Parish:	King's Lynn	
Proposal:	Consultation in respect of amendment to application 08/01544/S36 - construction of King's Lynn CCGT power station	
Location:	King's Lynn Power Station Willow Road Willows Business Park King's Lynn	
Applicant:	DWD Property And Planning	
Case No:	18/00797/S36 (Section 36 Electricity Act Consultation)	
Case Officer:	Mrs H Morris	Date for Determination: 30 June 2018

**Reason for Referral to Planning Committee** – At the discretion of the Executive Director as the application raises issues of wider concern

# Neighbourhood Plan: No

# **Case Summary**

The site lies on land at Willows Business Park, Saddlebow Road to the south of King's Lynn.

The application seeks to vary the extant consent and deemed planning permission for King's Lynn 'B' CCGT Power Station Project which was granted on 5th February 2009 to Centrica Leasing (KL) Limited under Section 36 of the Electricity Act 1989 (08/01544/S36). The application has been made to the Secretary of State for Business, Energy and Industrial Strategy ('BEIS') for determination but has been referred to the Borough Council for consultation.

A number of the conditions attached to the deemed planning permission have previously been varied by planning permissions 11/01034/F (Conditions 14, 37 and 38) and 12/01986/F (Condition 8) granted on 3rd April 2012 and 13th May 2013 respectively. A Section 106 agreement relates to the previous consent with the primary obligation being the payment of £200,000 to the Borough Council for the 'Landscape Fund'.

The 2009 Consent has been implemented by the construction, in 2013, of the gatehouse that formed part of the approved plans, confirmed by the issue of a lawful development certificate on 2nd May 2017 (17/00352/LDE).

The existing consent allows for the construction and operation of a CCGT power station of about 1,020 megawatts ('MW') capacity adjacent to the existing King's Lynn 'A' CCGT Power Station.

Since the 2009 consent was granted there have been significant advances in CCGT technology with the latest CCGT units available of the market being much more efficient than those that were available in 2009 and they are able to achieve a significantly greater electrical output.

This variation application therefore requests that the SoS consents to vary the 2009 Consent to provide EP UK Power Development Limited with the ability to construct and operate a gas-fired electricity generating station of up to 1,700 MW capacity, comprising one of the following:

Option 1 - up to two CCGT, comprising up to two gas turbines, up to two steam turbines, up to two heat recovery steam generators ('HRSG') and air-cooled condensers; or
Option 2 - one CCGT unit, comprising one gas turbine, one steam turbine, one HRSG and air-cooled condensers and; an Open Cycle Gas Turbine ('OCGT') plant of up to 299 MW

The application is accompanied by an Environmental Impact Assessment.

# Key Issues

capacity.

The application raises the following issues: -

- Principle of Development;
- Air quality;
- Noise and Vibration;
- Ecology;
- Land Contamination;
- Landscape and Visual Amenity;
- Traffic and Transport;
- Cumulative and Combined Effects; and
- Other considerations.

### Recommendation

**NO OBJECTION** subject to the imposition of additional conditions as put forward by the agent and those recommended by CSNN, Environmental Quality and the Council's tree officer; as well as the completion of either a new S106 agreement or a Deed of Variation to the existing S106 agreement related to planning permission ref: 12/01986/F in order to secure a payment of £200,000 to the Borough Council for the 'Landscape Fund' in addition to a financial contribution towards air quality monitoring.

# THE APPLICATION

This Variation Application has been made to the Secretary of State (SoS) for the Department of Business, Energy and Industrial Strategy (BEIS) pursuant to section 36C 'variation of consents granted under section 36' of the 1989 Act for the 2009 Consent (08/01544/S36) to be varied. It also requests that the SoS pursuant to his powers under Section 90(2) and (2ZA) of the Town and Country Planning Act 1990 directs that the deemed planning permission granted on 5th February 2009 (as varied by planning permission ref. 12/01986/F) also be varied.

The existing consent allows for the construction and operation of a combined cycle gas turbine (CCGT) generating station of about 1,020 megawatts (MW). This has been implemented by the construction, in 2013, of the gatehouse that formed part of the approved plans. A lawful development certificate was granted on 2nd May 2017 (17/00352/LDE) confirming that the 2009 consent has been lawfully implemented and remains extant.

Since the 2009 consent was granted there have been significant advances in CCGT technology. The latest CCGT units available on the market are much more efficient than those that were available in 2009 and are able to achieve a significantly greater electrical output. The variation application therefore seeks to capitalise on these technological developments by providing EP UK Power Development Limited the ability to deploy two of the latest CCGT units at the Site, thereby making a greater contribution to the security of electricity supplies.

As a result the current application requests that the SoS consents to vary the 2009 consent to provide EP UK Power Development Limited with the ability to construct and operate a gas-fired electricity generating station of up to 1,700 MW capacity (the 'Proposed Development'), comprising one of the following:

- Option 1 up to two CCGT, comprising up to two gas turbines, up to two steam turbines, up to two heat recovery steam generators ('HRSG') and air-cooled condensers; or
- Option 2 one CCGT unit, comprising one gas turbine, one steam turbine, one HRSG and air-cooled condensers and; an Open Cycle Gas Turbine ('OCGT') plant of up to 299 MW capacity.

The current proposal will also comprise:

- a black start generating facility;
- ancillary plant and equipment;
- the necessary buildings (including security gatehouse, control room, administrative block, warehouses and workshops), enclosures, structures and civil engineering works;
- demineralised and waste water treatment plants and storage tanks;
- foul and surface water drainage systems and utilities connections;
- internal access roads
- a gas reception and compression facility; and
- electrical equipment, including electrical switchgear, transformers and underground cables.

In order to accommodate the development proposed by the variation the application site 'red line' area has increased by approximately 5 hectares which is in part a product of seeking to employ the latest CCGT units to deliver a greater output.

A new gas supply pipeline would be required to connect the generating station to a supply of natural gas. It is proposed that this connection will be made to the existing Above Ground Installation ('AGI') within the King's Lynn 'A' Power Station site, which connects that power station to the National Transmission System ('NTS') for gas that is operated by National Grid Gas Plc. The gas supply pipeline and AGI works would be the subject of a separate planning application that will be submitted to the Council for determination at a later date.

An electrical connection will also be required to the National Grid in order to export the electricity that the Proposed Development would generate. This connection will be provided by a short section of underground electrical cable connecting to a proposed substation in the southern part of the application site that will be connected directly into the 400 kilovolt ('kV') Norwich Main to Walpole transmission line at some 2.8km distance via an over-ground transmission line. At the time of the 2009 consent the separate scheme to connect the site to the Norwich Main to Walpole line had not been designed or consented. Consent has since been obtained by National Grid dated 18th December 2013 for the substation and off-site connection (The National Grid (King's Lynn B Power Station Connection) Order 2013) and a number of requirements discharged by application to the Council. These works are not part of this proposal.

The variation application also seeks to provide the choice of deploying an OCGT plant at the Site. The UK is becoming increasingly reliant on renewable energy. Due to the intermittent nature of renewable energy sources, notably wind, it is important to ensure that there is the infrastructure in place that is able to respond to spikes in demand and fluctuations in supply. Gas-fired generating stations and, in particular, OCGT plants are well suited to this, having the capability to start up rapidly, thus being able to respond in a timely manner to changes in demand and supply. An OCGT plant at the site would therefore make a positive contribution to the security of electricity supplies, providing much needed back-up to the UK's existing generation fleet.

The stack proposed would be between 80m and 90m tall (or for the OCGT unit, 45m). These compare with a height of 80m under the 2009 Consent. The HRSG would be up to 45m in height, compared with 40m in the 2009 Consent. Demolitions of small structures along with utility diversions and relocations would be carried out as part of the preliminary works for either option.

A number of the conditions attached to the extant deemed planning permission have been varied by planning permissions 11/01034/F (Conditions 14, 37 and 38) and 12/01986/F (Condition 8) granted on 3rd April 2012 and 13th May 2013 respectively. The 2009 consent was granted following the completion of a Section 106 planning agreement between the applicant, Centrica Leasing (KL) Limited, and King's Lynn and West Norfolk Council ('KLWNBC') (dated 16 January 2009). A new Section 106 agreement was entered into in respect of planning permission 11/01034/F (dated 23rd January 2012) and a variation of this was subsequently agreed in respect of planning permission 12/01986/F (dated 11th April 2013). These all related to the site as defined in the 2009 Consent but in each case the primary obligation has remained the payment of £200,000 to KLWNBC for the 'Landscape Fund'.

The application site comprises some 16.6 hectares of land approximately 2.8km to the south east of King's Lynn town centre, at Willows Business Park. This represents an additional coverage of approximately 5 hectares eastwards compared to the 2009 consent site area.

The western boundary of the site borders King's Lynn 'A' Power Station, owned by Centrica, and beyond this scrubland and the tail sluice gate on the Relief Channel for the River Ouse. To the north the site is bounded by Poplar Avenue and a section of parking, serving the Palm Paper factory and its recently constructed CCGT combined heat and power ('CHP) power station. To the north east lies the Saddlebow Industrial Estate containing industrial units and a speedway circuit, and beyond this at around 800m a travellers' site and the A47. To the south the site is bounded by High Road which connects the industrial estate to Saddle Bow, which lies 1km to the south across farmland. The nearest dwellings are situated along High Road, the nearest (Nos 1 and 2 High Road) being approximately 110m to the site boundary.

To the east the Site is bounded by the C&A motorbike dealership and the King's Lynn Police Investigation Centre, opened in 2011. This represents an eastward extension to the consented site, which was bounded to the east by the King's Lynn Main Household Waste Recycling Centre ('HWRC') and areas of open grassland land and scrub either side of the access road, but which now form part of the Site. The boundary between the original site (owned by the Company) and the additional extent (predominantly owned by Norfolk County Council and King's Lynn and West Norfolk Borough Council) is currently demarcated on the ground in part by a metal fence and the Ownership Boundary Plan enclosed with the Variation Application also shows this boundary.

The variation application would necessitate the relocation of the existing Household Waste Recycling Centre (HWRC). Accordingly land is shown available within the application for a

replacement facility, although the use, dimensions, impacts, access and design details of this would be subject of a separate planning application (to Norfolk County Council) by the promoter.

The variation application will not affect the existing sewage pumping station located in the east of the site. This will be retained unaffected for the construction and operation of the proposed development.

The application is referred to the Council for consultation purposes but will be determined by the Secretary of State for Business, Entergy and Industrial Strategy (BEIS) under Section 36 of the Electricity Act 1989. An objection from the Council will not necessarily result in a public inquiry to determine the application, this would be at the discretion of BEIS given that proposal seeks a variation to an existing consent. The Council's response must normally be forwarded to the Secretary of State within 2 months of the application being referred to the Council. However, in this instance the time period was due to expire on 30th June 2018 therefore an extension of time until 6th July 2018 has been agreed with BEIS due to the Council's committee cycle.

The chosen option and final plant configuration is yet to be determined. It will depend on technical and economic factors, including the electricity market, and will be subject to later detailed design work. Should consent be granted by BEIS for the proposed variation to the 2009 consent, only one of the two options would be developed and the selected configuration would be confirmed in writing to BEIS and the local planning authority prior to commencement of construction.

## SUPPORTING CASE

The application is accompanied by a Supporting Statement, an Environmental Impact Assessment (EIA) Report, Carbon Capture Readiness Assessment, Combined Heat and Power Assessment and a 'track change' version of the 2009 consent showing the variations to the conditions sought by this application.

The EIA Report sets out the following differences between the previous 2009 consent and the current proposed development.

2009 Consent:

- CCGT power plant with a nominal output of 1020 MW, air cooled.
- 80m stack
- HRSG 40m height.
- Connection to the National Grid 400 kV transmission system via the line running from the Walpole Grid Supply Point (GSP) to the Norwich Main (GSP) which will likely involve a new 400 kV substation and overground connection, about 2 km in length.
- Land set aside for carbon capture and export.

Proposed development:

- Option 1 Up to two CCGT units of up to 1,700 MW electrical output capacity, air cooled and a black start generating facility.
- Option 2 A single CCGT unit of up to 850 MW electrical output capacity and / or one Open Cycle Gas Turbine (OCGT) peaking plant of up to 299 MW electrical output capacity, both air cooled and a black start generating facility.
- 80m to 90m stack (CCGT) and / or 45m stack OCGT.
- HRSG maximum height 45m.

- Connection from the power station to the proposed on site 400kV sub-station and then be connected directly into the 400kV Norwich Main to Walpole transmission line by 2.8 km of overhead transmission line. This has been separately consented by National Grid through a Development Consent Order.
- Application Site larger than the 2009 Consent to accommodate additional Carbon Capture Readiness (CCR) land requirement in guidance published after the 2009 consent application was prepared.

The EIA Report also summarises the changes in environmental effects since the 2009 consent. Not all topics covered in the Environmental Statement prepared for the 2009 Consent are addressed in the EIA Report for the Proposed Development as it was clear as a result of the earlier work - and set out in the Scoping Report submitted to BEIS - that some topics did not need further assessment. In addition, Geology, Hydrogeology and Land Contamination was not covered in the earlier Environmental Statement. The conclusions of the topics assessed in both studies are summarised as follows:

# Air quality

The Environmental Statement prepared for the 2009 Consent predicted a negligible impact on air quality and no additional exceedances. The current EIA Report concludes there would be no change in the significance of the predicted effects.

# Noise and vibration

As set out in the Environmental Statement prepared for the 2009 Consent, the impact of construction noise is not predicted to be significant. No change in the significance of the predicted effects in the current EIA Report. When operational, there is no change in the significance of the predicted noise effects. While an unmitigated noise impact would be considered significant, mitigation can be applied to the key noise components of the proposed development to achieve a change in sound levels at noise sensitive receptors of less than +5dB during day and night.

# Ecology

The significant effects of the proposed development are comparable to those assessed for the 2009 Consent, although the extent of land required to construct the proposed development is greater and there is therefore a corresponding increase in the bankside habitat for water voles required on the Application Site. This does not mean a difference in the significance of effect however as the mitigation will be as effective as that proposed in the 2009 Consent.

### Landscape and visual

As with the 2009 Consent, no significant effect is predicted by the current EIA Report on landscape character. However the proposed development is assessed to have a moderate adverse (significant) effect on several viewpoints during construction and operation. This was not identified in the Environmental Statement prepared for the 2009 Consent which did not assess the impact from specific viewpoints but did acknowledge that the plant would be visible from much of the surrounding area.

### Traffic and transport

In the Environmental Statement prepared for the 2009 Consent the impacts of the proposed development due to increased traffic levels during construction were assessed to be of short

duration and not significant. The current EIA Report reaches the same conclusion, although the construction programme is expected to be approximately 10 months longer.

### Cumulative and combined effects

The current EIA Report analyses the combined effects of different types of impacts, for example noise, dust and visual impacts, as well as the impacts from several developments considered together.

Following a review of the potential location and timing of nearby planned developments, six developments were identified as potentially being relevant to the assessment. These are:

- Palm Paper Generating Station;
- King's Lynn 'A' Power Station Upgrade;
- King's Lynn 'B' Power Station Grid Connection;
- Connection to the National Transmission System for supply of natural gas;
- Undergrounding of the existing 132kV overhead line in the southern part of the Application Site; and
- Relocation of the Household Waste Recycling Centre.

No additional significant effects other than those previously identified within the topics above have been identified as a result of the cumulative impacts assessment.

There is little potential for combined effects to occur at sensitive receptors owing to the proposed approaches to controlling nuisance and environmental effects during construction and operation of the Proposed Development. Those that may occur are not likely to be significant.

The submitted Supporting Statement sets out the legislation and guidance relating to S36 variation applications and discusses the suitability of the S36 variation procedure for the proposed changes to the development.

This advises that since the 2009 Consent was granted there have been significant advances in CCGT technology. The latest CCGT units available on the market are much more efficient than those that were available in 2009 and are able to achieve a significantly greater electrical output. The energy market also continues to evolve, for example since the introduction of the Capacity Mechanism. The Company therefore wishes to vary the 2009 Consent to allow it to deploy the latest generation of CCGT units and construct a power station with an electrical output of up to 1,700 MW, enough to supply the electricity needs of over 1.7 million homes, and an alternative option that includes the ability to deploy a flexible OCGT unit. The Variation Application, if granted permission, would make a significant contribution to energy security in the UK.

The 2009 Consent permits "about" 1,020 MW generating capacity, with a 5% tolerance permitted, which corresponds to a range of 969MW to 1,071 MW. The Variation Application seeks to establish a maximum power output, which is the modern convention for any thermal generating station consent. The Company seeks the flexibility to develop a wider range of capacities than permitted by the 2009 Consent, up to a maximum of 1,700MW, to maximise the range of opportunities that the scheme could play in the rapidly changing energy market. This Variation Application does not seek a change in the Proposed Development's main fuel or power source. Moreover, the guidance is clear that changes to an existing consent to allow for the deployment of OCGT and a different amount of power to be generated are suitable subject matter for a variation application.

According to the submitted Supporting Statement, paragraph 28 of the Guidance Note on the S36 variation process published by BEIS confirms that "in principle, there is nothing to stop the section 36 variation process being used to facilitate changes which would involve development outside the "red line" indicated in the existing consent. However, a substantial expansion of development outside the original boundary may well be taken as an indicator that what is being proposed is really a new project...rather than something that it would be appropriate to authorise by means of a section 36 variation...".

The additional extent of the variation application amounts to around 5ha and the reasons for this increase are as follows:

• The increased size of modern CCGT units for a given power output, in providing greater efficiency, along with the increased maximum power output. The overall electrical efficiency expected in the 2009 Consent was 55% (2009 EIA Report, Page 1.3) whereas the overall electrical efficiency of the CCGT plant within the Variation Application is expected to be over 60%, similar to modern plants operating in France and elsewhere. However, the height of plant is not significantly increasing: the stack proposed would be between 80m and 90m tall (or for the OCGT unit, 45m) compared with a height of 80m under the 2009 Consent; and the HRSG would be up to 45m in height, compared with 40m in the 2009 Consent.

• The need to ensure the proposed development is CCR and provides sufficient land (or reserve space) for the installation of any future carbon capture plant. The 2009 Consent preceded the issuing of the DECC CCR Guidance (Carbon Capture Readiness - A guidance note for Section 36 Electricity Act 1989 consent applications, November 2009) and did not provide a specific amount of land for CCR, requiring simply that some land was retained. The power station layout approved most recently under application reference 12/01986/F showed an area of only 3.02 ha retained for carbon capture equipment, which for the maximum output allowed in the 2009 Consent (1,071 MW) equates to 28.2 square metres per MW generating capacity. As explained within the submitted CCR Report, modern requirements for CCR are at least 37.5 square metres per MW and the current variation application is able to provide 38.1 square metres per megawatt, totalling 6.48ha for 1,700MW. Had the 2009 Consent approved provision of 28.2 sq.m. / MW been applied to the new output of 1,700MW only 4.79ha would have been required therefore a 1.7 ha increase in the size of the site is attributable to modern requirements for CCR provision.

• The need to provide a greater amount of ecological mitigation land due to changed conditions on site (a higher population of water voles), the provision totalling 1.6 ha.

• The need to provide certain facilities (control room and demineralised water tank2) which were not included within the 2009 Consent but were required to operate it and were therefore authorised via a separate planning permission (KLWN reference 10/02133/F) to be constructed within King's Lynn 'A', along with other facilities that were to be shared between King's Lynn 'A' and 'B' but can no longer be shared. These amount to around 0.5 ha including circulation/separation.

• The inclusion, within the red line, of an area that is suitable and available for construction laydown (which was not included for in the application for the 2009 Consent). Under the 2009 Consent the EIA Report (Page 1.3) explained that a construction laydown area would be situated on the adjacent land (i.e. the site of this variation application). This could alternatively be sought via a lawful development certificate, as recently carried out for the construction laydown area for Centrica's King's Lynn 'A' Air Cooled Condenser development (KLWN reference 17/01112/LDP, see Table 1) but it is desirable to show a potential construction laydown area within the 'red line' area of this variation application, and this land would be available subsequently (by others and subject to further planning approval) to

house the re-provision of the Household Waste Recycling Centre. This amounts to around 0.5 ha.

• The availability of contiguous, suitable land which allows the provision of a more functional and modern power station layout. The additional extent corresponds to land that had been bought by NCC in 2008 and identified by them for an energy-from-waste development, the Willows Power and Recycling Centre. This land was also designated in NCC's Waste Site Specific Allocations Development Plan Document (Adopted October 2013). The proposal was withdrawn from the planning process in 2015, and NCC leader Cliff Jordan has stated "I want to be clear that this land will be taken out of the waste plan".

The additional extent is adjacent, is largely undeveloped, is contiguous, and of identical access and similar character to the site of the 2009 Consent. The existing sewage pumping station will be retained unaffected by development. The land has been previously designated for waste management uses in the Development Plan and was previously subject to an energy-from-waste plant planning application. The variation application would also utilise the existing (built out) access and the same electrical connection as for the 2009 Consent, and has the same technology type, fuel, and north-south orientation, and separation of noise sources (such as the air cooled condensers) from residential receptors.

The variation application would necessitate the relocation of the existing Household Waste Recycling Centre (HWRC). Accordingly land is shown available within the application for a replacement facility, although the use, dimensions, impacts, access and design details of this would be subject of a separate planning application (to Norfolk County Council) by the promoter. The land is flat, accessible, and near to the existing HWRC, and is considered suitable in principle for a relocated HWRC. The HWRC relocation is considered as a cumulative scheme within the EIA Report.

Enclosed with the variation application is a track change version of the 2009 Consent (the proposed variation consent). In recognition of the lawful implementation of the gatehouse that provides for the indefinite validity of the 2009 Consent, it is proposed to remove condition 3 (time limits). Otherwise, to provide a level of comfort to consultees and in light of the similar nature of the development it is proposed to retain the conditions from the 2009 Consent with minor modifications (amounting to the updating of references and specifications or accounting for the results of further studies of the site) and a small number of additional conditions (e.g. condition 9 Baseline Noise Monitoring and condition 48 Flood Risk). The relatively low overall amount of modification inherent in the proposed Variation Consent supports the suitability of the Section 36 variation procedure to the Proposed Development.

Additional information has also been submitted by the agent in response to queries raised during the consultation process.

### Notice of the start of commissioning

It was suggested by environmental control officers that it would be helpful if the Council could be provided with some notice of the start of commissioning of the development (the proposed power station). EPUKPD Ltd would suggest that the following condition is included within the variation consent. This is based on the wording from a number of other large scale energy developments:

"Notice of the intended start of commissioning of the Development shall be given to the relevant planning authority in writing and prior to such start and in any event within 14 days in advance of the date that commissioning is started. Notice of the intended completion of commissioning of the Development shall be given to the relevant planning authority in writing

where practicable prior to such completion and in any event within seven days from the date that commissioning is completed."

## Employment, skills and training

The desirability of maximising local employment, skills and training during the construction and operational phases of the project has been raised on a number of occasions. EPUKPD Ltd would be prepared to include a condition within the variation consent that requires the approval and implementation of an employment, skills and training plan. I have set out EPUKPD Ltd's proposed wording for the condition below. Again, this is based on the wording used on a number of other large scale energy developments:

"The construction of the Development shall not take place, save for the permitted preliminary works, until a plan detailing arrangements to promote employment, skills and training development opportunities for local residents during construction and employment opportunities during operation of the Development has been submitted to and approved in writing by the relevant planning authority.

The approved plan must be implemented and maintained during the construction and operation of the Development unless otherwise agreed in writing by the relevant planning authority."

## Local Liaison Committee

It has been suggested that it would be helpful to establish a Local Liaison Committee ('LLC') to provide an interface between EPUKPD Ltd and the local community during the construction and operation of the project. EPUKPD Ltd has experience of administering and running LLCs at other sites. EPUKPD Ltd therefore proposes to include a condition within the variation consent to secure the establishment of a LLC. The condition is proposed as follows:

"The construction of the Development shall not take place, saved for permitted preliminary works, until the Company has established a committee to liaise with local residents and organisations about matters relating to the Development (a 'local liaison committee'). The Company must invite the relevant planning authority and other relevant interest groups, as may be agreed with the relevant planning authority, to nominate representatives to join the local liaison committee. The Company shall provide a full secretariat service and supply an appropriate venue for the local liaison committee meetings to take place. The local liaison committee must:

(a) include representatives of the Company;

(b) meet every other month, starting in the month prior to construction of the Development commencing, until the completion of construction, testing and commissioning works unless otherwise agreed by the majority of the members of the local liaison committee; and

(c) during the operation of the Development meet once a year unless otherwise agreed by the majority of the members of the local liaison committee."

### **Emissions monitoring**

It has been suggested that, as with King's Lynn 'A' and Palm Paper, EPUKPD Ltd undertake emissions monitoring for an agreed period prior to and during the operation of the project. EPUKPD Ltd is in principle prepared to agree to a scheme of emissions monitoring in respect of NOx emissions within the vicinity of the site. With regard to this, there are a number of options as follows:

(a) a financial contribution to the Council to undertake its own monitoring;

(b) install a continuous NOx monitor at an agreed location and fund its maintenance;

(c) undertake diffusion tube monitoring at several agreed locations.

It would be helpful to discuss the specifics of the above with officers in due course and agree how the selected option is best secured.

## Meteorological monitoring

A number of requests have been made for more local meteorological monitoring to supplement data from RAF Marham. Again, EPUKPD Ltd are in principle prepared to agree to this and such monitoring could be undertaken at the location(s) agreed for the emissions monitoring.

## PLANNING HISTORY

18/00848/F: - Variation of condition 31 of planning permission 12/01986/F (in order to refer to revised water vile mitigation details). Currently pending consideration.

17/01112/LDP – Lawful Development Certificate: Development for 2 lay down areas for the storage of materials, plant and machinery. Approved: 16.08.2017.

17/01111/LDE – LAWFUL DEVELOPMENT CERTIFICATE: A two-storey modular office building situated within the contractor's compound which has been provided temporarily for accommodation of construction staff for the works for the existing gas turbine at the site. There will also be provision of a temporary floodlight within the same site. Approved: 10.08.2017.

17/00352/LDE – The applicant is seeking a Certificate of Lawful Development to confirm that the Section 36 and Section 90 deemed planning permission (as amended under application 12/01986/F) granted on 5 February 2009 has been lawfully implemented, remains extant and that consequently there is no legal impediment to continued development under its terms. Approved: 02.05.2017.

17/00535/DM: - Prior Notification: Demolish the existing 2 fuel oil tanks and the north, south and west bund wall which currently surrounds the tanks, filling any voids and creating a level site. The bund floor and east wall will remain in place. Prior approval not required: 22.05.2017.

16/01265/F: - Extension to Air Cooled Condenser (ACC) structure and Air Inlet Filter House (AIFH). Application Permitted: 05/09/16.

13/01105/FM: - Extension of the air cooled condenser structure and replacement of the air inlet filterhouse. Application Permitted: 23/10/13.

12/01986/F: - Variation of condition 8 of planning consent 11/01034/F: Variation of conditions 14, 37 & 38 of planning permission 08/01544/S36: Consultation in relation to the construction of King's Lynn CCGT power station. Application Permitted: 13/05/13.

12/00550/S36: - Construction and operation of a 2.8km (1.75 miles) 400,000 volt (400kv) overhead electricity transmission line between the proposed King's Lynn B power station and Willows Business Park, Saddlebow, near King's Lynn and the existing 400kV overhead electricity transmission line between Norwich main substation and Walpole substation. No objections to Crown application: 18/12/13.

11/01034/F: - Variation of conditions 14, 37 & 38 of planning permission 08/01544/S36: Consultation in relation to the construction of King's Lynn CCGT power station. Application Permitted: 03/04/12.

10/02133/F: - Extension to existing power station control room, conversion of existing storage area, installation of new water tank and replacement site perimeter fencing. Application Permitted: 17/03/11.

09/01000/F: - New warehouse storage facility. Application Permitted: 28/08/09.

08/01544/S36: - Consultation in relation to the construction of King's Lynn CCGT power station. No objections to Crown application: 05/08/08.

2/99/1600/F: - Temporary use of land for site installation infrastructure to support construction of the Kings Lynn Power Station. Application Permitted: 16/02/00.

2/98/0344/F: - Temporary use of land for site installation infrastructure to support construction of the King's Lynn Power Station. Application Permitted: 06/04/98.

2/95/1718/SU: - Proposed 400 kv overhead line connection. Status Unknown: 12/02/96.

2/95/0768/SU: - Construction of 33kv overhead line. No objections to Crown application: 11/07/95.

2/94/1675/F: - Temporary use of land for site installation infrastructure to support construction of the King's Lynn Power Station. Application Permitted: 14/12/94.

2/93/1177/F Construction of biofuelled power station. Application permitted, 12/08/1994.

2/92/0146/SU: - Construction of combined cycle gas turbine generating station. Application Permitted: 25/06/93.

# **RESPONSE TO CONSULTATION**

**BCKLWN Environmental Health Community Safety & Neighbourhood Nuisance: NO OBJECTION** subject to condition requiring a further survey of baseline noise survey to be re-monitored prior to construction to ensure that the data on which the EIA has been based is representative of the actual noise climate present at the time.

**BCKLWN Environmental Quality: NO OBJECTION** subject to additional information being required to finalise the air quality assessment; imposition of a condition requiring a further site investigation and risk assessment in order to address the outstanding issues outlined in 8.7 of the EIA; and a financial contribution towards air quality monitoring.

**BCKLWN Tree Officer: NO OBJECTION** subject to condition requiring a full tree survey to BS:5837, arboricultural implications assessment and method statement due to there being 4 no. oak trees adjacent to the southern boundary of the site which are covered by tree preservation orders (TPO's).

## REPRESENTATIONS

ONE letter of **OBJECTION** has been received from a local resident. Their expressed concerns can be summarised as follows:

- We have not received any notification about this application. We are the first residential property next to the site, why have we not been consulted?
- Safety, health, environmental and wildlife impacts do not appear to have been taken into account.
- This development would appear to place 'detrimental impact upon residential amenities'.

Note: The application is for consultation purposes only. Responsibility for consultation with the public rests with the applicant.

## LDF CORE STRATEGY POLICIES

- **CS01** Spatial Strategy
- CS03 King's Lynn Area
- CS02 The Settlement Hierarchy
- CS08 Sustainable Development
- CS10 The Economy
- **CS11** Transport
- **CS12** Environmental Assets

### SITE ALLOCATIONS AND DEVELOPMENT MANAGEMENT POLICIES PLAN 2016

- DM1 Presumption in Favour of Sustainable Development
- DM2 Development Boundaries
- **DM12** Strategic Road Network
- **DM15** Environment, Design and Amenity
- DM17 Parking Provision in New Development

### NATIONAL GUIDANCE

National Planning Policy Framework (NPPF) Planning Practice Guidance (PPG)

National Planning Policy Framework – sets out the Government's planning policies for England and how these are expected to be applied. National Planning Practice Guidance - Provides National Planning Practice Guidance, in support of and in addition to the NPPF

# PLANNING CONSIDERATIONS

The Council's response to the application should conform to the policies set out in the Council's Core Strategy (2011) and Site Allocations and Development Management Policies Plan (2016) unless other material planning considerations indicate otherwise.

The application raises the following issues: -

- Principle of Development;
- Air quality;
- Noise and Vibration;
- Ecology;
- Land Contamination;
- Landscape and Visual Amenity;
- Traffic and Transport;
- Cumulative and Combined Effects; and
- Other considerations.

### **Principle of Development**

Consent was granted on 9th February 2009 for the construction and operation of a combined cycle gas turbine (CCGT) power station of about 1,020 MW capacity with a tolerance of up to 5% on the site and this consent has been implemented by the construction, in 2013, of the gatehouse that formed part of the approved plans. It is therefore important to note that the fallback position to this current proposal not going ahead is that the extant consent (as varied by planning permissions 11/01034/F and 12/01986/F) could continue to be implemented.

The principle of development has therefore already been established as acceptable. Whilst the current variation application includes an increase in the 'red line' area of approximately 5 hectares eastwards towards the Policy Investigation Centre, this additional area of land falls within the Development Boundary of King's Lynn and West Lynn as defined on Inset map E1 of the Site Allocations and Development Management Policies Plan (2016) where the principle of new development is generally considered acceptable subject to compliance with all other relevant policies.

### Air Quality

The Council's Environmental Quality team have reviewed the submitted Environmental Impact Assessment Report Chapter 5 Air Quality, Appendix A Air Quality Assessment and Appendix 5B Human Health Risk Assessment and have advised as follows.

Emissions from this proposal will depend on how the station is operated. It is understood that this will not be decided until the electricity capacity auction in February 2019. Therefore it is required that the worst case scenario for operating model is examined for impact on air quality.

The Air Quality Assessment considers:

- baseline air quality present and future (construction and opening year)
- construction effects on air quality
- operational emissions
- single and cumulative impacts on human health and ecological receptors

The Assessment makes reference to data from the Borough Council's monitoring network and to diffusion tube monitoring carried out on behalf of the applicant. It should be noted that Figure 5.1 of the report shows an incorrect boundary of the Kings Lynn Air Quality Management Area (AQMA). AECOM have been supplied with the correct shapefiles to allow amended drawings and to assess if the findings require review.

Some potential impacts have been screened out of assessment as either the sources or receptors are not present and this is considered reasonable based on the information supplied.

The approach to assessing and managing particulates from construction is based on best practice guidance and it is unlikely that this will cause a significant air quality impact.

The increase in annual average daily traffic is considered during construction. The predicted impact on air quality from construction traffic is negligible when compared to National Air Quality Standards (NAQS). Construction traffic is calculated to generate <1ug/m3 of NO2, PM10 or PM2.5 at sensitive receptors so this is not considered a significant increase from this source.

The principal pollutant of concern from the operational phase is Nitrogen dioxide NO2. PM10 and SO2 can be screened out as emissions of these substances from a natural gas CCGT are negligible relative to NAQS.

As emissions from the power station will be regulated by the Environment Agency the Air Quality Assessment discusses two scenarios of regulation using:

1. Industrial Emissions directive Emission Limit Values (ELVs)

2. Best Available Techniques – Achievable Emission Levels (BAT-AELs)

The ELVs or BAT-AELs will be limits set for emissions from King's Lynn B under the environmental permit.

The predicted concentrations at sensitive receptors are considered insignificant or negligible where:

- Short term Process Contribution <= 10% National Air Quality Standard

- Long term Process Contribution <=1% of the National Air Quality Standard

A second stage of screening looks at predicted environmental contribution (PEC) and is considered insignificant where:

- Short term Process Contribution is <20% of short-term National Air Quality Standard minus 2 x background

- Long term PEC (Process Contribution + background) <70% of the National Air Quality Standard

The Air Quality Assessment assumes a 80m stack height (45m for Open Cycle Gas Turbine) and maximum emission rates at IED ELVs or BAT-AELs. Weather data from RAF Marham is used. This is an appropriate source of data for assessments in West Norfolk. The assessment has taken account of the borough council's diffusion tube monitoring data and 8 new locations monitored by AECOM from November 17 to February 2018 (annualised to 2017). Further explanation is needed of how the four months data was annualised and if this is suitable in this context.

Current and predicted future background concentrations of NO2 are used in the Air Quality assessment to calculate the potential process environmental contribution (PEC) of NO2

concentrations. The PEC is derived by adding the predicted process contributions of NO2 to the background concentration.

The highest annual mean process contribution (1.8ug/m3 or 4.7% of the national air quality standard) is at receptor R10 (Saddlebow caravan site). The annual mean PEC (PC plus background) 34% of the NAQS so is considered negligible. In areas where background NO2 is high, for example the Gaywood Clock and Kings Lynn air quality management areas (AQMAs) the PEC 70% and 80% of the NAQS. The predicted annual mean concentration in the AQMAs is below NAQS so this is described as a negligible adverse impact.

A negligible short term PC is predicted at the worst affected receptor (R2, High Rd) representing 11% of the 1 hour NAQS.

The Air Quality Assessment also considers ecological receptors. The highest concentration of NOx is predicted at a receptor at the River Nar SSSI. Location E1\_1 (adjacent to the A47) predicts a NOx PC at 7.2% of the critical level and PEC of 84% of the screening level. This receptor is reported to have been further assessed by an ecologist whose opinion is that as the Nar is naturally nutrient rich, the impact would be negligible. Impact at all other receptors is predicted to be negligible. Roydon common is considered in the assessment by an ecologist regarding acid deposition. The ecologist's opinion is that as nitrogen background is high and the PC is sufficiently small that no adverse ecological effect is predicted.

The combined impact of King's Lynn A, King's Lynn B and Palm Paper is considered in the air quality assessment. A combined PEC of 21.4ug/m3 (53.5% of NAQS) is predicted at the nearest sensitive receptor. This is considered a minor adverse effect and would not change the conclusions of the assessment of Centrica B alone. The cumulative impact is also discussed in the ecology assessment and this does not change the findings.

The use of Selective Catalytic Reduction (SCR) may be required to control NOx emission and this will increase Ammonia emission. This is also assessed in the air quality assessment and no significant impact on human health or ecology is predicted.

Based on the information supplied the Council's Environmental Quality team have no objection in principal to the current proposal. They are discussing the potential for additional air quality monitoring to be funded by the applicant to verify the air quality assessment both during the construction and operational phases. Some additional information is required to finalise the air quality assessment. However, this is unlikely to change the findings:

- An addendum report which revises findings using the current Air Quality Management Area boundary

- Explanation of the calculation of NO2 diffusion tube monitoring at AECOM monitoring sites which were annualised to 2017.

The Council's Environmental Quality Officer has confirmed that proposed condition 5 (suppression of dust) within the submitted tracked change version of the 2009 consent is suitable to address impacts on air quality during construction as set out in the air quality assessment.

### Noise and Vibration

The ES for the 2009 Consent stated that there would be no significant effects from noise as a result of the proposals for King's Lynn B. The analysis within the current EIA Report reaches a similar conclusion, that once detailed design measures are put in place the proposed development would not have a significant effect on the environment.

The Council's CSNN Officer has reviewed the information submitted in support of the application.

Prior to submission they had discussions with the applicants around the most appropriate methodology and baseline data on which to assess the noise and vibration from the construction and operation of the Power Station. Para 6.3.1 of the EIA Report: Volume 1 is an accurate representation of the outcome of those discussions. It was also agreed and reflected in para 6.4.4 that a further survey of baseline noise survey will be re-monitored prior to construction to ensure that the data on which the EIA has been based is representative of the actual noise climate present at the time. CSNN have confirmed that the changes proposed to the conditions within the submitted tracked change version of the 2009 consent, specifically s9 CEMP and s18-21 Baseline Noise Monitoring and Operational Noise procedures, adequately describe the controls they wish to see conditioned.

In terms of the criteria used within the EIA to determine noise levels and impact on noise sensitive receptors CSNN are satisfied that the methods outlined are appropriate for the development.

Given that there are two worst case options presented within the EIA, due to uncertainty over the final design, mitigation measures for the operation phase are not fully known, however given the criteria for assessment of the magnitude and classification of the development on Noise Sensitive Receptors is understood and agreed mitigation can be designed in when the option for the type of generation is confirmed.

With respect to construction noise and dust the outline CEMP identifies the main sources of noise and dust. It is recognised that detailed CEMP will be required and the CSNN Team have confirmed they wish to be involved in agreeing controls on noise and dust on site.

# Ecology

The application site is not located within any site statutorily located for nature conservation. The site is 17.2 ha in area and comprises a large south-facing bank vegetated with tall ruderal plants and an area of poor semi-improved grassland. Two lagoons are located to the north of this bank, surrounded by bramble, scrub and scattered trees. The northern boundary consists of a 2 m high bank covered in nettle and an area of trees surrounding a bund containing Japanese knotweed in the north-east corner.

A reed-fringed ditch runs north-south to the east of the lagoons, with likely connectivity to a second reed-fringed ditch that runs north-south adjacent to the entrance road. To the east of the ditches and south of the Japanese knotweed bund is a large compartment dominated by tall ruderal vegetation and scattered scrub. A second compartment, south of the access road to the Household Waste Recycling Centre, is dominated by tall ruderal vegetation with a large bund in the eastern section.

The Environmental Statement (ES) for the 2009 Consent identified potential impacts on bats, reptiles, water voles, invertebrates and breeding birds and made recommendations for additional surveys and proposed mitigation measures in agreement with Natural England, for impacts on protected species, where required.

Surveys for Great Crested Newt were undertaken for the 2009 Consent but did not find any evidence of this species being present on the Application Site.

Since the 2009 Consent was granted the population of water voles appears to have grown however the extent of mitigation proposed in this EIA Report is correspondingly greater,

therefore the ecological effects of the proposed development are found to be very similar to those set out in the ES for the 2009 Consent.

An application seeking to vary condition 31 of planning permission 12/01986/F in order to revise the previously approved water vole mitigation details is currently pending consideration with this authority (application ref: 18/00848/F).

## Land Contamination

The Council's Environmental Quality Officer has reviewed the information submitted in respect of land contamination and confirmed the following.

The approach to site investigation and risk assessment is reasonable and the findings from a Phase 1 desk study are included in Chapter 8 of the EIA. However, some additional areas of land have not been investigated previously and will require assessment for land contamination. The potential exposure pathway of any residual contamination from industrial former use will be reduced due to the prevalence of hard cover on site. However, further investigation is recommended in section 8.7 of the EIA.

At a recent meeting the inclusion of protected species as a receptor was discussed and advised that this should be considered in any further risk assessment.

Environmental Quality have confirmed that as further site investigation and risk assessment will be necessary to address outstanding issues outlined in 8.7 of the EIA they recommend that any varied consent includes conditions to ensure this safeguard.

In terms of the submitted tracked changes to the 2009 Consent which set out proposed changes to conditions, the Environmental Quality Officer has advised that 'Contaminated Waste' (conditions 31-36) would be more appropriately described as 'Contaminated Land'. The NPPF requires that when considering preventing new development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil of water pollution, the effects of pollution on health and the natural environment and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account. As a result, they recommend inclusion of the need for risk assessment in condition 31.

### Landscape and Visual Amenity

The supporting information and EIA Report states that the final option and final plant configuration is yet to be determined and will be subject to later detailed design work. The submitted tracked changes to the 2009 consent show that this would be subject to approval by the local planning authority under proposed condition 7.

However, the submitted application confirms that the stack proposed under the current application would be between 80m and 90m tall (or for the OCGT unit, 45m). These compare with a stack height of 80m under the 2009 Consent. The HRSG would be up to 45m in height, compared with 40m in the 2009 Consent.

The increase in site area which is proposed under this current application would not extend the built form of the existing power station further south into open countryside but further east towards the Police Investigation Centre. The structures would therefore still be seen from most vantage points in the context of existing commercial and industrial development, including King's Lynn 'A' and Palm Paper sites. The application details state that existing vegetation along the boundary of the application site will largely be retained and managed to ensure its continued presence to aid the screening of low level views into the application site. However, given that the increased site area includes 4 no. oak trees close to the southern boundary which are covered by a tree preservation orders (TPO's), the Council's tree officer has recommended that any variation to the existing consent includes a condition requiring submission of a full tree survey to BS:5837, arboricultural implications assessment and method statement.

# **Traffic and Transport**

The assessment within the submitted EIA Report considers the predicted number of vehicle movements generated during the construction and operation of the proposed development, and the sensitivity (including pedestrian and cyclist safety) and capacity of the local road network.

There are two existing accesses to the application site:

- Access A: via the Willows Business Park Access from the roundabout; and
- Access B: the southern access from High Road.

It is proposed that both accesses could be used for access to the application site during construction and operation of the Proposed Development. It is proposed that construction Heavy Goods Vehicles would use Access A to connect to the four-arm roundabout with Saddlebow Road

/ Low Road / Willows Business Park access.

The EIA Report concludes that construction traffic will result in small, temporary, increases of traffic flows, including heavy goods vehicles on the roads leading to the application site. This is only likely to have a high impact on the Willows Business Park access road, due to the low current usage of that road. However, it does not result in a significant effect due to the low sensitivity of that road.

During operation of the proposed development there will be heavy goods vehicles traffic generated by deliveries of operational and maintenance plant and equipment. However, this is expected to equate to a maximum of four heavy goods vehicles per day. The EIA Report therefore considers that generation of traffic during operation will be minimal when compared to both the construction period and the traffic baseline. The proposed development will not therefore have a significant impact on the local highway network.

Norfolk County Council as local highway authority have been consulted separately and will submit their own response to BEIS for the application.

## **Cumulative and Combined Effects**

Within the EIA Report the effects of the proposed development were considered in conjunction with the potential effects from other developments. Cumulative effects are generally considered unlikely to arise unless other proposed development sites are in close proximity to the proposed development. Following a review of the potential location and timing of nearby planned developments, six developments were identified as potentially being relevant to the assessment. These are:

- Palm Paper Generating Station;
- King's Lynn 'A' Power Station Upgrade;
- King's Lynn 'B' Power Station Grid Connection;
- Connection to the National Transmission System for supply of natural gas;

• Undergrounding of the existing 132kV overhead line in the southern part of the Application Site; and

• Relocation of the Household Waste Recycling Centre.

In some topics these 6 developments were included in the baseline assessment, and therefore taken into account in the main assessment of effects. In other topics these projects were separately assessed as cumulative schemes. These different approaches are standard practice in EIA topics.

The EIA Report concludes that no additional significant effects other than those previously identified within the individual topics have been identified as a result of the cumulative impacts assessment.

It goes on to state that "there is little potential for combined effects to occur at sensitive receptors owing to the proposed approaches to controlling nuisance and environmental effects during construction and operation of the proposed development. Those that may occur are not likely to be significant."

## Other Considerations

The supporting information advises that both of the proposed Options would make a material contribution to the scale and variety of employment in King's Lynn, West Norfolk, and Norfolk more widely. Option 1, the maximum scale of development, would provide around 1,000 construction roles and 40 operational jobs, comprising a variety of roles including skilled roles in line with supporting King's Lynn and West Norfolk's Core Strategy Policy CS10. Furthermore, the agent has confirmed the applicant would be prepared to include a condition within the variation consent that requires the approval and implementation of an employment, skills and training plan.

# CONCLUSION

The application seeks to vary the extant consent and deemed planning permission for King's Lynn 'B' CCGT Power Station Project which was granted on 5th February 2009 under Section 36 of the Electricity Act 1989 (08/01544/S36) and has since been varied by planning permissions 11/01034/F and 12/01986/F. The application has been made to the Secretary of State for determination but has been referred to the Borough Council for consultation.

The 2009 Consent has been implemented by the construction, in 2013, of the gatehouse that formed part of the approved plans, confirmed by the issue of a lawful development certificate on 2nd May 2017 (17/00352/LDE). As a result, this remains extant and could continue to be implemented.

Since the 2009 consent was granted there have been significant advances in CCGT technology with the latest CCGT units available of the market being much more efficient than those that were available in 2009. They are able to achieve a significantly greater electrical output which would make a significant and positive contribution toward the pressing need for new electricity generating capacity in the UK.

The EIA Report concludes that there would not be major differences in the likely significant environmental effects of the proposed development compared to that previously approved under the extant 2009 consent. Furthermore, the proposal would make a positive contribution to employment and the local economy and in principle is considered acceptable in design terms, accepting that the final option and plant configuration would be subject to later approval reserved by condition. As a result it is considered that the proposal complies with all relevant policies of the Council's Core Strategy (2011) and Site Allocations and Development Management Policies Plan (2016).

# **RECOMMENDATION:**

Planning Committee is therefore recommended to raise **NO OBJECTION** to the proposed development subject to the imposition of additional conditions as put forward by the agent and those recommended by CSNN, Environmental Quality and the Council's tree officer as well as the completion of either a new S106 agreement or a Deed of Variation to the existing S106 agreement related to planning permission ref: 12/01986/F in order to secure a payment of £200,000 to the Borough Council for the 'Landscape Fund' in addition to a financial contribution towards air quality monitoring.