



# Knapton Generating Station and Vale of Pickering Wells

Screening Request under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017

## Pipeline Network

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Third Energy UK Gas Limited

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# 1 Introduction

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## 1.1 Overview

- 1.1 Third Energy UK Gas Limited (Third Energy) intends to apply for planning consent to extend the lifetime of its gas and power infrastructure in North Yorkshire, which expires in May 2018. The infrastructure includes the following:
- Knapton Generating Station (KGS) – a facility including a gas-powered turbine, and overhead line (OHL) transmitting electricity produced to the National Grid
  - Six conventional wellsites producing natural gas – Kirby Misperton A (KM-A), Kirby Misperton B (KM-B), Malton A (MN-A), Malton B (MN-B), Marishes (MAR) and Pickering (PK); and
  - A pipeline network connecting the wellsites to KGS, transporting gas to KGS and condensates to KM-A for re-injection into a dedicated re-injection well.
- 1.2 It is intended to extend the lifetime of KGS and the OHL under Section 36C and Section 37 respectively of the Electricity Act 1989 (as amended), and the wellsites under Section 73 of the Town & Country Planning Act 1990 (as amended). The pipeline network is currently consented under several planning consents, and it is Third Energy's intention to combine these in a single consent, so an application for full consent would be made under the Town & Country Planning Act 1990 (as amended). The applications for consent relating to the wellsites and pipeline network would therefore fall to be considered by North Yorkshire County Council (NYCC). The applications relating to KGS and the OHL would be considered by the Department for Business, Energy and Industrial Strategy (BEIS).
- 1.3 A briefing note has been prepared, outlining the planning history of the infrastructure and the proposed strategy to extend its lifetime. This screening request should be read in conjunction with the briefing note.
- 1.4 This screening request is submitted to NYCC, to determine whether Third Energy's proposed application under the Town & Country Planning Act 1990 (as amended) to extend the lifetime of the existing pipeline network in the Vale of Pickering (the "Proposed Development") constitutes Environmental Impact Assessment ("EIA") development. NYCC is the Relevant Authority ("RA") for the proposed development.
- 1.5 This report reflects the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ("EIA Regulations") and in accordance with Regulation 6 (2) and Schedule 3 of the EIA Regulations, this report contains:
- a plan of the site of the development (Appendix 1);
  - a description of the development (Chapter 2 and 3), including in particular:
    - a description of the physical characteristics of the whole development and, where relevant, of demolition works;
    - a description of the location of the development, with particular regard to the environmental sensitivity of geographical areas likely to be affected;

- a description of the aspects of the environment likely to be significantly affected by the development;
  - a description of any likely significant effects, to the extent of the information available on such effects, of the development resulting from the expected residues and emissions and the production of waste, where relevant, and the use of natural resources, in particular soil, land, water and biodiversity.
- 1.6 In addition, other relevant EU assessments (including necessary assessments under the Habitats Regulations) are addressed.
- 1.7 A site plan of the network, including wells, pipelines and other infrastructure is shown in Drawing ZG-TE-PL-PA-01 in Appendix 1.
- 1.8 This report also outlines features of the existing development and existing mitigation measures already in place (and which would continue under the Proposed Development) to avoid or prevent what might otherwise be significant adverse effects on the environment. These are more particularly detailed in Appendix 2.

## 1.2 Requirement for EIA

- 1.9 In order to determine whether the Proposed Development is 'EIA development', regard must be had by the RA to the EIA Regulations and supporting Planning Practice Guidance ("PPG")<sup>1</sup>.
- 1.10 EIA development falls into two Schedules of the EIA Regulations. EIA is mandatory for developments listed within Schedule 1. Schedule 2 developments require EIA if they would be "likely to have significant effects on the environment by virtue of factors such as its nature, size or location".
- 1.11 Regulation 5(4) states the RA must make a screening decision on the basis of the information provided by the developer, taking account, where relevant, of—
- (a) *any information provided by the applicant;*
  - (b) *the results of any relevant EU environmental assessment which are reasonably available to the relevant planning authority or the Secretary of State; and*
  - (c) *such of the selection criteria set out in Schedule 3 as are relevant to the development.*
- 1.12 If the RA is of the opinion that the development is likely to have significant effects on the environment, the RA must make a screening decision that the development is EIA development.
- 1.13 In order to allow the RA to determine the need for EIA, this report provides a description of the site and Proposed Development (Chapter 2), a review of the EIA screening criteria based on the EIA Regulations and the PPG and a completed EIA Screening Checklist (Chapter 3), a site location plan in Appendix 1, and a summary of embedded mitigation measures within Appendix 2.

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<sup>1</sup> *Planning Practice Guidance on Environmental Impact Assessment - <https://www.gov.uk/guidance/environmental-impact-assessment>. This guidance refers to the Town and Country Planning EIA Regulations 2017.*

## 2 Site and Proposed Development

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### 2.1 Site Context

- 2.1 The pipeline network connects the Vale of Pickering wellsites to Knapton Generating Station (KGS), in East Knapton in North Yorkshire at SE 887 770. The network is located within open countryside in the county of North Yorkshire in Ryedale District Council area. KGS is in the east of the network, with the pipelines spreading out from this “hub” to the west, as shown in Drawing ZG-TE-PL-PA-01 in Appendix 1.
- 2.2 The pipeline network is located between the towns of Pickering in the north and Malton in the south, and small villages and farm buildings are scattered within the surrounding farmland, together with a number of small woodland areas. The River Derwent and River Rye are the main watercourses in the area with many smaller becks and drains feeding into these, and the road network includes the A64 in the south, the A169 (Pickering to Malton) and the York to Scarborough railway line.
- 2.3 The underground network crosses largely agricultural land, to the PK, KM-A and KM-B wellsites to the north-west, and MN-A and MN-B (near Great Habton) and MAR to the west. Land use dominating the whole of the Vale of Pickering is primarily agricultural, both arable and pasture land of Agricultural Land Classification Grade 3.
- 2.4 In total, the pipeline network covers approximately 39 km, though the distance covered by the pipelines is 22.39 km (as the gas and liquid pipelines are laid together). It is underground, with land at surface managed for agricultural purposes.

### 2.2 Proposed Development

- 2.5 The Proposed Development is the extension of the operating period of the existing pipeline network from 2018 to 2035. This network has two key aspects:
- transporting gas from the satellite wellsites (with their own planning consents) to KGS, as fuel for the turbine;
  - transporting produced water (water extracted alongside gas during gas extraction<sup>2</sup>) and hydrocarbon condensates (extracted alongside gas during gas extraction and separated during gas treatment at KGS) from the wells and KGS. These are transported by the pipeline to the KM-3 re-injection well, for re-injection into the Kirkham Abbey Formation (KAF), which is the gas-producing formation for wells in the area.
- 2.6 The Proposed Development will therefore permit the continued transportation of fuel to KGS, to allow its continued operation to produce electricity from the locally sourced gas, and to export the electricity via the associated OHL, to the National Grid. Re-injection of the produced water into KM-3 (which the retention of the pipeline network will also facilitate) avoids the requirement

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<sup>2</sup> For the purpose of this report, reference to “produced water” being re-injected into KM-3 is assumed to refer to hydrocarbon condensates as well, as both are transported in the liquid pipelines. The hydrocarbon condensates are originally present in the gas producing formation, extracted from the “gas” stream at KGS. Liquid pipelines refer to pipelines designed to carry both produced water and hydrocarbon condensates, and “liquids” refer to a mixture of produced water and hydrocarbon condensate.

to remove and treat the produced water by another means for disposal, by returning it to the gas-producing formation from which it was removed.

- 2.7 It is requested that the lifetime of the infrastructure is extended until December 2035, which is the date of the existing consent at the Pickering Wellsite (PK)<sup>3</sup>. This would provide the following benefits:
- Ensure that the gas produced from the consented gas production aspect of well PK-1 has the capacity to be exported to a consented end-use (i.e. KGS);
  - Ensure that the entire network, including pipelines, is consented to carry gas and produced water between the wellsites and KGS;
  - Ensure that any subsequent wells consented on individual wellsites can feed into a consented network with a lifetime appropriate for gas production; and
  - Ensure that KGS has a source of fuel to produce and export electricity from gas from the Vale of Pickering wells into the future.
- 2.8 It is intended that the existing environmental permits, and associated inspections of the surface infrastructure at KGS and the wellsites, and HSE regulation of the pipelines will continue for this period. The pipeline will not be used to transport any fluid outside of its current specifications. Any variations required by these regulators will be undertaken by Third Energy. Should these permits be surrendered in advance of 2035, the infrastructure will be decommissioned and the site restored in accordance with the planning conditions.
- 2.9 Maintenance of the pipeline network is a requirement of the HSE under the Pipeline Safety Regulations 1996, and this therefore forms part of the Proposed Development. This ensures that the pipeline continues to operate safely.
- 2.10 Abandonment and restoration of the pipeline network will take place according to good practice, with the pipelines purged prior to decommissioning.
- 2.11 The pipeline network historically has been consented in two sections. The main body of the network, associated with the “North Yorkshire Power Project” linked all the wellsites with the exception of PK, to KGS. The Pickering pipeline connects the PK wellsite to KM-A. Both sections fall within the scope of the Proposed Development, to simplify the consenting process in the region. The two sections are described in more detail below.

#### **North Yorkshire Power Project pipelines**

- 2.12 These pipelines were originally consented by DTI Pipeline consent PL B50 and PL B51, which was implemented by NYCC planning consent 4/A/93/FA. This NYCC consent was amended in 2006<sup>4</sup> to permit operation of the pipelines until May 2018.
- 2.13 The two pipelines referred to in the pipeline consent are:
- (i) A pipeline (B50) which has a nominal diameter of six inches for the conveyance of hydrocarbon gas from the wellsites at Great Habton, Kirkby*

<sup>3</sup> NYCC Consent C3/15/1507/CPO (NY/2015/0307/FUL) granted in June 2016 to change the use of the existing PK-1 Natural gas production well to a natural gas production and produced water re-injection well.

<sup>4</sup> Under C3/06/00625/CPO/F

*Misperton and Marishes to the power station at Claypit Plantation, East Knapton; and*

*(ii) A pipeline (B51) which has a nominal diameter of three inches for the conveyance of produced formation liquids from the power station at Claypit Plantation, East Knapton to the wellsite at Kirby Misperton in the region of Ryedale, North Yorkshire.*

- 2.14 These underground pipelines are currently in place and operational, with monitoring and routine maintenance forming part of Third Energy's management system at KGS. Flow within the pipelines is monitored and recorded electronically via the SCADA system at the control room at KGS.
- 2.15 There are above ground marker points, aerial marker posts and cathodic protection test points at appropriate intervals along the pipes.
- 2.16 The distances of the pipelines are as follows:
- MN-A to MN-B (gas) – 0.63 km
  - MN-A to MN-B (liquid) – 0.63 km
  - MN-B to KM-A (gas) – 2.23 km
  - MN-B to KM-A (liquid) – 2.23 km
  - KM-B to KM-A (gas) – 0.94 km
  - KM-B to KM-A (liquid) – 0.94 km
  - KM-A to MAR (gas) – 5.93 km
  - MAR to KM-A (liquid) – 5.93 km
  - MAR to KGS (gas) – 6.86 km
  - KGS to MAR (liquid) – 6.86 km
- 2.17 In total the length of the North Yorkshire Power Project pipelines is 33.18 km, though the distance covered by the pipelines is 16.59 km (as the gas and liquid pipelines are laid together).

### **Pickering Pipelines**

- 2.18 The Pickering pipeline connecting PK to KM-A (in its current route) was originally consented in 2000<sup>5</sup>. The lifetime of this pipeline was not extended in 2006 alongside the rest of the pipeline network, as it was not close to expiry at the time.
- 2.19 This pipeline is a 6" multiphase gas and liquid line between the PK wellsite and KM-A – approximately 5.8 km. This pipeline is in place and operational with monitoring and routine maintenance forming part of Third Energy's management system at KGS. Flow within the pipeline is monitored and recorded electronically via the SCADA system at the control room at KGS. There are above ground marker points, aerial marker posts and cathodic protection test points at appropriate intervals along the pipeline.

<sup>5</sup> C3/00/01298/CPO

- 2.20 In total the length of the North Yorkshire Power Project pipelines plus Pickering is 38.98 km, though the distance covered by the pipelines is 22.39 km (as the gas and liquid pipelines are laid together).
- 2.21 Continued use of the Pickering pipeline has been included within subsequent planning consents<sup>6</sup>, but these did not include the pipeline in the red line boundary of the relevant applications.

### **Proposed Changes**

- 2.22 The application will be to continue the use of the entire pipeline network to transport gas, produced water and hydrocarbon condensates between the wellsites, KGS and the KM-3 re-injection well on KM-A. The proposed red line will include all the network, including the PK segment.
- 2.23 Other than the extension of the time proposed for operation of the pipeline network until 2035, and the nature of the planning boundary (red line) to combine the two existing red lines, there are no proposed changes to the footprint of the existing consents or pipeline operations as currently consented. Any future changes would be subject to relevant planning and permitting controls.

### **2.3 Future Baseline Environment**

- 2.24 For the purposes of this screening report and the planning application, the future baseline environment will include the retained infrastructure, operating as consented (and permitted).
- 2.25 The Proposed Development consists of the extension of the existing development until 2035, and the submission will therefore include a baseline including this pre-existing development. The assessment addresses the “difference” between the impact of the existing development and its retention until 2035.
- 2.26 It is arguable that the baseline environment for the assessments should assume that a decommissioned site is in place (i.e. no pipeline network), as the “alternative” starting point. This exercise, however, would logically draw upon the pre-existing impacts in any assessment and would inevitably bring the process back to the baseline assumption made in this screening submission – that the impacts of the development will be assessed as a continuation of the pre-existing impacts.

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<sup>6</sup> Including C3/08/00779/CPO (as amended by C3/09/0069/CPO) to drill and produce gas from the PK-2 well on PK, and C3/15/1507/CPO granted in June 2016 to change the use of the existing PK-1 natural gas production well to a natural gas production and produced water re-injection well.

## 3 Screening Assessment

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### 3.1 Introduction

- 3.1 The following should be considered in determining whether the Proposed Development constitutes EIA development:
- If the Proposed Development is of a type listed in Schedule 1;
  - If not, whether:
    - it is listed in Schedule 2; and
    - any part of it is located within a sensitive area; or
    - it meets any of the relevant thresholds and criteria set out in Schedule 2; and / or
    - it would be likely to have significant effects on the environment.
- 3.2 These points are explored further in this section with reference to the EIA Regulations and supporting PPG.

### 3.2 Schedule 1 Projects

- 3.3 EIA is mandatory for projects listed in Schedule 1 of the EIA Regulations. Schedule 1 developments are large scale projects for which significant effects would be expected.
- 3.4 In respect of the Proposed Development, Schedule 1, applies for the following projects:
- 16. Pipelines with a diameter of more than 800 millimetres and a length of more than 40 kilometres for the transport of—*
- (a) gas, oil or chemicals; or*
- (b) carbon dioxide streams for the purposes of geological storage, including associated booster stations.*
- 3.5 The pipelines are a maximum diameter of 153 mm (6") and less than 40 km in total, and are therefore not Schedule 1 development.

### 3.3 Schedule 2 Projects

- 3.6 The development proposed is of a type listed in Schedule 2 development. Whether such development is EIA development depends on the location of the development (i.e. if it is within a sensitive area) and/or whether it meets any of the relevant thresholds or criteria in Column 2.
- 3.7 Sensitive Areas are defined in the EIA Regulations (Schedule 2(4)) as:
- Sites of Special Scientific Interest (SSSI), European Sites and Ramsar sites;
  - National Parks, the Broads, and Areas of Outstanding Natural Beauty; and
  - World Heritage Sites and Scheduled Monuments.
- 3.8 In certain cases, local designations which are not included in the definition of sensitive areas, but which are nonetheless environmentally sensitive, may also be relevant in determining

whether an assessment is required. Furthermore, in considering the sensitivity of a particular location, regard should also be had to whether any national or internationally agreed environmental standards (e.g. air quality) are already being approached or exceeded.

- 3.9 The pipeline is not located in a sensitive area, as it is not located in any of the designated areas listed above or in any locally designated areas. It passes under the River Derwent at Rye Mouth, just east of MAR wellsite. However, the location of the pipeline is not beneath the designated area, being located to the north of the SAC and SSSI.
- 3.10 Considering the relevant thresholds and criteria, oil and gas pipeline installations are included in Category 10 of Schedule 2 (Infrastructure Projects) of the EIA Regulations. These are relevant if the area of the works exceeds 1 ha or the installation has a design operating pressure exceeding 7 bar gauge. Changes and extensions to such infrastructure are addressed in Category 13, where either the development as changed or extended may have significant adverse effects on the environment; or the thresholds and criteria applied to the change or extension are met or exceeded.
- 3.11 There are no “works” proposed to extend the pipeline consent, though the red line boundary for the pipelines will exceed 1 ha, as the pipelines cover approximately 22 km in all (with approximately 39 km of pipeline within the trench). The operating pressure of the pipelines is 80-100 bar gauge.
- 3.12 As the thresholds in Schedule 2 are met, the test for whether the Proposed Development is EIA development is whether the likely effects on the environment are significant.
- 3.13 There is therefore a requirement to assess if the extension of the lifetime of the pipeline (both by itself, and in cumulation with other development) may have significant adverse effects on the environment, having regard for any mitigation that may be included to prevent such effects. The RA must consider the selection criteria set out at Schedule 3 of the EIA Regulations and the information outlined in Regulation 6.

### **3.4 Schedule 3**

- 3.14 Schedule 3 of the EIA Regulations set out selection criteria which relate to specific matters, including: the characteristics of the development; the location of the development; and the types and characteristics of the potential impact. These factors should be taken into account as part of the screening process and are set out below.

#### **Characteristics of development**

- The size and design of the whole development;
- Cumulation with other existing and approved developments;
- The use of natural resources, in particular land, soil, water and biodiversity;
- The production of waste;
- Pollution and nuisances;
- The risk of major accidents and disasters that are relevant to the development, including those caused by climate change, in accordance with scientific knowledge;
- The risks to human health (for example, due to water contamination or air pollution).

### Location of development

- The environmental sensitivity of geographical areas likely to be affected by the development must be considered, having regard in particular to—
  - The existing and approved land use;
  - The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;
  - The absorption capacity of the natural environment, paying particular attention to the following areas—
    - Wetlands, riparian areas and river mouths;
    - Coastal zones and the marine environment;
    - Mountain and forest areas;
    - Nature reserves and parks;
    - Areas classified or protected under domestic legislation or legislation of other EEA states;
    - European sites (as defined in regulation 8(1) of the Conservation of Habitats and Species Regulations 2010);
    - Areas in which there has already been a failure to meet environmental quality standards that are set out in European Union legislation and are relevant to the development, or in which it is thought that there is such a failure;
    - Densely-populated areas;
    - Landscapes and sites of historical, cultural or archaeological significance.

### Types and characteristics of the potential Impact

- The likely significant effect of the development on the environment must be considered in relation to the criteria above, with regard to the impact of the development on:
  - Population and human health;
  - Biodiversity (for example, fauna and flora), with particular attention to habitats and species protected under the Habitats Directive or the Wild Birds Directive;
  - Land (for example, land take), soil (for example, organic matter, erosion, compaction, sealing), water (for example, hydromorphological changes, quantity and quality), air and climate (for example, greenhouse gas emissions, impacts relevant to adaptation);

- Material assets, cultural heritage (including architectural and archaeological aspect) and the landscape; and
- The interaction between the factors above
- The assessment must take into account:
  - The magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected);
  - The nature of the impact;
  - The transboundary nature of the impact;
  - The intensity and complexity of the impact;
  - The probability of the impact;
  - The expected onset, duration, frequency and reversibility of the impact;
  - The cumulation of the impact with the impact of other existing and approved developments; and
  - The possibility of effectively reducing the impact.

### 3.5 Consideration of Cumulative Effects

- 3.15 The EIA Regulations require consideration of a proposed development cumulatively with other development. Guidance contained in the PPG regarding EIA Screening includes the topic ‘When should Cumulative Effects be Assessed?’ This states that:

*“each application (or request for a screening opinion) should be considered on its own merits. There are occasions where other existing or approved development may be relevant in determining whether significant effects are likely as a consequence of a proposed development. The local planning authorities should always have regard to the possible cumulative effects arising from any existing or approved development.”*

- 3.16 As the Proposed Development is an existing pipeline, it forms part of the existing baseline environment of the area. It will therefore have been considered as a baseline feature against which other planning consents were assessed (albeit potentially with the assumption made that the baseline would alter in 2018 at the end of life of the infrastructure – as discussed in Section 2.3 of this report). This assessment would either have been made explicitly for EIA development, or implicitly, in that each development must be acceptable within the environment in which it is located.
- 3.17 The cumulative assessment for the Proposed Development will seek to assess the impact of the extension of the existing development until 2035 against “committed” development. This is in the context of all existing development within the vicinity of the project which would again be added to the baseline conditions leaving only the extension of the life of the (other) existing conventional gas operations, unimplemented approved development, and reasonably foreseeable other development to be assessed cumulatively.

**Extension of life of existing conventional gas operations**

- 3.18 These features include the satellite wellsites (which will undergo a similar screening process to NYCC to extend their lifetime from May 2018 to 2035), KGS and the overhead line transporting electricity from KGS (which will undergo a similar screening process to BEIS to extend their lifetime from May 2018). These are consented and existing (baseline) features in the landscape, and provide the existing physical context for determination of the potential impact of the planning application. Therefore, their cumulative effect to 2035, alongside the Proposed Development will be addressed in the planning submission, as part of the environmental report.
- 3.19 The determination of these renewal applications must be considered on their merits, and as the operational proposals remain unchanged from the existing conditions (other than the extended operational period proposed) the cumulative impact must be assessed to the proposed extension date of 2035. However, it is noted that these sites have been “cumulative” features in the environment since their construction and no significant cumulative effects are therefore likely given mitigation in place (such as outlined in Appendix 2 of this report).

**Unimplemented, approved development**

- 3.20 There are additional consents in place (but not yet constructed) for further infrastructure within the region, and in some cases within the red line boundary of the Proposed Development (and other proposed applications). These include:
- Construction of a pipeline from the Ebberston Moor South (EM-S) wellsite to KGS to support production of gas from the Ebberston Moor field which is not currently linked to KGS. This was consented by North Yorkshire County Council (C3/14/00970/CPO/ NY/2014/0275/ENV) where KGS is located, and also North York Moors National Park Authority (NYM/2014/0587/EIA) where EM-S is located. The consent was obtained by a joint venture between Moorland Energy Ltd (who owned and operated the EM-S wellsite at the time) and Third Energy. Works on KGS include constructing a gas reception facility in the south-west of the site to enable production. This is unlikely to affect the current planning application to extend the site’s lifetime until 2035, given the scale of works proposed, but will be addressed in the environmental report.
  - Construction of a pipeline from the Ebberston Moor A (EM-A) wellsite to KGS (NY/2013/0593/EIA in the North York Moors National Park Authority and C3/13/01195/CPO in North Yorkshire). This was for gas production from the EM-A wellsite, provision of a water storage tank, gas fired heater, pipeline pig trap area, fire water tank (50 cubic metres) and gas fuelled electrical generator, water separator building, storage tanks and construction of a 15.3km steel underground pipeline to KGS. This consent lapsed in December 2016, and a new application to instead direct the pipeline to EM-S, as part of the overall development above (i.e. pipeline from EM-S to KGS) is in preparation. This will assess cumulative impacts at the time.
  - Consent to hydraulically fracture and produce gas from the KM-8 well on KM-A. Although a planning consent on the same wellsite as one of the conventional operations, it forms a separate permission, and must therefore be considered cumulatively. The majority of work is anticipated to be

complete by the start of the Proposed Development, though gas test and production will continue, potentially up to 2026. This development will be addressed as a cumulative project with the extension of the conventional gas operations at KM-A, within the environmental report. The planning application for KM-8 took existing operations at KM-A into account in its assessment of environmental effects, so no significant additional cumulative impacts are foreseen.

- 3.21 A planning consent for a gas processing plant in Hurrell Lane, Thornton-le-Dale in the North York Moors National Park was upheld at appeal in June 2012 (C3/10/00529/CPO/NY/2010/0159/ENV – North Yorkshire County Council and NYM/2010/0262 in North York Moors National Park). This involved gas production from the EM-S wellsite, alterations and the provision of new facilities at EM-S; the construction of two underground gas pipelines from EM-S to a proposed gas processing facility to be located off Hurrell Lane, Thornton Le Dale; the provision of a new vehicular access road between the A170 and the proposed gas processing facility; and the construction of a gas processing plant to include buildings, plant, and other associated works and infrastructure, and the construction of an export pipeline between Hurrell Lane to a proposed National Transmission System - Above Ground Installation to be located south of New Ings Drain, off Hurrell Lane. Condition 1 required development to start within five years of the date of consent, so it lapsed in June 2017. As the purpose of this consent (a use of gas from EM-S) has now been superseded by the consent to join the wellsite to KGS, there is understood to be no intention to re-visit this application from the current owners of the EM-S wellsite; INEOS 120 Exploration Limited.

**Reasonably foreseeable other development**

- 3.22 Given the existing presence of Third Energy’s infrastructure in the baseline environment, it is reasonable to assume that “committed” development has taken its presence into account. Continued operation of the infrastructure will therefore have limited additional cumulative impact on the operation of such “committed” development – even if the assumption had been made that it would cease operating in 2018.
- 3.23 Although a “formal” EIA cumulative assessment may not have been made, it is reasonable to assume that the baseline environment (including Third Energy infrastructure) was appropriately characterised, and that therefore effects would continue for the proposed extended lifetime until 2035.
- 3.24 It is therefore considered that the proposed retention of the infrastructure and its continuing operation until 2035 would not create any additional cumulative effects with other reasonably foreseeable development as there would be no environmental impact that is not already in place (as part of the baseline), or having been assessed as being acceptable. Nevertheless, such developments will be scoped with the planning authority and addressed in the assessment.
- 3.25 EIA screening for any additional future sites would be required to take account of potential impacts, having regard to the prevailing environmental baseline conditions and developments that have previously been approved, or the applicant has in the planning stage, at the point in time when the exercise is carried out.

### 3.6 Planning Practice Guidance

3.26 Paragraphs 057 and 058 of PPG provide guidance to help determine whether significant effects are likely. In general, the more environmentally sensitive the location, the lower the threshold will be at which significant effects are likely. Table 1 sets out indicative criteria and thresholds identified in the PPG along with some of the issues that are most likely to need to be considered in determining the whether a development is likely to be EIA development.

<b>Development Type</b>	<b>Schedule 2 Criteria</b>	<b>Indicative criteria and thresholds</b>	<b>Key issues to consider</b>
Oil and gas pipeline installations and pipelines for the transport of carbon dioxide streams for the purposes of geological storage	The area of the works exceeds 1 hectare; or in the case of a gas pipeline, the installation has a design operating pressure exceeding 7 bar gauge.	Pipelines over 5 km long. Environmental Impact Assessment is unlikely to be required for pipelines laid underneath a road, or for those installed entirely by means of tunnelling.	<p>For underground pipelines, the major impact will generally be the disruption to the surrounding ecosystems during construction, while for overground pipelines visual impact will be a key consideration.</p> <p>The underground pipeline network is approximately 39 km, though as the gas and liquid pipelines are laid together, it is approximately 22.39 km land take in all. However, there will be no disruption to surrounding ecosystems as the pipeline is already in place. The design pressure of the pipelines is 80-100 bar gauge.</p>

3.27 It is important to note that the Health and Safety Executive (HSE) permits pipeline operations and requires the operator (Third Energy) to carry out routine maintenance under the Pipelines Safety Regulations 1996. The HSE would require to be content that operation of the pipelines could continue safely.

3.28 The existing development and consenting/ permitting regime form a significant part of the existing relevant built environment and as such the extent of any potential “significant adverse effects” will be restricted to land-use planning effects, such as noise, traffic and landscape effects related to the extension of operations until 2035. As addressed in Section 2.3, the future baseline environment will be influenced by the fact that the current baseline environment contains the infrastructure.

3.29 Given that the operational effects have to date been adequately controlled since the pipelines were developed (by means of planning conditions attached to the planning consents, and various management plans in place, as well as under the requirements of the Pipeline Safety

Regulations), there are not anticipated to be any significant environmental effects arising from retaining the existing, underground pipeline infrastructure and it continuing to be operated until 2035.

### 3.7 Review of Screening Criteria

3.30 Table 2 sets out a review of all the above criteria and requirements and specifically addresses the Proposed Development at the site.

<b>Table 2: Screening Assessment for Proposed Development (extension of operational period until 2035)</b>	
<b>Pipelines</b>	
<b>1. CHARACTERISTICS OF THE DEVELOPMENT</b>	
<b>(a) Size and design of the development</b>	
Will the development as a whole be out of scale with the existing environment?	The development is part of the existing environment. The pipelines are approximately 39 km long, but cover a distance of approximately 22.39 km (as the gas and liquid pipelines are laid together). They are underground, and surface land is managed by landowners, generally as agricultural land.
Will the design of the development as a whole fit within the existing environment?	The pipelines are underground with limited surface infrastructure (marker posts and test points) so are well integrated in the existing environment.
Will it lead to further consequential development or works?	No – Routine maintenance only would be required. Should the network require to be expanded to accommodate other wellsites (for example, the consented pipeline from EM-S to KGS) these would be subject to further planning and permitting requirements.
<b>(b) Cumulation with other existing development and or approved development</b>	
Are there potential cumulative impacts with other existing development or development not yet begun but for which planning permission exists?	The pipeline network is an existing part of the environmental baseline. Any applications for similar development would require to take its presence into account.
Should the application for this development be regarded as an integral part of a more substantial project? If so, can related developments which are subject to separate applications proceed independently?	The network of KGS, OHL (covered in a screening report to BEIS), pipelines (covered in this screening report) and the satellite wellsites (covered in separate screening reports to NYCC) are components of a project to produce power from the gas sourced from within the Vale of Pickering. Although the other components of the project are dependent on the existence of the pipeline network, this in turn is not dependent on the exact works proposed on each satellite wellsite (which are properly consented, individually, by NYCC as the Minerals Planning Authority). The current pipeline network supports the existing wellsites and their consented wells, but could also support additional wells drilled in the future on these wellsites. Therefore it is not a specific, integral part of any particular consent for works on a single wellsite, and would not require to be decommissioned once any particular planning consent expires without renewal. Should the pipeline network not exist, justification for the satellite wellsites and KGS, and another means of transporting fuel and produced water, would need to be made. If additional wellsites were created, the pipeline extent would need to be expanded.

**Table 2: Screening Assessment for Proposed Development (extension of operational period until 2035)**

(c) Use of natural resources, in particular, land, soil, water and biodiversity	
<p>Will construction or operation of the development use natural resources such as land, water, material or energy, especially any resources which are non-renewable or in short supply?</p>	<p>As the pipeline is constructed and operational, there is no requirement for additional natural resource use, other than energy (diesel) for routine maintenance.</p>
(d) Production of waste	
<p>Will the development produce wastes during construction or operation or decommissioning?</p>	<p>There would be no construction waste, as the pipeline is already constructed. Operational waste would be restricted to that required during routine maintenance (staff waste and any pipeline or material removed during repair for reuse or recycling).</p> <p>Decommissioning waste would be minimised by the waste management plan produced prior to the decommissioning process, and would ensure options for reuse and recycling of the pipe were addressed. It is anticipated some pipes would be left in situ once cleaned and decommissioned, if they could not be reused, to minimise agricultural disturbance.</p>
(e) Pollution and nuisances	
<p>Will the development release any pollutants or any hazardous, toxic or noxious substances to air?</p>	<p>The potential for leaks of methane/ natural gas from the pipework exists, but this would be prevented by ongoing monitoring of the network at the control room in KGS, and routine monitoring by Third Energy employees and the HSE. The pipeline construction is required to avoid such leaks for health and safety as well as environmental purposes. Any issue would therefore be rapidly identified and addressed as a matter of course. Valves are in place to isolate sections of pipe for repair as required.</p> <p>There are no Air Quality Management Areas in the vicinity of the pipeline.</p>
<p>Is there a potential risk from leachates or escape of wastes of other products/by-products that may constitute a contaminant in the environment?</p>	<p>As above, should the underground pipeline leak (either natural gas or hydrocarbon condensate/ salt brine) there could be a risk to water. However, leaks will be monitored and repaired as necessary, as a condition of the pipeline consent from the HSE.</p>
<p>Will the development cause noise and vibration or release of light, heat, energy or electromagnetic radiation?</p>	<p>There will be no noise, vibration or release of light, heat, energy or electromagnetic radiation during routine operation of the pipeline. Any emissions of noise or vibration during routine maintenance or decommissioning would be controlled through working hours and appropriate management plans and method statements.</p>
<p>Will the development lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?</p>	<p>As above, should the underground pipeline leak (either natural gas or hydrocarbon condensate/ salt brine) there could be a risk to water. However, leaks will be monitored and repaired as necessary, as a condition of the pipeline consent from the HSE.</p>

**Table 2: Screening Assessment for Proposed Development (extension of operational period until 2035)**

(f) Risk of major accidents and/or disasters, including those caused by climate change	
<p>Will there be a risk of major accidents and/or disasters during construction or operation of the development which would have effects on people or the environment?</p>	<p>The pipelines are constructed and operational. Although the risk of a major accident exists, the management of the pipeline to good practice and in accordance with HSE guidance minimises this, so it will be no greater than the risk to any other operational gas transmission pipeline.</p> <p>Risks as a result of climate change (such as potentially increased flooding) are addressed through the undergrounding of the pipe, and its routine maintenance. Areas of the route such as near the MAR wellsite and south of the PK wellsite which are susceptible to flood were developed with this in mind. The pipeline itself is not affected by flood and does not increase the likelihood of flood elsewhere, as it is underground at sufficient depth to not affect the field drainage or topsoil.</p>
<p>Will the development involve use, storage, transport, handling or production of substances or materials which could be harmful to people or the environment (flora, fauna, water supplies)?</p>	<p>The pipelines carry gas and liquids which could be harmful to people or the environment (flora, fauna, water supplies) if a pathway existed to enter the environment. Regular monitoring and maintenance of the pipeline will ensure there is no contact of these contents with the surrounding environment. The Pipeline Safety Regulations and HSE audits also prevent (and control if necessary) the release of these to the environment.</p>
(g) Risks to human health	
<p>What are the risks to human health such as from water contamination or air pollution?</p>	<p>The pipelines carry gas and liquids which could be harmful to people or the environment (including water supplies) if a pathway existed to enter the environment. Regular monitoring and maintenance of the pipeline will ensure there is no contact of these contents with the surrounding environment, therefore avoiding the risk to human health. The Pipeline Safety Regulations and HSE audits also prevent (and control if necessary) the release of these to the environment.</p>
(h) Other characteristics	
<p>Potential physical changes (topography, land use, changes in water bodies etc.) from construction, operation or decommissioning of the development?</p>	<p>The pipeline network is existing infrastructure with no physical changes proposed. Decommissioning would be undertaken according to good practice by Third Energy at the time of decommissioning KGS or when a particular wellsite is decommissioned. This would be in accordance with existing requirements in the planning conditions attached to the existing planning consents.</p>
2. LOCATION OF THE DEVELOPMENT	
(a) Existing and approved land use	
<p>Are there existing or approved land uses on or around the location which could be affected by the development, e.g. residential, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying?</p>	<p>The underground pipeline network primarily passes through agricultural land, and adjacent to the road network where feasible. Field edges are used where landowner requirements were met during the installation of the network. The pipeline crosses roads and watercourses in places, having been laid by the statutory undertaker.</p>

**Table 2: Screening Assessment for Proposed Development (extension of operational period until 2035)**

<p>Is the development located in a previously undeveloped area where there will be loss of greenfield land?</p>	<p>No. The pipeline network is existing infrastructure.</p>
<p>(b) Relative abundance, availability, quality and regenerative capacity of natural resources in the area and its underground</p>	
<p>Are there any areas on or around the location which contain important, high quality or scarce resources which could be affected by the development?</p> <ul style="list-style-type: none"> <li>• soil</li> <li>• land</li> <li>• groundwater resources</li> <li>• surface waters</li> <li>• biodiversity</li> <li>• forestry</li> <li>• agriculture</li> <li>• fisheries</li> <li>• tourism</li> <li>• minerals</li> </ul>	<p>The pipeline is consented and regulated by the HSE with measures in place to prevent any effects on surrounding resources. Pressure within the pipeline when flowing is recorded from the control room at KGS to ensure there are no potential leaks to the environment.</p> <p>The pipeline network covers a wide area of primarily agricultural land, though no designated areas are included on the route. Some priority habitat (especially floodplain grazing marsh around MN-A, MN-B and MAR) is included on the route, though the pipeline is underground so this is not impacted.</p> <p>The superficial deposits along the route are generally secondary (Class A or undifferentiated) aquifers, and the bedrock is not classed as an aquifer along the route. The majority of the route is not classed as having groundwater vulnerability, though some land to the south of the route from MN-A and MN-B, and including the route from MAR to KGS is a minor aquifer of high vulnerability.</p> <p>The route, including the surrounding area is a drinking water protection area for surface water.</p> <p>The route crosses under watercourses including Pickering Beck, Costa Beck, and the River Derwent (at MAR), and several smaller field drains.</p> <p>Interaction of the above factors is important, but the overall limited impact on each, and mitigation to avoid significant environmental impacts overall will ensure interactive effects are also minimised.</p>
<p>(c) Absorption capacity of the natural environment</p>	
<p>Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the development?</p>	<p>The pipeline network covers a range of land types, though it does not pass through any statutory designated areas, or any areas designated for wildlife, cultural or landscape importance in the local plan.</p> <p>The route falls within Impact Risk Zones for the River Derwent SAC and SSSI (approximately 30m at its nearest point) The Ings Amotherby SSSI (just over 1 km from the route) and Wintringham Marsh SSSI (2.9km from the route) for developments involving infrastructure, though the nature of the development, and the fact that it is existing infrastructure, and below-ground means it does not present a risk of significant impacts in relation to Natural England's "reasons for concern."<sup>7</sup> East Heslerton SSSI is approximately 3.2km east of the end of the pipeline route at KGS. As the pipeline is existing it is considered that significant risk does not exist from its continued use, although the planning application will include measures in place (in addition to the ongoing protection afforded by HSE regulation) to prevent leaks which could impact on these designations.</p> <p>There are approximately 37 listed buildings within 1km of the route of the pipeline (three Grade 2* (Church of St Laurence, Palladian Bridge and Scampston Hall and Gateways, Walls And Terminal Piers) and the remainder Grade 2). The existing pipeline is underground so there will</p>

<sup>7</sup> Natural England Guidance Document (Natural England's Impact Risk Zones for Sites of Special Scientific Interest (For use by Local Planning Authorities to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites and determine when to consult Natural England) September 2017) - [http://magic.defra.gov.uk/Metadata\\_for\\_magic/SSSI%20IRZ%20User%20Guidance%20MAGIC.pdf](http://magic.defra.gov.uk/Metadata_for_magic/SSSI%20IRZ%20User%20Guidance%20MAGIC.pdf)

**Table 2: Screening Assessment for Proposed Development (extension of operational period until 2035)**

	<p>be no impact on the setting of these buildings. There are no scheduled monuments within 1 km of the route.</p> <p>Scampston Hall Registered Park and Garden (Grade 2*) is approximately 600m south of the route. The existing pipeline is underground so there will be no impact on the setting of this garden.</p>
<p>Are there any other areas on or around the location which are important or sensitive for reasons of:</p> <ul style="list-style-type: none"> <li>• wetlands; riparian areas; river mouths or coastal zones and the marine environment;</li> <li>• mountains and forest areas, or nature reserves and parks;</li> <li>• Special Protection Areas and Special Areas of Conservation, SSSIs, AONBs and National Parks;</li> <li>• areas in which there has already been a failure to meet the environmental quality standards laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;</li> <li>• densely populated areas;</li> <li>• landscapes and sites of historical, cultural or archaeological significance.</li> </ul>	<p>There are some fenland habitats (priority habitat) within Scampston Park approximately 700m south of the pipeline route (south of the railway) and south of Great Habton, 1km south of MN-B. Other priority habitat (especially floodplain grazing marsh around MN-A, MN-B and MAR) is included on the route, though the pipeline is underground so this is not impacted.</p> <p>The route crosses under watercourses including Pickering Beck, Costa Beck, and the River Derwent (at MAR), and several smaller field drains. The route also crosses at the confluence of the River Derwent and Costa Beck.</p> <p>There are no coastal zones, mountains or forest areas, nature reserves, national parks, Special Protection Areas or Areas of Outstanding Natural Beauty along or close to the route.</p> <p>SACs and SSSIs are addressed above.</p> <p>The route is not within any Air Quality Management Areas or areas where other EQSs have not been met. It does not pass through densely populated areas, and will not have any impact on landscapes or sites of historical, cultural or archaeological significance as it is currently located underground.</p>
<p>Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected?</p>	<p>The pipeline is an existing underground feature and there is no proposal to amend its existing route or operations. The route does not pass through designated sites, but there are locally important areas including field margins and watercourses which are crossed by the route. However, these will not be affected by the continued operation of the pipeline to 2035, given the ongoing routine of monitoring to avoid leaks to the environment.</p>

**Table 2: Screening Assessment for Proposed Development (extension of operational period until 2035)**

<p>Are there any inland, coastal, marine or underground waters on or around the location which could be affected?</p>	<p>The pipeline crosses under watercourses including Pickering Beck, Costa Beck, and the River Derwent (at MAR), and several smaller field drains. The route also crosses at the confluence of the River Derwent and Costa Beck.</p> <p>The route overlays superficial deposits that are secondary (Class A or undifferentiated) aquifers, and the bedrock is not classed as an aquifer along the route. The majority of the route is not classed as having groundwater vulnerability, though some land to the south of the route from MN-A and MN-B, and including the route from MAR to KGS is a minor aquifer of high vulnerability.</p> <p>The route, including the surrounding area is a drinking water protection area for surface water. There are several abstractions in catchments along the route from groundwater and surface water, but these would not be affected by the existing infrastructure given mitigation in place.</p>
<p>Are there any groundwater source protection zones or areas that contribute to the recharge of groundwater resources?</p>	<p>There are no groundwater source protection zones along the route.</p>
<p>Are there any areas or features of high landscape or scenic value on or around the location which could be affected?</p>	<p>The pipeline network is underground so will not affect any areas or features of high landscape or scenic value. Any maintenance or repair would be temporary and small scale, of a similar nature to works undertaken to other underground utilities.</p>
<p>Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected?</p>	<p>The pipeline network passes beneath various rights of way, footpaths and local roads, but these are not affected by the existing pipeline. Any maintenance or repair would be temporary and small scale, of a similar nature to works undertaken to other underground utilities. There may be a requirement for temporary closure or diversion of footpaths for safety in such circumstances, though these would be minimised by ensuring best practice is used.</p>
<p>Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected?</p>	<p>The pipeline network passes under local roads as well as following road verges, fields and passing under watercourses and the railway line north of KGS.</p> <p>The largest road the route passes under is the A169 (north of the junction to Marishes and the MAR wellsite), and other roads include Outgang Road and Low Moor Lane north and west of Scampston, Kirby Misperton Lane, Blansby Lane and Habton Lane near Great Habton (around the MN wellsites), Habton Road and Barugh Lane between Kirby Misperton and Little Barugh (near the KM wellsites) and Haygate Lane near the PK wellsite.</p> <p>Should maintenance be required on the pipeline, it is highly likely that work could be undertaken outside the road corridor, minimising the necessity for closure or delays. Any maintenance vehicles (or vehicles required for decommissioning) would be minimal against the background traffic numbers and such works form part of the current background numbers.</p>
<p>Is the development in a location where it is likely to be highly visible to many people?</p>	<p>The pipeline network is underground, so there will be no visibility during operations.</p>
<p>Are there any areas or features of historic or cultural importance on or around the</p>	<p>The pipeline network is underground and no additional landtake is proposed, so there will be no additional effect on any features of historic</p>

<b>Table 2: Screening Assessment for Proposed Development (extension of operational period until 2035)</b>	
location which could be affected?	or cultural importance.
Are there any areas on or around the location which are densely populated or built up, which could be affected?	The pipeline runs through rural areas, and does not pass through any densely populated areas.
Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected?	There are no areas along the pipeline route that are subject to pollution or environmental damage.
Is the location of the development susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the development to present environmental problems?	<p>Some areas of the route (especially where passing under rivers and becks/ streams, and in the plain area south of Pickering, near the PK wellsite) are susceptible to flood. The pipeline itself is not affected by flood and does not increase the likelihood of flood elsewhere, as it is underground at sufficient depth to not affect the field drainage or topsoil.</p> <p>The area does not have a history of earthquakes according to the BGS earthquake timeline<sup>8</sup>.</p> <p>The route is not susceptible to any other hazards mentioned.</p>
<b>3. TYPE AND CHARACTERISTICS OF THE POTENTIAL IMPACT</b>	
<b>(a) Magnitude and spatial extent of the impact</b>	
Will the effect extend over a large area?	No. The effect will be confined to the route of the pipeline itself. Possible impacts with wider potential such as emissions to water or ground, are included in existing management/ permitting, to ensure such effects are appropriately controlled.
Will many people be affected?	No - As above, the impacts will be mitigated by the existing measures in place (which will continue until 2035) to ensure the local population are not affected by the proposed extension.
<b>(b) Nature of the impact</b>	
What will be the nature of the impact?	The nature of the impact will be as currently experienced, as there is no proposal to amend the scope of consented operations without appropriate further planning and permitting applications. No aspect of the impact on the local environment is considered to be significant, and can be mitigated to acceptable levels by management in place, and relevant environmental permits and planning conditions.
<b>(c) Transboundary nature of the impact</b>	
Will there be any potential for transboundary impact?	No

<sup>8</sup> <http://mapapps.bgs.ac.uk/geologyofbritain/home.html?mode=earthquakes>

<b>Table 2: Screening Assessment for Proposed Development (extension of operational period until 2035)</b>	
(d) Intensity and complexity of the impact	
Will there be a large change in environmental conditions?	No – the pipeline network will be retained as at present.
Will the effect be unusual in the area or particularly complex?	No – the pipeline is existing, so effects will remain as in the current background as at present.
Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	The pipeline network will remain as at present and any effects will not therefore differ from the current background situation. These will be addressed in the environmental report submitted with the planning application.
Will valuable or scarce features or resources be affected?	No - There are no valuable or scarce features or resources in close proximity to the pipeline, and the infrastructure will continue operating as presently permitted and consented.
Is there a risk that environmental standards will be breached?	No –As indicated above, there are no environmental standards that would be breached as a result of extending the lifetime of the pipeline, and existing permits, planning conditions and other safeguards will ensure emissions are maintained at levels where this will not be an issue.
Is there a risk that protected sites, areas, and features will be affected?	No - As indicated above, there are no designated areas or features in close proximity to the pipeline that would be affected by continued operation of the infrastructure in accordance with relevant permits and planning conditions.
(e) Probability of the impact	
Is there a high probability of the effect occurring?	As with all development, It is likely that some environmental effects will occur, although the nature, duration and scale will be limited as described herein. The effects of the extension of lifetime of the pipeline network have been proven to be acceptable through nearly 25 years of operation, with monitoring of the baseline environment and emissions undertaken through that time. Established and embedded mitigation and management techniques will continue to be used to reduce the probability of effects occurring.
Is there a low probability of a potentially highly significant effect?	As above, control measures and mitigation will be retained (or be implemented as consented for temporary maintenance operations) to ensure that the possibility of a “highly significant effect” resulting from either routine operation of the infrastructure, or any accident will be avoided.
(f) Expected onset, duration, frequency and reversibility of the impact	
What will result in the onset of the impact?	The pipeline will continue to operate as at present, in accordance with the pipeline consent and HSE requirements.
Will the effect continue for a long time?	Any effects will continue for the lifetime of the infrastructure, subject to necessary maintenance and upgrades to meet necessary permitting requirements.
Will the effect be permanent rather than temporary?	As above, any effects will continue for the lifetime of the infrastructure, subject to necessary maintenance and upgrades to meet necessary permitting requirements.

<b>Table 2: Screening Assessment for Proposed Development (extension of operational period until 2035)</b>	
Will the impact be continuous rather than intermittent?	Effects relating to the presence of the underground pipeline would be continuous for the lifetime of the pipeline.
If intermittent, will it be frequent rather than rare?	Any intermittent effects would be as a result of routine maintenance, or contingency operations, for example, unexpected maintenance requirements. Such events would be rare.
Will the impact be irreversible?	No – any effects will be reversible through mitigation or environmental restoration measures.. These are as allowed for in the existing planning consents, to permit the retention of underground infrastructure. The underground infrastructure would remain in the ground on decommissioning of the pipeline, to prevent adverse environmental effects as part of the decommissioning process.
Will it be difficult to avoid or reduce or repair or compensate for the effect?	No – the controls in place ensure that monitoring will identify any issues quickly, and measures undertaken to stop any harmful emission, and remediate any resulting effect.
<b>(g) Cumulation of the impact with the impact of other existing and/or approved development</b>	
Will there be a cumulative impact arising from other existing and/or approved development?	<p>The impacts arising from the pipeline network are part of the existing background, and therefore any proposed future development will require to include the existing infrastructure within their assessment of potential cumulative effects.</p> <p>Other related features in the area are the satellite wellsites (which will undergo a similar screening process to NYCC to extend their lifetime from May 2018 to 2035) and KGS and the associated OHL (undergoing a similar screening request to BEIS). These are also consented and existing features in the landscape, and their cumulative effect with other planning applications being brought forward will be considered on their own merits.</p>
<b>(h) Possibility of effectively reducing the impact</b>	
What is the possibility of the likely impacts arising from the Proposed Development being effectively reduced?	Mitigation is embedded into the design of the existing development (as outlined in Appendix 2), which will not be affected by the Proposed Development, and effects have previously been assessed as being acceptable in the surrounding environment. The original consents addressed effects arising from construction (which is no longer relevant, but which effects would be greater in terms of noise, traffic and other amenity issues) as well as operation. Mitigation such as planting and undergrounding is now matured and provides more effective visual mitigation than when originally consented. Regulations surrounding the pipeline integrity have increased over time.

## 4 Conclusion

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- 4.1 This screening request has considered whether the Proposed Development is likely to give rise to significant effects on the environment.
- 4.2 The Proposed Development falls under Schedule 2 of the EIA Regulations as although not in a sensitive area, its footprint exceeds the legislative area thresholds. Although it exceeds indicative thresholds for EIA within the PPG this does not take account of the pre-existing nature of the development, and as the proposed application is only concerned with a time extension, additional environmental impact will be lower than a new development of the same size.
- 4.3 Table 2 sets out the baseline environmental conditions in the area on and adjacent to the Proposed Development. The potential exists for environmental effects on air quality, ground and surface water, transport, ecology views and noise. However, the site is existing infrastructure, located in an agricultural area with few adjacent sensitive receptors and therefore the potential for significant effects is considered to be unlikely. Standard proven mitigation measures employed on the current site will be employed as set out in Appendix 2.
- 4.4 Accordingly, the screening request has identified that significant effects on the environment are not considered likely either alone or in combination with other development and therefore the Proposed Development should not be considered to constitute EIA development as defined by the EIA Regulations.
- 4.5 An environmental report would be provided alongside the application. This would consider environmental issues arising from the pipeline network, and also KGS, OHL and the wellsites. Therefore it would address both the Proposed Development and other aspects of the Vale of Pickering conventional gas extension applications. Technical Appendices would address the impacts associated purely with the Proposed Development, and the main body of the report would outline cumulative effects associated with other aspects of the Vale of Pickering conventional gas extension applications.
- 4.6 In particular, the environmental report would identify the existing mitigation measures in place to prevent significant environmental impacts. It is acknowledged that, if consented, the existing infrastructure will continue to have a presence in the environment beyond that assessed in the original environmental information informing the planning consent. Therefore there will be a requirement to update information where this has altered from 1993 (or 2000 in the case of the Pickering pipeline) and the extension in 2006, and to assess how the ongoing operation could have environmental impacts (including cumulative impacts with other developments) until the new end-of-life proposed. In addition, the need for any further mitigation for the extension of operations to 2035 will be identified.
- 4.7 No new operations are proposed as part of the Proposed Development or any other aspects of the Vale of Pickering conventional gas extension applications, and should material additional works be proposed either on KGS, wellsites, or to amend the pipeline or OHL, these will be subject to their own planning consent, with appropriate consideration of environmental effects.
- 4.8 The scope of the environmental report will be discussed with regulators. In terms of the environmental impacts outlined in Schedule 3 of the EIA Regulations (covering all aspects of the Vale of Pickering development – including the wellsites), the following considerations have been made:

- Population and human health – There would be no assessment of these aspects specifically in the environmental report to accompany the planning application. The environmental permit associated with KGS will ensure that emissions from the installation and other operations are set at a level to protect sensitive receptors, including the health of the local population. There is sufficient flexibility in the environmental permit, and the capability of the Environment Agency to vary conditions and levels in accordance with current scientific opinion to ensure safe operation of KGS. This also applies to control of the pipeline network through HSE audits and associated requirements to upgrade and maintain the pipeline to meet the requirements of the relevant regulations. Similarly, emissions arising from the individual wellsites (producing wells and potential future wells to be drilled) will be controlled by the relevant permits, and planning consent attached to any new wells. A **review of the noise conditions** would be included, providing certainty that acceptable levels can be met at the nearest receptors, and to identify any necessary secondary measures to mitigate noise arising at identified sensitive receptors from continued operations at KGS and associated noise at wellsites. No noise (other than temporary maintenance noise) is anticipated from the pipeline.
- Biodiversity (for example, fauna and flora) – An **ecology report** will be included in the Environmental Report, to provide an updated baseline of ecological interest around KGS, the OHL, pipeline network and around the individual wellsites. Should any species or habitat be identified with potential to be adversely affected by the continuation of the operations, mitigation will be provided. Existing mitigation, such as emissions limits and operational controls (such as restrictions on lighting, hours of working, maintenance procedures etc.) will continue to be used, with modification as necessary.
- Land and soil – There will be no additional land take associated with the extension. Decommissioning and restoration of the infrastructure would take place according to the original proposals, though with regard to best practice at the time. Soil protection will be ensured through measures within the Environmental Permit (and pipeline consents) to prevent any release of potentially polluting material to the environment. Therefore, there is no intention to address the impact of the proposed extension on land/soil resources in the environmental report, as environmental protection measures will be included within the “operation” section.
- Water – There are no discharges to water from the pipeline. For the other aspects of the Vale of Pickering operations, although the existing discharge to water will continue from the infrastructure, as outlined in the relevant environmental permits, there will be no additional discharge points to water as a result of the time extension until 2035, and measures in place to protect nearby watercourses will be retained. The environmental permits will require necessary monitoring of any releases of surface water to the environment, and any waste arising from the operations at KGS and the wellsites will be exported from the site, either by the existing pipeline network (for re-injection into KM-3) or by licensed waste disposal contractors to a licensed facility. Runoff will not increase as there is no planned increase in land-take as a result of the time extensions. A brief assessment of the

continued impact of the Proposed Development (and other aspects of the Vale of Pickering conventional gas extension applications) on hydrological resources will be included in the environmental report, alongside any identified additional mitigation. A flood risk assessment will be provided as guidance relating to this has changed since 2006.

- Air and Climate – Emissions from the wellsites and pipeline network are minimised through the health and safety requirements on the wellsites and Pipelines Regulations, and procedures are in place to identify and prevent any unplanned releases to the environment, as part of Third Energy's requirements to the HSE. The emissions from KGS are permitted by the environmental permit and monitoring takes place in accordance with the requirements of the permit. Modelling that was undertaken to inform the original permit at KGS indicated that there would be no exceedance of Environmental Quality Standards for nitrogen dioxide, either in the short or long term as a result of the worst-case emissions from KGS, and these limits have not changed since 2006 (though the emissions permitted from KGS have decreased). Other emissions were excluded from assessment, having been screened out due to their low levels as identified by the permit monitoring (carbon monoxide and sulphur dioxide). Details on **emission limits and monitoring data** as provided to the Environment Agency as a requirement of the permitting will be outlined in the environmental report. A brief assessment of emissions up until 2035 against existing air quality standards will be included in the environmental report. This will assume KGS would operate at current capacity (approx. 42MW) and full consented capacity (up to 60MW). Similarly, carbon emissions will be provided alongside mitigation to minimise non-combustion emissions and likely susceptibility of the infrastructure to climate change.
- Material assets – It is not anticipated that there will be any requirement for an updated transport assessment, as the traffic numbers will not alter from the existing status, as outlined in the existing consents, and there will be no adverse material impact on the road network, given these form part of the baseline traffic (or would result in a small increase in the case of maintenance traffic). However, a **review of the traffic related conditions** to control traffic movements to the sites will be carried out and presented with the environmental report.
- Cultural heritage (including archaeology) – There is no intention to address this in the report. Impacts of setting on cultural heritage features will not change from the existing site, and there will be no extension of the currently consented sites that could affect archaeological features.
- Landscape – Although existing, the infrastructure is screened in the landscape by vegetation as well as bunds, fencing and other features. A brief **landscape and visual review** of the baseline including existing infrastructure will be carried out, assessing how it integrates into the landscape and where screening can be managed to ensure it provides an effective visual barrier until 2035.
- Cumulative/ Interactive Effects – The environmental report will address effects arising from all aspects of the Vale of Pickering conventional gas

extension applications (KGS, OHL, pipeline network and wellsites) – which are all cumulative. In addition, cumulative effects from other existing development including the consented work on the KM-8 well, and committed development including the consented pipeline from the Ebberston Moor South wellsite will be considered. As all infrastructure is existing within the environment, or was consented against a baseline including the existing conventional gas infrastructure (the extension until 2035 of part of which forms the Proposed Development and other proposed planning applications), cumulative and interactive effects are not anticipated to result in significant environmental effects.

- 4.9 The 2017 EIA Regulations have a requirement for a consideration of climate change, major accidents and human health. As it is not anticipated that the development will be EIA Development, these will not be addressed in detail. However, a brief justification of why the Proposed Development will not affect these will be included in the environmental report.
- 4.10 As there will be no significant environmental impacts arising from the Proposed Development, it can be ascertained that there will be no adverse effect on the integrity of any protected European sites or species, under the requirements of the Habitats Regulations (Conservation of Habitats and Species Regulations 2017).
- 4.11 It is considered that these assessments included alongside the planning application will provide sufficient information to allow the RA to consider the material matters pertaining to the future application.

## Appendix 1

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### Site Location Plans

- **Pipeline network and site locations (1:25,000) – ZG-TE-PL-PA-01**

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## Appendix 2

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### Summary of Mitigation Measures

#### Introduction

This appendix summarises the key embedded mitigation for all aspects of the development (with regard for potential cumulative effects arising from the “infrastructure” aspects (KGS, OHL and pipeline network) and the wellsites.

There are various mitigation measures integrated into the existing design of the sites, which are adopted to reduce or avoid impacts to the surrounding environment from the Proposed Development. These range from physical barriers to working practices and controls which are embedded within the development proposals. These draw upon industry experiences and best practice, as well as requirements associated with planning conditions and environmental permit conditions. This mitigation is an inherent part of the project proposal.

Where points are taken from existing permits and consents, these are paraphrased for simplicity. Numbers attached to planning conditions apply to the majority of wellsites, but PK, KM-A and KM-B have a different numbering system, though the majority of conditions are similarly worded. Unless otherwise stated, mitigation measures for wellsites apply to all wellsites.

Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained				
	KGS	OHL	Pipelines	Wellsites
Air Quality and Noise				
Env. Permit	<p>There shall be no point source emissions to water, air or land except from the sources and emission points listed ...The limits ...shall not be exceeded. (Monitoring points for air include the turbine stack (NOx, CO, SO2, O2, water vapour, temperature and pressure), emergency flare, gas pre-heater and HCl scrubber vent stack).</p> <p>Relevant monitoring of the emissions shall be undertaken, and records maintained.</p> <p>Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.</p> <p>If notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, the operator shall submit to the Environment Agency ... a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration, which shall be implemented.</p>	n/a	n/a	<p>No flaring is permitted on the wellsites.</p> <p>The mining waste permits require that gas (fugitive emissions) is correctly managed as a hazardous waste, and a closed system is used.</p> <p>During any drilling operations, and during gas production, ambient air quality monitoring, together with gas detection (for health and safety purposes), would be used to monitor air quality.</p>
Planning Conditions	<p>8) Except in an emergency, and upon routine maintenance of “sulfachek” agent, noise levels shall not exceed 35dB(A)Leq (60 min) between 0700 and 1900h and 33dB(A)Leq (5 min) between 1900 and 1700h when measured 12m in front of the nearest residential receptor.</p> <p>9) No flaring of gas except at start-up, shut-down and in an emergency.</p>	n/a	<p>9- No works associated with the maintenance of the pipelines shall take place on any Sunday or bank Holiday nor on any other day except Mon-Fri 0700-1900h and Sat 0700-</p>	<p>8 No daylight operational workovers to take place on any Sunday or Bank Holiday nor on any other day except Mon-Fri 0800-1900h and Sat 0700-1300h, except in an emergency or with prior written approval of the County Council.</p> <p>9 No major workover/ tubing replacement to take place prior to approval in writing by the LPA of a scheme of work. This will make provision for notifying the LPA and residents 7 days in advance, and specify a programme of noise monitoring. Maximum permissible noise levels to be x dBLAeq(1 hour)</p>

Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained				
	KGS	OHL	Pipelines	Wellsites
			<p>1300h, except in an emergency or with prior written approval of the County Council. No vehicles in excess of 1.5 tonnes unladen will be used for works outside these hours.</p>	<p>between 0700 and 1900h and x dBLAeq(5min) between 1900 and 0700 at the house nearest to the wellsite. All noise monitoring results to be made available to the LPA as soon as available.</p> <p>Noise levels vary (represented by x above)</p> <p>KM-A – 42 dBLAeq</p> <p>KM-B – 40dBLAeq</p> <p>Malton A - 45dBLAeq</p> <p>Malton B - 41dBLAeq</p> <p>Marishes - 40dBLAeq</p> <p>12 Normal routine maintenance not on Sunday or Bank Holiday nor on any other day except Mon-Fri 0700-1900h and Sat 0700-1300h</p> <p>15 Stringent precautions to avoid smell, nuisance and gaseous pollution. All operations to be enclosed, and facilities made available to deal with accidental spillage, including application of sodium hydroxide or sodium hypochlorite to reduce smell from any mercaptans present.</p> <p>16 Atmospheric emissions generated to be monitored in accordance with scheme approved by the planning authority, and results to be submitted annually.</p> <p>PK wellsite has different conditions attached -</p> <p>4. Prior to the commencement of development, a schedule of noise mitigation measures should be submitted to and approved in writing by the County Planning Authority. The schedule should take into account the recommendations as set out in MPS2 Appendix 2B and in accordance with the recommendations set out below:</p> <ul style="list-style-type: none"> <li>- All generator doors and mud pump engine doors should remain shut, particularly on an evening;</li> <li>- Unnecessary work activities between 21.00 hours</li> </ul>

Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained				
	KGS	OHL	Pipelines	Wellsites
				<p>and 07.00 hours should be avoided;</p> <ul style="list-style-type: none"> <li>- Drawworks Brakes should be adjusted to remove or minimise brake squeal, having confirmed that a low-noise lining material is used.</li> <li>- If possible without compromising the mud quality, the centrifuge should not be used at night. Moreover it may be possible to mount the unit on a stand at low level, and provide an acoustic enclosure around it.</li> <li>- Site rules should ensure that voices are not raised at night time.</li> <li>- Acoustic screening or enclosure of the rig engine.</li> <li>- Orientation of the rig with lower noise levels to the south and east</li> </ul> <p>Thereafter the development shall be implemented in accordance with the approved details unless otherwise agreed in writing by the County Planning Authority</p> <p>17. Such measures as may be approved in writing by the County Planning Authority including details of temporary acoustic bund shall be taken to ensure that perceived levels of noise, measured at the boundary of the nearest residential properties shall not exceed levels of 40dB(A) L90 and 50dB(A) L10 between the hours of 0700 and 1900 hours and 35dB(A) L90 and 40dB(A) L10 between the hours of 1900 and 0700 hours or such other levels at such locations as may be approved by the County Planning Authority.</p> <p>(Further conditions are placed on workover operations at PK-1, including a 5m acoustic barrier is to be erected and maintained during all night-time working on the 'Workover'.)</p>
Other	Location of the site approximately 650m from the nearest noise sensitive receptor. Positioning of any noisy equipment to ensure noise	The key mitigation for noise arising	Noise from routine maintenance and decommissioning	The wellsites are operated according to the Borehole Sites and Operations Regulations 1995 and Offshore Installations and Wells (Design and Construction, etc) Regulations 1996 (DCR

Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained				
	KGS	OHL	Pipelines	Wellsites
	<p>is minimised.</p> <p>Use of appropriate silencers on equipment as appropriate.</p> <p>No night-time vehicle movements, except in an emergency.</p> <p>Regular maintenance of equipment to minimise noise generation.</p> <p>Dust from vehicle use on the access track will be controlled with standard dust-control measures including use of water sprays where necessary.</p>	<p>from the OHL is the distance from the nearest residential receptor (Ochre Farm) which is approximately 300m from the OHL (and closer to the regional transmission line).</p> <p>Noise from routine maintenance and decommissioning will be controlled through controls on hours of working and a noise management plan, as outlined in the existing planning consent attached to KGS.</p>	<p>will be controlled through controls on hours of working as indicated above, and a noise management plan, as outlined in the existing planning consent attached to KGS.</p> <p>Monitoring and repairs as necessary will be undertaken, as required by the HSE, to prevent leaks affecting air quality.</p>	<p>1996), as well as other Health and Safety-related regulations. These require the integrity of wells to be maintained over the lifecycle of the well so as to ensure, so far as is reasonably practicable that there can be no unplanned escape of fluids from the well, or anything that risks the health and safety of persons. This includes emissions to air, including methane.</p> <p>The wellsites are located at a sufficient distance from properties that the noise limits outlined in the planning conditions can be met during the noisiest operations on the site, with additional noise mitigation applied where necessary (e.g. workovers or drilling). During operation, very little noise arises from the sites.</p> <p>General good practice relating to wellsite maintenance applies – for example:</p> <ul style="list-style-type: none"> <li>• positioning of any noisy equipment to ensure noise is minimised.</li> <li>• use of appropriate silencers on equipment as appropriate.</li> <li>• no night-time vehicle movements, except in an emergency.</li> <li>• regular maintenance of equipment to minimise noise generation.</li> <li>• dust from vehicle use on the access track will be controlled with standard dust-control measures including use of water sprays where necessary.</li> </ul>
Surface & Groundwater				
Env.Permit	<p>There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3...The limits given in schedule 3 shall not be exceeded. (Monitoring points for water include 1) the oil interceptor pit prior to discharge to Difford beck (measuring oil, biological oxygen demand, suspended solids and</p>	n/a	n/a	<p>The mining waste permits ensure proper management of waste in such a way as to ensure there is no pollution of groundwater or surface water.</p> <p>The groundwater permits at PK and KM-A ensure there is no re-injection into groundwater of any hazardous substances.</p>

Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained				
	KGS	OHL	Pipelines	Wellsites
	<p>pH) and 2) the point at which liquid arisings return pipeline from the installation meets liquid arisings from the Marishes well (measuring total volume of produced water, condensate, corrosion inhibitor and glycol discharged)).</p> <p>Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.</p> <p>A variation to the environmental permit to permit a mining waste facility, is under consideration by the Environment Agency. This outlines other mitigation to safeguard water by ensuring proper management of mining waste (liquids arising from gas operations, including produced or “flowback” water, and suspension fluid) on site.</p>			<p>Water sampling is required where there is risk of pollution.</p> <p>At KM-A and PK there is a requirement for monitoring of flow, volume and nature of the reinjected fluid.</p>
Planning Conditions	<p>6) All storage of fuel, oils and chemicals shall be individually contained, sited on impervious bases and surrounded by bund walls, of the capacity of the largest tank in each bund plus 10%<sup>9</sup>. All inlets and outlets etc should be located within the bund. Any contaminated water or materials should be disposed of satisfactorily.</p>	n/a	<p>5 Where the pipeline may affect any apparatus belonging to any statutory undertaker, or watercourse well or aquifer, any works for the operation or maintenance of the pipeline shall be carried out in accordance with the requirements of the appropriate authority.</p>	<p>10 Wellsites to be fitted with drainage system to remove liquids from well cellar/manifold to an oil/water separator. Contaminated hydrocarbons to be transferred to a holding tank for periodic removal to KGS for treatment.</p> <p>13 No storage of plant, equipment or materials.</p> <p>18 Surface finish of operational area to be maintained.</p> <p>At KM-A wellsite, an additional condition (4) requires that no liquids other than those specified in the application shall be reinjected into the KM-3 well. (Other conditions at this wellsite are increased by 1)</p> <p>PK wellsite has different conditions attached –</p> <p>5. Unless otherwise agreed, in writing, with the County Planning Authority, there shall be no:</p>

<sup>9</sup> Environment Agency guidance is now that this can be 25% of the full capacity of all tanks or 110% of the largest tank – whichever is larger.

Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained				
	KGS	OHL	Pipelines	Wellsites
			(The original consent required that all crossings of rivers were agreed in consultation with the National Rivers Authority (Environment Agency). No soil could be stored in areas liable to flood)	<p>Oil based drilling methods used in strata shallower than, and including, the Corallian Group aquifer.</p> <p>Oil based drilling methods used in strata deeper than the Corallian.</p> <p>6.No potentially contaminating substances should be allowed to enter the groundwater</p> <p>7.If during development dewatering is found to be required, the Environment Agency must be consulted prior to any dewatering taking place.</p> <p>8.Any facilities, above ground for the storage of oils, fuels or chemicals shall be sited on an impervious base and surrounded by impervious walls. The volume of the bunded compound should be at least equivalent to the capacity of the tank plus 10%. All filling points, vents, gauges and sight glasses must be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipe work should be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets should be detailed to discharge into the bund. Such facilities shall be constructed and completed in accordance with plans approved by the Local Planning Authority</p>
Other	<p>Other mitigation includes measures to avoid or prevent potential impacts from occurring by controlling potential sources and pathways to water receptors, for example:</p> <p>The site is lined with a low permeability clay membrane to prevent any permeation of liquid through the site. All chemicals on site would be correctly stored in accordance with Environment Agency guidelines<sup>10</sup> (and in accordance with the</p>	Land surrounding the OHL towers continues to be managed as agricultural land, ensuring field drainage etc is appropriate.	The pipelines are routinely monitored from the control room at KGS for unexpected loss of pressure etc which could indicate leakage. The route is also checked physically for signs	<p>The wellsites are managed to ensure surface water and groundwater is protected as part of standard operational practices. In particular, the following regulations and guidance will be followed:</p> <ul style="list-style-type: none"> <li>- Oil and Gas UK Well Life Cycle Integrity Guidelines;</li> <li>- Oil and Gas UK Guidelines for Abandonment of Wells;</li> </ul>

<sup>10</sup> [https://www.gov.uk/guidance/storing-oil-at-a-home-or-business A3-3](https://www.gov.uk/guidance/storing-oil-at-a-home-or-business-A3-3)

Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained				
	KGS	OHL	Pipelines	Wellsites
	<p>mining waste permit and planning condition 6).</p> <p>Ensuring there is no discharge from the site of potentially contaminated water, through routine closure of valves from the perimeter drainage ditch.</p> <p>Routine monitoring of the site is carried out as part of the Environmental Management Plan (EMP) to identify visual signs of pollution, (e.g. ensuring integrity of site surfacing and clay liner, integrity of tanks and bunds, status of perimeter drain). Maintenance is carried out to ensure they remain fully operational and effective. Any faults noted are recorded, action identified and repairs undertaken within a suitable timeframe.</p> <p>Preventing pollution of soil, groundwater or surface water from leaks from vehicles or on-site tanks, by ensuring any vehicles working on site are regularly maintained. Vehicles are not fuelled on site, and any fuelling of equipment is undertaken by trained personnel in appropriate areas on site, with drip trays in place. Double-skinned fuel tanks are used to store fuel.</p> <p>Spill kits are present on site, and staff are trained in spill response as part of the EMP.</p> <p>Any drilling, such as for installing groundwater monitoring boreholes through the clay liner, would comply with good practice for drilling water wells, as described in the Environment Agency's Guidance on the design and installation of groundwater quality monitoring points (Science Report SC020093).</p> <p>During restoration of the site, a restoration and aftercare plan would be followed to prevent soil damage and pollution of surface and groundwater (for example, silting). Any potentially contaminated</p>	<p>During maintenance, care is taken to avoid any spillage of fuels onto the ground, and appropriate spill kits are in place.</p> <p>Management of maintenance prevents compaction of soils etc.</p>	<p>of any leakage.</p> <p>Maintenance would be carried out in sections of the pipeline with appropriate safeguards to minimise silting onto any watercourses (storing any soils away from watercourses, for example), spillage of chemicals or fuel, compaction of soil increase of flood risk or other potential damage to the water environment or groundwater.</p> <p>Any necessary work within the water environment would be subject to an appropriate flood risk activity environmental permit.</p>	<ul style="list-style-type: none"> <li>- Environment Agency Onshore Oil &amp; Gas Sector Guidance;</li> <li>- Borehole Sites and Operations Regulations 1995; and</li> <li>- Offshore Installations and Wells (Design and Construction, etc.) Regulations 1996</li> </ul> <p>Borehole design and operation (for example, fluids to be used) would be regulated by the Environment Agency (via environmental permit), Oil and Gas Authority, HSE, Coal Authority and design approved by an accredited Independent Well Examiner prior to drilling.</p> <p>The mitigation measures are design to avoid or prevent potential impacts from occurring by controlling the potential source of release of contaminants and prevent any released from reaching a pathway to a receptor.</p> <p>The company's EMP includes measures to monitor that operations proceed in accordance with these mitigation and management measures, for instance the wellsites are checked on a daily basis for visual signs of pollution (e.g. fuel oil, leakage from perimeter, noticeable silting, checks on integrity of site lining, storage tanks and valves/pipes). If failures or shortfalls within mitigation measures are noted, these are recorded, action identified and undertaken within a suitable timeframe.</p> <p>The wellsites are lined with either a clay lining or geotextile membrane to prevent leakage through the site.</p> <p>Drainage from the wellsites drains to a perimeter drain which is isolated from the surrounding environment by a series of valves, and only released once confirmed to be uncontaminated. Any contaminated water or other waste would be removed from site by a licensed waste contractor to a licensed waste facility for reuse, recycling or disposal.</p> <p>Other measures as outlined for KGS will also be followed, relating to storage of chemicals and fuels, fuelling of maintenance vehicles on site etc, and during restoration of the</p>

Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained				
	KGS	OHL	Pipelines	Wellsites
	aggregate or equipment would be fully removed from site before the clay liner was removed so any residual contamination would not be washed into soil.			<p>site.</p> <p>Method statements would be produced for all activities that could pose a risk to the water environment and would clearly state what mitigation measures and monitoring requirements should be in place prior to and while the activity is underway.</p> <p>During decommissioning any wells measures would be undertaken to ensure no inputs of pollutants to groundwater and that there was no subsequent leakage of groundwater, including any gas or other contaminants that this may contain, into the well or to other geological horizons.</p> <p>The wells would be decommissioned with at least two permanent barriers to seal the well. These would be pressure tested to ensure integrity.</p>
Transport				
Planning Conditions	<p>2) Except in an emergency all vehicles entering or leaving the site shall do so via the access road.</p> <p>10) No waste to be removed from the site except by underground pipeline to KM-3 or by covered vehicle or road tanker to permitted disposal facilities or treatment works as appropriate.</p>	n/a	<p>8 Access to the route of the pipelines shall be as approved, except if agreed otherwise with the County Council.</p> <p>9 No works associated with the maintenance of the pipelines shall take place on any Sunday or bank Holiday nor on any other day except Mon-Fri 0700-1900h and Sat 0700-1300h, except in an emergency or with prior written</p>	<p>3 Access routes to each wellsite are specified. Access roads to be maintained with stone surface. Provision to be made to prevent surface water discharging onto the existing highway.</p> <p>6 Provision to be made for parking, turning, loading and unloading within the site only</p> <p>7 No vehicles over 3 tonnes gross involved in material delivery to enter or leave the wellsites on any Sunday or bank Holiday nor on any other day except Mon-Fri 0700-1900h and Sat 0700-1300h, except in an emergency or with prior written approval of the County Council.</p> <p>Planning consent for KM-B has an additional condition (4) that the access road shall be maintained throughout the duration of the development (separate from Condition 3). All other conditions are numbered one higher.</p> <p>PK wellsite has different conditions attached –</p> <p>3. There shall be no access or egress between the highway and the application site by any vehicles other than via the existing</p>

<b>Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained</b>				
	<b>KGS</b>	<b>OHL</b>	<b>Pipelines</b>	<b>Wellsites</b>
			approval of the County Council. No vehicles in excess of 1.5 tonnes unladen will be used for works outside these hours.	access with the public highway at the A169 Malton Road. The access shall be maintained in a safe manner which shall include the repair of any damage to the existing adopted highway occurring during construction  4. Except with the prior approval of the County Planning Authority during construction works there shall be no: (a) Goods Vehicles exceeding 7.5 tonnes permitted to arrive, depart, be loaded or unloaded on Sunday or a Bank Holiday nor at any time, except between the hours of 07.00 to 19.00 on Mondays to Fridays and 07.00 to 13.00 on Saturdays.
Other	The Traffic Management Plan (TMP) includes details of specific route management requirements, driver behaviour requirements and management measures and parking strategies for the site.	Only vehicles associated with routine maintenance and eventual decommissioning would be required. Maintenance vehicles would follow the overall TMP. A decommissioning plan would be produced.	Only vehicles associated with routine maintenance and eventual decommissioning would be required. Maintenance vehicles would follow the overall TMP. A decommissioning plan would be produced.	The Traffic Management Plan (TMP) includes details of specific route management requirements, driver behaviour requirements and management measures and parking strategies for the wellsites.
<b>Landscape and visual</b>				
Planning Conditions	3& 4) No buildings or structures will be constructed outside the site, or be greater than 4m in height (other than those approved) shall be constructed on the site (without planning permission being granted).  7) No additional external lighting shall be installed except in accordance with the approved details.	1 Land to be reinstated to former condition.  2 Within 6 months of decommissioning the OHL the towers shall be	1/2 Land to be reinstated within 18 months of cessation of operation of KGS, or within 18 months of cessation of gas production from any wellsite (or as soon	2 All buildings and plant to be removed within 6 months of cessation of gas production or cessation of electricity production at KGS (whichever is sooner) and site to be restored.  4/ 5 Landscaping fencing and gating to be maintained  (Marshes consent in addition states that planting shall take place in the first available planting season, and a tree or plant which dies or is damaged or diseased in 5 years to be

<b>Table A1 Summary of relevant existing mitigation in place under existing consents, and to be retained</b>				
	<b>KGS</b>	<b>OHL</b>	<b>Pipelines</b>	<b>Wellsites</b>
	<p>11) Restoration of the site to agricultural use and/or woodland shall be undertaken in accordance with a detailed scheme submitted to and approved in writing by the local planning authority (Ryedale DC).</p>	<p>removed (in agreement with landowner) and the remaining infrastructure to be removed or shortened (as appropriate)</p>	<p>as practicable thereafter/ in conjunction with restoration)</p> <p>6 Fences along the line of the pipeline to be periodically inspected and maintained.</p> <p>7 Landscaping undertaken (in accordance with 1994 application) to be maintained for the duration of development</p>	<p>replaced).</p> <p>11 No buildings, plant or machinery should be placed on the site without the approval of the planning authority.</p> <p>14 No external lighting except in accordance with a scheme agreed with the planning authority.</p> <p>17 All equipment and buildings to be coloured in accordance with application details, and maintained, including for any replacements.</p> <p>19 Restoration to agriculture including capping/backfilling the well, removal of imported materials, soil ripping, replacement of soils and subsoils, and agreed aftercare measures. Any land drainage to be repaired. Only landscaping undertaken for screening (woodland) to be retained. Highway verge and access track also to be restored.</p> <p>PK wellsite numbering of conditions is different, but nature of conditions is similar.</p>
Other	<p>Presence of mature belt of vegetation around KGS which will be maintained, to screen the site within the landscape.</p> <p>Use of existing landscape and built features (for example, the railway embankments) to screen the site.</p>	<p>The OHL is located within the existing landscape, amongst other tall infrastructure, including the regional transmission line, maltings plant, and infrastructure associated with the railway.</p>	<p>Underground nature of the pipeline, with agricultural land and other features (roads, railway etc) above avoids all but very localised visual and landscape impact (marker pegs etc).</p>	<p>Vegetation is present to screen the wellsites, which is now mature. Fencing around the sites ensures minimal visibility from surrounding roads and residences.</p> <p>Screening mounds/ bunds and other landscape screening is also present around the wellsites.</p> <p>Wellsites are located at distance to the nearest residential receptors, with intervening screening vegetation.</p> <p>Apart from during drilling/ workovers, all plant on the wellsites is low level and does not break the skyline over the surrounding trees.</p>

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	KGS	OHL	Pipelines	Wellsites
Ecology				
Other	<p>Specific mitigation will be outlined in the planning application. Good practice on site, including measures in place to protect air quality and water quality, and the lighting scheme in place to avoid overspill will also benefit ecological receptors in the vicinity.</p> <p>Maintenance of screening vegetation will provide woodland habitat in the area.</p> <p>Any hedge trimming required to maintain the access track or similar will be undertaken outside the bird breeding season (i.e. avoiding March – August).</p>	<p>No specific mitigation is proposed, though the presence of the OHL and tower bases (largely along a field margin) may provide a corridor of favourable vegetation within an agricultural landscape.</p>	<p>Original consent required that no development took place until a survey of flora and fauna was carried out, including specific attention to possible presence of great crested newts, badgers, otters and water voles, and a survey of hedgerow species and trees was carried out.</p>	<p>Specific mitigation will be outlined in the planning application. Good practice on site, including measures in place to protect air quality and water quality, and the lighting scheme in place to avoid overspill will also benefit ecological receptors in the vicinity.</p> <p>Maintenance of screening vegetation will provide woodland habitat in the area.</p> <p>Any hedge trimming required to maintain the access tracks or similar will be undertaken outside the bird breeding season (i.e. avoiding March – August).</p>