EXPLANATORY MEMORANDUM TO

THE PETROLEUM ACT 1998 (SPECIFIED PIPELINES) (AMENDMENT) AND IMPORTATION AND STORAGE OF COMBUSTIBLE GAS (DESIGNATION OF SUBSTANCE ETC.) ORDER 2023

2023 No. 971

1. Introduction

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

2. Purpose of the instrument

2.1 This instrument extends the regime for authorising the construction and use of offshore pipelines set out in Part 3 of the Petroleum Act 1998 to cover hydrogen pipelines; extends the offshore gas storage (etc.) licensing regime in Chapter 2, Part 1 of the Energy Act 2008 to cover hydrogen storage (etc.); and makes a consequential amendment to the model clauses prescribed for gas storage (etc.) licences.

2.2 These changes are intended to enable better regulation of first-of-a-kind (FOAK) offshore hydrogen projects and reduce regulatory uncertainty for businesses investing in this space.

3. Matters of special interest to Parliament

Matters of special interest to the Joint Committee on Statutory Instruments

3.1 None.

4. Extent and Territorial Application

4.1 This instrument extends and applies to the United Kingdom, though it relates solely to the regulation of offshore activities within the UK territorial sea, the area designated under section 1(7) of the Continental Shelf Act 1964, and/or the area designated as a Gas Importation and Storage Zone under section 1(5) of the Energy Act 2008, depending on the article in question.

5. European Convention on Human Rights

5.1 As the instrument is subject to the negative resolution procedure and does not amend primary legislation, no statement is required.

6. Legislative Context

6.1 There is currently no clear regulatory framework governing the construction and use of offshore hydrogen transport and storage infrastructure. In anticipation of the emergence of FOAK offshore hydrogen infrastructure projects, this legislation seeks to remedy that fact, extending existing oil and gas frameworks to cover hydrogen.

6.2 Part 3 of the Petroleum Act 1998 sets out a regime for authorising the construction and use of offshore pipelines. The Petroleum Act 1998 (Specified Pipelines) Order 2011 specifies pipelines that are to be disregarded for the purposes of that regime, and effectively restricts the application of Part 3 of the 1998 Act to certain pipelines relating to oil, natural gas and carbon dioxide. This instrument amends the 2011 Order so that hydrogen pipelines are no longer excluded from the application of Part 3 of the 1998 Act. This means that an authorisation from the North Sea Transition Authority (NSTA) will be required to construct or use a hydrogen pipeline in the UK territorial sea or UK continental shelf. The NSTA is the business name of the Oil and Gas Authority.

6.3 Part 2, Chapter 1 of the Energy Act 2008 provides for a licensing regime governing the offshore storage and unloading of certain gases (excluding hydrogen) in the UK territorial sea and the area extending beyond the territorial sea that has been designated as a Gas Importation and Storage Zone under section 1(5) of that Act. This instrument designates hydrogen as a gas for the purposes of this licensing regime, meaning that the storage and unloading of hydrogen in the relevant offshore areas will require a licence from the NSTA. The instrument also updates the definition of gas in the model clauses prescribed for licences relating to the storage of gas, so that it includes hydrogen.

6.4 These changes in turn mean that the decommissioning regime set out in Part 4 of the Petroleum Act 1998, which applies in respect of "submarine pipelines" and "offshore installations", will, by virtue of the way these terms are defined, apply to hydrogen pipelines and hydrogen storage and unloading infrastructure. Such infrastructure will also, as a consequence of these changes, be brought in scope of the environmental impact assessment regime set out in the Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020. Both regimes are administered by the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED).

6.5 The instrument relies on the power in section 105 of the Deregulation Act 2015 to combine different types of subordinate legislation.

7. Policy background

What is being done and why?

7.1 The government has an ambition of 10GW of low carbon hydrogen production capacity by 2030¸ with at least half of this coming from electrolytic ('green') production.

7.2 Hydrogen transport and storage infrastructure represents a critical next step to enable this 10GW ambition and related economic benefits.

7.3 There is currently no comprehensive regulatory framework governing the construction and use of offshore hydrogen pipelines and storage infrastructure. Existing regulatory frameworks governing offshore oil and gas transport and storage infrastructure were not designed to accommodate hydrogen. These changes adapt those frameworks, so they apply to hydrogen.

7.4 They are being introduced to support FOAK offshore hydrogen projects. FOAK hydrogen projects are world-leading demonstrations aiming to produce hydrogen offshore using offshore wind. However, without a clear regulatory framework in place, projects may be delayed or cancelled, jeopardising wider opportunities to

achieve the UK's hydrogen ambitions. The changes are therefore being made to encourage and facilitate FOAK hydrogen project development while also ensuring such projects are conducted with proper regulatory oversight.

7.5 Our changes bring offshore hydrogen pipelines within scope of the petroleum works authorisation (PWA) regime provided for in Part 3 of the Petroleum Act 1998. This regime gives the NSTA regulatory oversight of the construction and use of offshore pipelines that fall within its scope. Previously, the only pipelines that were in scope of the PWA regime were those relating to oil, natural gas and carbon dioxide. As the NSTA has well established technical processes and expertise to regulate offshore oil and gas activities, the Government recognises the benefits of extending the current PWA regime administered by the NSTA to provide an operable and consistent regulatory regime for offshore hydrogen pipelines which is well established and understood by industry.

7.6 Once in scope of the PWA regime, hydrogen pipelines will also fall within scope of the decommissioning provisions in Part 4 of the 1998 Act. This will enable OPRED to operate a functioning decommissioning regime for offshore hydrogen pipelines. This regime aims to achieve effective and balanced decommissioning solutions, which are consistent with international obligations and have a proper regard for safety, the environment, other legitimate users of the sea, economic and social considerations as well as technical feasibility. It protects the taxpayer from decommissioning liabilities and ensures that those who have benefited from the exploitation or production of oil and gas bear the responsibility for decommissioning. Hydrogen pipelines in scope of the PWA regime will also be subject to environmental impact assessment by OPRED.

7.7 We are also designating hydrogen as a gas under section 2(4) of the Energy Act 2008. This will enable the NSTA to issue licences for the offshore activities listed under section 2(3) of that Act in respect of hydrogen, including offshore hydrogen storage. The NSTA has well established technical processes and expertise of sub surface storage and the data management of offshore energy activities, which could support future security of supply and wider network management. This designation in turn means that the infrastructure involved in these activities, such as hydrogen storage facilities, would generally fall within scope of the decommissioning regime in Part 4 of the Petroleum Act, administered by OPRED, explained in more detail above. It also means hydrogen storage and unloading infrastructure will be subject to environmental impact assessment by OPRED.

7.8 Extending the existing remits of the NSTA and OPRED to cover hydrogen infrastructure and activities will enable regulatory coordination across sectors.

7.9 Finally, we are updating the model clauses prescribed for offshore gas storage licences to reflect the fact that the gas in question might be hydrogen. These prescribed model clauses are deemed to be incorporated into relevant licences, though a clause can be excluded or modified in the case of any particular licence.

7.10 These proposals are of specific interest to hydrogen economy stakeholders, evidenced from the responses received to the Offshore Hydrogen Regulation Consultation.

8. European Union Withdrawal and Future Relationship

8.1 This instrument does not relate to withdrawal from the European Union / trigger the statement requirements under the European Union (Withdrawal) Act.

9. Consolidation

9.1 No consolidation is planned.

10. Consultation outcome

10.1 To seek views on proposals for secondary legislation changes to extend existing oil and gas pipeline and storage regulatory frameworks to cover hydrogen, on 24 April 2023 the UK Government published the Offshore Hydrogen Regulation Consultation, which closed for responses on 22 May 2023. The consultation was open to all to respond but was of specific interest to hydrogen economy stakeholders. Eighteen responses to the consultation were received; we received significant agreement on our proposals as 94% of respondents agreed with our regulatory proposal to specify hydrogen pipelines to be covered by Part 3 of the Petroleum Act 1998, with 6% of respondents being unsure. Additionally, 100% of respondents agreed with our regulatory proposal to designate hydrogen as a gas under section 2(4) of the Energy Act 2008.

10.2 The government response to the consultation alongside a summary of the responses received was published on 6th September 2023: www.gov.uk/government/consultations/proposals-for-offshore-hydrogen-regulation.

11. Guidance

11.1 The principles of the existing regulatory guidance published by NSTA and OPRED remain relevant. Regulatory guidance from DESNZ to UK industry and regulators is not currently planned.

12. Impact

12.1 The impact on business, charities or voluntary bodies is expected to be less than £5 million.

12.2 There is no significant impact on the public sector.

12.3 A full Impact Assessment has not been prepared for this instrument because of the low level impact on businesses (less than £5 million). Instead, a de minimis assessment has been prepared for this instrument. We estimate the EANDCB (equivalent annual direct costs to businesses) to be £320,000 over the 10-year appraisal period of 2023-2032. The cost estimates are indicative, based on assumptions about the hydrogen market which does not currently exist.

13. Regulating small business

13.1 The legislation applies to activities that are undertaken by small businesses.

14. Monitoring & review

14.1 A statutory review clause is not included in the instrument.

15. Contact

15.1 Sabeeha Tahir at the Department for Energy Security and Net Zero, email: sabeeha.tahir@beis.gov.uk can be contacted with any queries regarding the instrument.

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

15.3 Lord Callanan at the Department for Energy Security and Net Zero can confirm that this Explanatory Memorandum meets the required standard.