

AENC-ARC-ETA-REP-0012

Norwich to Tilbury

Volume 7: Other Documents

Document: 7.14 Equality Impact Assessment

Final Issue A

August 2025

Planning Inspectorate Reference: EN020027

Infrastructure Planning (Applications: Prescribed Forms and Procedure)
Regulations 2009 Regulation 5(2)(a)

nationalgrid

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Executive summary

Introduction

This Equality Impact Assessment (EqIA) assesses the potential impacts of National Grid Electricity Transmission plc's (National Grid) Norwich to Tilbury Project (the Proposed Project) on protected characteristic groups, as defined under the Equality Act 2010. The assessment considers how the consultation, construction, operation, and decommissioning phases of the Proposed Project may differentially or disproportionately affect these groups.

The purpose of the EqIA is to assist the Secretary of State in determining National Grid's application for development consent for the Proposed Project. The EqIA demonstrates that due regard has been given to the aims of the Public Sector Equality Duty (PSED) and s149 of the Equality Act 2010. Those subject to the PSED are required to have due regard to:

- Eliminating unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act;
- Advancing equality of opportunity between people who share a protected characteristic and those who do not; and
- Fostering good relations between people who share a protected characteristic and those who do not.

Although National Grid is not itself subject to the PSED, the Secretary of State is, and must have regard to these requirements in determining the outcome of the application for development consent.

The Project comprises reinforcement of the transmission network between the existing Norwich Main Substation in Norfolk and a new Tilbury North Substation in Essex, as well as connecting new offshore wind generation and an interconnector proposed to come ashore on, or in the vicinity of, the Tendring Peninsula.

A desk-based review was undertaken to inform the assessment of potential equality impacts. This involved: review of relevant legislation and policy, review of all relevant project documentation being submitted as part of the development consent application, review and analysis of population data on protected characteristic groups and socioeconomic deprivation, and review of pre-application consultation and engagement activities.

The applicant embraces diversity, and this is reflected in its core values and Code of Ethics documents. As part of the consultations undertaken for the Project (including non-statutory, statutory and targeted consultations), methods were deployed to engage Hard to Reach Groups (HRGs), for example both digital and in-person formats, youth engagement and the use of advertising events in both traditional news papers and via social media. Feedback forms used during consultation sought to gather data on who had engaged with the consultations, including questions on diversity.

During construction, specific topics assessed within the ES were identified as having the potential to affect groups with protected characteristics in a greater or different way to how they would affect the wider population. For example, impacts on air quality and dust levels, impacts on PRow, changes to views and landscape character, noise impacts, and impacts associated with traffic flows.

Once operational, and following the embedded measures incorporated into the design to reduce environmental impacts, changes in views and landscape character was identified as an impact that could affect some groups with protected characteristics in a different or greater way than the wider population.

Summary of Potential impacts

The EqIA identifies various potential impacts on protected characteristic groups during the different stages of the Proposed Project. These are summarised below:

Construction

- People with neurodivergent conditions, such as autism, may be more sensitive to changes in their visual landscape and increased noise levels associated with construction activities, which could lead to increased anxiety and distress.
- Short term changes to PRowS, specifically increased distances and severance, may affect younger, older or disabled people to a greater extent, due to their potential increased reliance on the use of PRow over private car use.
- Increased construction traffic could have a greater impact on older people and people with disabilities; or have a disproportional impact on those with protected characteristics if in proximity to local facilities such as schools and religious buildings.
- Dust and other particulate emissions from construction activities themselves, or from construction traffic and the operation of construction plant has the potential to affect those with pre-existing conditions (such as respiratory conditions such as asthma). Children and the elderly are potentially more vulnerable to these effects.
- Those more sensitive to changes in noise and vibration levels may experience an impact associated with traffic related noise and noise generated by construction activities themselves. Those groups more likely to be affected might include children, young people, the elderly, people with disabilities, pregnant women and those visiting places of worship. Elevated noise levels may also have an effect on schools and other educational establishments.
- Changes to the landscape may have an impact on certain neurodivergent individuals who are particularly sensitive to changes in their environment.

Operation

- People with neurodivergent conditions may be more sensitive to permanent changes in their visual landscape and may take more time to adjust to these changes.

Mitigation of Impacts During Construction and Operation

Impacts of the Project in terms of its specific effect on those with protected characteristics during construction and operation are mitigated through embedded design measures, good practice, management of construction processes, and additional mitigation through the design development. Impacts during construction will be temporary and short term.

Conclusion

The EqlA demonstrates that National Grid has paid due regard to the needs of protected characteristic groups. It provides the Secretary of State with the necessary information to have regard to the requirements of the Equality Act 2010 and the PSED when determining the application for development consent.

A number of negative equality impacts have been identified during construction and decommissioning. However, these impacts are not expected to be substantial in nature and are mitigated through embedded design measures, good practice construction management, and additional mitigation where required. During operation, equality impacts are expected to be minimal.

The project will also deliver wider societal benefits, including improved energy security and support for renewable energy integration, which may positively affect all communities, including those with protected characteristics.

1. Introduction

1.1 Project Background

- 1.1.1 National Grid Electricity Transmission PLC (the Applicant) is promoting an application for development consent to provide the transmission network between Norwich to Tilbury, a Nationally Significant Infrastructure Project (NSIP). Norwich to Tilbury ('the project') would be achieved by the construction and operation of a new electricity transmission line over a distance of approximately 180 km, the majority of which would follow the general alignment of the existing overhead line network, as well as underground cabling. The Project comprises reinforcement of the transmission network between the existing Norwich Main Substation in Norfolk and Tilbury Substation in Essex, via Bramford Substation, the new East Anglia Connection Node (EACN) Substation and the new Tilbury North Substation.
- 1.1.2 This document presents an assessment of the potential equality effects, informed by baseline data and outcomes of public consultation and engagement events. Mitigation measures have been identified where appropriate to avoid, reduce or offset any adverse effects identified and / or enhance likely beneficial effects.
- 1.1.3 Although National Grid is not itself subject to the PSED, the Secretary of State is, and must have regard to these requirements in determining the outcome of the application for development consent.

1.2 Purpose of the Equality Impact Assessment

- 1.2.1 The Equality Act 2010 provides people with legal protection from discrimination. It sets out different ways in which it is unlawful for someone to be treated. The Public Sector Equality Duty (the PSED) was created under the Equality Act 2010 and came into force in 2011 to harmonise the equality duties and in particular, to require those subject to it to have due regard to:
- Eliminating unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act;
 - Advancing equality of opportunity between people who share a protected characteristic (defined below) and those who do not; and
 - Fostering good relations between people who share a protected characteristic and those who do not.
- 1.2.2 Equality Impact Assessment (EqIA) is a tool used to identify and address equality issues that may arise from a policy, a programme or a proposal. The aim is to promote equality and to avoid discrimination.
- 1.2.3 The aim of this EqIA is to identify and assess any impacts of the proposals on people with relevant protected characteristics under the Equality Act 2010 who live or work in areas affected by the project. These protected characteristics (defined in section 149 of the Equality Act 2010) are age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.

- 1.2.4 The Applicant is committed to understanding and managing the potential impacts of the project on people who have characteristics that are protected under the Equality Act 2010. Whilst the Applicant is not a public body and is not bound by the PSED requirements of the Equality Act 2010, the Secretary of State is, and must have regard to the requirements in determining the outcome of the application for development consent for the project. As such, this EqlA provides the Secretary of State with relevant information to assist in their determination.
- 1.2.5 Whilst the PSED does not apply to the Applicant, nevertheless the Applicant has had due regard to the matters set out in s149(1) of the Equality Act 2010. This document explains how that has been done, and how the Applicant has sought to maximise equal opportunities and foster good relations with those individuals with protected characteristics in the local area.
- 1.2.6 This EqlA considers the construction, operation and decommissioning of the project and other project related activities or decisions, such as community consultation and engagement, to demonstrate how equality, diversity and inclusion principles have been properly considered, and that proposals have given due regard to the needs of all protected characteristic groups (PCG).
- 1.2.7 This EqlA has been prepared using available demographic data including baseline information presented in the Environmental Statement (ES) in Volume 6 of the development consent order (DCO) application. See Chapter 3 of this EqlA 'Overview of relevant demographic data' for further details.

1.3 Description of the Project

- 1.3.1 A detailed description of the proposals is set out in ES Chapter 4: Project Description (application document 6.4), beginning at Paragraph 1.1.5. The project description is included in this section to provide context for the EqlA.
- 1.3.2 The Project is a proposal by National Grid to upgrade the electricity transmission system in East Anglia between Norwich and Tilbury, comprising:
- A new 400 kilovolt (kV) electricity transmission connection of approximately 180 km overall length from Norwich Main Substation to Tilbury Substation via Bramford Substation, a new East Anglia Connection Node (EACN) Substation and a new Tilbury North Substation, including:
 - Approximately 159 km of new overhead line supported on approximately 509 pylons, either standard steel lattice pylons (approximately 50 m in height) or low height steel lattice pylons (approximately 40 m in height) and some of which would be gantries (typically up to 15 m in height) within proposed Cable Sealing End (CSE) compounds or existing or proposed substations
 - Approximately 21 km of 400 kV underground cabling, some of which would be located through the Dedham Vale National Landscape (an Area of Outstanding Natural Beauty (AONB1))
 - Up to seven new CSE compounds (with permanent access) to connect the overhead lines to the underground cables
 - Modification works to connect into the existing Norwich Main Substation and a substation extension at the existing Bramford Substation

- A new 400 kV substation on the Tendring Peninsula, referred to as the EACN Substation (with a new permanent access). This is proposed to be an Air Insulated Switchgear (AIS) substation
 - A new 400 kV substation to the south of Orsett Golf Course in Essex, referred to as the Tilbury North Substation (with a new permanent access). This is proposed to be a Gas Insulated Switchgear (GIS) substation
 - Modifications to the existing National Grid Electricity Transmission overhead lines to facilitate the connection of the existing network into the new Tilbury North Substation to provide connection to the Tilbury Substation
 - Ancillary and/or temporary works associated with the construction of the Project.
- 1.3.3 In addition, third party utilities diversions and/or modifications would be required to facilitate the construction of the Project. There would also be land required for environmental mitigation and Biodiversity Net Gain (BNG).
- 1.3.4 As well as the permanent infrastructure, land would also be required temporarily for construction activities including, for example, working areas for construction equipment and machinery, site offices, welfare, storage and temporary construction access.
- 1.3.5 As described in ES Chapter 1: Introduction (document reference 6.1), the Project has been broken down into eight sections based largely on local authority boundaries. The eight sections are described below and presented on ES Figure 1.1: Site Location Plan and Project Sections (document reference 6.1.F1).
- Section A – South Norfolk Council
 - Section B – Mid-Suffolk District Council
 - Section C – Babergh District Council, Colchester City Council and Tendring District Council
 - Section D – Colchester City Council
 - Section E – Braintree District Council
 - Section F – Chelmsford City Council and Brentwood Borough Council
 - Section G – Basildon Borough Council and Brentwood Borough Council (and part of Chelmsford City Council)
 - Section H – Thurrock Council
- 1.3.6 **Structure of the Equality Impact Assessment**
- 1.3.7 The remainder of this document is structured as follows:
- Chapter 2: Provides an overview of the methodology which has been followed.
 - Chapter 3: Describes baseline data for the local area and protected characteristics.
 - Chapter 4: Provides an overview of consultation and engagement which has taken place as part of the project.
 - Chapter 5: Provides the assessment of potential equalities impacts, together with potential mitigation measures, and/or likely enhancements and beneficial effects.

2. Approach to EqlA

2.1 Assessment Methodology

- 2.1.1 This chapter describes the approach taken with regards to the EqlA i.e. how relevance to equality has been determined and due regard given to PCG that could be affected during different stages of the project. Equality impacts have been considered with regard to the following stages of the project:
- Communications, engagement and public consultation;
 - Construction of the project;
 - Operation of the project; and
 - Decommissioning.
- 2.1.2 The EqlA considers the impacts of the project on PCG at each of these stages, where there may be potential for different groups of people to be affected differently. The EqlA is presented as a qualitative appraisal of these stages, each of which has the potential for equality impacts, and has been informed by the findings of the ES. The potential likely significant effects identified in the ES are reported where they could potentially lead to disproportionate and/or differential impacts on a particular equality group.
- 2.1.3 All PCG defined in section 149 of the Equality Act are hereafter referred to in this report as 'equality groups'. This report focuses on differential impacts on groups of people (reporting at a community level) rather than on individuals.
- 2.1.4 The protected characteristics reported in this assessment (as defined in the Equality and Human Rights Commission 2023), where relevant, are:
- **Age** - refers to a person belonging to a particular age or range of ages;
 - **Disability** - a person has a disability if they have a physical or mental impairment that has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities;
 - **Gender reassignment** - anyone who is proposing to undergo, are undergoing or have undergone a process (or part of a process) for the purpose of reassigning their sex;
 - **Pregnancy and maternity** - pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after the birth, and is linked to maternity leave in the employment context. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth;
 - **Race** - refers to a group of people defined by their colour, nationality (including citizenship), ethnic or national origins;
 - **Religion or belief** – religion refers to any religion, including a lack of religion. Belief refers to any religious or philosophical belief including lack of belief (such as atheism);

- **Sex** - this refers to a man or to a woman, or to a group of people of the same sex (sex is the protected characteristic and not gender); and
- **Sexual orientation** - whether a person's sexual attraction is towards their own sex, the opposite sex or to both sexes.

- 2.1.5 The Equality Act 2010 defines "marriage and civil partnership" as a protected characteristic, meaning it is illegal to discriminate against someone based on their status as married or in a civil partnership. Whilst marriage is a protected characteristic it is not a 'relevant' characteristic and, hence a body which is subject to the PSED needs only comply with the first of the three aims of that duty, as set out at paragraph 1.2. Consequently, this equality group is not considered further in this report.
- 2.1.6 The assessment presented in Chapter 4 'EqIA findings', initially considers types of environmental effects that may be of particular relevance to equality groups, and scopes in which equality groups could be affected by the types of effect described. Further consideration is subsequently given to the nature of those project-specific effects, and an assessment is provided in Table 4.2 with justification of the potential benefits and negative impacts that may be experienced differentially (see Terminology section below) by equality groups, together with any embedded measures, good practice measures or additional mitigation proposed (see Terminology section below). Consideration is given to the vulnerability of the equality group identified in relation to the issue or type of effect described. A conclusion is provided to confirm whether equality groups may experience disproportionate and/or differential equality impacts.
- 2.1.7 The EqIA process has also considered whether the proposed permanent acquisition of land and acquisition of permanent rights (and temporary use powers) for delivery of the project, could potentially lead to equality impacts on a particular equality group with protected characteristics.). A range of alternative routeing options between Norwich and Tilbury were assessed during the evolution of the project by the Applicant, including against socio-economic criteria as far as reasonably practicable. The routeing process considered options that avoided settlement centres and this project has sought to limit the impact on personal and business property where practicable. Notwithstanding this, the project by its very nature would require some permanent acquisition of land and acquisition of permanent rights.
- 2.1.8 Where it has been necessary to seek the acquisition of land or rights to facilitate delivery of the project, the Applicant has ensured that they are only seeking to acquire the minimum land/rights required for the delivery of the project. Any land interests required would be subject to compensation in accordance with statutory provisions. The project does not require any residential dwellinghouse properties to be acquired compulsorily and the land proposed to be compulsorily acquired is predominantly rural land comprising agricultural fields. Consequently, no known equality impacts have been identified as a result of land or rights acquisition and are therefore not considered further in this report. Should any landowners, tenants or those with an interest in the land required for the project be identified as having protected characteristics at a later date, potential equality impacts (and mitigation of the same) will be considered separately on a case by case basis. No land owners with protected characteristics have been identified at the time of writing this EqIA.
- 2.1.9 The EqIA has been based on readily available data outlined in Chapter 3 of this report 'Overview of relevant demographic data', which describes the demographics of the population potentially affected by the project. The available data is presented at

the district level (not parish level). The EqIA therefore considers differential impacts and those disproportionate impacts that are based on a demographic analysis of district versus national level data (not parish level data) as well as those arising from the disproportionate use by one or more equality groups of a significantly affected environmental receptor. This terminology is explained further in section 2.2 below.

2.1.10 The area over which potential equality impacts associated with different types of likely significant environmental effects have been considered directly relate to those study areas defined in the ES in Volume 6 of the application for development consent for the following relevant assessments:

- ES Chapter 7: Air Quality (application document 6.7);
- ES Chapter 10: Health and Wellbeing (application document 6.10);
- ES Chapter 13: Landscape and Visual (application document 6.13);
- ES Chapter 14: Noise and Vibration (application document 6.14);
- ES Chapter 15: Socio-economics, Recreation and Tourism (application documentation 6.15);
- ES Chapter 16: Traffic and Transport (application document 6.16); and
- ES Chapter 17: Cumulative Effects Assessment (application document 6.17).

2.2 Terminology

2.2.1 A disproportionate equality impact relates to an effect on a certain equality group that is greater than on other members of the general population at a particular location. For example, if an equality group makes up a greater proportion of the affected residential population than their representation in the wider national population. A disproportionate equality impact may also arise where an effect is predicted on an environmental receptor which is predominantly or heavily used by one or more equality groups (e.g. primary schools attended by young children).

2.2.2 A differential equality impact is one which affects members of an equality group differently from the rest of the general population because of their specific needs, or a recognised sensitivity or vulnerability associated with their protected characteristic, irrespective of the number of people affected i.e. an effect which varies according to the circumstances of groups that receive the impact.

2.2.3 Embedded measures are described as 'primary or inherent' by the Institute of Environmental Management and Assessment (IEMA, 2016) i.e. measures that are best applied early or are a fundamental part of the design seeking consent and do not require additional action to be taken and include things that are intrinsic to and built into the design.

2.2.4 Additional mitigation (described as secondary or foreseeable in IEMA (2016)) is additional mitigation identified through the environmental assessment process that is required to offset or reduce a likely significant environmental effect

2.2.5 Good practice measures (described as tertiary or inexorable in IEMA (2016)) are typically actions that would occur with or without input from the Environmental Impact Assessment (EIA) feeding into the design process. These include actions that would be undertaken to comply with best practice, meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects.

2.3 National Grid's Equalities Policies

- 2.3.1 The Applicant embraces diversity and their mission is to build a business that represents, reflects and celebrates the cultures and communities they serve. Their business is conducted in line with the Applicant's Values to 'Do the Right Thing, Find a Better Way and Make it Happen', and respect for human rights is incorporated into the Applicant's employment practices and Values.
- 2.3.2 This is also reflected in their Code of Ethics document (National Grid, updated 2024) which has clear objectives and greater accountability around the organisation with regard to Diversity, Equity and Inclusion.
- 2.3.3 The Applicant has been recognised for their inclusivity through various awards including:
- Ranking 1st in the UK and 3rd globally for gender equality in an assessment of almost 4000 companies in 23 markets by Equileap, the leading provider of gender equality data and insights, in 2021 (as cited on the inclusion and diversity section of National Grid's website);
 - Rated in 2023, in the annual Times Top 50 Employers for Women list, which recognises the employers that are taking action to drive gender equality at work, from embracing flexible working practices to tackling the pay gap and normalising caring responsibilities for all genders;
 - One of 484 companies across 45 countries to be included in the 2023 Bloomberg Gender-Equality Index, which aims to track the performance of public companies committed to transparency in gender-data reporting; and
 - Joined 499 other companies around the world to take action on disability inclusion, The Valuable 500.
- 2.3.4 The Applicant works with its supply chains to provide adherence to the principles of the UK Modern Slavery Act 2015 and the requirements of the Living Wage Foundation. It takes responsibility to report and monitor human rights violations and mitigate against any risk in its supply chain.
- 2.3.5 The Applicant is committed to maintaining a work environment and supply chain that recognises and upholds the importance of human rights and is committed to the communities served while supporting programmes designed to help improve the way people live and work.

2.4 Hard to Reach Groups

- 2.4.1 This section defines those groups considered to be Hard to Reach (HTR) groups, and how the Applicant has given all equality groups equal opportunities to be engaged during the process. It is essential that all groups of people in the communities affected by the project can be involved in consultation and engagement, so that they can influence and contribute to the development of the project and that the proposals have regard to the needs of each group of people (including those with protected characteristics).
- 2.4.2 The Public Consultation Strategy for the project (National Grid, 2022) details the Applicant's approach to inclusive engagement. This is particularly focused around engaging with those that are hard to reach (HTR).

- 2.4.3 HTR groups are defined as being inaccessible to most traditional and conventional methods of consultation for any reason, and are described as:
- ethnic minority groups and people for whom English is a second language
 - the Traveller community
 - the elderly
 - people with visual and hearing impairments
 - people with limited mobility/disability
 - the 15-19 and 20-39 age groups
 - carers and families with young children
 - economically inactive individuals geographically isolated communities or individual.
- 2.4.4 The strategy for engaging with HTR and seldom heard groups was developed over the course of the initial consultation exercise and included use of the communication tools set out in the Public Consultation Strategy (National Grid, 2022).
- 2.4.5 Section 5.9 of the Statement of Community Consultation (SoCC) details the HTR groups and the methods used to engage with them. This is set out by category group at Table 5.4 of the SoCC.

2.5 Approach to Consultation

- 2.5.1 The project has held three rounds of community consultation in April 2022, June 2023 and April 2024 as well as supplementary targeted consultations starting in January 2025.
- 2.5.2 At each stage of public consultation the Applicant has sought to deploy methods of engagement to make its consultations engaging and accessible to the HTR groups identified in section 2.4.
- 2.5.3 To allow people to engage with the proposals and each consultation at their own convenience, the Project used a 'digital first' approach to consultation. The online webinars, held at each stage of consultation were open and accessible to anyone to attend and ask questions of the Project team.
- 2.5.4 For those less able or less comfortable engaging digitally, we developed consultation 'in person' aspects to be as accessible as possible, with the focus on ensuring events were accessible and held over several days in different locations to encourage attendance.
- 2.5.5 Event locations were also risk assessed to ensure that there was adequate parking and venues were accessible via public transport.
- 2.5.6 Details of the consultation process are set out in chronological order below. A robust methodology and process of consultation was deployed from the initial non-statutory stage. These details are set out below. Full details are explained in the following non statutory stage but was also applicable at the statutory consultation stages, it has not been repeated in full for each stage.

2.5.7 Non-statutory consultation – April 2022

2.5.8 The Applicant's specific approach to engaging with HTR groups during the April 2022 non-statutory consultation is set out in the Public consultation strategy April 2022 which was published on the project website on 21 April 2022. The strategy defined the HTR groups set-out in section 2.4 of this document and the Project's approach to engaging with them.

2.5.9 The Applicant utilised the following methods to engage with HTR groups during its April 2022 non-statutory consultation:

- Newsletter mailing to all the addresses within the Primary Consultation Zone to provide information on the Project
- Advertisements in local and regional news
- Paid advertising on social media to target different demographics and to include those who might not otherwise engage with the consultation
- Press release to local media
- Providing project documents for inspection at deposit locations
- Email to relevant contacts at HTR and seldom heard community groups detailing times for the consultation, how to take part and how to find further information on the project.
- Published and advertised contact details widely so people could call, email or write to the Project for assistance.

2.5.10 The applicant also made important information available in both digital and hard copy formats. Hard copies were available on request and could have been provided in alternate formats if required.

2.5.11 Non-statutory consultation – June 2023

2.5.12 The Applicant's approach to engaging with HTR groups during the June 2023 non-statutory consultation was consistent with the approach used during the April 2022 non-statutory consultation and is set out in the Non-Statutory Public Consultation Strategy June 2023 which was published on the project website on 27 June 2023. The strategy defined the HTR groups set-out in section 2.4 of this document and the Project's approach to engaging with them.

2.5.13 The Applicant utilised the following methods to engage with HTR groups during its April 2022 non-statutory consultation:

- Newsletter mailing to all the addresses within the Primary Consultation Zone to provide information on the Project
- Advertisements in local and regional news
- Paid advertising on social media to target different demographics and to include those who might not otherwise engage with the consultation
- Press release to local media
- Providing project documents for inspection at deposit locations
- Published and advertised contact details widely so people could call, email or write to the Project for assistance.

- 2.5.14 The applicant updated and refined its database of hard to reach and seldom heard community groups and emailed relevant groups detailing timings for the consultation, how to take part and how to find further information on the project. Local enterprise and business groups were also added to the database and emailed at consultation launch.
- 2.5.15 Youth engagement**
- 2.5.16 Recognising that young people will be one of the greatest beneficiaries of net zero, the Applicant sought to increase its focus on youth engagement for the 2023 non-statutory consultation.
- 2.5.17 Alongside project events and webinars, the Applicant held an additional youth engagement forum to provide young people with an opportunity to meet and discuss the proposals with the project team.
- 2.5.18 Statutory consultation – April 2024**
- 2.5.19 The Applicant's approach to engaging with HTR groups during the April 2024 statutory consultation is set out in the Statement of Community Consultation (SoCC) April 2024 which was published on the project website on 10 April 2024. The strategy defined the HTR groups set out in section 2.4 of this document and the Project's approach to engaging with them.
- 2.5.20 The Applicant utilised the following methods to engage with HTR groups during the April 2024 statutory consultation:
- Newsletter mailing to all the addresses within the Primary Consultation Zone to provide information on the Project
 - British Sign Language signing was provided at one of the Project's online webinars.
 - Advertisements in local and regional news
 - Paid advertising on social media to target different demographics and to include those who might not otherwise engage with the consultation
 - Press release to local media
 - Providing project documents for inspection at deposit locations
 - Email to relevant contacts at HTR and seldom heard community groups detailing times for the consultation, how to take part and how to find further information on the project
 - Published and advertised contact details widely so people could call, email or write to the Project for assistance.
- 2.5.21 The applicant also made important information available in both digital and hard copy formats. Hard copies were available on request and could have been provided in alternate formats if required.
- 2.5.22 Youth engagement**
- 2.5.23 Building on the youth engagement that had already taken place at the summer 2023 non-statutory consultation, the Applicant sought to further engage with young people local to the Project.

- 2.5.24 The Applicant utilised the following methods to engage with young people during the April 2024 statutory consultation:
- Production of a youth brochure to present the proposals in a more engaging format for the target demographic. The brochure was sent to educational institutions along the route of the project.
 - Youth webinar
 - Two in-person events at universities close to the proposed route.
- 2.5.25 The targeted consultations were designed to present updated proposals to local communities and stakeholders in areas where changes were being considered and further targeted consultation was considered to be appropriate and in line with the government's guidance.
- 2.5.26 Targeted consultations were held in three phases according to geographical location.
- Norfolk and Suffolk (Non-Statutory): 30 January to 3 March 2025;
 - Essex and Thurrock (Non-Statutory): 25 February to 27 March 2025; and
 - Thurrock 3 (Statutory): 18 March to 17 April 2025.
- 2.5.27 In line with government guidance, the consultations followed a bespoke approach, focusing on affected areas and stakeholders rather than repeating the broader statutory consultation.
- 2.5.28 At the launch of each phase of targeted consultations, an email was sent to relevant contacts at HTR and seldom heard community groups detailing times for the consultation, how to take part and how to find further information on the project.
- 2.5.29 The Applicant also undertook the following promotional methods to engage with HTR groups:
- Advertisements in local and regional news
 - Providing project documents for inspection at deposit locations
 - Published and advertised contact details widely so people could call, email or write to the Project for assistance.
- 2.5.30 In addition to the targeted community consultation, engagement and consultation as appropriate with landowners and other parties with an interest in land was an ongoing process throughout the development of the Project.

2.6 Feedback

- 2.6.1 The Applicant used feedback forms during non-statutory, statutory and targeted consultations to gather data for the project on the people who had engaged in the process to help inform the development and tailoring of the future consultation events. The feedback forms included questions on inclusion and diversity to help understand whether the consultation was useful to people of different backgrounds and requirements. The following responses were received relating to diversity during all stages of consultation:
- Age - feedback was received from respondents ranging from Under 16 to the 65+ categories. The highest numbers of responses were received from those in the age group of '65+' with 29% of representation in this age bracket. The next most

represented age group with 24% was '55-64'. 8% representation was from the age group '21-50'. The lowest represented age groups were 'Under 16' and '16-24' with >1% and 1% respectively. 17% of respondents did not wish to provide their age. This sample of respondents is representative of the wider community when looking at data from the 2021 census regarding the age makeup of people within the districts through which the project passes, which is broadly in line with an ageing population (see Appendix A).

- **Disability** – From the response feedback forms received, the majority of respondents who answered (80%) of people said that they did not consider themselves a person with a disability, whilst a small proportion (6%) indicated that they did. The remaining 14% of respondents did not wish to answer. This sample of respondents is unrepresentative of the wider community when looking at data from the 2021 census, which indicates that between 14.1% - 24.1%% of people in the districts through which the project passes have a disability (see Appendix A).
- **Race** – where respondents were asked how they would describe their ethnic background, the majority of respondents that answered this question (81%) indicated that they were 'White'. Almost a fifth (17%) of respondents did not wish to provide their ethnic background. Respondents who selected 'Any other ethnic group' were asked to provide more details. Responses included: Anglo-Celtic, multi-cultural and statements around the relevance of the question. This sample of respondents is generally under representative of the wider community when looking at data from the 2021 census, which indicates that between 87% and 96.8% (dependent on geographical location of people in the districts through which the project passes described themselves as 'White English, Welsh, Scottish, Northern Irish or British' (see Appendix A). The response is however reflective of National averages (81%).
- **Sex** - From the response to consultation feedback forms received, almost half of responses to this question (47%) were from males, compared to 41% from females. <1% of respondents categorised themselves as 'non-binary'. The final 12% of respondents did not wish to provide their gender. Males made up the majority of respondents and were over-represented whereas females were under-represented in comparison to the gender makeup of the local population (see Appendix A).

2.6.2 From the consultation feedback received, there is no evidence to suggest some groups of people are more dissatisfied than others with the project. Consultation feedback to the 2022 Non-statutory consultation did however highlight the need for clear consultation questionnaire questions to avoid being misleading, consider mental health and anxieties or concerns about the health effects of living close to an overhead line, and for considering the inclusion of pedestrians (potentially vulnerable travellers including children and older people) when taking into account the sensitivity of receptors e.g. users of Public Rights of Way (PRoW) and bridges (general public access link infrastructure) and taking account of specific needs when considering proposed diversions of PRoW. Later consultation questionnaires were designed to be clearer.

2.6.3 The statutory consultation held in 2024 received 12,996 submissions from stakeholders, local authorities, and the public. Key feedback themes included concerns over the cost of the project, with criticism that the cheapest options were prioritised over more sustainable solutions. Respondents raised issues related to financial compensation, requests for cheaper energy bills, and the project's long-term sustainability for future generations.

- 2.6.4 Additionally, feedback highlighted environmental concerns, such as impacts on heritage sites, tourism, wildlife, and ecology. Many submissions voiced opposition to the use of overhead lines, citing vulnerabilities to weather events and requesting alternative solutions such as underground or offshore cables. Stakeholders also expressed concerns about potential health risks, including electromagnetic fields (EMF) and cancer, as well as safety risks tied to static electricity and currents. The feedback informed iterative changes to the project design, with responses carefully analysed and incorporated into the Environmental Impact Assessment (EIA) and other planning processes.
- 2.6.5 With regards to the targeted consultations which took place in early 2025, these consultations focused on localised changes to the proposals and received feedback from affected communities and statutory consultees. Key concerns mirrored those raised during the statutory consultation, including opposition to overhead lines and calls for alternative solutions such as offshore cables. There was also criticism of project delays and associated cost increases.
- 2.6.6 Participants raised specific issues such as the project's environmental impact on National Landscapes (formerly known as Areas of Outstanding Natural Beauty, AONB), heritage sites, and local wildlife. Feedback also included requests for clarity on the cost breakdown for underground cables and financial compensation for affected communities. Concerns related to health and safety risks, particularly regarding EMF exposure, were also prominent. The targeted approach allowed National Grid to address these localised concerns while ensuring proportionality in its consultation strategy.

2.7 Construction of the Project

- 2.7.1 The construction of the project has the potential to disproportionately and/or differentially affect people from different protected characteristic groups (as explained in Section 2.1). Based on the findings of the ES, the following topics have the potential for equality impacts and are therefore assessed in Chapter 4 'EqIA findings' for the groups with potential to be affected. As described in Section 2.1, all potential likely significant effects identified in the ES are reported where they could potentially lead to differential impacts on a particular equality group or disproportionate impacts evident at a district level.
- 2.7.2 Elevated Dust Levels and Air Pollutants (Air Quality - ES Chapter 7)**
- 2.7.3 Increased air pollution and emissions from generator use and construction traffic may cause potentially negative changes to human health. Particulate matter, mainly generated from construction activities, can adversely affect human health in varying degrees depending on its size, composition, origin and the length of exposure. Dust emissions can irritate the eyes and aggravate pre-existing respiratory problems, such as asthma. Children, the elderly and the disabled (particularly those with respiratory illness) are likely to be more vulnerable to the effects of poor air quality compared to the overall population and could therefore be differentially and adversely affected because of poorer air quality due to vehicle emissions, construction plant and construction dust.

- 2.7.4 Severance to PRow or Changes to Journey Length or Time (Health and wellbeing and Socio-economic Recreation and Tourism - ES chapters 10 and 15)**
- 2.7.5 Disruption to PRow (notably temporary diversions and closures of PRow) used by walkers, cyclists and horse riders (WCH) has the potential to differentially affect equality groups e.g. the elderly and young people that may be less likely to have access to a car as an alternative method of travel, pushchair users, wheelchair users and other disabled people that may experience barriers to recreation, and children who may be more sensitive to changes in public access. Any changes in PRow journey length or severance therefore have the potential to affect these equality groups.
- 2.7.6 Changes in Views and Landscape Character (Landscape and Visual - ES chapter 13)**
- 2.7.7 Changes in views from community areas (people living and moving around the area) and recreational receptors, relating to construction activity and loss of vegetation, have the potential to affect some equality groups differently. In particular, such changes may affect those with disabilities such as autism that affect a person's ability to interact and experience their surrounding environment.
- 2.7.8 Elevated Noise and Vibration Levels (Noise and Vibration - ES Chapter 14)**
- 2.7.9 Certain groups with protected characteristics are more sensitive to changes in noise and vibration levels and may experience different effects compared to the overall population including children, young people, elderly, people with disabilities, pregnant women and people visiting places of worship.
- 2.7.10 Traffic-related noise is correlated more broadly with lower health-related quality of life in children and increased health risks for the elderly. Elevated environmental noise has the potential to cause health impacts such as hearing impairment, hypertension, ischemic heart disease, annoyance, and sleep disturbance. Vulnerable groups such as the sick, the elderly and the unemployed tend to spend large amounts of time in their homes. This includes people who suffer from mental illnesses. This could increase exposure for those living close to sources of noise (Welsh Government, 2015).
- 2.7.11 Exposure to noise can be a particular problem around schools, leading to cognitive impairment for children during lessons (Horizon et al., 2017). Autistic children can be particularly sensitive to their environment, and in some cases can be extremely distressed by loud noise (Redelmeier et al., 2014). Children with hearing difficulties also benefit from a quiet learning environment, and background noise can reduce the effectiveness of hearing aids (Welsh Government, 2015).
- 2.7.12 Increased Traffic Flows leading to Changes in Pedestrian Amenity, Fear and Intimidation (Chapter 16)**
- 2.7.13 Changes to traffic flows due to construction traffic on local roads can disproportionately and differentially affect equality groups such as the disabled, women, pregnant women and age related groups. Some groups are particularly sensitive to the effects of road traffic, which can disproportionately affect individuals through pedestrian accidents, air pollution and noise (Redelmeier et al., 2014). Heavy goods vehicles often have 'blind spots', which make it difficult for drivers to see pedestrians and other road-users, and are associated with a disproportionate number of accidents involving construction vehicles (Transport Research Laboratory, 2013).

- 2.7.14 Construction traffic poses a particular risk to some groups of disabled people, including visually impaired, deaf people, people who are hard of hearing, and people with mental disabilities. Children with hearing difficulties are 10 times more likely to be involved in road accidents while walking or playing than other children (AA Motoring Trust, 2002).
- 2.7.15 Busy roads can also result in severance for local communities, increase casualties and restrict walking/cycling, particularly for children and young people. Children and younger people rely on public transport to access places of employment, education and essential services. Older people also rely on public transport to access essential services, including healthcare, and for socialising and participating in their local communities. Women may have more concerns over personal security and accessibility as a higher proportion are less likely to have access to a car, particularly mothers of new born babies.

2.8 Operation of the Project

- 2.8.1 The project seeks to provide a reliable electricity supply to the UK with positive impacts on health and wellbeing. The project would improve the security of supply of power to the network and increased electricity transmission capability, to all protected characteristic groups. Groups who will particularly benefit from a reliable electricity supply include the elderly, very ill and disabled people, who may rely on warmth and power for medical equipment. This is likely to disproportionately benefit older people as all counties and districts within which the route is located have a higher representation of over 65 year olds than the national average.
- 2.8.2 Differential impacts on people with protected characteristics after the project has been completed are outlined in Chapter 4 'EqIA findings' for the groups expected to be most affected.
- 2.8.3 Following all stages of consultations, in response to the feedback and ongoing environmental and engineering studies, a range of amendments to the design of the Project were considered from a socio-economic perspective, as well as environmental, technical and economic factors. These potential amendments, , included consideration of different geographical connection points and route corridors for the transmission. It also considered the appropriateness of overhead line versus underground cables and appropriate construction methods.
- 2.8.4 The Applicant also embedded measures into the design of the project that have been identified through iterative design, to avoid or reduce likely significant environmental effects.
- 2.8.5 The operation of the project has potential to disproportionately and/or differentially affect people from different protected characteristic groups. Based on the findings of the ES, the following topic has potential for equality impacts and is assessed in Chapter 4 'EqIA findings'.
- 2.8.6 Changes in Views and Landscape Character (Landscape and Visual - ES chapter 13)**
- 2.8.7 As previously described in Section 2.5 changes in views from community areas (people living and moving around the area) and recreational receptors as a result of new electricity infrastructure within the landscape and views, have the potential to affect some equality groups differently, in particular, those with disabilities such as sensory disorders (e.g. autism).

3. Overview of Demographic Data

3.1 Overview

3.1.1 This chapter summarises the baseline socio-demographic information/data available in the wards through which the project passes, of relevance to groups with protected characteristics and how it has been considered. Consideration has been given to the following readily available data in the cited documents:

- ES Chapter 15: Socio-Economics (application document 6.15);
- Statement of Community Consultation (application document 5.1, Appendix E);
- National Grid Consultation Strategy (National Grid, 2022);
- Consultation Report ¹(application document 5.1);

3.2 Data Limitations, Gaps and Assumptions

3.2.1 In some cases, baseline data are not available at a local (e.g. ward) level; therefore, the assessment is limited by the granularity of the data available, with most data available for the districts through which the project passes. In addition, some data are not updated or recorded regularly. The most recent data has been sourced to establish the baseline and the data is considered to be sufficient for the conclusions of this report.

3.2.2 The following limitations and assumptions should be noted with regard to the data presented in this EqIA:

- The 2021 Census was carried out during the COVID-19 pandemic, which may have affected how people responded to the questions asked.
- No data is available for pregnancy and maternity and marriage and civil partnership.
- In order to protect against the disclosure of personal information, NOMIS records have been slightly altered through swapping different geographic areas and counts perturbed by small amounts.

3.3 Relevant Data

3.3.1 The districts and wards through which the project passes are shown in Table 3.1.

¹ The Consultation Report (application document 5.1) includes details of all stages of consultation including non-statutory to targeted consultation.

Table 3.1 Districts and Wards the Route Passes

Districts	Wards
South Norfolk	<p>Norfolk County Council Wards: Forehoe, Henstead, West Depwade, Long Stratton, Diss and Roydon, Loddon, Acle, Gorleston St Andrews, Humbleyard, Wymondham, Attleborough, Guiltcross, Clavering, East Depwade, Thetford West, Thetford East, Lakenham, Eaton, Hingham</p> <p>South Norfolk District Council: Mulbarton & Stoke Holy-Cross, Forncett, Bunwell, Newton Flotman, Bressingham & Burston, Diss and Roydon, Mulbarton & Stoke Holy-Cross, Stratton, South Wymondham, Beck Vale, Dickleburgh, and Scole, Diss and Roydon</p> <p>Breckland Council: Guiltcross, Forest, Harling and Heathlands</p> <p>Thetford Council: Thetford Boudica, Thetford Priory, Thetford Castle</p>
Mid-Suffolk	<p>Suffolk County Council Wards: Cosford, Hartismere, Upper Gipping, Thedwastre North, Thredling, Stowmarket North and Stowupland, Bosmere, Belstead Brook, Samford, Blything, Hardwick, Gipping Valley.</p> <p>Mid Suffolk District and Babergh wards: Gislingham; Mendlesham; Haughley, Stowupland & Wetherden Green; Bacton; Stonham; Stow Thorney; Needham Market; Battisford & Ringshall; Blakenham; Rickingham; Claydon and Barham; Thurston; Chilton; Debenham; Eye; Fressingfield; Hoxne and Worlingworth; Stradbroke and Laxfield; Elmswell and Woolpit; Onehouse; Combs Ford; St Peter's; Palgrave; Rattlesden; Walsham-le-Willows; Assington; Box Vale; Brantham; Chadacre; Ganges; Great Cornard; Hadleigh North; Hadleigh South; Lavenham; Long Melford; North West Cosford; Orwell; South East Cosford; Stour; Sudbury North east; Sudbury North west; Sudbury South east; Sudbury south west; Bramford; Sproughton & Pinewood; Copdock & Washbrook; Brett Vale; East Bergholt; Capel St Mary; Hadleigh North; Bures St Mary & Nayland</p>
Babergh, Tendring & Colchester	<p>Suffolk County Council wards: Cosford; Hartismere; Upper Gipping; Thedwastre North; Thredling; Stowmarket North and Stowupland; Bosmere; Belstead Brook; Samford; Blything; Hardwick; Gipping Valley.</p> <p>Essex County Council wards: Constable; Tendring Rural West; Braintree Eastern; Witham Northern; Broomfield and Writtle; Brentwood Rural; Stock; Billericay and Burstead; Billericay and Burstead; Brentwood and Hutton; Laindon Park and Fryerns; Laindon Park and Fryerns; Wickford Crouch; Wickford Crouch; Braintree Town; Hadleigh.</p> <p>Babergh and Mid Suffolk District Council wards: Gislingham; Mendlesham; Haughley, Stowupland & Wetherden Green; Bacton; Stonham; Stow Thorney; Needham Market; Battisford & Ringshall; Blakenham; Rickingham; Claydon and Barham; Thurston; Chilton; Debenham; Eye; Fressingfield; Hoxne and Worlingworth; Stradbroke and Laxfield; Elmswell and Woolpit; Onehouse; Combs Ford; St</p>

Districts	Wards
	<p>Peter's; Palgrave; Rattlesden; Walsham-le-Willows; Assington; Box Vale; Brantham; Chadacre; Ganges; Great Cornard; Hadleigh North; Hadleigh South; Lavenham; Long Melford; North West Cosford; Orwell; South East Cosford; Stour; Sudbury North east; Sudbury North west; Sudbury South east; Sudbury south west; Bramford; Sproughton & Pinewood; Copdock & Washbrook; Brett Vale; East Bergholt; Capel St Mary; Hadleigh North; Bures St Mary & Nayland.</p> <p>Tendring District Council wards: Ardleigh & Little Bromley; Lawford, Manningtree & Mistley; Alresford & Elmstead.</p> <p>Colchester Council wards: Lexden & Braiswick; Marks Tey and Layer; Colchester Rural North; Mile End; Wivenhoe; Colchester Rural North.</p>
Braintree	<p>Essex County Council: Braintree Eastern, Braintree Town</p> <p>Braintree District Council: Kelvedon and Feering, Silver End and Cressing, Hatfield Peverel and Terling, Witham North, Witham Central, Witham North, Coggeshall, The Colnes, Great Notley and Black Notley, Coggeshall</p>
Chelmsford	<p>Essex County Council wards: Constable; Tendring Rural West; Braintree Eastern; Witham Northern; Broomfield and Writtle; Brentwood Rural; Stock; Billericay and Burstead; Billericay and Burstead; Brentwood and Hutton; Laindon Park and Fryerns; Laindon Park and Fryerns; Wickford Crouch; Wickford Crouch; Braintree Town; Hadleigh</p> <p>Chelmsford City Council: Chelmsford Rural West, Writtle, South Hanningfield Stock and Margaretting, Moulsham and Central, Boreham and The Leighs, Broomfield and The Walthams.</p>
Basildon and Brentwood Borough Council	<p>Basildon Borough Council wards: Laindon Park, Burstead, Billericay West, Castleton and Crouch.</p> <p>Brentwood Borough Council wards: Ingatestone, Fryering, and Mountnessing, Hutton East, Herongate, Ingrave, and West Horndon, Warley, Brentwood North, Pilgrims Hatch.</p>
Thurrock	<p>Thurrock Council: Orsett, East Tilbury, Tilbury Riverside and Thurrock Park, Tilbury St Chads, Stanford-le-hope, Ockendon, Tilbury St Chads.</p>

- 3.3.2 Appendix A presents the socio-demographic data for the relevant protected characteristics in the districts and wards in the area through which the project passes (Table 3.1) and provides a profile of residents living in the area surrounding the project, with specific reference to districts. It draws upon the 2021 Census to identify the level and distribution of people with protected characteristics in the area. This data is subsequently used in Chapter 4 'EqIA' to determine whether any particular groups with protected characteristics are disproportionately affected by the project (during construction or operation).

- 3.3.3 The analysis of demographic data for the project area within Essex County Council districts (other than Thurrock Unitary Authority, which has a proportionately younger population), Norfolk County Council districts and Suffolk County Council districts (other than Colchester, which is in line with regional and national averages) have a higher proportion of residents over 65 years old than the regional and national averages.
- 3.3.4 Analysis of demographic data also indicated that all areas other than Thurrock have a greater proportion of white people in their population in relation to regional and national averages. When analysing Disability data, Tendring was found to have higher than the regional and national averages for residents who are disabled under the Equality Act. 24.1% compared to an average of 16.6% in the east of England and 17.3% in England.
- 3.3.5 There is no known disproportionate representation of other equality groups within the project area.
- 3.3.6 The baseline demographics will be continually changing due to a number of factors, including inbound and outbound migration and changes to the regional, national and international economic climate. In the reasonably foreseeable future, resident populations within the Norfolk, Suffolk and Essex counties, Thurrock, the East of England, and England are all projected to rise based on current trends (ONS, 2025). The local, regional and national age distribution is projected to skew older over time, with fewer young people and a greater proportion of the population over 60 years old (ONS, 2025).

4. EqlA Findings

4.1 Overview

- 4.1.1 This chapter describes the analysis of impacts (risks and benefits of the project) on people with protected characteristics with reference to all equality groups as defined in the Equality Act 2010 (excluding marriage and civil partnerships as explained in Section 2.1). Evidence (and reasonable justification) is provided, where relevant, of how the impacts of the project during construction and/or operation may be relevant to and affect different equality groups. The impact of decommissioning is anticipated to the same (if not less) than the construction stage.
- 4.1.2 Table 4.1 summarises the topics where there could be a potential pathway for equality impacts on individual groups with protected characteristics. These equality groups are discussed further in Table 4.2.

4.2 All Protected Characteristics

- 4.2.1 Table 4.2 summarises the environmental effects identified in the ES that have potential to impact specific equality groups. Only those equality groups in Table 4.1 where a potential impact has been identified based on the EIA findings, are described in the conclusions in Table 4.2.
- 4.2.2 This EqlA has not identified any likely equality impacts for the gender reassignment and sexual orientation protected characteristics.

Table 4.1 Topics of Potential Relevance to Equality Groups

Topics with Potential for Equality Impacts	Equality Groups								
	Age	Disability	Gender Reassignment	Marriage and civil partnership	Pregnancy And Maternity	Race	Religion and belief	Sex	Sexual Orientation
Construction of the Project									
Changes in views/landscape relating to construction activity and loss of vegetation	Y	Y	N	N	Y	N	N	N	N
Severance to PRow or changes to journey length or time	Y	Y	N	N	Y	N	N	N	N
Increased traffic flows leading to changes in pedestrian amenity, fear and intimidation	Y	Y	N	N	Y	N	Y	Y	N
Elevated noise and vibration	Y	Y	N	N	Y	N	N	N	N

Topics with Potential for Equality Impacts	Equality Groups								
	Age	Disability	Gender Reassignment	Marriage and civil partnership	Pregnancy And Maternity	Race	Religion and belief	Sex	Sexual Orientation
Elevated dust and air emissions	Y	Y	N	N	Y	N	N	N	N
Operation of the Project									
Changes in views and landscape character	Y	Y	N	N	Y	N	N	N	N

Table 4.2 Impacts on Equality Groups

Type of Impact	Assessment	Conclusion
Construction of the Project		
Changes in views/landscape character relating to construction activity and loss of vegetation	<p>The changes to landscape and views from vegetation clearance, topsoil stripping, earthworks and excavation, construction plant, changes to access and general construction activities and construction lighting are described in ES Chapter 13: Landscape and Visual (application document 6.13) and the good practice measures are set out within the CoCP (application document 7.2).</p> <p>During Construction, the main effects on landscape and visual receptors comprise the removal of vegetation during construction along with the presence of construction activities within the landscape and views from communities. The visibility and conspicuousness of construction activities, such as the presence of machinery and infrastructure, will alter views and impact visual amenity during the construction phase. Temporary changes in landscape character may occur due to construction disturbances, including the establishment of work sites and access routes.</p> <p>This could have differential impacts on people with disabilities such as autism (through modification of the environment in which sensory stimuli exist). However, these construction effects would generally be temporary and short term and the effects localised.</p> <p>It should be noted that some measures, such as sensitive siting and undergrounding of cables, have been embedded into the project design to minimise landscape and visual impacts, particularly in sensitive areas like the Dedham Vale National Landscape.</p>	<p>Potential for differential impacts on disabled people with sensory disorders through temporary changes in views from recreational and community areas during construction.</p> <p>Construction activities will temporarily alter landscape character and views due to the visibility of works and loss of vegetation. However, these changes will largely be mitigated through reinstatement and embedded design measures, although certain areas may experience longer-lasting impacts due to operational restrictions.</p>
Severance to PRow or changes to journey length or time	<p>The changes to WCH are described in ES Chapter 16: Traffic and Transport (application document 6.16). The good practice measures within the CoCP (application document 7.2) would reduce the effects experienced by visitors from changes to PRow, by only closing accesses for short periods while construction activities occur and providing signed diversions for any temporary diversions required (CoCP). An Outline Public Rights of Way (PRow)</p>	<p>No significant effects on WCH journey length or severance identified in the ES although there may be potential for differential impacts on younger and</p>

Type of Impact	Assessment	Conclusion
	<p>Management Plan (document reference 7.6) has also been provided with the DCO.</p> <p>PRoWs crossing the working areas will be managed in discussion with the relevant local authorities and potential temporary closures and diversions applied, where required. Temporary closures and diversions will be kept to a temporal minimum, and that, where possible alternative routes are maintained. Access disruption would be reduced while construction activities occur where possible. Any required temporary diversions will be clearly marked at both ends with signage explaining the diversion, the duration of the diversion and a contact number for any concerns.</p> <p>There are four small sections of PRoW where the diversion proposed will be made permanent as a result of the original PRoW being stopped up due road widening works.</p> <p>The design of the project and assessment of the proposals on access routes has given due consideration to vulnerable groups. For example, the existing baseline for the assessment of impacts on the existing network was defined based on reviews of PRoW interacting with the project; the characteristics of the road network in the study area (including for example existing provision of pedestrian crossings); and the land-uses surrounding the road network (noting particularly the location of facilities such as schools that would generate trips by vulnerable groups, such as school children). It was also supplemented by PRoW surveys. Sensitivity values for the impact assessment were assigned to road segments and PRoW within the study area based on network characteristics and an assessment of the likelihood of their usage by WCH, particularly vulnerable users such as school children and the elderly. Where possible, safe and continued public access would be maintained for all (including those with protected characteristics). For example, site fencing, barriers and scaffolding will be used during construction of the overhead line, where feasible therefore maintaining safe and continued access for users of existing footpaths during construction.</p> <p>The likely changes in WCH journey length due to temporary closures of PRoW during construction, as set out in Table 16.11: PRoW temporary stopped up and</p>	<p>older people, and disabled people due to increased PRoW distances and severance during construction.</p>

Type of Impact	Assessment	Conclusion
	<p>diversions of the ES, have been assessed. This assessment excluded PRoW if the closure is expected to be for two weeks or less, as this duration has been assumed to result in negligible impacts, and therefore the significance of effect would be classified as slight and therefore not significant. The assessment is set out in Table A16.3.3 - Significance of Effect WCH Delay in Appendix 16.3: Traffic and Transport Construction Effects (document reference 6.16.A3). A short term neutral or minor adverse effect is expected on all PRoW from WCH delays, and overall these are therefore expected to be not significant.</p> <p>A short term neutral or minor adverse effect is expected on all PRoW, as set out in ES Appendix 16.16.A3: Traffic and Transport Construction Effects Tables (application document 16.16.A3). Any proposed changes to access networks and facilities for WCH such as increases in WCH distances and impacts on severance could potentially have differential impacts for equality groups, especially those that are less likely to have access to a car, such as young people, and the elderly and disabled who may not be able to travel by WCH over the longer distances resulting from diversions. Although the effects on these routes are not expected to be significant, there is potential for differential impacts on some equality groups and more vulnerable road users.</p> <p>There are no expected changes to bus services, bus stops or taxi facilities for over four weeks in any 12 month period during the construction period 2027–2031 as a result of the construction activities. Therefore, there are no significant effects associated with changes to the bus network or infrastructure.</p>	
Increased traffic flows leading to changes to pedestrian amenity, fear and intimidation	<p>The assessment of WCH fear and intimidation effects arising through the construction phase is presented in Table A16.3.6 : Significance of Effect WCH Fear and intimidation. The assessment shows that the significance of effect on WCH fear and intimidation for all the road links is classified as slight or neutral and not significant.</p> <p>There are no expected closures or diversions of footways or the cycle network as a result of the construction activities of the Project. However, several cycle routes that are located in the PARs will experience a temporary increase in traffic during construction but over short duration of time.</p>	Increased construction traffic could differentially impact older people and disabled people who are more likely to have mobility issues or be more sensitive to fear and intimidation caused by HGVs. — There may also be differential and disproportionate

Type of Impact	Assessment	Conclusion
	<p>The impact to cyclists journey times on these PARS therefore relates to an increase in traffic and the magnitude follows that of the assessment for Driver Delay, with the significance of effects presented in in Table A16.3.2 – Significance of Effect Driver /Passenger Delay in Appendix 16.3: Traffic and Transport Construction Effects (document reference 6.16.A3).</p> <p>Temporary changes to on street parking have been identified as a result of the construction activities as part of embedded mitigation which have been identified within the Outline CTMP (document reference 7.3). Temporary parking suspensions are proposed at informal kerb side parking and at signed parking bays where there are carriageway width restrictions. This will ensure the safe two-way movement of HGVs and AILs is maintained along the PAR. Construction workers and vehicles will have sufficient parking provision within the designated temporary construction compounds. As a result, there would be no additional demand of parking spaces along the LRN. No additional mitigation is required.</p> <p>Where permanent TROs are sought, alternative measures put in place through the construction will be retained on a permanent basis.</p> <p>The Outline CTMP (document reference 7.3) provides details of the proposed traffic management of delivery vehicles and other traffic generated during the construction phase at this stage of the Project. It identifies measures designed to avoid and reduce the effect wherever possible between construction site traffic and other road users. The CTMP(s) would be implemented by the Main Works Contractor(s) to ensure that all traffic movements associated with the Project's construction works operate in a compliant manner.</p> <p>It is proposed to implement lower speed limits, particularly in areas frequented by WCH, such as village centres or near schools</p>	<p>impact caused by increased construction traffic in proximity to local facilities including schools and Churches.</p>
<p>Temporary impacts during construction from locally elevated noise and vibration</p>	<p>Noise and vibration is assessed in ES Chapter 14: Noise and Vibration (application document 6.14). The Applicant and its contractor(s) would adopt Best Practicable Means (BPM) to reduce noise levels during the construction works. Temporary noise mitigation measures would be put in place and secured through the Noise and Vibration Management Plan (appendix G to ES) to</p>	<p>Changes in noise levels arising from construction activities themselves as well as construction traffic and other related plant</p>

Type of Impact	Assessment	Conclusion
levels to noise sensitive receptors	<p>reduce noise levels from construction plant and machinery at specified locations identified in the ES, unless a detailed assessment is undertaken which demonstrates that no significant noise impacts would occur.</p> <p>The ES identified that there is no expected significant change to the future Noise and Vibration baseline along most of the Project alignment owing to its largely rural and agricultural nature (Paragraph 14.5.14). There are, however, localised areas where the future baseline may change. This is including the Lower Thames Crossing project, the Chelmsford northern bypass, and the onshore components of the Five Estuaries and North Falls Offshore Wind Farm projects close to the proposed EACN Substation.</p> <p>The ES indicates (Para 14.7.6 - 14.7.16) that there are potential significant adverse effects at one hundred and five Noise Sensitive Receptors (NSR) during daytime works and seven NSR during potential night-time works. With the use of mitigation in the form of BPM, the magnitude of impact of construction noise are expected to be negligible to small at all nearby residential and low to medium sensitivity non-residential NSRs, and negligible at all nearby high-sensitivity NSRs during daytime and nighttime periods. The residual effect of construction noise is therefore not significant at all nearby NSRs during daytime and nighttime periods.</p> <p>The Outline CoCP (document reference 7.2) outlines specific mitigation measures to reduce construction noise and vibration which will be secured by Requirement in the DCO. However, specific BPM to reduce construction noise and vibration would be determined by the Main Works Contractor(s).</p>	<p>may affect certain sensitive individuals where these changes occur in sensitive locations (such as near schools or places of worship). Significant effects are predicted at a number of sensitive receptors.</p> <p>Mitigation measures to reduce these impacts will be deployed throughout the construction period in line with best practice.</p> <p>Such impacts, if they occur, are only expected to be experienced during the construction phase.</p>
Temporary impacts during construction from locally elevated dust levels and air pollutants	<p>Air quality is assessed in ES Chapter 7: Air Quality (application document 6.7). The ES concluded there would be the potential for significant effects caused by dust. However, proposed standard mitigation measures for high-risk sites are set out in the Outline CoCP (document reference 7.2). Following the implementation of the proposed standard mitigation measures, the effects of construction on dust soiling and human health are anticipated to be not significant, in line with IAQM guidance.</p>	<p>No differential impacts on equality groups are predicted.</p>

Type of Impact	Assessment	Conclusion
	<p>The ES also details that it is considered that emissions from construction equipment and plant are likely to be neutral and not significant.</p> <p>Consequently, no differential impacts to equality groups are predicted.</p>	
Operation of Project		
Changes in views and landscape character	<p>As a result of consultation feedback and assessment, changes were made to the design to reduce impacts on landscape and visual amenity, where possible. These measures aim to preserve the scenic value of sensitive landscapes and reduce visual disruption, thereby addressing the potential disproportionate impacts on vulnerable communities that rely on local landscapes for cultural, recreational, or therapeutic value.</p> <p>Embedded mitigation measures have been integrated into the project design to minimise impacts on sensitive landscapes and visual receptors which have included sensitive routeing and siting, undergrounding of infrastructure and use of Full Line Tension Gantries over larger terminal pylons. By addressing sensitive locations and implementing restoration efforts, the project aims to ensure that all communities, including those with protected characteristics, can continue to enjoy access to visually meaningful and culturally significant landscapes. These measures are essential for reducing disproportionate impacts on vulnerable populations, such as those reliant on local landscapes for recreation, mental health, and cultural identity.</p>	Potential for short-term differential impacts on disabled people with sensory disorders while adjusting to permanent changes in views from community areas. No long-term differential or disproportionate impacts on equality groups are predicted.

5. Conclusion

- 5.1.1 The Project is a nationally significant infrastructure project that will reinforce the electricity transmission network between Norwich and Tilbury, supporting the UK's transition to a low-carbon energy system.
- 5.1.2 This EqIA demonstrates whether and how National Grid has paid due regard to the needs of protected characteristic groups in line with the Equality Act 2010 and the PSED. It provides the Secretary of State with the necessary information to have regard to the requirements of the Equality Act 2010 and the PSED when determining the application.
- 5.1.3 The EqIA has assessed the potential for differential and disproportionate impacts on people with protected characteristics during the consultation, construction, operation, and decommissioning phases of the Project. The assessment has been informed by demographic data, consultation feedback, and the findings of the Environmental Statement.
- 5.1.4 National Grid has undertaken inclusive and accessible consultation throughout the development of the project. This has included targeted engagement with seldom-heard groups, provision of materials in alternative formats, and the use of accessible venues and digital platforms. These efforts are considered to have supported positive equality outcomes and demonstrate due regard to the PSED.
- 5.1.5 The assessment has identified that the construction and decommissioning phases may give rise to temporary negative equality impacts, particularly in relation to:
- Diversions and closures of Public Rights of Way (PRoW), which may affect older people, disabled people, and those with limited mobility;
 - Increased construction traffic, which may impact vulnerable road users and those accessing community facilities;
 - Noise, vibration, and air quality changes, which may differentially affect children, older people, pregnant women, and people with sensory or respiratory conditions;
 - Visual changes, which may affect neurodivergent individuals sensitive to alterations in their environment.
- 5.1.6 These impacts are not expected to be substantial in nature and are mitigated through embedded design measures, good practice construction management, and additional mitigation where required. The project does not require the compulsory acquisition of residential properties, and no known equality impacts have been identified in relation to land acquisition.
- 5.1.7 During operation, equality impacts are expected to be minimal. Some permanent PRoW diversions may remain in place, but these are not anticipated to result in significant adverse effects. The project will also deliver wider societal benefits, including improved energy security and support for renewable energy integration, which may positively affect all communities, including those with protected characteristics.

- 5.1.8 In conclusion, the Project has been developed with due regard to the needs of people with protected characteristics. With the implementation of proposed mitigation measures, the potential for negative equality impacts is considered to be low. The information presented in this EqlA provides the Secretary of State with a robust basis to consider equality matters in the determination of the application for development consent.

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