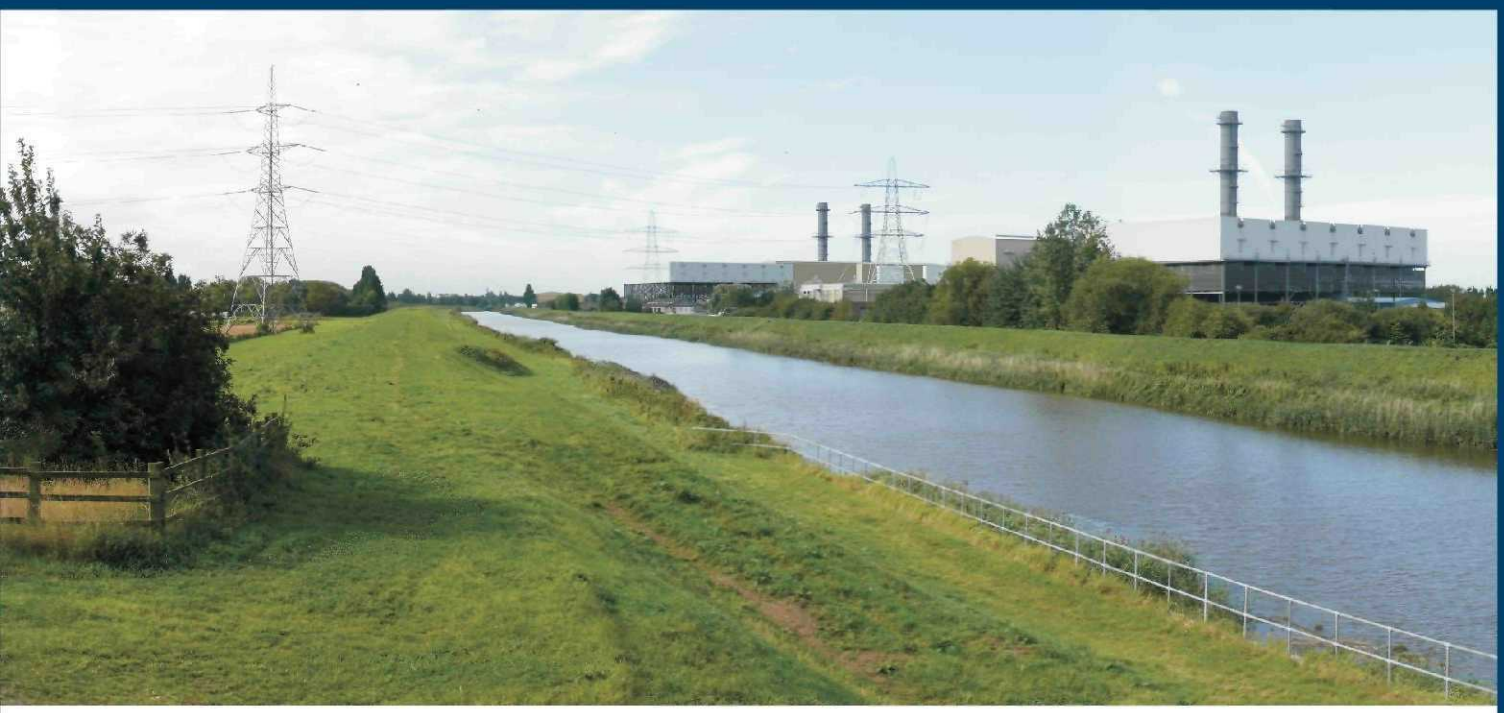
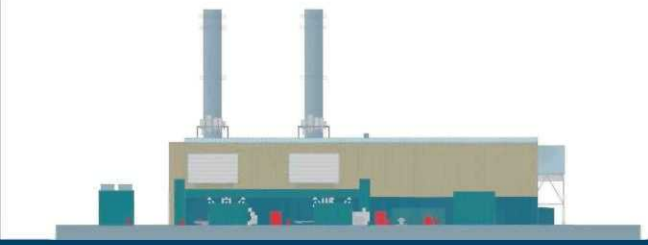
ENVIRON

INTERGEN

Spalding Energy Expansion

Environmental Statement
Non-Technical Summary
Volume 1









Spalding Energy Expansion Limited
March 2009



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Summary

Background

InterGen proposes to construct a new Combined Cycle Gas Turbine power station, known as the "Spalding Energy Expansion," adjacent to its existing power station in Spalding, Lincolnshire. The Spalding Energy Expansion will produce up to 900 MW of electricity. The Environmental Statement accompanies Spalding Energy Expansion Limited's application to the Department of Energy and Climate Change for Section 36 Consent under the Electricity Act 1989.



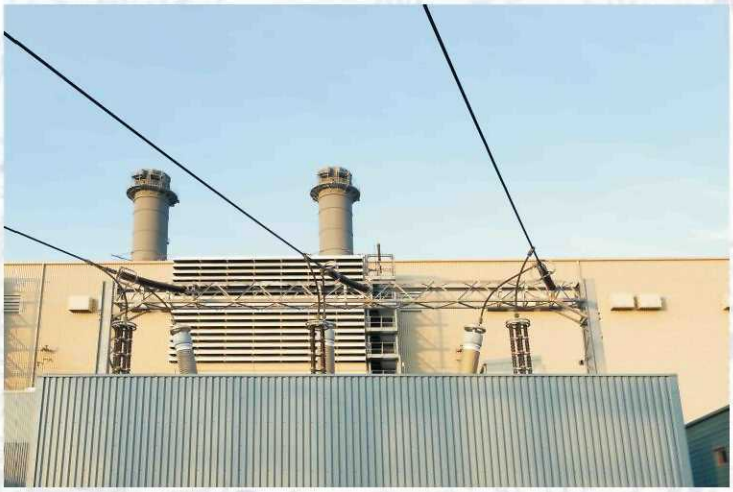
The Proposed Spalding Energy Expansion will:

- Be similar in size and appearance to the existing Spalding Energy power station;
- Use modern, proven and reliable technology to generate electricity efficiently;
- Be capable of being retrofitted with technology to capture carbon dioxide emissions in the future;
- Help address the UK's expected electricity supply shortfall which is predicted by 2015;
- Create 56-61 direct and indirect permanent jobs;
- Create up to 600 jobs during construction;
- Be capable of providing waste heat to local businesses on a commercial basis; and
- Produce around 50% of the carbon dioxide emissions of a traditional coal plant.

Environmental Statement

This document summarises the environmental information contained within the Environmental Statement to enable stakeholders to understand the potential construction and operational environmental effects of the project. Key highlights include:

- In depth consultation with stakeholders including public exhibitions and meetings;
- Dialogue with stakeholders to confirm the environmental matters to be assessed;
- Assessment of the potential environmental impacts of the Spalding Energy Expansion power station; and
- Establish mitigation measures for the potential environmental impacts.



Summary

Key Impacts and Mitigation

Issue	Description and Potential Impacts	Design Measures and Mitigation
Landscape and visual	• During construction the disturbed works area will extend over much of the site. • During operations the Spalding Energy Expansion power station will be evident from some distance.	• Hoarding will surround the site during construction works. • Landscaping such as planting of native woodland will provide screening at low levels. • It is likely that the building's materials and colour will be similar to the existing power station to maintain continuity.
Traffic	• During construction, traffic will increase. There will be a large number of Heavy Goods Vehicle movements associated with soil removal and building material deliveries. • During operations, traffic will increase.	• A management plan to reduce traffic impacts during construction will be implemented. • Operational traffic impacts will be negligible.
Noise	• There may be some noise created during the construction phase. • During operations noise will be negligible.	• Noise will be minimised through a management plan during construction. • The station will be designed with low noise plant, silencers and noise barriers.
Air Quality	• The main air emissions will be carbon dioxide, and other gases such as nitrogen oxides.	• Low pollution technology has been specified in order to avoid and reduce harmful emissions to the air. • The station will be capable of being fitted with carbon capture technology in the future to capture upto 90% of carbon dioxide emissions.
Ecology	• Ecology on site is mainly low value. The immediate surroundings reflect a diverse and thriving habitat for flora and fauna.	• Landscaping and new planting will improve the range of habitats on site. • Off-site measures have been agreed for ecological improvements at Vernatt's Drain, and the River Welland.

1 Introduction

1.1 This Non-Technical Summary (NTS) is Volume 1 of the Environmental Statement (ES) which has been prepared to accompany an application by Spalding Energy Expansion Limited (SEEL) for an expansion to the existing power station in Spalding, Lincolnshire. The existing 880 MW Combined Cycle Gas Turbine (CCGT) power station is owned and operated by an affiliate of InterGen, Spalding Energy Company Ltd (SECL). InterGen proposes to construct an adjacent CCGT of up to a nominal 900 MW, known as the "Spalding Energy Expansion" (proposed SEE). SEEL is making its application to the Department of Energy and Climate Change (DECC) under the Electricity Act 1989 for Section 36 Consent, the permit which will allow SEEL to construct the proposed power station.

1.2 The aim of the NTS is to summarise the content and main findings of the ES in a clear and concise manner to assist the public in understanding what the environmental effects of the proposed SEE are likely to be. The full ES (Volume 2 Main Report and Volume 3 Technical Appendices) provides a more detailed description of the proposed SEE site, the characteristics of the proposed SEE and the findings of the environmental impact assessment process.



1.3 The following sections of this NTS summarise the:

- development proposals being submitted;
- need for the proposed SEE;
- consultation process undertaken;
- main characteristics of the physical, natural and built environment around the proposed SEE site; and
- principal environmental effects envisaged as a result of the proposed SEE and the measures that will be adopted to avoid, reduce or control any significant adverse effects.

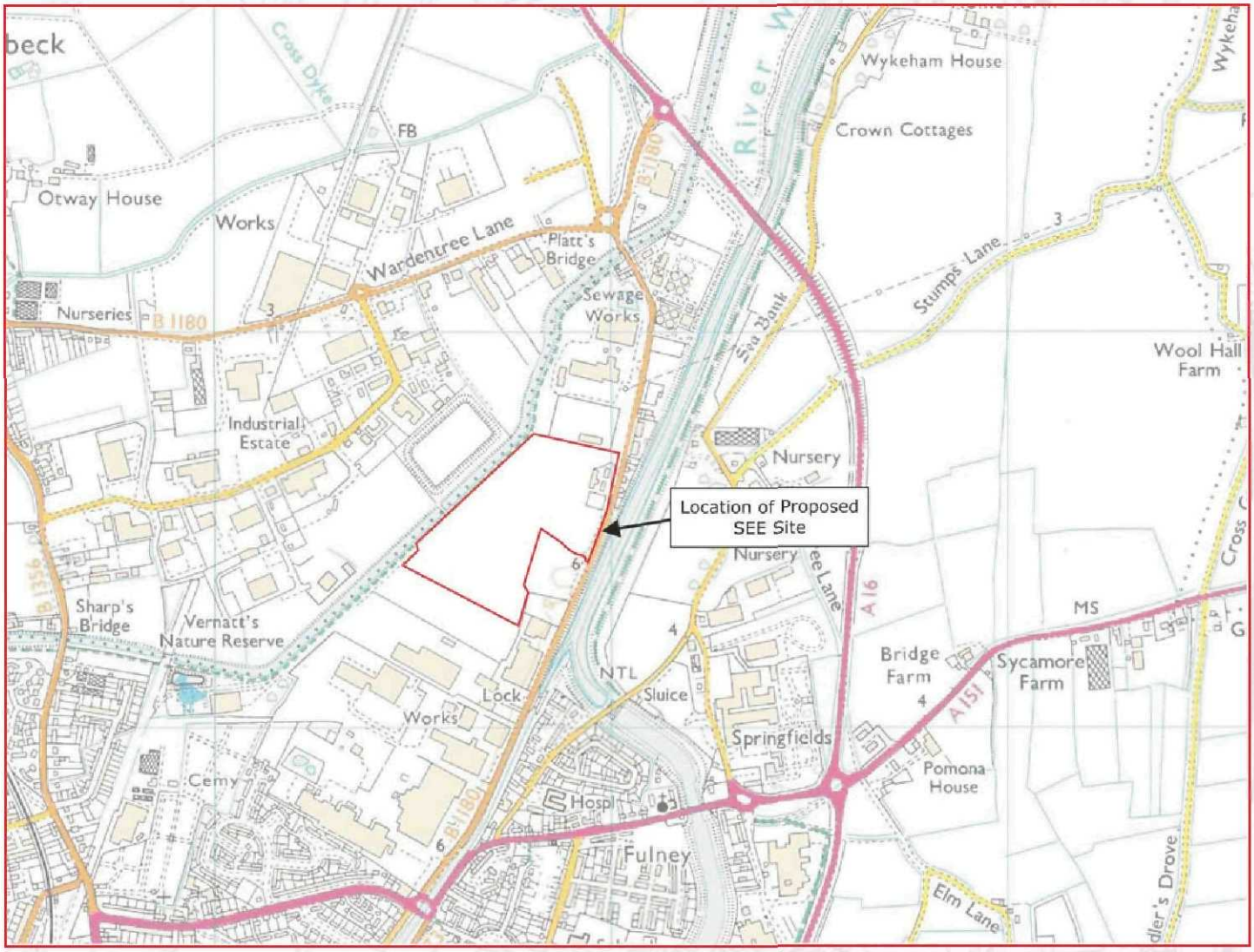
1.4 The full ES and supporting Technical Appendices can be viewed at the addresses below.

- South Holland District Council, Council Offices, Priory Road, Spalding, Lincolnshire PE11 2XE:
  Opening hours: Mon/Tues/Thur 8.30 - 17.15, Wed 9.00 - 17.15, Fri 8.30 - 16.45
- Lincolnshire County Council, Council Offices, Newland, Lincoln, LN1 1YL
  Opening hours: Mon/Thur 8.45 - 17.15, Fri 8.45 - 16.45
- Spalding Library, Victoria Street, Spalding, Lincolnshire, PE11 1EA:
  Opening hours: Mon/Fri 9.00 - 18.00, Tues/Wed 9.00 - 19.00, Thur 9.00 - 14.00, Sat 9.00 - 16.00
- The South Holland Centre, Market Place, Spalding, Lincolnshire, PE11 1SS:
  Opening hours: Mon/Sat 9.30-20.30
- Pinchbeck Study Centre & Library, 48 Knight Street, Pinchbeck, Spalding, Lincolnshire PE11 3RB:
  Opening hours: Tues/Wed/Thur 10.00 - 16.00

1.5 An electronic version of the consent application reports, including the ES, will be available to download from **http://www.spaldingenergy.co.uk**. Paper copies of the NTS and Main Report can be requested from Nathan Swankie of ENVIRON UK Ltd at 7 Walker Street, Edinburgh, EH3 7JY, Tel: 0131 225 9899. Copies of the NTS are available free of charge; the Main Report and Technical Appendices can be purchased on CD for £5 or in paper form at a cost of £250.

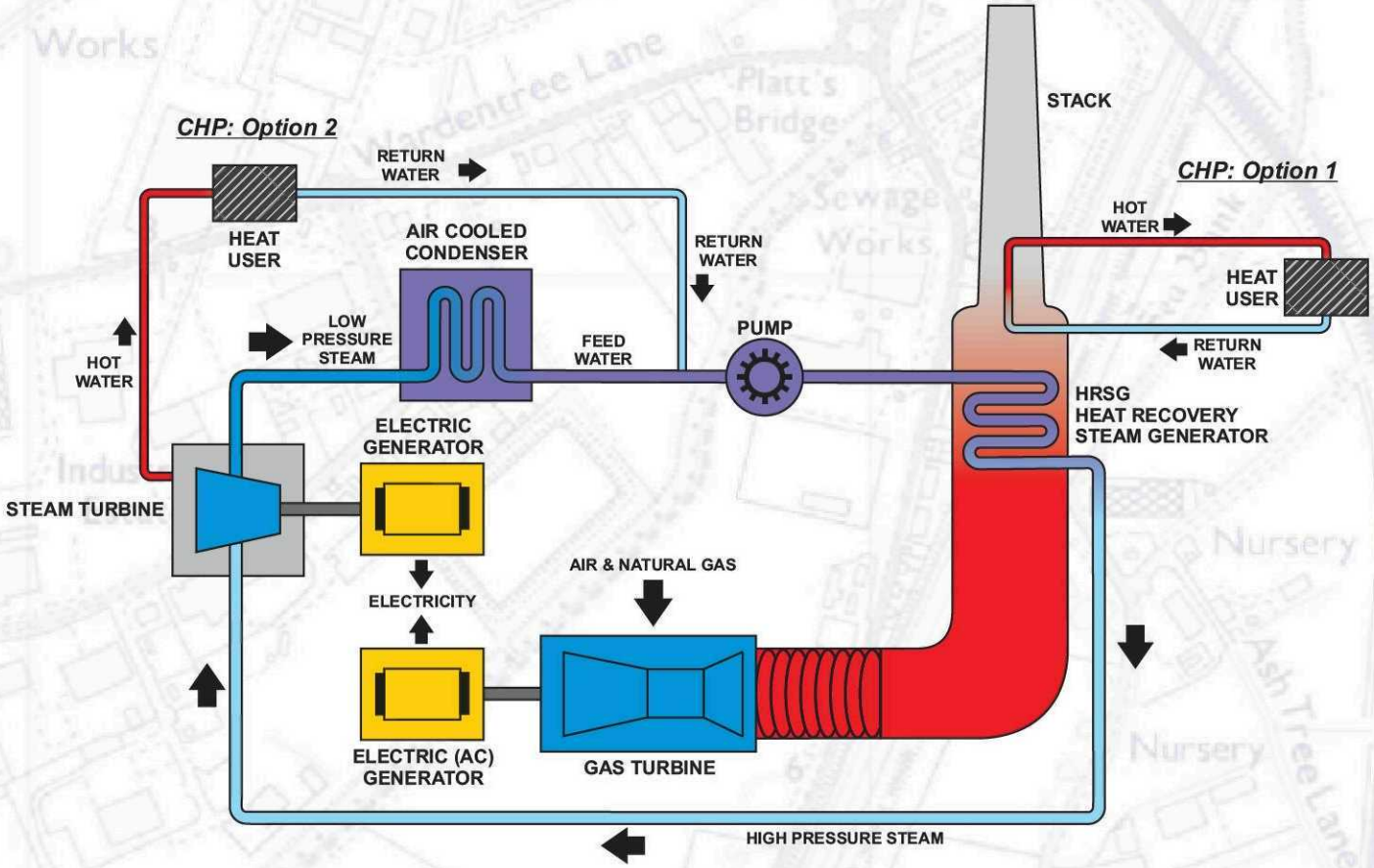
2 Description of the Proposals

2.1 The proposed SEE will use modern, proven and efficient CCGT technology to generate electricity to help meet regional and national demand. The electricity will be transferred to the National Grid electricity transmission system for onward distribution and use by consumers. It is expected that the proposed SEE will be capable of generating enough electricity to power the equivalent of one million homes.





2.2 The process of generating electricity through CCGT technology is shown in the diagram below. Natural gas is burnt in the gas turbines which drive the generators to produce electricity. The hot exhaust gases from the gas turbines are used to convert water into steam in the Heat Recovery Steam Generators to drive the steam turbine, which in turn drives another generator to produce more electricity. CCGTs are more efficient than other forms of fossil fuel power generation due to the use of the Heat Recovery Steam Generators and steam turbines, achieving up to around 55% efficiency for electricity generated compared to the energy in the natural gas used. The same process is currently used to generate electricity in the existing SECL.



2.3 The main emissions from the proposed SEE will be carbon dioxide (CO_2) and nitrogen dioxide (NO_2). Compared to a traditional coal-fired plant the CCGT produces around 50% less CO_2 and 75% less nitrogen NO_2. The CCGT technology produces no ash, dust or smells and is relatively quiet.

2.4 The main elements of the proposed SEE are below.

- **Main Plant**: A new CCGT plant, of a broadly similar size and appearance to the existing SECL power station. The main plant will comprise principally:
  - two gas turbines;
  - one or more steam turbines;
  - two Heat Recovery Steam Generators;
  - one or more auxiliary boilers;
  - one ACC and ancillary cooling;
  - two or more transformers;
  - 400kV substation;
  - balance of plant equipment
  - water treatment plant; and
  - two water tanks



- **An underground gas supply pipeline**: The preferred gas supply pipeline will be approximately 8 km long, and join the proposed SEE to the gas national transmission system via a connection at Wragg Marsh. The route of the pipeline will largely follow that of the gas pipeline for the existing SECL.

- **An overhead transmission line**: A new 400kV overhead transmission line will be required to connect the proposed SEE to the main electricity national transmission line. National Grid has responsibility for determining the final route. A preliminary study has been carried out by SEEL and a transmission line route that follows largely the existing overhead transmission line for SECL is preferred.

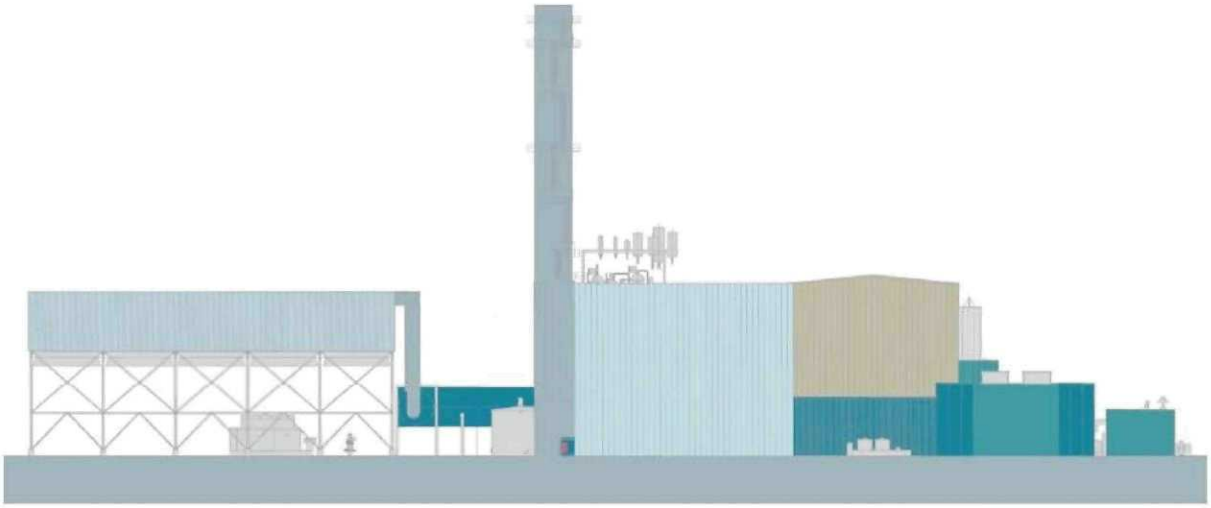
- **Carbon Capture Ready (CCR)**: The proposed SEE is designed to be 'Carbon Capture Ready', which means it is capable of having 'Carbon Capture' technology added at some point in the future. All fossil fuel (e.g. gas and coal) fired power stations generate CO_2 during combustion and this is released into the atmosphere via tall stacks. Carbon Capture technology is expected, once available and proven on a large scale, to capture up to 90% of CO_2 from the fuel gas that is burnt and thus prevent it from entering the atmosphere. Following capture, the CO_2 would be transported off-site and stored off-shore in suitable geological deposits, beneath the sea-bed. SEEL has set aside sufficient land in the southern portion of the proposed SEE site to enable the future accommodation of a Carbon Capture plant.

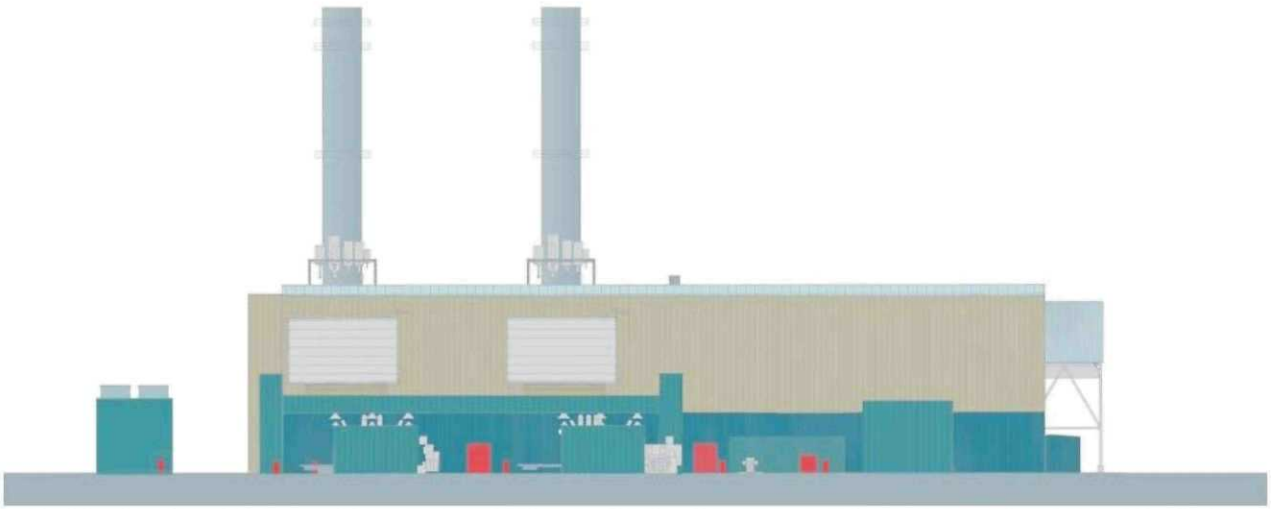
- **Combined Heat & Power (CHP)**: SEEL has undertaken a Combined Heat and Power assessment of the proposed SEE (CHP Assessment). This has included consultation with potential users of waste heat produced by the proposed SEE in the immediate surroundings, and has identified a number of potential local heat users. SEEL will continue discussions with potential heat users in the vicinity of the proposed SEE post application submission. The proposed SEE will be designed CHP ready.

2.5 The detailed design of the proposed SEE is yet to be finalised. This will be completed once a construction contract(s) is in place.

2.6 The proposed SEE is anticipated to take around 5 years to construct and test from the date the application is submitted. The following indicative programme has been developed for the proposed SEE:

- March 2009 – application for Section 36 Consent submitted;
- March 2010 – receipt of necessary consents and permissions, subject to regulatory approval;
- March 2011 – commence remediation of the site;
- September 2011 – commence main construction works; and
- March 2014 – complete site works and commence operations.



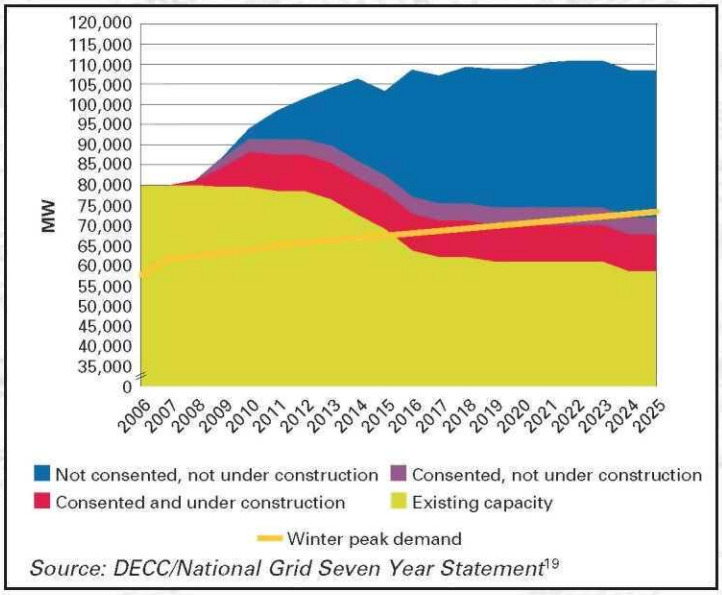


3 The need for the proposed SEE

UK Need for More Power Generating Plant

3.1 The proposed SEE responds to the UK Government's energy objectives, using proven and efficient CCGT technology to provide a supply of electricity to help meet regional and national demand.

3.2 The Government predicts that the UK requires substantial investment in new electricity generating capacity as many older coal and nuclear plants are scheduled to retire and as energy demand grows over time, despite improvements in energy efficiency. A shortfall in electricity supply is predicted by 2015, even allowing for the new generating plants already under construction and consented plants not yet being constructed in the UK.



Source: DECC/National Grid Seven Year Statement[19]

3.3 The UK Government has a vision for the UK to become a low carbon economy while achieving energy security. There is recognition that the UK cannot rely on improvements in energy efficiency and renewable technologies alone, and needs to continue to invest in and use fossil fuels as part of a diverse energy mix for some time to come, including high efficiency gas fired generating plant.

Planning Policy

3.4 The Proposed SEE site is within an area administered by South Holland District Council (SHDC); Lincolnshire County Council (LCC) is the minerals and waste planning authority and the highway authority, and the East Midlands Regional Assembly is the regional planning body. For this application, the relevant regional and local development plans are the East Midlands Regional Plan 2009 and the South Holland Local Plan 2006. Other material considerations to any decision to grant consent include UK Government statements of planning and energy policy, the Regional Economic Strategy and SHDC's emerging local development framework which will follow the approach of the East Midlands Regional Plan.

3.5 There are numerous policies to be considered which cover a range of topics including sustainable development, adopting a sequential approach which prioritises the use of previously developed land within built areas, supportive energy including opportunities to use waste heat, adopting sustainable urban drainage systems where appropriate, cleaning up contaminated land, not producing unacceptable levels of pollution resulting from noise, light, odours, emissions to air and waste, building to a high quality, ensuring safe access for vehicles and people, cutting down on unnecessary car usage, ensuring residential amenity is protected, investing in landscaping and biodiversity, creating long term sustainable jobs, helping to reduce impacts on climate change and managing flood risk.

4. Consents Procedure

4.1 In addition to Section 36 Consent under the Electricity Act 1989, the proposed SEE will require the following key consents and permits:

- power stations of 10 MW or more require energy policy clearance under section 14 (1) of the Energy Act 1976 if they are to be fuelled by natural gas;
- an Environmental Permit (EP) to operate under the Environmental Permitting (England and Wales) Regulations 2007;
- a permit to emit CO_2 under the Greenhouse Gas Emissions Trading Scheme Regulations 2005;
- the new overhead transmission line associated with the proposed SEE will require a consent under section 37 of the Electricity Act 1989;
- the new gas pipeline associated with the proposed SEE will require planning permission for its construction under the Town and Country Planning Act 1990; and
- a land drainage consent from the Welland and Deeping Internal Drainage Board (WDIDB) in connection with works to Vernatt's Drain.

4.2 The application for Section 36 consent is accompanied by the following documents, in addition to the ES:

- Design and Access Statement
- Statement of Community Involvement
- Combined Heat and Power Assessment
- Flood Risk Assessment (appended to the ES)
- Planning Statement
- Transport Statement (appended to the ES)
- Carbon Capture Readiness Assessment
- Landscape and Visual Assessment (appended to the ES)

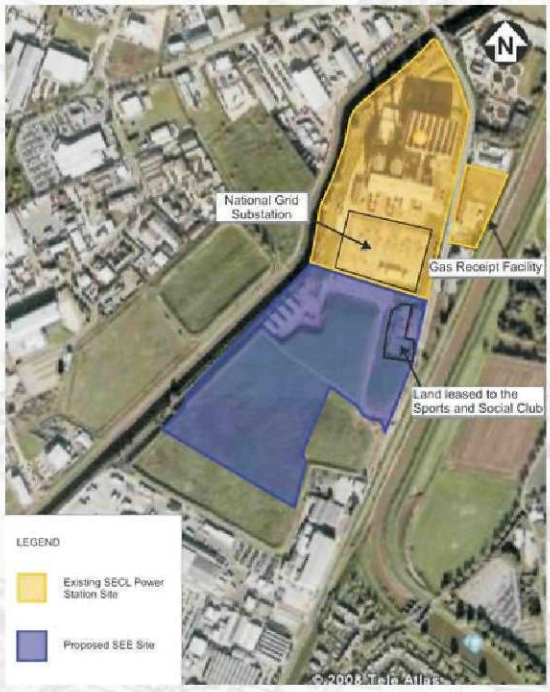


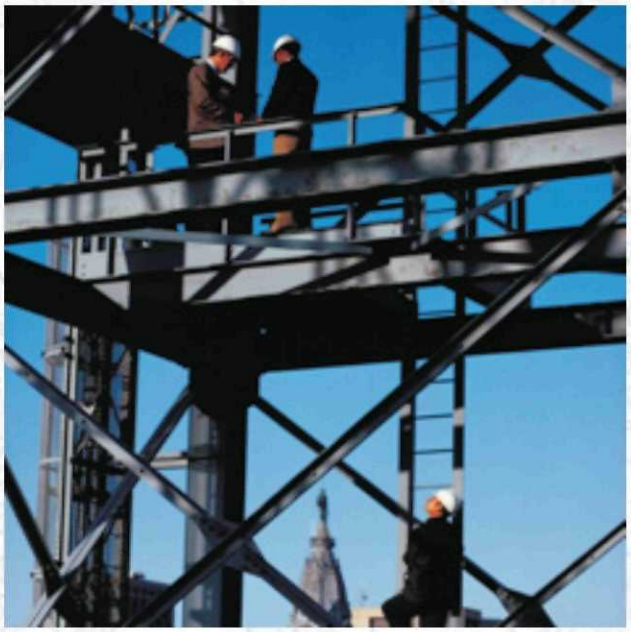
5 Description of the Proposed SEE Site & Surrounding Land Use

5.1 The proposed SEE site comprises a total area of approximately 14 hectares. The land immediately surrounding the proposed SEE is mainly industrial. The wider area is predominantly rural, dominated by agriculture, horticulture and food processing industries. The landscape is generally open and flat. Outside of Spalding town centre, the wider area is sparsely populated with occasional farmsteads. The proposed SEE site, which utilises brownfield land is the best site as it offers a number of benefits including:

- it will utilise existing infrastructure where possible;
- the presence of a skilled workforce at the existing SECL power station with its established operational systems will be available for training new employees;
- the electrical grid connection, east of Spalding, is accessible to key areas of UK electricity demand;
- the gas supply pipeline east of Spalding is accessible and has capacity;
- the adjoining land uses (industrial estate and the existing SECL power station site) provide an appropriate context for the development; and
- InterGen has strong existing relationships with key stakeholders and the local community.

5.2 The location of the proposed SEE and existing SECL sites was occupied formerly by a sugar beet factory, which was owned and operated by British Sugar plc, prior to demolition in 1996. The northern part of the proposed SEE site comprises a man-made mound (the Mound) up to 4 metres above ground level which consists of soil washings from the former sugar beet factory processes. In the northeastern portion of the proposed SEE site there is a group of buildings and a bowling green, owned by Spalding Energy Company Limited (SECL), which is let to the British Sugar Sports and Social Club (BSSSC). Four vacant storage tents used during the construction stage of the existing SECL power station are located in the north west corner of the proposed SEE site. The southern part of the proposed SEE site is currently vacant grassland.





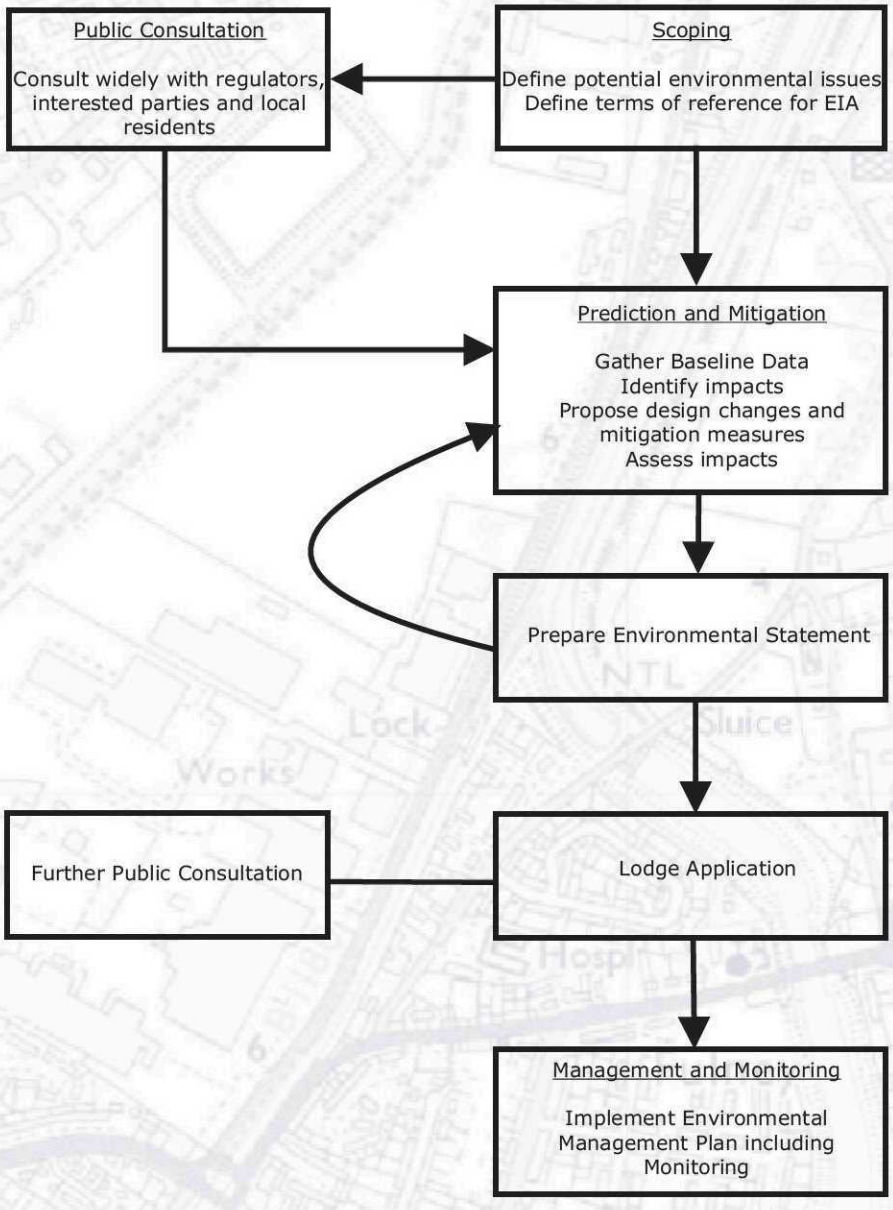


6 Environmental Impact Assessment Process

6.1 The purpose of Environmental Impact Assessment (EIA) is to provide adequate environmental information to enable stakeholders to understand the potential environmental effects of a project.

6.2 The EIA identifies and assesses the potential environmental impacts associated with the construction and operation of the proposed development. The assessment and potential environmental impacts are recorded in an Environmental Statement (ES). For each potential impact, the ES considers the 'worst case'. This ensures that the development possibilities and environmental scenarios likely to cause the greatest environmental impact are taken into account for every aspect of the project. This process defines clearly the potential boundaries of the development and describes the maximum possible impact.

EIA Process



7 Consultation and EIA Scoping

7.1 Consultation has played a key role in the development of the proposed SEE. Extensive and ongoing consultation has been undertaken with a variety of groups including: the local community; SHDC; LCC; DECC; and the Environment Agency.

7.2 Informal consultation with statutory consultees was undertaken early in the development process and formal consultation was undertaken via a 'scoping' process. Scoping is a mechanism by which key authorities in the EIA process are informed about the proposed development and the potential environmental impacts arising from it, and have the opportunity to comment on the key issues that the EIA should focus on. A scoping report[1] was issued which set out the 'terms of reference' for the EIA.

7.3 The feedback from this consultation has been used to shape the proposed SEE, for example in relation to the Carbon Capture arrangements and defining suitable floor levels to prevent flood risk.

7.4 In addition, a 4 page newsletter was circulated to approximately 3,500 homes and businesses in the wider Spalding community on 7 November 2008 containing details of the proposed SEE site and the potential environmental impacts of the proposed SEE including air emissions, noise, visual, ecology, re-use of heat and environmental impacts associated with infrastructure connections (e.g. gas pipeline and overhead transmission line).

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SPALDING ENERGY EXPANSION

PROJECT FACTS: Local benefits

- Up to 600 construction jobs
- Contracts for local businesses, during construction and operations
- Up to 20 permanent skilled jobs
- Further active involvement in community initiatives: education, careers, environmental issues, sport and road safety


SPALDING ENERGY NEWSLETTER ISSUE 2 INTERGEN

Residents are welcomed to exhibitions

Members of the Spalding Energy Expansion project team were delighted to welcome local residents to the public exhibitions at the end of last year.

Held in the newly refurbished Broad Street Business Centre, approximately 150 visitors called in on 20, 21 and 22 November to find out more about the £500 million investment proposed for the West Marsh Road site.

Visitors had the opportunity to talk to various specialists about aspects of the proposal and view computer-generated images showing how the completed expansion might look.

Station Manager Paul Hanson said: "It was good to meet so many residents on a face-to-face basis, and we were extremely pleased with the responses to the questionnaire.

"For the most part, the people we spoke with and heard from were aware of the looming shortfall in the UK's energy supplies and were supportive of our expansion plans."

A number of themes emerged from discussions with visitors and an analysis of the questionnaire responses.

Visitor Martin Deacon (left) talks to Project Manager Neil Anderson (centre) and Station Manager Paul Hanson

These include:

- Specific benefits for the local economy
- Additional support for initiatives within the community
- Visual impact of the expansion
- Environmental impact of the expansion
- Future of the British Sugar Sports and Social Club

InterGen is taking each of these themes raised by local residents and considering them as part of the Spalding Energy Expansion process.

Computer-generated images of the expansion with the existing plant in the foreground, from the A16 bridge over the Welland (above) and from the A16 (below)

INSIDE: UK energy scene p2 | Power behind the pedals p3 | Continuing the dialogue p4

7.5 In parallel with the EIA Scoping, the wider community was invited to comment on the proposals at a public exhibition held over three days (Thursday 20 November - Saturday 22 November 2008) at the Broad Street Business Centre in Spalding town centre. The purpose of the public exhibition was two-fold: to provide the community with an understanding of the proposed SEE, and to provide InterGen with feedback from the local community. The exhibition material consisted primarily of a range of display boards with information about the project and a selection of views from various locations.

7.6 A second newsletter was issued on 18 March 2009 providing an update on the project. A further public exhibition is planned for 26 - 28 March in Spalding at the same venue as above.

1 ENVIRON UK Ltd (November 2008) Environmental Impact Assessment (EIA) and Environmental Permit (EP) Scoping and Consultation Report, Spalding Energy Expansion

8 Environmental Baseline

8.1 While the immediate surroundings of the proposed SEE site are mainly industrial, the wider area is predominantly rural, and existing air quality is good. With the exception of the existing SECL power station, there is no major source of emissions within 1 km of the proposed SEE site, although low levels of emissions arise from local industry.





8.2 The proposed SEE site is bordered to the north by the existing SECL power station, to the east by West Marsh Road, with the River Welland and associated flood defences beyond, to the west is Vernatt's Drain and to the south by undeveloped brownfield land.

8.3 The proposed SEE site has limited ecological value. However, Vernatt's Drain to the west and the River Welland to the east, provide good river corridor habitat. Both watercourses are lined by stands of common reed. Evidence of otter activity was found along both watercourses and evidence of water vole was found along the River Welland. While no evidence of badger activity was found on-site or within the wider study area, badgers are know to exist in the extended wider area within the agricultural land to the east. The vacant grassland in the southern portion of the proposed SEE site offers good habitat for birds. Seven species of bat are known to exist in the area surrounding the proposed SEE site.





8.4 Within the wider area there are a number of statutory designated sites. These include Surfleet Lows Site of Specific Scientific Interest (SSSI) (a meadow, approximately 3.5 km to the north) and Vernatt's Local Nature Reserve (a small pond and mature scrub and woodland, approximately 700 m to the south west). Further afield is Cowbit Wash (a Geological SSSI), located approximately 5 km to the south and approximately 15 km to the north east lies a diverse wetland habitat known as 'The Wash'. The importance of The Wash is recognised at both a national and international level and it is a designated Special Protection Area (SPA), a Special Area of Conservation (SAC), a SSSI, and under the Ramsar Convention. The Wash provides a breeding and resting place for over 20 wetland bird species and regularly supports in excess of 20,000 birds. Its varied habitats and diverse flora and fauna also provides a home to the UK's largest common seal colony.

8.5 The proposed SEE lies within the flood plain of the River Welland. However, the proposed SEE site is protected from flooding by defences along the River Welland. Studies carried out as part of the EIA process have shown that in the event of a failure in the flood defences, the proposed SEE site would remain above the level of predicted flooding.

8.6 There is no evidence of significant contamination on the proposed SEE site. However, ground gas (methane (CH_4) and CO_2) is being generated at low flow rates as a result of the natural breakdown of organic material in a spoil mound at the north of the proposed SEE site. There is no significant risk associated with these gases off site. SEEL has developed a plan in consultation with the Environment Agency and SHDC to remove this spoil material off-site for re-use as part of the enabling works for the proposed SEE.



9 Environmental Impacts

9.1 The design of the proposed SEE has been considered carefully to avoid key areas of environmental sensitivity and impact. The potential impacts of the proposed SEE during construction and operation have been assessed in relation to the following impacts:

- Landscape and Visual;
- Transport;
- Noise and Vibration;
- Air Quality;
- Ground Contamination;
- Water Resources and Flood Risk;
- Ecology;
- Socio-Economics; and
- Indirect, Secondary and Cumulative impacts.

9.2 The following pages contain a summary of the key potential environmental impacts. The measures included as part of the proposed SEE in order to avoid and reduce impacts are also listed along with the associated mitigation. More in depth information is contained in the ES (Volumes 2&3).



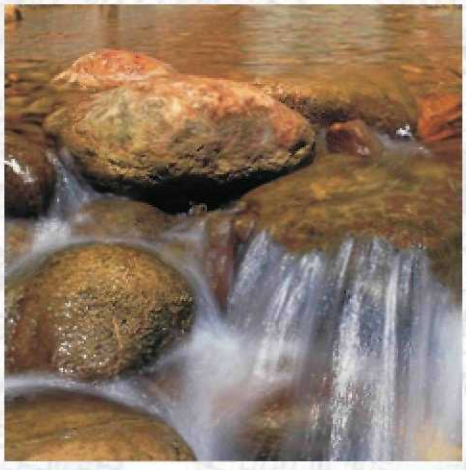
Issue	Description and Potential Impact	Design Measures and Mitigation
Landscape and Visual	During construction, cranes and large quantities of machinery will be visible and apparent across a wide area. During operations, the proposed SEE will be evident from some distance. A very limited number of properties that lie in relatively close proximity to the proposed SEE site will be significantly adversely affected by views of the proposed SEE site.	• 2m high hoarding will surround the site during construction to screen the works. • Planting of native woodland, trees and hedges will be located around the periphery of the site, where possible, and the bund along the eastern bank of Vernatts drain will screen the lower level elements of the site. • It is likely that the material, colour and construction of the proposed SEE will be similar to that of the existing SECL power station, resulting in a more unified and integrated visual image within views. • The lighting design will be carried out by a professional lighting design engineer using guidelines with the aim of reducing light pollution.
Transport	During construction a large number of daily Heavy Goods Vehicle movements, up to 120 'in' and 120 'out', will be required. This is associated with building material movements and deliveries. Construction traffic is predicted to peak in 2013.	• During the construction phase a Construction Traffic Management Plan will be used to control traffic movements, routeing, parking and other associated measures such as signage.
Noise and Vibration	There is the potential for noise impacts to arise during the construction phase as a result of machinery on site, construction activities and construction traffic and during the operation phase as a result of daily operations.	• The measures to avoid adverse noise conditions during construction will be set out in a Construction Environment Management Plan (CEMP) and will include guidance on the timing of deliveries, choice of plant machinery, and switching off machinery when not in use. As a result, no adverse noise impacts are predicted. • High performance noise barriers and silencers will be fitted where appropriate, thereby reducing the potential for noise during operations.





Issue	Description and Potential Impacts	Design Measures and Mitigation
Air Quality	Dust will be the main air emission during the construction works. The main air emissions during operations (CO_2 and NO_2) will exit via the main stacks.	• The control of dust emissions during the construction period will be ensured through the CEMP, and it is anticipated that there will be no adverse impacts. • Low pollution technology has been specified for the CCGT plant in order to avoid and reduce harmful emissions to the air during operations.
Ground Conditions	The proposed SEE site was used formally as part of the British Sugar beet processing factory. This former land use has left behind organic material which is generating ground gas at low flow rates.	• Prior to commencing any work on site it is proposed to remove the gas-generating material, including the spoil mound. It is proposed that this material is re-used off site as topsoil. • The design of the foundations for the proposed SEE will ensure that any remaining ground gas will be prevented from entering the buildings and allowed to disperse safely into the atmosphere.
Water Resources and Flood Risk	Spills etc may affect water resources during construction. During operations the site needs to have an appropriate floor level to minimise flood risk. During operations, additional mains water will be required.	• The potential for water pollution during construction will be controlled and reduced by the mitigation measures detailed in the CEMP. • The design of the proposed SEE has taken into account the flood risk associated with the River Welland and, therefore, the proposed SEE will be entirely located above the flood risk level. • A Sustainable Urban Drainage Strategy has been designed to store and treat rain water run off once the proposed SEE is built. • Rainwater harvesting will be incorporated within the detailed design to reduce water consumption.





Issue	Description and Potential Impact	Design Measures and Mitigation
Ecology	There is limited ecological value on the proposed SEE site itself. However, the immediate surroundings reflect a diverse and thriving habitat for flora and fauna.	• A range of enhancement measures for species mostly centred on the Vernatt's Drain corridor have been agreed with Welland and Deeping Internal Drainage Board, including the management of the existing habitat along the watercourse, provision of bat and bird boxes on and off site, and the creation of an artificial otter holt along Vernatt's Drain. • Within the proposed SEE site, landscaping (including trees, bushes and shrubs) and potentially a green/brown[2] roof on at least one of the buildings will provide opportunities for both fauna and flora.
Socio-Economics	The construction and operational phases of the proposed SEE will create employment opportunities, with up to around 600 jobs predicted during the construction phase and approximately 56-61 direct and indirect jobs during the operational phase. The proposed SEE will result in the demolition of buildings leased to the BSSSC.	• No mitigation is required in relation to job creation, as impacts are beneficial. • A working group has been established to assess options for the future of the BSSSC and these discussions will continue beyond the date of the Section 36 application for the proposed SEE.







2 Green/Brown Roof: Is a roof that has been intentionally covered in vegetation, with green roofs being dominated by vegetation and brown roofs being more sparsely vegetated and covered by a gravelly substrate. These are also known as living roofs.

Indirect, Secondary & Cumulative Impacts

9.3 The impacts that are described above relate only to the proposed SEE. However, it is recognised that there is the potential for other environmental impacts to arise as a result of the cumulative impact of the proposed overhead transmission line, the gas supply pipeline, the CHP and future Carbon Capture Storage (CCS) proposals. In addition, consent has been granted by SHDC to Rand Developments LLP and Howtin Investments Ltd (the Rand and Howtin development) for the development of land to the east of the proposed SEE site, fronting onto West Marsh Road. The Rand and Howtin development consists of a petrol filling station, a car showroom and some industrial storage units.

9.4 An EIA is underway for the proposed gas supply pipeline, and an Environmental Statement will accompany a planning application, to be submitted to SHDC in around June 2009. A separate ES will be prepared by National Grid in due course for the overhead transmission line, and a further ES will be required to support a second or successor application for Section 36 Consent for CCS proposals.

9.5 The following table summarises the key indirect, secondary and cumulative impacts:

Issue	Description and Potential Impact	Design Measures and Mitigation
Construction	During construction the key cumulative impact is likely to be visual. Other likely impacts to arise could include traffic, noise, dust and ecology. There is also likely to be a positive impact as a result of temporary employment. Productive agricultural land will be temporarily required for the construction of the overhead transmission line and gas supply pipeline.	• Construction impacts will be temporary and local, and will be mitigated through the effective use of management plans and communication between construction teams. • Appropriate arrangements will be made with affected landowners.
Operation	Once all developments are built, significant cumulative landscape and visual impacts will arise as a result of the proposed overhead transmission line, the proposed SEE, the Rand and Howtin development and CCS. There is also the potential for noise impacts from the proposed SEE, CCS and the Rand and Howtin development. The proposed SEE, CCS and the Rand and Howtin development will all occupy brownfield land.	• Planting at the proposed SEE site will screen views and effective design of the proposed SEE and CCS will reduce visual impacts. • Noise impacts are not considered to be significant as the proposed SEE and CCS will be designed to reduce noise impacts at source. • Land use is consistent with the SHDC Local Plan.

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