses were amended at any stage in the Lords. These provisions aim to:
 - ensure that an under-the-seabed geological disposal facility for radioactive waste will require a licence and be regulated by the Office for Nuclear Regulation. The location of the facility has not been confirmed.
 - allow nuclear sites that are being decommissioned to be delicensed earlier than at present. This would mean that regulation of the sites would be transferred from the Office for Nuclear Regulation (ONR)

to the relevant environment agency and the Health and Safety Executive. The Government believes this would enable a more sustainable approach to waste management and restoring the land back to an acceptable condition.

- to allow nuclear sites that are in the process of being decommissioned to be delicensed earlier than at present. This would mean that instead of being regulated by the Office for Nuclear Regulation (ONR), regulation would be transferred to the relevant environment agency and the Health and Safety Executive. The Government believes this would enable a more sustainable approach to waste management and restoring the land back to an acceptable condition.
- to allow for both decommissioned sites and for facilities for the disposal of low-level radioactive waste to exit the nuclear third-party liability regime when internationally agreed standards have been met. This regime specifies that financial provision must be in place to meet claims in the event of a nuclear incident, as required under international law on nuclear third-party liability. Existing international standards on when such sites and facilities can exit this regime already exist, but until now have not been implemented in UK law.
- to allow the UK to join the Convention on Supplementary Compensation for Nuclear Damage. This is a form of nuclear third-party liability (NTPL) treaty. NTPL treaties are international agreements that ensure that, in the unlikely event of a nuclear incident, there is a minimum amount of compensation available to victims and that claims are channelled to operators of the nuclear installation (and not the supply chain).
- **Part 13, chapter 2** contains provisions on the civil nuclear constabulary (CNC). These provisions would enable the CNC to provide a wider range of policing services beyond the civil nuclear sector.
- **Part 13, chapter 3** contains provisions to bring Nuclear Decommissioning Authority pensions in line with other public sector pensions by moving from a final salary scheme to a career average scheme. These were new clauses which were added by the Government at the Bill's committee stage in the House of Lords.

1.2

Territorial extent and application

Territorial application is about where a Bill produces a practical effect rather than where it forms part of the law. The [bill's explanatory notes](#) (PDF) show that the most of the above provisions extend to and apply to England, Wales, Scotland and Northern Ireland. The exception to this are the clauses on the

CNC which extend to and apply to England, Wales and Scotland, but not all of them extend to and apply to Northern Ireland. Within the CNC chapter only clause 262 on cross-border enforcement powers fully extends to and applies to England, Wales, Scotland and Northern Ireland.

2

Geological disposal facility for the storage of radioactive waste

This part of the bill is about the Government's intention to ensure that a future geological disposal facility positioned under the seabed for radioactive materials will be licensed and regulated by the Office for Nuclear Regulation (ONR). The Government has said this is already understood to be the case in legislation, but the bill would “put it beyond doubt by making it expressly clear”.¹ The location for the facility has not yet been identified.

The Government has published a [factsheet covering this part of the bill](#).²

2.1

What is a geological disposal facility?

Geological disposal involves placing radioactive waste deep within a suitable rock formation. The idea is that the rock formation, under the seabed, provides long-term protection by preventing the escape of radiation and by protecting the waste from adverse impacts at the surface.

Geological disposal facilities (GDFs) are highly engineered structures consisting of multiple barriers and are intended to “provide protection over hundreds of thousands of years”.³ They involve building a series of specially designed and engineered vaults and tunnels at a depth of between 200 metres and 1,000 metres underground. Other countries, such as Sweden, France, Canada, Switzerland, and Japan are also considering GDFs and construction of one has recently been completed at Finland’s Onkalo site.⁴

The UK Government is searching for a suitable site for a GDF under the seabed and a community willing to host it. This would be for the disposal of higher-activity radioactive waste.⁵ The UK has accumulated a substantial legacy of radioactive waste and nuclear materials from electricity generation, defence programmes and other industrial, medical and research activities.⁶

¹ HM Government, [Energy Security Bill factsheet: Licensing of Geological Disposal Facility beneath the seabed](#), 20 March 2023

² HM Government, [Energy Security Bill factsheet: Licensing of Geological Disposal Facility beneath the seabed](#), 20 March 2023

³ HM Government, [Energy Security Bill factsheet: Licensing of Geological Disposal Facility beneath the seabed](#), 20 March 2023

⁴ GOV.UK, [NWS hosts Sky News visit to world’s first GDF in Finland](#), 18 October 2022

⁵ GOV.UK, [Geological Disposal - a programme like no other](#), 3 November 2020

⁶ HM Government, [UK Radioactive Waste Inventory 2022](#), 8 February 2023

2.2

Why does the UK need a geological disposal facility?

The Government's view is that a GDF is required because the UK's existing surface storage for radioactive waste, although it was designed to be safe for around 100 years in total, does not provide a permanent solution.⁷

The current stores need to be continually monitored to keep the waste secure and periodically refurbished to stop the waste from being exposed to the effects of the weather. Eventually, they will need to be replaced or the waste moved elsewhere. The Government has said that, "surface storage is therefore less safe than geological disposal for the long term, and would end up being much more labour intensive and costly in the long run".⁸

Further information about UK Government policy in this area is set out in a [December 2018 policy paper](#).⁹ Information about how and where current nuclear waste is stored is available from the [UK Radioactive Waste Inventory website](#).

2.3

How will a site be chosen?

In the UK, radioactive waste management is a devolved matter. This means that different policies may apply in England, Northern Ireland, Wales and Scotland. UK Government policy applies in England only.¹⁰

The [Welsh Government](#) published its [Working with Communities policy: 'Geological disposal of radioactive waste: Working with potential host communities'](#) in January 2019. There are no policies on GDF relating specifically to Scotland or Northern Ireland.

Selecting a site

At this stage, no host site for a GDF has been identified, but Nuclear Waste Services is working to find a community willing to host a suitable site. Nuclear Waste Services is a wholly owned subsidiary of the Nuclear Decommissioning Authority, which is an executive non-departmental public body sponsored by the Department for Energy Security and Net Zero.

⁷ GOV.UK, [Geological Disposal – a programme like no other](#), 3 November 2020

⁸ GOV.UK, [Geological Disposal – a programme like no other](#), 3 November 2020

⁹ HM Government, [Implementing geological disposal – working with communities: long term management of higher activity radioactive waste](#), December 2018

¹⁰ HM Government, [Implementing geological disposal – working with communities: long term management of higher activity radioactive waste](#), December 2018

Working groups and community partnerships have been formed in different areas of the country to start exploring whether a GDF is right for their area. GDF Community Partnerships have been set up in four locations: Allerdale,¹¹ Mid Copeland¹² and South Copeland,¹³ in Cumbria, and Theddlethorpe in Lincolnshire.¹⁴ Resources for communities explaining what a GDF is and the process for finding a site are available from the Nuclear Waste Services' [Working in Partnership website](#).

To determine whether a potential site is suitable, there needs to be an understanding of the nature of the rocks and geological structure of the seabed. Nuclear Waste Services has published guidance on evaluating sites:

- [Site Evaluation: How we will evaluate sites in England](#), 2020 (PDF)
- [Site Evaluation - How we will evaluate sites in Wales](#), updated February 2020

Development consent and planning permission

Once a site is selected, development consent (which includes planning permission) will need to be sought. In England, under section 30A of the Planning Act 2008, GDFs for radioactive waste that are constructed at a depth of at least 200 metres under the ground or seabed are a type of nationally significant infrastructure project (NSIP).

This means that the Secretary of State for Energy Security and Net Zero will decide the application for development consent in accordance with the Government's [National Policy Statement \(NPS\) for Geological Disposal Infrastructure](#), 2019. The NPS covers both the deep boreholes necessary to determine the suitability of a site for a GDF, and the construction of the GDF itself.

Radioactive waste management is a devolved policy issue. Planning consents for all radioactive waste projects are devolved to the Scottish Government, Welsh Government and Northern Ireland Executive. The NPS only applies to proposals for development in England and the Secretary of State will not decide applications for development in other parts of the UK.

2.4

What will regulation involve?

Nuclear sites are normally regulated by the Office for Nuclear Regulation (ONR).¹⁵ Requirements are prescribed by the [Nuclear Installations Act 1965](#),

¹¹ [Allerdale GDF Community Partnership](#), [accessed 7 February 2023]

¹² [Mid Copeland GDF Community Partnership](#), [accessed 7 February 2023]

¹³ [South Copeland GDF Community Partnership](#), [accessed 7 February 2023]

¹⁴ [Theddlethorpe GDF Community Partnership](#), [accessed 7 February 2023]

¹⁵ HM Government, [UK's Fusion Strategy: Towards Fusion Energy](#), October 2021

(the NIA65) as amended, and the [Nuclear Installations Regulations 1971](#), as amended.

Under these provisions, operators must obtain a nuclear site licence (a legal document) from the ONR and demonstrate compliance with several standard conditions relating to design, construction, operation and decommissioning.¹⁶

The ONR agrees that a future GDF should be subject to the requirements of the NIA65 during its design, construction, operation and closure, and that it should regulate such a GDF for nuclear safety and security purposes. The ONR has worked with the Government on developing the legislative provisions in this bill to enable this.¹⁷

The ONR is developing additional guidance specific to licensing and regulating a GDF which will help inform Nuclear Waste Services and other stakeholders who are engaged during the GDF siting process. The ONR has said that it intends to attach the same set of standard licence conditions to any licence for a GDF, “although these will be reviewed to identify any necessary modifications specifically relating to a GDF.”¹⁸

ONR will use its [Safety Assessment Principles](#) and [Security Assessment Principles](#), which provide inspectors with a framework for making consistent regulatory judgements on nuclear safety cases, as its standard for assessing a new GDF. These principles are under constant review, and “modifications will be made in relation to geological disposal, if necessary.”¹⁹

Further information about the proposed regulatory framework for a GDF and about the ONR’s role and how it will work with other connected regulators, such as the Environment Agency (in England) and Natural Resources Wales, is available on the ONR’s [Geological Disposal webpage](#).

2.5 Provisions for regulation in the bill and reaction

Clause 256 of the bill would amend section 1 and section 26 of the Nuclear Installations Act 1965 and section 68 of the Energy Act 2013 (which defines “nuclear installation”), to make it clear that certain nuclear sites located wholly or partly in or under the territorial sea adjacent to the UK would require a licence and would be regulated by the ONR.

The Government has also said it intends to use an existing delegated power in the NIA65: a [statutory instrument](#) will be brought forward, “in due course”, to amend the existing Nuclear Installations Regulations 1971, to make a GDF

¹⁶ For further information see ONR website, [Nuclear site licensing](#) [downloaded 1 February 2023]

¹⁷ Office for Nuclear Regulation, [Geological disposal](#) [downloaded 21 February 2023]

¹⁸ Office for Nuclear Regulation, [Geological disposal](#) [downloaded 21 February 2023]

¹⁹ Office for Nuclear Regulation, [Geological disposal](#) [downloaded 21 February 2023]

(whether located beneath the seabed or otherwise) a prescribed installation that requires a licence, and as such, subject to ONR regulation.²⁰

While there is a range of views about the desirability of a GDF and where it should be located,²¹ at the time of writing there does not appear to be public comment on these particular clauses in the bill. These clauses were not amended at any stage in the House of Lords.²²

²⁰ HM Government, [Energy Security Bill factsheet: Licensing of Geological Disposal Facility beneath the seabed](#), 20 March 2023

²¹ See for example, written and oral evidence submitted to the Science and Technology Committee inquiry [Delivering nuclear power](#), 2022-23

²² House of Lords Grand Committee, [Energy Bill](#), 16 January 2023, c404GC

3 Regulatory framework for nuclear decommissioning and third-party liability

3.1 Simplifying the existing framework

The Government wants to simplify the regulatory framework that applies to nuclear energy sites in the final stages of being decommissioned and facilities for the disposal of low-level radioactive waste. It has published a factsheet covering provisions relating to this in the bill.²³

Through the bill the Government wants to make the following changes to the existing regime:

- To allow nuclear sites that are in the process of being decommissioned to be delicensed earlier than at present. This would mean regulation of the sites would be transferred from the Office for Nuclear Regulation (ONR) to the relevant environment agency and the Health and Safety Executive, enable a more sustainable approach to waste management and restoring the land back to an acceptable condition.²⁴
- To allow for both decommissioned sites and facilities for the disposal of low-level radioactive waste to exit the nuclear third-party liability regime when internationally agreed standards have been met. This regime specifies that financial provision must be put in place to meet claims in the event of a nuclear incident, as required under international law on nuclear third-party liability.²⁵ Existing international standards on when such sites and facilities can exit this regime already exist, but until now have not been implemented in UK law.

The Government's factsheet states these measures are expected to save at least £500 million over the next 20 years and up to £7.5 billion over the next 100 years:

²³ HM Government, [Energy Security Bill factsheet: Proposals to amend the regulatory framework for the final stages of nuclear decommissioning](#), updated 20 March 2023

²⁴ HM Government, [Consultation on the Regulation of Nuclear Sites in the Final Stages of Decommissioning and Clean-Up](#), May 2018

²⁵ HM Government, [Energy Security Bill factsheet: Proposals to amend the regulatory framework for the final stages of nuclear decommissioning](#), updated 20 March 2023

The proposals will align the UK with international standards and are estimated to save at least £500 million of taxpayers' money over the next 20 years, with similar savings in the following 40 years. In addition, we estimate up to £7.5 billion additional savings over the next 100 years as the Sellafield site is decommissioned, although this estimate is uncertain.²⁶

3.2

Decommissioning regulation: What would change?

Existing decommissioning regulation

The Nuclear Installations Act 1965 (the NIA65) provides the legal framework for nuclear safety and nuclear third-party liability. The NIA65 sets out a system of regulatory control based on a licensing process administered by the Office for Nuclear Regulation (ONR). Under this system, a site operator is required to have a licence and have financial provision in place to meet claims in the event of a nuclear incident, as required [under international law on nuclear third party liability](#) (NTPL).

Decommissioning generally involves removing all the radioactive fuel from a nuclear power station, taking down the plant and facilities and restoring the site to an agreed end-state ready for some form of re-use.²⁷ An operator of an existing nuclear power station is required to produce a clear decommissioning strategy that is monitored closely by the ONR. Eventually, the ONR will delicense the former nuclear power station.

Licence holders can apply to the ONR to delicense all or part of a site and effectively end the ONR's period of responsibility for it. The ONR will consider applications for delicensing and will assess the license holder's evidence and information from other regulatory bodies (such as the relevant environment regulator) to ensure there is "no danger" from ionising radiation on site. The "no danger" provision stems from section 7B (3)(a) of the NIA65, that "...that in the opinion of that authority there has ceased to be any danger from ionising radiations from anything on the site...".

Reasons for changing the current regulation

The Government factsheet accompanying the Energy Bill 2022-23 states that, in practice, meeting the usual interpretation of the "no danger" provision in the NIA65 generally means removing virtually all the lightly radioactively

²⁶ HM Government, [Energy Security Bill factsheet: Proposals to amend the regulatory framework for the final stages of nuclear decommissioning](#), updated 20 March 2023

²⁷ EDF Energy, [Nuclear decommissioning](#) [downloaded on 21 February 2023]

contaminated foundations and substructures from a site and transporting them to disposal facilities elsewhere.²⁸

Higher level radioactive waste is normally dealt with in the earlier stages of a decommissioning process.²⁹ During the final stages of decommissioning and clean-up, significant volumes of waste can be generated, most of which is non-radioactive rubble, concrete, brick, soil, drains and pipelines. However, a small percentage of this waste is radioactive; it is mostly ‘low-level waste’ and ‘very-low level waste’.³⁰

The Government has said that the excavation and transport of this waste for disposal elsewhere results in a number of adverse effects on people and the environment. These include:

creation of radioactive dust; risks to construction and demolition workers; traffic risks due to many movements of heavy lorries taking waste away and bringing fresh material in for filling voids; and the filling up of the limited space in specialised radioactive waste disposal facilities.³¹

It has argued that in some cases the risks of leaving lightly contaminated substructures and soils in place, where it is safe to do so, “may be significantly lower than those of excavating, transporting and disposing of them elsewhere”.³²

Proposals to change decommissioning regulation

In 2016 the Government published a [discussion paper on the regulation of nuclear sites in the final stages of decommissioning and clean-up](#). In it, the Government supported proposals, initially put forward by the Nuclear Decommissioning Authority (NDA),³³ that sites in their final stages of decommissioning and clean-up should be released from their regulation under the NIA65.³⁴

The Government then published a consultation on this proposal in 2018.³⁵ A government response was published in October 2018. The response confirmed

²⁸ HM Government, [Energy Security Bill factsheet: Proposals to amend the regulatory framework for the final stages of nuclear decommissioning](#), updated 20 March 2023

²⁹ See for example, UK Radioactive Waste Inventory, [How do we manage radioactive waste?](#) [accessed 26 April 2023]

³⁰ For further information about these categories and definitions see the UK radioactive waste inventory website, [What are the main waste categories?](#) [downloaded 28 February 2023]

³¹ HM Government, [Energy Security Bill factsheet: Proposals to amend the regulatory framework for the final stages of nuclear decommissioning](#), updated 20 March 2023

³² HM Government, [Energy Security Bill factsheet: Proposals to amend the regulatory framework for the final stages of nuclear decommissioning](#), updated 20 March 2023

³³ The Nuclear Decommissioning Authority is a non-departmental public body of the Department for Energy Security & Net Zero, formed by the Energy Act 2004. It operates to clean-up the UK’s earliest nuclear sites safely, securely and cost effectively.

³⁴ HM Government, [Discussion paper on the regulation of nuclear sites in the final stages of decommissioning and clean-up](#), 3 November 2016

³⁵ HM Government, [Consultation on the Regulation of Nuclear Sites in the Final Stages of Decommissioning and Clean-Up](#), 2018

that the Government intended to legislate to amend the NIA65 when parliamentary time allowed.³⁶

The Government has said that existing environmental legislation (the [Environmental Permitting \(England and Wales\) Regulations 2016](#) (SI 2016/1154) and the [Environmental Authorisations \(Scotland\) Regulations 2018](#) (SI 2018/219)) can “provide a robust mechanism for assessing the wider impacts of different clean-up proposals and identifying the best overall solution for the site”. The intention is that this may include disposing of lightly contaminated material on-site, subject to obtaining an environmental permit.³⁷

The Government believes this existing environmental regulation would provide a more proportionate regulatory framework than the current nuclear regulation for the final stages of decommissioning. For this reason, the Government proposes that a nuclear site licence can be ended once the ONR is satisfied that all nuclear safety issues have been addressed and once the site meets internationally agreed standards (specifically, the OECD (Organisation for Economic Co-operation and Development) Nuclear Energy Agency’s 2014 “[Decision And Recommendation Of The Steering Committee Concerning The Application Of The Paris Convention To Nuclear Installations In The Process Of Being Decommissioned](#)”, known as the “Decommissioning Exclusion”).

3.3 Excluding sites from the nuclear third-party liability regime

When does nuclear third-party liability apply?

The liability regime for nuclear accidents in the UK is governed by the NIA65. The NIA65 in turn implements the 1960 [Paris Convention on Third Party Liability in the Field of Nuclear Energy](#) and the 1963 [supplementary Brussels Convention](#) that followed; the UK is a signatory to both. These conventions seek to ensure that in the unlikely event of a nuclear incident there is a minimum amount of compensation available to victims and that claims are channelled to operators of the nuclear installation. These types of treaties are known as nuclear third party liability (NTPL) treaties.

On 1 January 2022 changes to the nuclear third-party liability aspects of the NIA65 took effect following the UK’s ratification of and the coming into force of, the [2004 Protocols to the Paris Convention on Nuclear Third-Party Liability and the Brussels Supplementary Convention on Nuclear Third-Party Liability](#).

³⁶ HM Government, [Amendment of regulation of nuclear sites in the final stages of decommissioning and clean-up: government response](#), October 2018

³⁷ HM Government, [Energy Security Bill factsheet: Proposals to amend the regulatory framework for the final stages of nuclear decommissioning](#), updated 20 March 2023

These changes were implemented domestically via the [Nuclear Installations \(Liability for Damage\) Order 2016](#) (SI 2016/562).

The changes mean that an increased amount of money must be available for compensation, and that compensation is now available for additional types of damage.³⁸ They also mean that all disposal facilities that accept radioactive waste of nuclear origin must have cover for nuclear third-party liability. The Government argues that disposal facilities for some types of low-level and very-low-level radioactive waste³⁹ pose very little risk and requiring them to have nuclear third party liability cover is “disproportionate”.⁴⁰

When does nuclear third-party liability stop applying?

In the UK a nuclear site currently remains subject to the nuclear third-party liability regime until the ONR notifies the licensee that the period of responsibility has ended because the site has met the “no danger” criterion specified in the NIA65.

The Government has said that, at the time that the NIA65 was drafted, detailed consideration had not been given to decommissioning and the practicalities of ending the period of responsibility for licensed nuclear sites using the “no danger” requirement. There was no international guidance and no suitable alternative regulatory framework in place at that time to regulate any residual risks.⁴¹

There is now international guidance, published by the Organisation for Economic Co-operation and Development Nuclear Energy Agency (OECD NEA),⁴² which specifies when certain type of sites can be excluded from the nuclear third-party liability regime and which sets out the conditions that must be met. The guidance was published in 2014 and 2016 and relates to sites being decommissioned (2014) and for low level waste disposals facility sites (2016). These are:

- The 2014 “[Decision And Recommendation Of The Steering Committee Concerning The Application Of The Paris Convention To Nuclear Installations In The Process Of Being Decommissioned](#)”, known as the “Decommissioning Exclusion”, relates to sites being decommissioned.
- The 2016 “[Decision and Recommendation Concerning the Application of the Paris Convention on Third Party Liability in the Field of Nuclear Energy](#)”

³⁸ HM Government, [Ratification of the UK's Nuclear Third-Party Liability Regime](#), 4 March 2022

³⁹ For further information about these categories and definitions see the UK radioactive waste inventory website, [What are the main waste categories?](#) [downloaded 28 February 2023]

⁴⁰ HM Government, [Energy Security Bill factsheet: Proposals to amend the regulatory framework for the final stages of nuclear decommissioning](#), updated 20 March 2023

⁴¹ HM Government, [Consultation on the Regulation of Nuclear Sites in the Final Stages of Decommissioning and Clean-Up](#), May 2018, p21

⁴² The OECD NEA is an intergovernmental agency that facilitates cooperation among countries with advanced nuclear technology infrastructures to “seek excellence in nuclear safety, technology, science, environment and law.” The NEA operates within the framework of the OECD. For further information see NEA, [About Us](#) [accessed on 1 March 2023]

[to Nuclear Installations for the Disposal of Certain Types of Low-level Radioactive Waste](#)”, known as the “Low Level Waste Exclusion”, relates to disposal facilities for low-level radioactive waste.

The Government proposes to allow such sites to exit the requirement for nuclear third-party liability if they meet conditions equivalent to these documents. When the nuclear liability regime ceases to apply, ordinary third-party liability (under ordinary law) would then apply to the site, providing an alternative legal regime for third-party damage or injury.⁴³

3.4 Provision in the bill

Decommissioned nuclear sites

Clause 257 relates to nuclear sites that are being decommissioned. It would make new provisions for:

- when ONR regulation could end
- criteria that decommissioned nuclear sites would need to meet to no longer be required to have nuclear third-party liability

The criteria for these are linked to the OECD NEA 2014 Decommissioning Exclusion. Clause 257 would achieve this by amending the NIA65 provisions on nuclear third-party liability and the processes for revoking and varying a nuclear site licence.

The Government has explained how a nuclear site licence holder could use the provisions in the bill:

Introduce a new surrender mechanism in the NIA65 whereby the licensee must apply to ONR if it wishes to surrender its licence. Once nuclear safety and security matters have been resolved, a licensee would be able to submit an application for licence surrender concurrently with, or subsequent to, the ending of the period of responsibility for third party nuclear liability. This proposal would remove the licensee’s right to surrender its licence without prior approval from ONR. When the period of responsibility for third party nuclear liability has ended and ONR has accepted the surrender of the nuclear licence, HSE and the relevant environment agency would then become the primary regulators for the remaining stages of decommissioning and clean-up.

Amend the NIA65 [the NIA65] to require ONR to also consult with the HSE as well as the relevant environment agency when making the decision to accept surrender of a nuclear licence or a licence variation to exclude part of the site.⁴⁴

⁴³ HM Government, [Consultation on the Regulation of Nuclear Sites in the Final Stages of Decommissioning and Clean-Up](#), May 2018, p26

⁴⁴ HM Government, [Amending the framework for the final stages of nuclear decommissioning and clean-up: Government response to consultation](#), October 2018, p25

Disposal sites

Clause 258 of the bill relates to disposal sites. It excludes certain low-risk sites from the nuclear third-party liability regime, subject to them meeting conditions equivalent to the OECD NEA 2016 Low Level Waste Exclusion.⁴⁵ This clause would also allow the relevant Secretary of State to make regulations:

- specifying conditions that must be met to allow a disposal facility to be excluded from the nuclear third-party liability regime
- specifying which documents must be supplied with an application for exclusion

Further information about what these regulations may contain was published by the Government in an accompanying [Energy Bill Policy Statement: Excluded disposal sites](#) (PDF). In this document the Government said it intended to consult on draft regulations.

These clauses were not amended at any stage in the House of Lords.⁴⁶ They have not attracted specific commentary from stakeholders.

⁴⁵ The “Paris Convention Decommissioning Exclusion Criteria” means the [Decision and Recommendation of the Steering Committee Concerning the Application of the Paris Convention to Nuclear Installations in the Process of Being Decommissioned](#), published on 30 October 2014 by the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development

⁴⁶ House of Lords Grand Committee, [Energy Bill](#), 16 January 2023, c404GC

4 Accession to the Convention on Supplementary Compensation for Nuclear Damage

This part of the bill would allow the UK to join the International Atomic Energy Agency [Convention on Supplementary Compensation for Nuclear Damage](#).

The Government has published a factsheet covering this provision.⁴⁷

4.1 What is the Convention on Supplementary Compensation?

The United Nations (UN) International Atomic Energy Agency (IAEA) [Convention on Supplementary Compensation](#) (CSC) is a form of nuclear third-party liability (NTPL) treaty, similar to those mentioned in section 3 of this briefing. NTPL treaties are international agreements that ensure that, in the unlikely event of a nuclear incident, there is a minimum amount of compensation available to victims and that claims are channelled to operators of the nuclear installation (and not the supply chain).⁴⁸

As set out in the previous section, the UK is already a signatory to two NTPL treaties: the 1960 [Paris Convention on Third Party Liability in the Field of Nuclear Energy](#) and the 1963 [supplementary Brussels Convention](#) that followed. The CSC is a freestanding instrument, independent of, and supplementary to, these existing treaties.

The CSC aims to develop an international nuclear liability regime by establishing a pool of funds that countries can use to provide compensation to victims. The size of the fund depends on how much the contracting parties contribute to the UN and their installed nuclear capacity (at the time of any incident). The exact size of the fund will change over time as reactors come offline and online, exchange rates fluctuate, and UN contribution rates of the contracting parties change.⁴⁹

⁴⁷ HM Government, [Energy Security Bill factsheet: Enabling accession to the Convention on Supplementary Compensation for Nuclear Damage](#), 20 March 2023

⁴⁸ HM Government, [Energy Security Bill factsheet: Enabling accession to the Convention on Supplementary Compensation for Nuclear Damage](#), updated 20 March 2023

⁴⁹ Energy Bill 2022-23, [Explanatory notes to bill 295](#) (PDF), para 91

The Government has said that if the UK were to complete accession, the potential amount the UK would be liable to contribute would be around £7.5 million, with the overall CSC fund totalling £116 million. To date, no party has drawn on this fund since the convention entered into force in April 2015. The UK would also be able to call upon these international funds if it was required.⁵⁰

4.2 Why does the Government want to join the CSC?

The Government has said that being a member of the CSC increases compensation for potential victims of nuclear incidents and makes it clearer who claims should be brought against.⁵¹

It would also increase the number of countries that the UK has reciprocal arrangements with. The Government has said that accession would likely give private sector developers increased confidence in investing in new nuclear projects; offer participants in the UK's nuclear supply chain protection from claims; and reduce the risk of increased costs and timings associated with essential projects such as decommissioning.⁵² It also highlighted that accession would remove some “potential barriers” to future investment:

Key nuclear strategic partners to the UK, including the US, Canada, and Japan, are parties to the CSC. These countries play a significant role in the UK nuclear sector, with the potential to play a much greater role in the government's aims to significantly accelerate new nuclear. Expanding Treaty relations to these key partners removes some of the potential barriers to investment in UK nuclear, as well as offering reciprocal benefits to UK suppliers.⁵³

4.3 Provision in the bill

Clause 259 and schedule 20 would make the necessary amendments to the NIA65 to implement the provisions of the CSC.

The main amendments to the NIA65 will be to section 16, with new subsections (1ZAA) and (3BA) to (3BD) setting out the liability limits for claims relating to the CSC.

⁵⁰ HM Government, [Energy Security Bill factsheet: Enabling accession to the Convention on Supplementary Compensation for Nuclear Damage](#), updated 20 March 2023

⁵¹ HM Government, [Energy Security Bill factsheet: Enabling accession to the Convention on Supplementary Compensation for Nuclear Damage](#), updated 20 March 2023

⁵² Energy Bill 2022-23, [Explanatory notes to bill 295](#) (PDF), para 90

⁵³ HM Government, [Energy Security Bill factsheet: Enabling accession to the Convention on Supplementary Compensation for Nuclear Damage](#), updated 20 March 2023

These clauses were not amended at any stage in the House of Lords. They have not attracted specific commentary from stakeholders.

5 Civil Nuclear Constabulary

The [Civil Nuclear Constabulary](#) (CNC) is an armed police force that is responsible for protecting civil nuclear sites and nuclear materials in England, Scotland and Wales. The Department for Energy Security and Net Zero holds departmental responsibility for the CNC.⁵⁴ The CNC has over 1,300 officers and 300 support staff operating at authorised nuclear sites across the country. However, over the next decade there are plans to decommission five of the six existing nuclear plants that the CNC protect. Whilst new nuclear technology and infrastructure is being developed to replace them, to adapt to the changing energy landscape and its changing security needs, the Bill would extend the powers and remit of the CNC to:

5.1 National security and protection

Clause 260 would insert a new provision into [section 55](#) of the Energy Act 2004 to enable the CNC to provide policing and security services beyond the civil nuclear sector where it would be in the interests of national security. For example, to provide armed guarding services to other facilities that provide “vital services” or “to deliver other protective policing services in response to emerging threat”.⁵⁵

This would be subject to approval from the Secretary of State who would be able to give consent for such an arrangement for a maximum of five years at a time. To agree to this use of the CNC, the Secretary of State would need to be satisfied that the deployment would not detract from the CNC’s core mission to protect civil nuclear sites. The chief constable of the CNC would also be responsible for ensuring the provision of additional security services to non-nuclear sites would not detract from the force’s primary function.

5.2 Supporting other police forces

Clause 261 would also add provision to section 55 of the 2004 Act to enable chief constables of the territorial police forces to request support from the CNC. This could be for the CNC’s specialist support or for additional capacity

⁵⁴ The Home Office holds responsibility for the 43 territorial police forces in England and Wales. Policing is devolved in Scotland with one territorial police force, Police Scotland, for the country.

⁵⁵ [Explanatory Notes](#) (PDF), p89, para 635

if there is something causing a force to experience greater demand, eg in managing a particular event (planned or spontaneous).

When providing assistance under this arrangement, CNC officers would be under the direction and control of the chief officer of the requesting force and would have the same powers and privileges as officers of that force. The chief constable of the CNC would need to ensure that providing additional support to other police forces would not detract from the CNC's primary function to protect nuclear sites.

5.3 Cross-border enforcement

Clause 262 would extend cross-border enforcement powers - currently provided to officers serving in the 43 territorial forces and British Transport Police⁵⁶ - to members of the CNC. These powers enable officers to apprehend suspects in different jurisdictions to those in which they are suspected of committing offences.

The collective aim of these provisions is to ensure the CNC retains specialist personnel with the experience to protect future nuclear sites, whilst delivering an efficient and value for money service through safeguarding other critical infrastructure and supporting other police forces where needed.⁵⁷

In 2021, the (then) Department for Business, Energy and Industrial Strategy⁵⁸ consulted on plans to expand and diversify the CNC's remit. It received 51 responses in total. These were broadly positive about the proposals to allow the CNC to protect other critical national infrastructure sites and support other forces with different types of (non-armed) policing functions.⁵⁹

Some however felt that the CNC should only be deployed outside of its core function in situations of national emergency and heightened security concern. Concerns were also raised about independent oversight of CNC activities conducted away from its licensed sites and reducing public accountability as the CNC's "governing body, the Civil Nuclear Police Authority, is unelected and does not hold open annual general meetings".⁶⁰ Some respondents also noted potential issues around the different "training and capability" of CNC officers compared to other officers. However, the Government notes "the CNC Armed Officer training provision meets the same standards required from all Home Office forces".⁶¹ Behavioural standards in the CNC have also come under scrutiny following high profile cases of officers convicted of violence

⁵⁶ See [part 10](#) of the Criminal Justice and Public Order Act 1994

⁵⁷ Department for Business, Energy, & Industrial Strategy, [Energy Security Bill factsheet: Ensuring the future of the Civil Nuclear Constabulary](#), 6 September 2022.

⁵⁸ Now the Department for Energy Security and Net Zero

⁵⁹ Department for Business, Energy and Industrial Strategy [Civil Nuclear Constabulary: service expansion and diversification: government response to consultation](#) (PDF), 5 August 2021

⁶⁰ As above, p9

⁶¹ As above, p13.

against women, such as Wayne Couzens and David Carrick who had previously served in the CNC.⁶²

The clauses relating to the CNC (260-263) were not debated during the Lords stages of the Bill and no significant amendments were made to them.

⁶² In 2021, [former officer Wayne Couzens was convicted](#) of the murder of Sarah Everard. In 2023, former officer David Carrick [pled guilty to 43 criminal charges](#) (including 20 counts of rape) that spanned from 2003 to 2020. The Independent Office for Police Conduct (IOPC) is [investigating nine CNC officers](#) for allegedly engaging in conversations of a racist, misogynistic, ableist and offensive nature. [Further CNC officers are under IOPC investigation](#) for 'derogatory' WhatsApp messages.

6 Nuclear decommissioning authority pensions reform

6.1 Reforms to public service pensions

The Bill contains provisions to bring Nuclear Decommissioning Authority (NDA) pensions in line with other public service pensions by moving from a final salary scheme (a pension based only on the amount someone is earning at the point when they leave employment with the employer) to a career average scheme (a pension based on someone's average salary while they work for an employer). The majority of public service schemes were reformed under the Public Service Pensions Act 2013, with career average schemes starting in 2015.

The Bill would have an impact on two final salary public service schemes within the Nuclear Decommissioning Authority's Group, the Combined Nuclear Pension Plan and the Magnox Electric Group of the Electricity Supply Pension Scheme. Together both schemes have around 8,000 members who are contributing to their pension and would be affected by the changes.⁶³ Members who are no longer contributing to their pension, for example those who have retired or moved to other employment, would not be affected.

The Government and unions agreed the details of the scheme in 2017 and consulted on the reforms in 2018.⁶⁴ It has been reported that the Prospect Union called on the Government to reconsider the reforms in September 2022 stating that "the context is now very different" to when the agreement was made in 2017.⁶⁵

Further background about the wider public service pension reforms are covered in the Library briefing [Public service pensions- the 2015 reforms](#).

⁶³ Combined Nuclear Pension Plan, [Annual Report 2022](#), 27 October 2022 and Magnox Electric Group of the Electricity Supply Pension Scheme, [Annual Report and Financial Statements for the year ended 31 March 2022](#), 10 October 2022

⁶⁴ Department for Business, Energy and Industrial Strategy, [Energy Security Bill factsheet: Nuclear decommissioning authority pensions reform](#), 20 March 2023

⁶⁵ "[Union urges govt to reconsider ending final salary scheme](#)", FT Adviser [online], 16 September 2022

6.2

Provisions in the Bill

The Government tabled new clauses to the Bill in the Lords in January 2023, which were agreed to at Committee stage.⁶⁶

The **new clauses 264 to 269** in the Bill would give the Secretary of State powers to require the NDA to bring pension schemes for its employees in alignment with changes to other public service pensions. This would enable changes to be made to change the NDA's two final salary public service schemes to career average schemes.

⁶⁶ [HL Deb 16 January 2023 c421GC](#)

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