

**February 2005**

**Distributed Generation Incentive**

**Innovation Funding Incentive**

**Registered Power Zones**

**Regulatory Instructions and Guidance**

**Version 1**

## **Executive 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.

Copies of this document are available on Ofgem's website ([www.ofgem.gov.uk](http://www.ofgem.gov.uk)).

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# 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 condition (SLC) 51 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 the “specified information” as defined in SLC 51.
- 1.3 Any changes to the RIGs will comply with the change process set out in paragraphs 9 to 13 of SLC 51. Ofgem recognises that any significant changes to the scope or form of the information that it requests from the DNOs could increase not only 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’s carrying out its duties under the Electricity Act 1989, the Utilities Act 2000 and the Energy Act 2004.
- 1.4 The RIGs cover the following main areas:
- ◆ definitions, instructions and guidance for collating information on DG connection, innovation, and registered power zones; and
  - ◆ an outline of the reporting arrangements, specification of the information to be reported, and the required levels of accuracy for reporting.

## 2. Definitions, instructions and guidance for reporting terms relating to the 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 the DG incentive.

### *Definitions of terms*

- 2.2 Definitions to be applied for reporting on the terms relating to the 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 distribution network or directly connected to an independent or private network (not including the onshore interconnected transmission networks) which in turn is connected to the DNO's distribution network;
  - has a **connection start date** on or after 1 April 2005; and
  - is eligible for use of system charges (if any) in accordance with the charging methodologies in place on or after 1 April 2005, but excluding generators who have paid deep connection charges and are exempt from use of system charges at least until 2010, by virtue of being pre-existing under the policy set out in Ofgem's "Structure of electricity distribution charges – initial decision document, November 2003").
- 2.4 An increase in capacity due to an upgrading or expansion after 1 April 2005 of a DG plant, whether or not existing before 1 April 2005, is regarded as a separate addition of DG for the purpose of the 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 agreed 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 or any other means. Relevant agents are parties such as the generator owner, relevant suppliers, meter registrant or independent distribution network operator who enter into the connection and use of system agreement(s) with the DNO on behalf of the generator.

### **Reporting year**

- 2.6 This is a period of 12 months to which reported information relates, beginning on 1 April of each calendar year and ending on 31 March of the following calendar year.

### **Incentivised DG capacity**

- 2.7 This is the highest active electrical power that could 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) in force on 31 March of that relevant year or notification in cases of generation covered by Engineering Recommendation G83/1.

### **Total incentivised DG capacity**

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

## **Total capex for DG**

- 2.9 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 subsequent **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 have been avoided if the DG connection had been 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. Costs incurred before 1 April 2005 for the purpose of connecting **relevant DG** after 1 April 2005 can be indexed by both the allowed pre-tax cost of capital of 6.9% and the percentage change in the Retail Price Index between 2004/05 and 2005/06 so as to be treated as 2005/06 costs.
- 2.10 The proposed or expected **relevant DG** for subsequent **reporting years** referred to in the paragraph above should only include that 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 developers' applications for relevant planning permission.

## **Direct cost**

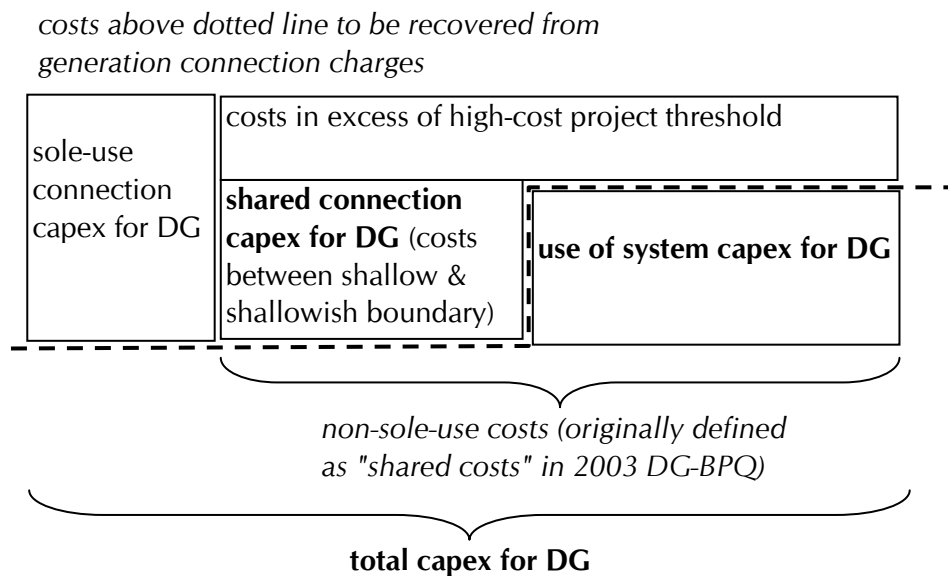
- 2.11 This is all directly attributable costs (in accordance with the requirements of Financial Reporting Standard 15 – Tangible Assets) incurred for installing or reinforcing the distribution assets. This should include acquisition costs (including stamp duty, import duties etc); site preparation and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

### Use of system capex for DG

- 2.12 This is the **total capex for DG** minus all costs to be remunerated from the distributed generation connection charges which are payable to the licensee.

### Shared connection capex for DG

- 2.13 This is the part of the **total capex for DG** that is to be recovered from distributed generation connection charges, which are payable to the licensee, but exclusive of all costs relating to sole-use assets and the incremental costs in excess of the high-cost project threshold (as set out in the distribution charging methodology).
- 2.14 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.



In this diagram, "sole-use connection capex" means that part of total capex for DG that is to be recovered from distributed generation connection charges in respect of assets required primarily for an individual customer, and "costs in excess of high-cost project threshold" means the amount by which total capex for DG on individual projects, excluding sole-use connection capex, exceeds £200/kW in 2005/06 prices.

### **Assets transferred from DG capex to demand capex**

- 2.15 This is the total amount of capex which has been transferred from the **use of system capex for DG** to the regulatory asset value which is used in setting the price control for demand use of system charges.

### **DG network unavailability**

- 2.16 This is the sum, for all **relevant DG**, of the products resulting from the multiplication of the **network interruption duration**, experienced during the **reporting year**, by the **incentivised DG capacity** for each installation.

### **Network interruption duration**

- 2.17 This is, for a **relevant DG** connected at HV or above, the total duration of all occurrences on the licensee's distribution system, within the **reporting year**, each of which involves a physical break in the circuit between the **relevant DG** and the rest of the system or any other open circuit condition, which prevent that DG from exporting power for a consecutive period of three minutes or longer. It excludes:

- 50 per cent of the total duration of cases where DNO takes pre-arranged outages of its equipment for which the statutory notification has been given to the DG;
- cases where the relevant agents for DG had specific exemption agreements with the DNO in the connection and use of system agreement(s), (relevant agents being parties such as the generator owner, relevant suppliers, meter registrant or independent distribution network operator who enter into the connection and use of system agreement(s) with the DNO on behalf of the generator); and
- cases where the network interruption was caused primarily by severe weather or other events as more fully described in Annex B and C respectively of special licence condition C2.

- 2.18 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.

2.19 The completion of a network interruption is the time when the connection is restored from the network to the DG so that the DG is able to generate at its agreed capacity.

**Baseline network interruption duration**

2.20 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**

2.21 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***

2.22 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

2.23 This will be the total **incentivised DG capacity** disaggregated into 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

2.24 These include:

- directly attributable costs in the current **reporting year** associated with the operation (ie directly attributable costs) and maintenance of 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, or in support of, constructing, maintaining and operating the whole distribution infrastructure required to facilitate network access to all distribution customers.

### 3. Definitions, instructions and guidance for reporting relating to the IFI

#### *Introduction*

- 3.1 This section sets out definitions and related instructions and guidance to be used for reporting relating to the innovation funding incentive (IFI).

#### *Definitions of terms*

##### **Eligible IFI project**

- 3.2 A project will qualify as an **eligible IFI project** provided that it is designed to enhance the technical development of distribution networks (up to and including 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. The **Innovation Good Practice Guide** will provide further guidance on the criteria defining **eligible IFI projects**. **Eligible IFI projects** should be justified prior to commitment on the expectation that the present value of their costs will be exceeded by the present value of the benefits which could be delivered to customers.

##### **IFI carry forward**

- 3.3 This is as defined in special condition C3 (Calculation of charge restriction adjustments arising from the innovation funding incentive scheme) of the distribution licence.

##### **IFI annual report**

- 3.4 This is the annual report of a DNO's IFI activities in a format agreed with Ofgem.

##### **Eligible IFI expenditure**

- 3.5 This is the costs incurred or accrued directly on **eligible IFI projects** in a **reporting year**.

### **Eligible IFI internal expenditure**

- 3.6 This is the costs incurred out of a DNO's internal resources directly on **eligible IFI projects** in a **reporting year**.

### **Combined distribution network revenue**

- 3.7 This will be as defined in special licence condition A1 (Definitions and interpretation) of the distribution licence.

### **Innovation good practice guide**

- 3.8 This is 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. This **Innovation Good Practice Guide** will be submitted by the DNOs to Ofgem for approval prior to the commencement of **eligible IFI projects** unless otherwise agreed with Ofgem.

## 4. Definitions, instructions and guidance for reporting relating to RPZs

### *Introduction*

- 4.1 This section sets out definitions and related instructions and guidance to be used for reporting relating to the registered power zones (RPZs).

### *Definitions of terms*

#### **Registered Power Zone (RPZ)**

- 4.2 An area comprising a collection of contiguously connected distribution system assets having one or more terminal points which together describe in full the boundary of that area with the distribution system and which has been registered with the Authority as a registered power zone in accordance with special condition D2 (Calculation of charge restriction adjustments arising from the incentive schemes for distributed generation and registered power zones). The **Innovation Good Practice Guide** will provide further guidance on the criteria defining **RPZs**.

#### **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.

#### **Innovation Good Practice Guide**

- 4.5 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. This **Innovation Good Practice Guide** will be submitted by the DNOs to Ofgem for approval prior to the commencement of **RPZs** unless otherwise agreed with Ofgem.

## **5. Arrangements and required levels of accuracy for reporting**

### ***Introduction***

- 5.1 This section sets out the arrangements and minimum levels of accuracy for the reporting of terms relevant to the DG incentive, the innovation funding incentive (IFI) and registered power zone (RPZ) schemes.
- 5.2 All information provided should be an accurate representation of the information available to the licensee, such information being sufficient to ascertain the value of the terms to the minimum levels of accuracy as set out in this section. 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.

### ***Reporting arrangements***

- 5.3 As defined in Chapter 2, the normal reporting year for the provision of information required under the DG incentive, the IFI, and the RPZ schemes will be a period of 12 months beginning on 1 April of each calendar year and ending on 31 March of the following calendar 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 paragraphs 9 to 13 of SLC 51. 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.
- 5.4 DNOs will normally be required to provide the information specified in the following sections at the end of the reporting year and by no later than the

immediately following 31 July. This date is the earliest that information can be requested for submission. Ofgem may specify a later date if it considers that it is appropriate. Once the DNOs have submitted the information to Ofgem, Ofgem may undertake an audit of the information over the course of the subsequent months following the submission.

***Terms relating to the DG incentive***

5.5 The table below specifies the quantified information to be included in the reporting relevant to the DG incentive and the minimum levels of accuracy required for that reporting.

Term	Minimum level of accuracy
Total incentivised DG capacity	0.1MW
Disaggregated 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
Assets transferred from DG capex to demand capex	£0.1m
DG network unavailability	100MWh
DG network unavailability rebate payment	£0.01m
Operational and maintenance costs for DG	to be estimated to the level of £0.01m

***Terms relating to the IFI***

5.6 The table below specifies the quantified information to be included in the reporting relevant to the IFI and the minimum levels of accuracy required for that reporting.

Term	Minimum level of accuracy
IFI carry-forward	£1k
Eligible IFI expenditure	£1k
Eligible IFI internal expenditure	£1k
Combined distribution network revenue	£0.1m

5.7 In addition, DNOs will be required to submit the IFI annual report.

***Terms relating to RPZs***

5.8 The table below specifies the quantified information to be included in the reporting relevant to RPZs and the minimum levels of accuracy required for that reporting.

Terms	Minimum level of accuracy
RPZ DG capacity	0.1MW

5.9 In addition, DNOs will be required to provide the following information for each relevant RPZ:

- A schedule of all RPZ projects planned, committed, under construction and operational detailing their starting year, generating capacity in MW, connection cost and a summary of the innovation content of the RPZ; and
- For operating RPZs a report of the performance achieved in the reporting year will be submitted in a form agreed with Ofgem.

## Appendix 1 – Standard template for reporting

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

### *Aggregated template for end of year reporting*

<b>Regulatory report for DG incentive, RPZs and IFI</b>	
<b>Reporting year 2005/06</b>	
<b>[Enter company name here]</b>	
<b>Distributed generation (DG) incentive</b>	
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 out of DG capex to demand capex (£m)*	
DG network unavailability (MWh)	
DG network unavailability rebate payment (£m)	
operational & maintenance costs for DG (£m)	
<b>Innovation funding incentive</b>	
IFI carry forward (£m)	
eligible IFI expenditure (£m)	
eligible IFI internal expenditure (£m)	
combined distribution network revenue (£m)	
<b>Registered Power Zones (RPZs)</b>	
<b>[Enter RPZ name here]</b>	
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 and further details for any non-zero entry, including the remaining asset values, the number of years in the remaining annuity period, and the scaling factor for the transfer into the demand capex, should be provided in an accompanying narrative.

*Disaggregated template for end of year reporting*

**Incentivised DG capacity in technology types**  
**Reporting year 2005/06**

[Enter company name here]

<b>Technology types</b>	<b>DG capacity (MW)</b>
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)	
Large CHP (> = 50MW)	
Other generation	