

Electricity Distribution Price Control Review

Distributed generation, innovation funding incentive and registered power zones Regulatory Instructions and Guidance Version 1

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Summary

This document is Version 1 of the Regulatory Instructions and Guidance (RIGs) relating to the distributed generation (DG) incentive, innovation funding incentive (IFI), and registered power zones (RPZs). The purpose of the RIGs is to provide a framework for the collection and provision of accurate and consistent information from the electricity distribution companies (DNOs). The RIGs will take effect on and from 1 April 2005.

Responses to this document should be received by 9 August 2004. They should be sent to:

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Unless marked as confidential all responses will be published by placing them in Ofgem's library or on the website. It would be helpful if responses could be submitted both electronically and in writing.

Table of contents

1. Introduction	1
Structure of this document.....	1
2. Definitions, instructions and guidance for reporting terms in relation to DG incentive.....	3
Introduction	3
Definitions of output measures	3
Further definitions, instructions and guidance.....	7
3. Definitions, instructions and guidance for reporting in relation to IFI	9
Introduction	9
Definitions of output measures	9
4. Definitions, instructions and guidance for reporting in relation to RPZs.....	11
Introduction	11
Definitions of output measures	11
5. Required level of accuracy for reporting	12
Introduction	12
Required levels of accuracy – terms in relation to DG incentive	12
Required levels of accuracy – terms in relation to IFI	13
Required levels of accuracy – terms in relation to RPZs	13
6. Reporting arrangements in relation to DG incentive	14
Introduction	14
Ofgem’s role in reporting and the requirements on DNOs.....	14
7. Reporting arrangements in relation to IFI	16
Introduction	16
Ofgem’s role in reporting and the requirements on DNOs.....	16
8. Reporting arrangements in relation to RPZs.....	18

Introduction	18
Ofgem’s role in reporting and the requirements on DNOs	18
Appendix 1 Standard template for reporting.....	19
Aggregated template for beginning of year reporting.....	19
Aggregated template for end of year reporting	20
Disaggregated template for end of year reporting.....	21

1. Introduction

- 1.1. Version 1 of the Regulatory Instructions and Guidance (RIGs) for distributed generation (DG) incentives, innovation funding incentive (IFI) and registered power zones (RPZs) has been produced in accordance with Standard Licence Condition (SLC) [x] of the electricity distribution licence. The purpose of the RIGs is to provide a framework for the collection and provision of accurate and consistent information from the electricity distribution companies (DNOs). This is important as it reduces the scope for inaccurate reporting and provides companies with certainty about what they should be reporting. Robust reporting of information benefits all those with an interest in the regulation of DNOs, including generators and demand customers, the regulator and the DNOs themselves.
- 1.2. The RIGs include definitions and related instructions and guidance for collating “Specified Information” as defined in SLC [x].
- 1.3. Any changes to the RIGs will comply with the change process set out in paragraphs [x] to [x] of SLC [x]. Ofgem recognises that any significant changes to the scope or form of the information that it requests from the DNOs could not only increase the regulatory burden but also the perception of regulatory risk. It is Ofgem’s intention to change the scope and form of the information it requests as infrequently as possible, consistent with Ofgem carrying out its duties under the Electricity Act 1989 and the Utilities Act 2000.

Structure of this document

- 1.4. The RIGs covers the following main areas:
 - ◆ definitions, instructions and guidance for collating information on DG connection, innovation, and registered power zones;
 - ◆ specification of the required levels of accuracy for reporting – Ofgem has specified minimum levels of accuracy that must be achieved for the reporting of relevant terms; and

- ◆ reporting arrangements – an outline of the reporting arrangements for DG incentives, IFI and RPZs.

2. Definitions, instructions and guidance for reporting terms in relation to DG incentive

Introduction

- 2.1. This section sets out definitions and related instructions and guidance for the reporting of terms relevant to the implementation of DG incentive.

Definitions of output measures

- 2.2. Definitions to be applied for reporting on the terms in relation to DG incentive are shown below.

Relevant DG

- 2.3. This means an installation comprising any plant or apparatus for the production of electricity, which:
- ◆ is directly connected to the DNO's licensed distribution network or directly connected to an independent or private network (not including any transmission networks) which in turn is directly connected to the DNO's licensed distribution network;
 - ◆ has a **connection start date** on or after 1 April 2005; and
 - ◆ has relevant agents who have connection and use of system agreement(s) in force with the DNO relating to these plant or apparatus for any time during the reporting year (as set out in Chapter 5). In the case of generation whose connection only requires notification to the DNO under Engineering Recommendation G83/1, this includes those whose relevant agents have notified their connection before the end of the reporting year and have not notified disconnection before the start of the reporting year.
- 2.4. An upgrading or expansion of a DG plant existing before 1 April 2005 is regarded as separate addition of DG for the purpose of DG incentive scheme.

Standby generators that operate in parallel with the distribution system for short periods of time for the purpose of testing only will not be included in this term.

Connection start date

- 2.5. This is the date, according to the agreements between the DNO and the relevant agents of the **relevant DG**, and as subsequently notified by the DNO, when all associated network connection and infrastructure reinforcement works necessary for DG's full commercial operation are in place so that the network is capable of accepting output from the generator at its agreed level of capacity. This will also be the starting date for the DG being eligible for use of system charges. In the case of generation whose connection does not require prior application, it is the date that the notification is served by the relevant agent of the generator in accordance with Engineering Recommendation G83/1.

Incentivised DG capacity

- 2.6. This is the highest active electrical power that can be generated (or the relevant incremental change of this amount in cases of the expansion of existing DG plant) by a **relevant DG** for the reporting year, according to the connection and use of system agreement(s) or notification in cases of generation covered by Engineering Recommendation G83/1.

Total incentivised DG capacity

- 2.7. This is the sum, for all the **relevant DG** in a DNO's distribution system, of the **incentivised DG capacity**.

Total capex for DG

- 2.8. This is the sum of all **direct costs** incurred by the DNO in the reporting year on installation or reinforcement of assets which are directly incurred for connecting the **relevant DG** for the current reporting year or proposed or expected **relevant DG** for future reporting years. It includes both project-specific costs and general costs relating to overall generation development. In cases where costs on assets were incurred for the purpose of accommodating the new DG as well as the overall system requirement or new demand connection, this term should only include the costs that could be avoided if the DG connection were taken away from the design consideration. In other words, it should be the difference

between the total costs calculated a) including the DG and b) excluding the DG. Costs under b) which are required for other areas of distribution activities and therefore are covered by other price control mechanisms, such as the main price control allowance, the quality of supply incentive, or the distribution losses incentive, should be excluded from this term but fed into other appropriate mechanisms.

- 2.9. The proposed or expected **relevant DG** for future reporting years referred to above should only include those for which the DNO, when requested by Ofgem, can present reasonable evidence such as agreements to terms offered for connection and use of system, applications for connection and use of system, completed feasibility studies, or the DG developer's applications for relevant planning permission.

Direct cost

- 2.10. This is all directly attributable costs (in accordance with the requirements of Financial Reporting Standard 15 – Tangible Assets) incurred for installing or reinforcing the distribution assets. This would include: acquisition costs (including stamp duty, import duties etc), site preparation and clearance costs, installation costs, and professional fees.

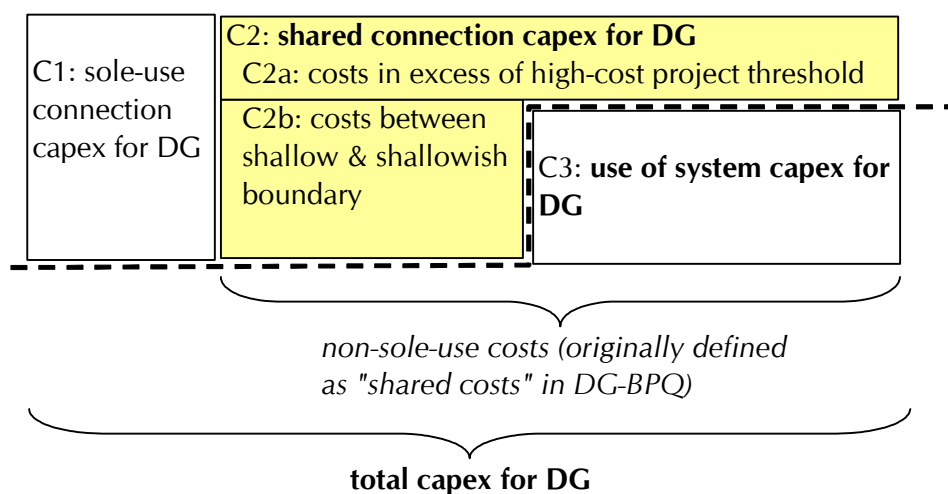
Use of system capex for DG

- 2.11. This is the **total capex for DG** minus all costs to be remunerated from the generation connection charges.

Shared connection capex for DG

- 2.12. This is the part of the **total capex for DG** that is to be recovered from generation connection charges, but exclusive of all costs relating to sole-use assets.
- 2.13. For further clarification, the relationship between the **total capex for DG**, **shared connection capex for DG**, and **use of system capex for DG** as defined above is set out in a schematic diagram below.

costs above dotted line to be recovered from generation connection charges



Assets transferred from DG capex to demand capex

- 2.14. This is the total sum of regulatory asset value which has been transferred from the **use of system capex for DG** to the main price control registered asset value, as allowed under the DNO's Special Licence Condition [x].

DG network unavailability

- 2.15. This is the sum, for all **relevant DG**, of the **network interruption duration** experienced by relevant DG during the reporting year multiplied by its **incentivised DG capacity**.

Network interruption duration

- 2.16. This is, for a **relevant DG**, the total duration of all occurrences on the distribution system each of which involves a physical break in the circuit between itself and the rest of the system or due to any other open circuit condition, which prevents the DG from exporting power. It excludes:
- ◆ 50 per cent of the cases where a DNO takes pre-arranged outages of its equipment for which the statutory notification has been given to the DG;
 - ◆ the cases where the relevant agents for DG had specific exemption agreements with the DNO in the connection and use of system agreement(s); and

- ◆ the cases which are part of exempted events in the quality of service incentive.

2.17. The start time of a network interruption is the earlier of the time at which:

- ◆ the first report, whether from DG, DNO's own alarm system, employee or agent, is received of a loss of connection or other abnormality which prevents a circuit or other item of equipment from carrying output from DG or being able to withstand "through fault current"; or
- ◆ the relevant circuit is automatically, deliberately or otherwise disconnected.

2.18. The completion of a network interruption is the time when connection is restored from the network to the DG so that the DG is able to export at its full capacity.

Baseline network interruption duration

2.19. This is the total **network interruption duration** in a reporting year for a **relevant DG**, above which the network unavailability rebate will apply.

DG network unavailability rebate payment

2.20. This is the total sum, for all **relevant DG**, paid by the DNO when any DG's **network interruption duration** exceeds the **baseline network interruption duration** during the reporting year.

Further definitions, instructions and guidance

2.21. In addition to the terms directly linked with the calculation of revenue allowance under the DG incentive, there are other items of information which will be required in reviewing the ongoing operation of the incentive scheme.

Disaggregated DG capacity information

2.22. This will be the **incentivised DG capacity** disaggregated in the following fourteen technology types:

Type	Description
1	Onshore wind
2	Offshore wind
3	Tidal stream & wave power
4	Biomass & energy crops (not CHP)
5	Hydro
6	Landfill gas, sewage gas, biogas (not CHP)
7	Waste incineration (not CHP)
8	Photovoltaic
9	Micro CHP (domestic)
10	Mini CHP (< 1MW)
11	Small CHP (> = 1MW, < 5MW)
12	Medium CHP (> = 5MW, < 50MW)
13	Large CHP (> = 50MW)
14	Other generation

Operational and maintenance costs for DG

2.23. This includes:

- ◆ the costs in the current reporting year associated with the operation (ie directly attributable costs) and maintenance on the assets that have been included in the **total capex for DG** in the current and past reporting years starting from 1 April 2005; and
- ◆ a relevant portion of the indirect overhead costs incurred in the current reporting year on constructing, maintaining and operating the whole distribution infrastructure required to facilitate the network access to all the distribution customers.

3. Definitions, instructions and guidance for reporting in relation to IFI

Introduction

- 3.1. This section sets out definitions and related instructions and guidance to be used for reporting in relation to the innovation funding incentive (IFI). The detailed structure of the IFI is subject to consultation¹ and the following definitions and guidance are therefore subject to changes and additions resulting from the consultation.

Definitions of output measures

Estimated turnover

- 3.2. A DNO's annual turnover as estimated one month before the commencement of the reporting year.

IFI annual report

- 3.3. The annual report of a DNO's IFI activities in a format agreed with Ofgem.

IFI Budget

- 3.4. The total budget for **eligible IFI projects** as estimated one month prior to the commencement of a reporting year.

IFI carry forward

- 3.5. The difference between the **IFI cap** and the **eligible IFI expenditure** in a reporting year less any **IFI carry forward** from the preceding reporting year.

¹ "Further details on the incentive schemes for distributed generation, innovation funding and registered power zones", Ofgem, June 2004
Electricity Distribution Price Control Review: Initial Proposals, Appendix
Office of Gas and Electricity Markets

IFI cap

- 3.6. This is 0.5% of the **actual turnover** for the same reporting year plus any **IFI carry forward** from the preceding reporting year.

IFI internal budget

- 3.7. Monies allocated to fund a DNO's internal resources employed directly on **eligible IFI projects**.

Actual turnover

- 3.8. A DNO's annual turnover as reported in its Annual Report and Accounts.

Innovation good practice guide

- 3.9. A good practice guide for the management of research and development in distribution companies including such subjects as project appraisal, value quantification, project management, budgeting and accounting and reporting.

Eligible IFI expenditure

- 3.10. Monies spent or accrued on **eligible IFI projects** in a reporting year.

Eligible IFI project

- 3.11. A project will qualify as an **eligible IFI project** provided that it is designed to enhance the technical development of distribution networks (up to 132kV) and to deliver value (i.e. – financial, supply quality, environmental, safety) to end consumers. **Eligible IFI projects** will embrace all aspects of distribution system asset management from design through to construction, commissioning, operation, maintenance and decommissioning. Each **eligible IFI project** will be justified prior to commitment on the expectation that the Present Value of its costs will be exceeded by the Present Value of the benefits it could deliver to customers.

Eligible IFI internal expenditure

- 3.12. Monies expended on a DNO's internal resources directly on **eligible IFI projects** in a reporting year.

4. Definitions, instructions and guidance for reporting in relation to RPZs

Introduction

- 4.1. This section sets out definitions and related instructions and guidance to be used for reporting in relation to the registered power zones (RPZs). The detailed structure of the RPZ is subject to consultation² and the following definitions and guidance are therefore subject to changes and additions resulting from the consultation.

Definitions of output measures

RPZ

- 4.2. A network of contiguously connected distribution system assets, having one or more terminal points which together describe in full the RPZ's boundary with the total system that has been registered with Ofgem as a Registered Power Zone in accordance with special licence condition [xx].

RPZ DG capacity

- 4.3. The sum of the **incentivised DG capacity** of all the **relevant DG** whose connection point is contained in a **RPZ**.

RPZ starting year

- 4.4. The reporting year in which the **RPZ** was first registered. [Please check with the draft definition.]

² "Appendix [x] - Further details on the incentive schemes for distributed generation, innovation funding and registered power zones", Ofgem, June 2004
Electricity Distribution Price Control Review: Initial Proposals, Appendix
Office of Gas and Electricity Markets

5. Required level of accuracy for reporting

Introduction

- 5.1. Ofgem has specified minimum levels of accuracy for the reporting of terms relevant to DG incentive, IFI and RPZs.

Required levels of accuracy – terms in relation to DG incentive

- 5.2. The table below specifies the minimum levels of accuracy required for the reporting of DG capacity, capex for connecting DG, and network unavailability in relation to DG incentive. They are expressed in absolute, rather than relative, terms, ie in terms of relevant physical units, and the values given are the maximum amount by which the DNOs' reported figure can deviate from the correct figure. For terms which are based on information provided by a third party, the correct figure will also be derived from such information. For terms whose values are derived according to relevant rules, for example for apportioning certain costs, the correct figure will contain a tolerance level that is allowed in such rules.

Terms	Minimum level of accuracy
Incentivised DG capacity	0.1MW
Total capex for DG	£0.1m
Use of system capex for DG	£0.1m
Shared connection capex for DG	£0.1m
DG network unavailability	1MWh
DG network unavailability rebate payment	£0.01m

Required levels of accuracy – terms in relation to IFI

- 5.3. The table below specifies the minimum levels of accuracy required for the reporting of costs relating to IFI.

Terms	Minimum level of accuracy
Eligible IFI expenditure	£1k
Eligible IFI internal expenditure	£1k
Actual turnover	£0.1m

Required levels of accuracy – terms in relation to RPZs

- 5.4. The table below specifies the minimum levels of accuracy required for the reporting of DG capacity relating to RPZ.

Terms	Minimum level of accuracy
RPZ DG capacity	0.1MW

6. Reporting arrangements in relation to DG incentive

Introduction

- 6.1. This section sets out the reporting arrangements in relation to DG incentive that Ofgem expects to apply in each reporting year.

Ofgem's role in reporting and the requirements on DNOs

- 6.2. The normal reporting year for the provision of information required under the DG incentive will be a period of 12 months beginning on 1 April of each year and ending on 31 March of the following year. Ofgem expects to publish the RIGs at least one month in advance of the relevant reporting year, normally in February. At the same time Ofgem will also provide the DNOs with standard templates that should be used for the reporting of relevant information. Any changes to the RIGs will have been consulted on for a period of time in accordance with the relevant licence condition [xx]. Where these changes do not relate to information included in the incentive scheme or the required level of accuracy the consultation period will not be less than 28 days.
- 6.3. DNOs will normally be required to provide the following information at the end of the reporting year and by no later than the immediately following 31 June:
- ◆ total incentivised DG capacity;
 - ◆ total capex for DG;
 - ◆ use of system capex for DG;
 - ◆ shared connection capex for DG;
 - ◆ assets transferred from DG capex to demand capex;
 - ◆ DG network unavailability;

- ◆ DG network unavailability rebate payment; and
- ◆ Operational and maintenance costs for DG.

6.4. The date specified in the paragraph above is the earliest that information can be requested for submission. Ofgem could specify a later date if it considers that it is appropriate. Once the DNOs have submitted the information to Ofgem, Ofgem could appoint auditors to undertake an audit of the information over the course of the subsequent months following the submission.

7. Reporting arrangements in relation to IFI

Introduction

- 7.1. This section sets out the reporting arrangements in relation to the innovation funding incentive (IFI) that Ofgem expects to apply in each reporting year.

Ofgem's role in reporting and the requirements on DNOs

- 7.2. The normal reporting year for the provision of information required under the IFI will be a period of 12 months beginning on 1 April of each year and ending on 31 March of the following year. Ofgem expects to publish the RIGs at least one month in advance of the relevant reporting year, normally in February. At the same time Ofgem will also provide the DNOs with standard templates that should be used for the reporting of relevant information. Any changes to the RIGs will have been consulted on for a period of time in accordance with the relevant licence condition [xx]. Where these changes do not relate to information included in the incentive scheme or the required level of accuracy the consultation period will not be less than 28 days.
- 7.3. DNOs will be required to provide the following information on or before 1 March of each reporting year:
- ◆ estimated turnover;
 - ◆ IFI budget;
 - ◆ IFI internal budget;
 - ◆ IFI carry forward; and
 - ◆ project schedule.
- 7.4. By the following 14 March, Ofgem will either acknowledge receipt of the information listed above and confirm its acceptability or inform the DNO of any deficiencies.

- 7.5. In the event that Ofgem informs the DNO of deficiencies in the submitted information the DNO will be granted a period of 10 working days to address the deficiencies to Ofgem's satisfaction which Ofgem will record in writing.
- 7.6. DNOs will normally be required to provide the following information at the end of the reporting year and by no later than the immediately following 31 June:
- ◆ eligible IFI expenditure;
 - ◆ eligible IFI internal expenditure;
 - ◆ actual turnover; and
 - ◆ the IFI annual report.
- 7.7. The date specified in the paragraph above is the earliest that information can be requested for submission. Ofgem could specify a later date if it considers that it is appropriate. Once the DNOs have submitted the information to Ofgem, Ofgem could appoint auditors to undertake an audit of the information over the course of the subsequent months following the submission.

8. Reporting arrangements in relation to RPZs

Introduction

- 8.1. This section sets out the reporting arrangements in relation to registered power zones (RPZs) that Ofgem expects to apply in each reporting year.

Ofgem's role in reporting and the requirements on DNOs

- 8.2. The normal reporting year for the provision of information required under the RPZs will be a period of 12 months beginning on 1 April of each year and ending on 31 March of the following year. Ofgem expects to publish the RIGs at least one month in advance of the relevant reporting year, normally in February. At the same time Ofgem will also provide the DNOs with standard templates that should be used for the reporting of relevant information. Any changes to the RIGs will have been consulted on for a period of time in accordance with the relevant licence condition [xx]. Where these changes do not relate to information included in the incentive scheme or the required level of accuracy the consultation period will not be less than 28 days.
- 8.3. DNOs will normally be required to provide the following information for each relevant RPZ at the end of the reporting year and by no later than the immediately following 31 June:
- ◆ RPZ DG capacity; and
 - ◆ RPZ starting year.
- 8.4. The date specified in the paragraph above is the earliest that information can be requested for submission. Ofgem could specify a later date if it considers that it is appropriate. Once the DNOs have submitted the information to Ofgem, Ofgem could appoint auditors to undertake an audit of the information over the course of the subsequent months following the submission.

Appendix 1 Standard template for reporting

This Appendix shows the format of the standard templates for the reporting of required information. The real template in the form of an excel spreadsheet will be provided to the DNOs for filling in the relevant data.

Aggregated template for beginning of year reporting

Regulatory report for DG incentive, RPZs and IFI	
Reporting year 2005/06	
[Enter company name here]	
Innovation funding incentive	
estimated turnover (£m)	
IFI budget (£m)	
IFI internal budget (£m)	
IFI carry forward (£m)	

Aggregated template for end of year reporting

Regulatory report for DG incentive, RPZs and IFI	
Reporting year 2005/06	
[Enter company name here]	
Distributed generation (DG) incentive	
total incentivised DG capacity (MW)	
total capex for DG (£m)	
use of system capex for DG (£m)	
shared connection capex for DG (£m)	
assets transferred from DG capex to demand capex (£m)*	
DG network unavailability (MWh)	
DG network unavailability rebate payment (£m)	
operational & maintenance costs for DG (£m)	
Innovation funding incentive	
eligible IFI expenditure (£m)	
eligible IFI internal expenditure (£m)	
actual turnover (£m)	
Registered Power Zones (RPZs)	
[Enter RPZ name here]	
RPZ DG capacity (MW)	
RPZ starting year (xx/xx)	
<i>(For more than one RPZ, please copy and insert the above three rows.)</i>	

* An explanation for any non-zero entry should be provided in the accompanying narrative.

Disaggregated template for end of year reporting

Incentivised DG capacity in technology types	
Reporting year 2005/06	
[Enter company name here]	
Technology types	DG capacity (MW)
Onshore wind	
Offshore wind	
Tidal stream & wave power	
Biomass & energy crops (not CHP)	
Hydro	
Landfill gas, sewage gas, biogas (not CHP)	
Waste incineration (not CHP)	
Photovoltaic	
Micro CHP (domestic)	
Mini CHP (< 1MW)	
Small CHP (> = 1MW, < 5MW)	
Medium CHP (> = 5MW, < 50MW)	
Larch CHP (> = 50MW)	
Other generation	

