EXPLANATORY MEMORANDUM TO

THE ENVIRONMENTAL PERMITTING (ELECTRICITY GENERATING STATIONS) (AMENDMENT) REGULATIONS 2025

2025 No. 154

1. Introduction

1.1 This explanatory memorandum has been prepared by the Department for Energy Security and Net Zero and is laid before Parliament by Command of His Majesty.

1.2 This memorandum contains information for the Joint Committee on Statutory Instruments.

2. Declaration

2.1 Michael Shanks MP, Parliamentary Under-Secretary of State for Energy at the Department for Energy Security and Net Zero confirms that this Explanatory Memorandum meets the required standard.

2.2 Katie Ostheimer, Deputy Director for Hydrogen Economy, at the Department for Energy Security and Net Zero confirms that this Explanatory Memorandum meets the required standard.

3. Contact

3.1 Adam Peek (Adam.Peek2@energysecurity.gov.uk) at the Department for Energy Security and Net Zero can be contacted with any queries regarding the instrument.

Part One: Explanation, and context, of the Instrument

4. Overview of the Instrument

What does the legislation do?

4.1 This instrument amends the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ("the Permitting Regulations"), to introduce a new requirement for new and substantially refurbishing combustion plants to include a 'decarbonisation readiness report' as part of their environmental permitting application.

4.2 The scheme will require eligible new and substantially refurbishing combustion plants to be built in such a way that they can be decarbonised in the future, by converting to either hydrogen-firing or retrofit carbon capture technology, within the plant's lifetime.

4.3 These new provisions replace, in England, the requirements currently imposed by the Carbon Capture Readiness (Electricity Generating Stations) Regulations 2013 (S.I. 2013/2696) ("the 2013 Regulations"). These Regulations therefore make consequential amendments to the 2013 Regulations together with related transitional provisions and savings.

Where does the legislation extend to, and apply?

4.4 Parts 1 and 3 extend to England and Wales and Scotland. Part 2 extends to England and Wales.

4.5 The territorial application of this instrument is as set out in regulation 2.

4.6 Schedule 25C applies to England.

5. Policy Context

What is being done and why?

5.1 The transition to a fully decarbonised power system will dramatically increase the need for low carbon flexible technologies and services to balance electricity supply and demand at all times, and to maintain the security and stability of the electricity system. Several of the low carbon flexible technologies expected to play a key future role, including Power Carbon Capture Usage and Storage (CCUS) and hydrogen to power (H2P) are emerging technologies.

5.2 It will take time for these technologies to deploy at scale and therefore we expect unabated combustion plants to continue to play a critical role in order to support security of electricity supply in the short to medium-term, particularly during peaks in demand and when renewable generation is low.

5.3 Decarbonisation Readiness (DR) requirements will ensure that new and substantially refurbishing combustion plants are able to transition to low carbon alternatives, by requiring the operator of such a plant to demonstrate that it satisfies certain technical conditions in relation to the feasibility of using CCUS or conversion to hydrogen. In doing so, DR will act as a critical bridge between the high carbon combustion we need for the system in the short term and the decarbonised power system of the future.

5.4 The requirements are being implemented through the Permitting Regulations, rather than the planning regime as is currently case for the 2013 Regulations. This will prevent the creation of a loophole in which plant operators could avoid the requirements by returning to abandoned projects that had already previously received planning consent.

5.5 DR will also extend the requirements by removing the 300MW threshold which existed within the 2013 regulations, and enable eligible combustion plants to demonstrate DR through conversion to hydrogen firing, as well as CCUS retrofit. This will ensure that the requirements keep pace with technological developments and are in line with the governments ambition of decarbonising the power sector by 2035, subject to security of supply.

What was the previous policy, how is this different?

5.6 The 2013 Regulations provided that planning consent could only be granted to combustion plants in Great Britain sized above 300 MW where the relevant authority had determined that it was technically and economically feasible to retrofit the equipment necessary to capture the carbon dioxide that would otherwise be emitted from the plant, and to transport and store such carbon dioxide from the site.

5.7 Since the Carbon Capture Readiness (CCR) requirements were introduced, the energy landscape in Great Britain has changed significantly, with a strong need to go further and faster on the decarbonisation of the power sector to reach both our legally binding

Carbon Budget Six (CB6) obligations and Government's own commitment to decarbonise the power system by 2035, subject to security of supply.

5.8 Decarbonisation Readiness updates the CCR requirements by removing the 300MW threshold; expanding the scope of the requirements to include biomass, energy from waste, and combined heat and power plants; moving the requirements from the planning to the permitting regime; extending the requirements to include substantially refurbishing combustion power plants, and introducing hydrogen generation as an alternative decarbonisation route alongside conversion to carbon capture and storage.

6. Legislative and Legal Context

How has the law changed?

6.1 The 2013 Regulations transposed Article 36 of Directive 2010/75/EU of the European Parliament and of the Council of 24th November 2010 on industrial emissions (integrated pollution and prevention and control).

6.2 The UK formally left the EU on 31st January 2020. These new provisions replace, in England, the requirements currently imposed by the 2013 Regulations. These Regulations therefore make consequential amendments to the 2013 Regulations together with related transitional provisions and savings.

6.3 These Regulations amend the Permitting Regulations and insert a new Schedule (25C). The relevant authority (the Environment Agency) will be able to grant the relevant environmental permit, or variation of the relevant environmental permit, only if the operator has submitted a decarbonisation readiness report and the Agency determines that the baseline requirements are met.

Why was this approach taken to change the law?

6.4 This is the only possible approach to make the necessary changes. The powers under which the 2013 Regulations were made are no longer available, and the Pollution Prevention and Control Act 1999 alone provides the requisite enabling powers. Amending the Permitting Regulations provides the most efficient method of implementing the policy.

7. Consultation

7.1 The DR public consultation ran between 13th March and 24th April 2023. The consultation was published on Gov.uk[1] alongside a draft Impact Assessment and two technical studies on 'Hydrogen Readiness' and 'Carbon Capture Readiness'[2].

7.2 29 responses were received from a range of stakeholders, including developers, original equipment manufacturers, energy from waste operators and trade associations. The proposals were broadly supported by respondents with feedback generally requesting more detail on specific proposals, such as the exemptions for

[1] https://www.gov.uk/government/consultations/decarbonisation-readiness-updates-to-the-2009-carbon-capture-readiness-requirements
[2] https://www.gov.uk/government/publications/decarbonisation-readiness-of-electricity-generators-technical-studies

certain types of plants. A full summary of the responses can be found in the corresponding Decarbonisation Readiness: Government Response to Consultation[3].

7.3 As these proposals only relate to England we did not consult directly with the devolved administrations. However, we have engaged with the Scottish and Welsh governments to understand the alignment between decarbonisation readiness in England and their respective policies for H2P and CCUS. Moreover, a joint call for evidence was held with the Welsh government in 2021 to provide the evidence base for these reforms[4]. Following that call for evidence, the Welsh government chose to issue a separate response and develop their own regime.

8. Applicable Guidance

8.1 The Environment Agency are aiming to publish interpretive guidance well in advance of the requirements coming into force on 28 February 2026. They will consult on draft guidance before publishing a finalised version.

Part Two: Impact and the Better Regulation Framework

9. Impact Assessment

9.1 A full Impact Assessment has not been published for this instrument because the requirements are not expected to have a significant cost to business.

Impact on businesses, charities and voluntary bodies

9.2 There is no, or no significant, impact on charities or voluntary bodies.

9.3 We expect the Regulations will have impacts on some small and micro businesses that would develop new combustion power plants or refurbish existing ones. It would not be appropriate to exempt these businesses as they currently constitute a significant proportion of all combustion power plants and therefore excluding them from this requirement would not be in line with our power sector decarbonisation ambition and Carbon Budget targets.

9.4 There is no significant impact on the public sector. The Environment Agency (EA) will incur a small cost to prepare their systems and capacity ahead of the requirements coming into force. The government will provide the EA with transitional funding support to cover these initial costs. Once these Regulations are in force, the EA will be funded through the standard environmental permitting regime.

10. Monitoring and review

What is the approach to monitoring and reviewing this legislation?

10.1 The Secretary of State is required to undertake a statutory review under regulation 80 of the Permitting Regulations. This review section requires the Secretary of State to publish a report setting out the conclusions of the review at intervals not exceeding five years.

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[3] https://www.gov.uk/government/consultations/decarbonisation-readiness-updates-to-the-2009-carbon-capture-readiness-requirements [Note this hasn't been published yet]

[4] https://www.gov.uk/government/calls-for-evidence/decarbonisation-readiness-call-for-evidence-on-the-expansion-of-the-2009-carbon-capture-readiness-requirements

Part Three: Statements and Matters of Particular Interest to Parliament

11. Matters of special interest to Parliament

11.1 None.

12. European Convention on Human Rights

12.1 The Minister for Energy has made the following statement regarding Human Rights:

"In my view the provisions of the Environmental Permitting (Electricity Generating Stations) (Amendment) Regulations 2025 are compatible with the Convention rights."

13. The Relevant European Union Acts

13.1 This instrument is not made under the European Union (Withdrawal) Act 2018, the European Union (Future Relationship) Act 2020 or the Retained EU Law (Revocation and Reform) Act 2023 ("relevant European Union Acts"). It does however relate to the withdrawal of the United Kingdom from the European Union because the 2013 Regulations originally transposed Article 36 of Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control).