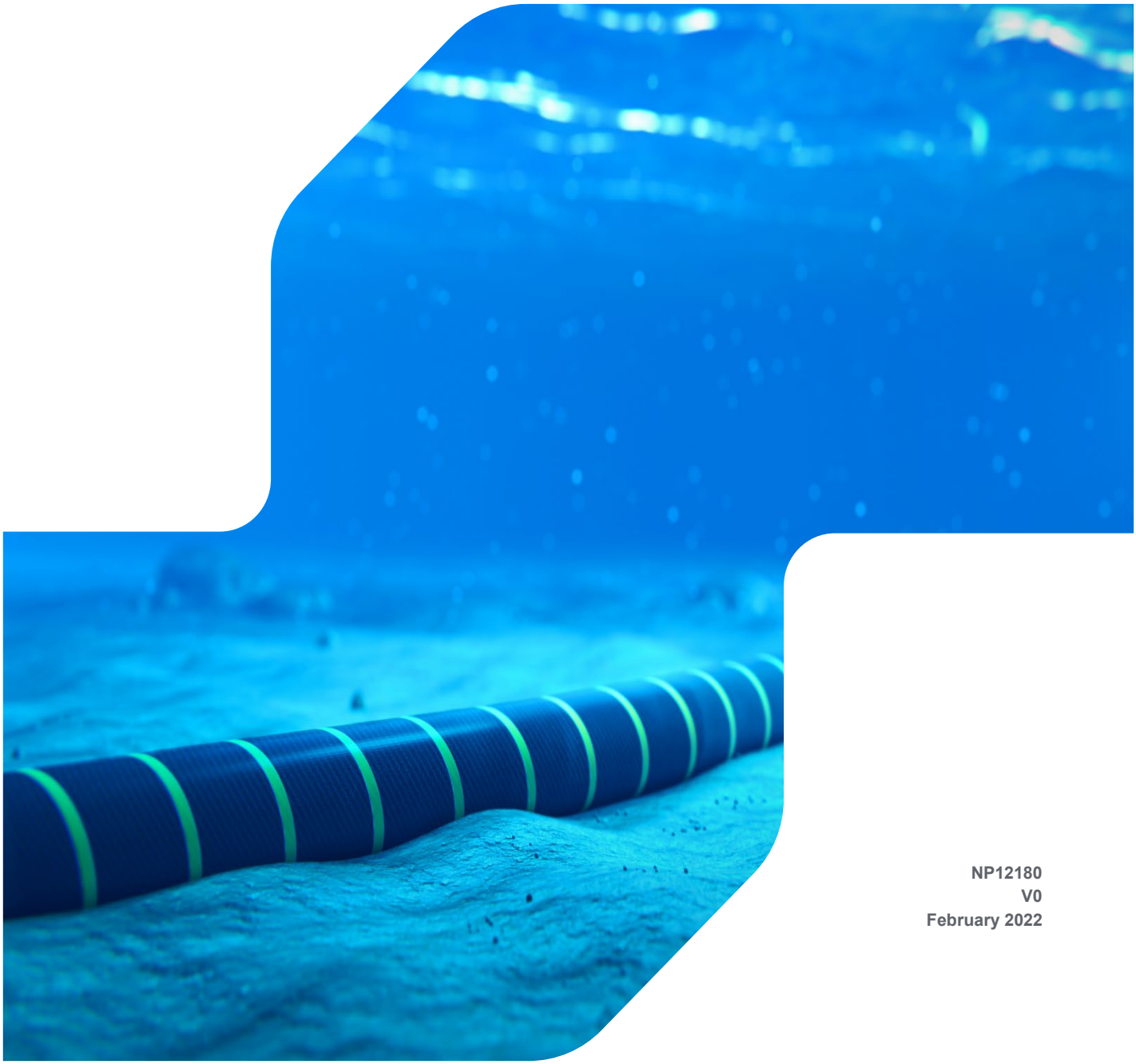
XLCC CABLE FACTORY - HUNTERSTON

Appendix 2.2: Population and Health Statement



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1 POPULATION AND HEALTH STATEMENT

Introduction

Background

1.1 This population and health statement has been prepared by RPS on behalf of XLCC Limited (XLCC). It is intended that the statement should be used in support of the application for planning consent for the proposed High-Voltage Cable Manufacturing Facility at Hunterston Port (hereafter referred to as the 'Project').

Population and Health

1.2 The 2014 amendment to the EU Environmental Impact Assessment (EIA) Directive and subsequent modification to the EIA Regulations 2017, as amended, in combination with the National Planning Framework 3 (NPF3) and NPF4 position statement (UK Parliament, 2017; Scottish Government, 2014; Scottish Government, 2020) reinforces the consideration of population and health through the regulatory planning process.

1.3 This document presents a population and health scoping exercise to investigate any construction and operation activities across the site, directly attributable to the Project with the potential to influence health (either adversely and/or beneficially); and, where appropriate, to define a proportionate assessment to assess and address these effects.

Site Location

1.4 The Project site is located on part of the former Hunterston Coal Yard within the wider Hunterston Port and Resource Centre (Hunterston PARC), located on the coast of the West of Scotland, south of the settlement of Fairlie, and north of the EDF Hunterston Power Station. The project site is approximately 50.7 hectares (ha) in size which includes the factory plot, cable export route along the jetty, access and temporary construction laydown areas. The factory plot is approximately 28.5ha in size.

1.5 The site contains some vegetation, hardstanding and buildings associated with the former coal yard use. The area surrounding the site is dominated by port infrastructure. The nearest residential property is located approximately 157m east of the Project site, on the other side of the A78 on Fairlie Moor Road. Further residential properties are located in the village of Fairlie northeast of the site, the closest of which are approximately 350m from the site.

Project Description Summary

1.6 The Project proposes the use of an advanced manufacturing process to produce high-voltage electricity transmission cables for specialised applications that require very high reliability of manufacture quality. The process takes raw materials of conductor wire, XLPE plastic pellets and steel armouring etc to produce high quality cable in a continuous process.

1.7 A full description of the Project is presented within Chapter 2: Project Description of this Environmental Impact Assessment Report (EIA Report).

1.8 It is proposed that access will be gained from the existing port access road via Irvine Road (A78) for both the construction and operational phases.

1.9 The Project will be designed to operate for up to 25 years, after which time ongoing operation and market conditions will be reviewed. If it is not appropriate to continue operating after that time, the Project may be decommissioned in full or in part.

Health Scoping Exercise

Health Scoping

1.10 Table 1 shows the relevant health determinants associated with the construction and operation of the Project and provides an indication as to the type of influence (be it adverse or beneficial), timescale (temporary or permanent), and geographical scope (site, local, regional or national).

1.11 The assigned impact, timescale and geographical scope for each of the activities have been taken from the assessments within Chapter 10: Traffic and Transport, Chapter 11: Noise and Vibration, Chapter 13: Air Quality and Chapter 14: Socio-economics of this EIA Report.

1.12 In addition to considering adverse changes that may affect human health from the physical environment, the scoping exercise has also considered the effects to human health as a result of impacts of additional employment that would be generated by the Project.

1.13 Each of the health determinants are identified in Table 1 and discussed below, setting the justification for the scoping statement.

Table 1: Health determinants

Phase	Health determinant	Potential effect	Timescale	Geographical scope
Construction phase	Changes in local air quality (nuisance dust only)	Negligible	Temporary	Local
	Changes in noise exposure	Negligible	Temporary	Local
	Changes in local transport nature and flow rates	Negligible	Temporary	Local
	Direct, indirect and induced income and employment opportunities	Beneficial at the individual level	Temporary	Local/Regional
Operation phase	Changes in noise exposure	Negligible	Permanent	Local
	Changes in local transport nature and flow rates	Negligible	Permanent	Local
	Direct, indirect and induced income and employment opportunities	Beneficial	Permanent	Local/Regional
		Negligible	Permanent	National/UK

Air Quality and Health

Construction

1.14 An assessment of exhaust emissions from construction-related vehicles has been scoped out on the basis that the number of construction-related vehicle movements does not meet the threshold for detailed assessment and are therefore unlikely to have a significant impact on local air quality. As a result, it can be concluded that there would be no likely significant adverse associated health effects.

1.15 Nuisance dust is the only relevant health determinant that has been assessed. As stated in Chapter 13: Air Quality, the key sources of dust for the proposed high voltage cable manufacturing facility would be the construction of the facility buildings, associated earthworks and any tracked out dust on HGVs.

1.16 Prior to mitigation, there is potential for exposure to nuisance dust associated with the activities outlined above. However, construction of the Project would be managed through a Code of Construction Practice (CoCP) (Appendix 2.1 of this EIA Report). This sets out the principles of good environmental management to be followed in order to avoid or minimise environmental impacts, including principles for dust management.

1.17 Furthermore, site-specific dust mitigation measures will be embedded into the design of the Project, as outlined in Chapter 13: Air Quality. Following the implementation of these measures, the potential for nuisance dust would be reduced to a level which is not significant in air quality terms.

1.18 Accordingly, there would be no likely significant adverse health effects and therefore, no detailed population and health assessment is necessary.

Operation

1.19 Air quality effects from operational vehicle movements is the only relevant health determinant that has been assessed.

1.20 As detailed in Chapter 13: Air Quality, concentrations of all three key pollutants (Nitrogen Dioxide (NO_2), particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$)) are predicted to be below objective thresholds at all receptors, therefore the impact of operational vehicle movements on air quality is considered negligible, which is not significant.

1.21 Accordingly, there would be no likely significant adverse health effects and therefore, no detailed population and health assessment is necessary.

Noise and Health

Construction

1.22 As stated in Chapter 2: Project Description, normal construction working hours will be Monday to Friday 07:00-19:00 and Saturday 08:00-13:00. No Sunday, Bank Holiday or night working is proposed. The exception to this is for non-noisy activities (such as fit-out within buildings) or activities that cannot be interrupted (such as continuous concrete pour and the slip-form concrete tower), which may be undertaken outside of these hours. Operating conditions for continuous construction activities will be separately agreed with North Ayrshire Council (NAC) to avoid causing nuisance.

1.23 Prior to mitigation, there is potential for exposure to construction noise at the nearest residential properties. However, potential health effects associated with exposure to construction noise are largely limited to daytime annoyance on the basis that no noisy activities would be undertaken at night. The only exception is works associated with construction of the extrusion tower which could be audible at the nearest sensitive receptors, and has potential to cause small changes in behaviour (e.g. turning up volume of television) and some sleep disturbance. However, this is limited to the early period of the night-time (between 23:00 and 00:00 hrs) and to a period of 43 weeks. Any daytime noise would also be temporary and intermittent in nature, limiting potential for adverse health effects to temporary annoyance. The CoCP (Appendix 2.1) would be applied in this context to further avoid or minimise environmental impacts, including principles for management of construction noise.

1.24 Change in noise levels due to construction traffic is assessed to be negligible. Overall, no significant noise effects have been identified during construction.

1.25 Accordingly, there would be no likely significant adverse health effects and therefore, no detailed population and health assessment is necessary.

Operation

1.26 As detailed in Chapter 11: Noise and Vibration, operational noise levels during the daytime and night-time are both below objective thresholds set to be protective of human health, specifically for risk of annoyance during the daytime and sleep disturbance during the night-time. Overall, change in noise levels at sensitive receptors during operation are not anticipated to give rise to significant effects.

1.27 Change in noise levels due to operational traffic is assessed to be negligible. Overall, change in noise levels at sensitive receptors during operation are not anticipated to give rise to significant effects.

1.28 Accordingly, there would be no likely significant adverse health effects and therefore, no detailed population and health assessment is necessary.

Transport and Health

Construction

1.29 As detailed in Chapter 10: Traffic and Transport, increases in traffic along the road network as a result of construction vehicle movements is predicted to result in negligible effects at most road links, and minor adverse effects at two links with sensitive receptors nearby. However, construction activities will be temporary, and managed through a Construction Traffic Management Plan (CTMP) which will outline good practice measures that will be adopted during construction to further minimise potential adverse effects.

1.30 Accordingly, there would be no likely significant adverse health effects (in terms of risk of accident/injury, pedestrian severance and delay, and pedestrian/cycle amenity) and therefore, no detailed population and health assessment is necessary.

Operation

1.31 As detailed in Chapter 10: Traffic and Transport, percentage increases in traffic along the road network as a result of operation of the Project is anticipated to result in negligible effects at all road links except two, where the effects would be minor.

1.32 Overall, the impact of the operational phase of the Project is not predicted to cause significant effects on driver stress, pedestrian severance and delay, pedestrian and cycle amenity, or risk of accident/injury.

1.33 Accordingly, there would be no likely significance adverse health effects from these changes and therefore, no detailed population and health assessment is necessary.

Socio-economic Factors and Health

Construction

1.34 Consistent, good-quality employment is a key wider determinant of health. As detailed in Chapter 14: Socio-economics, the Project will generate some temporary employment during the construction phase. While this would be beneficial at the individual level, there is limited potential for significant health benefits at the population level due to the temporary nature and duration of the construction phase.

1.35 Accordingly, there would be no likely significant health benefits and therefore, no detailed population and health assessment is necessary.

Operation

1.36 The operation of the Project will require a substantial workforce involved in a variety of employment opportunities at the site, and will also support further employment through the supply chain. As detailed in Chapter 14: Socio-economics, operation of the Project is likely to result in major beneficial effects in terms of manufacturing employment at the regional (North Ayrshire) level, which is significant. The Project is not anticipated to result in significant socio-economic effects as a result of operational employment at the national (Scotland) level or in terms of the UK.

1.37 Adverse health outcomes (both physical and mental) of long-term unemployment are well known and studied (Moller, 2012). Therefore, the provision of secure, long-term employment opportunities can offer health and wellbeing benefits.

1.38 Accordingly, given the significant beneficial employment impacts identified above, there is potential for significant indirect health benefits at the population level in North Ayrshire as a result of long-term employment during operation of the Project.

Conclusion

1.39 Overall, the Project is not anticipated to result in any significant adverse effects on health during construction or operation. There is potential for long-term, significant indirect health benefits through operational employment.

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