



Data Transfer Code

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Data Transfer Code

DTC.1 Introduction

The Data Transfer Code provides a unified listing of all data that Users are required by the Grid Code to provide to OETC and that OETC is required to provide to Users.

In the event of inconsistencies between this DTC and other sections of the Grid Code the provisions in individual sections of the Grid Code shall prevail.

The relevant section of the Grid Code, under which any item of data is required, specifies the procedures, timing, and routing for the supply of that data and the updating and recording of temporary or permanent changes to that data.

DTC.2 Objective

The objectives of the DTC are as follows;

- to list and collate all requirements in respect of data to be provided by each category of User to OETC under the Grid Code;
- to list requirements in respect of all the data to be provided by OETC to each category of User under the Grid Code; and
- to provide an overview of the data requirements of certain sections of the Grid Code.

DTC.3 Scope

In addition to OETC, the DTC applies to;

- Power Producers;
- Licensed Distributors;
- Licensed Suppliers;
- Directly Connected Consumers;
- International Interconnected Parties
- Internally Interconnected Parties;
- PWP; and
- PAEW.



DTC.4 Data categories

The DTC groups data into a number of categories;

- **Standard Planning Data:** is that data listed in Appendix B to the Planning Code required for the purpose of determining any requirements to reinforce the Transmission System;
- **Detailed Planning Data:** is that data listed in Appendix C to the Planning Code required of carry out detailed stability studies as necessary;
- **System data:** is that data listed in Appendix D to the Planning Code required to enable Users to conduct their own studies as necessary;
- **Operational data:** is data related to Operating Code (OC) and Scheduling and Despatch Code (SDC) of the Grid Code. Within the DTC, Operational Data is sub-categorised according to the relevant Operating Code, namely OC1, OC2 or SDC, and;
- **Metering and Data Exchange Code data:** is that data listed in Appendix E Metering data.

DTC.5 Procedures and responsibilities

DTC.5.1. Responsibility for submission and updating of data

Users shall record, exchange and record data listed in the DTC in accordance with the provisions of relevant sections of the Grid Code.

DTC.5.2. Methods of submitting data

The data schedules to the DTC are structured, where possible, to serve as standard formats for submission of data to OETC and from OETC to Users. Unless agreed with OETC, all data provided by Users to OETC and by OETC to Users shall be provided in accordance with the DTC schedule formats where such formats are given.

Data submitted to OETC must include the name of the User representative submitting each schedule of data. The data is preferred in electronic format and may be submitted via a computer link if such a data link exists between a User and OETC or utilising a data transfer media, such as floppy diskette, magnetic tape, CD ROM etc after obtaining the prior written consent from OETC. If electronic means are not available, subject to OETC's prior agreement, data to be provided to OETC on a daily basis may be submitted by fax.

DTC.5.3. Changes to Users' data

All Users must notify OETC promptly of any change to an item of data that is registered with OETC in accordance with the relevant section of the Grid Code.

DTC.5.4. Data not supplied

Users and OETC are obliged to provide data as set out in and in accordance with the individual sections of the Grid Code. If a User fails to supply OETC with data required by a section of the Grid Code, OETC shall use its best estimate of the required data. OETC will advise a User in writing of any estimated data it intends to use concerning a User's Plant in the event that a User has not provided the required data.



If OETC fails to provide data required by a section of the Grid Code, the User to whom that data ought to have been supplied will use an estimate of the data not provided by OETC when, in that User's view, it is necessary to do so. A User will advise OETC in writing of any estimated data it intends to use in the event of data not being supplied.

OETC and User estimates of data not supplied will, in each case, be based upon data supplied previously for the same Plant or upon corresponding data for similar Plant or upon such other information as OETC or a User, as the case may be, deems appropriate.

Corrections to estimates of data not supplied shall be made by OETC or the User post event, where the data affects Operating Parameters,



DTC.6 Grid Code data exchanged between OETC and Users

Table 6.1 provides details of Schedules A to N of the DTC. OETC is a party to each Schedule, PWP is the recipient of the data in Schedules A to E and G and I

Table 6.1:

Schedule	Data type	Comprising	User	Grid Code section
A	Genset And Desalination Unit technical data.	Genset, Desalination Unit and Production Facility fixed Operating Parameters.	PP	PC SDC1
B	Generation/Operational Planning data.	Genset Operating Parameters required for Operational Planning.	PP	OC 2 SDC1
C	Scheduling And Despatch data.	Operating Parameters required for Scheduling and Despatch.	PP	SDC1
D	Generation Schedule data.	Data required for the preparation of the Generation Schedule.	PP	OC 1 & 2 SDC1 & 2
E	Genset and Desalination Unit Outage data	Genset and Production Facility equipment Outage planning data.	PP	OC 2
F	User System data.	Electrical parameters relating to Plant Connected to OETC Transmission System	PP, LD, DCC, OCP	PC
G	Load characteristics data	The estimated parameters of Loads in respect of harmonic content, sensitivity etc.	LD, DCC, OCP	PC
H	User Demand profiles & Active Energy data.	Data related to Demand profiles.	LD, DCC, OCP	PC OC1
I	Connection Point data.	Data related to Demand and Demand transfer capability.	PP, LD, DCC, OCP	PC OC 1
J	Demand Control data.	Data related Demand Control.	LD, LS, DCC, OCP	OC 1
K	Fault infeed data.	Data related to short circuit contribution to OETC Transmission System.	LD, DCC, OCP	PC
L	OETC data to Users	All relevant data	PP, LD, DCC, OCP	PC OC1, 2 & 6
M	Metering data	All relevant data	PP, LD, DCC, OCP	MDEC

**Key to Users**

	User
PWP	Power and Water Procurer
PP	Power Producers with Generating and Desalination Plant
LD	Licensed Distributors
LS	Licensed Suppliers
DCC	Directly Connected Consumers
OCP	Other Connected Parties: Users Connected to the Transmission System excluding PP, LD, LS, and DCC

Abbreviations used in all schedules:

MDEC	Metering and Data Exchange Code
OC	Operating Codes
PC B	Planning Code - Appendix B Standard Planning Data
PC C	Planning Code - Appendix C Detailed Planning Data
PC D	Planning Code - Appendix D System Data
SDC	Scheduling and Dispatch Codes

Notes:

- 1 The data marked with "+" is required with an application for a Connection Agreement (to facilitate an early assessment by OETC of the need for more detailed studies).



Schedule A: Genset And Desalination Unit technical data

The following details are required from each User with existing or proposed CDGensets, Directly Connected, or to be Directly Connected, to the Transmission System and/or with existing, or proposed Embedded CDGensets.

Production Facility name:.....

Ref.	Data description	Units	Grid Code	Genset/ Desalination Unit/ Production Facility (PF) data					
				FY0	FY1	FY2	FY3	FY4	FY5
1. Production Facility Demand:									
Demand associated with the Production Facility supplied through Transmission System or in addition to Demand supplied through Genset unit transformer;									
1.1	Maximum Demand that could occur;	MW Mvar	PC C+						
1.2	Demand at the time of peak OETC Demand;	MW Mvar	PC C						
1.3	Demand at the time of minimum OETC Demand;	MW Mvar	PC C						
2. CDGenset Demand		Units	Grid Code	U1	U2	U3	U4	U5	PF
Demand supplied through unit transformer when CDGenset is at Rated MW output		MW Mvar	PC C+						

Provide details of point of Connection to the Transmission System of each CDGenset (in terms of geographical and electrical location and System voltage) (PC B +)

Unit 1

Unit 2

etc



	Units	Grid Code	U1	U2	U3	U4	U5	PF
3. CDGenset performance and parameters:								
General								
3.1.2	Type of CDGenset (e.g. Steam Turbine Genset, Gas Turbine Genset, Cogeneration, etc);		PC C +					
3.2.1	Rated terminal voltage;	kV	PC B					
3.3.4	Registered Capacity;	MW	PC B SDC 1					
3.4.8	Rated Active Power;	MW	PC B/C+					
3.5.9	Rated VA;	MVA	PC B/ C +					
3.6.5	System constrained Capacity (for Embedded CDGensets only);	MW	PC B					
3.7.7	Minimum Generation;	MW	PC B/C					
3.8.6	Active Power obtained in excess of Registered Capacity;	MW	PC B					
3.9.3	Expected running regime(s);		PC B					
3.10	Generator Performance Chart at stator terminals;	Chart						
3.11	Short circuit ratio;		PC B/C+					
3.12	Genset inertia constant; (alternator plus prime mover);	MWs/ MVA	PC B +					
3.13	Rated field current at rated MW and Mvar output and at rated terminal voltage;	A	PC C					
3.14	Field current open circuit saturation curve test certificate); 120% rated terminal voltage; 110% rated terminal voltage; 100% rated terminal voltage; 90% rated terminal voltage; 80% rated terminal voltage; 70% rated terminal voltage; 60% rated terminal voltage; 50% rated terminal voltage;	A A A A A A A A	PC C					
4. Impedances								
4.1.1	Direct axis synchronous reactance;	% on MVA	PC C					
4.2.2	Direct axis transient reactance;	% on MVA	PC B +					
4.3.3	Direct axis sub-transient; reactance;	% on MVA	PC C					



		Units	Grid Code	U1	U2	U3	U4	U5	PF
4.4	Quadrature axis synchronous reactance;	% on MVA	PC C						
4.5	Quadrature axis sub-transient reactance;	% on MVA	PC C						
4.6	Stator leakage reactance;	% on MVA	PC C						
4.7	Armature winding direct-current resistance;	% on MVA	PC C						
5. Time constants:									
5.1	Direct axis short-circuit transient time constant;	s	PC C						
5.2	Direct axis short-circuit sub-transient time constant;	s	PC C						
5.3	Quadrature axis short-circuit sub-transient time constant;	s	PC C						
5.4	Stator time constant;	s	PC C						
6. Generator transformer:									
6.1	Rated VA;	MVA	PC B +						
6.2	Rated voltage ratio;		PC C+						
6.3	Winding arrangement;		PC C						
6.4	Vector group;		PC C						
6.5	Positive sequence resistance;								
	- @ maximum tap;	% on MVA	PC B/C						
	- @ minimum tap;	% on MVA	PC C						
	- @ nominal tap;	% on MVA	PC B/C						
6.6	Positive sequence reactance;								
	- @ maximum tap;	% on MVA	PC B/C+						
	- @ minimum tap;	% on MVA	PC C +						
	- @ nominal tap;	% on MVA	PC B/C+						
6.7	Zero phase sequence reactance;	% on MVA	PC C						
6.8	Tap changer range;	±%	PC C						
6.9	Tap changer step size;	±%	PC C						
6.10	Tap changer type; (i.e. on-load or off-circuit);	On/ Off	PC C						
7. Excitation control system parameters:									
7.1	Exciter category (e.g. rotating or static);	Text	PC C +						

		Units	Grid Code	U1	U2	U3	U4	U5	PF
7.2	Details of excitation system described in block diagram showing transfer functions of individual elements (including PSS if fitted);	Diagram	PC C						
7.3	Rated field voltage;	V	PC C						
7.4	Generator no-load field voltage;	V	PC C						
7.5	Excitation system on-load; positive ceiling voltage;	V	PC C						
7.6	Excitation system no-load negative ceiling voltage;	V	PC C						
7.7	Power system stabiliser fitted?	Yes /No	PC C +						
7.8	Details of over excitation limiter described in block diagram; showing transfer functions of individual elements;	Diagram	PC C						
7.9	Details of under excitation limiter described in block diagram showing transfer functions of individual elements;	Diagram	PC C						
8. Governor parameters (All Gensets):									
	Governor system block diagram showing transfer function of individual elements;	Diagram	PC C						
9. Prime mover parameters (Steam Turbines Genset):									
	Prime mover system block diagram showing transfer function of individual elements and controllers;	Diagram	PC C						
10. Prime mover parameters (Gas Turbines Genset):									
	Prime mover system block diagram showing transfer function of individual elements and controllers;	Diagram	PC C						
11. Desalination Unit parameters:									
	Registered Capacity;	Ml/gpd							
	Desalination Unit auxiliary Power;	MW							



		Units	Grid Code	U1	U2	U3	U4	U5	PF
12. Genset flexibility performance:									
Details required with respect to Gensets;									
12.1	Rate of loading following a weekend (72 hour) shut- down (CDGenset and Production Facility);	MW/ Min	PC C						
12.2	Rate of loading following an overnight (8 hour) shut- down (CDGenset and Production Facility);	MW/ Min	PC C						
12.3	Block load following Synchronising;	MW	PC C						
12.4	Rate of De-loading from Rated MW;	MW/ Min	PC C						
12.5	Regulating range;	MW	PC C						
12.6	Load rejection capability while still Synchronised and able to Supply Load;	MW	PC C						

Note: The data marked with "+" is required with an application for a Connection Agreement (to facilitate an early assessment by OETC of the need for more detailed studies).



Schedule E: Genset Outage data

Production Facility name:.....

The following details are required from each User in respect of each CDGenset.

	Data description	Units	Time covered	Update time	Data category
1. Provisional Outage Programme:					
1.1	CDGensets concerned;	ID	Year 2 to 3	End of January	OC2
1.2	Active Power not Available as a result of Outage;	MW	Year 2 to 3	End of January	OC2
1.3	Remaining Active Power of the Genset;	MW	Year 2 to 3	End of January	OC2
1.4	Duration of Outage;	Weeks	Year 2 to 3	End of January	OC2
1.5	Start date and time or a range of start dates and times;	Date hrs	Year 2 to 3	End of January	OC2
1.6	Flexible Outage or Inflexible Outage;	Flexible/ Inflexible	Year 2 to 3	End of January	OC2
1.7	Flexible Outage; Period for which the Outage could be deferred (not less than 30 days in length); Period for which the Outage could be advanced (not less than 10 days in length);	Days	Year 2 to 3	End of January	OC2
		Days	Year 2 to 3	End of January	OC2
	OETC issue Proposed System Outage Schedule to Users;		Year 2 to 3	End of July	OC2
	Agreement on Proposed System Outage Schedule;	Text	Year 2 to 3	End of September	OC2



2. Final Outage Programme:					
2.1	Gensets concerned;		Year 2 to 3	End of January	OC2
2.2	Active Power not Available as a result of Outage;	MW	Year 1 to 2	End of January	OC2
2.3	Remaining Active Power of the Genset;	MW	Year 1 to 2	End of January	OC2
2.4	Duration of Outage;	Weeks	Year 1 to 2	End of January	OC2
2.5	Start date and time or a range of start dates and Times;	Date hrs	Year 1 to 2	End of January	OC2
2.6	Flexible Outage or Inflexible Outage;	Flexible/ Inflexible	Year 1 to 2	End of January	OC2
2.7	Flexible Outage; Period for which the Outage could be deferred (not less than 30 days in length); Period for which the Outage could be advanced (not less than 10 days in length);	Days	Year 1 to 2	End of January	OC2
		Days	Year 1 to 2	End of January	OC2
	OETC issue draft Final Outage Programme to Users;		Year 1 to 2	End of June	OC2
	OETC issue Final Outage Programme to Users;	Text	Year 1 to 2	End of Sept	OC2
3. Short Term Planned Outage:					
3.1	Gensets concerned;	ID	Year 0	7 Days before	OC2
3.2	Active Power not Available as a result of Outage;	MW	Year 0	7 Days before	OC2
3.3	Remaining Active Power of the Genset;	MW	Year 0	7 Days before	OC2
3.4	Duration of Outage;	Weeks	Year 0	7 Days before	OC2
3.5	Start date and time or a range of start dates and times;	Date hrs	Year 0	7 Days before	OC2

Schedule F: User System data

The following current and forecast details that relate to the Connection Site containing the Connection Point are required from each User on its User System.

	Data description	Units	Data category
1. Single line diagram:			
	Single line diagram showing all existing and proposed HV equipment and Connections together with equipment ratings and any third party Embedded within its User System;	Drawing	PC B PC C
2. Reactive compensation equipment:			
	For all reactive compensation equipment Connected to the User System at 11 kV and above, other than Power Factor correction equipment associated directly with a Consumer Plant, the following details;		
2.1	Type of equipment (e.g. fixed or variable);	Text	PC B
2.2	Capacitive rating;	MVA _r	PC B
2.3	Inductive rating;	MVA _r	PC B
2.4	Operating range;	MVA _r	PC B
2.5	Details of any automatic control logic to enable operating characteristics to be determined;	Text and/or Diagrams	PC B
2.6	Point of Connection to the User System in terms of electrical location and System voltage;	Text	PC B
3. Switchgear:			
	For all switchgear (i.e. circuit breakers, switch disconnectors and isolators) on all circuits Directly Connected to the Connection Point including those at Production Facilities;		
3.1	Rated voltage;	kV	PC B
3.2	Operating voltage;	kV	PC B
3.3	Rated short-circuit breaking current; Single phase; Three phase;	kA kA	PC B PC B
3.4	Rated load breaking current; Single phase; Three phase;	kA kA	PC B PC B
3.5	Rated peak short-circuit making current; Single phase; Three phase;	kA kA	PC B PC B



	Data description	Units	Data category
4. User HV Connecting System data:			
Circuit Parameters (for all circuits);			
For all Systems at 11 kV and above Connecting the User System to the Transmission System, the following details are required relating to that HV Connection Point;			
4.1	Rated voltage;	kV	PC B
4.2	Operating voltage;	kV	PC B
4.3	Positive phase sequence; Resistance; Reactance; Susceptance;	% on 100 % on 100 % on 100	PC B PC B PC B
4.4	Zero phase sequence; Resistance; Reactance; Susceptance;	% on 100 % on 100 % on 100	PC B PC B PC B
5. Interconnecting transformers:			
For transformers between the Transmission System and the User System, the following data is required;			
5.1	Rated Power;	MVA	PC B PC C
5.2	Rated voltage ratio; (i.e. primary/secondary/tertiary);		PC B PC C
5.3	Winding arrangement;		PC B PC C
5.4	Vector group;		PC B PC C
5.5	Positive sequence resistance; @ maximum tap; @ minimum tap; @ nominal tap;	% on MVA % on MVA % on MVA	PC C PC C PC C
5.6	Positive sequence reactance; @ maximum tap; @ minimum tap; @ nominal tap;	% on MVA % on MVA % on MVA	PC C PC C PC C
5.7	Zero phase sequence reactance;	% on MVA	PC C

	Data description	Units	Data category
5.8	Tap changer type (e.g. on-load or off-load);	On/Off	PC B PC C
5.9	Tap changer range;		PC B PC C
5.10	Tap changer step size;		PC B PC C
5.11	Impedance value (if not directly earthed);		PC C
6. HV motor drives:			
Following details are required for each HV motor drive connected to the User System;			
6.1	Rated VA;	MVA	PC C
6.2	Rated Active Power;	MW	PC C
6.3	Full Load current;	kA	PC C
6.4	Means of starting;	Text	PC C
6.5	Starting current;	kA	PC C
6.6	Motor torque/speed characteristics;		PC C
6.7	Drive torque/speed characteristics;		PC C
6.8	Motor plus drive inertia constant;		PC C
7. User Protection data:			
Following details relates only to protection equipment which can trip, inter-trip or close any Connection Point circuit breaker or any OETC circuit breaker;			
7.1	A full description including estimated settings, for all relays and Protection systems installed or to be installed on the User System;	Text	PC C
7.2	A full description of any auto-reclose facilities installed on the User System, including type and time delays;	Text	PC C
7.3	A full description including estimated settings, for all relays and Protection systems installed or to be installed on the Genset, Genset transformer, Production Facility transformer and their associated connections;	Text	PC C
7.4	For Genset having or intended to have a circuit breaker at the Genset terminal voltage, clearance times for electrical faults within the Genset zone;	ms	PC C
7.5	The most probable fault clearance time for electrical faults on any part of the User System Directly Connected to the Transmission System;	ms	PC C



	Data description	Units	Data category
8. Transient over-voltage assessment data:			
When requested by OETC, each User is required to submit data with respect to the Connection Site as follows (undertaking insulation co-ordination studies);			
8.1	Busbar layout, including dimensions and geometry together with electrical parameters of any associated current transformers, voltage transformers, wall bushings, and support insulators;	Diagram	PC C
8.2	Physical and electrical parameters of lines, cables, transformers, reactors and shunt compensator equipment Connected at that busbar or by lines or cables to that busbar (for the purpose of calculating surge impedances);	Text	PC C
8.3	Specification details of connected directly or by lines and cables to the busbar including basic insulation levels;	Text	PC C
8.4	Characteristics of over-voltage protection at the busbar and at the termination of lines and cables connected at the busbar;	Text	PC C
8.5	The following Genset or Production Facility transformer data is required; three or five limb cores or single phase units to be specified, and operating peak flux density at nominal voltage;	Text	PC C



Schedule H: User Demand profiles and Active Energy data

The following information is required from each User who is Directly Connected to the Transmission System with Demand.

Data description	FY 0	FY 1	FY 2	FY 3	FY 4	FY 5	Update time	Data category
Forecast daily Demand profiles in respect of each User System (summated over all Connection Points for a Licensed Distributor and at the Connection Point for Non Embedded Consumers);	1. Day of User maximum Demand (MW) at annual maximum Demand Conditions; 2. Day of peak OETC Demand (MW) at annual maximum Demand Conditions; 3. Day of minimum OETC Demand (MW) at Average Conditions;						End of January	PC B OC1
00:00 – 01:00								
01:00 – 02:00								
02:00 – 03:00								
03:00 – 04:00								
04:00 – 05:00								
05:00 – 06:00								
06:00 – 07:00								
07:00 – 08:00								
08:00 – 09:00								
09:00 – 10:00								
10:00 – 11:00								
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16:00 – 17:00								
17:00 – 18:00								
18:00 – 19:00								
19:00 – 20:00								
20:00 – 21:00:								
21:00 – 22:00								
22:00 – 23:00								
23:00 – 24:00								



Schedule J: Demand Control data

The following information is required from each User;

	Data description	Units	Time covered	Update time	Data category
1.Programming Phase: (applicable to Licensed Distributors & Directly Connected Consumers)					
Demand Control which may result in a Demand change of 1 MW or more on an hourly and Connection Point basis;					
1.1	Demand profile MW;	Weeks 1 to 8		10:00 Saturday	OC1
1.2	Duration of proposed Demand Control hrs;	Weeks 1 to 8		10:00 Saturday	OC1
2. Control Phase: (applicable to Licensed Distributors & Directly Connected Consumers)					
2.1	Demand Control which may result in a Demand change of 1 MW or more averaged over any hour on any Connection Point which is planned after 10:00 hours;	MW	Now to 7 Days	Immediate	OC1
2.2	Any changes to planned Demand Control notified to OETC prior to 10:00 hours;	hours	Now to 7 Days	Immediate	OC1
3. Post Control Phase:					
Demand reduction achieved on previous calendar day of 1 MW or more averaged over any Connection Point, on an hourly and Connection Point basis;					
3.1	Active Power profiles;	MW	Previous Day	06:00 Daily	OC1
3.2	Duration;	hours	Previous Day	06:00 Daily	OC1



Schedule K: Fault infeed data

The following information is required from each User who is Connected to the Transmission System via a Connection Point and the User System contains CDGenset(s) and/or motor loads.

Short circuit Infeed to OETC Transmission System from a User System at a Connection Point

Name of Connection Point:.....

	Data description	Units	FY 0	FY 1	FY 2	FY 3	FY 4	FY 5	Data category
1	Symmetrical three-phase short circuit current infeed; At instant of fault; After sub-transient fault current contribution has substantially decayed;	kA kA							PC B
2	Zero sequence source impedance values as seen from the Connection Point consistent with the maximum infeed above; Resistance (R); Reactance (X);	% on 100 % on 100							PC B
3	Positive sequence X/R ratio at instance of fault;								PC B



Schedule L: Data supplied by OETC to Users

OETC will provide Users and potential Users the following data related to the OETC Transmission System.

Name of Connection Point:.....

	Data description	Data category
1. Operation Diagram:		OCB
1.1	OETC will notify each User no later than the end of October, for the current calendar year and for each of the following 5 calendar years; The date and time of annual peak of OETC Demand at annual maximum Demand conditions;	OC1
1.2	The date and time of annual minimum OETC Demand at average conditions;	OC1
2. Network Data:		
2.1	Transmission System data; including Network topology and ratings of principal items of equipment; Positive, negative and zero sequence data of lines, cables, transformers, etc; CDGenset electrical and mechanical parameters Relay and protection data;	PC D
2.2	Following network data as an equivalent 220kV and 132kV source at the HV point of Connection to the User System;	
2.2.1	Symmetrical three-phase short circuit current infeed at the instant of fault from the Transmission System;	PC D
2.2.2	Symmetrical three-phase short circuit current from the Transmission System after the sub-transient fault current contribution has substantially decayed;	PC D
2.2.3	Zero sequence source resistance and reactance values at the Connection Point, consistent with the maximum infeed below;	PC D
2.2.4	Pre-fault voltage magnitude at which the maximum fault currents were calculated;	PC D
2.2.5	Positive sequence X/R ratio at the instant of fault PC;	PC D
2.2.6	Appropriate interconnection transformer data;	PC D
3	Names of Safety Coordinators;	OC6
4.1	Provisional Outage programme showing the CDGensets expected to be withdrawn from service during each week of Years 2 and 3 for Planned Outages;	OC2
4.2	Draft Final Outage programme showing the CDGensets expected to be withdrawn from service during each week of year 1 for Planned Outages;	OC2



Schedule M: Metering Data

The Metering Registration System forms the Metering database and holds Metering data relating to Metering Systems defined by the Metering and Data Exchange Code.

Timing: All data shall be submitted promptly after Connection or any other event that causes a change to the data.

Abbreviations:

MO Meter Owner

PO Plant Owner

	Data	Responsible party	Data category
1	Connection and Metering Point reference details for both Delivery Point and Actual Metering Point:		
1.1	Location and reference details;	PO	MDEC
1.2	Participant details at the Connection Point;	PO	MDEC
1.3	Site identification nomenclature;	PO	MDEC
1.4	Meter Owner;	PO	MDEC
1.5	Loss compensation calculation details where Actual Metering Point and Delivery Point differ;	PO	MDEC
2	Main and Check Meter installation details;		
2.1	Meter serial numbers;	MO	MDEC
2.2	Metering installation identification name;	MO	MDEC
2.3	Meter types and models;	MO	MDEC
2.4	Instrument transformer serial numbers;	PO	MDEC
2.5	Instrument transformer ratios;	PO	MDEC
2.6	Test and calibration programme details; test results and reference test certificates for Meters and Measurement Transformers;	MO	MDEC
2.7	Asset management plan and testing schedule;	MO	MDEC
2.8	Calibration tables, where applied to achieve Meter installation accuracy;	MO	MDEC



2.9	Meter summation scheme values and multipliers;	MO	MDEC
2.10	Data register coding details;	PO MO	MDEC
3	Data communication details (when communication systems are used):		
3.1	Telephone number for access to data;	PO MO	MDEC
3.2	Communication equipment type and serial numbers;	MO	MDEC
3.3	Communication protocol details or references;	MO	MDEC
3.4	Data conversion details;	MO	MDEC
3.5	User identifications and access rights;	MO	MDEC
4	Data validation and substitution processes agreed between affected parties, including:		
4.1	Algorithm;	MO	MDEC
4.2	Data comparison technique;	MO	MDEC
4.3	Processing and alarms (i.e. voltage source limits, phase-angle limits);	MO	MDEC
4.4	Check Metering compensation details;	MO	MDEC