

# The Millbrook Power (Gas Fired Power Station) Order

# 5.2 Consultation Report Appendices – Volume 2 Appendices 3.Y(i) – 3.Y(iv)

**Planning Act 2008** 

The Infrastructure Planning

(Applications: Prescribed Forms and Procedure) Regulations 2009

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# **Consultation Report Appendices Volume 2 index**

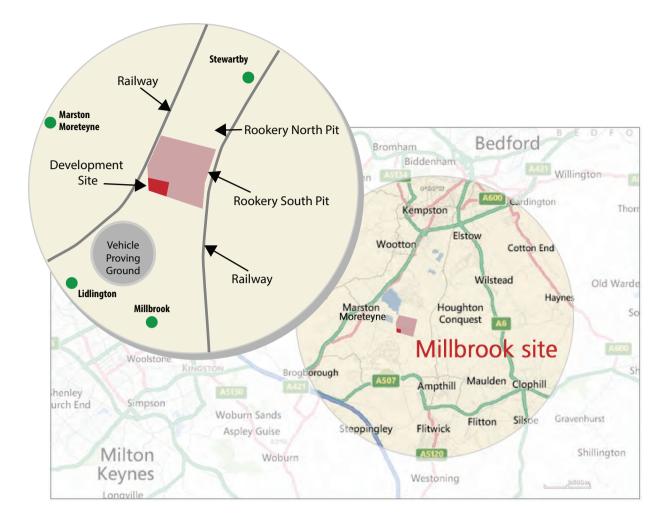
Ref	Title	Sub- ref	Sub-title
3.Y	Phase 1 Section 47 - Statutory Consultation Exhibition material	3.Y.i	Exhibition boards: Main exhibition board and topic specific pull up boards
		3.Y.ii	Figures on display at exhibition
		3.Y.iii	Leaflet
		3.Y.iv	Feedback form



# **Appendix 3.Y: Phase 1 Section 47 - Statutory Consultation Exhibition material**

3.Y(i) Exhibition boards: Main exhibition board and topic specific pull up boards





Millbrook Power Limited proposes to develop a gas-fired power plant with a rated electrical output of up to 299 MW at Rookery South Pit. Using modern and efficient electricity power generation technology, the plant will support the country's move to a low-carbon economy.

## Today's exhibition provides information on

- Millbrook Power;
- the need for new electricity generation fuelled by natural gas, and our reasons for choosing Rookery South Pit;
- the DCO planning & consultation process at local and national levels;
- the Proposed Project;
- project timeline.
- results of our Preliminary Environmental Information Report(PEIR);
- community benefits;
- this phase of consultation and how to provide feedback;

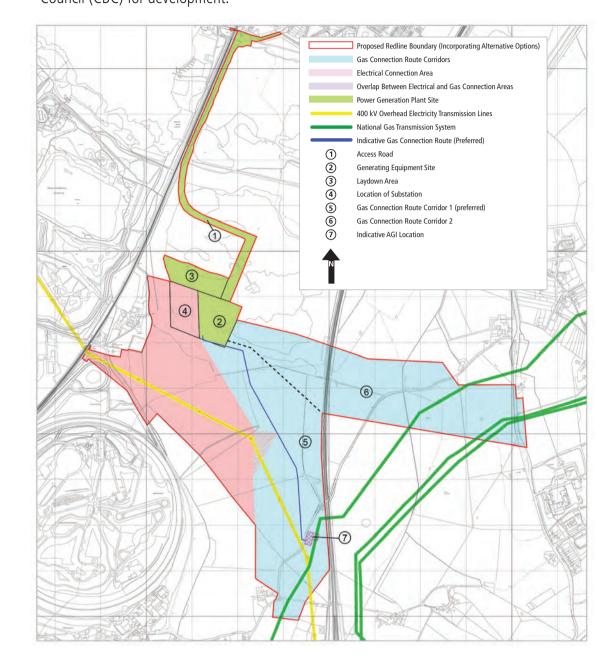
# Who is Millbrook Power?

Millbrook Power Limited is an energy development company established for the Rookery South Pit project by Watt Power Limited of Edinburgh. Watt Power wishes to develop a gas-fired power plant at Rookery South Pit and elsewhere in the UK to support the UK Government's drive to a low-carbon economy.

#### Why Rookery South Pit?

#### It has three advantages:

- 1. Proximity to the national gas and electricity transmission networks
- 2. National Grid encourages new power generation development in the region
- **3.** Rookery South Pit is classified as brownfield land and is allocated by Central Bedfordshire Council (CBC) for development.



### **DCO Regime Planning & Public Consultation**

The project is classified as a Nationally Significant Infrastructure Project, which means that a Development Consent Order (DCO) is required to build, operate and maintain it.

The DCO application will be processed and examined by the Planning Inspectorate and the final decision on the application will be made by the Secretary of State for Energy and Climate Change.

The electrical and gas connections are integral to the project and will be considered together with the power generation plant under the DCO application.

Consultation with CBC, Bedford Borough Council (BBC), local people, businesses, and Parish Councils in the area is an essential part of the DCO process and will help to influence the final designs of the Project. MPL is also liaising closely with organisations such as the Environment Agency, Natural England and English Heritage to ensure that the plant will be designed, built, operated and maintained to the highest relevant and current safety and environmental standards.

### **Development of the Project**

As a result of consultation, feedback, and technical and environmental studies, several significant changes have occurred since the previous consultation events:

- a reduction in the maximum height of the stacks from 60m to 40m;
- a narrowing of the gas connection opportunity area into two route corridors with a preferred connection route;
- refinement of the electrical connection opportunity area;
- generating equipment has been arranged to reduce the impact of noise for near-by homes.

### **Key Milestones**



#### The Project Key Details

- the construction, operation and maintenance of a Simple Cycle Gas Turbine power generation plant with a rated electrical output of up to 299 MW of electricity;
- the power generation plant will produce electricity from natural gas;
- it is designed to provide flexible back-up generation capacity which can respond quickly and efficiently to both short-term variation in customer demand, and intermittent output from renewable power generation;
- it is anticipated that it will operate for no more than 1500 hours per year;
- the power generation plant will have up to five stacks, each up to 40 m in height;
- the site for the generating equipment and substation covers an area of approximately 8 ha and is located within Rookery South Pit itself;
- the proposed Project includes the construction, operation and maintenance of a new electrical connection together with a new substation to connect the power generation plant to the existing overhead power line nearby;
- the layout of the electrical connection is yet to be finalised but an area within which the connection will be sited has been identified;
- a realistic worst case scenario of up to two overhead line double circuits [of 400 kV] (including up to seven new towers one of which will replace an existing tower leading to six net additional towers) has been assumed (and is being environmentally assessed), however MPL will continue to work with National Grid on the indicative design of the connection over the coming months;
- the proposed Project also includes the construction of a new underground pipeline to bring natural gas to the power generating plant from the National Gas Transmission System located nearby;
   at this stage two gas connection route corridors have been identified with a preferred connection
- route within one of them;

  the plant could enter commercial operation in 2019/20, subject to public consultation, planning and

Continued consultation and environmental assessment on the connection route options and possible electrical connection is required before each can be confirmed.

In addition, although a preliminary preferred layout of the power generation plant has been identified, the final location and layout are yet to be determined.

### **Preliminary Environmental Assessment**

Steps to mitigate the impact of the Project on the local environment during its construction, operation, maintenance and decommissioning are a major part of the consultation and planning process. Due to the nature and size of the Project, MPL is undertaking an Environmental Impact Assessment (EIA). The EIA considers the potential positive and negative impacts of the Project and MPL has published its interim findings in the PEIR. The PEIR, along with a non-technical summary, is available for inspection today, at the main office of Central Bedfordshire Council, Bedford Borough Hall, Marston Vale Forest Centre, as well as at Bedford, Ampthill and Wootton Libraries. It can also be viewed at www.millbrookpower.co.uk.

### **Community Benefits**

This £200m Project would be a substantial investment in the area and would deliver significant economic benefits for a period of at least 25 years

- creation of around 150 jobs during a 2 year construction period;
- creation of up to 15 permanent skilled jobs for on-going operation and maintenance of the facility;
- potential business opportunities for local suppliers.

MPL will consult CBC and BBC on ways to bring wider social and environmental benefits to the surrounding area.



Illustrative visual showing worst case Electrical Connection

# Comment and Feedback

Your feedback is important to the consultation process. We would like your views on:

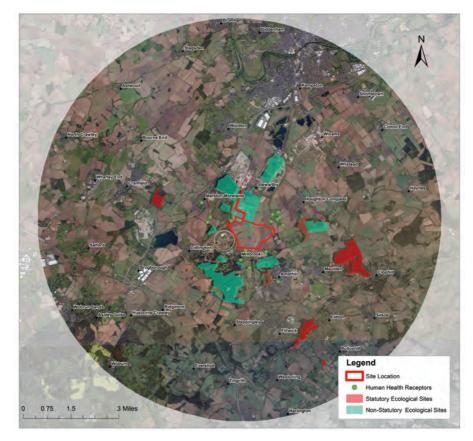
- the layout of the Power Generation Plant within the Project Site;
- route option(s) for accessing the gas and electricity connections infrastructure during construction and maintenance;
- the preferred route option for the gas connection;
- the proposed electrical connection;
- the findings of the preliminary assessment on the likely significant environmental effects of the Project during construction and operation, as set out in the PEIR.

This consultation phase will end on Sunday, 16th November 2014, and we would welcome your views on or before this date.





# AIR QUALITY



The construction, operation and decommissioning of the Project all have the potential to affect air quality, both through the generation of dust during the construction and decommissioning phases, as well as the generation of stack emissions during operation.

# **Preliminary Assessment & Results**

A desk based assessment and air dispersion modelling have been carried out to assess any potential air quality effects resulting from the Project on identified residential and ecological receptors.

#### **Construction & Decommissioning**

Dust may result from works during construction, such as earth moving operations for new foundations and for the Gas Connection.

#### **Generating Equipment Operational Impact**

The Power Generation Plant has the potential to affect air quality through the emission of flue gases resulting from the combustion of natural gas. This includes the release of Nitrous Oxides (NOx). Modern gas fired power plants are, however, inherently clean and produce far fewer emissions than other fossil fuel power plants when compared on an energy output basis.

#### **Proposed Mitigation Measures**

Mitigation against the unwanted spread of dust would be addressed by the Construction Environmental Management Plan (CEMP) through appropriate dust mitigation measures such as covering stockpiles or dowsing them with water during dry, windy conditions. The CEMP will be presented in the Environmental Statement.

Mitigation against negative effects resulting from flue gas emissions during operation is to be achieved through appropriate plant design — most notably through correct stack heights.

In order to determine stack heights, air quality impact assessments have been undertaken using air dispersion modelling techniques. The results of these assessments indicate that the appropriate stack height for the proposed Power Generation Plant, which will achieve adequate dispersion of emission gases, is between 30 m and 40 m. Given this stack height and based on the Preliminary Environmental Assessments, there are not anticipated to be any significant effects on air quality as a result of the Project during construction, operation or decommissioning.

### **Cumulative effects**

The only development in the vicinity of the Project which has the potential to cumulatively interact in terms of air quality is the Covanta RRF. However, initial modelling has been undertaken which has shown that given the proposed differences in stack heights between the Project and the Covanta RRF, no cumulative effects in terms of air quality are anticipated.

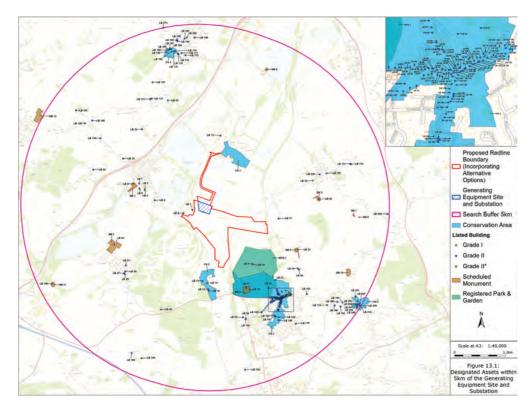
# **Conclusions & Next Steps**

Based on the preliminary assessment, no likely significant effects are anticipated on air quality as a result of the construction, operation or decommissioning of the Project. Further work will include a more detailed assessment of cumulative effects with other projects, as well as the production of figures accurately showing the distribution of stack emissions.





# ARCHAEOLOGY & CULTURAL HERITAGE



The construction, operation and decommissioning of the Project all have the potential to affect both above-ground and buried archaeological assets, as well as the setting and appreciation of assets of importance to cultural heritage, including surrounding Listed Buildings, Scheduled Monuments and Conservation Areas.

# **Preliminary Assessment & Results**

An archaeological desk based assessment and a site visit were carried out as part of the overall archaeological assessment. This identified cultural heritage assets in the vicinity of the Project Site including buried archaeological remains and findspots, Listed Buildings, Scheduled Monuments and Registered Parks and Gardens.

Results of this assessment show that there are no designated heritage assets within the Project Site. However, within 5km of the Project Site there are 14 Scheduled Monuments, 13 Listed Buildings (Grade I & II), 5 Conservation Areas and 1 Registered Park.

#### **Construction & Decommissioning**

There will be no direct physical impacts on any designated heritage assets during the construction and decommissioning phases. Furthermore, the majority of the construction works will not be visible outside of Rookery South Pit and therefore will have no significant visual effects on the setting of any nearby heritage sites.

Given that Rookery South Pit was formerly used for clay extraction, there are not anticipated to be any effects on buried archaeology from any of the elements of the Project within Rookery South Pit.

The Gas and Electrical Connections are in previously undeveloped agricultural land, and therefore there remains the potential for as yet undiscovered buried archaeology to be adversly effected. Previous archaeological investigations in the areas where the Gas and Electrical Connections are proposed did not reveal any significant archaeology. Further assessment of this area will however be undertaken as part of ongoing works and will be presented in the final Environmental Statement.

### **Power Generation Plant Operational Impact**

During operation, the introduction of the stack(s) of the Generating Equipment, as well as the towers to support an overhead electrical line, have the potential to have minor adverse effects on surrounding cultural heritage assets such as Listed Buildings. However none of these effects are considered to be significant.

### **Cumulative Effects**

Given that the Project will not give rise to any effects on archaeology and cultural heritage on its own, no cumulative effects are predicted with other developments.

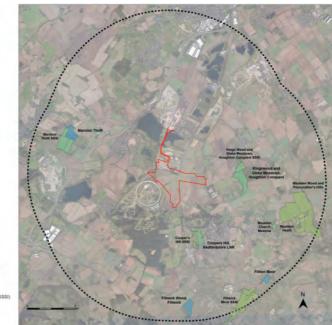
# **Conclusions & Next Steps**

No significant effects are anticipated on archaeology and cultural heritage as a result of the Project during construction, operation or decommissioning. Further work will be undertaken to confirm the potential effects of the Gas Connection on buried archaeology, and the operation of the Generating Equipment and Electrical Connection to affect cultural heritage assets such as Listed Buildings and Scheduled Monuments.





# **ECOLOGY**





The construction, operation and decommissioning phases of the Project have the potential to adversely affect sensitive ecological receptors. The Project also has the potential to provide ecological value, for example, by reinforcing existing habitats or through the introduction of screen planting, which could provide additional habitat for some species.

# **Preliminary Assessment & Results**

In order to assess the potential for the Project to affect sensitive ecological receptors, desk studies and site walkover studies known as a "Phase 1 habitat survey" were undertaken. Based on the results of the Phase 1 Habitat Survey, Phase 2 Protected Species Surveys were commissioned and the table below summarises their findings to date.

### **Summary of preliminary Phase 2 Surveys**

	Results obtained to date				
Species	Power Generation Plant Site	Electrical and Gas Connection Area			
Badger	Although signs of badger activity were recorded in the vicinity, no setts were revealed during the surveys.*	A single badger sett was recorded within a wooded copse.			
Bats	A diverse bat assemblage was recorded during the activity and automated static bat detector surveys undertaken in May and July 2014. 9 species recorded in total.	Surveys undertaken in May and July 2014 recorded 4 species in total. Emergence/ return roost surveys at Pillinge Farm confirmed the continued presence of bat roosts.			
Breeding Birds	A relatively diverse assemblage of 65 species of breeding birds (either confirmed or potentially breeding) was recorded during the surveys. Of these, 31 are species of importance to Nature Conservation.	The majority of species recorded are common species, breeding within hedgerows, scrub, and small wooded copses. Skylark were recorded breeding in open fields. A single barn owl was recorded incidentally foraging during the bat activity surveys.			
Great Crested Newts	As part of the ongoing Low Level Restoration Scheme, trapping and translocation of great crested newts (and reptiles) has taken place and therefore it is assumed that they will not be present in Rookery South Pit by the completion of the Low Level Restoration Scheme.	Surveys of 13 ponds within 250m of the Project were undertaken to confirm presence/absence. Presence was confirmed in 8 of the ponds. 8 ponds were also found to support common toad, a species of principle importance.			
Invertebrates	As a result of the ground works and vegetation clearance associated with the Low Level Restoration Scheme in Rookery South Pit, no invertebrates are assumed to be presen by its completion.	Limited presence of species due to intensively managed arable land. 155 species recorded, all of which are common and widespread across England.			
Otters and Water Voles	There are no features suitable for use by water voles or otters within the Power Generation Plant Site.*	No signs of water voles or otters were recorded during the surveys.			
Reptiles	Only small to medium populations confirmed to date.	Ongoing surveys have confirmed the presence of small populations of common lizard and grass snake.			

<sup>\*</sup> These species will not therefore be considered any further in the assessment process.

### **Proposed Mitigation Measures**

Although a number of sensitive species have been identified within the Project Site, at this stage it is not expected that any of them will be significantly adversely affected by the Project. Measures incorporated into the design of the Project to minimise effects on protected species include avoiding specific habitats where the species are known to be present such as ponds or woods. Thus far, no other specific mitigation measures have been deemed necessary.

## **Conclusions & Next Steps**

Following the completion of all of the Phase 2 species surveys, a full assessment of the potential effects of the proposed Project on ecology will be undertaken.





# GEOLOGY, GROUND CONDITIONS & AGRICULTURE

The construction, operation and decommissioning of the proposed Project has the potential to affect ground conditions by, for example, the removal of good quality agricultural land. The proposed Project also has the potential to affect human health and other sensitive ecological receptors from contamination, whether existing or created.

# **Preliminary Assessment and Results**

A preliminary desk based assessment has been carried out to assess the baseline geology and ground conditions underlying the Project Site. The assessment studied information regarding previous land uses of the Project Site and the surrounding area, the soils and geology present, any potential contamination issues resulting from former site uses and any potential ground stability hazards.

#### **Geology and Ground Conditions**

The main potential impacts would arise during construction and decommissioning from the disturbance of any existing contamination, and the creation of pollution incidents, for example spillages.

Given the previous extraction undertaken in the Power Generation Plant Site there is no important underlying geology, soil or existing hazardous contamination.

Given that land underlying the Gas and Electrical Connection has not previously been subject to industrial development, the potential for encountering contaminated materials is considered to be low.

#### **Agriculture**

Construction of the Gas and Electrical Connection will result in the temporary sterilisation of agricultural land. However, this will only be in a narrow corridor area (maximum 30 m working width) and any effects would be temporary. There would be a permanent easement around the pipeline of the Gas Connection and cables of the Electrical Connection, however these would not affect the current agricultural use of the land, thus no significant effects are anticipated.

#### **Proposed Mitigation Measures**

All construction work will be conducted within best practice guidelines, and a detailed Construction Environmental Management Plan (CEMP) will be employed to prevent any contamination or pollution incidents impacting on ground conditions. In respect of geology, ground conditions and agriculture, some mitigation could include;

- minimizing land take where possible;
- avoiding the need for piled foundations where possible;
- dust suppression measures;
- following best practice guidance to minimise risk of spillages.

These mitigation measures would be detailed within the CEMP.

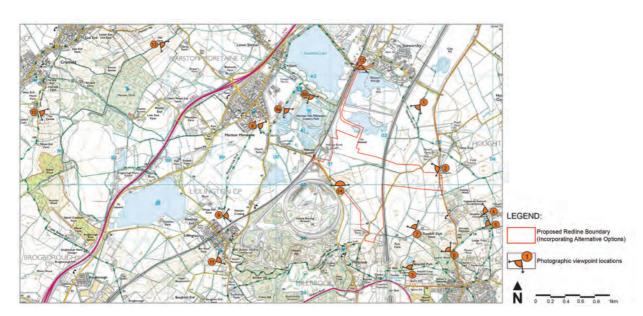
# **Conclusions & Next Steps**

No significant effects are anticipated on geology and ground conditions as a result of the Project during construction, operation or decommissioning. Ground water monitoring will be carried out at the Generating Equipment Site to confirm the results.





# LANDSCAPE & VISUAL IMPACTS



The proposed Project has the potential to affect the landscape and visual receptors during construction, operation and decommissioning.

# **Preliminary Assessment and Results**

To date, a desk based assessment and site visit have been undertaken to determine the baseline landscape character and the sensitive receptors which may be affected by the visual appearance of the Project. Photographs were also taken from key viewpoints and, of these, a handful were chosen as points from which photographic models (photomontages) were created to illustrate how the Project would look in the landscape. These key viewpoints were agreed with consultees and include residential areas, public rights of way and historic monuments. The resultant photomontages can be viewed here today. The Preliminary Assessment has taken account of cumulative effects between the Project, the Covanta RRF and other developments in the area.

### **Construction and Decommissioning**

There would inevitably be some temporary adverse effects on the landscape and visual receptors during construction and decommissioning. These effects would arise from activities such as earthworks, site clearance works, the removal of vegetation (in the case of the Gas Connection), construction traffic and construction site lighting. However, given the limited construction period (22 months) and the relatively modest construction operations, these effects are not considered to be significant.

#### **Power Generation Plant and Electrical Connection**

During operation, adverse effects on landscape and visual amenity will result from the introduction of permanent structures, particularly the stacks of the Generating Equipment and towers required for the Electrical Connection, which will be the tallest structures on the Project Site. These features will be clearly visible from some locations to the south and south east, particularly along the Greensands Ridge. However, a large proportion of the Project is situated within the Rookery South Pit and will therefore be largely screened from view. The predicted moderate adverse effects may also become insignificant following mitigation measures in the form of landscaping and planting of vegetation. A recent site visit found that existing vegetation will effectively screen the Project Site from view for most nearby settlements and outlying properties.

### **Gas Connection**

No significant effects are anticipated from the operation of the  $\ensuremath{\mathsf{Gas}}$  Connection.

### **Proposed mitigation Measures**

Local reinforcement of hedgerows or plantations could be undertaken to ensure effects on visual amenity remain minimal.

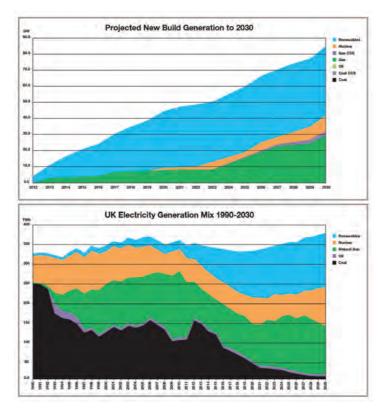
## **Conclusions & Next Steps**

There is the possibility of moderately significant effects from certain view points, primarily from the south and east of the Project Site. Further work will be undertaken to produce photomontages in the winter to ensure that a worst case scenario is being assessed when screening effects of vegetation are at their minimum. Further work will also focus on designing appropriate mitigation such as screen planting in order to limit effects from views to the south and east of the Project Site. The results of the further work will be included in the Environmental Statement.





# **NEED FOR GAS GENERATION**



The information below illustrates the national need for new gas-fired electricity generation:

- Early next decade a large amount of the UK's coal-fired power stations and some older gas-fired plants will close due to the EU Industrial Emissions Directive;
- similarly, a large number of the UK's nuclear power stations will close having already been given large extensions to their predicted lifespan;
- renewable energy technologies are fundamental to the UK's decarbonisation strategy, however they cannot provide the security of supply that is currently provided by ageing coal-fired, gas-fired and nuclear plants;
- the UK Government's Department for Energy and Climate Change (DECC) currently forecast a need for ~ 45 GW of new Gas, Nuclear and Carbon Capture and Storage (CCS) capacity between 2012 and 2030;
- no new nuclear plants are expected to be operational until late next decade and CCS remains an unproven technology with no plants expected to be available in the foreseeable future;
- new gas-fired generation required post 2020 needs to be more flexible to support intermittent forms of renewable energy, in particular wind.

#### **Government Policy**

The overarching National Policy Statement (NPS) for Energy is NPS EN-1, which sets out national policy and explains the need for energy infrastructure.

NPS EN-1 re-affirms the transitional role of new gas-fired generation. It confirms that a diverse energy mix is required and that there is a significant need for new energy generation infrastructure to replace capacity that will be lost through the closure of large existing plants. Such government policies therefore highlight the general need for new gas-fired generation and Projects like our own.

To ensure that there is reliability of supply, it is Government policy that the electricity generation mix needs to incorporate a balance

of technologies that can continuously and reliably produce stable and controllable power, and that within this scenario, gas-fired electricity generating technologies will play a significant role. Thus in the second Annual Energy Statement (November, 2011) ("the Strategy"), DECC directed the need to build new power generation infrastructure. In line with this requirement, DECC also acknowledged the need for gas to continue to feature strongly in the energy mix.

### **Gas Generation Strategy**

Released by DECC in December 2012, the Strategy sets out the important role that gas-fired generation—as a reliable and flexible source of electricity—will play in any future generation mix, supporting a secure, low-carbon and affordable electricity system. It states that;

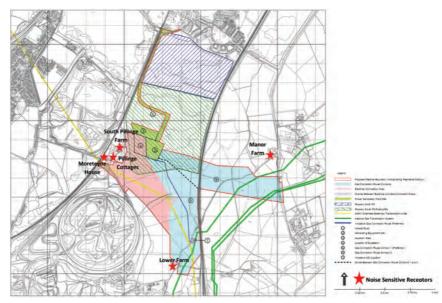
"Gas currently forms an integral part of the UK's generation mix and is a reliable and flexible source of electricity. Using gas as a fuel in our power stations currently provides a significant proportion of our electricity generation (around 40% in 2011)".

Moreover, the Strategy suggests that there could be as much as 26 GW of new gas-fired generation infrastructure required if the decarbonisation target is set at 200 g/CO2/kWh. This is also acknowledged in DECC's Gas Generation Strategy which indicates that in 2030 we could need more overall gas capacity than we have today, although operating for a smaller percentage of the time.





# NOISE AND VIBRATION



The construction, operation and decommissioning of the Project all have the potential to affect local noise levels and generate vibration, which may affect sensitive receptors.

# **Preliminary Assessment and Results**

In order to predict and assess operational noise levels, background noise measurements taken at South Pillinge Farm were modelled alongside noise levels predicted for typical Generating Equipment similar to that expected to be utilised in the Project. The survey methodology was agreed in consultation with Central Bedfordshire Council. The preliminary assessment has also taken into account the cumulative effects of the Project and the Covanta RRF. However, initial modelling has shown that given the noise limits which the Covanta RRF must adhere to, no cumulative effects are anticipated.

#### **Construction and Decommissioning**

Noise disturbance as a result of construction and decommissioning could arise from activities such as excavation for foundations, delivery of the plant, and excavation of the Gas Connection. This will however be a temporary source of noise.

Based on a conservative, worst case assessment, where numerous large plant items are operating simultaneously, the significance of the overall effect of construction and decommissioning noise is predicted to be neutral at all receptor locations.

# **Generating Equipment Operational Impact**

Noise disturbance could potentially occur from the rotating components of the plant (e.g. the gas turbine generator units). However the preliminary assessment has shown that there are not predicted to be any significant noise effects at South Pillinge Farm. As this is the closest property to the Generating Equipment Site, it therefore follows that, by proxy, no significant effects from noise are predicted at any other properties in close proximity to the Site.

No significant effects are predicted from operational vibration impacts.

#### **Gas Connection**

During the operation of the Gas Connection, noise effects at sensitive receptors cannot be ruled out. However the noise is rarely perceptible and given the lack of residential properties in close proximity to the proposed location for the Above Ground Installation, the initial assessment concludes that operational noise from the Gas Connection will be negligible.

### **Electrical Connection**

Given the distance between the connection and residential properties, and the typically low levels of noise generated by such equipment, no effects are anticipated from the operation of the Electrical Connection.

### **Proposed Mitigation Measures**

During construction a Construction Environmental Management Plan (CEMP) would be adhered to and an appropriately placed acoustic screen would be used.

Embedded mitigation in the form of high performance silencers, the acoustic cladding of all gas turbine generators, and the use of inherently quiet plant items will minimise any potential effects of noise during operation.

# **Conclusions and Next Steps**

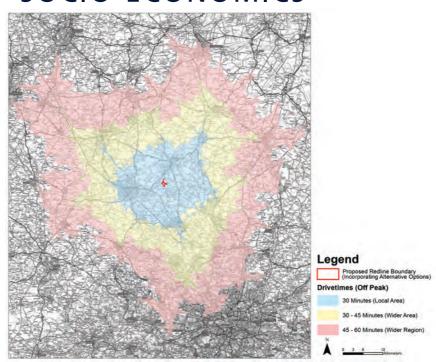
No significant effects are anticipated from noise as a result of the project during construction, operation or decommissioning. These studies will be further refined and a more detailed assessment undertaken and presented in the final Environmental Statement.

Further work will be undertaken to carry out background monitoring at other potential sensitive receptors, as well as better defining any potential effects from operation of the Electrical Connection, and quantifying cumulative effects with the Covanta RRF.





# **SOCIO-ECONOMICS**



The construction, operation and decommissioning phases of the proposed Project have the potential to affect the local area's labour market, community facilities and tourism sector.

# **Preliminary Assessment and Results**

A desk based assessment has been undertaken which has assessed the socio-economic makeup of the local and wider areas surrounding the Project through a review of statistics. Three main study areas have been used in this assessment: socio-economic, tourism and community infrastructure.

#### **Socio-economic Study Area**

Preliminary socio-economic assessments demonstrate that the Local Area surrounding the proposed Project is characterised by:

- a high and growing retirement age population;
- lower levels of unemployment and a higher level of self-employment than the UK average;
- a projected population increase of c.7% between 2013 and 2021, (higher than UK average);
- a high proportion of people achieving the highest qualifications compared to the UK average;
- economic activity higher than the UK average;
- a high proportion of people working in the retail industry;
- a comparable proportion of people working in the manufacturing and construction sector;
- a high proportion of people in highly skilled jobs.

The socio-economic profile outlined by the preliminary assessment reveals that the overall sensitivity of the labour market is assessed as low.

#### **Tourism Study Area**

The tourism profile outlined by the preliminary assessment indicates that visitor numbers, spending, and trips to Bedfordshire's key attractions are increasing. The overall sensitivity of the tourism economy is therefore assessed as low.

The Marston Vale Millennium Country Park and Woburn Abbey are the most significant attractions located within 5 km of the proposed site. They will both be assessed individually and included in the tourism business survey to assess any perceived effect on visitor activity.

### **Community Infrastructure Study Area**

Within 5 km of the proposed Project Site there are a range of community infrastructures such as schools, GP surgeries, pharmacies, a hospital and a library. The community infrastructure audit has shown that all receptors serve local catchments and are therefore of low sensitivity.

### **Proposed Mitigation Measures**

No significant adverse effects on socio-economics, tourism and community infrastructure as a result of the proposed Project have been identified, therefore no mitigation measures have been identified.

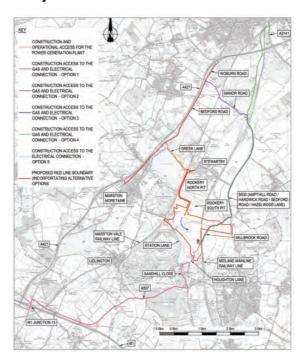
## **Conclusions & Next Steps**

No significant effects on socio-economics are anticipated as a result of the Project during construction, operation or decommissioning. However, there are likely to be minor positive effects from investment at all stages of the Project. Further work will be undertaken to produce and circulate a questionnaire in the area to ascertain peoples' opinions of the Project, particularly focusing on local businesses.





# TRAFFIC, TRANSPORT & ACCESS



The construction, operation and decommissioning of the Project have the potential to affect the local transport network, through the generation of additional traffic movements in the area.

# **Preliminary Assessment and Results**

An initial desk based assessment has been carried out which has identified and assessed the following:

- Pedestrian, equestrian and cycle facilities;
- public transport services including bus and rail services;
- private transport services including parking provision;
- highways networks and junctions;
- road safety and collision statistics; and
- effects from increased traffic movements as a result of construction, operation and decommissioning of the Project.

#### **Power Generation Plant**

Access to the Power Generation Plant Site is proposed from the north near Stewartby via Green Lane. Green Lane links to Bedford Road and the A421 to the west, and Stewartby Way and the B530 to the east. A new purpose built Access Road would be constructed within the Power Generation Plant Site from Green Lane to the Generating Equipment Site. The route of the Access Road from Green Lane would follow the existing track which borders the lake within Rookery North Pit.

Construction of the Power Generation Plant will require the delivery of large plant items such as the Gas Turbine Generators and stacks. Therefore potential traffic impacts in the form of temporary road closures and the requirement of escort vehicles are possible. However, given the temporary nature of the construction phase, the effects on traffic and transport are predicted to be minor.

Operation of the Project is not anticipated to have any negative effects on the local road network.

### **Proposed Mitigation Measures**

During normal operation, up to five members of staff would be working at the Power Generation Plant Site at any one time. Shift changes would be timed to avoid network peak hour, minimising affects on the local transport network.

### **Gas Connection & Electrical Connection**

Neither the Gas, nor Electrical Connection will be manned. They will have very infrequent service and maintenance visits thus traffic impacts will be negligible.

### **Cumulative Effects**

Given that the Project will not give rise to any traffic and transport effects on its own, no cumulative effects are predicted with other developments. However, it is recognised that there is the potential for the Project to be operational at the same time as the Covanta RRF, which will produce a large volume of additional traffic movements during operation. Despite this, the very limited number of vehicles accessing the Project Site during operation (5 workers on site at any one time) will not dramatically change the assumptions made by Covanta RRF in the mitigation required to alleviate the impacts from their scheme. Therefore these mitigation measures will still be suitable for use with the Covanta RRF and the Project.

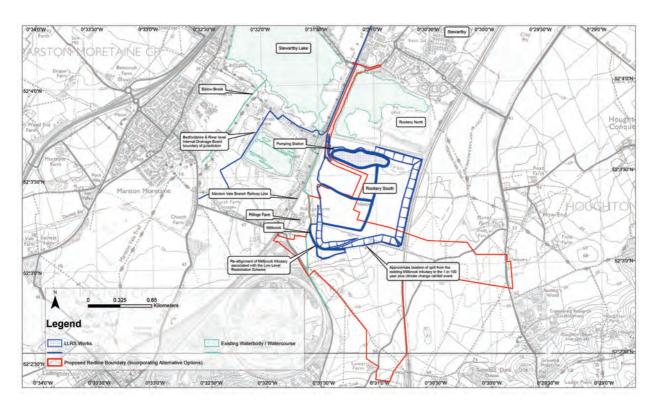
# **Conclusions & Next Steps**

No significant effects are anticipated from traffic and transport as a result of the Project during construction, operation or decommissioning. Further work will be undertaken to carry out additional traffic counts on the local road network.





# WATER RESOURCES



The main potential effects on local water resources that could result from construction and decommissioning of the Project are contaminated material entering a surface water body, or during operation for the Generating Equipment Site to become inundated with flood water.

# **Preliminary Assessment & Results**

A desk based assessment has been carried out that has identified surface water resources within the vicinity of the Project Site, as well as previous pollution incidents which may have impacted upon water bodies. The potential for the Project to be impacted by flooding, or to increase the likelihood of flooding elsewhere, has also been assessed.

There are not anticipated to be any effects on the water bodies identified in the area as the majority are a significant distance from the Project Site.

#### **Generating Equipment Operational Impact**

Due to the very limited amount of water utilised in the Generating Equipment (only required for fire water, maintenance operations, and personnel welfare), all water would be transported to the Generating Equipment Site and stored in tanks. Thus no surface or groundwater would be required. As no water will be abstracted for the Project, water resources will not be depleted. There will be no pollution of watercourses given embedded mitigation measures.

#### **Electrical Connection and Gas Connection**

Neither the Gas or Electrical Connection will require water during operation, nor will they have any impact on flooding or runoff rates. The Gas Connection will probably cross one minor watercourse (a drainage ditch) but no significant effects are anticipated as a result.

### **Proposed Mitigation Measures**

In order to protect the water environment during construction, best practice would be employed in accordance with the Environment Agency and Internal Drainage Board guidelines. It is predicted that following the implementation of best practice construction methods, any effects on water quality and resources will be negligible.

During operation, the Power Generation Plant Site would be equipped with a surface water drainage system and a sewerage system. The surface water drainage system would remove any potentially polluted runoff, prior to reaching the main sewerage network.

# **Conclusions & Next Steps**

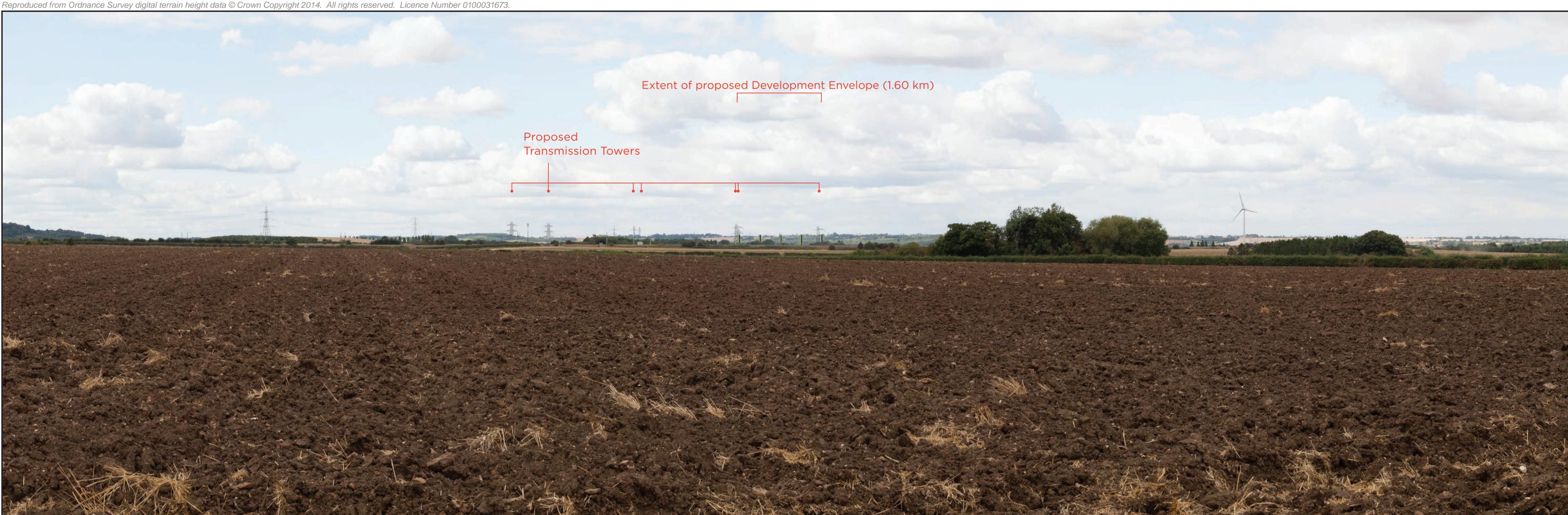
No significant effects are anticipated on water quality and resources as a result of the Project during construction, operation or decommissioning. Further work will be undertaken to produce a detailed flood risk assessment which will be submitted as a supporting document to the final Environmental Statement.





# Appendix 3.Y: Phase 1 Section 47 - Statutory Consultation Exhibition material

3.Y(ii) Figures on display at exhibition



Photomontage view from footpath by Chequers Pub. (72 degrees horizontal field of view, 64 cm viewing distance). \*\* Refer to the note at the bottom of the Development Parameters Plan for a description of the development envelope.

Viewpoint 2 Extent of proposed Development Envelope (2.38 km) Proposed Transmission Towers

**Photomontage view** from Ampthill Park, Katherine's Cross. (72 degrees horizontal field of view, 64 cm viewing distance). \*\* Refer to the note at the bottom of the Development Parameters Plan for a description of the development envelope.