

## Part 4b

### Power Park Module model data: Fixed speed induction Generating Units (see Notes 10 and 11) (please complete a separate sheet for each different Generating Unit)

Name(s) / identifiers of Generating Unit(s)

Magnetising reactance  
(HV connected generators only)  per unit

Stator resistance  
(HV connected generators only)  per unit

Stator reactance  
(HV connected generators only)  per unit

Inner cage or running rotor resistance  
(HV connected generators only)  per unit

Inner cage or running rotor reactance  
(HV connected generators only)  per unit

Outer cage or standstill rotor resistance  
(HV connected generators only)  per unit

Outer cage or standstill rotor reactance  
(HV connected generators only)  per unit

State whether data is inner-outer cage  
or running-standstill  
(HV generators connected only)

inner-outer cage  running-standstill

Number of pole pairs  number

Gearbox ratio  number

Slip at rated output  
(HV connected generators only)  %

**Shunt capacitance connected in parallel at % of rated output:  
Provide as values below or attach a graph**

If attaching a graph, please insert the file name of the attachment here

Starting	<input type="text"/>	kVAr
20%	<input type="text"/>	kVAr
40%	<input type="text"/>	kVAr
60%	<input type="text"/>	kVAr
80%	<input type="text"/>	kVAr
100%	<input type="text"/>	kVAr

**Active power and reactive power:  
Provide as values below or attach a graph**

If attaching a graph, please insert the file name of the attachment here

Active power and reactive power import during start-up	<input type="text"/>	MW- MVar
Active power and reactive power import during switching operations eg '6 to 4 pole' change-over (HV connected generators only)	<input type="text"/>	MW- MVar
Under voltage protection setting & time delay	<input type="text"/> Per Unit V	<input type="text"/> s

### Generating Unit Voltage Control (to be agreed with the DNO)

If operating in Power Factor control mode,  
preferred Power Factor

If operating in voltage control mode, voltage set point

 V

If operating in reactive power control mode, reactive power set point

 MVA<sub>r</sub>

Generating Unit Performance Chart attached

If yes, please insert the file name of the attachment here

Yes

No

### HV Connected Type A, Type B, Type C and Type D Power Generating Module frequency and excitation

Frequency response Droop setting in LFSM (see Note 8)

 %

Governor and prime mover model attached (see Note 9)

If yes, please insert the file name of the attachment here

Yes

No

Total effective inertia constant  
(generator and prime mover)  
(HV connected generators only)

 MWsec/  
MVA

AVR / excitation model attached

If yes, please insert the file name of the attachment here

Yes

No

### Type C and Type D Power Generating Module additional frequency response

Frequency response Droop setting in FSM (if applicable)

 %

Frequency response mode

FSM

LFSM

**Note 10** – Asynchronous generators may be represented by an equivalent synchronous data set.

**Note 11** – Provide the above data for each asynchronous generation set based on the number of pole sets (ie two data sets for dual speed 4/6 pole machines).