



# The Millbrook Power (Gas Fired Power Station) Order

## 9.1 Grid Connection Statement

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

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**Author:** Millbrook Power Limited

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## 1. INTRODUCTION

1.1 Millbrook Power Limited (MPL) is seeking to develop a gas fired power station at Rookery South Pit located near the villages of Stewartby, Millbrook, Lidlington and Marston Moretaine, Bedfordshire, referred to as the Millbrook Power Project.

1.2 The Project constitutes a Nationally Significant Infrastructure Project (NSIP) by virtue of section 14 (1)(a) and sections 15(1) and (2) of the Planning Act 2008 (PA 2008) which includes within the definition of an NSIP any onshore generating station in England or Wales of 50 MWE capacity or more. Under section 31 of the PA 2008 a development consent order (DCO) is required to develop a NSIP. Under section 37 of the PA 2008, the DCO can only be granted if an application is made for it to the Secretary of State (SoS) (the DCO Application).

1.3 The Project would comprise:

- I. a new Power Generation Plant in the form of an Open Cycle Gas Turbine (OCGT) peaking power generating station, fuelled by natural gas with a rated electrical output of up to 299 MW. This is the output of the generating station as a whole, measured at the terminals of the generating equipment. The Power Generation Plant comprises:
  - (a) generating equipment including one Gas Turbine Generator with one exhaust gas flue stack and Balance of Plant (together referred to as the 'Generating Equipment'), which are located within the 'Generating Equipment Site';
  - (b) a new purpose built access road from Green Lane to the Generating Equipment Site (the 'Access Road' or the 'Short Access Road');
  - (c) a temporary construction compound required during construction only (the 'Laydown Area');
- II. a new underground gas pipeline connection, approximately 1.8 km in length (the 'Pipeline') to bring natural gas to the Generating Equipment from the National Transmission System (the 'Gas Connection'). The Gas Connection also incorporates an Above Ground Installation (AGI) at the point of connection to the National Transmission System; and
- III. a new electrical connection to export power from the Generating Equipment to the National Grid Electricity Transmission System (NETS) (the 'Electrical Connection'), comprising an underground double circuit Tee-in. This would require one new tower (which will replace an existing tower and be located in the existing Grendon – Sundon transmission route

corridor, thereby resulting in no net additional towers). This option would require two SECs, one located on each side of the existing transmission line, and both circuits would then be connected via underground cables approximately 500 m in length to a new substation (the 'Substation').

- 1.4 The Generating Equipment, Access Road and Construction Laydown Area are together known as the 'Power Generation Plant' and are located within the 'Power Generation Plant Site'. The Power Generation Plant Site is approximately 12.5 ha in area.
- 1.5 The Power Generation Plant, Gas Connection, and Electrical Connection, together with all access requirements are referred to as the 'Project'. The land upon which the Project would be developed, or which would be required in order to facilitate the development of the Project, is referred to as the 'Project Site'. The Project Site is approximately 48 ha in area.
- 1.6 Paragraph 4.9.1 of the Overarching Energy National Policy Statement for Energy (EN-1) emphasises that it is for the Applicant to ensure that there will be necessary infrastructure and capacity in the transmission and distribution network to accommodate the electricity to be generated by a proposed new power plant.
- 1.7 Section 37 of the PA 2008 governs the content of an application for a development consent order, including the requirements for the necessary accompanying documents specified in the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (APFP Regulations).
- 1.8 This Grid Connection Statement accompanies the DCO Application and has been prepared to comply with Regulation 6(1)(a)(i) of the APFP Regulations, which requires the Applicant to provide a statement of who will be responsible for designing and building the connection to the electricity grid.
- 1.9 A glossary of defined terms is presented in Document Reference 1.4.

## 2. PROJECT SUMMARY

- 2.1 The Generating Equipment would operate as a OCGT peaking plant and would be designed to provide an electrical output of up to 299 Megawatts electrical (MWe). The plant would be fuelled by natural gas, supplied to the Generating Equipment Site by a new Pipeline connecting the Generating Equipment to the existing National Gas Transmission System. The Gas Connection is described in detail in the Gas Connection Statement (Document Reference: 9.2).
- 2.2 Peaking plants are required to operate when there is a surge in demand for electricity associated with a particular event (e.g. where many people across the country boil kettles following the end of a popular television programme) or where there is a sudden drop in power being generated from plant which are constantly operational (e.g. a sudden outage).
- 2.3 Operating as a peaking plant, the Generating Equipment would also help to 'balance out' the grid at times of peak electricity demand and will help to support the grid at times when other technologies (e.g. wind and solar farms) cannot generate electricity due to their intermittent operation and reliance on weather conditions. Peaking plants are therefore vital in 'evening out' the power in the grid system. The Generating Equipment would operate intermittently for up to 2,250 hours per year. This could be at any time during the year and for any length of time up to but not exceeding 2,250 hours and not exceeding 1,500 hours on a 5 year rolling average.
- 2.4 The Generating Equipment will supply electricity to the NETS operated by National Grid Electricity Transmission PLC (NGET), NGET holds a transmission licence issued pursuant to the Electricity Act 1989.
- 2.5 The Project is more fully described in Chapter 3 of the Environmental Statement (Document Reference: 6.1).

### 3. **CONTRACTUAL AGREEMENTS**

- 3.1 NGET owns and manages the NETS in England and Wales.
- 3.2 Applicants must secure connection with NGET if constructing a generating station if they want the output of that power station to be distributed across the national transmission system (certain power stations are used "on-site" only whilst others connect into the local distribution network).
- 3.3 MPL signed a Bilateral Connection Agreement and Construction Agreement with NGET on 2<sup>nd</sup> October 2017 (the Connection Agreement Offer) to connect the Generating Equipment to the NETS.
- 3.4 The Connection Agreement provides the Generating Equipment with a connection to the NETS in September 2022.
- 3.5 As such, MPL can confirm that output of the Generating Equipment will be exported via the NETS.

#### **4. RESPONSIBILITIES FOR DESIGNING AND BUILDING THE GRID CONNECTION**

- 4.1 For the Electrical Connection, the Substation and (underground) Cables would export electricity from the Generating Equipment. The Cables would then connect to the SEC(s) which would bring the Cables above ground and connect via downloads to the replacement tower which will be part of the existing NETS. This will complete the connection between the Generating Equipment and the NETS.
- 4.2 The Electrical Connection would connect into the existing National Grid double circuit 400 kV line (part of the NETS) which runs from Sundon to Grendon. The 400 kV line is located approximately 320 m southwest of the Generating Equipment Site.
- 4.3 In conjunction with the construction of the Electrical Connection a temporary diversion of the existing 400 kV line located adjacent to the three most westerly existing transmission towers within the Project Site would be required. It is anticipated that the temporary diversion is likely to be constructed as a single circuit outage of the existing 400 kV line. The temporary work is likely to require mast(s) or temporary tower(s), of up to 55 m in height. The temporary works are also likely to include the temporary erection of scaffolding over Station Lane for the protection of road users whilst the diversion is installed.
- 4.4 At this stage, it is anticipated that the installing and dismantling of the temporary works may require the temporary closure of Station Lane for up to approximately 1 day on two separate occasions and that the temporary diversion of the existing 400 kV line would be in place for approximately five months
- 4.5 Further information on the Electrical Connection and the alternative means of connection that have been considered is contained Chapter 5 of the Environmental Statement (Document Reference 6.1).
- 4.6 An explanation of consultation feedback received on the Electrical Connection and how this feedback has been considered is contained in the Consultation Report (Document Reference: 5.1).
- 4.7 Pursuant to the Connection Agreement Offer, NGET has agreed to be responsible for the detailed design and construction of the Electrical Connection including the temporary diversion works. Design work by NGET in relation to the temporary diversion works is ongoing. The environmental effects of the temporary diversion works have been considered as part of the assessment of the Project that is set out in the Environmental Statement (Document Reference 6.1).
- 4.8 As such, MPL considers signing the Connection Agreement Offer secures the design and build of the Electrical Connection.

## 5. **ACQUISITION OF LAND AND RIGHTS**

- 5.1 MPL has an option agreement in place to purchase the freehold and rights over the land on which the Electrical Connection will be located. The option agreement was signed on 16 July 2014 with O&H Q7 Limited.
- 5.2 As explained in the Statement of Reasons (Document Reference 4.1) MPL is also seeking powers via its draft DCO to compulsorily acquire land and rights and impose restrictions to allow MPL to construct, use and maintain the Electrical Connection, as well as providing for powers of temporary use relating to the construction of the temporary diversion works.
- 5.3 These powers are set out in Part 5 of the Draft DCO and apply to Works No. 5, 6 and 7. These are fully described in the Book of Reference (Document Reference 4.3) and are justified in the Statement of Reasons (Document Reference 4.1).
- 5.4 On this basis, MPL considers that all land and rights would be in place pursuant to its Option Agreement and/or via any powers of compulsory purchase that it may be granted in the draft DCO (Document Reference 3.1) in order to deliver numbered Works No. 5 and 6.
- 5.5 The powers that MPL is seeking to temporarily use land pursuant to the draft DCO (Document Reference 3.1) would allow it to deliver the temporary diversion works (Work No. 7).

6. **CONSENT FOR THE CONNECTION WORKS**

- 6.1 The Electrical Connection (including the temporary diversion works) forms part of the Project for which development consent is being sought via the DCO Application. The Draft DCO provides at Article 6 for the exercise of the powers in relation to the Electrical Connection by NGET to allow NGET to construct, operate and maintain these works.
- 6.2 As such, MPL considers that, if the DCO is granted on substantively the same terms as those set out in the draft DCO (Document Reference 3.1) then development consent for the Electrical Connection will have been secured.

## 7. **CONCLUSION**

- 7.1 MPL is required to submit a statement pursuant to regulation 6 of the APFP Regulations confirming "who will be responsible for designing and building the connection to the electricity grid".
- 7.2 MPL considers that this statement provides confirmation to the Secretary of State that:
  - 7.2.1 MPL has secured agreement with NGET regarding connection of its up to 299 MW output from the Generating Equipment to the NETS;
  - 7.2.2 The Connection Agreement provides that NGET will design and build the Electrical Connection;
  - 7.2.3 MPL has secured the necessary land and rights to allow NGET to construct numbered works 5 and 6 and is seeking powers of temporary use under the draft DCO to secure the construction of the temporary diversion works;
  - 7.2.4 In including the Electrical Connection (including the temporary diversion works) as numbered works 5, 6 and 7 in the draft DCO, MPL would, if the draft DCO was made on substantively the same terms as those out in the draft DCO (Document Reference 3.1). have secured development consent for the Electrical Connection.