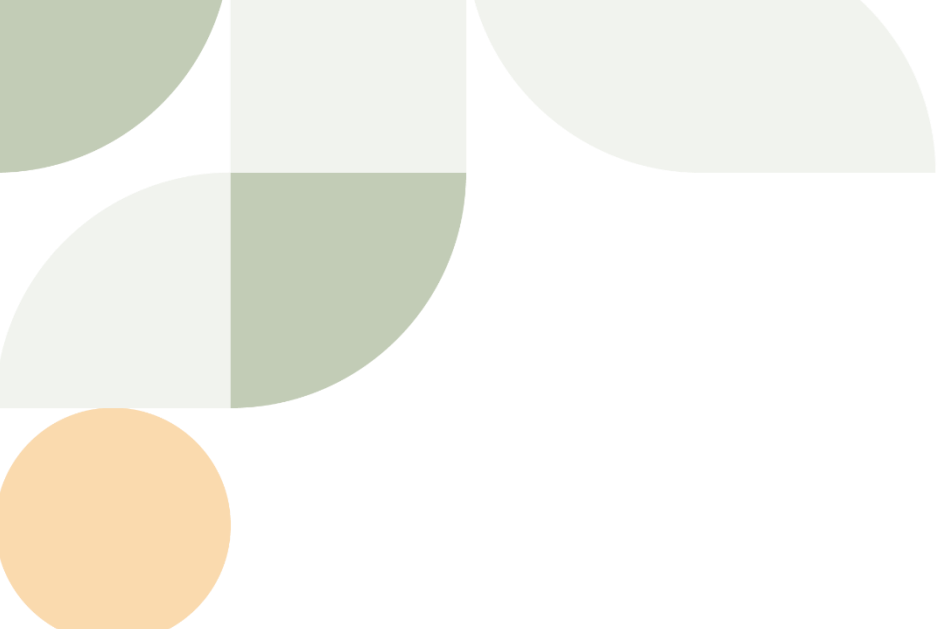




Lime Down

Solar Park

Applicant's Response to the Examining Authority's Rule 17 Request

October 2026

Revision 1

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The Infrastructure Planning (Examination Procedure) Rules 2010



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1 Introduction

- 1.1.1 The purpose of this document is to provide the Applicant's response to the Examining Authority's Rule 17 Request for further information [PD-019] dated 23 September 2026.

1.2 Request for further information

- 1.2.1 The Rule 17 Request [PD-019] seeks confirmation of the following:

Generating output for the proposed development and relationship with the secured grid connection limit

Provide the predicted electricity generating output, expressed in megawatt hours (MWh) for the proposed development for every hour in a typical calendar year (365 days/8,760 hours duration). In answering this question, the applicant should provide calendar year predictions for:

a) the total number of hours in a year when the proposed development would be expected to generate electricity in excess of the secured grid limit of 500 megawatts (MW) (paragraph 2.1.3 in the Grid Connection Statement [APP-270]); and

b) the total number of hours in a year when the proposed development would be expected to generate electricity at levels below the secured grid connection limit, for each of the following percentage bands: 0 to 9; 10 to 19; 20 to 29; 30 to 39; 40 to 49; 50 to 59; 60 to 69; 70 to 79; 80 to 89; and 90 to 99%.

1.3 Methodology

- 1.3.1 The Applicant uses standard industry-wide tools to assess historic levels of solar irradiation at a particular location. These tools generally use historical satellite data and interpolate observed values on different temporal bases (e.g. hourly, daily, monthly).
- 1.3.2 The Applicant has used PVsyst, an industry-standard tool, to simulate the output effect of the modelled insolation on the Scheme's indicative design.
- 1.3.3 Consistent with its approach throughout the Examination, the Applicant has based its indicative design on technologies which are currently readily available on the market.
- 1.3.4 The detailed outputs of the PVsyst simulation are then aggregated to an overall profile of generation from the Scheme per time period.
- 1.3.5 The generation output achieved in any individual future hour will be dependent upon a number of environmental, climate and weather factors prevailing in that individual future hour.

- 1.3.6 The simulation results can be interpreted as a mathematically unbiased view of the distribution of outputs through the course of a year, based upon the historical data which has been fed into the model.
- 1.3.7 The Grid Connection Capacity is 500MW, therefore the Scheme cannot export more than this amount.
- 1.3.8 The simulation is based on Year 1 operation.
- 1.3.9 Following consent, if granted, at the detailed design stage the Applicant will seek to maximise the efficiency and effectiveness of the Scheme within the control parameters established by the made DCO. The delivered generation may differ from the indicative design on which this simulation is based.
- 1.3.10 For the avoidance of doubt, Solar PV generation stored within the BESS is not limited to periods during which generation exceeds the 500 MW grid connection limit. Whether and when the BESS would store or release any power generated at the solar panels in any given hour would depend on many factors including: national demand and grid balancing requirements, the weather, and the evolving composition of the future GB generation fleet. This simulation does not consider any interactions between the BESS and the solar components of the Scheme.

2 Generation output for the Scheme

2.1 Results

- 2.1.1 **Table 1** shows the aggregated results of the simulation.
- 2.1.2 All hours of the year, including nighttime when there is no generation, have been included in the results table.
- 2.1.3 The Percentage Bands cover the range strictly greater than the lower range, and lower than or including the upper range (i.e. > lower, <= upper).
- 2.1.4 In answer to part (a) of the Examining Authority's question, based on the conservative assumptions made, **Table 1** shows that there are expected to be 18 hours in a year when the Scheme is anticipated to generate electricity in excess of the secured grid limit of 500 megawatts (MW).
- 2.1.5 **Table 1** and **Figure 1** provide the answer to part (b) of the Examining Authorities question.
- 2.1.6 The data in **Table 1** and also presented in **Figure 1** are consistent with the Applicant's expectations of a scheme which is not significantly overplanted.

Table 1 - Hours per year at each generation output band

Percentage Band (of 500MW)	Lower (MW)	Upper (MW)	Hours of the year	Percentage of hours of the year (of 8760 hours)
0% / Hours of darkness	0	0	4472	51.1%
0-10%	0<	50	1492	17.0%
10-20%	50<	100	545	6.2%
20-30%	100<	150	421	4.8%
30-40%	150<	200	388	4.4%
40-50%	200<	250	329	3.8%
50-60%	250<	300	329	3.8%
60-70%	300<	350	274	3.1%
70-80%	350<	400	231	2.6%
80-90%	400<	450	180	2.1%
90-100%	450<	500	81	0.9%
100%+	500<	N/A	18	0.2%

Figure 1 – Hours per year at each generation output band (excluding hours of darkness)

