Yorkshire GREEN Project

Environmental Impact Assessment

Preliminary Environmental Information Report
Volume two Chapter 1 Introduction

October 2021

nationalgrid

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1. Introduction

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1.1 Introduction to this Preliminary Environmental Information Report

1.1.1 This Preliminary Environmental Information Report (PEIR) is the written output of the Environmental Impact Assessment (EIA) undertaken to date for the Yorkshire Green Energy Enablement (GREEN) Project ('the 'Project' or 'Yorkshire GREEN'), formerly known as the Central Yorkshire Reinforcement (CYR) project. Although preliminary, the findings of the assessment are set out within this report to allow an informed view to be developed of the Project that is being promoted, the assessment approach that has been undertaken, to draw preliminary conclusions on the likely significant effects of the Project and the environmental measures proposed.

1.1.2 The requirement to consult on Preliminary Environmental Information is set out in The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations')[1]. Regulation 12(1)(b) requires the applicant to set out in a statement of community consultation (SoCC) prepared under section 47 of the Planning Act 2008[2], how it '*intends to publicise and consult on preliminary environmental information'* (where the proposed development is 'EIA development' (**Section 1.3**)). In accordance with section 47(7) of the Planning Act 2008, the applicant is required to carry out consultation in accordance with the SoCC.

1.1.3 Preliminary environmental information is defined in Regulation 12(2) of the EIA Regulations as *"information referred to in regulation 14(2) which (a) has been compiled by the applicant; and (b) is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)*".

1.1.4 By providing a preliminary view of the assessment's findings, the PEIR allows an informed view to be made of the Project's likely significant effects identified to date, to support consultation. The PEIR has regard to the preliminary stage in the design process and has taken into account the complexities of the Project and the receiving environment.

1.1.5 This PEIR has been prepared for the purposes of statutory consultation prior to submission of an application for development consent and associated Environmental Statement (ES). The purpose of this document is to enable members of the public, consultation bodies and other stakeholders to develop an informed view of the likely significant effects, as identified at this stage, and comment on particular aspects of interest.

1.1.6 Consultation feedback will inform the ongoing development of the Project. The design of the Project and therefore the assessment of its effects will continue to evolve in response to consultation, and as further baseline information becomes available. As such, information on the likely significant effects (material to the decision-making process) may change. However, the baseline information presented in the PEIR is

[1] The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Online). Available from: https://www.legislation.gov.uk/uksi/2017/572/regulation/31/made (Accessed 14 October 2021).
[2] The Planning Act 2008 (Online). Available from: https://www.legislation.gov.uk/ukpga/2008/29/contents (Accessed 14 October 2021)

considered to be sufficient to inform the preliminary assessment of the Project and is further informed by the judgement of specialists undertaking the environmental studies.

1.2 Overview of the Yorkshire GREEN Project

1.2.1 National Grid Electricity Transmission (NGET) ("National Grid") propose to upgrade and reinforce the electricity transmission system in Yorkshire. This reinforcement is needed to improve the transfer of clean energy across the country. It will support the Government's commitment to quadruple the UK's offshore wind capacity by 2030. It will also support growth in this source of green energy in Scotland and the north-east of England by providing the capability to efficiently manage substantially increased power flows in Great Britain and increased energy demand, which the Climate Change Committee (CCC) predicts will double by 2050. Further information about the Project need is provided in **Chapter 2: Project Need and Alternatives**.

1.2.2 The Project is sited within Yorkshire, with the most northerly components located approximately 1.5km north-east of the village of Shipton and approximately 10km north-west of York city centre, and the most southerly components at the existing Monk Fryston Substation, located to the east of the A1 and immediately south of the A63 (see **Figure 1.1**). **Figure 1.2** shows the key components for the proposed Project.

1.2.3 The Project will comprise both new infrastructure and works to existing transmission infrastructure and facilities. The new elements of the Project would include a proposed substation (Overton Substation[3]) approximately 1km south of Shipton by Beningborough. Three new overhead lines would connect into this substation. To the north a new 400kV overhead line, approximately 2.8km in length, would connect the substation with an existing overhead line to the north. To the south two new 275kV overhead lines (1.5km to 2.1km in length) would connect the substation with an existing overhead line further south. Cable sealing end compounds would be installed to help facilitate the connection of the new overhead lines with the existing overhead lines in the wider area, with two installed approximately 1.5km north-east of Shipton by Beningbrough and two installed approximately 3km south-west of Tadcaster and north-east of the A64/A659 junction. A new substation would also be constructed adjacent to the existing substation at Monk Fryston approximately 2km south-west of Monk Fryston and located off Rawfield Lane, south of the A63.

1.2.4 Works proposed to existing overhead lines in the wider area include replacing existing overhead line conductors, replacement of pylon fittings, strengthening of steelwork and works to pylon foundations. Two overhead lines which currently connect into the existing Monk Fryston Substation would be partially realigned to connect into the proposed Monk Fryston Substation. In addition, a number of pylons on the existing overhead line running between Monk Fryston and Poppleton to the north-west of York would be replaced and the overhead line realigned as follows:

- a 1.5km section of overhead line to the south and south-east of Moor Monkton would be realigned up to 230m south from the current overhead line and the closest pylon to Moor Monkton (340m south-east) removed; and
- a 1.45km section of overhead line to the west of the existing Monk Fryston substation and south of South Pollums Farm would be realigned to connect to the proposed Monk Fryston Substation.

[3] In earlier stages of the Project this substation was known as 'York North Substation' but has been renamed as Overton Substation.

1.2.5 A 2.35km section of this overhead line would also be permanently removed.

1.2.6 The Project also includes minor works at Osbaldwick Substation. Further detail about the Project is provided in **Chapter 3: Description of the Project**.

1.2.7 The Project is defined as a Nationally Significant Infrastructure Project (NSIP) under Section 14(1)(b) and Section 16 of the Planning Act 2008[2] as it comprises new overhead electricity transmission connections of more than 2km in length, with an operating voltage above 132kV.

1.2.8 National Grid intends to submit an application for an order granting development consent (Development Consent Order (DCO)) for the Project under Section 37 of the Planning Act 2008[2] to the Secretary of State. The application will comprise details of the development proposals and will be accompanied by an ES conforming to the EIA Regulations.

1.3 The need for an Environmental Impact Assessment

1.3.1 EIA is a process required by UK law which brings together information about the likely significant effects of a development. The legal basis for EIA arises from the EIA Regulations which were made to implement European Community Directive 85/337/EEC3[4] (the 'EIA Directive') prior to the UK leaving the EU. The EIA Regulations, which set out the procedures to be followed in relation to EIAs undertaken for NSIPs in England and Wales, continue to have effect notwithstanding the UK's departure from the EU.

1.3.2 EIA is mandatory for development projects defined under Schedule 1 of the EIA Regulations. Those development projects defined in Schedule 2 only require EIA if they are likely to have significant effects on the environment by virtue of their nature, size or location.

1.3.3 As the proposed length of the overhead lines is less than 15km, the Project does not fall within the provisions of Schedule 1. The Project falls within paragraph 3(b) of Schedule 2, as it comprises "*transmission of electrical energy by overhead cables*". As set out in paragraph 1.4.5 of the EIA Scoping Report[5], considering the nature and size of the Project, National Grid gave notice in line with Regulation 8(1)(b) of the EIA Regulations that an EIA will be prepared for the Project and that the application for a DCO will be accompanied by an ES.

1.4 The applicant and the EIA team

The applicant

1.4.1 National Grid owns the high voltage electricity transmission system in England and Wales and operates the high voltage electricity network throughout Great Britain, transporting electricity from generators (such as power stations and wind farms) to local distribution network operators (DNOs). DNOs, such as Northern Powergrid, are the companies that own and operate the local power lines and infrastructure that delivers electricity to individual properties. National Grid's network does not connect directly to

[4] The EIA Directive (85/337/EEC) [online]. Available at: https://ec.europa.eu/environment/eia/eia-legalcontext.htm [Accessed 12 May 2021].
[5] National Grid, March 2021, Environmental Impact Assessment Scoping Report: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020024/EN020024-000008-YGRN%20Scoping%20Report.pdf

homes and businesses, because the voltage at which it transmits electricity is too high for domestic and commercial properties.

1.4.2 The electricity transmission system is made up largely of 400kV, 275kV and 132kV assets connecting separately owned generators and interconnectors with the demand for electricity fed directly from the transmission and distribution systems. The 'transmission' classification in England and Wales applies to assets at 275kV and above. The electricity transmission system comprises some 7,200km of overhead lines, 700km of underground cable and around 340 substations. At the substations, electricity that has been produced by generators is connected to the transmission system and the primary transmission voltage of 400kV or 275kV is transformed to lower voltages for the DNOs to distribute.

1.4.3 The electricity transmission system is designed to make sure there is sufficient transmission capacity to allow the system to be operated in an economic and efficient way by the Electricity System Operator (ESO), ensuring power can be moved from where it is generated to demand centres across the UK. This planning and development of the electricity transmission system is governed by the Security and Quality of Supply Standards (SQSS)[6] which ensure that the network is developed and operated securely and is resilient to any foreseeable network faults and disruption.

The EIA team

1.4.4 Regulation 14(4) of the EIA Regulations requires that an ES is prepared by 'competent experts' and that the ES is accompanied by a statement outlining the relevant expertise or qualifications of such experts.

1.4.5 This report and the EIA for the Project are being undertaken by suitably qualified and experienced specialists (competent experts). This report has been produced and co-ordinated by environmental consultants who are members of the Institute of Environmental Management and Assessment's (IEMA) EIA Quality Mark scheme. The Quality Mark requires its members to provide evidence of their EIA activities and adhere to certain commitments set out by IEMA. IEMA carry out an independent audit of those commitments each year by reviewing the ES's produced by Quality Mark members.

1.4.6 Competent experts have also been responsible for preparing aspect specific chapters of this report and further details of their expertise and qualifications are provided in **Appendix 1A**.

1.5 Structure of the PEIR

1.5.1 The PEIR comprises 4 volumes:

- **Volume 1** is a Non-Technical Summary (NTS), which is also available as a standalone document.
- **Volume 2** (i.e. this volume) is sub-divided into the following chapters:
  - **Chapter 2** explains the need for Yorkshire GREEN, outlines the main alternatives considered for meeting this need and indicates the main reasons for the preferred choice.
  - **Chapter 3** provides a detailed description of the Project.

[6] National Electricity Transmission System, 01 April 2021, Security and Quality of Supply Standard Version 2.5: https://www.nationalgrideso.com/document/189561/download

- **Chapter 4** details the approach and methodology that has been adopted in preparing the PEIR.
- **Chapter 5** provides an overview of the legislation and policies that are relevant to the PEIR as well as an overview of the consultation and engagement undertaken to date and planned to be undertaken.
- **Chapters 6** to **16** set out the technical assessments for the environmental aspects that need to be considered in the PEIR.

- **Volume 3** contains the appendices referred to in the PEIR.
- **Volume 4** contains the figures referred to in the aforementioned volumes.

1.5.2 An abbreviations list and glossary is also provided.

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