PART 1a

Applicant's Details

Company Name :	
Company registered No.	
Postal Address :	
Contact Name :	
Email Address :	
Telephone No.	
Fax No.	

Consultant's Details (if applicable)

Consultants Name :	
Postal Address:	
Contact Name :	
Email Address :	
Telephone No.	
Fax No.	

Power station location and operation

Power station name :	
Postal Address or site boundary plan (1:500) :	
Details of any existing Connection Agreements :	

Target date for provision of connection / commissioning of power station :	

Put a date in this box - not just "As soon as possible"

The eventual owner of the PV system.

Contractor details

Power station name can be anything. Postal address is self explanatory.

At most addresses, "details of any existing connection agreements" will be "Import Only"

PART 1a

(lagging)	
Maximum reactive power export (leading)	MVAr

Connection Point (OS grid ref or description) :	
Preferred connection point voltage :	V
Single line diagram of any on-site existing or proposed electrical plant or, where available, operation diagrams	Please attach
What security is required for the connection? (see Note A1) :	
No. of generation sets in power station :	
Are all generation sets of same design/rating?	Y/N
Will power station operate in island mode?	Y/N
Will generation plant supply electricity to on-site premises?	Y/N

This is required. Will generally be marked on a drawing.

This will normally be up to the DNO themselves.

Standard schematic of the PV system

This will generally be "None".

How many inverters in the system?

Are all inverters of the same rating?

This will always be "No."

Self explanatory - normally yes, but perhaps not on some field installs

Power station standby import requirements (see Note A2)

How much energy is needed when not generating

Maximum active power import	MW
Maximum reactive power import (lagging)	MVAr
Maximum reactive power export (leading)	MVAr

This will generally be "none".

PF should be 1 so there should be zero lagging import current

As above

Power station top-up import requirements (see Note A3)

Maximum active power import	MW
Maximum reactive power import	MVAr

How much power is required on-site when system is generating but not enough to run site - this will be an estimate.

PART 1a

Power station export requirements (see Note A4):

Total power station output at registered capacity (net of auxiliary loads)

Registered capacity (maximum active power export)	MW
Maximum reactive power export (lagging)	MVAr
Maximum reactive power import (leading)	MVAr

Total capacity of system

Power station maximum fault current contribution (see Note A5)

Peak asymmetrical short circuit current at 10ms (i_p) for a 3φ short circuit fault at the connection point	kA
RMS value of the initial symmetrical short circuit current (I_k'') for a 3φ short circuit fault at the connection point	kA
RMS value of the symmetrical short circuit current at 100ms ($I_{k(100)}$) for a 3φ short circuit fault at the connection point	kA

This section should not be required as long as Section part 1b is filled out correctly.

Power station interface arrangements (see Note A6)

Means of connection, disconnection and synchronising between the DNO and the Customer	

Will generally be inverter and any G59 relay protection.

For each type of inverter used in the set up, you need to fill in a seperate page for this section.

PART 1b

generators only	

Generation set general data

Number of generation sets to which this data applies:		How many inverters of this type are used
Type of generation set (please tick box)	Synchronous generator ☐	
	Fixed speed induction generator ☐	
	Double fed induction generator ☐	
	Series converter / inverter connected generator ☐	
	Other (provide details) ☐	Will be OTHER - Electronic inverter.
Type of prime mover:		Photovoltaic panels
Operating regime (see Note B1). Please tick box	Intermittent ☐	Intermittent
	Non-intermittent ☐	

Generation set Active Power capability

Rated terminal voltage (generator)	V	230v or 400v depending on set-up
Rated terminal current (generator)	A	Current of inverter
Generation set registered capacity (net)	MW	Power rating of inverter
Generation set apparent power rating (to be used as base for generator parameters)	MVA	Not applicable as PF of system should be "1"
Generation set rated active power (gross at generator terminals)	MW	Same as inverter

Generation set Reactive Power capability at rated Active Power (gross, at generator terminals)

Maximum reactive power export (lagging). For HV connected generators only	MVAr	N/A
Maximum reactive power import (leading). For HV connected	MVAr	N/A

PART 1b

Generation set maximum fault current contribution (see Note B2)

Peak asymmetrical short circuit current at 10ms (i_p) for a 3φ short circuit fault at the generation set terminals (HV connected generators only)	kA
RMS value of the initial symmetrical short circuit current (I_k'') for a 3φ short circuit fault at the generation set terminals (HV connected only)	kA
RMS value of the symmetrical short circuit current at 100ms ($I_{k(100)}$) for a 3φ short circuit fault at the generation set terminals	kA

Not applicable generally as this is for HV systems

Note B1 – Intermittent and Non-intermittent Generation is defined in Engineering Recommendation P2/6 as follows:
Intermittent Generation: Generation plant where the energy source for the prime mover can not be made available on demand.
Non-intermittent Generation: Generation plant where the energy source for the prime mover can be made available on demand.

Note B2 - See Engineering Recommendation G74, ETR 120 and IEC 60909 for guidance on fault current data. Additionally, fault current contribution data may be provided in the form of detailed graphs, waveforms and/or tables.