The Millbrook Power (Gas Fired Power Station) Order

5.2 Consultation Report Appendices – Volume 3 Appendix 3.Z(i) - 3.Z(iv)

Planning Act 2008
The Infrastructure Planning
(Applications: Prescribed Forms and Procedure) Regulations 2009

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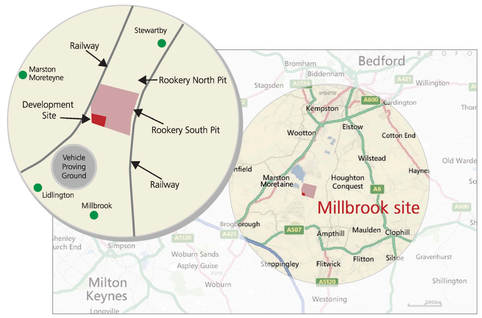
Consultation Report Appendices Volume 3 index

Ref	Title	Sub-ref	Sub-title
3.Z	Phase 2 Section 47 - Statutory Consultation Exhibition material	**3.Z.i**	Exhibition boards: Main exhibition board and topic specific pull up boards
		3.Z.ii	Figures on display at exhibition
		3.Z.iii	Leaflet
		3.Z.iv	Feedback form

Appendix 3.Z: Phase 2 Section 47 - Statutory Consultation Exhibition material

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

Proposal for a gas-fired power station at Rookery South Pit



Millbrook Power Limited (MPL) 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 transition 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 Development Consent Order (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
- the interaction between MPL and the Rookery South Resource Recovery Facility (the Rookery South RRF Project)

Under the new ownership of UK energy company Drax Group plc, MPL is now resuming the DCO process, building on the previous consultation and environmental work undertaken in 2014/15.

Why Rookery South Pit?

It has three main 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.

Illustrative view

Planning & Public Consultation

The project is classified as a Nationally Significant Infrastructure Project, which means that a 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 Business, Energy and Industrial Strategy.

The associated electrical and gas connections will be considered together with the power generation plant under the DCO application.

Consultation with Central Bedfordshire Council, 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 Historic England to ensure that the plant will be designed, built, operated and maintained to the highest 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 in 2014:

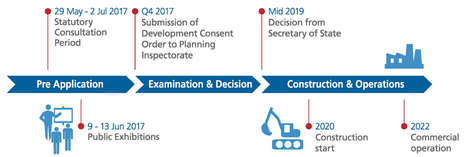
- undergrounding of the electrical connection to the National Grid (thereby avoiding the need for overhead transmission lines and additional transmission towers)
- reduction in the number of turbines used to generate electricity from a maximum of five units to only one unit with one stack
- reduction in the maximum height of the stack (from 60 m to 35 m)
- re-arrangement of generating equipment in order to reduce the impact of noise on nearby homes
- re-location of the gas connection site to reduce impact on agricultural land
- improvement of access arrangements, traffic management measures and routing during construction to minimise impact on the road network

The Project Key Details

- the construction, operation and maintenance of an Open Cycle Gas Turbine (also known as a Simple Cycle Gas Turbine) Power Generation Plant
- 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 short-term variation in electricity demand, intermittent output from renewable power generation and periods of system stress
- the Power Generation Plant could operate for up to a maximum of 2,250 hours in any given year, provided that the five-year rolling average does not exceed 1,500 hours per year
- the Power Generation Plant will have one stack of up to 35m in height from the base of Rookery South Pit
- the site for the generating equipment and substation covers an area of approximately 8 hectares (20 acres) and is located within Rookery South Pit itself
- the construction, operation and maintenance of a new underground 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; MPL will work with National Grid on the indicative design of the connection over the coming months
- the construction of a new underground pipeline to bring natural gas to the Power Generation Plant from the National Gas Transmission System located nearby
- the Power Generation Plant could become operational in 2022, subject to public consultation, planning and market conditions

Although a preliminary preferred layout of the Power Generation Plant has been identified, the final location and layout are yet to be determined.

Key Milestones

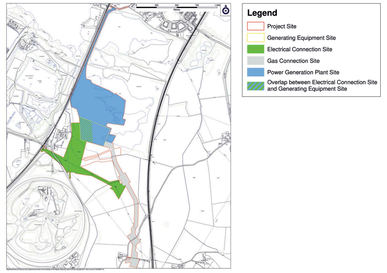


Preliminary Environmental Assessment

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 Council's Customer Service Centre, Marston Vale Forest Centre, as well as at local libraries. It can also be viewed at www.millbrookpower.co.uk.

The Project's environmental assessments (in 2014 and since) take the Rookery South RRF Project into account and provide a clear assessment of the cumulative environmental impact of both projects.



Community Benefits

This £100m Project would be a substantial investment in the area and would deliver significant economic benefits for a period of at least 25 years, including:

- 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.

Comment and Feedback

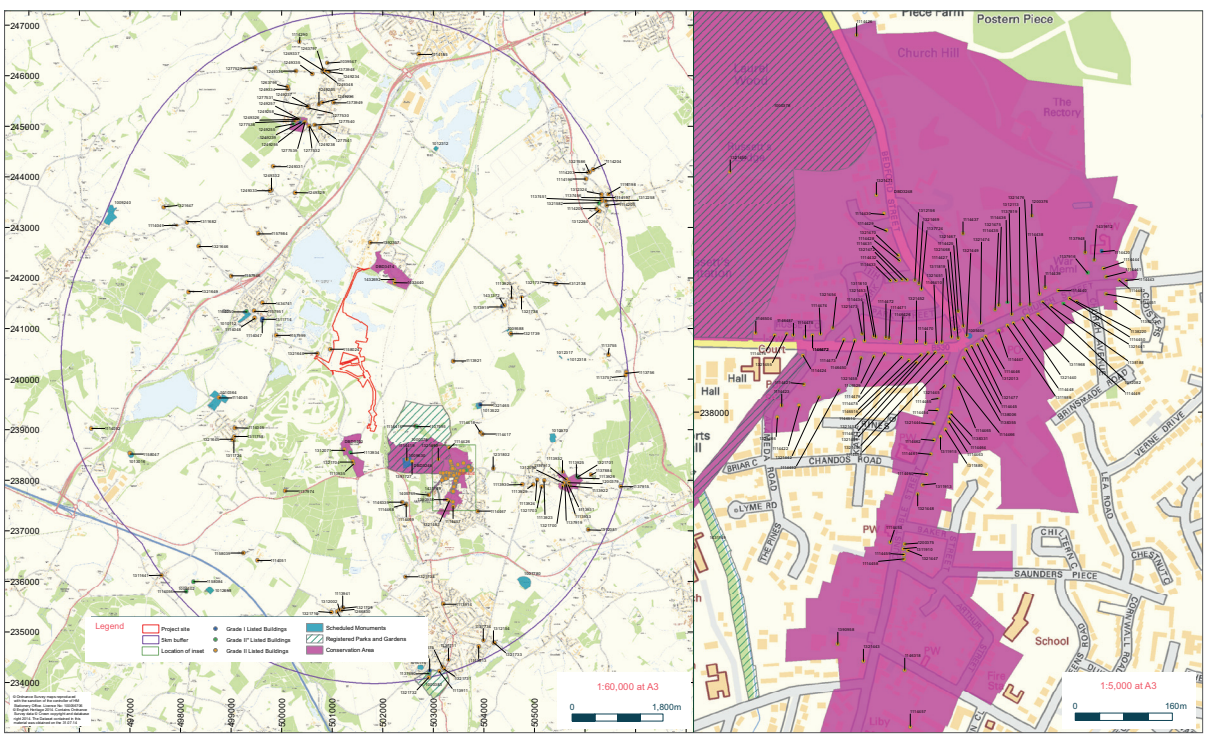
Your feedback is important to the consultation process. We would like your views on:

- the layout of the Generating Equipment within the Generating Equipment Site
- the Project as a whole, including changes since the 2014 consultation
- the interaction between the Project and the Rookery South RRF Project
- 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 2nd July 2017, and we would welcome your views on or before this date.

www.millbrookpower.co.uk

HISTORIC ENVIRONMENT



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 Listed Buildings, Scheduled Monuments and Conservation Areas. The steps we have taken to assess and mitigate this are outlined below.

Preliminary Assessment and 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 12 Scheduled Monuments, 22 Listed Buildings (Grade I & II), 5 Conservation Areas and 1 Registered Park.

Construction and 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 prior to commencement of construction of the Project.

Operational Impact of the Project

During operation, the introduction of the stack of the Generating Equipment, as well as parts of the Electrical Connection and Gas Connection 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.

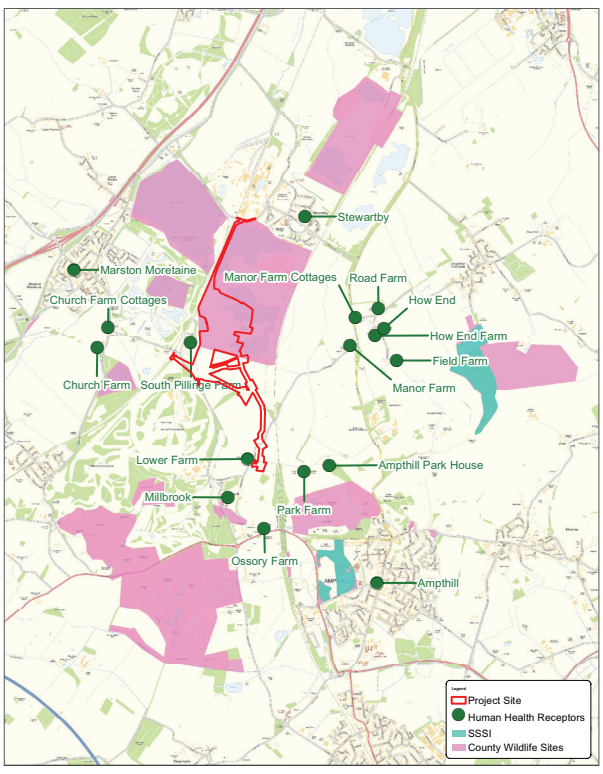
Cumulative Effects

A preliminary cumulative assessment has been undertaken specifically focusing on the effects of the Project with the Covanta Resource Recovery Facility. However, no significant effects have been identified in this assessment.

Conclusions and 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 prior to construction to confirm the potential effects of the Gas Connection and Electrical Connection on buried on buried archaeology.

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. The steps we have taken to assess and mitigate this are outlined below.

Preliminary Assessment and 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 and Decommissioning

Dust may result from works during construction, such as earth moving operations for new foundations and for the Gas Connection and Electrical 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 cleaner and produce far fewer emissions than other fossil fuel power plants when compared on an energy output basis. Emissions from the Power Generation Plant are also limited by the number of hours the Project can operate.

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 height.

In order to determine stack height, air quality impact assessments have been undertaken using air dispersion modelling. 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 32.5 m and 35 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.

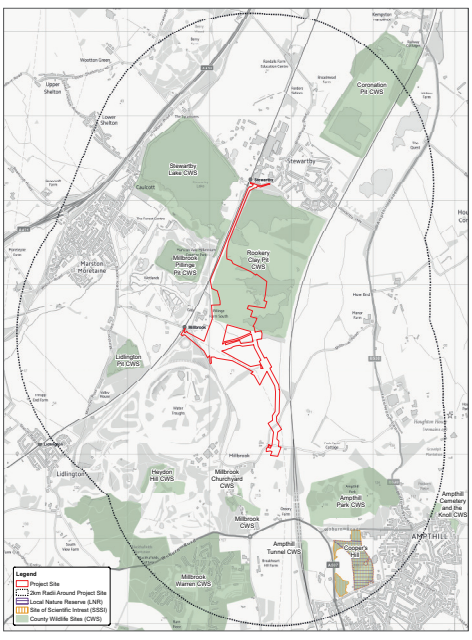
Cumulative Effects

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

Conclusions and 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 finalising the assessment of cumulative effects with other projects.

ECOLOGY



The construction, operation and decommissioning phases of the Project have the potential to adversely affect sensitive ecological receptors. The steps we have taken to assess and mitigate this are outlined below. 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 and 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 both in 2014 and 2017. 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.

* These species will not therefore be considered any further in the assessment process.

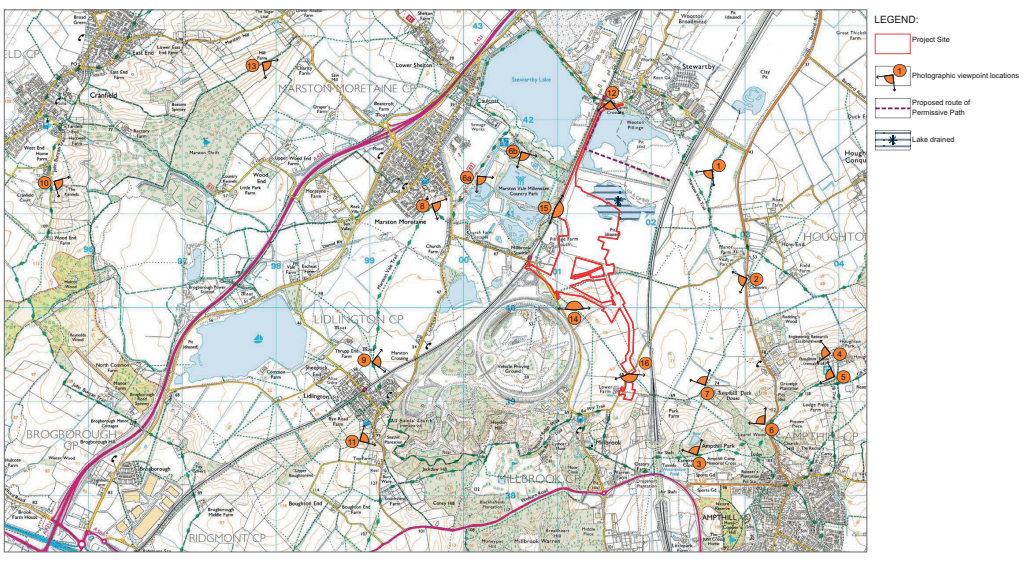
Proposed Mitigation Measures

Although a number of sensitive species have been identified within the Project Site, 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 and Next Steps

Following the completion of all of the Phase 2 species surveys, the full assessment of the potential effects of the proposed Project on ecology can now be finalised. Additionally, ongoing work will determine the most effective means of creating new habitats of ecological value at the Project Site.

LANDSCAPE & VISUAL IMPACTS



The proposed Project has the potential to affect the landscape and visual receptors during construction, operation and decommissioning. The steps we have taken to assess and mitigate this are outlined below.

Preliminary Assessment and Results

To date, a desk based assessment and several site visits 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 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 Resource Recovery Facility (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 and Electrical 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

During operation, adverse effects on landscape and visual amenity will result from the introduction of permanent structures, particularly the stack of the Generating Equipment, which will be the tallest structure on the Project Site. This feature 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 only significant visual effects during the operational phase will be from the local viewpoints (14 and 15) due to their proximity to the Project. Existing vegetation will effectively screen the Project Site from view for most nearby settlements and outlying properties.

Gas Connection and Electrical Connection

No significant effects are anticipated from the operation of the Gas Connection or Electrical Connection because of the use of underground cables and pipeline.

Proposed Mitigation Measures

A Landscape and Ecology Mitigation and Management Strategy (LEMMS) is being developed and will be finalised in the ES. The LEMMS will set out a series of landscape and habitat improvement measures such as planting and creation of ponds which will mitigate any long term visual impacts of the Project from local viewpoints.

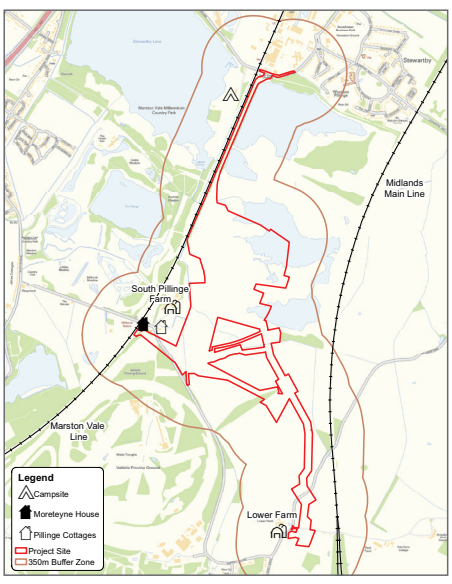
Cumulative Effects

A preliminary cumulative assessment has been carried out, particularly focusing on interactions with the Covanta RRF. No additional adverse effects are predicted from the combination of both projects over and above those predicated for each project individually. The full cumulative assessment will be reported in the Environmental Statement.

Conclusions and Next Steps

There is the possibility of moderately significant effects from local view points, from the south and east of the Project Site. 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.

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. The steps we have taken to assess and mitigate this are outlined below.

Preliminary Assessment and Results

In order to predict and assess operational noise levels, background noise measurements were taken at South Pillinge Farm and Lower Farm on two separate occasions in 2014. These 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 Resource Recovery Facility (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 and Electrical 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 not significant 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 and cooling equipment). Calculations indicate that without mitigation, noise levels at South Pillinge Farm could be considered to be significant. However, this is a preliminary assessment which has not explored detailed mitigation options. Mitigation measures will be explored further as part of the Environmental Statement (ES) with respect to reducing this impact.

Gas Connection

During the operation of the Gas Connection, noise effects at sensitive receptors have been assessed. 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 effects from the Gas Connection will not be significant.

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

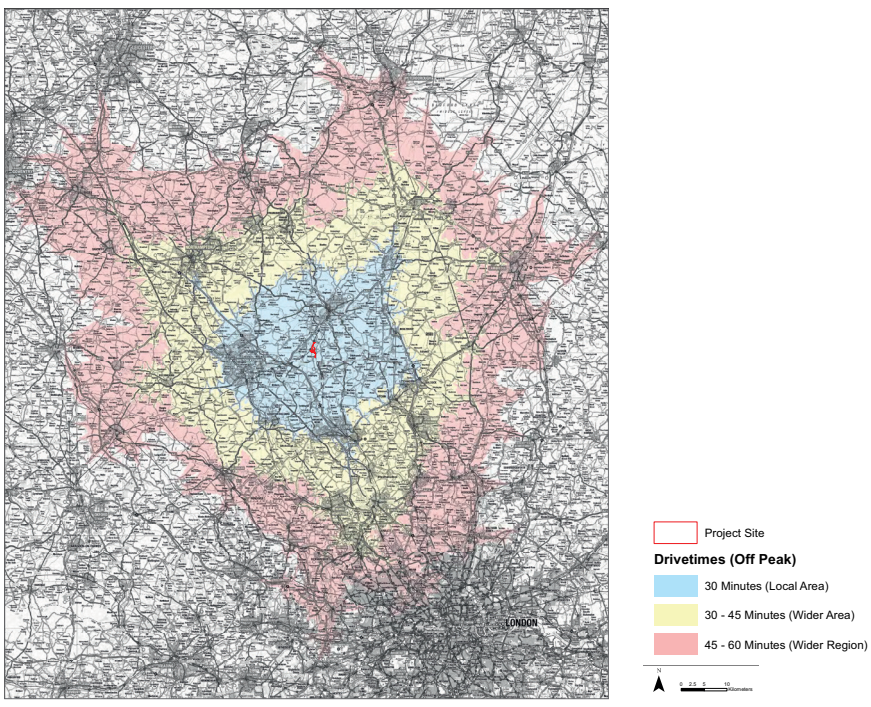
During construction a Construction Environmental Management Plan would be adhered to and an appropriately placed acoustic screen would be used.

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. Further additional mitigation measures will be explored and reported on in the final ES.

Conclusions and Next Steps

Provided that the limits identified in the Preliminary Environmental Information Report are met, no likely significant effects are anticipated from noise as a result of the construction, operation and decommissioning of the Project. Based on the preliminary assessments undertaken, additional mitigation measures are likely to be required which will be fully explored in the ES.

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. The steps we have taken to assess and mitigate this are outlined below.

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. A visitor attraction and business survey has also been undertaken with a questionnaire issued to local businesses. 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 which will both be assessed individually.

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.

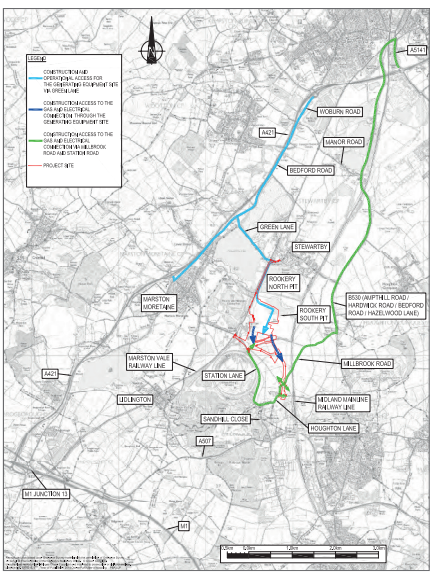
Proposed Mitigation Measures

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 and 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. The assessment is now ready to be finalised and included in the Environmental Statement.

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. The steps we have taken to assess and mitigate this are outlined below.

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
- 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. Should the Covanta Resource Recovery Facility (RRF) Project be constructed ahead of the Millbrook Project their purpose built access road would be used for both projects. However Millbrook Power would then construct a short access road from the Covanta RRF to the Generating Equipment Site.

Construction of the Power Generation Plant will require the delivery of large plant items such as the Gas Turbine Generator and stack. 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 given the limited number of operational traffic movements associated with staff and infrequent maintenance visits.

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 and 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.

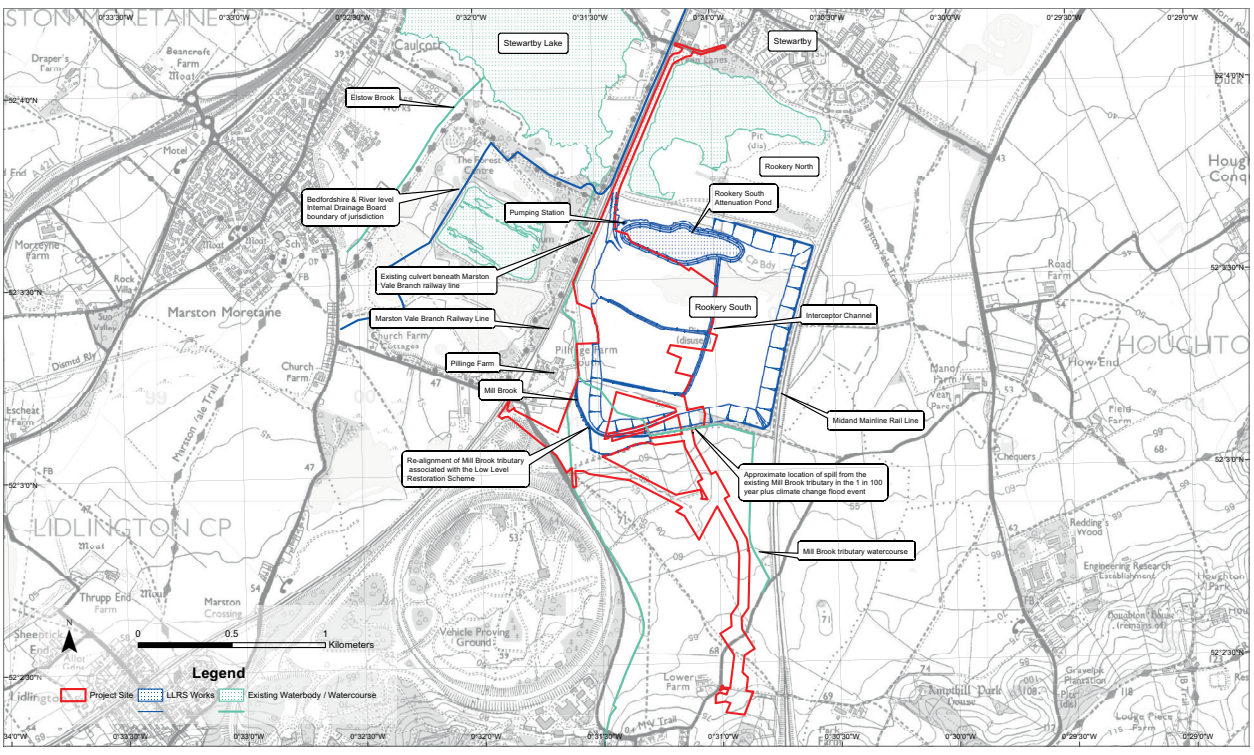
Cumulative Effects

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 and construction. Despite this, the very limited number of vehicles accessing the Project Site during operation (5 workers on site at any one time) will not 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. It is not considered likely that the two projects could be under construction at the same time, however a preliminarily assessment of this scenario has been carried out and will be considered further in the Environmental Statement (ES).

Conclusions and 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 and also further assessment of cumulative impacts during construction will be made and reported on in the ES.

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. The steps we have taken to assess and mitigate this are outlined below.

Preliminary Assessment and 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. A flood risk assessment and hydraulic modelling have been undertaken which demonstrate that the Project would not be at risk from flooding.

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.

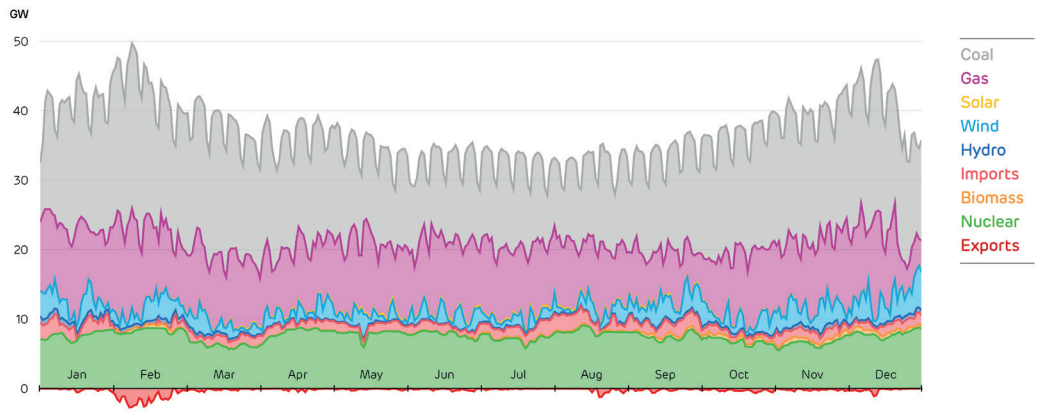
During operation, the Power Generation Plant Site would be equipped with a surface water drainage system and a sewerage system. The surface water drainage system would remove any potentially polluted runoff, prior to reaching the main sewerage network.

Conclusions and Next Steps

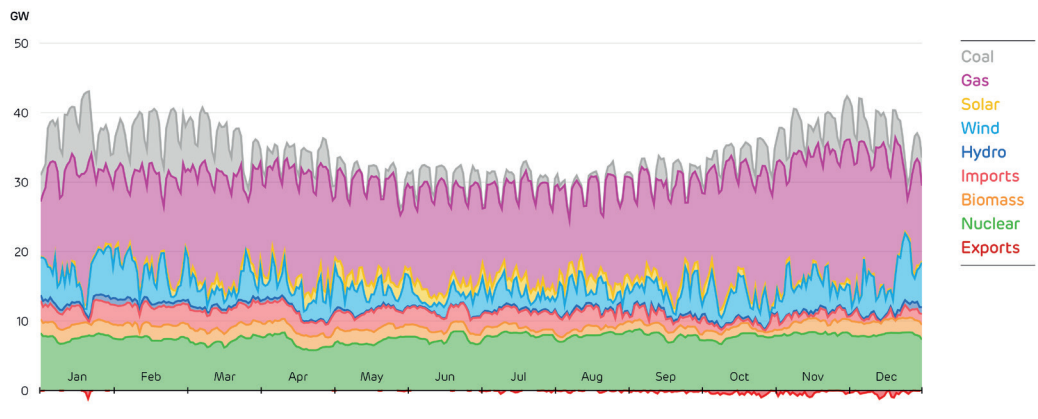
No significant effects are anticipated on water quality and resources as a result of the Project during construction, operation or decommissioning. Further work will be undertaken to update the detailed flood risk assessment which will be submitted as a supporting document to the final Environmental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

NEED FOR FLEXIBLE GAS GENERATION

Daily generation mix during 2012



Daily generation mix during 2016



Nearly 45% of the country's power already comes from gas, mostly generated by combined cycle gas turbine (CCGT) power plants. But while CCGT plants can deliver a steady supply of baseload power, they can't turn on and be at full capacity at very short notice. Starting from cold to quickly power the equivalent of a small city in a matter of minutes rather than hours or days, however, is exactly what the UK power network is increasingly going to need.

Solar and wind power can't generate electricity when it's dark or still. So to facilitate more of these intermittent renewables coming onto the grid, we need sources that can be quickly ramped up to 'fill the gaps' when lower carbon technologies aren't able to provide the essential power for the modern world. This is where Open Cycle Gas Turbine (OCGT) stations come in, alongside other standby technologies such as storage and demand side response.

OCGT stations have turbines that work like jet engines. This means they can start up incredibly quickly, getting to full load in just 10 minutes, meeting surges quickly when intermittent renewables can't and nuclear, biomass and CCGT power stations are already providing baseload electricity.

- By early next decade all of the UK's coal-fired power stations and some older gas fired plant will have closed 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 future for new nuclear power stations in the UK is uncertain and and no new plant are expected to be operational until late next decade
- Carbon Capture and Storage remains an unproven technology with no plants expected to be available in the foreseeable future

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.

GEOLOGY AND GROUND CONDITIONS

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. The steps we have taken to assess and mitigate this are outlined below.

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.

Construction and Decommisioning

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 Connection 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 Connection and Electrical Connection will result in the loss of a small amount of agricultural land. However, this will be a relayively narrow corridor and most of the effects would be temporary as the land would be reinstated above the buried cables and pipeline. The area for the Sealing End Compounds of the Electrical Connection and Above Ground Installation of the Gas Connection would be affected for the lifetime of the Project resulting in a slight adverse effect which not considered significant.

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;

- Minimising 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 and 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.

ABOUT DRAX GROUP

Drax Group plc is a British owned and operated energy company headquartered in North Yorkshire that generates seven per cent of the UK's electricity. We employ around 2,300 people and support over 14,000 jobs across our UK supply chain.

We are involved in three principal activities:

- Generating electricity in power stations
- Supplying electricity and gas to British businesses
- Manufacturing sustainable wood pellets for use in electricity production

The Millbrook Power project is an important part of our strategy to build a flexible, reliable and affordable energy system that can complement the increasing amount of weather dependent wind and solar power generation.

We are experts in building and operating power stations. Drax Power Station, the largest in the country, has been providing electricity to the national grid since the 1970s. In recent years the power station has been upgraded, on-time and on-budget, to use compressed wood pellets instead of coal, making it Europe's largest decarbonisation project and the country's single largest source of renewable power.

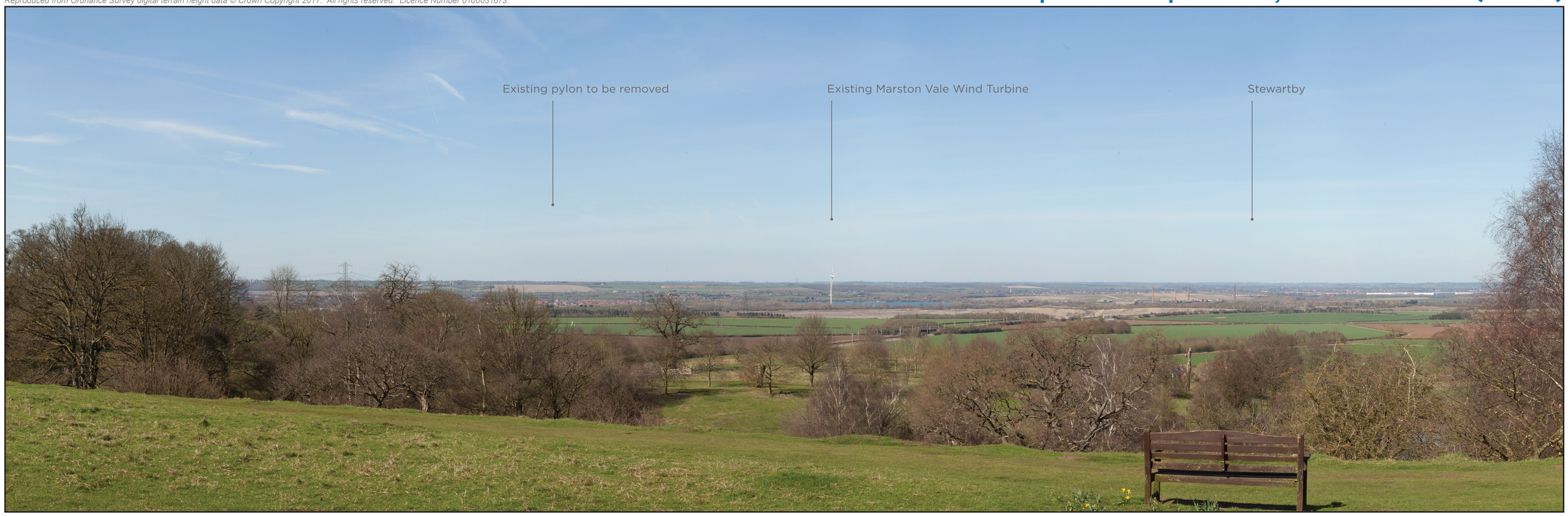
We know from experience that energy companies play an important role in the areas they operate. We aim to make a real, positive difference to the lives of the people living and working in our communities. We promise to work hard to ensure we're being a responsible neighbour.

www.millbrookpower.co.uk

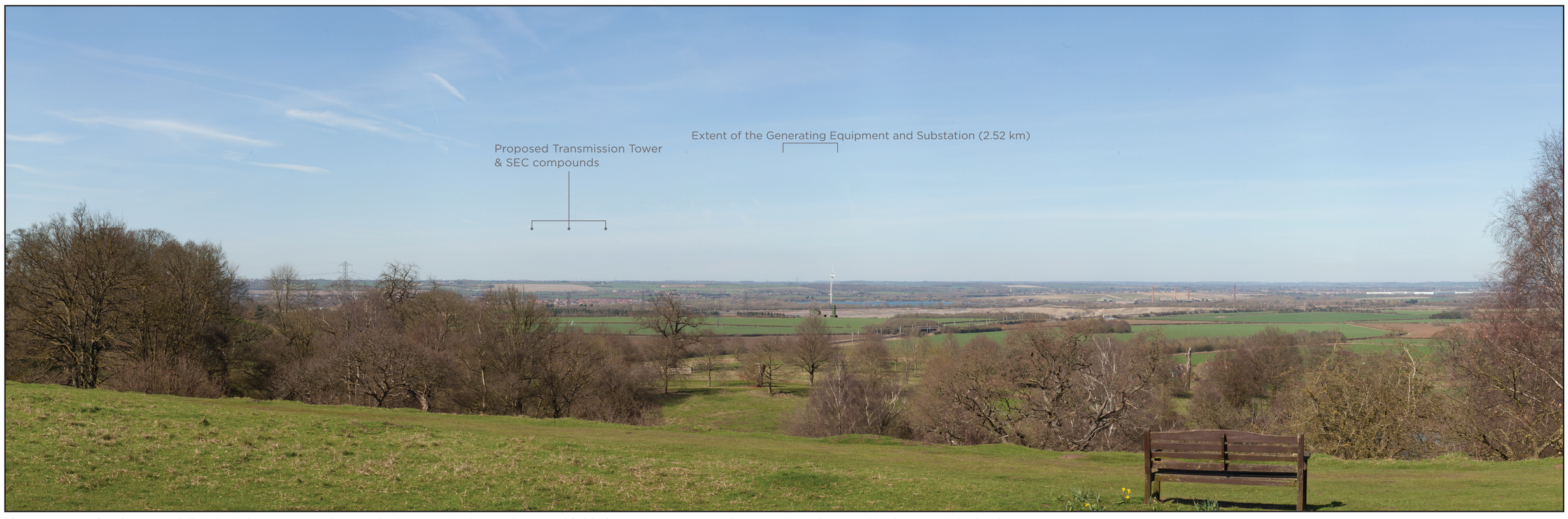
Appendix 3.Z: Phase 2 Section 47 - Statutory Consultation Exhibition material

3.Z(ii) Figures on display at exhibition

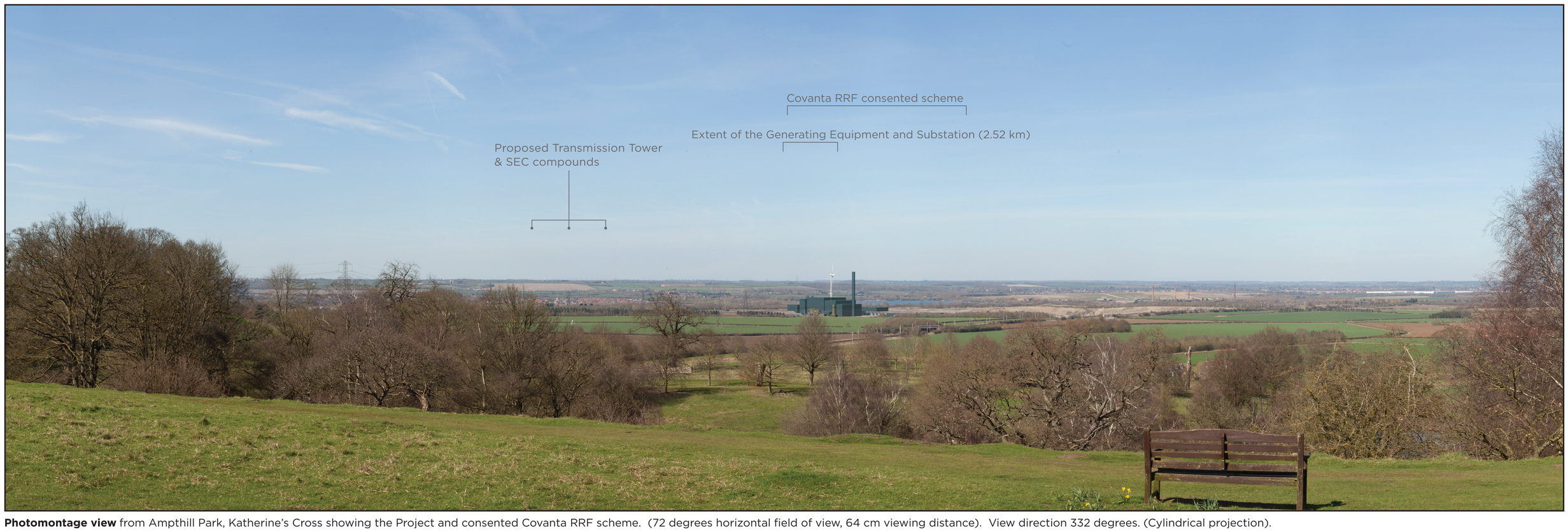
Viewpoint 3: Ampthill Park, Katherine's Cross (Winter)



Existing baseline view from Ampthill Park, Katherine's Cross. (72 degrees horizontal field of view, 64 cm viewing distance). View direction 332 degrees. Camera: Canon EOS 5D Mark II Focal Length: 50mm Camera Height: 1.5m Date: 25/03/17 Time: 13:15



Photomontage view from Ampthill Park, Katherine's Cross showing the Project. (72 degrees horizontal field of view, 64 cm viewing distance). View direction 332 degrees. (Cylindrical projection).



Photomontage view from Ampthill Park, Katherine's Cross showing the Project and consented Covanta RRF scheme. (72 degrees horizontal field of view, 64 cm viewing distance). View direction 332 degrees. (Cylindrical projection).